

**ASSESSMENT OF THE IMPACT OF DIVIDEND PAYOUT
RATIO ON FIRM PERFORMANCE: A CASE OF LISTED
FIRMS IN DAR-ES-SALAAM STOCK EXCHANGE**

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FIRM PERFORMANCE: A CASE OF LISTED FIRMS IN DAR-ES-
SALAAM STOCK EXCHANGE**

By

Khadija Ushahidi

**A Dissertation Submitted in Partial Fulfilment of the Requirements for Award
of the Degree of Master of Science in Accounting and Finance (MSc. A&F) of
Mzumbe University**

December, 2018

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled “**Assessment of the impact of dividend payout ratio on firm performance: A case of listed firms in Dar-Es-Salaam Stock Exchange**” in partial fulfilment of the requirements for award of the degree of Master of Science in Accounting and Finance of the Mzumbe University

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DEDICATION

This dissertation is dedicated to my lovely mother Mrs Mwanakombo Khamis Rashid, late father Mr Ali Ushahidi, my husband Mr Haji Saleh Haji, my sons Ali Haji Saleh and Saleh Haji Saleh and lastly to all my sisters and brothers

ABBREVIATIONS AND ACRONYMS

DPR	-	Dividend Payout Ratio
DSE	-	Dar-Es-Salaam Stock Exchange
EPS	-	Earnings Per Share
ROA	-	Return on Assets
ROCE	-	Return on Capital Employed
ROE	-	Return on Equity
SPSS	-	Statistical Packages for Social Science
TBL	-	Tanzania Breweries Limited
TCC	-	Tanzania Cigarrate Company
TCCL	-	Tanga Cement Company Limited
TPCC	-	Tanzania Portland Cement Company
TZS	-	Tanzania Shilling
VIF	-	Variance Inflation Factor

ABSTRACT

The study aimed to assess the impact of dividend pay-out on firm's performance by focusing specifically on examining the dividend policies, rate, and frequencies amongst the listed firms in DSE. It further aimed to examine the relationship between dividend payout ratio and firm's performance; and finally to determine the impact of dividend payout ratio on firm performance. To achieve this, the study employed a descriptive research design; considering a sample of four listed firms and their characteristics over 10 years from 2007 to 2016. Eventually, the analysis was aided by quantitative analysis through the application of Statistical Packages for Social Science (SPSS) and STATA. The findings revealed that's each firms considered in the study has its own dividend policy, rate and frequencies, furthermore the study show that dividend payout ratio has a weak insignificant positive correlation on profit generated by the firm. However, control variables such as investment, total assets, and firm size have a significant correlation- linear relationship with firm performance. The result of multiple regression analysis on the other hand reveals that only dividend payout ratio, total assets, firm growth, and leverage have significant impact on the performance of firms listed in DSE; while results reveal otherwise for firm size and investment. The study recommended the important of firm's management to devote more time in making rational decision and designing dividend policy that enhance firm's performance.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Dividend has been pronounced to be the impetus for the firms' financial performance. In the present business context and more particularly in firms' performance evaluation, the issue of dividend payout is very crucial. Dividend payout is the major policy that a company employs to decide whether dividend should be paid out to shareholders or not. The decision by the firm to payout dividend is the essential component of any corporate policy which is fundamentally the profit to investor for investing their cash in the organization (Enekwe, Nweze, & Agu, 2015). Being the case, individuals often invest in firms expecting later dividend payout as return. However, dividend decision by firms is crucial as it determine the amount of fund flowing to investors, yet provides them with information regarding the company performance (Karethio, 2013). On the other hand, financial performance stands as a subjective proxy of how efficiently a firm utilize its business assets to generate revenues; yet, exhibit the overall firm's financial health in a particular period of time, and assist in comparing identical firms across the same industry (Hales, 2005).

However, the debate regarding dividend payout stall as the most controversial issues in corporate finance, and stock market. Black (1976) hinted that, "*The harder we look at the dividend picture, it seems like a puzzle with pieces that don't fit together*"; yet over years the puzzle pieces don't fit together in modern financial economics despite of vast amount of literatures produced regarding dividend payout (Anike 2014; Frankfurter and Wood , 2002). For instance, there are scholars who supports the argument that dividend decision is irrelevant as it does not affect firms value at a perfect market condition such that no taxes, no costs of transactions, and information are costless (See, De Angelo & Skinner, 1996; Lang & Litzenberger, 1989; Miller & Modigliani, 1961). Hirtherto, other scholars argues that dividend policy provides to investors very crucial information regarding firms future financial performance, thus, it affects firm's value, and it is relevant (See, Aharony & Swary, 1980; Asquith &

Mullins, 1983; Benartzi, Michaely, & Thaler, 1997; Lintner, 1956; Miller & Rock, 1987; Watts, 1973).

Despite the trending debate, regrettably, only scant studies have been conducted to assess the impact of dividend policy on financial performance in Tanzania (See, Deodatus, 2015; Juma, 2010; Wambura, 2016). Subsequently, this study seeks to reveal the impact of dividend payout ratio on profitability, and market value of firms listed in DSE, Tanzania; yet, justify theories regarding dividend.

1.1.1 Dividend Payout Ratio

The percentage of company's net income declared to shareholders as a dividend is referred to as dividend payout ratio; computed as dividend per share by earning per share (Gugler, 2003).

$$\text{Dividend Payout Ratio} = \frac{\text{Dividends per share}}{\text{Earnings per share}}$$

However, there are three decisions regarding dividends payout; such that, the whole amount of net income to be distributed as dividends, partly as dividends and partly to be retained; and finally, the whole amount is kept as retained earnings. Being the case, some investors may prefer company to reinvest their funds into operation to excel future growth; while other appreciates cash payment as dividends. Notwithstanding, increase in dividend payments increases the demand for shares of that particular companies and so is its value; yet, extensive high payout ratios implies that firms might be paying uncomfortably out of its capacity. This is necessarily the case as it believed that firm actually spent the amount that should be returned to business operations, consequently, investors are suspicious to decline in later dividend payments. Eventually, it has been postulated that constant payout ratio, constant amount per share, and residuals dividend payout ratio marks different rates that firms consider while declaring dividends (Karethio, 2013). According to Al-Najjar & Hussainey (2009) a fixed dividend rate that fluctuate with earning per share, paid by the firm to its shareholder is referred to as constant payout ratio. Also, constant amount per share is when dividend per share does not fluctuate with earning per share; while dividends declared out of amount remained after financing all investment opportunities.

1.1.2 Financial Performance

Financial performance exhibits the financial health of particular firms, and it is a final result or outcome of the firm's business operations. In the event that the firm works for a stipulated period of time, it ought to be assessed to see it's significant. Firm's profit which actually reflects its performance results straightforwardly from appropriate and effective administration, management and usage of firm's economic resources (Abuja, 2011). The analysis of firm's performance in connection to capital structure is exceptionally noteworthy in building sustainable and attainable firm's objectives; which is dependably to minimize cost and amplify shareholders' wealth. Firms explore diverse conceivable proxies to quantify the performance of the business; and the helpful one lies in its objective. Firms have numerous conceivable outcomes for measuring work performance. The least complex strategy is to assess the performance by one chosen proxy which is established on the firm's objective. Aside from utilizing accomplishment of firm's objectives as its performance proxies, profit produced can likewise be contemplated. Financial measurement is one of the instruments which show the financial state of any firm. In view of Barbosa and Louri (2005) the firm can utilize financial related indicators to assess its performance, such proxies incorporate dividend yield, Residual Income (RI), Return on Investment (ROI), Price earnings ratio, Growth in sales, Earning per Share (EPS) and market capitalization to make reference to the few.

Also, the performance of the firm can be valued through returns spilling out of shares contributed by firm's shareholders (Rouf, 2011). As per Herly and Sisnuhadi (2011) firm's value coming about because of careful evaluation and analysis of firm's report of financial statements, additionally reflect firm's performance. Nonetheless, Profitability reflects the firm's capacity to generate profit and it is a result of every single financial decisions and plans. However, for the case of this study, profitability (net profit after tax) will be considered as financial performance measures.

1.2 Problem Statement

The most commonly accepted aim of a firm is to maximize the value of the firm and the wealth of its stock holders. However the subject matter of dividend policy remains

one of the most controversial issues in corporate finance and stock market trading. The impact of dividend payout remains a controversial issue in corporate finance, despite of numerous studies (See, Arnott & Asness 2003; Farsio et al 2004; Nissim & Ziv, 2001) that have been done. Theories have been proposed to give clarification in regards to the relevance of dividend on firm's performance, yet, without reaching common grounds regarding the subject matter (DeAngelo, 2006; Pandey, 2003;Stulz, 2000). All things considered, past investigations led by Amidu (2007), Howatt et al. (2009), Lie (2005), and Zhou and Ruland (2006) thought of conflicting and various discoveries with respect to how dividend payout relates to firm performance. An examination by Amidu (2007), and Howatt et al. (2009) uncovered that dividend payout influences performance when measured by using profitability; displaying a positive and significant connection between ROA, ROE, growth in sales and dividend payout. Unlikely, Lie (2005) contends that there is restricted proof that profit paying firms experience consequent firm performance. Together with this logical inconsistency, there are insufficient investigations which look direct on the dividend payout in firm performance, particularly in Tanzanian context. Therefore, the purpose of this descriptive study is to test the dividend irrelevance theory that postulated that dividend decision by the firm does not affect its performance; yet related dividend payout ratio to financial performance of listed firms in Dar Es Salaam Stock Exchange (DSE) measured by profitability.

1.3 Objective of the study

1.3.1 General objective

The core objective of this study is to assess the impact of dividend payout on the financial performance of listed firms in Dar Es Salaam Stock Exchange.

1.3.2 Specific Objectives

The general objective of this study will be accompanied with the following specific objectives:-

- i. To examine the dividend policies, rate, and frequencies amongst firms listed in DSE
- ii. To determine the relationship between dividend payout ratio and performance of firms listed in DSE
- iii. To determine the impact of dividend payout ratio on performance of firms listed in DSE

1.4 Research Questions

- i. What are the dividend policies, rates, and frequencies of firms listed in DSE?
- ii. What is the relationship between dividend payout ratio and performance of firms listed in DSE?
- iii. What is the impact of dividend payout ratio on performance of firms listed in DSE?

1.5 Significance of the study

This study will be vital to various stakeholders such as investors, managers, financial analysts, academicians, and creditors; yet, policy wise. Initially, this study will be of significance to both existing and prospective investors; it will allow them to make rational decisions regarding the companies they would prefer to invest in. Likewise to managers, the study will allow managers in assisting the board of directors to declare dividends that exhibit positive performance and image of a company. Also, this study will allow financial analysts in significantly assisting their clients through advices, knowledge, and decision making regarding dividend payout in relation to firms financial performance. The study will boost up the knowledge base of literature on the corporate financing field and vest a room for future researches. Finally, all the operations of DSE and listed firms in it are guided with policies, procedures, and regulations. Being the case, outcome of this study will allow policy makers in designing and formulating policies that have significant and positive impact on the performance of listed firms in DSE.

1.6 Limitation of the study

The DSE have over 30 listed companies, but this study used only four companies to assess the impact of dividend payout on firm's performance which may limit the generalization of this study findings to overall 30 listed companies; or might likely change the weight of impact that dividend payout has on firm's performance. Nevertheless, the study could have used extra years instead of only 10 years to extensively realize the research core objective. Also, the study used only dividend payout in relation to firm's performance measured by profit generated, thus neglecting other important performance proxy such as Earning Per Share (EPS); Return on Asset (ROA); and Return on Equity (ROE).

1.7 Delimitation of the study

The study used secondary data obtain from DSE data base on company stock price, dividend payment announcement and listed firms audited financial statement for the period of 10 years, which were easily obtain from firms website hence reduce cost of data collection.

1.8 Organization of the study

The complete dissertation comprises of six chapters. Chapter one covers the general introduction of the study that comprises of the background of the study, problem statement, rationale of the study, research questions, and objectives. Chapter two covers the theoretical settings guiding the study, empirical reviews and conceptual framework. Chapter three provides study's methodological description, covering research design, methods for data collection, data type, sample selection and respective targeted population; also data analysis, reliability and validity. Chapter four covers the presentation of the study's findings both qualitative and quantitative. Chapter five covers the discussion and arguments regarding the findings presented in Chapter four in relation to the particular study and other similar studies. Finally, chapter six provides the summary, conclusion and policy implications; as well as limitation of the study and area for future studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers both theoretical review that govern this study and the review of past empirical studies regarding the impact of dividend payout ratio on firm's performance. Nevertheless, it draws the conceptual framework narrating how the study variables will be operationalized.

2.2 Operation Definition

Operational definition in a typical dialect alludes to the way toward building up a theoretical definition that is unequivocally expressing what an idea implies with regards to a specific report (Singleton, 1999). Cozby (2007) gives the definition of the term by describing a concept with regards to techniques researcher employ to gauge or control it. He further contends that operational definition powers researcher(s) to talk about conceptual ideas in solid terms. Operational definition stays away from misguided judgment to the clients of a specific report. In view of the above clarification, the key concepts which are taken into consideration of the current study incorporate the following:-

2.2.1 General view of dividend

Dividend is seen from two points of view; that is outright amount of money circulated to investors and the proportion of profit paid to investors. Outright amount of money conveyed to investors, take a glance at the measure of money paid to investors as dividend per share (D'Souza, 1999). This point of view is exclusively worried about the real amount of money paid per share as dividend. The second point of view of dividend, see dividend in connection to the proportion of profit paid to investors as dividend (Kunkel et al, 1999). Under this view in the wake of figuring the net profit for a given year then a proportion of profit which is paid to investors is eluded as dividend. Subsequently when alluding to dividend should be explicit on whether are alluding to the sum or percentage of profit declared to shareholders. Dividend in

connection to the dimension of payout, empower examination between dividend per share and earnings per share or to market price per share (Kunkel et al, 1999). At the point when dividend is seen as a flat out sum it may not give a full picture and in this way a need emerge to view dividend from payout ratio viewpoint and also outright amount in order to have a full picture.

