

**FINANCIAL MANAGEMENT DECISIONS AND FIRM VALUE OF SELECTED
FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE, KENYA**

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DECLARATION

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DEDICATION

This thesis is dedicated to my late Parents Mr. and Mrs. Moses Gitagia Waweru for their moral and financial support in my entire academic life. Am grateful to my Siblings for their encouragement throughout my academic endeavors and especially in developing this thesis. Lastly to my wife Mary Muthoni Mwangi, daughter Stacy Nyokabi and my son Ryan Gitagia for their encouragement through this journey of thesis development.

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OPERATIONAL DEFINITION OF TERMS

| | |
|---------------------------------------|--|
| Agency Problem | The possibility of the management of organization pursuing their personal goals as opposed to goals of the providers of funds. |
| Capital Structure Decisions: | The managerial role of determining the ratio of Debt to Equity that maximizes the firm value. |
| Cash Holding Decisions | The total amount held by a firm through cash in bank and hand and cash equivalents, relative to the total assets held by the firm |
| Corporate Investment Decision | The decisions regarding commitment of current assets to non-current assets through capital budgeting. It is concerned with investments in noncurrent assets. |
| Dividend Decisions | The financial managerial role of determining the amount of dividends to be paid by the organization in order to increase the value of the company. |
| Financial Distress | The Inability of an organization to meet its short term financial obligations due to shortage of liquid assets. |
| Financial Leverage | The degree to which a firm uses fixed-income securities such as debt and preferred equity. |
| Financial Management Decisions | The corporate decisions regarding capital structure, Dividend, Cash holding, and Corporate investment. |
| Firm value | The shareholders wealth as indicated by the ratio of market capitalization to market value of assets. |

| | |
|--------------------------------|---|
| Information Asymmetry | The information imbalance between the management of organization and outsiders. |
| Liquidity | The ease with which assets are converted to cash as indicated by current ratio. |
| Macroeconomic variables | Factors that affect the general economy and in particular Gross Domestic Product and Political Risk |
| Marginal leverage Cost | Extra cost associated with a unit increase in financial leverage. This cost is associated with bankruptcy costs. |
| Marginal Tax Benefit | The extra tax benefit associated with increase in leverage. |
| Market Capitalization | The total market value of firm's outstanding shares indicated by the current market price of a security multiplied by quantity of shares outstanding for respective listed firms. |
| Moral hazard | Risk that a party to a contract has not entered into the contract in good faith |
| Selected firms | Companies listed in securities exchange other than those in banking, investment and insurance sector |
| Stock Return Volatility | The Fluctuation of security's return as measured by standard deviation. It's considered a measure of risk of returns. |
| Tobin's Q | A measure of market value computed as the ratio of market capitalization to book value of assets. |

Value Maximization

A Goal of a firm concerned with increasing the shareholder's wealth through making all efforts to increase the market value of the securities.

ABBREVIATIONS AND ACRONYMS

| | |
|-------------|-------------------------------------|
| BLUE | Best Linear Unbiased Estimator |
| BOD | Board of directors |
| CEO | Chief Executive Officer |
| CLRM | Classical Linear Regression Model |
| CSE | Chittagong Stock Exchange |
| CSE | Colombo Securities Exchange |
| DPS | Dividend per Share |
| DSE | Dhaka Securities Exchange |
| FE | Fixed Effect |
| FGLS | Feasible Generalized Least Squares |
| GDP | Gross Domestic Product |
| GMI | Global Mapping International |
| GoK | Government of Kenya |
| KNBS | Kenya National Bureau of Statistics |
| KPA | Kenya Ports Authority |
| LPER | Lagged Price Earnings Ratio |
| LR | Likelihood Ratio |
| MPS | Market Price per Share |

| | |
|----------------|---|
| NACOSTI | National Commission for Science Technology and Innovation |
| NSE | Nairobi Securities Exchange |
| OECD | Organisation for Economic Co-operation and Development |
| OLS | Ordinary Least Square |
| PER | Price Earnings Ratio |
| RE | Random Effect |
| ROE | Return on Equity |
| ROI | Return on Investment |
| SEM | Structural Equation Modelling |
| VIF | Variance Inflation Factor |

ABSTRACT

The declining and highly volatile firm value observed in the Nairobi Securities Exchange (NSE) over the last decade has raised concern among scholars and financial practitioners. The Kenyan securities market has undergone periods of decline in firm value as shown by reduction in market capitalization from a high of 6161 points in year 2007 to a low of 2789.64 points in year 2016. Firm's financial management decisions have long been linked with firm value; However, there has not been a consensus amongst empirical studies on the effect of financial management decision variables including capital structure, dividend, Cash holding and corporate investment on firm value. The study sought to determine the effect of financial management decisions on firm value of selected firms listed at Nairobi Securities Exchange. The specific objectives were: to determine the effect of capital structure decisions, dividend decisions, cash holding decisions, and corporate investment decisions on firm value of selected firms listed at the NSE, Kenya. The study further assessed the moderating effect of Gross Domestic Product and political risk on the relationship between financial management decisions and firm value. The study was anchored on: Shareholder value theory, pecking order theory, Signaling theory and trade-off theory. A census of 46 firms was carried out. The study utilized secondary data from financial reports obtained from NSE handbooks and Kenya National Bureau of Statistics for the period between 2008-2016. Data was analyzed using descriptive statistics. The study found that capital structure, dividend decisions and corporate investment had a positive and statistically significant effect on firm value. On contrary, cash holding was found to have a statistically significant negative effect on firm value. Whisman test of moderation further indicated that GDP had significant positive moderation effect on the relationship between each of the financial management decision and the firm value. On contrary, political risk was found to have a significant negative moderation effect on the relationship between capital structure, dividend decisions and corporate investment and the firm value. Further, political risk had insignificant negative moderating effect on the relationship between cash holding and firm value. The study concluded that firms with high debt levels relative to equity, pays dividends and increases corporate investment has high value whereas those with high cash holding have low firm value. Consequently, the study recommended that, corporate managers issue more corporate debt, increase the dividend payout, reduce free cash flows and increase corporate investments. It further recommended that the government reduce taxation on corporate bond interest, introduce interventions to reduce corporate cost of debt (through CBK), and increase capital allowances to encourage investments in long term assets. Additionally, NSE to work with other securities exchange to harmonize regulations to enable cross listing while CMA comes up with regulations regarding stock buybacks.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Firm value is of great importance since it determines the ultimate survival of a company (Muruga, Somu & Mathivathani, 2013). Firm value is reflected by the market prices of its securities, largely because market prices reflect company's investment decision, financing and asset management decisions. In case of increase in the real prices of securities the firm or the wealth of the shareholder's increases. Conversely, decrease in the security prices, decreases the firm value and thereby reducing the shareholder's wealth (Debby, Mukhtaruddin, Yuniarti, Saputra & Abukosim, 2014). Lestari (2016) indicates that firm value maximization is superior goal compared to other goals of a firm including profit maximisation, social responsibility and growth. Despite the significance of firm value in finance practice, it remains largely unclear if the same is significantly affected by the company's financial management.

Dolenco, Stubelj and Laporšek (2012) indicate that value maximization is not equivalent to profit maximization. In concurrence, Lestari (2016) concludes that value maximisation objective is superior to profit maximization objective and as such, firms are moving from the traditional goals of profit maximization to value maximization. Paminto (2015) concludes that, management of firm should espouse the concept of firm value maximization by applying deliberate efforts to maximize the firm value as measured by the market prices of shares.

Though Numerous companies have embraced value based management which endeavors to maximize the firm value and thereby increasing the shareholder's wealth, low market valuations of securities and high fluctuations in the market price of the shares makes it essential to examine the factors influencing firm value (Ganesh, Somu & Mathivathani, 2013). Adenugba, Ige and Kesinro (2016) indicates that, though empirical studies have identified financial management decisions as one of the key factor in determining the firm value, a considerable debate remains on the direction and strength of such relationship.

Faulkender and Wang (2006) indicate that company's financial management decisions are based on capital structure, dividend decisions, cash holding and corporate investment. Financial management decisions must aim at coming up with the optimal set of these variables to maximize the value of firm and hence increase the shareholder's wealth (Romney, 2009). In line with Afza and Nazir (2008), the puzzle is on how these decisions affect the firms' value and how they can be optimized to ensure increased shareholders wealth.

According to Aggarwal and Kyaw (2006) capital structure adopted by a firm may affect the firm value positively or adversely. Afza and Nazir (2008) indicate that the decisions regarding capital structure are very critical and have a link towards firm valuation. Issue of debt or equity communicates a signal to the market which affects the share price. It's therefore important for firm to come up with appropriate level of debt, equity or judicious mix of debt and equity in order to come up with the optimal firm value (Pandey, 2010). Studies relating to capital structure and the firm value are

diverse and have given rise to contradicting theories in endeavors to explain the effect of capital structure and the firm value with others testing the granger casualty of capital structure and firm value (Bhaduri, 2002)

Since the seminar work of Modigliani and Miller (1958), many scholars have directed their efforts towards the topic of dividend decisions and in particular it's bearing on the firm's value. Anand (2004) contends that dividend decisions play a crucial role in predicting the future prospect of a firm and hence huge influence on the market valuation of company. This indicates that the decisions regarding dividends have a very strong bearing towards the firm value. Kausar, Nazir and Butt (2014) conclude that, despite the fact that dividend decisions are some of the most crucial and valuable factors in determination of the firm's value, the real effect of the decisions on firm valuation remains a mystery which can only be unearthed by empirical studies in different contexts.

Companies hold cash for transactional costs, to enable them carry day to day operations and to take advantage of arising business opportunities. Ferreira and Vilela (2004) contend that decisions regarding cash ratio are imperative and when indecorously made firms may suffer from financial distress leading to lower market value. However little literature exists to show the direction and the strength of the relationship between cash holding and firm's value.

NSE is the biggest securities exchange in East and Central Africa with the largest market capitalization (NSE, 2017). It has been ranked in the second tier Securities Exchange in the same category with Morocco, Egypt Tunisia in Africa. NSE is

categorized into 14 sectors with a total of 67 registered companies; 45 non-financial companies and 22 financial companies in banking and insurance sector which are largely regulated in their capital structure, investment, and cash holdings.

1.1.1 Financial Management Decisions

Financial management decisions are the critical areas in which financial managers must take caution while acquiring and utilizing financial resources in order to maximise the value of company (Wagithunu, Muthee & Thinguri, 2014). These decisions involve the various choices made by financial managers in acquisition and investment of financial resources. The choices also involve the ultimate distribution of resources generated in order to maximise the firm value (Mapunda, 2013). Beena (2012) contends that financial management decisions are the crucial roles that financial managers undertake in their day to day operations of the business in endeavors to achieve the main goals of a firm.

Financial management decisions are critical in any company for its ultimate survival and maximization of the shareholder's value and as such they must be set at an optimal level (Nassab, 2016). Brigham and Houston (2012) indicate that majority of companies document poor financial management decisions as key cause of financial distress and corporate failures witnessed in the last decade. In concurrence, Brealey, Myers, Allen and Mohanty (2012) indicate that companies that have sound financial management system consequential to good financial management decisions will show great performance in terms of profitability and firm value. However, Myers *et al.* (2012) caution that the relationship between financial management decisions and

firm value have yielded mixed results since the seminal work of Modigliani and Miller (1958) and hence recommends more studies in various contexts. Financial management decisions form the major role of financial managers and when optimal choices are not made, the organization may suffer from financial distress, poor corporate governance and the ultimate collapse of a company (Tirole, 2010).

Pandey and Bhat (2007) identify capital structure, dividend decisions, cash holding and corporate investment as the main elements of financial management decisions. Similarly, Srivastava (2008) indicates that the role of financial manager involves key critical decision areas including but not limited to acquisition of funds (capital structure), liquidity management (cash holding), distribution of profits (dividend decisions) and corporate investment decisions. These decisions are interrelated and therefore it is necessary that, financial managers in coming up with the optimal choice of each of the element considers the effect of all the others (Titman, Keown, & Martin, 2011).

1.1.1.1 Capital Structure Decisions

According to Bhaduri (2002), Capital structure is the different options used by a company in financing its assets. These options are largely classified as falling under equity or debt and they could be long term or short term. Muritala (2012) defines Capital structure decisions as the choices made by management regarding the best option to finance their activities. Modugu (2013) observes that as companies attempt to maximise their value, they will adapt dissimilar capital structures This has

led to diverse capital structure theories that try to explain the different types of capital structures and their effect on the firm value (Shah, Hijazi & Hamdani ,2005).

The relative importance of the capital structure and contradicting results of various empirical studies linking capital structure and firm value have attracted lots of attention amongst scholars and practitioners (Obaid, 2016). Consequently, Antwi, Mills and Zhao (2012) observe that, diverse measures of capital structure have been adopted while testing such relationships. In most cases, ratios relating to leverage and equity have been found to be very important tools in analyzing the capital structure of companies. Muathe, Mwangi and Kosimbei (2014) used financial leverage, total current liabilities to total assets ratio and total current assets to total assets ratio to indicate capital structure. Muritala (2012) utilized debt ratio, assets turnover, size age, and asset structure and growth opportunities as a measure of capital structure. The current study adopted the ratio of total liabilities to stockholder's equity as advocated for by Modugu (2013).

The highly developed capital market has enabled easy access to Equity and debt capital through the Nairobi Securities Exchange (NSE, 2016). This has witnessed increase in equity and debt capital over the last decade. Debt capital raised through NSE by listed companies rose from below Kshs. 1 billion in year 2008 to Kshs. 2.3 billion in the year 2016. Equity capital raised in the same period through NSE increased from Kshs. 636 billion to Kshs 585 billion (NSE, 2016). This affects the capital structure and hence the firms value either positively or negatively.

1.1.1.2 Dividend Decisions

Dividend decision is the exercises of dividend payout decisions made by the managers of the organization (Baker, Powell & Veit, 2002). Dividend decisions are the choices regarding the amount of dividend paid and amounts retained, that is, choices about the proportion of dividends to be paid as a proportion of the net income made by the firm (Kapoor, Mishra & Anil (2010). These decisions include, how much to pay, when to pay, how to pay and why pay the dividends, thereby broadening the aspects of the dividend decision variables (Al-Twajjry, 2007).