2.2.2 Types of dividends

Emekekwe (2008, p.393) characterizes dividend as the percentage of profit after tax that is declared to the investors as remuneration for their investment. They further postulated that, dividend places extra cash in the hands of investors and accordingly they classified dividends into three fundamental types: Cash dividend, Stock dividend and Stock splits. Then again, Nwude (2003, pp. 121-126) postulated that dividend declared to shareholders can be grouped into five types. These comprise of cash dividend, Stock repurchase, stock or share split, stock dividend or bonus issues, and reserve stock split. Next each one of these types of dividend is clarified.

Cash Dividend:

Cash dividend is amount of money-- cash declared to shareholders as a reward for their investment. This is standard for any firm that proclaims profits to pay in real money. At the point when a cash dividend is paid, the ramifications of the statement of financial position is that the firm's cash account and reserves account will be decreased, therefore diminishing both the total assets and aggregate worth of the firm. A firm that payout cash dividend must guarantee that it has adequate cash to meet its necessities.

Stock Dividend or Bonus Issue:

Stock dividend is the amount of dividend paid out in the form of issue of extra shares to the residual owners of the firm. It includes underwriting the firm's share premium or reserves and expanding the share capital account by a similar amount of money capitalized from the reserves account.

Stock or Share Split:

Stock or share split is the division of the current share price by two or duplication of the current number of shares by two. The impact of this stock split is that it decreases the prevailing par or nominal value of shares by half and duplicates the current number of shares. The management utilizes stock split to bring down the its share price to pull in expanded trading activity on the share on the stock exchange. Basically, stock split does not influence either side of the statement of financial position regarding the amount, yet changes the figure and book entry of the quantity of outstanding shares and also the par value.

Dividend Policy

Dividend policy is the core value for deciding the portion of an firm's net profit after taxes to be declared to the residual investors as dividend amid a a particular financial year. The reason for dividend policy is to maximize the wealth of firm's shareholders which is subjected to both current dividend and capital gains (Nwude, 2003).

2.2.3 Firm performance measurements

Demirbag (2006) hypothesizes that measuring performance is significant in guaranteeing powerful management of any firm; and by doing as such it clears path for improvement process. From this time forward, it is critical for the firm to gauge their improvement in order to decide the degree in which their assets affect business performance. Eventually, it is just firm's prosperity that shows it dimension of performance; with the end goal that it is vital for firms to have suitable performance measure to permit the process of comparing its performance over the long run (Garden and Sharma, 2002; Madu et al., 1996).

Fibirova (2005) proposed that, in measuring the firm's performance could be dissected by utilizing the outright value of earnings, generated cash flow and profitability. Pertaining earnings, the net income, earning before taxes, net profit before interest and taxes, and earnings before interest, tax and depreciations are used as performance proxies. Cash flows regularly reveals data's for cash inflow and cash outflow of the

particular firm. On the other hand, profitability use Return on Assets (ROA), Return on Sales (ROS), Return on Capital Employed (ROCE), Earnings per share (EPS) as its proxy, and they are also used to indicate a firm's operation. Marikova et al. (2001) censure the financial analysis by recommending that business performance prompted the generation of modern proxies, which established on the usual meaning of significant value for owner's capital as the most noteworthy firm's objective. The performance measurement standards and requirements depend on the creation and practice of different proxies and concepts of performance management; where most generally and significance indicators includes Discounted Cash Flow (DCF), Total Shareholder Returns (TSR), Shareholders Value Added ((SHVA), Market Value Added (MVA), Economic Value Added (EVA), and Cash flow return of investment. For the most part, financial analysis associated with accounting valuation of the firm must be contemplated as a viable measure of a firm's profitability.

2.2.4 Dar Es Salaam Stock Exchange (DSE)

Dar Es Salaam Stock Exchange (DSE) which was incorporated in 1996 is the essential securities exchange in Tanzania in which financial instruments traders meets to transact. This is an alternative Capital Market Channel that assists to provide long term and reasonably priced capital to companies from investors with investment motives. The Stock Exchange is in this way part of the procedure through which firms searching for capital; issue financial instruments to investors from the overall population in order to raise capital and back their firms. The two fundamental financial instruments issued by firms to raise capital are Equity (Shares) and Debt (Corporate Bonds).

Vision and mission

To be a sustainable securities exchange that is a motor of economic growth for Tanzania; through arrangement of a responsive securities trade that advances financial strengthening and adds to the nation's economic development through offering a scope of alluring and cost-effective products and services.

Central Depository System

The Central Depository System (CDS) of the DSE stall like a bank for securities where different securities are stored in safe care to encourage conveyances for DSE exchanges. By storing securities into the CDS, the conveyance of the securities in settlement of DSE exchanges can be accomplished by electronic book passages rather than physically trading authentications (scrip). The securities saved into the CDS might be sworn against a bank loan.

Trading System

Exchanging is led through an Automated Trading System (ATS). This is an electronic framework which matches bids and offers utilizing an electronic coordinating engine. The ATS is coordinated with the CDS to encourage automated validation of securities possessions and straight through handling of securities exchanges.

2.3 Theoretical review

2.3.1 Dividend Relevance Theory

The pioneer of this school of thought believes that in the real world, a dividend payment has a positive or a negative effect on the value of the company. This will impact on the stock price, market value and the average cost of capital. The principles of this school of thought were pioneered primarily by Gordon (1959) and Lintner (1962). Under this theory we have additional propositions that support the conception of dividend relevance, such as the Tax preference theory, the Agency theory, the Signaling theory, and the Clientele theory.

2.3.2 Bird in Hand Theory

This theory was progressed by Lintner (1962) and Myron (1963). They contended that investors want to get dividend "today" since current dividends are surer than future capital gains that may come about because of investment in growth opportunities by retained earnings. Investors subsequently value dividend more than capital gains and a firm that declares dividend will have a higher market value. They presumed that dividend policy is applicable and a firm that declares higher dividend bears higher value.

2.3.3 Tax Differential Theory

Litzenberger and Ramaswamy (1982) contend that investors incline toward one dividend policy to another due to the effect of tax on dividend acquired. Taxes charged on dividends ought to be paid around the same dividends are acquired. However, capital gains are not taxed before trading an investment. Contingent upon investors' tax position they may incline toward either current earning payout as dividends or capital gains related with stock value.

2.3.4 Information Signalling Effect Theory

Ross (1977) postulated that increase in stock price is often an outcome of increased dividends; while a decrease in dividend for the most part prompts stock value decay. Dividend declaration apparently conveys to investors that the firm is profitable and solid fiscally. Ross (1977) continues that in an efficient market, the management can utilize profits to flag imperative information to the market which is only known to them. For example, if the management declares higher dividends it signals expected future higher profit to stall high level of dividend payout. Solomon (1963) states, "In an unverifiable world in which verbal explanations might be confounded or disregarded, dividend activity provides an obvious methods for creating an impression that talks more intense than a thousand words". Asquith and Mullins (1983) gauge that stock prices increase for about 3 percent following declaration of dividend inception. Healy and Palepu (1988) find that prices decline for about 7 percent following declaration of dividend omission.

2.3.5 Clientele Effects Theory

This theory was progressed by Pettit in 1977. The theory postulates that distinctive groups or clienteles of investors have diverse inclination for dividend depending on their dimension of income. Low income investors incline toward high dividend to meet their utilization needs while high income investors lean toward low dividend to maintain a strategic distance from tax expenses. In this way when a firm sets a dividend policy, investors will tend to shift into and out of the firm until the point of equilibrium is attained. Pettit (1977) tested for the effect of dividend clienteles by inspecting the

portfolio positions of around 914 individual records dealt with by an reputable retail brokerage house during 1964 and 1910. He contends that investors with high income will prefer stocks yielding low dividend. As the retired individual often inclined to current incomes, ultimately they may demand higher earning percentage from the firm. Such investors are frequently in a low or even zero tax expenses, so taxes are of no worry. Then again, investors in the pinnacle earning years may incline toward reinvestment, since they have fewer requirements for current investment fund and would just reinvest any dividend acquired after accommodating initial tax expenses associated with dividend income.

2.3.6 The Dividend Irrelevance Theory

Miller & Modigliani (1961) contend that dividend policy has no impact on either the cost of a company's stock or its expense of capital. Firm's value relies upon the investment decision yet not the dividend policy. MM contention depends on various key suppositions, some not feasible in reality. The suspicions incorporate no corporate or individual charges on income (thus, income taxes), no stock vacillation or tax collection costs, the firm's investment approach is autonomous of dividend policy, the market is efficient and in this manner investors have a similar arrangement of data in regards to future investment opportunities. MM contended that under this arrangement of suspicions, on the off chance that a firm pays higher profit, it must pitch more stock to prospective investors and thus the firm value offered up to the prospective investors is actually equivalent to the dividend payout; as investors can build their very own dividend policy, thus, dividend policy is irrelevant.

Miller and Modigliani continued by considering the sources and uses of funds equation; that is, $CF_t + F_t = D_t + I_t + (1 + r) F_{t-1}$ where; CF - cash flow from operations, F_t - new equity financing raised at time t, D_t - dividend paid, I_t - investments and $(1 + r)$ and F_{t-1} repayment of finance raised in time t (Eckbo, 2008 p 9). Debt financing was excluded because of the assertion that the firm's value is an independent of capital structure. This means that a firm's value is directly related to future cash flows and market capitalization and inversely related to investment and the required rate of return. Moreover, the equation shows that the firm's value is an

independent of dividend policy. However, Miller and Modigliani acknowledged that in the presence of taxation, investors tend to form clienteles and this is a common phenomenon under imperfect capital markets.

Fama and Miller (1972) supported the dividend irrelevance theory. They proved graphically that dividends have no impact on share prices. The MM irrelevancy proposition is based on the major assumption that investment decisions are made independently of the dividend policy and that the borrowing policy is fixed. Other assumptions are: the existence of perfect capital markets, no taxes, no transaction costs, no asymmetric information to all investors and that investors can borrow and lend at the same interest rate. Furthermore, investors are indifferent between dividends and capital gain. Miller and Scholes (1978) used a different approach to explain dividend irrelevance. They posited that dividend income can be converted into capital gains by borrowing an appropriate amount to be invested in a risk free insurance contract. Since interest rates are tax deductible expenses, they may be used to offset against the tax charged on dividends and hence concluded that investors are indifferent with respect to dividends and capital gains.

2.4 Empirical review

There are mixed results regarding the impact of dividend payout ratio and firm's profitability. Khan, Anuar, Ramakrishnan, and Malik (2015) used a fixed effect model of panel data regression to assess the effect of dividend payout ratio on firm's profitability while considering leverage and firm size as control variables. In their results, dividend payout ratio was found to have significant negative effect on firm's profitability; such that, other things being equal, the more firms payout dividend, the more the profit earned. However, leverage positively related to firm's profitability unlike firm size, yet they were both statistically insignificant.

Hasan, Ahmad, Rafiq, and Rehman (2015) investigated the impact of dividend payout on firm's profitability by grouping the listed firms into two groups; thus, firms with high dividend pay, and those with low pay. Using logarithmic regression, dividend payout ratio was found to have negative significant on profitability when measured

through Earning Per Share (EPS) and Return On Assets (ROA) in firms that pay high dividend. Yet, such results are similar to the firms that pay low dividend to its shareholders. They however concluded that regardless of the industry type dividend payout ratio will have a negative impact on the next year firm's earnings.

Ajanthan (2013) focused on the relationship between dividend payout and firm's profitability taking revenue and total assets as control variables. This study employed a multiple regression analysis on secondary collected data to establish the existing relationship. The results revealed a positive significant relationship between dividend payout, revenue, total assets and firm's profitability; implying that a unit change by increase in the explanatory variables will increase the firm's profitability under ceteris paribus. However, it recommended the importance of future studies to consider other variables such as leverage, tax policy, ownership structure, access to capital markets, growth stage, shareholder's expectation, legal rules, and pattern of past dividends.

On the other hand, Thafani and Abdullah (2014) used both simple and multiple regression model to assess the impact of dividend payout ratio on firm's profitability when measured in terms of Return On Equity (ROE), ROA, and EPS; with firm size, growth and leverage as control variables. The quantitative secondary data when analyzed, revealed that, dividend payout ratio and growth are positive and statistically insignificant; while firm size and leverage had negative impact on ROA, yet statistically significant. Regarding ROE as a profitability proxy, dividend payout had a positive impact on profitability, but statistically insignificant. Also, size has a negative impact on ROE while growth bears a positive impact, both being statistically significant impact on profitability. Furthermore, leverage has a negative impact on ROE, yet statistically insignificant. Concerning ROA, both dividend payout ratio and growth are statistically insignificant with a positive impact on profitability; while both size and leverage have significant negative impact on profitability. For EPS, dividend payout ratio and leverage significantly and negatively impact profitability. Growth has a significant and positive impact on profitability while size of the firm holds otherwise.