Numerous finance scholars have focused on the dividend decisions because of the relative importance they play in enhancing profitability and firms' value. Dividend decision not only determines the firm value but also affects the shareholder wealth (Zainuddin, 2015). Michaely and Roberts (2007) indicate that the dividend decisions affect the value of company either positively or negatively and therefore very essential. The decisions regarding the optimal dividend decisions are amongst the hardest financial management decisions to make hence presenting financial managers with dividend puzzle. This has led to empirical studies focusing more on effects of dividend decisions on firm value yielding contradictory results. Al-Twajjry (2007) indicates that the management should be careful in their dividend decisions since it has a critical bearing towards profitability and the hence the firms value.

Abdullah, Ahmad and Roslan (2012) advocates for more empirical studies to resolve dividend puzzle. Accordingly, scholars and finance practitioners in different

empirical studies adopt different measures of dividend decisions. Velnampy, Nimalthasan and Kalaiarasi (2012) adopt ratio of dividend to net income paid as a measure of dividend decisions with a focus on how much to pay. Obaid (2016) utilize EPS and dividend payout ratio as the key indicator of dividend decision. The study adopted dividend yield as the indicator of dividend decisions as adopted by Kapoor *et al.* (2010) due to the ability of the ratio to relate the dividend paid with market price per share and hence the tradeoff between capital growth and dividend.

According to Ferris, Sen, and Unlu (2009), there has been a downward trend from 72% to 55% of companies paying dividends globally. Similarly, both academic and professional literature indicates that the dividend payment has declined significantly in Kenya for the period between 2008 and 2016. According to NSE statistical bulletin (2017), Nairobi Securities Exchange (NSE) was trading at eight-year lows with companies not declaring dividends. This has been associated with structural adjustments and inability of companies to generate adequate profits to distribute to the shareholders as dividends. Most businesses retain most of their profits in order to take advantage of profitable investment opportunities (Khan & Shamin, 2017).

1.1.1.3 Cash Holding Decision

According to Morellec (2001), cash holding is the cash in hand and bank and cash equivalents. Firms hold cash in order to reduce transactional costs, to enable them carry day to day operations, to avoid having to sell assets to perform its payment obligations due, and finally, companies can hold cash to take advantage of an arising opportunity (Ferreira & Vilela, 2004). A considerable debate is on the amount to be

held by the companies in order to increase the firm value. Cash holding is measured using cash holding ratio, that is, the ratio of cash and cash equivalent to total assets (Ferreira & Vilela, 2004; Carmen Martínez-Carrascal, 2010).

Organizations in Kenya have faced period of financial distress due to inability to meet their daily cash requirement for transaction purposes and hence affecting the value of the companies and constantly leading to corporate failures in the last decade. At the centre of these corporate failures is Uchumi supermarkets which among other reasons for the failure were financial distress (Muthuva, 2014).

1.1.1.4 Corporate Investment Decisions

According to Brealey and Myers (2003), corporate investment decisions are concerned with massive investments in noncurrent assets. The assets could be tangible or intangible and they may include property plant and equipment and also intangible ones for example trademarks, copyrights and franchises. Dayananda (2002) contend that corporate investment decisions are used to make investment decisions so as to increase shareholders value. Accordingly, Pandey (2010) defines investment decisions as a company's endeavors to invest its current assets most efficiently in the non-current assets in order to increase the shareholder's wealth through increase in the firm value.

Corporate investment decision in the current study was indicated by Capital Expenditure (CAPEX) on noncurrent Assets, that is, ratio of change in capital expenditure on noncurrent assets to total assets in the previous period. According to Global Investor Sentiment Survey carried out in 2015, investors were found to be

constantly optimistic in selected markets. This was associated with investor beliefs, misconceptions and biases which have greater effects on the value of the company. Foreign investments are on increase and 7 out of 10 investors interviewed expected high returns from equity investment outside their home country (Nabianga & Ibrahim, 2015).

1.1.2 Firm Value

According to Wahyudi and Pawestri (2006), firm value is the amount the prospective buyers would be willing to pay if the firm was to be liquidated. Sundaram and Inkpen (2004) describe firm value maximization as a decision-making rule that brings benefits to all stakeholders. According to the shareholder theory, the primary goal of a company is usually defined as value maximization for the owners. This means maximizing the value of equity and thereby increasing the shareholder's wealth.

According to the theory of firm, the main purpose for the existence of a firm is to maximize shareholder's wealth or firm value (Paminto, 2015). By maximizing the firm's value, shareholder's wealth is maximized and thereby helping the organization to achieve the main goal of existence (Dan, 2002). Ganesh *et al.* (2013) contends that the value maximisation objective is considered superior to profit maximization objective. Maximizing the firm value is the basis upon which wealth maximization objective is based. Unlike the traditional profit maximizing goal, value maximization goal considers time value of money and is objective.

According to Thavikulwat (2014), the firm value can be obtained through diverse measures; the values obtained from each measure are likely to be different from each other. The most common measure is the intrinsic values of all the outstanding shares of the firm. Its application, however, requires an efficient real market for shares. Other indicator is capitalized value of its projected future performance (Dolenco *et al.*, 2012). However, this may require accurate projection of future cash flows and discounting rates. To eliminate problems related to estimation, Tobin's Q invented by James Tobin in 1969 as a measure of the firm value was used as a proxy for firm value. Thavikulwat (2014) observed that Tobin's Q eliminates the difficult problem of estimating both cash flow and the rate of return or marginal costs. The ratio uses market value of equities which can accurately be estimated.

The firm value of companies listed in the NSE has faced periods of decline as evidenced by NSE 20 share index and market capitalization rate. The NSE share index declined significantly in the period between 2007 and 2009 from a high of 6161 points to a low of 2474.75 points, this saw investors lose Kshs 80 billion. A further decline in the NSE 20 share index was experienced between 2010 and 2011 from 4559.56 points to 3155.00 points (NSE Monthly Market Statistical Bulletins, 2012).

1.1.3 Macroeconomic Variables

Macroeconomic variables include elements that indicate the aggregate performance of the economy; they focus on aggregate changes in the economy such as, employment, Gross domestic product, political risk and inflation (Kirui, Wawire &

Onono, 2014). Macroeconomic variables and in particular GDP and Political risk are likely to affect the relationship between financial management decisions and firm value either positively or negatively as documented by literature for instance Bokpin, 2009 and Elkahaldi and Daadaa (2015). However, it remains unclear whether they positively or negatively affect such relation and whether such relation is significant or insignificant.

Gross domestic product is the total market value of all final goods and services produced within a given time period from the various factors of production (Mudida, 2003). It is the overall productivity of a specific country in a specific period given her resources (Shahzad & Al-Swidi, 2013). According to Ongore and Kusa (2013), it is the sum total value added of all production units including all taxes and subsidies on products which are not included in the valuation of output. Ndunda (2016) indicates that GDP is a basic economic indicator and measures the level of total economic output relative to the population of a country. GDP affects the overall performance of the economy and is regarded external to the organization and as such, financial managers do not have control over it (Humpe & Macmillan, 2009).

GDP is likely to affect the relationship between the financial management decisions and firm value either positively or negatively. This is largely attributed to macroeconomic variable's effect on overall economy which includes the corporate sector (Muchiri, 2016). Correspondingly, GDP affects the firm's expected future cash flows which in turn affects the firm's capacity to borrow, pay dividends, raise

equity and invest in long term assets and thereby affecting the its market valuation (Maina & Ishmail ,2014).

The GDP growth rate was utilized in the study to determine the moderating effect of GDP on the relationship between financial management decisions and firm value. As utilized in other studies (Tonmoy & Sadia, 2017, Musau *et al*, 2018). The Kenya economy has faced cyclical movements with some periods showing high growth rate and others showing dismal growth rate (Kirui, Wawire & Onono, 2014).

Political risk has been defined as a chance that some loss may occur due to political instability caused by risk of doing business in a country, where political changes, choices or interferences have significant effect on the loss of business (Kriel, 2012). It is the probability that certain losses may be suffered due to political manipulations causing instability and thereby increasing losses to investors (Kyaw, Manley, & Shetty, 2011). The political risk relates to political actions emanating from government policies and legal framework that may lead to uncertainties about the organizations future. The uncertainties increase with increases in time horizons (Kesternich & Schnitzer, 2010).

Political risk plays a key role in determining corporate success and the management must carry out reasonable due diligence in regard to political environment in order to accept calculated political risk. Pérez-González and Yun (2013) contends that Firms should track their political environment since political factors affects political risk which in turn affect the discounting rate of projected cash flows and hence the firm value. Jiménez and Delgado-Garcia (2012) advocated for proactive management of

political risk in order to enhance firm value. Kenya is rated by Moody's (2018) at "B1", Uganda at "B2", and South Africa at "Baa2" and the USA at "Aaa" with a country risk of premium of 6.4%, 7.82%, 2.71% and 0.00% respectively. Political risk in this study was measured by political risk index as utilized by Mokaya, Jagongo & James (2017) and Molonko and Ampah (2017).

1.1.4 Firms listed at Nairobi Securities Exchange, Kenya

Nairobi Securities Exchange (NSE) provides a platform for listing and trading of various securities. NSE was registered under the Societies Act (1954) as an organization of security brokers and tasked with establishing securities market and providing platform for trading such securities. NSE is regulated by CMA with a key role of enabling trading and controlling the participating companies. The Central Depository and Settlement Corporation (CDSC) clears, delivers, and settles securities traded at the NSE (NSE, 2017). The NSE is a second-tier market that stands out as an average Securities Exchange with great potential for growth (Aduda, 2011).

According to NSE (2017), the securities exchange has a total of 63 listed companies comprising of 46 non-financial companies and 22 financial companies. In the recent past, both financial and non-financial companies have shown declining trends in terms of the firm value. This has been shown by dilapidating NSE 20 share index and Market capitalization both of which represents an aggregate performance of the market. The value of non-financial companies listed in the securities market

declined by 54% from 6161 points to 2789 points in market capitalization in the period between 2007 and 2016.

1.2 Statement of the Problem

The ultimate survival of a firm depends on its ability to utilize the resources provided by the shareholders in order to increase the firm value and hence their wealth (Yartey & Adjasi, 2007) In Kenya firm value as indicated by the market capitalization and NSE 20 Share index is highly volatile and thereby increasing the risk of holding such securities (Nyasha & Odhiambo, 2014). The market capitalization declined significantly in the period between 2007 and 2016 from a high of 6161 points to a low of 2789.64 (NSE Monthly Market Statistical Bulletins, 2016). Such declines in the firm value results in losses to investors and especially corporate investors who rely heavily on capital growth of such securities to meet their future obligations, for instance pension fund management organizations (Nyasha & Odhiambo, 2014).

The importance of financial management decisions in achieving strong economic fundamentals for the firms in the long-run is undebatable. This has led to several empirical studies endeavoring to unearth the significance and magnitude of the effects the decisions may have on performance of the firms. Despite the relative importance, the numerous studies on financial management decisions and the performance utilized the traditional profitability measures of performance that heavily relies on accounting profits as opposed to firm value. Firm value is considered superior since it reflects all the firm's fundamentals. For instance,

Mwangi, Muathe and Kosimbei (2014); Uwuigbe (2012) and Mikkelson Partch (2003) utilized profitability measures in their respective studies. The current study bridges the gap by utilizing firm value as opposed to profitability measures for instance Return on Equity, Return on Assets and Gross Profit Margin as documented by Dolenco et al. (2012) and Lestari (2016).

In the face of the relative importance of the concept of value maximisation to shareholders and other stakeholders, much of empirical evidence has been carried out in developed economies such as Aggarwal and Zhao (2007); Gupta and Gordon (2009). This is an indication that the research findings of these studies cannot be generalized to Kenya which is an emerging economy. It is against this background that this study was carried to determine the effect of financial management decisions on the value of selected firms listed in NSE as the unit of observation.

1.3 Objectives of the Study

The study was guided by the following objectives.

1.3.1 General Objective

To determine the effect of financial management decisions on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

1.3.2 Specific Objectives

The study sought to achieve the following specific objectives

- i. To determine the effect of capital structure decisions on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- ii. To establish the effect of dividend decisions on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- iii. To determine the effect of cash holding decisions on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- iv. To analyse the effect of corporate investment decisions on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- v. To establish the moderation effect of Gross Domestic Product on the relationship between financial management decisions and firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- vi. To establish the moderation effect of political risk on the relationship between financial management decisions and firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

1.4 Research Hypotheses

The study tested the following null hypotheses:

- H₀₁:** Capital structure decisions do not have a significant effect on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.
- H₀₂:** Dividend decision does not have a significant effect on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

H₀₃: Cash holding decisions do not have a significant effect on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

H₀₄: Corporate investment decisions do not have a significant effect on firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

H₀₅: Gross Domestic Product does not significantly moderate the relationship between financial management decisions and firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

H₀₆: Political risk does not significantly moderate the relationship between financial management decisions and firm value of selected firms listed at Nairobi Securities Exchange, Kenya.

1.5 Scope of the Study

The study was confined to selected firms listed in the NSE, Kenya. This excluded companies whose financing structure is highly regulated including companies in the banking, insurance and investment sectors. The financial management decisions considered in the study were capital structure, dividend, cash holding and corporate investment decisions. The period of study was 2008-2016 largely considered due to bearish trend observed during the period occasioning losses to both individual and corporate investors and hence negatively impacting the corporate sector.

1.6 Significance of the Study

The study findings are imperative in informing and contributing to the theory, practice, and policy in numerous ways; through the findings of this study, firms in Kenya understand and design suitable financial management decisions in order to

increase their value. The findings further inform companies on how prevailing political environment and GDP is likely to affect their firm value and as such they are able to plan on how to overcome shocks related to both political changes and swings in the country's productivity.

The findings of the study are of utmost importance to the management of organizations by providing them with insightful ideas on how to improve the value of their respective firms through capital structure, dividend, cash holding and corporate investment decisions. This is by providing the optimal financial management decision variables that maximizes the firm value to the management who are the key agents entrusted by the shareholders to optimally use their resources.

The researchers and academicians benefit from the findings of the study in providing ideas to help them in their scientific enquiries. The findings of the study contribute to the theory of capital structure, dividend decision, cash holding, corporate investment and firm value. The research findings build on already established body of knowledge on investigating how shareholders value theory, pecking order theory, signaling theory and trade off theory are applied in financial management decisions and firm value. Industrialization being one of the key pillars of vision 2030, the findings are of importance to the government by providing the decision makers with information required in their endeavors to attain vision 2030. Investors also benefit from the result findings in determining investment opportunities to put their funds in order to maximize their returns.

1.7 Organisation of the Study

The thesis is organized into five Chapters. Chapter one provides the background of the study and introduces the main variables of study. The variables include the independent variable comprising of financial management decisions; capital structure, dividend, cash holding and corporate investment while the dependent variable is firm value. It also indicates statement of the problem, objectives of the study, hypothesis, and significance of the study, scope and limitations of the study.

Chapter two presents a review of the relevant literature including, the key theory anchoring the study and other supporting theories. It also presents empirical studies related to the study and conceptual framework to show the relationship between independent, dependent and moderating variables. Chapter three presents the research methodology including; research philosophy, research design, empirical model, target population, data collection instrument, data collection procedure and data analysis and presentation. Chapter four provides the research findings and discussions. Finally, chapter five presents summary, conclusions, contributions of the study and recommendations for policy implications.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the overview of theories anchoring the study. It also provides an empirical review of the previous studies in the area of financial management decisions and firm's value. The research gaps in the previous studies to be filled by the current study are also identified in this chapter. The chapter also provides the conceptual framework of the study showing the relationship between the variables of interest in the study.

2.2 Theoretical Literature

This section provides the fundamental theories anchoring the study which provides the basis for the rest of the thesis. Saunders, Lewis and Thornhill (2009) contend that a theory is a statement formulated to explain or predict a phenomenon under a study. The study is anchored on shareholders' value theory, tradeoff theory, signaling theory and pecking order theory.

Shareholders value theory was used to explain the importance of firm value and the link between firm value and the various components of financial management decisions. Signaling theory was utilized to explain the role played by payment or non-payment of dividends in determining the firm value. it links dividend decisions and firm value. Tradeoff theory and pecking order theory links cash and capital structure theories to the firm value.

2.2.1 Shareholder Value Theory

This theory was advanced by Friedman (1970). Shareholder value theory is the most prominent economic theory in use by business. It proposes that the main purpose of the business is maximizing shareholder wealth through improving the firm value. The theory strongly argues in favor of maximizing the firm value in order to increase the wealth of shareholders. The firm should be operated in such a way as to cater for the interests of the shareholders. According to Jensen (2001), the management should carry out the operations of the business with the aim of increasing the shareholders' value through maximizing the revenue, minimizing costs and reducing the risks.

Margolis and Walsh (2003) contend that shareholders have primary position over all the other stakeholders; accordingly, the board has a primary duty and responsibility to increase the shareholders' value (Sharfan, 2014). Saint and Tripathi (2006) indicates that the fact that the business exists to maximize the interests of shareholders is so socially incorporated into the financial community that the business community believes it's the truth and therefore the value maximization motive is propagated in and applied in practice, and is justified through other sources. This theory was utilized in the study to support the value maximization motive which forms the basis of the dependent variable in the current study. It also explained the importance of maximizing the value of companies as a primary goal of any financial management decision making unit.

2.2.2 Signaling Theory

Signaling was introduced by Akerlof and Arrow (1970). Spence (1974) further developed it into signal equilibrium theory, which states that a good firm can separate itself from a bad one by sending superior signals to the capital market. The signal will be convincing only if the bad firm is unable to copy the good firm by sending similar signal. The bad firm will not find it necessary to mimic the signal of the good firm if the cost of the signal is costlier.

This theory was further developed by Ross (1977) who suggested that dividend decision will send a signal to the investors; either positive or negative. Bhattacharya (1979) asserts that good companies that pay dividends are perceived to have better value than those that pay lesser dividend. Allen, Bernardo, and Welch (2000) support signaling theory; in their research, they found that theories regarding information asymmetry model indicates that declaration of dividend payout different from expectation of owners contain information on future earnings. This is further supported by Grullon, Michaely, Benartzi and Thaler, (2005) who indicates that dividend decision changes show information about future earnings.

The theory is relevant to the current study in explaining the link between dividend decisions and firm value. Evidence has shown that market reacts positively when dividends increase and react negatively with decrease in dividends in support of signaling theory (Amihud & Li, 2002). Dividend decision changes convey news regarding future cash flows which affects the firm value (Gabillon & Gabillon, 2012).

2.2.3 Tradeoff Theory

This theory was advanced by Dittmer Mahrt-Smith and Servaes (2003). According to the theory managers of a company must consider the marginal cost and benefit of holding cash in order to maximize the value of the company. Cash holding is supported by Keynes (1936) who contended that the motive of holding cash is for transaction, precautionary and speculative motive. Precautionary motive indicates that companies will hold cash as a cushion in case other regular sources of day to day cash fail because of changes in both systematic and unsystematic risk factors. Holding cash for speculative purposes is carried out in order to reduce the chances of incurring high cost of capital when investment opportunity arises (Ozkan & Ozkan, 2004). Bates and Kahle (2009) contend that companies hold money for transactional purposes in order to reduce shortages that may lead costs related to insufficient funds and lowering the firm value and hence the wealth of the shareholders.

According to Ferreira and Vilela (2004), prudent cash management practices will lead to increased profitability and hence enhanced firm value. Despite the benefits associated with cash holding cash Jensen (1986) indicates that cash holding may lead to agency cost since companies with higher cash holding may not require to access capital markets and therefore making the company get away from market scrutiny (Uyar & Kuzey ,2014). This theory was relevant in the study in linking the cash holding with firm value. It helped in designing data extraction tools by guiding selection of the relevant data, data interpretation and proposed explanations for findings on the relationship between cash holding and firm value.

2.2.4 Modigliani and miller (1963) Theory

This theory was founded by Modigliani and Miller in 1963 as an improvement to their original theory of capital structure in 1958. In situation where taxes are not included, the proponents argue that, since investors are rational, the expected return of equity (K_e) is directly proportional to the increase in gearing (D/E). The expected return of equity (K_e) is compensated by the benefit of cheaper debt finance, and, therefore the Weighted Average Cost of Capital (WAAC) remains unchanged. This therefore means that that firm value would not be affected by capital structure.

Where taxes are included, Modigliani & Miller (1963) argue that firms can decrease weighted average cost of capital (WAAC) by increasing the debt percentage in the capital structure. This is largely due to the benefits associated with tax shield as documented by Brigham & Ehrhardt (2010). This in effect indicates that that where taxes are included, use of debt in the capital structure increases the firms' value. The current study considered Modigliani & miller (1963) proposition II, with taxes since the context of study requires payment of taxes.

The Modigliani and miller theory was considered important in the current study in developing the hypothesis related to capital structure in order to test the relationship between capital structure decisions and firm value. This theory has been supported by various empirical literature and some other theories. For example, Frydenberg (2004) indicates that companies give a positive signal to the market whenever they issue debt; this is by showing that the company is exceptional and confident of repaying debt and interests and hence increasing the value of the company. In

opposition, Frank and Goyal (2007) indicates that companies intending to increase the firm value should first utilize the internal sources of funding before proceeding to external sources in support of pecking order theory. This is by utilizing internal sources of finance before going for debt capital (Abeywardhana, 2017).

2.3 Empirical Review

This section reviews various studies in relation to financial management decisions and firm value.

2.3.1 Capital Structure decisions and Firm Value

Muchiri *et al.* (2016) investigated the Relationship between Financial Structure and Financial Performance of Companies Listed at East Africa Securities Exchanges. The study used explanatory research design with secondary cross sectional time series data for 61 companies. Using the Feasible Generalized Least Squares the study found that, long term debt, short term debt, external equity and retained earnings had insignificant positive association with ROE but insignificant negative association with ROA. Capital structure was found to be positively related to ROE and negatively related to ROA. GDP was similarly found to have a significant moderating effect. However, this study considered only the financing structure without regard to other factors including dividend decisions, cash holding decisions and corporate investment decisions which form the larger financial management decision making unit. The study also considered the profitability measures of performance as opposed to use of more robust measures of performance such as Tobin's Q.

Obaid (2016) studied the impact of financing structure and dividend decision on firm value in Pakistan. The method of analysis was panel data regression analysis for the time period between 2006 and 2013. The research showed that capital structure and dividend decision has a significant effect on the firm value as measured by Tobin's Q. This study assumed a direct relationship between the explanatory and dependent variable. The current study in addition to dividend decision and capital structure decisions incorporated cash holding as an explanatory variable and GDP and political risk as moderator variables.

Mwangi, Muathe and Kosimbei (2014) sought to determine the relationship between capital structure and the performance of non-financial companies listed in the Nairobi Securities Exchange (NSE). The study used a census of 42 non-financial companies listed in the Nairobi securities exchange and applied explanatory non-experimental research design. The results indicated that debt had a statistically significant negative relationship with performance as determined by return on assets and return on equity. Methodologically, the study utilized the traditional measures of performance; ROE and ROI. The current study utilized Tobin's q as a measure of value which is considered superior to traditional profit measures.

Antwi, Mills and Zhao (2012) investigated the effect of capital structure on a firm value. The finding of the study indicated that shareholder's equity and long term debt are the key determinants of the value of the company. Debt was found to have a positive relationship with the firm value while equity was found to have a negative relationship with value of the company. Following the findings of the study,

companies intending to maximize their value should employ more leverage than equity. However, Antwi *et al.* (2012) considered capital structure as the only financial management decision affecting the value of the company. Tremendous efforts were made in the current study to include all the components of financial management decisions and considering the GDP and political risk as a moderating variable.

Ali and Chowdhury (2010) studied the effect of financing decisions on the firm value in Bangladesh. The study considered a stratum of the four most profitable companies in Bangladesh in order to enhance robustness of the results. The study found a strong positive correlation between capital structure and the value of shares when the industry was stratified. This study however solely considered capital structure as the key driver of value and ignored dividend decisions, cash holding and corporate investment decisions and the likely effect of political risk and GDP on the relationship between aforementioned financial management decisions and firm value. Efforts were made in the current research to incorporate the key financial management decisions and also the GDP and political risk as the moderator variables.

2.3.2 Dividend Decisions and Firm Value

Velnampy, Nimalthasan and Kalaiarasi (2014) sought to establish the link between dividend decision and company's financial performance. The findings of the study indicated that the dividend decision do not affect company's return on equity and return on asset. This study considered dividend decision as the only key driver of the

company performance. The study also ignores moderating variables which may affect the direct relation between the explanatory variable and dependent variable. There is need to incorporate other variables including intervening variables which may affect the firm value besides dividend decision.

Abdullah Al Masum (2014) estimated excess stock market returns for the entire population of thirty banks listed in Dhaka Stock Exchange (DSE) for the period between 2007 and 2011. The objective of the study was to determine the relationship between stock market returns of private commercial banks in Bangladesh and their financial performance. The study also intended to determine the degree the returns on stocks can be explained by the dividend decision for similar period of time. The findings of the research indicated that dividend Decisions had significant positive effect on Stock Prices. However, the study considered the dividend decisions as the only key driver of the firm value. The findings of the current study were enhanced by considering other financial management decisions. To enhance the robustness of the research findings, Tobin's Q was utilized in the study as opposed to MPS.

Gul, Sajid, Razzaq, Iqbal and Khan, (2012) studied the effect of dividend decision on shareholder's wealth of companies listed in Karachi Stock Exchange. Multiple and stepwise regression was used to show relationship between variables. Shareholders wealth was used as the dependent variable as indicated by market price per share (MPS), the independent variable was the dividend decision as measured by dividend per share (DPS), Lagged Price earnings ratio (LPER), Retained Earnings and Lagged Market Value of equity. The research showed that there is significant

influence of dividend decision shareholders wealth. This study considered only the dividend decision and assumed a direct relationship between the independent and dependent variable. However, the current study considered MPS as the measure of shareholder's wealth, a more robust result was enhanced in this study by considering Tobin's q considered superior to MPS.

Uwuigbe (2012) studied the association between the financial performance and dividend decision. The study concentrated on listed companies in Nigeria. The study also looked at the association of ownership structure and the dividend payouts. The findings of the study suggested significant positive relationship between the dividend decision and the performance of the companies listed in Nigeria. The study also showed that ownership structure and company's size has a significant impact of the dividend decision of the company. However, this study solely considered dividend decision and ignored the other financial management decisions which may affect the company performance. Further, the robustness of the result of this study were enhanced by use of firm value as the dependent value as opposed to traditional measures of company performance.

2.3.3 Cash Holding decisions and Firm Value

Loncan *et al.* (2014) sought to determine the relationship between capital structure, cash holding and firm value. The study utilized panel data and fixed estimator to analyse the relationship. The findings of the study indicate that debt, is negatively related to cash holdings, and that the level of cash holdings is positively related to a lower leverage. The study further indicated that the financially constrained

companies hold more cash. Firms with high Cash holdings, is valued as positive by investors and therefore increases the value of the company. This study considered all the financial management decisions in order to have holistic implication of company's financial management decision on the firm value. Further the current study incorporated the moderating effect of GDP and political risk on the relationship between the financial management decisions and value of the company.

Han and Qiu (2007) analyzed the relationship between corporate cash holdings and changes in the cash held by NYSE registered companies. Their findings found no restriction to access of credit. This therefore indicates that there is no need to reserve cash to take advantage of opportunities that may arise in future. This implies that cash decisions should not depend on the changes in the cash flow. Their findings further indicate that the link between corporate cash holding and changes in the cash flow depends on the limitations faced by the company in endeavors to access financing. Where there is access to financing, the relationship will be positive and where the access is restricted, the relationship will be negative. The findings further reveals that, cash held by small companies respond positively to cash flow changes while cash holding of large companies respond negatively to cash flow changes. This study considered the effect of restriction to financing and size of company on cash holding. The current study provides more robust findings by considering the impact of cash held on the firm value and considering the moderating effect of GDP and political risk on such relationship.

Almeida, Campello and Weisbach (2004) sought to estimate cash holdings in order to determine whether there is any inadequacy in cash held by US registered companies. The findings of this study indicated a positive relationship of cash holdings to cash flow and thereby indicating relationship between cash holding and financing constraints. If the company has adequate finances their cash holdings should be insensitive to the present amount of cash and therefore no need to save cash out of present cash flow. If company predicts financing constraints in future, it would then be prudent to hold cash today in order to ensure enough cash for future investments. The reverse applies for companies which do anticipate future cash inadequacies. This study however considered only manufacturing sector as opposed to the whole sector. The current study will expand the scope by considering NSE with several subsectors. The current study also considered the effect of cash holding on the value of the company.

Shuting and Meng (2012) studied the relationship between the free cash flow and the financial performance of these firms in order to optimize the finance decision for management and investment. Using principal component analysis and regression analysis, key financial performance indicators were calculated out of 21 financial performance indicators, and these key indicators of sample companies were correlated to their free cash flow. The results showed that the free cash flow of a company is negatively linear-correlated to its financial performance. The current study extended the scope by studying the firms listed in NSE which comprises diverse subsectors.