Enekwe, Nweze, and Agu (2015) through an ex-post research design measured profitability in terms of Return on Capital Employed (ROCE), ROA, and ROE against

dividend payout ratio. The results of a simple linear regression revealed that dividend payout ratio has a positive effect on both ROCE and ROA, yet statistically significant. However, dividend payout ratio has a negative effect on ROE despite of being statistically insignificant.

Karethio (2013) considered the relationship between dividend payout ratio and profitability; taking firm size, tangible assets, and leverage as control variables. By employing a correlation research design, the results of multiple linear regression analysis exhibit that, dividend payout ratio and all the control variable bear a strong and positive relationship with profitability. This study concluded that dividend policy is relevant and managers ought to devote significant time in designing dividend policy that will effectively and efficiently enhance firm's financial performance and shareholder's value.

M'rabet and Boujjaat (2016) investigated on the relationship between dividend policy and shareholders' wealth, and firm's financial performance of the listed firms in Morocco. The study also considered firm's total assets as a control variable. Therefore, the results of multiple linear regression analysis revealed that both dividend policy and total assets measured in term of actual amount of dividend paid and amount of total assets respectively, have significant and positive relationship with both firms profitability and market capitalization. Eventually, they concluded that the relationship between dividends and firm's performance is positive and strong; such that dividends affects firm's profitability. The study also recommended future studies to take into consideration of the determinants of dividend policy and its influence on the value creation.

Kanwal and Hameed (2017) studied on the relationship between dividend payout ratio and firm's financial performance, which is measured by ROE, ROA and Net profit. Through a regression analysis, the results exhibited that dividend payout ratio has a strong and positive association with ROE and Net profit; while having a weak association with ROA. The study concluded that dividend policy influences firm's financial performance; yet, to be specifically, dividend payout ratio highly influenced the financial performance of the firm.

Regarding the effect of dividend payout ratio on market value, Luvembe, Njangiru, and Mungami (2014) employed a descriptive research design and regression analysis realize the existing positive and significant relationship between dividend payout ratio and change in share prices. The study concluded that the adopted dividend policy has a significant impact on market value of banks.

John (2015) studied the effect of dividend payout ratio on firm's market capitalization with firm's assets and growth as control variables. The study employed a descriptive research design and multiple regression analysis (multivariate) to conclude that dividend payout ratio has a positive and significant effects on share price. However, firm's assets exhibited a negative effect on share price, while growth is otherwise; yet both are statistically insignificant. the study eventually concluded that dividend policy affects firm's share price and thus, it is relevant as contrary to theories that views dividend policy as irrelevant.

Anton (2016) conducted a panel data analysis to examine the impact of dividend payout ratio on firm's value, taking debt ratio, firm size, profitability, and liquidity, as control variables. The results of fixed effect regression model revealed that dividend payout ratio, debt ratio, and firm size have positive impact on firm's value, yet statistically significant. On the other hand, unlike liquidity, profitability has a positive impact on firm's value, while both of them are statistically insignificant. the study concluded that, by increasing dividend to an optimal level managers can create value; yet, dividend payout ratio significantly and positively influence the value of the firm after controlling other firm's specific variables.

Manjunatha (2013) employed a descriptive research design to investigate the impact of debt to equity ratio and dividend payout ratio on the value of the firm measured as actual ROE. The results of multiple regression analysis exhibited that both debt to equity ratio and dividend payout ratio are statistically insignificant; concluding that inexistence of significant effect of debt to equity ratio and dividend payout ratio on share prices.

Giang and Tuan (2016) conducted an explanatory research to investigate on the impact of dividend payment on firm performance and market value of the listed firms in Vietnam. The study considered dividend paid and dividend payout as explanatory variables to firm's market value. The results of multiple linear regression revealed that both of the explanatory variables have positive impact on the firm's market value, yet statistically insignificant.

Bezawada and Tati (2017) studied the impact of dividend policy on firm valuation in India, taking dividend yield, ROCE, sales growth rate, and sales as explanatory variables. The study employed an ordinary least square method to explore the impact of dependent variables on market value. The results revealed that dividend yield and sales growth rate have negative impact on market value, yet statistically significant; while ROCE and sales positively impact market value, and both are statistically significant. They concluded that, there is a negative nonlinear association between dividend yields and market value.

Pandy (2001) explored the dividend payout behaviour in Malaysia and results demonstrated that dividend payout ratio among various firms are distinctive in Malaysia. The outcome likewise demonstrated that profitability, company's size and investment opportunities influence dividend payout. These outcomes proposed that bigger and increasingly profitable firms' chances pay fewer dividends. The outcomes additionally proposed that firms that never pay dividends are increasingly productive. Larger part of the investors in DSE are people with no investment information and whose investment plans are driven by excitement, feeling and mental reasons, while in the developed markets, the primary investors are institutions and people who are exceedingly proficient on investment matters or depend intensely on investment advice when deciding.

An investigation by Dhanani (2005) uncovered that dividend policy is imperative in amplifying investor wealth. A company's dividend arrangement can impact at least one of blemishes in reality, for example, lack of information among managers and investors, taxes and exchange costs and thus upgrade the firm's value to investors.

Nissim and Ziv (2001) found that dividend increments and diminishes are not symmetric. Dividend increments are related with future profitability for something like two years after the dividend change, though dividend diminishes are not identified with future gainfulness, in the wake of controlling for current and anticipated profit. They suggest that this absence of affiliation can be clarified by bookkeeping conservatism. They along these lines reason that here is a positive connection between dividend payout and future profit.

Bitok (2004) considered the impact of dividend policy on the value of firms cited at the NSE. The populace of interest for this study covers all the firms listed in the NSE for a time of 6 years from 1998 to 2003. The study was aided by utilization of secondary data. The data gathered was examined by utilizing correlation and simple linear regression analysis. The study discovered that, all things considered, there was a significant and positive relationship between dividend policy and firm's value.

Siero (2006) completed an exploratory investigation at the NSE on examining the likelihood of the dividend paying firm. He revealed that price earnings ratio, book value, dividend yield and dividend payout ratio are the most significant factors in segregating the firm declaring dividend from non-payers at the NSE. He postulated that financial related ratios are significant in evaluating the probability of firm paying dividends to its shareholders.

An investigation by Arnott and Asness (2003) uncovered that future earning growth is related with high as opposed to low dividend payout. They reasoned that verifiable proof unequivocally proposes that expected growth in future earnings is quickest when current payout ratios are high and slowest when payout ratios are low. Their proof repudiated the view that considerable reinvestment of retained earnings would fuel quicker the growth of future earnings.

Njoroge (2000) considered listed firms from 1991 to 1998 and utilized linear regression analysis with dividend payout as the dependent variable and considering ROA, ROE, and Growth in assets as explanatory variables. The researcher discovered

that neither both ROA and ROE, nor Growth in sales were significant in explaining dividend payout ratios.

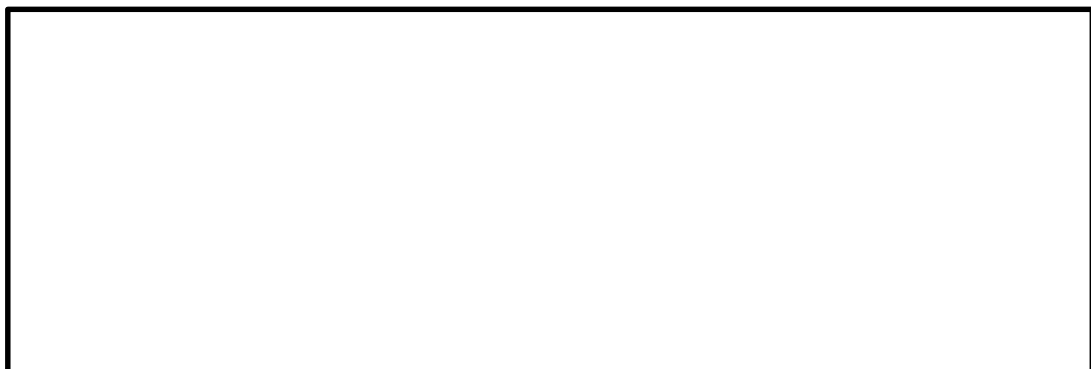
Muriuki (2010) analyzed the relationship between share prices of the firm listed in NSE and dividend policies. He utilized every one of the 47 quoted firms from 2005 to 2009 with the assistance of multivariate regression model and eventually postulated that there is a negative relationship between firm's share prices and declaration of constant payout proportion. Use of constant amount per share had a positive association with share prices of the firm.

2.5 Summary of the reviewed Literatures

Previous studies have studied the impact of dividend payout ratio on firm's profitability and market value, and independently have considered various control variables. In advance of the current study, past studies exhibit the importance of the information regarding the relationship between dividend payout ratio and firm's performance (market value, and profitability). However, no consistency has been witnessed among the results of previous studies, yet lacking similar study in Tanzania context. Being the case, this study is ought to fill the prevailing knowledge gap in Tanzanian context; by taking into consideration of previous studies' control variables. See Appendix V for the summary of reviewed literatures associated with this study.

2.6 Conceptual framework

This is a framework narrating the relationship among the variables, and specifically how these variables will be operationalized. The framework is generalized from both theoretical reviews and empirical studies to exhibit how the explanatory variables impact the dependent variables. In this case, dividend payout ratio will be considered as main explanatory variable while firm size, total assets, leverage, growth, and location.



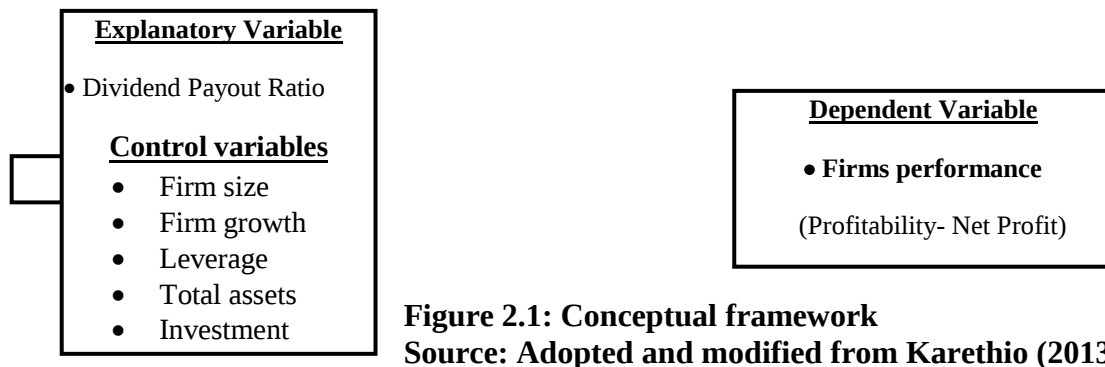


Figure 2.1: Conceptual framework
Source: Adopted and modified from Karethio (2013)

Figure 2.1 narrates how the variable will be operationalized, taking profitability and market value as two separate dependent variables; dividend payout ratio as independent variable; while firm size, growth, leverage, total assets, and investment as control variables. It is expected that, dividend payout ratio will have positive impact on the profitability (Giang & Tuan, 2016; Kanwal & Hameed, 2017). Similarly to previous studies (see, Anton, 2016; Karethio, 2013) firm size is expected to have positive impact on the profitability of the firm. Nevertheless, growth of the firm is also expected to impact profitability positively (John, 2015; Thafani & Abdullah, 2014). Also, leverage measured as total debt by shareholders equity is expected to have a negative impact on firm's profitability; while total assets will impact otherwise. Finally, investment made by the firm measured in TZS amount, will be an additional variable, and it is expected to impact firm's performance positively under ceteris paribus. Table 2.1 exhibit how the variables will be operationalized, and their expected signs.

Table 2.1: Summary of the study variables

Sn	Variable	Measurement	Expected Sign
1.	Dividend Payout Ratio	Dividend per share by Earning per share	+
2.	Firm size	Change in total assets	+
3.	Growth	Change in sales	+
4.	Total assets	ln(Amount of total assets in TZS)	+
5.	Leverage	Total debt by shareholders equity	-
6.	Investment	ln(Amount of Investment in TZS)	+

2.6.1 Research Hypotheses

This study ought to test the following hypothesis in examining the impact of dividend payout ratio and firm's performance

H₀: Dividend payout ratio have no significant impact on the performance of firms listed in DSE

H_a: Dividend payout ratio have significant impact on the performance of firms listed in DSE

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

This chapter barrates the blue print of the study and methods employed to achieve its set objectives. This chapter begins by exploring the study design, population, and sample, data and method of data collection, and finally data analysis.

3.2 Research design

A research design is a general strategy or plan for conducting a research study. Apart from indicating the goal of the study, research design further gives the necessary

details for gathering information required to structure and address the research problem (Gay, Mills, & Airasian, 2012). There are different design for different studies, however the main question guiding the study, nature of the variables involved, constraints of the environment and researcher's convictions (positivist or interpretivist (Khan S. N., 2014)) are crucial for choosing a particular research design. According to Creswell (2014), research design is grouped into three approaches being qualitative research design, quantitative research design and mixed method research design.