Ferreira and Vilela (2004) sought to determine the main factors that determine the amount of cash holdings for listed companies. Their findings indicate that, cash holding of publicly traded companies are related to investment opportunities and to cash flow. Contrary, cash holding is inversely related to the debt levels and size of the company. The findings were similar to that of Martínez-Carrascal and von Landesberger (2008) who found a positive relationship between potential investments and cash holding and inverse relationship between debt levels and cash holding. However, the studies were carried in euro area which is a developed area and therefore the results cannot be generalized for emerging economies like Kenya. The current study bridged this limitation by considering the firms registered by the local securities exchange and considered panel multiple regression analysis as the principle method of analysis.

2.3.4 Corporate Investment decisions and Firm Value

Ariemba, Muli and Evusa (2016) analyzed the effect of investment decision on the financial performance of SACCO'S. Census sampling was utilized in the study to collect data from all twelve SACCOS in Kitui Town. The study findings indicated a significant negative relationship between investment decisions indicated by expansion, replacement, renewal and research and development cost and the company performance. However, this study concentrated on SACCO'S which are not representative of all sectors. The current study concentrated on companies listed in NSE and considered their value as opposed to traditional measures of performance. The current study also incorporated GDP and political risk as the moderating variables as opposed to considering direct relationship.

Mushaho, Mbabazize and Shukla (2015) investigated the impact of investment decisions on the performance of organization. The study applied exploratory research design and data was collected using questionnaires. The unit of analysis was employees working in finance and accounting departments and senior managers of Bahresa Grain Milling Rwanda Ltd. The research findings indicated positive correlation between capital budgeting and firm performance. This study however concentrated on one organization. A more robust result was enhanced in the current study by considering more sectors as represented by companies listed in the NSE. The current study utilized the firm value as the dependent variable as opposed to traditional measures of performance.

Sharma and Mathur (2012) studied the effect of debt decision on the investment decision. The research design applied in the study was non-experimental field study design where questionnaire was used to collect data on perceptions, feeling, beliefs regarding the independent and dependent variable. The study findings indicated that debt decision, small business performance, current assets and family values have a positive significant effect on investment decision of small business owners. This study dwelt on the determinants of investment decisions and particularly concentrated on small companies. The current expanded the scope by looking at the companies listed in the NSE which represents companies in different sector and sizes. The current study also widened the content scope by considering other elements of financial decision.

2.4 Summary of Literature Review and Research Gaps

| Author(s) and study context | Study Objective(s) | Key Findings | Research Gaps | Addressing Gaps via current study |
|---|---|--|--|---|
| Obaid Ur Rehman (2016) -KSE securities exchange -Pakistan | Impact of Capital Structure and Dividend Decision on Firm value | -Debt increases firm value -Increase in EPS increases companies value | -Did not consider moderating effect of macroeconomic variables | The study introduced GDP and Political risk as moderating variables. |
| Ariemba, Muli and Evusa (2016) | Effect of investment decision on the financial performance of SACCO'S | A significant negative relationship between investment decisions indicated by expansion, replacement, renewal and research and development cost and the company performance. | -The study concentrated on companies in Sacco's Kitui town only -The study conceptualizes direct relationship between corporate investment to financial performance | The study considered selected Firms listed in the securities exchange and introduced moderator variables. |
| Muchiri <i>et al.</i> (2016) - East Africa - East African stock Exchanges | Relationship between Financial Structure and Financial Performance. | -Capital structure was found to have a significant positive relationship with ROE and significant negative relationship with ROA GDP had significant moderating effect. | -Considers the financial measures of profit | Adopted Firm Value (Tobin's Q) which is a more superior measure of performance |

| Author(s) and study context | Study Objective(s) | Key Findings | Research Gaps | Addressing Gaps via current study |
|--|--|---|--|--|
| Mwangi <i>et al.</i> (2014) - Kenya - NSE | Relationship between Capital Structure and Performance of Non-Financial Companies Listed In the Nairobi Securities Exchange, Kenya | -capital structure has a statistically significant negative relationship with performance | -Utilization of traditional profit maximizing criterion as measured by ROA and ROE | Adopted Firm Value (Tobin's Q) which is a more superior measure of performance |
| Velnampy <i>et al.</i> (2014) -Sri Lanka -Colombo stock Exchange | Dividend Decision and Company Performance: | -Dividend decision is not correlated to the company's performance | -Considers only dividend decision -Considers the ordinary measures of profitability | Utilised all the financial management decisions and considered the firm value. Additionally, the context of the study was NSE, Kenya |
| Abdullah Al Masum (2014) - Bangladesh -Banks listed Dhaka stock Exchange | Dividend Decision and Its Impact on Stock Price | -Dividend Decision has significant Positive effect on Stock Prices. | -Considers only dividend decision -Assumes direct relationship between dividend decision and stock prices -Use of simple regression analysis | The study Incorporated all the financial management decisions in addition to dividend decisions and used panel multiple regression analysis as principle tool of analysis. |

| Author(s) and study context | Study Objective(s) | Key Findings | Research Gaps | Addressing Gaps via current study |
|---|---|---|--|---|
| Rodrigues Loncan and João Frois Caldeira (2014) | The relationship between capital structure, cash holding and firm value | -Cash holding increases the value of the company | Ignores other financial management decision variables | Incorporated all financial management decisions in addition to cash holding decisions |
| Antwi <i>et al.</i> (2012) - Ghana - Ghana stock Exchange | Capital Structure and Firm value: | -Long term debt is positively related to the value of the company | Considers capital structure variable | Incorporated all financial management decisions and included GDP and political risk as moderator variables. |
| Uwuigbe (2012) - Nigeria - Nigerian Stock Exchange | Dividend decision and company performance | -Significant positive correlation between the performance of companies and the dividend decision -Ownership structure and company's size has a significant effect on dividend decision | -Considers only dividend decision -Assumes direct relationship between dividend decision and stock prices | Incorporated other financial management decisions in addition to dividend decisions and included GDP and political risk as moderator variables. |
| Sajid Gul, Muhammad Sajid, Nasir Razzaq, Muhammad Farrukh Iqbal, Muhammad Bilal Khan (2012) - Pakistan - Companies listed in Karachi stock Exchange | The Relationship between Dividend Decision and Shareholder's Wealth" (Evidence from Pakistan) | -There is significant influence of dividend decision and shareholders wealth | -Considers only dividend decision -Assumes direct relationship | Incorporated other financial management decisions in addition to dividend decisions and included GDP and political risk as moderator variables. |

| Author(s) and study context | Study Objective(s) | Key Findings | Research Gaps | Addressing Gaps via current study |
|---------------------------------------|---|--|---|--|
| Han and Qiu (2007) | The relationship between corporate cash holdings and changes in the cash flow | - Where there is no restriction to access of credit, companies will hold less cash and vice versa. | Ignores Firm value as the dependent value and also other financial management decision indicators, that is, dividend and capital structure decisions. | Used firm value as a measure of performance and incorporated all financial management decisions |
| Ferreira and Vilela (2004) | To determine factors affecting cash holding | -Cash holding is positively related to investment opportunities | Does not show relationship between cash holding and firm value | Applies panel Multiple regression to determine the relationship between cash holdings and firms value |
| Almeida, Campello and Weisbach (2004) | Cash holding and the value of the company | -Cash holding have a negative impact on the value of the company | Considers only the cash holding as a component of financial management decisions and assumes a direct relationship | Included all the other components of financial managements decisions such and also incorporated the moderator variables. |
| Mikkelson and Partch (2003) | Cash reserves and company performance | - Holding higher levels of cash reduces the operational efficiency | -Assumes a direct relationship - Considers only Cash holding | Included all the financial management decisions and included the moderator variables |

Source: Various Literature Reviewed, 2019

2.5 Conceptual Framework

A conceptual framework is an investigative tool with several disparities and contexts. It is utilized to make conceptual differences and organize research ideas. It shows the interconnection between variables under consideration and provides researcher with guideline on the research methodology to be applied. Figure 2.1 shows a conceptual framework showing the relationship between financial management decisions and the value of non-financial companies listed in Nairobi securities Exchange. The explanatory variable is financial management decisions and the dependent variable is firm value. The moderating variables include GDP and political risk.

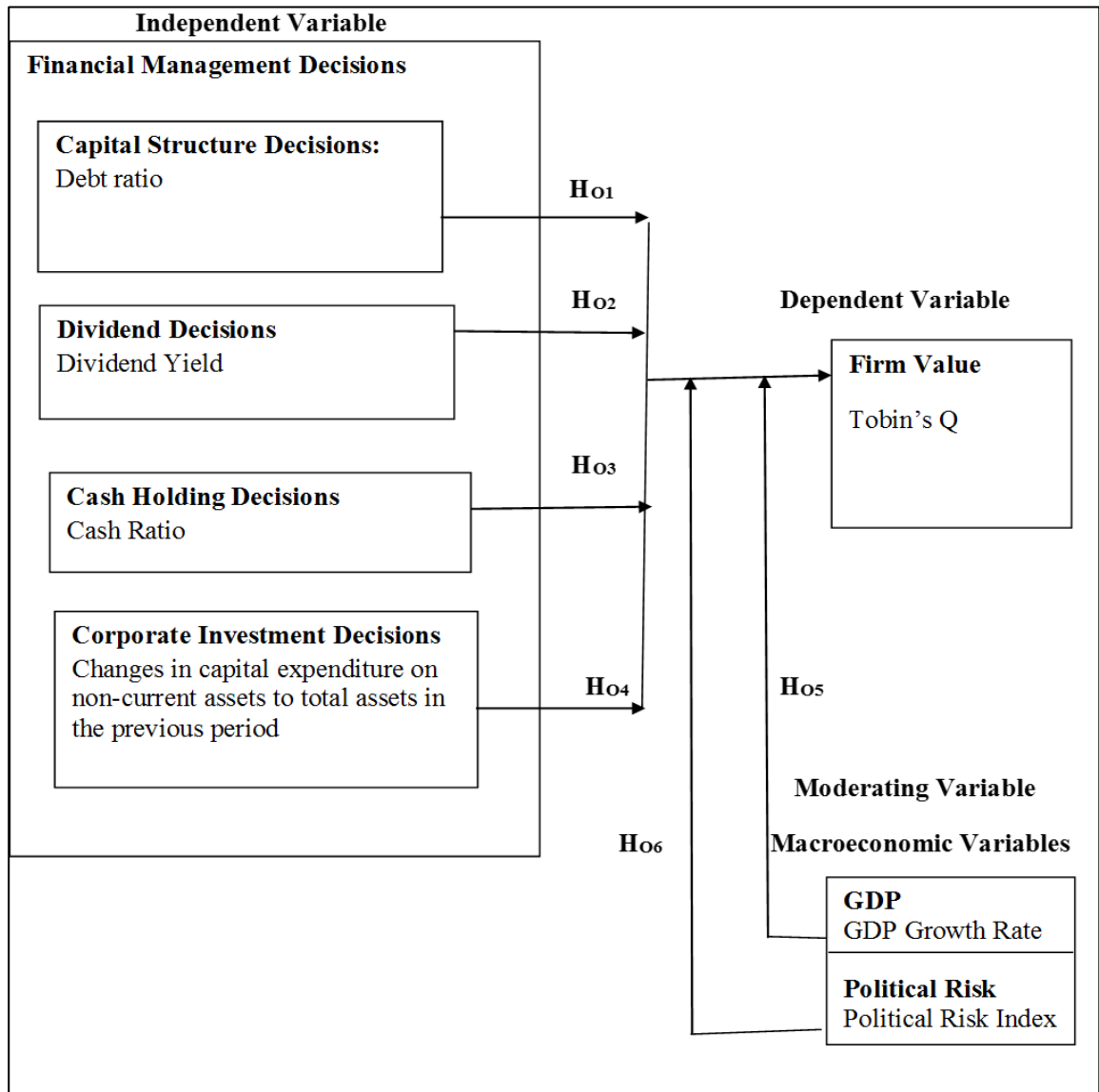


Figure 2.1 Conceptual Framework

Source: Author, 2019

Figure 2.1 shows the relationship between the independent variable, moderating variable and dependent variable. The independent variables used in the study were financial management decisions including capital structure decisions, dividend decisions, cash holding decisions and corporate investment decisions. The capital structure was determined by total debt to total assets ratio, dividend decision was

proxied by dividend to market price per share, and cash holding was represented by cash to total assets while corporate investment was determined by a ratio of changes in capital expenditure on noncurrent assets to total assets in the previous period. The dependent variable of the study was firm value which was proxied by Tobin's Q. The researcher further conceptualized that the variation in the dependent variable (firm value) is explained by the individual independent variables, that is, capital structure decisions, dividend decisions, cash holding decisions and corporate investment decisions.

The study also conceptualized that the relationship between independent variables and the dependent was likely to be affected by macro-economic variables. The macroeconomic variables considered in this case included Gross Domestic Product and political risk. Gross Domestic Product was proxied by GDP growth rate while political risk was proxied by political risk index.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter documents the research methodology adopted for the study. Specifically, it describes the research philosophy that was utilized, as well as research design. Empirical model specification along with operationalization and measurement of variables of interest is discussed in this section. The target population and sample size determination alongside sampling method applied in the study are discussed in this section. Data collection method utilized in addition to data analysis techniques applied in the study was also indicated in this section.

3.2 Research Philosophy

Research philosophy is the development of knowledge and the nature of knowledge (Saunders *et al.*, 2009). According to Crossan (2003), a researcher should have knowledge on philosophical issues before data collection. Through the research philosophy, the researcher is able to refine and clarify the research methodology and gather evidence to answer the hypothesis. The research philosophy also helps the researcher with diverse methodologies and as such circumventing unnecessary and unrelated work (Easterby-Smith, *et al.*, 2002). The research philosophy helps identify the research paradigm and research method. Research paradigm reflects the nature and approach taken when conducting research while research method are techniques used to gather and analyse data in the study (Saunders *et al.*, 2007:2009)

The study adopted positivism approach since the research was based on observable social reality and the phenomenon under the study was observable and hence ability to produce credible data. The events under the study were objective, external and free from researcher's manipulation hence making positivism approach appropriate for the study. In line with Cohen and Crabtree (2006) and Saunders *et al.* (2009); one of the important elements of a positivism approach is that the views of the researcher are not affected by value judgments. The research was based on hypothesis derived from theories of finance and was tested to either support or reject the hypothesis.