3.2.1 Qualitative research design

A qualitative design is an approach that stresses on an interpretivist view (Khan S. N., 2014), yet involves gathering information from smaller sample group to explore and understand the meaning individuals or groups assign to a social or human problem (Creswell, 2014). Historically, the origin of qualitative design can be traced back from education and social science discipline with the aim to study social and cultural phenomena. Unlike quantitative design which is confined to closed-ended questions, a qualitative one allows acquiring in-depth information regarding the phenomena through open-ended questions for problem solving (Leavy, 2017). The commonly used qualitative research design includes narrative, phenomenological, grounded theory, ethnography and case study designs (Creswell, 2014) in which data from the respondent's settings are collected, analysed and the researcher interpret the meanings of the respective phenomenon.

Therefore, this study will employ a quantitative research design, specifically, and similarly to previous studies (See, John, 2015; Luvembe et al., 2014; Manjunatha, 2013), a descriptive research design will accommodate this study as it is of great assistant in identifying variable to be tested and yet explain the existing relationship among variables. However, the study will be conducted in Tanzania, covering the firms listed in DSE.

3.3 Targeted population and Sampling

3.3.1 Targeted population

A group of individuals who possess the same characteristics can be referred to as a population; whereas, a group of individuals bearing similar characteristics that the researcher is interested to study is referred to as a targeted population (Creswell, 2014). The targeted population can consist of elements such as person, organization, household and other of the same nature. Therefore, this study will take into account of the entire 30 firms listed in the DSE as it targeted population, and yet as sample frame from which the sample size will be drawn.

3.3.2 Sampling design

According to DiGaetano (2013) sampling frame is the listing of the units from which sample is to be drawn at any stage of sampling. To study a sample instead of the entire population depends on several factors including measurement destructive nature, low cost of sampling error, size of available population, limited time and budget and variation in the element of population (Malhotra, 2005). Therefore, similarly to previous studies (See, Bezawada & Tati, 2017; Enekwe et al., 2015; Hasan et al., 2015), this study will used convenient sampling technique (non-probability sampling technique) to select among listed firms in DSE to represent a sample size of this study.

Furthermore, the section of the companies were based on local listed, and often dividend declaring companies, both interim and final during the period of 2007 and 2016. Also, a firm should have paid dividend for all years covered by the study that is year 2007 to 2016; yet it should be locally registered under the Companies Act 2002, and its financial statements for the period of the study should be easily obtainable. Companies that were newly listed, particularly those that had been listed on the stock market for less than two years, will be left out of the sample. Based on above criterion, four (4) companies will be selected for this study namely Tanga Cement Company Limited (TCCL), Tanzania Portland Cement Company (TPCC), Tanzania Cigarrate Company (TCC) and Tanzania Breweries Limited (TBL) out of the total of thirty (30) companies currently listed.

3.4 Data and method of data collection

Data collection methods include various techniques for gathering relevant information for the study at hand. The decision on the particular method to be employed depends on various influential factors such as data type (whether secondary or primary data); among other factors include objective of the study, and experienced response rate (Malhotra, 2005). On the other hand, regarding types of data; Primary data are alternatively known as first hand data which are collected directly from the field. In this case, the researcher has to go field and gather relevant information from the respondents. Despite that primary data gives accurate data and help to avoid fabricated data, they cost time and expensive to obtain as the research has to start from the scratch to gather such kind of data (Dawson, 2002). Also, Secondary data are second hand data collected from different sources, rather than directly from the field. The collection process of secondary data involves reviewing relevant documents fitting the study in question (Dawson, 2002). Unlike primary data that needs field visiting, secondary data are cheaper in accessibility and less time consuming. However, secondary data are subjected to less accuracy and for some cases irrelevant with the study in hand.

Therefore, this study will use secondary data extracted from DSE database on company stock prices, dividend payment announcement and the DSE index data; yet, more data will be collected from listed firms financial statements covering the period under this study.

3.5 Data analysis

This study will employ both qualitative and quantitative method of data analysis. Qualitative data analysis is categorized into content and thematic analysis; while quantitative data analysis method involves descriptive statistical analysis and inferential statistics.

3.5.1 Qualitative method of data analysis

Regarding qualitative method of data analysis, this study employed content analysis that involve reviewing published and audited financial statements of firms listed in DSE; as well as other material from DSE website.

3.5.2 Quantitative method of data analysis

3.5.2.1 Descriptive statistics

A descriptive statistics will be employed to accommodate the determination of dividend payout trends for firms listed in DSE from 2007 to 2016. It will be assisted by the Statistical Packages for Social Science (SPSS) Version 25.0 and excel related programs to establish the tables and graphical presentation.

3.5.2.2 Inferential Statistics (Econometrics data analysis)

Inferential statistics that involves drawing conclusion from the sample will dominated the analysis part stage of this study. It will be employed to determine the impact of dividend payout ratio on both profitability, and firm's market value. Regarding analytical models, this study will employ to models aided by multiple linear regression analysis. Specifically, The statistical data analysis programme STATA Version 13.0 will be used to determine the impact of dividend payout ratio on firm performance, while taking into consideration of other control variables.

This model will involve determining the impact of dividend payout ratio on firm's profitability presented in equation (3.1)

$$Y_{\pi} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon \quad (3.1)$$

Where

Y_{π} = Profitability (Natural logarithm of Firm's net profit)

X_1 = Dividend payout ratio measured as dividend per share by earning per share

X_2 = Firms size measured by Change in firm's total assets

X_3 = Growth measured as change in firm's sales

X_4 = Total assets measured as Natural logarithm of the amount of total assets

X_5 = Leverage measured as total debt by stakeholders' equity

X_6 = Investment measured as Natural logarithm of the amount of investment

α = Regression constant of intercept

β_n = Coefficient of explanatory variable X_n

ε = Random error term

3.5.2.3 Regression diagnosis test

This study also consider the importance of post estimation test, such that through a STATA programe Version 13.0; the model will be tested for heteroscedasticity; multicollinerity; and Normality of residuals.

i. Normality of residuals

Normality of residuals is among the assumption underlying multiple linear regression models. It assumes that for any values combination on the explanatory variables residuals (errors) are normally distributed; yet hold a zero mean for each value set of explanatory variable. There are several tests for normality of residuals in the multiple regression models, however, in this study Shapiro-Wilk W test for normal data was employed to test for normality of residuals predict for each model. The rule of thumb is that, for any variable (predicted residuals for our case) to be normally distributed it should exhibit a *p-value* of greater than 0.05 (i.e. *p-value*>0.05) otherwise, the assumption is violated.

ii. Heteroscedasticity

Homoscedasticity (opposite-heteroscedasticity) is another assumption underlying multiple linear regression models. It insinuates residuals (errors) should have constant variance through all levels of the explanatory variables. To test for homoscedasticity (inexistence of heteroscedasticity) assumption, Breusch-Pagan or Cook-Weisberg test for heteroscedasticity were employed. The rule of thumb is that, heteroscedasticity exist when the test results *p-value* is below the appropriate threshold (*p-value* = 0.05),

thus, when the results from Breusch-Pagan or Cook-Weisberg test for heteroscedasticity is statistically significant at 5% level.

iii. Multicollinearity or collinearity

Multicollinearity, alternatively collinearity occurs when two or more explanatory variables in the model have an approximately linear relationship with other explanatory variables in the exact same model. This creates difficulties to uniquely estimate regression coefficients with all the explanatory variables in the model. Therefore, to test for collinearity assumption underlying multiple regression models, this study established Variance Inflation Factors (VIF) and tolerance combined table. The rule of thumb is that a concern for multicollinearity among explanatory variables should be raised when tolerance is less or equal to 0.1; equivalently when VIF is greater or equal to 10 (Long & Freese, 2014).

3.6 Validity and Reliability

3.6.1 Validity

Validity refers to the degree to which an instrument measures what is supposed to measure (Kothari, 2004). To ensure validity, secondary data from published financial statement of the sampled companies were collected from DSE website; yet, purposive sampling technique was employed to draw sample size from the entire population. The study also designed the data collection instruments to allow collection of relevant data. Yet these instruments were piloted to ensure validity. Nevertheless, a conceptual framework was built up and compared with tested variables to ensure construct validity; as well as application of statistical analysis such as regression and correlation.

3.6.2 Reliability

According to Golafshani (2003) reliability refers to the extent in which results are consistent over time. Data reliability is groundwork of forming a successful and meaningful work. To ensure reliability, the study scrutinized the reliable sources from which relevant data were collected to address research objectives of this study. This was made possible through an elaborated routine that demanded a serial publication of

revisions under the close guidance and supervision of researcher. Consequently, this allowed the fieldwork to be carried out through high quality data aggregation.

CHAPTER FOUR

PRESENTATION OF RESULTS

4.1 Overview

This chapter presents the findings regarding the impact of dividend payout ratio on the performance of firms listed in DSE. These results exhibit the dividend policies, rate, and frequencies among the listed firms in DSE. It further exhibits the relationship between dividend payout ratio and firm performance in DSE; and finally the impact of dividend payout ratio on firm's performance through econometrics analysis.

4.2 Dividend policies, rate and frequencies amongst the listed firms

Dividend policy comprises of the decision made by the board of directors regarding the amount of profit to be paid as dividend to company shareholders. In doing so, the board have three decision to make; thus, firstly, to pay the entire profit generated as dividend; secondly, to pay the portion of its profit as dividend and retain the remaining amount; and lastly, is to retain the entire profit as retained earnings. On the other hand, the dividend rate represents the percentage of profit that is issued as dividend to shareholders while the final dividend amount represents the frequencies. Therefore, the subsequent sections exhibits the dividend policies, rate, frequencies for each firms listed in DSE.

4.2.1 Dividend policies, rate, and frequencies for TBL

Regarding dividend policy, Table 4.1 reveals that TBL used part of its generated profit to pay dividend to its shareholders and retained part of it as retained earnings. This policy decision was consecutive for ten years; except for year 2011 were the company's board of director retained all its profit to support its operations. It further reveals that, TBL issued a constant dividend amount of TZS 58.986 Billion for both 2007 and 2008 marking a dividend rate of 92.3% and 79.5% respectively. TBL further reduced its dividend paying rate from 54.8% to 47.9% in 2009 and 2010 respectively marking a constant dividend amount of TZS 44.239 Billion. The company retained all its profit in 2011; thereafter it experienced an increasing dividend amount consecutively to 2016; such that it issued TZS 66.368 Billion (39.9%), TZS 95.993 Billion (54.5%), TZS 141.095 Billion (68.5%), TZS 152.405 Billion (71.7%), and TZS 184.658 Billion (80.3%) in 2012 to 2016 respectively.

Table 4.1: Dividend policy, rate, and frequencies for TBL

Time	Profit After Tax (Billion)	Dividend (%)	Dividend Amount (Billion)	Dividend Policy
2007	63.913	92.3	58.986	Dividend issued; and retained earnings
2008	74.195	79.5	58.986	Dividend issued; and retained earnings
2009	80.797	54.8	44.239	Dividend issued; and retained earnings

2010	92.449	47.9	44.239	Dividend issued; and retained earnings
2011	121.695	-	-	All as retained earning
2012	166.415	39.9	66.368	Dividend issued; and retained earnings
2013	176.090	54.5	95.993	Dividend issued; and retained earnings
2014	206.096	68.5	141.095	Dividend issued; and retained earnings
2015	212.597	71.7	152.405	Dividend issued; and retained earnings
2016	229.953	80.3	184.658	Dividend issued; and retained earnings

Source: TBL financial statements (2007-2016)

Regarding the trend of dividend payout Figure 4.1 reveal that, as the net profit increase from 2007 to 2008; and from 2009 to 2010, the amount of dividend payout remain constant; yet decreases to zero in 2011 despite the significant increase in the amount of profit. Thereafter, from 2012 to 2016, the dividend payout increases as net profit generated by the company increases.

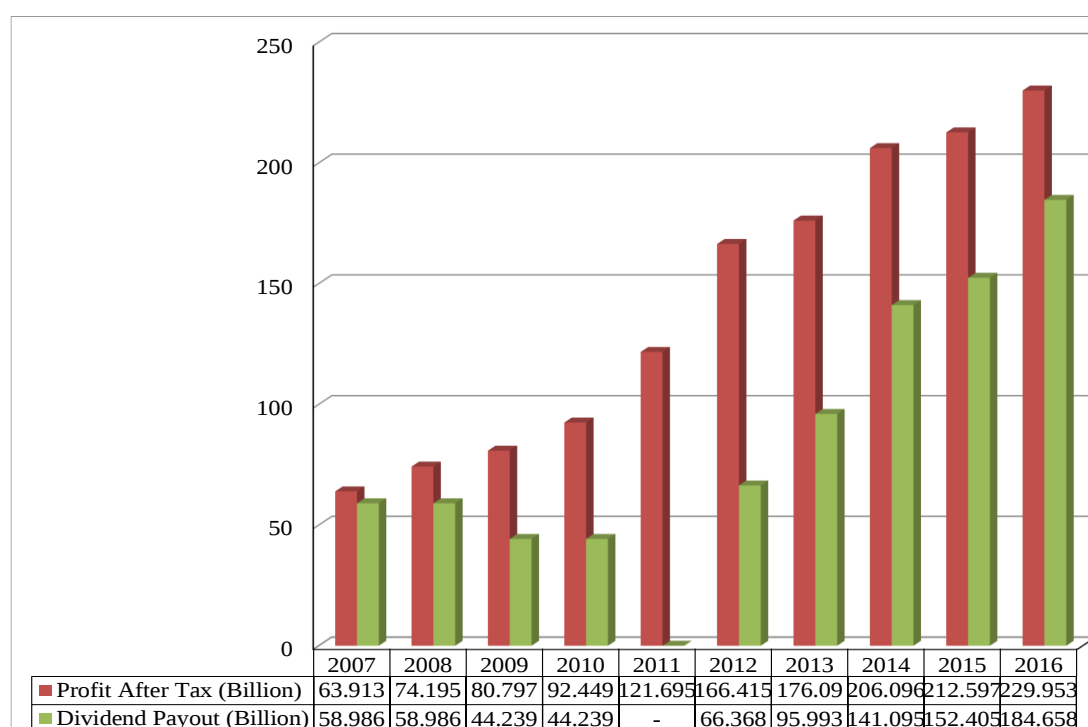


Figure 4.1: Profit and dividend payout trend for TBL

4.2.2 Dividend policy, rate, and frequencies for TCC

Table 4.2 reveals that TCC used part of its generated profit to pay dividend to its shareholders, yet retaining part of its profit for its operation from 2007 to 2016. However, in 2014 and 2015 the company used all its profit to pay dividend with additional from dividend issued from its previous retained earnings to mark a dividend amount of TZS 70 Billion for both years. Regarding the rate and amount of dividend; the company paid TZS 17.5 Billion (71.7%) in 2007 and TZS 27.5 Billion (88.5%) in 2008. It further issued TZS 15 Billion (32.6%), TZS 30 Billion (49.8%), and TZS 60 Billion (86.2%) in 2009 to 2011 respectively. Nevertheless, it issued a constant dividend of TZS 75 Billion for two years marking a rate of 87.3% in 2012 and 96.1% in 2013; followed by a payout of TZS 40 Billion (58.3%), TZS 30 Billion (45.7%), and TZS 60 Billion (87.4%) of the entire profit in 2014, 2015, and 2016 respectively.