3.3 Research Design

According to Kothari (2004), research design is overall plan that guides research work. It shows how the research is arranged. It guides the researcher on how to answer research questions. It holds together the important aspects of the research in order to derive meaning (Maxwell, 2012). The study adopted explanatory non experimental research design. Corresponding to Kerlinger and Lee (2000), the design was more suitable in identifying factors that cause change in the value of companies, without influencing the financial management decisions variables.

Saunders *et al.* (2009) contends that non-experimental research is systematic empirical inquiry in which the researcher cannot control the independent variables since they have already occurred. The research design was adopted largely because the materialization of the independent variables had already occurred and as such they could not be manipulated. According to Sekaran and Bougie (2011),

explanatory research design intends to find causal relationship between independent and dependent variables.

3.4 Empirical Model

3.4.1 General Model

In order to analyze the effect of Financial Management Decisions on the value of non-financial companies listed in the NSE, the study adopted and modified a model by Obaid (2016) as indicated by equation 3.1. The general model of the study was given as

$$FV_{it} = \beta_0 + \beta_1 FD_{it} + \varepsilon_{it} \dots \dots \dots 3.1$$

Where FV_{it} is the firm value i at time t proxied by Tobin's Q. i denote the company while t is the time period running from 2008 to 2016. FD_{it} denotes a vector of financial management decisions β_1 is coefficient to be estimated while β_0 is a constant term. ε_{it} is the composite error term.

Equation 3.1 above was expanded to obtain equation 3.2

$$FV_{it} = \beta_0 + \beta_1 CS_{it} + \beta_2 DP_{it} + \beta_3 CH_{it} + \beta_4 CI_{it} + \varepsilon_{it} \dots \dots \dots 3.2$$

Where;

FV_{it} = Firm Value of firm i at time t

CS_{it} =Capital Structure Decisions of firm i at time t

DP_{it} = Dividend Decisions of firm i at time t

CH_{it} =Cash Holding Decisions of firm i at time t

CI_{it} =Corporate Investment Decisions of firm i at time t

β_0 =Constant

β_{1-4} =Beta Coefficients

3.4.2 Moderating Effect Model

Moderation effect is where the relationship between explanatory and dependent variable is affected by another variable known as moderator variable (Hayes and Mathes, 2009). For purposes of this study, moderation effect was tested using Whisman and McClelland moderation test as supported by Kraemer, Stice, Kazdin, Offord & Kupfer (2001). To determine the moderation effect of GDP and political risk on the relationship between the Financial Management Decisions and the value of the firm, the following steps were used:

STEP 1: $FV_{it} = \beta_0 + \beta_{1it} CS_{it} + \beta_{2it} DP_{it} + \beta_{3it} CH_{it} + \beta_{4it} CI_{it-1} + \beta_{5it} PR_t + \varepsilon_{it}$3.3

STEP 2:

Moderator 1: GDP

$FV_{it} = \beta_0 + \beta_1 CS_{it} + \beta_2 DP_{it} + \beta_3 CH_{it} + \beta_4 CI_{it} + \beta_5 GDP_{it} + \beta_6 CS_{it} * GDP_t + \beta_7 DP_{it} * GDP_t + \beta_8 CH_{it} * GDP_t + \beta_9 CI_{it-1} * GDP_t + \varepsilon_{it}$3.4

Moderator 2: Political Risk

$FV_{it} = \beta_0 + \beta_1 CS_{it} + \beta_2 DP_{it} + \beta_3 CH_{it} + \beta_4 CI_{it} + \beta_5 PR_t + \beta_6 CS_{it} * PR_t + \beta_7 DP_{it} * PR_t + \beta_8 CH_{it} * PR_t + \beta_9 CI_{it-1} * PR_t + \varepsilon_{it}$3.5

Where:

FV_{it} = Firm Value

GDP_t = Gross Domestic product

PR_t = Political Risk

3.4.3 Moderation Decision Making Criteria

The table 3.1 below shows the decision making criteria used in analyzing the moderating variable. The moderator variable was analyzed in two steps using F statistics at 5% level of significance; step one as an independent variable and step two as a moderator variable and the respective decisions was as indicated.

Table 3.1 Moderation Decision Making Criteria

| Analysis | Outcome | Conclusion |
|---|--|--|
| Step One: Equation 3.3 Macroeconomic Variables as independent variable | Significant coefficient of Macroeconomic Variables | Macroeconomic variables are explanatory variables |
| | Insignificant coefficient of Macroeconomic variables | Macroeconomic variables moderate relationship between financial management decisions and the firm value |
| Step Two: Equation 3.4 Macroeconomic variables as moderator variable | Significant coefficient of macroeconomic variables | Macroeconomic variables moderate the relationship between financial management decisions and firm value |
| | Insignificant coefficient of macroeconomic variables | Macroeconomic variables do not moderate the relationship between financial management decisions and firm value |
| | Significant coefficient of interaction terms | Significant interaction |
| | Significant coefficient of Interaction | Insignificant interaction |

Source: Researcher, 2019

3.5 Operationalization of Variables

Table 3.2 below shows a list of variables with their operationalization and measurements that was used in order to estimate variables. These measures were adopted in the study as supported by other researchers as shown by the literature.

Table 3.2 Operationalization and measurement of Study Variables

| Category Variable | Variable | Operationalization | Measurement | Measurement Scale |
|--------------------------|----------------------------------|--|--|--------------------------|
| Dependent Variable | • Firm Value | Ratio of market valuation of shares to the value of assets | • Market Capitalization/Book Value of assets | Ratio |
| Independent Variable | • Capital structure decisions | Amount of long term debt as a ratio of shareholders' equity | • Total Liabilities/Stockholders equity | Ratio |
| | • Dividend decisions | Dividend Yield | • Dividend per share/Market Price per Share | Ratio |
| | • Corporate investment decisions | Ratio of capital expenditure on noncurrent assets to total assets in the previous period | • Change in capital expenditure in noncurrent Assets/Total assets in the previous period | Ratio |
| | • Cash holding decisions | Ratio of Cash held relative to Total assets denoted as cash ratio | Cash/Total assets | Ratio |

Source: Researcher, 2019

3.6 Target Population

According to Mugenda and Mugenda (2003), a population consists of a group of objects with similar observable characteristics. Population is any complete group

conforming to a set of specifications (Creswell & Creswell, 2017). The study adopted a census where 46 listed companies in NSE were studied. The target population excluded companies in Banking and Insurance industries largely because they are regulated in their financial decision. Companies in NSE were chosen as units of analysis because data is readily available and represent a wide range of industries. Census provided a good representation of the population and also more accurate results consistent with Hakim (2012).

3.7 Data Collection Instrument

The study utilized secondary data since it could be used for comparison purposes, requires less resources and it easily allows for panel data analysis (Saunders *et al.*, 2009). The data was obtained from the company's financial reports as published in the NSE handbook and Kenya National Bureau of Statistics for the period between 2008 and 2016. The study utilized data extraction guide in appendix II.

3.8 Data Collection Procedure

The researcher obtained a research authorization letter from Kenyatta University Graduate School. The letter was transmitted to National Commission for Science, Technology and Innovation (NACOSTI) and research permit obtained thereof. The data considered under the study was panel data comprising of a cross-section of 46 selected listed companies and time series data of each of the company for period between 2008 and 2016. The data was extracted using data extraction sheet attached in appendix III.

3.9 Data Analysis and Presentation

The study utilized both descriptive and inferential statistics to analyse data. Panel multiple regressions were used in the study since the data had time and cross section dimensions. Pearson's Product Moment Correlation analysis was used to determine the relationship between financial management decisions and firm value. Measures of central tendency including mean, median, mode, skewness, kurtosis, maximum, minimum and standard deviation was used for purposes of descriptive analysis as supported by Jackson (2009), Velnampy *et al.* (2014) and Paminto (2015).

Panel data was used in the study because it has the advantage of providing better insights compared to time series and cross-sectional data since it is possible to put aside the theoretical effects and enhances comparison of industries over a period of time (Kothari, 2004). Data was presented by use of tables and graphs. The data analysis was carried out using E-Views 8.0 considered ideal because of its efficiency in managing data while performing econometrics and analyzing data in order to generate descriptive statics and statistical parameter estimates.

3.10 Diagnostic Tests

In estimating the empirical Model, it was necessary to ensure non-violation of the Classical Linear Regression Model (CLRM) assumptions. Violation of CLRM assumptions may cause the estimates produced not to be Best Linear Unbiased Estimates (BLUE). To ensure non violation the study carried out the tests for normality, Multicollinearity, autocorrelation, Heteroskedasticity and Panel Unit root test as supported by fadhili *et al.* (2011).

3.10.1 Normality

Normality was presumed in the study considering that multiple regression analysis was used as a principle data analysis method. Normality can be tested using Shapiro Wilk test, Kolmogorov-Smirnov Test, Normal Q-Q Plot and Jarque-Bera test. The study adopted Jarque-Bera test since the sample size contained more than 2000 observations and is considered more comprehensive compared to others as supported by Field, 2009; Gujarati & Porter, 2004 and Razali & Wah, 2011).

Sample scores were compared to normally distributed scores with similar measures of deviation. Where the coefficient is non-significant ($p > 0.05$), it means that the distribution of the sample is not significantly different from a normal distribution hence would be normally distributed. Conversely, where the test is significant ($p < 0.05$), then the distribution in question is considered non-normal (Jackson, 2009). Where data fails normality test, non-parametric statistics are run since they don't require normality of the data.

3.10.2 Multicollinearity

Multicollinearity is a condition where one or more independent variables are highly correlated such that one can be used to predict the other. Multicollinearity affects almost all aspects of multiple regression analysis and has a negative effect on such analysis especially if the correlation among independent variables is high (Aczel & Sounderpandian, 2009). Failure of this classical assumption causes the regression coefficients to be indeterminate and the resulting standard errors to be infinite hence affecting precision on rejection or failure of rejection of the null hypothesis.

Correlation matrix was used in the study to detect Multicollinearity where threshold of Multicollinearity was 0.8 (Blumberg, Cooper & Schindler, 2008). Where Multicollinearity was detected, the variables are centered in order to standardize the predictors. This strategy helps eliminate the Multicollinearity occasioned by interaction and higher-order terms without altering interpretation of the coefficients (William *et al*, 2013).

3.10.3 Heteroskedasticity

According to Baum, Lewbel, Schaffer and Talavera (2012), Heteroskedasticity is the extent to which the data values for the dependent and independent variables have unequal variances. Heteroskedasticity implies that error term among different values of financial management decisions do not have constant variances. Failure of this assumption affects OLS estimator such that it cannot be utilized for hypothesis testing since it would bring inefficient predictions (Dansey & Reidy, 2004).

The study tested Heteroskedasticity using Breusch-Pagan test where the null hypothesis was Homoscedasticity while alternative was Heteroskedasticity. Where the P value is less than critical level of significance at 0.05, then the null hypothesis should be accepted and resulting residuals deemed homoskedastic (Poi & Wiggins, 2001). Where data is found to be heteroskedastic, logarithmic transformation can be used to reduce such Heteroskedasticity by compressing the scale in which variables is measured several times.

3.10.4 Autocorrelation

The use of panel data necessitates a test of autocorrelation. Autocorrelation is where error terms between periods are correlated. Presence of autocorrelation causes error terms to be biased and inefficient hence wrong inferences (Kock & Lyne, 2012). The study utilized Breusch-Godfrey test for serial correlation because it can be applied in several lags. The null hypothesis for this test is that there is no first order serial autocorrelation. Where the P value is greater than the 5% significance level, then the data indicated that the null hypothesis was rejected and that the residuals are autocorrelated (Rumana, Tapati, Rahman & Majumder, 2012) where autocorrelation assumption is violated, robust standard errors method may be used to remedy as supported by Wooldridge (2002).

3.10.5 Stationarity Test

Since the data to be utilized in this study was panel, stationarity test was necessary. Stationarity is a situation where mean and variance of data over time is constant. According to Aczel (2009), non-stationary data gives rise to spurious regression results. Panel Unit root tests was carried out using Levin, Lin and Chu (2002) to establish whether the data was stationary or non-stationary. Critical values at 5% significance level were compared to corresponding Levin, Lin and Chu test statistic.

The null hypothesis for the test was that the residuals were not stationary while the alternative was that the residuals were stationary. In situations where Levin, Lin and Chu test statistic is greater than the critical value at 5%, then the null hypothesis should be accepted. That is, the data is non-stationary (Wooldridge, 2002). Where

variables are found to have unit root, the variable are differenced and equations run using the differenced variable.

3.10.6 Endogeneity Test

Endogeneity is a situation where an explanatory variable is correlated with the error term, it can also arise when an unobserved or omitted variable is confounding both independent and dependent variables, or when independent variables are measured with error (Elhorst, 2003). Endogeneity causes Ordinary Least Square to produce biased and inconsistent parameter estimates thus causing the hypothesis tests to be misleading (Allison, 2009). Where Endogeneity is detected, instrumental variables (IV) techniques are applied. To test for Endogeneity in the study, Durbin–Wu–Hausman test (augmented regression test) for Endogeneity was applied. The null hypothesis for the test is no correlation between explanatory and error term whereas alternative is correlation between explanatory variables and error terms.

3.10.7 Test for Fixed or Random effect

To determine whether to run a fixed model or a random model, Hausman specification test was used. The consistency and efficiency of the random effect (RE) and fixed effect (FE) estimators were considered. This test sought to determine whether there existed significant correlation between the unobserved company specific random effects and the regressors. Where no correlation is detected then the random effect is used while if such correlation is detected, then fixed effect model is appropriate (Elhorst, 2003). In cases where the fixed effects models are recommended, a test for inclusion of time fixed effects is undertaken in the study

estimation. Where random effect model is found suitable, test as to whether the data have panel effects is undertaken (Allison, 2009).

3.11 Ethical Consideration

Ethics is the study of right and wrong conduct (Resnik, Rasmussen, & Kissling, 2015). The study ensured that ethical considerations are adhered to by seeking permission from the relevant authorities before conducting the study. A research authorization letter was obtained from Kenyatta University (Graduate School) and the same was used to obtain a research permit from the national research agency (NACOSTI). The data sources used were acknowledged whereas relevant literature reviewed was cited and referenced accordingly.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter indicates the descriptive analysis of the study variables which are presented in cross tabulation and measures of central tendency in order to show trends in the study variables. The diagnostic tests are also indicated antecedent to panel multiple regression analysis. The tests included normality, linearity, Multicollinearity, Heteroscedasticity, autocorrelation, stationarity and test for random or fixed effect. Lastly, the chapter contains the results for panel multiple regression analysis indicating the strength and direction of relationships between explanatory variables and dependent variables.

4.2 Descriptive Analysis

Results in Table 4.1 show the summary of the descriptive statistics of capital structure, cash holding, corporate investment, dividend decision, GDP growth rate and political risk.

Table 4.1 Descriptive Statistics

| | Capital Structure | Cash Holding | Corporate Investment | Dividend Decision | GDP Growth Rate | Political Risk |
|--------------|--------------------------|---------------------|-----------------------------|--------------------------|------------------------|-----------------------|
| Mean | 0.889917 | 0.102984 | 0.592292 | 0.052989 | 1.724919 | 67.24444 |
| Median | 0.766120 | 0.000001 | 0.025141 | 0.018117 | 0.067500 | 67.00000 |
| Maximum | 15.23839 | 5.156565 | 30.94109 | 2.076696 | 13.25000 | 70.00000 |
| Minimum | -93.60150 | -0.409720 | -0.838934 | 0.000000 | -0.272600 | 66.00000 |
| Std. Dev. | 5.778509 | 0.544384 | 2.623090 | 0.199512 | 4.065373 | 1.130101 |
| Skewness | -12.76850 | 6.982808 | 9.032937 | 7.928819 | 2.423472 | 1.365464 |
| Kurtosis | 203.7340 | 54.98762 | 101.1279 | 68.83683 | 7.060943 | 4.287422 |
| Jarque-Bera | 614194.0 | 43466.27 | 149331.8 | 68789.29 | 599.7619 | 136.7314 |
| Probability | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Sum | 320.3701 | 37.07421 | 213.2250 | 19.07604 | 620.9709 | 24208.00 |
| Sum Sq. Dev. | 11987.43 | 106.3911 | 2470.135 | 14.29001 | 5933.285 | 458.4889 |
| Observations | 360 | 360 | 360 | 360 | 360 | 360 |

Source: Research Data, 2019

Table 4.1 indicates that on average companies were more geared relative to equity. This is shown by average of debt to equity of 0.889917. This points out to a trend in companies applying more of debt than equity. To complement the findings, Kazi Tashkin Huda (2015) who contends globally firms utilizes more debt than equity in their financing structure. Acheampong, Agalega, and Shibu (2014) contradict the findings of the current study by documenting application of lesser debt in capital structure relative to equity as a global trend. The standard deviation of debt ratio was 0.6661 indicating a higher variability in the debt ratio among the companies considered in the period of study. Such high variability was documented by Masavi, Kiweu and Kinyili (2017) who documented high variability of debt ratio in in companies listed in NSE. The maximum and minimum of the debt ratio was 15.23839 and -93.60150 while the negative in the minimum indicating that more companies were geared.

Cash holding had a mean of 0.102984 indicating that on average companies held 10.28% of cash and cash equivalents in relation to total assets. This indicates that on average cash-to-assets ratio for selected firms listed in NSE was low (below 50%). This contradicted a study by Cava and Windsor (2016) which indicated a global trend where companies were found to increase Cash and cash equivalents relative to other assets. Additionally, Bates, Kahle and Stulz (2009) further contradicted the current study by documenting an increasing trend in cash holding worldwide as companies avoided financial distress. The level of dispersion was 0.5443 indicating a higher level of variability of the cash ratio; a finding similar to Maimba (2015). This can be attributed to changing determinants of cash demand. The maximum and minimum was 5.156565 and -0.409720. The negative in the minimum indicating that some companies were operating bank overdraft

Corporate investment had a mean of 0.5922 indicating that firms on average were increasing corporate investments. Similar findings were found in Ariemba *et al.* (2016) where firms were found to on average increase their investments in capital assets. The standard deviation of 0.2623 indicated a low variation in changes in corporate investment. The minimum and maximum of corporate investment was -0.838934 and 30.94. The negative indicating that some firms reduced corporate investment in subsequent years. The results further indicate that; the ratio of corporate investment was skewed to the right indicating that most firms had increased corporate investments in the study period.

Dividend yield had a mean of 0.5298 indicating that on average companies with lower market price per share (MPS) were paying high dividends per share (DPS) that is more than 50%. Bergmann (2016) found similar trends by documenting increased trend in small cap companies paying higher dividends compared to large cap companies globally. The variability of dividend yield as indicated by standard deviation was at lower of 0.1995 indicating that there was no high variations in dividend yield among selected listed companies. The minimum and maximum of dividend yield was 0.0000 and 2.0767 which indicates that dividend yield was positive at both the lower level and higher level. The results further indicate that dividend yield was skewed to the right indicating that more companies were having a higher dividend yield.

The mean GDP growth rate of 0.1724 implies that GDP was increasing over the study period. The standard deviation of GDP growth rate was 0.4065 indicating that variability in the GDP growth rate was low. However, Obere, Thuku, and Gachanja (2013), found a cyclical movement in GDP growth rate. The difference could be traced to the length of study period (1963 to 2009) which was fairly longer than the period of the current study (2008 to 2016). The minimum and maximum of GDP growth rate was -0.272600 and 13.2500. The negative observation implies that in certain years there was negative growth rate in GDP. GDP growth rate was skewed to the right as shown by positive sign on the skewness which indicates that the GDP growth rate was increasing in the period 2008 to 2016.

Political risk had a mean of 67.22 over the period of study; this indicated that the political risk was high during the period thus affecting the value of the firm directly or indirectly. Mokaya, Jagongo and James (2017) found similar trends in political risk notwithstanding the different study periods. The standard deviation of 1.1301 indicates there were high variations in political risk over the study period. This is attributable to the aftermath of 2007 post-election violence and uncertainty around elections and successions leading to sharp increases in political risk in Kenya relative to counterparts in the region (Molonko *et al.*, 2017). The maximum and minimum of political risk was 70 and 66 respectively indicating a lower spread in political risk, the positive sign on both the minimum and maximum indicates that the political risk was conventionally positive.

4.3 Diagnostic Test Results

This section presents the results of the following diagnostic tests: Normality, linearity, Multicollinearity, Heteroscedasticity, Autocorrelation, Stationarity and Test for random or fixed effect.

4.3.1 Multicollinearity Test Result

The study used a correlation matrix to test for Multicollinearity. The test results were as shown below.

Table 4.2 Correlation Matrix

| | Capital Structur e | Cash Holdin g | Corporate Investmen t | Dividend decisions | Firm Value |
|--|-----------------------------------|------------------------------|--------------------------------------|-------------------------------|-----------------------|
| Capital Structure | 1.00 | | | | |
| Cash Holding | 0.33 | 1.00 | | | |
| Corporate Investment | 0.37 | 0.45 | 1.00 | | |
| Dividend | 0.29 | 0.61 | 0.66 | 1.00 | |
| Firm Value | 0.13 | 0.44 | 0.27 | 0.14 | 1.00 |
| Correlation coefficients, using the observations (2008 – 2016) 5% critical value (two-tailed) = 0.0064 for n = 9 | | | | | |

Source: Research Data, 2019

From the table 4.2 above, the explanatory variables used in the study were capital structure decisions, cash holding decisions, corporate investment decisions, dividend Decisions. The results indicate that there was no presence of severe Multicollinearity since all the coefficients were less than 0.8 as recommended by Gujarati (2010).

4.3.2 Normality Test

Since multiple regressions were used as a principle data analysis method, the assumption of normality of data was necessary. Normality of data can be tested using Kolmogorov-Smirnov tests, Shapiro Wilk test, Kurtosis and Skewness, Quantile-Quantile plots (Q-Q plots), Jarque-Bera test and histograms (Saunders *et al.*, 2009). In this study, Jarque-Bera test was used as a test of normality since the data set contained more than 2000 observations as advocated for by Field (2005).

Table 4.3 Normality test results

| Variable | Jarque-Bera test | P-value |
|----------------------|-------------------------|----------------|
| Capital Structure | 3.70389 | 0.156931 |
| Dividend decisions | 1.49713 | 0.473046 |
| Cash holding | 1.19678 | 0.549696 |
| Corporate investment | 15.4900 | 0.432895 |
| GDP Growth Rate | 14.1576 | 0.00084 |
| Political Risk | 3.56972 | 0.16782 |
| Firm Value | 1.55628, | 0.459259 |

Source: Research Data, 2019

The results in the table 4.3 above indicate that the residuals for the variables were normally distributed. The null hypothesis for Jarque-Bera test is that the residuals are not significantly different from a normal distribution (Gujarati & Porter, 2004). Where the p-value is very small, usually less than or equal to a threshold value previously preferred called the significance level, it suggests that the observed data is inconsistent with the assumption that the null hypothesis is true (Brooks, 2008). The significance level for the study was 0.05 and all the p-values were found to be higher than the level of significance. Similarly, for all the variables of Jarque-Bera test statistics were greater than the level of significance of 0.05 hence the data was found to be normal and therefore fit for panel multiple regressions.

4.3.3 Stationarity Test

Since the data used in the study was panel, it was necessary to assume that the mean and variance of data over time was constant. Failure of the assumption would lead to spurious regression and the results would be rendered unreliable (Bhargava, 1986; Aczel, 2009).

Table 4.4 Stationarity Test results

| Test | Statistic | Probability |
|-----------------------------|------------------|--------------------|
| Levin, Lin & Chu | 2.3954 | 0.0432 |
| Im, Pesaran and Shin W-Stat | 2.8054 | 0.0431 |
| ADF-Fisher Chi-Square | 12.0000 | 0.0330 |
| PP-Fisher Chi-Square | 12.9243 | 0.0412 |

Source: Research Data, 2019

Table 4.4 above shows panel test results using Levin, Lin and Chu test statistic. This test was selected due to its ability to handle large data sets and clearly set criteria for acceptance or rejection of null hypothesis (Brooks, 2008). The null hypothesis for the Levin, Lin and Chu test statistic is that the residuals are stationary while the alternative is residuals are not stationary (Gujarati & Porter, 2004). From the test result, the Levin, Lin and Chu test statistic for were found to be less than the 5% level of significance.

Woolridge (2002) postulates that where Levin, Lin and Chu test statistic is less than the critical values, the null hypothesis that the data has a unit root should not be rejected and the data was therefore deemed to be stationery.

4.3.4 Heteroskedasticity Test

In order to ensure that the error term among different values of Financial Management Decisions have constant variances, it was necessary to carry out Heteroskedasticity test. Heteroskedasticity is the extent to which the data values for the dependent and independent variables have unequal variances (Baum *et al.*, 2012). In order to carry the test, Breusch-Pagan (1980) test was applied and the table below indicates the test results.

Table 4.5 Heteroskedasticity Test Results

| Test | Statistic | d.f. | Prob. |
|--------------------------|-----------|------|--------|
| Breusch-Pagan LM | 3968.072 | 780 | 0.0000 |
| Pesaran scaled LM | 79.70440 | | 0.0000 |
| Bias-corrected scaled LM | 77.20440 | | 0.0000 |
| Pesaran CD | 22.27754 | | 0.0000 |

Source: Research Data, 2019

Table 4.5 above shows the results of Breusch-Pagan Heteroskedasticity test. The Null hypothesis for the test is Homoscedasticity while alternative is Heteroskedasticity. Where the P value is less than critical level of significance at 0.05, then the null hypothesis should be accepted and resulting residuals are homoskedastic (Poi and Wiggins, 2001). The table above shows the test statistic value, test of degree-of-freedom, and the associated p-value.

In this case, the value of the test statistic, 3968.072 is well into the upper tail of a χ^2_{780} , therefore, the null hypothesis of constant variance at conventional significance levels of 5% was rejected and therefore heteroskedastic. Heteroskedastic data implies that error term among different values of financial management decisions does not have constant variances and as such, OLS estimator would bring inefficient predictions and cannot be utilized for hypothesis testing (Dansey & Reidy, 2004). To remedy this, the study employed the FGLS estimation technique as applied by Mwangi *et al.*, (2014).

4.3.5 Autocorrelation Test

Autocorrelation test was necessary to ensure that error terms between periods were not correlated. Existence of autocorrelation causes error terms to be biased and

inefficient hence wrong inferences (Wooldridge, 2003; Baltagi, 2005). To test for autocorrelation, the study applied Wald Test where Null Hypothesis was no autocorrelation, that is, no serial relation in residual of model while alternative is serial correlation (Doornik, Bond and Arellano, 2006). The results of the test were as shown below.

Table 4.6 Autocorrelation Test Results

**Wald Test:
Equation: Untitled**

| Test Statistic | Value | Df | Probability |
|----------------|----------|----------|-------------|
| F-statistic | 15197.41 | (4, 316) | 0.0000 |
| Chi-square | 60789.65 | 4 | 0.0000 |

Source: Research Data, 2019

Table 4.6 above indicates single linear restriction so that F-statistic and Chi-square statistic are identical. In determining whether to accept or reject the hypothesis, a comparison is made of the p- value of F-statistic and level of significance which in this case is 5% (Miller & Startz, 2018.) A p- value lesser than the level of significance signifies autocorrelation and therefore the null hypothesis is rejected (Blumberg Cooper & Schindler, 2008). Therefore, the study found serial correlation and therefore first order autocorrelation. To solve this FGLS estimation technique was applied as employed by Mwangi *et al.*, (2014).

4.3.6 Endogeneity test

Endogeneity test was necessary to ensure that the explanatory variables were not related to error term. Presence of Endogeneity causes Ordinary Least Square to

produce biased and inconsistent parameter estimates thus causing the hypothesis tests to be misleading (Allison, 2009). Durbin–Wu–Hausman test (augmented regression test) for Endogeneity was applied. The table below shows the results

Table 4.7 Summary of Durbin–Wu–Hausman test (augmented regression test) for Endogeneity

| Variable | Coefficient | Std. Error | t-Statistic | P> t | Low | High |
|--------------------------------|-------------|------------|-------------|-------|---------|--------|
| C | 0.645 | 0.467 | 5.3342 | 0.001 | 0.684 | 2.409 |
| Capital Structure decisions | 0.0080 | 0.003 | 1.7564 | 0.000 | -0.03 | 0.016 |
| Cash Holding decisions | -6.3202 | 1.802 | -6.3243 | 0.000 | -1.207 | 9.847 |
| Dividend decisions | 7.0019 | 0.021 | 2.7686 | 0.000 | -36.903 | -1.374 |
| Corporate Investment decisions | 0.264 | 0.667 | 12.6543 | 0.003 | 0.711 | 0.975 |

Source: Research Data, 2019

Table 4.7 shows Durbin–Wu–Hausman test for Endogeneity. The null hypothesis for the test was no correlation between explanatory and error terms whereas the alternative was correlation between explanatory variables and error terms. From table 4.7 above, all the p values were less than 0. 05 and therefore the null hypothesis was accepted and therefore there was no Endogeneity detected.