Concerning trend of dividend payout Figure 4.2 exhibits that, as profit increases from TZS 24.398 Billion in 2007 to TZS 85.941 Billion in 2012, dividend payout keeps on fluctuating; start by increasing from 2007 to 2008, reaching minimum of TZS 15 Billion in 2009 then increasing towards 2012 marking TZS 75 Billion. Thereafter, the

profit decreases as dividend payout remain constant at TZS 75 Billion from 2012 to 2013; and at TZS 70 Billion from 2014 to 2015. Finally, from 2015 to 2016, dividend payout decreases by TZS 10 Billion as profit start to increases again.

Table 4.2: Dividend policy, rate, and frequencies for TCC

Time	Profit After Tax (Billion)	Dividend (%)	Dividend Amount (Billion)	Dividend Policy
2007	24.398	71.7	17.5	Dividend issued; and retained earnings
2008	31.063	88.5	27.5	Dividend issued; and retained earnings
2009	46.028	32.6	15	Dividend issued; and retained earnings
2010	60.200	49.8	30	Dividend issued; and retained earnings
2011	69.627	86.2	60	Dividend issued; and retained earnings
2012	85.941	87.3	75	Dividend issued; and retained earnings
2013	78.058	96.1	75	Dividend issued; and retained earnings
2014	68.6	58.3	40	Dividend issued; and retained earnings
2015	65.711	45.7	30	Dividend issued; and retained earnings
2016	68.669	87.4	60	Dividend issued; and retained earnings

Source: TCC financial statements (2007-2016)

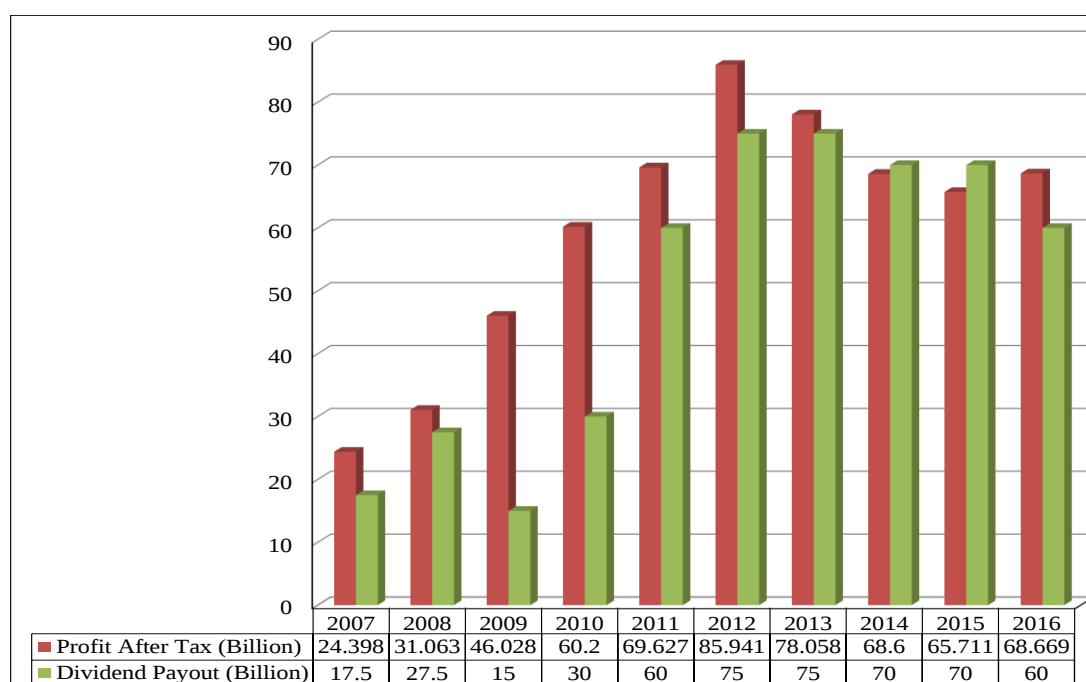


Figure 4.2: Dividend payout and profit trend for TCC

4.2.3 Dividend policy, rate, and frequencies for TPCC

Pertaining dividend policy, Table 4.3 reveals that from 2007 to 2016 TPCC consecutively used part of its income generated from operations to pay dividend to its owners, yet retaining the remaining part of profit.

Table 4.3: Dividend policy, rate, and frequencies for TPCC

Time	Profit After Tax (Billions)	Dividend (%)	Dividend Amount (Billion)	Dividend Policy
2007	30.112	25.7	7.74	Dividend issued; and retained earnings
2008	34.962	36.0	12.59	Dividend issued; and retained earnings
2009	47.993	49.0	23.52	Dividend issued; and retained earnings
2010	50.205	50.0	25.1	Dividend issued; and retained earnings
2011	50.605	64.0	32.39	Dividend issued; and retained earnings
2012	61.579	55.0	33.87	Dividend issued; and retained earnings
2013	37.640	93.0	35.01	Dividend issued; and retained earnings
2014	54.478	88.2	48.05	Dividend issued; and retained earnings
2015	56.247	97.9	55.06	Dividend issued; and retained earnings
2016	39.838	54.2	21.59	Dividend issued; and retained earnings

Source: TPCC financial statements (2007-2016)

Notwithstanding, Table 4.3 reveals that, TPCC experienced an increase in dividend payout such that TZS 7.74 Billion (25.7%) in 2007; TZS 12.59 Billion (36%) in 2008; TZS 23.52 Billion (49%) in 2009; TZS 25.1 Billion (50%) in 2010; TZS 32.39 Billion (64%) in 2011; TZS 33.87 Billion (55%) in 2012; TZS 35.01 Billion (93%) in 2013; TZS 48.05 Billion (88.2%) and TZS 55.06 Billion (97.9%) in 2014 and 2015 respectively. Finally, it issued TZS 21.59 Billion representing 54.2% of the entire profit in 2016 financial year.

Regarding trend of dividend payout Figure 4.2 shows that, dividend payment increases from TZS 7.739 Billion to TZS 33.868 Billion as profit increases from TZS 30.112 Billion in 2007 to TZS 61.579 Billion in 2012. In 2013 dividend payout keeps on increasing as profit decreases compared to previous year. Nevertheless, when profit start to increase again from 2013 to 2015, dividend payout maintain an increasing

status as for previous years. Finally, in 2016 dividend payout decreases as profit decreases compared to previous year.

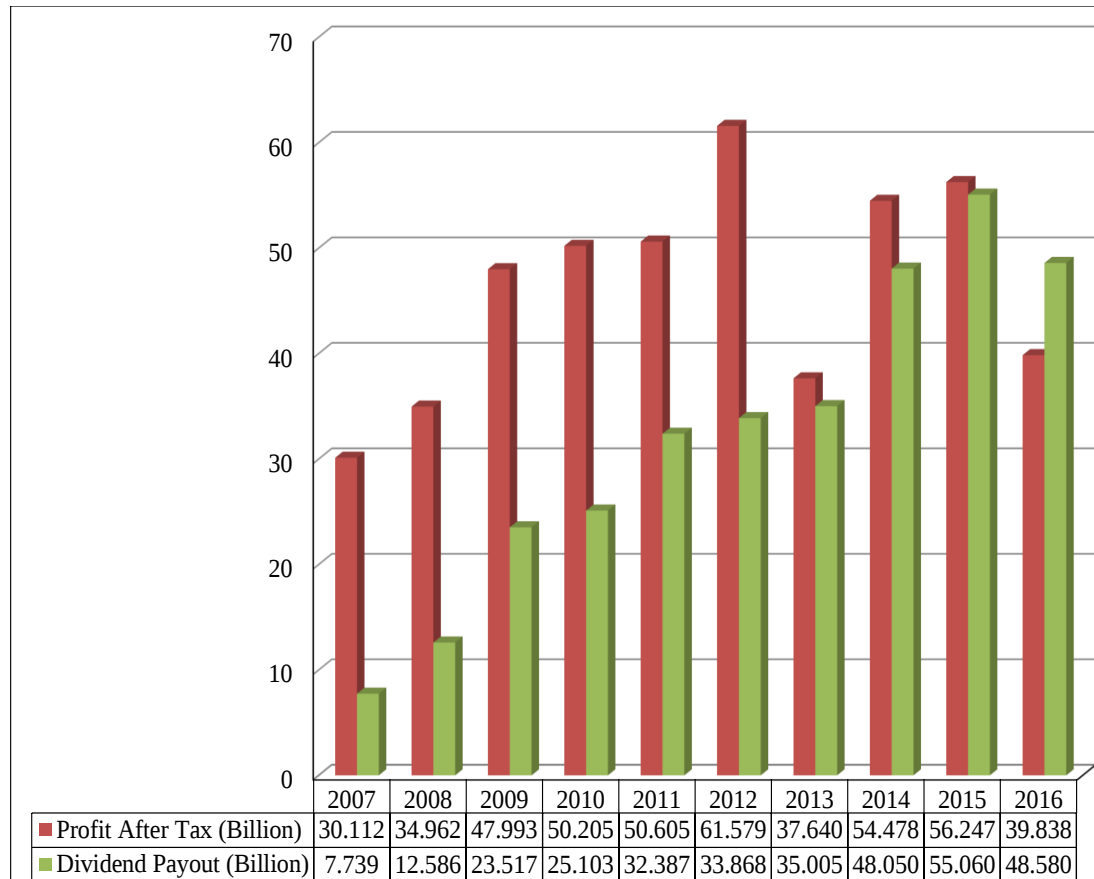


Figure 4.3: Profit and dividend payout for TPCC

4.2.4 Dividend policy, rate, and frequencies for Tanga Cement Company

Pertaining dividend policy, Table 4.4 exhibits that Tanga Cement Company used part of its generated income from operations to payout dividend and retained the remaining part in 2007, and from 2009 to 2016. In 2008 it retained all of its profits; while in 2016 it issued TZS 3.5 Billion (68.8%) as dividend to its owners. Furthermore, the company paid a dividend of TZS 11.8 Billion (50%) in 2007; TZS 11.41 Billion (37.5%) in 2009; TZS 10.63 Billion (32.7%) in 2010; TZS 3 Billion (13.5%) in 2011; TZS 3.5 Billion (9.4%) in 2012; TZS 3.8 Billion (11.8%) in 2013; while in 2014 and 2015 it paid out a dividend of TZS 4.1 Billion (14.4%), and TZS 5.1 Billion (61.2%) respectively.

Table 4.4: Dividend policy, rate, and frequencies for Tanga Cement Company

Time	Profit After Tax (Billion)	Dividend (%)	Dividend Amount (Billion)	Dividend Policy
2007	23.591	50.0	11.80	Dividend issued; and retained earnings
2008	30.253	-	-	All as retained earning
2009	30.420	37.5	11.41	Dividend issued; and retained earnings
2010	32.526	32.7	10.63	Dividend issued; and retained earnings
2011	22.291	13.5	3	Dividend issued; and retained earnings
2012	37.113	9.4	3.5	Dividend issued; and retained earnings
2013	32.165	11.8	3.8	Dividend issued; and retained earnings
2014	28.401	14.4	4.1	Dividend issued; and retained earnings
2015	8.329	61.2	5.1	Dividend issued; and retained earnings
2016	4.197	68.8	3.5	Dividend issued; and retained earnings

Source: Tanga Cement Company financial statements (2007-2016)

Regarding trend of the dividend payout, Figure 4.4 exhibit that, dividend payout decreases to zero in 2008 from TZS 11.795 Billion in 2007 as profit increases from TZS 23.591 Billion to TZS 30.253 Billion. On the other hand, dividend payout decreases from TZS 11.408 Billion in 2009 to 10.633 Billion in 2010 as profit increases from TZS 30.420 Billion to TZS 32.526 Billion. In 2011 both profit and dividend payout were decreasing compared to previous years. However, opposite relationship between profit and dividend payout is revealed from 2012 to 2016 such that, dividend payout increases as profit generated by the company decreases.

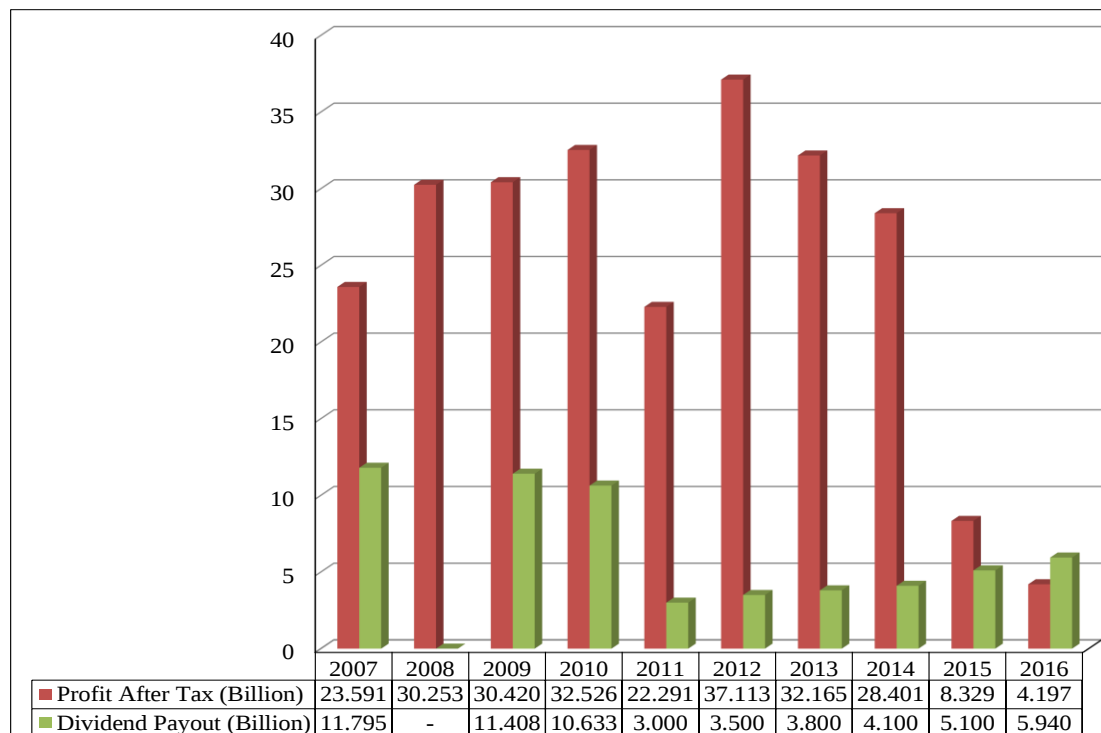


Figure 4.4: Profit and dividend payout for Tanga Cement Company

4.3 Relationship between dividend payout ratio and firm performance

Correlation matrix was employed to narrate the existing relationship between dividend payout ratio and performance of firms listed in DSE; taking into account of control variable, say firm size, total assets, firm growth, leverage and investment. Prior to results presentation, correlation coefficient reveals the direction and strength of existing linear relationship between variables. Yet, for a meaningful interpretation of significance of correlation coefficient a hypothesis test was run to decide whether correlation coefficient value is significantly different from zero; thus,

H_0 : There is no significant correlation (linear relationship) between dividend payout ratio and performance of firms listed in DSE

H_a : There is a significant correlation (linear relationship) between dividend payout ratio and performance of firms listed in DSE

Therefore, Table 4 exhibits a Pearson correlation matrix produced through Statistical Packages for Social Science (SPSS) along with their significance level.

Table 4.5: Pearson correlation matrix

	Firm performance	DPR	Investment	Total Assets	Firm size	Firm Growth	Leverage
Firm performance	1	0.085	.481**	.868**	.751*	-0.011	-0.089
DPR	0.085	1	-0.234	0.124	0.214	-.384*	0.099
Investment	.481**	-0.23	1	.660**	.641*	-0.098	.504**
Total Assets	.868**	0.124	.660**	1	.937*	-0.270	0.209
Firm size	.751**	0.214	.641**	.937**	1	-.386*	0.294
Firm Growth	-0.011	-	-0.098	-0.270	-	1	-0.121
Leverage	-0.089	0.099	.504**	0.209	0.294	-0.121	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Dividend Payout Ratio and Firm performance

Table 4.5 reveals that there is a very weak but positive linear relationship between dividend payout ratio and firm performance when measure as net profit after tax. Nevertheless, the relationship between dividend payout ratio and firm performance was found to be statistically insignificant, implying that, there is insufficient evidence to conclude the existence of linear relationship between dividend payout ratio and firm performance as it correlation coefficient is not significantly different from zero. However, dividend payout ratio exhibits a weak negative relationship against firm growth.

Investment and firm performance

Taking into account of the results for control variable in Table 4.5, investment has a weak but positive linear relationship with firm performance; yet statistically significant at 1% level of significance. It implies that there is sufficient evidence to conclude the existing linear relationship between investment and firm performance as its correlation coefficient is significantly different from zero. Regarding other

variables, investment has a moderate positive and significant linear relationship with total assets, firm size, and leverage; yet insignificant negative weak linear relationship with firm's growth.

Total assets and firm performance

Total assets on the other hand exhibit a strong and positive linear relationship with firm performance when measured as net profit. Such positive relationship implies that firm's total assets and its performance moves in the same direction, other things being equal; yet, statistically significant at 1% level of significance. It implies that there is sufficient evidence to conclude that there is significant linear relationship between total assets and firm performance as its correlation coefficient is significantly different from zero. Regarding the linear relationship with other variables, total assets has a positive and moderate linear relationship with investment, yet strong and positive linear relation with firm size; and altogether are statistically different from zero.

Firm size and firm performance

Also firm size as narrated in Table 4.5, has a positive and strong linear relationship with firm performance; yet statistically significant at 1% level of significance. The positive relationship implies that variables moves in the same direction; and b being significant it implies that, there is sufficient evidence to conclude that there is a significant linear relationship between firm size and its performance as its correlation coefficient is significantly away from zero. Notwithstanding, there is also a significant linear relationship between firm size and other variable such as Investment and total assets, but at 1% level of significance.

Firm growth and firm performance

Table 4.5 reveals that, there is insignificant and yet, a negative linear relationship between firm growth and firm performance. Furthermore, its coefficient of correlation (-0.011) evidence the presence of a very weak correlation between firm growth and the performance of firms listed in DSE. By being statistically insignificant it exhibits the presence of insufficient evidence to conclude that there is significant relationship

between firm growth and firm performance as its coefficient is not significantly away from zero. However, the result reveals that, there is negative and weak, but significant linear relationship between firm growth and variables such as dividend payout ratio and firm size; both at 5% level of significance.

Leverage and firm performance

Table 4.5 reveals that, there is a very weak, negative, and insignificant linear relationship between leverage and performance of firms listed in DSE when net profit after tax is used as its proxy. The negative sign its coefficient bears implies that leverage and firm performance moves in different direction, other things being equal. However, as the relationship between leverage and firm performance is insignificant, it implies that there is insufficient evidence to conclude that there is a significant linear relationship between leverage and firm performance as its coefficient of correlation is not significantly away from zero.

4.4 Impact of dividend payout ratio on firm performance

4.4.1 Descriptive Statistics

Initially, a descriptive statistics result was generated prior to the determination of the impact of dividend payout ratio on firm performance. The results as in Table 4.6 reveals the minimum and maximum value, the mean, and the standard deviation of the variable considered in the model. However, for a sound presentation of the obtained results, Firm performance measure by net profit are in Billion TZS, the same as for total assets, firm size, and investment.

Table 4.6: Variable descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Net profit	40	4.197	229.953	68.386	55.638
Dividend Payout Ratio	40	0.000	1.222	0.607	0.329
Total Assets	40	68.787	898.936	307.274	216.531
Firm size	40	24.954	27.524	26.243	0.645
Firm Growth	40	-0.202	0.663	0.135	0.160
Leverage	40	0.233	1.479	0.536	0.320

Investment	40	4.363	127.329	39.578	35.281
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4.4.2 Assumption test for Regression model

Prior to determining the impact of dividend payout ratio on the performance of firms listed in DSE, specification tests associated with multiple regression model were run covering the test for normality of residuals, heteroscedasticity, and multicollinearity. In regards to subsection 3.5.2.3 the following results for specification test were produced in analysis process.

4.4.2.1 Normality of residuals

The results of normality test; such that the probability (*p-value*) produced by Shapiro-Wilk W test for normal data is greater than *p-value* = 0.05. This output results exhibit that, the rule of thumb regarding normality of residuals is obeyed, such that, data residuals are normally distributed.

```
. swilk residualFP
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
-----+-----					
residualFP	40	0.97927	0.820	-0.419	0.66230

4.4.2.2 Heteroscedasticity

The result of Breusch-Pagan / Cook-Weisberg test for heteroscedasticity reveals that, the obtained *p-value* = 0.270 is greater than the threshold *p-value* = 0.05; such results implies that, the rule of thumb regarding heteroscedasticity was obeyed, thus, no heteroscedasticity problem among the variables in the regression model.

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variables: fitted values of Firm_Performance