4.3.7 Test for Random or fixed Effect

In order to determine the appropriate model to use for estimation, the study estimated both the fixed effects model and random effects model. Then Hausman specification test was carried out to establish the appropriate model to be used for

the study (Full results in appendix IV). Table 4.7 indicates the summary of test result.

Table 4.8 Summary of Hausman Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|--------------------|--------------------|--------------------|--------------|
| C | 1.800508 | 0.216563 | 8.314022 | 0.000 |
| Capital Structure | 0.007781 | 0.036736 | -0.211818 | 0.832 |
| Cash Holding | 9.44719 | 1.844372 | 5.122171 | 0.000 |
| Dividend Decision | -38.31344 | 5.317398 | -7.205298 | 0.000 |
| Corporate Investment | 1.239405 | 0.156831 | 7.902796 | 0.000 |
| Weighted Statistics | | | | |
| R-squared | 0.210865 | Mean dependent var | | 1.400905 |
| Adjusted R-squared | 0.201974 | S.D. dependent var | | 3.952838 |
| S.E. of regression | 3.531162 | Sum squared resid | | 4426.532 |
| F-statistic | 23.71496 | Durbin-Watson stat | | 1.041013 |
| Prob(F-statistic) | 0.0000 | | | |

Source: Research Data, 2019

Table 4.8 above shows Hausman test result. The null hypothesis under Hausman is that random effect model was appropriate for the data at conventional significance level of 0.05 (Hausman, 1978). Data was ran using Feasible Generalised Least Squares and the resulting p -value was 0.0000 which led to rejection of the null hypothesis that random effect was appropriate for the data and therefore fixed effect model was preferred.

4.4 Regression Analysis

The diagnostics test carried out indicated that capital structure, dividend decisions and cash holding were found to be stationery and therefore ran at their levels. Corporate investment, Firm Value, GDP and Political risk were found to be non-

stationery and therefore unfit for regression. First differentiation made the non-stationary variables stationary as advocated for by Dansey and Reidy (2004)

Using firm value as the dependent variable, the study considered a set of hypotheses pertaining to the relationship between capital structure, dividend decisions, cash holding corporate investment and firm value. Firm value as measured by Tobin's Q was regressed against Debt to equity ratio, Dividend Yield, Ratio of Cash held relative to Total assets and Ratio of capital expenditure on noncurrent assets to total assets in the previous period.

Table 4.9 FGLS Regression Results (Dependent variable: Tobin's Q)

| Variable | Coefficient | Std. Error | t-Statistic | P> t | Low | High |
|---------------------------------------|-------------|--------------------|-------------|-------|----------|--------|
| C | 1.5468 | 0.438 | 3.5285 | 0.001 | 0.684 | 2.409 |
| Capital Structure decisions | 0.0070 | 0.003 | 2.5940 | 0.044 | -0.03 | 0.016 |
| Cash Holding decisions | -4.3202 | 1.702 | -2.5379 | 0.012 | -1.207 | 9.847 |
| Dividend decisions | 0.0019 | 0.001 | 2.1197 | 0.034 | -36.903 | -1.374 |
| Corporate Investment decisions | 0.8426 | 0.067 | 12.5519 | 0.000 | 0.711 | 0.975 |
| Effects Specification | | | | | | |
| Cross-section fixed (dummy variables) | | | | | | |
| Weighted Statistics | | | | | | |
| R-squared | 0.269356 | Mean dependent var | | | 2.002270 | |
| Adjusted R-squared | 0.169933 | S.D. dependent var | | | 3.660233 | |
| S.E. of regression | 3.341509 | Sum squared resid | | | 3528.355 | |
| F-statistic | 2.709195 | Durbin-Watson stat | | | 1.086187 | |
| Prob(F-statistic) | 0.000000 | | | | | |
| Unweighted Statistics | | | | | | |
| R-squared | 0.247680 | Mean dependent var | | | 1.470390 | |
| Sum squared resid | 4264.107 | Durbin-Watson stat | | | 1.102935 | |

Source: Research Data, 2019

The results in table 4.9 indicate an R-square of 0.2694. This implies that the financial management decisions variables (Capital structure decisions, dividend decisions, cash holding decisions and corporate investment decisions) had low explanatory power on firm value. The F statistic value was 2.7092 with a p-value of 0.0000 which is less than 0.05. This indicates that, Financial Management Decisions had significant effect on firm value of selected firms listed at Nairobi Securities Exchange, Kenya. Further, the results indicate that a unit increase in capital structure (debt ratio) leads to 0.007 increases in firm value while a unit increase in dividend payout leads to 0.0019 increase in firm value. A unit increase in cash holding reduces firm value by 4.3202. Additionally, a unit increase in corporate investments leads to an increase of 0.8426 in firm value. The Y- intercept or constant term is 1.5468 which represents the portion of firm value not affected by the financial management decisions.

4.4.1 Effects of Capital Structure Decisions on Firm Value

The first hypothesis of the study sought to test the statistical significance of the relationship between capital structure and firm value of selected firms listed in the NSE. The regression results presented in Table 4.9 indicate that the p- value of capital structure decisions was at ($p=0.044$, <0.05) indicating a statistically significant relationship between capital structure decisions and firm value of selected firms listed at the NSE.

The findings of the current study were consistent with Net Income approach to capital structure. This approach was founded by Durand David (1959). According to

this approach, the market value of equity shares is based on the earning available for equity Shareholders after the payment of interest on debt if it is included in the Capital Structure (Pandey, 2010). In line with this theory, Lixin and Lin (2008) contend that, as the proportion of cheaper source of funds (debt) increases, overall cost of capital declines which consequently increases the market value of the firm. Hence, the optimum capital structure exists when the firm employs 100% debt or maximum debt in the capital structure (Durand, 1959; Klein, O'Brien & Peters, 2002). From the above results, use of debt in the capital structure significantly increases the value of the firm as indicated by 0.7%.

The result of the current study supports the findings of Obaid (2016) who found a positive relationship between capital structure and the value of the firm. Correspondingly, Antwi *et al.* (2012) found a positive relationship between debt and the firm value while equity was found to have a negative relationship with the value of the company. Further, Muchiri *et al.* (2016) found a positive relationship between debt financing and performance. In contradiction to the findings of the study, Abor (2007) established that, long-term and total debt ratios, negatively affect performance negatively affected the value of SMEs. Other studies that controvert the findings of this study in regard to capital structure and firm value includes: Myers (1984); Desai, Foley and Hines (2008); Mahajan and Tartaroglu (2008); Vasiliou and Daskalaskis (2009). The Differences in results could be attributed to use of different proxies of capital structure variables, study contexts and methodology used.

4.4.2 Effect of Dividend Decisions on the firm value

The second hypothesis sought to establish the effects of dividend decisions on firm value of selected firms listed in the NSE. The p- value of dividend decisions was at (p=0.034, <0.05) indicating a statistically significant relationship between dividend decisions and firm value of selected firms listed in the NSE (see Table 4.9). Hence the study failed to reject H_{02} at $\alpha=0.05$ and concluded that there is a statistically significant relationship between dividend decision and firm value of selected firms listed in the NSE.

The findings of the study were consistent with signaling theory attributed to Akerlof and Arrow (1970) and further developed by Spence (1974) into signal equilibrium theory. The study findings are also supported by Bird in hand theory proposed by Myron Gordon (1963) and John Linter (1964). This theories advocate for payment of dividends in order to increase firm value. In contradiction the findings of the study are not supported by dividend irrelevant theories including Modigliani and Miller (1963) who indicated that the value of company is not responsive to the dividend decisions.

The findings of the study compliment the findings in Abdullah Al Masum (2014), where the study indicated a significant positive relationship between dividend decisions and Stock Prices. Similarly, Gul *et al.* (2014) indicated a positive relationship between company's dividend decisions and firm value. To support the findings in the current study, Uwuigbe (2012) suggested significant positive relationship between the dividend decision and the performance. However, the

findings of the study contradict the findings in Velnampy *et al.* (2014) who found a negative relationship between dividend decisions and firm value. The difference could be traced to the comparing number of variables, measures of variables, and presence of moderating variables in the current study.

4.4.3 Effect of Cash Holding Decisions on the Firm Value

The third hypothesis sought to establish if there is statistically significant relationship between cash holding and firm value of selected firms listed in the NSE. The p-value of cash holding was at ($p=0.034$, <0.05) showed a statistically significant negative relationship between cash holding and firm value of selected firms listed in the NSE (see Table 4.9). Hence the study failed to reject H_{03} at $\alpha=0.05$ and concluded that there is a statistically significant negative relationship between cash holding and firm value of selected firms listed in the NSE.

The findings of the study are consistent with free cash flow theory by Jensen (1986). The theory asserts that firms generating cash in excess of that required to fund projects with higher NPV face greater agency problems as the excess cash flow aggravates the conflict of interest between shareholders and managers. Accordingly, such firms do not require external financing and as such, public scrutiny will not be required and managers may tend to invest in projects with negative NPV (Fukuda, 2011).

The findings of the study are consistent with Hong, Shuting and Meng (2012) in which study the results showed that the free cash flow of a company is negatively linear-correlated to its firm value, that is, too much free cash flow will lead to

financial performance decline. However, the findings contradict the findings of Chua (2012) who found that firms hold more cash to increase the firm value. Correspondingly, Hubbard (1998) found a significant positive relationship between free cash flows and profitability, an increase in the level of cash flow of a firm leads to a corresponding increase in profits of the firm. Such contradictions could be traced to the context of the study.

4.4.4 Effect of Corporate Investment Decisions on the Firm Value

The fourth hypothesis sought to establish if there is statistically significant relationship between corporate investment and firm value of selected firms listed in the NSE. The p- value of corporate investment ($p=0.000$, <0.05) showed a statistically significant positive relationship between corporate investment and firm value of selected firms listed in the NSE. Hence the study rejected H_{04} at $\alpha=0.05$ and concluded that there is a statistically significant positive relationship between corporate investment and firm value of selected firms listed in the NSE.

The study findings are consistent with capital budgeting theory which was developed by Woods and Randall (1989). The theory indicates that the future of Conventional Capital planning approaches is biased towards investing in the long term investments in order to increase firm value. The value of a company is determined by expected future returns which depend on the investment in the capital assets (Clancy & Collins, 2014). This implies a positive relationship between corporate investment and firm value. The findings are consistent with findings in Mushaho *et al.* (2015) who found a positive relationship between capital budgeting

and company's performance. Similarly, Sharma *et al.* (2012) found a positive relationship in concurrence with the current study. The study contradicts the finding in Ariemba *et al.* (2016) who found a negative relationship between corporate investment and firm value. The contradictions in findings of the previous studies and the current study could be attributed to the different contexts of studies, indicators of corporate investments and study period.

4.5 Test for Moderating Effects

The study sought to determine the moderating effect of GDP and political risk on the relationship between management financial decisions and the firm value. The test applied Whisman and McClelland (2005) which involves two steps; in the first step, each moderator is run as an independent variable in addition to other explanatory variables. If the coefficient is insignificant at 0.05, then the variable in question becomes an independent variable. If insignificant, then second step is necessary to include interaction effect of the moderator with each of the variable in consideration.

4.5.1 Moderating Effect of GDP on the Relationship Between Financial Management Decisions and Firm value

The study sought to determine the moderating effect of GDP on the relationship between financial management decisions and the firm value. This was determined through testing sub hypothesis $H_{05(i)}$ to $H_{05(iv)}$. Whisman and McClelland (2005) test was used to test the moderation. The test results are as indicated below:

Table 4.10 Summary Table for Moderation effect of GDP

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------------------------------|-------------|--------------------|-------------|-------|
| C | 0.160536 | 0.153314 | 1.04711 | 0.296 |
| Capital Structure | -0.029142 | 0.007921 | 3.67917 | 0.000 |
| Cash Holding | 8.482396 | 1.586493 | 5.346632 | 0.000 |
| Dividend Decision | 19.23815 | 5.467544 | 3.51861 | 0.001 |
| Corporate Investment | 3.04905 | 0.203899 | 14.95374 | 0.000 |
| GDP Growth Rate | 0.380248 | 0.037635 | 10.10351 | 0.060 |
| CS*GDP | 0.076905 | 0.013052 | 5.89227 | 0.000 |
| CH*GDP | 0.374421 | 0.115381 | 3.245087 | 0.001 |
| DI*GDP | 1.628879 | 0.428944 | 3.797413 | 0.000 |
| CI*GDP | 0.223566 | 0.015509 | 14.41517 | 0.000 |
| Effects Specification | | | | |
| Cross-section fixed (dummy variables) | | | | |
| Weighted Statistics | | | | |
| R-squared | 0.881338 | Mean dependent var | 3.459074 | |
| Adjusted R-squared | 0.863024 | S.D. dependent var | 8.210936 | |
| S.E. of regression | 2.850316 | Sum squared resid | 2526.657 | |
| F-statistic | 48.12279 | Durbin-Watson stat | 1.302447 | |
| Prob(F-statistic) | 0.000000 | | | |
| Unweighted Statistics | | | | |
| R-squared | 0.479621 | Mean dependent var | 1.470390 | |
| Sum squared resid | 2949.479 | Durbin-Watson stat | 1.251109 | |

Source: Research Data, 2019

From Table 4.10, step one involved running GDP as an independent variable. The various coefficients were extracted from the table to form equation 3.3 above. The R squared of 0.8813 indicates that the 88.13% changes in the dependent variable could be explained by the explanatory variables. The findings indicated that, all the p-values of independent variables including capital structure ($p=0.0000$, <0.05) dividend decisions ($p=0.001$, <0.05), cash holding ($p=0.0000$, <0.05), and corporate investments ($p=0.0000$, <0.05) were significant. The coefficient of GDP was insignificant with (p value =0.0600, <0.05). In line with MacKinnon, Lockwood,

Hoffman, West and Sheets (2002), where the moderator variable (in this case GDP) is insignificant, the null hypothesis that the GDP is an explanatory variable is rejected and alternative hypothesis that GDP is a moderator variable is accepted. This required inclusion of the interaction factor in the model to test the following hypothesis as per equation 3.4 above.

The result indicates that, GDP had a significant positive moderating effect on the relationship between capital structure and firm value as indicated by p-values of ($p=0.0000$, <0.05), The findings of this study compliment the findings in Onyuma and Ochieng (2017); Muchiri, Muturi and Ngumi (2016) and Mwangi (2016) where GDP was found to moderate the relationship between capital structure and firm value. In contradiction Siddik, Sajal and Shanmuga (2017) found an insignificant moderating effect. The contradiction could be due to different contexts of study.