```
chi2(1)      =      1.19
```

```
Prob > chi2   =      0.2750
```

4.4.2.3 Multicollinearity (collinearity) test

Among the variables involved in the model, the issue of multicollinearity is inevitable; such that, only with the higher degree of multicollinearity a concern should be raised. As exhibited in Table 4.7, none of the variables in the model violated the rule of thumb narrated in subsection 3.5.2.3. The results of collinearity test reveals that investment was the variable with maximum VIF (4.72), evidencing that all the variables was below 10. Therefore, none of the variables was automatically omitted from the model due to the exhibited degree of multicollinearity.

Table 4.7: VIF results

Variable	VIF	Tolerance (1/VIF)
Firm size	4.02	0.248475
Total Assets	4.41	0.226538
Investment	4.72	0.211872
Leverage	1.55	0.644284
DPR	1.74	0.576361
Firm growth	1.35	0.738261
Mean VIF	2.97	

4.4.3 The results of Regression Model

Table 4.8 exhibits the results of multiple regression model, covering all the explanatory variables, their respective coefficients, *p-value*, t-statistics values, and R- square, concerning the joint test of significant of all variables, a *p- value* of 0.000 implies that, all variables predict the model correctly at 1% level of significance. Generally, the results further implies the acceptance of alternative hypothesis, and rejection of null hypothesis, such that performance of firms listed in DSE is not influenced by its predictors (Say, DPR, firm size, total assets, investment, firm growth, and leverage). Notwithstanding, R- squared of 0.664 from the regression model implies that, the explanatory variables explain the variation in the dependent variable (firm performance) by approximately 66%; while they does not explain it by approximately 34%. Therefore, the following results are of each explanatory variable from the regression model; beginning with variables found to be statistically significant.

Dividend Payout Ratio (DPR)

Table 4.8 reveals that dividend payout ratio positively and significantly impact performance of firms listed in DSE at 10% level of significance. A positive result further implies that, other things being equal, a unit change (by increase) in dividend payout ratio will change (increase) firms performance (measured as net profit after tax) by 0.436.

Table 4.8: Results of Regression model (firm performance as dependent)

Variables	Coef (Std Err)	t	P- Value
DPR	0.436 * (0.219)	1.99	0.055
Firm Size	-0.196 (0.885)	-0.22	0.826
Total Assets	0.815 *** (0.183)	4.45	0.000
Firm Growth	2.167 ** (0.906)	2.39	0.023
Leverage	-1.328 ** (0.547)	-2.43	0.021
Investment	0.209 (0.157)	1.33	0.194
Constant	-1.539 (2.575)	-0.60	0.554
Number of observation			40
F(6, 33)			40.63
Prob > F			0.000
R- squared			0.664

Note: *** p<0.01, ** p<0.05, * p<0.1

Total assets

As revealed in Table 4.8 total assets significantly and positively impact the performance of firms listed in DSE at 1% level of significance. Hitherto, a positive sign implies that, a unit increase (decrease) in firm's total asset will increase (decrease) its performance measured as net profit after tax by TZS 0.815; keeping constant all other variables.

Firm growth

The growth of the firm also significantly impacts the performance of firms listed under DSE at 5% level of significance as narrated in Table 4.8. By bearing a positive sign and its coefficient, firm size implies that, other variables held constant, a unit growth of firm by increasing will ultimately increase its firm performance and vice versa.

Leverage

As revealed in Table 4.8 leverage measured as total debt by total shareholder's equity significantly impacts performance of firms listed in DSE at 5% level of significance; however, bearing a negative sign. Therefore, such sign implies that, all other variables being the same, a unit increase (decrease) in firm's leverage will decrease (increase) firm performance by 1.328.

Firm size

Table 4.8 exhibits that firm size negatively impacts firm's performance, however, it was found to be statistically insignificant. By bearing a negative sign, under ceteris paribus, one unit increase (decrease) in the firm size will in return decrease (increase) the net profit of such particular firm (so its performance) by 0.196.

Firm's investment

Investment bears a positive sign in regards to performance of firms in DSE such that increase (decrease) in firm's investment will increase (decrease) firm's performance by 0.209, under ceteris paribus. Table 4.8 further reveals that, investment of a firm is statistically insignificant on impacting performance of firms listed in DSE.

Generally, despite of the variable significance level as narrated in Table 4.8. A ‘constant’ was also determined bearing a negative coefficient of 1.539, representing the amount of net profit lost by a particular firm listed in DSE if other variables were not determine (bared a zero coefficient). However, regarding hypothesis testing, results associated with dividend payout ratio reveals the rejection of null hypothesis, and acceptance of alternative hypothesis such that dividend payout ratio has significant impact on the performance of firms listed in DSE.

CHAPTER FIVE

DISCUSSION OF RESULTS

5.1 Introduction

This chapter is a successor of the previous chapter, and it focus on exhibiting detailed discussion of the results presented in chapter four. However, it should be noted that,

this study aimed to assess the impact of dividend payout ratio on the performance of firms listed in DSE using net profit after tax as its proxy. To accomplish such goal the study take the liberty to initially examine the dividend frequency, rates, and policies; thereafter, examined the relationship between dividend payout ratio and firm performance, and finally, determined the impact of dividend payout ratio on firm performance.

5.2 Dividend policy, rate and frequencies

The dividend policy, dividend rate, and dividend amount among the firms listed in DSE and considered as a sample in this study were not uniform overtime. As observed for each individual firm, the rate, amount and dividend issuing decision were fluctuating regardless of the amount of profit generated from particular firms operations. However, some of the rate or dividend amount outweighs the amount of profit generated; which implies that the firms were using current profit plus the previous years retained earnings to pay-out dividend to its shareholders. In a nutshell, it should be noted that, the dividend amount, rate or policy of a particular will always change with the decision made by board of directors, as they sees fit to achieve firm's needs or objectives at hand. These decisions that cause fluctuation in dividend amount, rate, and policy supports the Clientele Theory; and other arguments by Allen et al. (2000) and Litzenger and Ramawaswamy (1979).

5.3 Relationship between dividend payout ratio and firm performance

Different theories in corporate finance discipline have taken into consideration of the relationship between dividend and firms' performance, ending to inconsistency conclusion. Therefore, a Pearson correlation in this study examined the existing relationship between dividend payout ratio per se and performance of firms listed in DSE, while taking into account of the firm's specific control variables. The results however, exhibited a positive weak linear relationship implying that a slightly increase or decrease in dividend payout ratio, other things being constant will ultimately increase or decrease the net profit of listed firms (thus, they both moves in the same direction). Hitherto, the correlation between dividend payout ratio and firm

performance were statistically insignificant implying that insufficient evidence prevail to conclude the existence of relationship between dividend payout ratio and firm performance. Such result of correlation supports the argument of dividend irrelevance theory by Miller & Modigliani (1961) such that firm performance relies upon investment decisions rather than dividends decision. On the other hand, the correlation results contradict dividend relevance theory by Gordon (1959) and Lintner (1962); Bird in Hand theory by Lintner (1962) and Myron (1963) who postulated that dividend payment has a positive or negative value on firm performance.

Regarding the control variables, only investment, total assets, and firm size were found to be statistically significant implying rich in evidence to conclude the existence of linear relationship between each of them and performance of firms listed in DSE as their coefficient of correlation are way far from zero. Also, they exhibited a positive correlation implying that the relationship moves in the same direction, such that any increase or decrease in either of the variable will have corresponding increase or decrease in firm performance. However, firm growth and leverage were both insignificant, yet exhibited weak and negative linear relationship implying that they moves in opposite direction against firm performance; and lack of evidence for a linear relationship between them (leverage and firm growth separately) and firm performance.

5.4 Impact of dividend payout ratio and firm performance

A multiple regression model was employed to determine the impact of dividend payout ratio on performance of firms listed in DSE, measured as net profit after tax. Nevertheless, the modelling process took into account of the control variables such as total assets, firm size, growth, investment, and leverage. However, the results presented in chapter four were tested for regression model underlying assumptions to justify the appropriateness of using regression model to determine the impact of dividend payout ratio on firm's performance. From the results in subsection 4.4.1 the residuals were found to be normally distributed, no heteroscedasticity, and multicollinearity slightly prevails, however, not to the degree that concern should be raised.

Dividend payout ratio exhibited a slightly positive impact on firm performance implying that as performance of a firm (net profit after tax) increases following a unit increase in dividend payout ratio, under *ceteris paribus*. These results justify the arguments of dividend relevance theory (Gordon, 1959; Lintner, 1962), which postulated that dividend decisions have significant impact on firm value; thus, as firm payout more dividend the more its performance increase. Notwithstanding, such results are in favour of other theory such as Bird in hand theory by Lintner (1962) and Myron (1963); information signalling effect theory (Ross, 1977); but also inconsistent with dividend irrelevance theory by Miller & Modigliani (1961). Regarding empirical evidence, the findings of this study are consistency with Enekwe et al. (2015) when ROA and ROCE are used as performance proxy; similarly to Anton (2016), Ajanthan (2013), John (2015), and M'rabet et al. (2016). On the other hand, this study findings contradicts the finding of previous studies (see, (Hasan et al., 2015; Kanwal & Hameed, 2017; Khan et al., 2015; Thafani & Abdullah, 2014) such as dividend payout ratio has no significant and positive impact on performance of listed firms. Therefore, from the results of this study it is important for firm's dividend decision makers to consider increasing dividend payout ratio so as to boost up their performance.

Firm's total assets on the other side has a strong, positive and significant impact on performance of firms listed in DSE implying that holding other things the same, firms which tends to increase their total assets will in return increase their performance, and vice versa. This is necessarily the case as increase in firm assets boost up its efficiency by supporting operations that in return increases its profit. The finding of this study regarding impact of total assets on firm performance are consistency with other previous studies such as Ajanthan (2013), Karethio (2013), and M'rabet and Boujjaat (2016). However, this study findings are inconsistency with John (2015) who postulated that firm assets has a negative, yet, insignificant impact on firm's performance; such that any increase in firm's assets is more likely to decrease its level of profitability.

Regarding the impact of firm growth on firm performance, the findings of this study are consistency with the findings of Thafani and Abdullah (2014) when firm

performance- profitability is measured by ROE and EPS. The results exhibit that firm growth has a positive and significant impact implying that as a firm grow in terms of it sales, it is more likely to increase enhance its performance in term of profitability. However, these findings contradicts the arguments postulated by John (2015), Thafani and Abdullah (2014) when profitability is measured as ROA; while Bezawada and Tati (2017) concluded that firm growth has a significan impact on firm performance but a negative one.

Leverage measured as the ratio between total debt and total shareholders' equity has a significant but negative impact on the performance of firms listed in DSE. The implication of this finding is that, firms are more likely to increase their profitability (performance) following a decrease in its level of leverage, other things being the same. This is necessarily the case since, as the firm increase its debts in regards to equity, it increase the burden of payables that also decreases the amount of profit of such particular firm. These findings are actually consistency with other previous findings by Thafani and Abdullah (2014) when ROA and EPS are used as proxy fo firm performance. However, when the performance is measured as ROE, Thafani and Abdullah (2014) postulate leverage to have negative but insignificant impact on the performance of firms listed in DSE. Furthermore, the findings of this study contradicts with studies such as Khan et al. (2015), and Karethio (2013) who concluded that leverage has strong positive relationship and insignificant impact on the performance of the firms listed in DSE.

Firm size was found to have an insignificant, yet negative impact on firm performance implying that holding other things constant, firm performance is more likely to decline following a corresponding increase in firm size, and vice versa. These findngs are consistency with Khan et al. (2015); Thafani and Abdullah (2014) when performance- profitability is measured as EPS. However, the findings are incostisstent with previous studies which considered firm size to have negative and significant impact on profitability (firm performance) when measured as ROA, and ROE (Thafani & Abdullah, 2014). The findings further contradicts the conclusion made by Karethio (2013) such that firm size and performance has strong and positive relationship.

Finally, firm investment was found to have a positive but insignificant impact on the performance of firms listed in DSE. By being insignificant, it marks a contradiction to the theory of dividend irrelevance by Miller and Modigliani (1961) who claimed that investment decisions have more impact on firm performance, and not dividend decisions. However, the positive impact of investment on firm performance implies that the profitability of the firm is likely to increase following an increase in its investment, and vice versa; holding other things constant.

CHAPTER SIX

SUMMARY, CONCLUSION, AND POLICY IMPLICATIONS

6.1 Overview

This chapter gives the summary of the overall study and its findings. It further gives the conclusion followed by policy implication associated with the findings; and finally, the limitation of the study and proposed area for further research.

6.2 Summary and Conclusion

This study generally intended to assess the impact of dividend payout ratio on the performance of firms listed in DSE. And to achieve such core objective, the study specifically examined the dividend policies, rate, and frequencies amongst firms listed in DSE; to determine the relationship between dividend payout ratio and firm performance; and lastly, to determine the impact of dividend payout ratio on the performance of firms listed in DSE. The study also used various theories such as dividend relevance and irrelevance theory, information signalling effect theory, Bird in hand theory, Tax differential theory, and clientele effects theory. The study employed a descriptive design to assess the impact of dividend payout ratio on purposively four selected firms from DSE for a period of 2007 to 2016. Yet used both qualitative and quantitative methods of data analysis dominated by multiple regression model to address the study objectives.

The findings of this study however reveal that, each firm considered in the study has different dividend policy, rate, and frequencies. However, pertaining dividend policy, majority of the firms issued dividend as a part of their profit while retaining the portion of it as retained earnings. Nevertheless, in minor cases, the firms found themselves paying dividend beyond the profit generated (thus, using retained earnings from previous years) and in other cases, opt to retain all the amount of profit generated; thus, not paying dividend to its shareholders. Considering the relationship between dividend payout ratio and firm performance, there were no sufficient evidence to concludes the presence of significant linear relationship between the two variables; this conclusion was however the same to firm growth and leverage in relation to firm performance. Other control variables such as investment, total assets, and firm size exhibited a significant linear relationship with respect to firm performance. Despite of the relationship revealed through Pearson correlation, dividend payout ratio emerge to have significant impact at 10% level of significant through multiple regression model. Also, control variables such as firm growth and leverage were significant at 5% level, while only total assets of the firms at 1% level of significant. The remaining control

variables, say investment, and firm size were the only variables that exhibited none significant impact on the performance of firms listed in DSE from 2007 to 2016.

Therefore, it can be concluded that, firms through their body of directors and management makes different dividend payout decision at different times depending on financial status of a particular firm. Notwithstanding, the relationship between dividend payout ratio and firm performance does not necessarily describes the impact dividend payout ratio has on performance. Being the case, it is important for the firm to consider other firm's specific decisions in regards to its performance (such as its assets, level of it growth, and leverage level decisions to mention the few) rather than depending on dividend decision only. In a nutshell, it is important for the firms to pay out dividend to its shareholders as it has a significant influence on performance. More likely, board of directors has to make rational dividend policies (decisions) that enhance the performance of the firm.

Theoretically, it has been noted that firms which pay out dividend are more likely to increase it values by attracting more investors; and this reflect how important it is for the firms to make sound dividend payout decisions. However, it should further be noted that, firm's board of directors have three decisions to make regarding dividend payout. Firstly, to issue dividend as a proportion of generated profit and retain some; second, pay out all of its profit as a dividend to shareholders; and third, to retain all of its profit and pay out no dividend to its owners. Henceforth, regardless of the decision made, the rate of profit paid as dividend should reflect the respective decision that suits the betterment of the firm.

6.3 Policy implications

This study provides valuable insights to different stakeholders especially, policy makers, and both potential and existing investors. Thus, as dividend payout ratio was found to have a significant impact on firm performance, it is important to managers and firm's board of directors to invest adequate time in making rational dividend decision, yet in designing dividend policies that boost up firm performance. Also, the findings of this study stall as a future policy or decision to both prospective and

existing investors regarding their investment decision to maximize their wealth. On the other hand, it is important to firms' management to take into consideration of enhancing their total assets and expanding their growth through sales so as to increase their performance in terms of profit. However, firms should consider reducing their leverage level through reducing their amount of liabilities for future enhancement of their performance. Other variables such as investment were insignificant, yet having a positive impact on firm performance, such that it is crucial for managers to positively adjust their investment decision for future enhancement of their performance.

6.4 Limitation of the study

The DSE has over 30 listed companies, but this study used only four companies to assess the impact of dividend payout on firm's performance which may limit the generalization of this study's findings to overall 30 listed companies; or might likely change the weight of impact that dividend payout has on firm's performance. Nevertheless, the study could have used extra years instead of only 10 years to extensively realize the research core objective. Also, the study used only dividend payout in relation to firm's performance measured by profit generated, thus neglecting other important performance proxy such as Earning Per Share (EPS); Return on Asset (ROA); and Return on Equity (ROE).

6.5 Area for future research

Reference made to this study's flaws narrated in the preceding subsection, there is a need for future study to assess the impact of dividend payout on firm's performance by extending the number of years, and so is the number of firms to be studied. Furthermore, future study should adopt specific measures such as Propensity Score Matching (PSM) in assessing the impact of dividend payout or any other extra factors on firm's performance, yet different proxy for performance of firms.

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APPENDICES

Appendix I: Regression model output (Robust)

```
. regress FirmPerformance DPR Investment TotalAssets FirmSize FirmGrowth  
Leverage, vce(robust)
```

```
Linear regression                               Number of obs =          40  
  
                                                F(   6,   33) =   40.63  
                                                Prob > F       =   0.0000  
                                                R-squared      =   0.6643  
                                                Root MSE      =   .50582
```

```
-----  
                |               Robust  
FirmPerfor~|      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
```

DPR		.4356108	.2187844	1.99	0.055	-.0095095	.8807311
Investment		.2086599	.1573608	1.33	0.194	-.1114931	.5288128
TotalAssets		.8149542	.1829988	4.45	0.000	.4426404	1.187268
FirmSize		-.1960657	.8848578	-0.22	0.826	-1.996322	1.604191
FirmGrowth		2.167059	.906405	2.39	0.023	.3229646	4.011154
Leverage		-1.3283	.5465547	-2.43	0.021	-2.440274	-.2163263
_cons		-1.539449	2.574537	-0.60	0.554	-6.777385	3.698486

Appendix II: Regression model output

```
. regress FirmPerformance DPR Investment TotalAssets FirmSize FirmGrowth
Leverage
```

Source		SS	df	MS	Number of obs =	40
					F(6, 33) =	10.88
Model		16.7055236	6	2.78425394	Prob > F =	0.0000
Residual		8.44318686	33	.255854147	R-squared =	0.6643
					Adj R-squared =	0.6032
Total		25.1487105	39	.64483873	Root MSE =	.50582
FirmPerfor~		Coef.	Std. Err.	t	P> t	[95% Conf. Interval]

DPR	.4356108	.3239602	1.34	0.188	-.2234912	1.094713
Investment	.2086599	.184414	1.13	0.266	-.1665333	.5838531
TotalAssets	.8149542	.2636369	3.09	0.004	.2785809	1.351327
FirmSize	-.1960657	.9097076	-0.22	0.831	-2.04688	1.654748
FirmGrowth	2.167059	.5899911	3.67	0.001	.9667136	3.367405
Leverage	-1.3283	.3153104	-4.21	0.000	-1.969804	-.6867964
_cons	-1.539449	4.180719	-0.37	0.715	-10.04519	6.966288

Appendix III: Multicollinearity test output

```
. estat vif
```

Variable	VIF	1/VIF
-----+-----		
Investment	4.72	0.211872
TotalAssets	4.41	0.226538
FirmSize	4.02	0.248475
DPR	1.74	0.576361
Leverage	1.55	0.644284
FirmGrowth	1.35	0.738261
-----+-----		

Mean VIF | 2.97

Appendix IV: Pearson Correlation (SPSS) output

Correlations

		Net profit	Dividend Payout Ratio	Investment	Total Assets	Firm size	Firm Growth	Leverage
Net profit	Pearson Correlation	1	.085	.481**	.868**	.751**	-.011	-.089
	Sig. (2-tailed)		.600	.002	.000	.000	.945	.586
	N	40	40	40	40	40	40	40
Dividend Payout Ratio	Pearson Correlation	.085	1	-.234	.124	.214	-.384*	.099
	Sig. (2-tailed)	.600		.146	.445	.186	.014	.545
	N	40	40	40	40	40	40	40
Investment	Pearson Correlation	.481**	-.234	1	.660**	.641**	-.098	.504**
	Sig. (2-tailed)	.002	.146		.000	.000	.548	.001
	N	40	40	40	40	40	40	40
Total Assets	Pearson Correlation	.868**	.124	.660**	1	.937**	-.270	.209
	Sig. (2-tailed)	.000	.445	.000		.000	.092	.196
	N	40	40	40	40	40	40	40
Firm size	Pearson Correlation	.751**	.214	.641**	.937**	1	-.386*	.294
	Sig. (2-tailed)	.000	.186	.000	.000		.014	.065

	N	40	40	40	40	40	40	40
Firm Growth	Pearson Correlation	-.011	-.384*	-.098	-.270	-.386*	1	-.121
	Sig. (2-tailed)	.945	.014	.548	.092	.014		.458
	N	40	40	40	40	40	40	40
Leverage	Pearson Correlation	-.089	.099	.504**	.209	.294	-.121	1
	Sig. (2-tailed)	.586	.545	.001	.196	.065	.458	
	N	40	40	40	40	40	40	40

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix V: Summary of the reviewed literatures

Dividend Pay-out Ratio and Firm's profitability											
S n	Articles	Dependent Variable		Independent Variable		Results (Sign)	R. Design	Data collection; type.	Model & Data analysis	Sampling Techniques	Conclusion and recommendati on
		Variable	Measureme nt	Variable	Measureme nt						
1.	(Khan, Anuar, Ramakrishna , & Malik, 2015)	Profitability	ROA (Net Income after taxes / Total Assets)	Dividend Pay-out Ratio	Dividend per share / Earning per share	Significant (-)	Panel Data	Secondary Data. -Audited annual reports -Balance sheet (state bank of Pakistan)	Fixed effect model of panel data regression -Hausman test, P<0.05 (goodness of fit) -VIF (less than 10) - Heteroscedastic ity test (P>0.05)	Convenien t Sampling Technique	Summary of the overall study.
				Leverage	Total Debt / Total Equity	Insignifica nt (+)					
				Firm size	Ln (Total assets)	Insignifica nt (-)					
2.	(Hasan, Ahmad, Rafiq, & Rehman, 2015)	Profitability (High Dividend Pay)	Earnings Per Share (EPS)	Dividend Pay-out Ratio	Dividend per share / Earning per share	Significant (-)	Time Series	Secondary Data	Logarithmic Regression	Convenien t sampling technique	No matter what industry is, there is a negative impact of dividend pay-out ratio on next year earnings of a firm.
			ROA	Dividend Pay-out Ratio	Dividend per share / Earning per share	Significant (-)					
		Profitability	Earnings Per Share (EPS)	Dividend Pay-out Ratio	Dividend per share / Earning per share	Significant (-)					

		(Low Dividend Pay)	ROA	Dividend Pay-out Ratio	Dividend per share / Earning per share	Significant (-)					
3.	(Ajanthan, 2013)	Profitability	Net Profit (Net Profit After Tax (NPAT) / Total Revenue (TR) X100)	Dividend Pay-out	Total Amount of Dividend Paid during the Particular Period	Significant (+)	Time series	Secondary Data -Annual Statements -Scholarly articles	-Correlation -Multiple Regression -Descriptive statistics (SPSS)	Convenient sampling technique	-Future research can increase the sample size. -Other variables i.e. changes in tax policy, pattern of past dividends, legal rules, financial leverage, opportunities, growth stage and capital structure; Ownership structure, shareholder's expectations and access to capital markets.
				Revenue	Amount of Sales	Significant (+)					
				Total Assets	Amount of Total Assets	Significant (+)					
4.	(Thafani & Abdullah, 2014)	Profitability	ROA (Earnings before interest & tax divided)	Dividend Pay-out Ratio	Dividend per share divided by earnings per share in year t	Insignificant (+)	Time series	Quantitative data (Secondary)	-Correlation analysis -Simple and Multiple regression -SPSS	Convenient Sampling Technique	A positive significant relation is found between dividend

			by total assets in year t)	Size	Natural logarithm of total assets in year t,	Significant (-)						Pay-out and return on assets and return on equity for the whole sample while significant negative relationship is found between dividend pay-out and earnings per share as far as the dividend paying sample is concerned.
				Growth	Sales C-Sales P by Sales P	Insignificalnt (+)						
				Leverage	Long term debt divided by total shareholders fund in year t,	Significant (-)						
			ROE (Profit after tax divided by shareholders equity year t)	Dividend Pay-out Ratio	Dividend per share divided by earnings per share in year t	Insignificalnt (+)						
				Size	Natural logarithm of total assets in year t,	Significant (-)						
				Growth	Sales C-Sales P by Sales P	Significant (+)						
				Leverage	Long term debt divided by total shareholders fund in year t,	Insignificalnt (-)						

			EPS (Profit after tax divided by number of shares outstanding in year t)	Dividend Pay-out Ratio	Dividend per share divided by earnings per share in year t	Significant (-)					
				Size	Natural logarithm of total assets in year t,	Insignificant (-)					
				Growth	Sales C-Sales P by Sales P	Significant (+)					
				Leverage	Long term debt divided by total shareholders fund in year t,	Significant (-)					
5.	(Enekwe, Nweze, & Agu, 2015)	Performance Evaluation	ROCE (NPBIT/TA)	Dividend Pay-out Ratio	DPS/EPS*100	Significant (+)	Ex-Post Facto research design	Secondary data	-Descriptive Statistic; -Pearson Correlation -Simple Linear Regression	Convenient Sampling Technique	
			ROA (NI/TA)	Dividend Pay-out Ratio	DPS/EPS*100	Significant (+)					
			ROE (NI/SE)	Dividend Pay-out Ratio	DPS/EPS*100	Insignificant (+)					
6.	(Karethio, 2013)	Financial Performance	Profitability	Dividend Pay-out Ratio	Dividend per share divided by earnings per share	Strong and Positive Relationship	Correlation research design	Secondary Data	-Correlation -Multiple Linear Regression -SPSS	Convenient Sampling Technique	Dividend policy is relevant and that managers should devote

				Firm size	Natural logarithm of market capitalization	Strong and Positive Relationship					adequate time in designing a dividend policy that will enhance financial performance and therefore shareholder value.
				Tangible Assets	Natural logarithm of tangible assets of the firm	Strong and Positive Relationship					
				Leverage	Total debt divided by shareholders equity	Strong and Positive Relationship					
7.	(M'rabet & Boujjaat, 2016)	Firm performance	Profit after tax	Dividend policy	Actual dividend paid	Significant (+)		Secondary data	-Correlation -Multiple regression -Descriptive statistics. -SPSS	Judgemental Sampling Technique	-Dividends affect firm performance and that this relationship is strong and positive. -Future studies can also look more at the determinants of dividend policy and its influence on the Value Creation
				Total assets	Amount of total assets	Significant (+)					
		Shareholders' wealth	Market capitalization	Dividend policy	Actual dividend paid	Significant (+)					
				Total assets	Amount of total assets	Significant (+)					

8.	(Kanwal & Hameed, 2017)	Financial performance	ROE	Dividend Pay-out Ratio	Dividend per share divided by earnings per share	Insignificant (+) -Strong association		Secondary data	-Correlation -Regression analysis	Convenient Sampling Technique	Firm financial performance is influenced by the dividend policy. Consequently the results suggest that the dividend payout ratio highly influenced the firm financial performance.
			ROA	Dividend Pay-out Ratio	Dividend per share divided by earnings per share	Insignificant (+) -Weak association					
			Net Profit	Dividend Pay-out Ratio	Dividend per share divided by earnings per share	Insignificant (+) -Strong association					
Dividend Pay-out Ratio and Market Value											
1.	(Luvembe, Njangiru, & Mungami, 2014)	Market Value	Change in Share prices	Dividend Pay-out Ratio	Dividends paid at period	Positive relationship Significant (+)	Descriptive research design	secondary and primary data	-SPSS -Qualitative & Quantitative Analysis -Regression Analysis	Convenient Sampling Technique	It therefore concludes that the dividend policy adopted has a significant impact on market value of banks.
2.	(John, 2015)	Market Capitalization	Share price	Dividend Pay-out Ratio	Dividend per share by earning per share	Significant (+)	Descriptive research design	Secondary Data	-Multiple Regression Analysis (Multivariate)	Convenient Sampling Technique	Dividend policy is relevant and therefore affects the share price of a firm hence its value contrary
				Firm's assets	Amount of assets	Insignificant (-)					
				Growth	Current earnings less	Insignificant (+)					

					previous earnings by previous earnings						to theories that view dividend policy as irrelevant.
3.	(Anton, 2016)	Firm value	Natural logarithm of market value of firm over replacement value of its assets	Dividend pay-out ratio	Dividend per share over earnings per share	Significant (+)		Secondary data	- fixed-effects model (Regression model)	Convenient Sampling Technique	Managers can create value by increasing dividends to an optimal level - dividend pay-out ratio positively influences firm value after controlling for other firm-specific variables
				Debt ratio	Total liabilities over total assets	Significant (+)					
				Firm size	Natural logarithm of total sales	Significant (+)					
				Profitability	Net profit over total assets	Insignificant (+)					
				Liquidity	Current assets over current liabilities	Insignificant (-)					
4.	(Manjunatha, 2013)	Firms value	Actual ROE	Debt-Equity Ratio	Expected Debt-Equity Ratio (Moving average for five years)	Insignificant	Quantitative Research Design (Descriptive Design)	Secondary Data	Multiple Regression Model	Convenient Sampling Technique	There is no significant effect of dividend pay-out and debt equity ratio on share prices.
				Dividend Pay-out Ratio	Dividend per share over	Insignificant					

					earnings per share						
5.	(Giang & Tuan, 2016)	Market Value	Ratio of capitalized value of listed firm per share to per value of stock	Dividend Paid	Fraction of cash dividend payment for one stock in one year and per value of stock	Insignificant (+)	exploratory research	Secondary Data	Multiple Regression Model	Convenient Sampling Technique	
				Dividend Pay-out	Ratio of dividend per share to earnings per share	Insignificant (+)					
6.	(Bezawada & Tati, 2017)	Market Value	Sum of equity market value, preference shares and debt; divided by total assets	Dividend Yield	Dividend per share over price per share	Significant (-)		Secondary data	Ordinary Least Squared Method	Convenient Sampling Technique	There is a negative nonlinear association between market value of a share and the dividend yields.
				ROCE		Significant (+)					
				Sales growth rate		Significant (-)					
				Sales	Log sales	Significant (+)					