The study sought to determine the moderating effect of GDP on relationship between cash holding and firm value. The results indicate that, GDP had a significant positive moderating effect on the relationship between cash holding and firm value as indicated by ($p=0.001$, <0.05), and thereby significant (see Table 4.10). The research findings were in line with Mun and Jang (2015) and contradict the findings in Dong, Chen and Yang (2014) who found little evidence of such relationship.

Further moderation test was carried out to determine the moderating effect of GDP on the relationship between dividend decisions and firm value. The p value of ($p=0.000$, <0.05), indicates that GDP had a significant positive moderating effect on

the relationship between dividend decisions and firm value. Yensu1 and Adusei (2016) concur with the findings and indicate that GDP changes are likely to affect the relationship between dividend decisions and firm value in a positive way. However, Farrukh, Irshad, Khakwani, Ishaque and Ansa (2017) refute the findings by documenting an insignificant positive effect. The difference could be traced to the context of the study and period of study under consideration.

The study also sought to determine the moderating effect of GDP on the relationship between corporate investment and firm value. The results in table 4.10. Indicate a significant positive moderating effect of GDP on the relationship between corporate investment and firm value as shown by ($p=0.0000$, <0.05). Such findings were documented by Oke (2013) who found GDP have a significant positive moderating effect on the relationship between corporate investment and firm value in Nigerian context. Ariemba et al., (2016); Olatunji, Oladipupo and Afolabi (2017) documented similar findings in Savings and Credit Cooperative Societies and whole economy respectively.

4.5.2 Moderating effect of Political risk on the relationship between financial management decisions and Firm Value

The study sought to determine the moderating effect of political risk on the relationship between financial management decisions and firm value. This was tested through testing sub hypothesis $H_{06(i)}$: to $H_{06(iv)}$. Table 4.52 below indicates the Whisman test results.

Table 4.11 Summary Table for Moderation effect of Political Risk

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -28.57482 | 26.77626 | -1.06717 | 0.2867 |
| Capital Structure | -34.91667 | 8.094048 | -4.31387 | 0.0000 |
| Cash Holding | 146.633 | 93.39044 | 1.570107 | 0.1174 |
| Dividend Decision | 347.6258 | 106.9934 | 3.24904 | 0.0013 |
| Corporate Investment | 58.44832 | 22.9407 | 2.5478 | 0.0113 |
| Political Risk | 0.427553 | 0.402408 | 1.062485 | 0.0810 |
| CS*PR | -0.529262 | 0.122584 | 4.317537 | 0.0000 |
| CH*PR | -2.038548 | 1.339658 | 1.521693 | 0.1291 |
| DP*PR | -5.062931 | 1.536867 | 3.29432 | 0.0011 |
| CI*PR | -0.834257 | 0.327427 | 2.547918 | 0.0113 |

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

| | | | |
|--------------------|----------|--------------------|----------|
| R-squared | 0.839116 | Mean dependent var | 3.035993 |
| Adjusted R-squared | 0.814285 | S.D. dependent var | 6.948467 |
| S.E. of regression | 2.827607 | Sum squared resid | 2486.557 |
| F-statistic | 33.79318 | Durbin-Watson stat | 1.376921 |
| Prob(F-statistic) | 0.000000 | | |

Source: Research Data, 2019

From Table 4.11, steps one involved running political risk as an independent variable. The various coefficients were extracted from the table to form equation 3.5 above. The R squared of 0.8391 indicate that the 83.91% changes in the dependent variable could be explained by the explanatory variables. The result findings indicated that P-value was insignificant ($p=0.0810$, <0.05). Since the coefficient of the moderating variable was insignificant, the null hypothesis that political risk was an explanatory variable was rejected and the alternative hypothesis that it is a moderating variable accepted (Whisman *et al.*, 2005)

The study sought to determine whether the political risk had a significant moderating effect on the relationship between capital structure and firm value. The results in table 4.11 indicate a significant negative moderating effect of political risk on the relationship between capital structure and firm value ($p=0.0000$, <0.05). Çam (2013) documents an incongruity with the findings of the current study and documents a significant negative moderating effect of political risk on the relationship between capital structure and firm value. Hassan, Hollander, van Lent, and Tahoun (2017) found no evidence of such moderation but document a significant negative relationship between political risk and firm value and document political risk to be explanatory variable.

The study also sought to determine whether political risk had a significant moderating effect on the relationship between dividend decisions and firm value. The result in table 4.11 indicate a significant negative moderating effect of political risk on the relationship between dividend decisions and firm value ($p=0.0011$, <0.05). The findings contradict the findings in Huang, Wu, Yu and Zhang (2015) who found political risk to significantly affect the firm value to the extent that it cannot be indicated as moderating variable but an explanatory variable. Political risk raise the market perceived uncertainty and cost of external financing and thus past dividend payers are more likely to terminate dividends and that non-payers are less likely to initiate dividends during periods of high political risk (Narang, 2018).

Further moderation effect was tested to determine whether the political risk had a significant moderating effect on the relationship between cash holding and firm

value. The p value of 0.1291 was higher than 0.05 significance level and thus insignificant moderating effect of political risk on the relationship between cash holding and firm value. In this case, there was negative insignificant effect on the relationship between cash holding and firm value. This study contradicts the findings in Xu, Chen, Xu and Chan (2016) who document a significant negative moderating effect on relationship between cash holding and firm value. Gadringer (2011) further contradicts the current study by indicating that the impact of political risk on a firm's value depends on the risk exposure of a firm's individual business interests to it.

To determine whether political risk had a significant moderating effect on the relationship between corporate investment and firm value, the coefficient of interaction between political risk and firm value was introduced to the model. The results in Table 4.11 indicated that political risk had a significant moderating effect on the relationship between corporate investment and firm value ($p=0.0113, <0.05$). This finding is consistent with Molonko and Ampah (2017) who documents a significant negative moderating effect of Political Risk on the Relationship between Capital Expenditure and Sectoral Economic Growth in Kenya. Inconsistent with Restrepo, Correia, and Población (2012) found different expressions of political risk influencing both positively and negatively the value of investment opportunities and the decisions of firms to invest.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary, conclusions, recommendations, contribution of the study to knowledge and suggestions for further studies. The summary is based on the objectives and the methodology that was applied in the study. The conclusions and recommendations were based on the research findings of the study. The chapter finally indicates the ways in which the study contributes to the knowledge and gives further suggestions for further studies.

5.2 Summary

Statistics presented in the study indicates a declining trend in the firm value. The various empirical studies carried out on the effect of financial management decisions provide variegated results and most studies carried out in other countries and results cannot be generalized to Kenyan context. The study intended to bridge the gaps by assessing the effect of financial management decisions on firm value.

Firstly, the study sought to determine the effect of capital structure decisions on firm value of selected firms listed at NSE. Capital structure decisions were proxied by debt ratio while the firm value was represented by Tobin's q. To understand the contribution of leverage to the firm value, Net income approach was utilized to hypothesize the effect of debt ratio. The findings of correlation analysis document that capital structure decisions had a weak and positive correlation with firm value

of selected listed companies in NSE. Using the FGLS estimation technique, the study established a significant positive relationship between increased used of debt and firm value. Net income approach to capital structure supported the findings of the study.

Secondly, the study sought to determine the effect of dividend decisions on the firm value of selected firms listed in the NSE, Kenya. Dividend Decisions in this case was represented by dividend payout while firm value was represented by Tobin's q. To enable conceptualization and development of hypothesis for testing such relationship, signaling theory was applied. The findings of correlation analysis indicated that dividend decisions had a weak and positive correlation with firm value of selected listed firms in NSE. The FGLS results document a significant positive effect of dividend decision on firm value.

Thirdly, the study sought to determine the effect of cash holding on firm value. Cash holding was proxied by cash ratio. By utilizing trade off theory to conceptualize the relationship between cash holding decision and firm value, hypothesis was developed to test such relationship. The findings of correlation analysis indicate that cash holding had a weak and negative correlation with firm value of selected listed companies in NSE. By means of the FGLS estimation technique, the study established a statistically significant negative relationship between cash holding and firm value.

The fourth objective sought to determine the effect of corporate investment on the firm value. The findings of correlation analysis indicated that corporate investment

had a weak and negative correlation with firm value of selected listed companies in NSE. Upon carrying out various diagnostic tests, FGLS estimation method was utilized to determine such effects. The study established a significant positive effect between corporate investment and firms' value.

Fifthly, the study sought to determine the moderating effect of Gross Domestic Product on the relationship between firm values. To fulfill the objective, different indicators of financial management decisions including capital structure, dividend decisions, cash holding and corporate investment and their corresponding interaction effects was run against the firm value. The regression results documented a significant moderating effect of GDP on the relationship between the various indicators of financial management decisions and firm value.

Lastly, the study sought to determine the moderating effect of political risk on the firm value. The FGLS found a significant negative moderation effect of political risk on the relationship between capital structure, dividend decisions and corporate investment. On contrary, political risk was found to have a negative insignificant effect on the relationship between cash holding and firm value.

The results of Correlation analysis in the current study indicated that capital structure and corporate investment had weak positive correlation with firm value, dividend decisions had strong positive correlation with firm value whereas cash holding had strong negative correlation with firm value.

The descriptive analysis results indicate that on average most companies in the Nairobi Securities Exchange used more leverage than equity. The variation of debt ratio among the firms was found to be high. Further, in analyzing the dividend decisions, the dividend yield among the listed companies was found to be high. Cash and cash equivalents held by companies was low whereas the variation in the cash ratio among the companies was low. Additionally, some firms were found to operate on bank overdraft. On average, Corporate investment was found to increase over the study period.

5.3 Conclusion

In regard to the capital structure decisions, the study concluded that when a firm increases debt in its financing structure the value of the firm is increased. This has been supported by various literatures for example the Net operating income approach to financing. The conclusion has also been opposed by other schools of thought for example Modigliani and Miller theory of capital structure. Secondly, the study concluded that increase in the dividend payout leads to increase in firm value. Moreover, this is supported by various empirical literatures for example the signaling theory of dividends.

Thirdly, the study concluded that as firms increase the cash and cash equivalents relative to the total assets, the firm value declines. This has been collaborated by various literatures and in particular the free cash flow theory. In regard to the fourth objective, increase in corporate investment led to increase in firm value. This

compliments capital budgeting theory which advocates for increased investment in fixed assets in order to enhance the firm value.

Lastly, in regard to the moderating effects of macroeconomic variables on the relationship between financial management decisions and firm value, the study concluded that, the relationship between the financial management decisions and firm value is not only direct, but it is also affected by macro-economic variables and in particular GDP and Political risk. The study concludes that GDP increases enhances such relationship with overall effect of increasing the firm value while increase in Political risk overall effect reduces the firm value.

5.4 Policy Implications and Recommendations

In view of the findings of the study and its ensuing conclusions, the study makes the following recommendations to policy and finance practice. Firstly, leverage was found to have a significant positive effect on the firm value. Hypothesis test results indicate that an increase in debt in the organizational financing structure leads to increased firm value. The study therefore recommends that corporate managers should prefer debt to equity this is by increasing corporate bonds and reduce equity through stock buy backs. The government through its fiscal and monetary policies should carry out interventions to reduce tax on interest on corporate bonds and also reduce corporate cost of debt. The capital markets authority should Publish regulations on guidelines to enable listed firms to acquire their own shares (stock buybacks).

Secondly, dividend decisions were found to have a significant effect on the firm value. Particularly, dividend payout ratio was found to have a positive effect on the firm value. The study therefore recommends that corporate managers increase the dividend payout in times of profitability. It is further recommended that, the dividends be paid in cash as opposed to other methods which may lead to increased equity. This will send pleasant information to the market which in turn increases the market valuation. Capital Markets Authority (CMA) should come up with the necessary regulations as to the minimum amount of dividends a profitable company should pay in order to augment investors' wealth.

Thirdly, cash holding was found to have a significant relationship with firm value. In particular, cash ratio was found to have a negative relationship with the firm value. The study recommends that the managers reduce the amount of cash and cash equivalents held in the organization. The ratio of cash to the total assets should be maintained at lower levels just enough to cater for precautionary and transactive motives of holding money. The extra cash should be utilized in payment of cash dividends and investments in fixed assets in order to increase the firms' value. Pronounced efforts should be made by the board to reduce free cash flows which may lead to managers investing in negative NPV projects which may reduce the future expected cash flow and hence the firm value.

Fourthly, the findings indicated that corporate investment had a significant positive effect on the firm value. Consequently, the study recommends corporate managers to make deliberate efforts to increase capital investments. Further, the government

through the revenue authority should make deliberate efforts to give incentives in capital allowances in order to encourage capital investments. Managers are also encouraged to invest excess cash in capital investments. Gross Domestic Product was found to have a significant positive moderating effect on the relationship between financial management decisions and firm value for all the variables. Reduction in GDP reduces the firm value and vice versa. Consequently, the study recommends that the corporate managers be a lot more proactive in global and country specific factors that cause alterations in GDP by applying focusting models. Application of economic analysis tools is highly recommended so that the companies can make deliberate actions to take cautionary actions to mitigate the risk associated with deviations in GDP growth rate. Further, NSE should work with other securities exchange in order to harmonise regulations to encourage cross listings in order to diversify Economic risks. The government should ensure a proper check in the fiscal and monetary policies to ensure stable economy.

Lastly, political risk was found to negatively affect the relationship between financial management decision variables and firm value. Consequently, the study recommended precautionary incentive of managers in response to political shocks. The study also recommends solicitous interventions from the government to ensure stronger legal and investor protection. Further, Nairobi Securities Exchange should work with other securities markets in the region to harmonize regulations and encourage cross listing diversifying both economic and political risks.

5.5 Contribution to Knowledge

This study makes contributions to finance theory, practice and policy in several ways. Firstly, the study makes contributions to finance theory on how financial management decisions affect the firm value. The magnitude and direction of each of the decision variable is also explained in the study. Secondly, from the gaps highlighted from this study, academicians will have a basis of conducting future studies in areas where some knowledge gaps have been identified in order to fill such gaps. Thirdly, the study will contribute to other topics of finance for instance efficient market hypothesis and behavioral finance which endeavors to explain the drivers of firm value.

5.6 Limitations of the Study

The study encountered some limitations which are worth noting. First, some firms had missing data within the study period. This had a potential ability to affect panel data analysis. To overcome this, the study adopted unbalanced panel regression analysis which had the ability to produce credible results. Secondly, the selected firms considered under the study were 46 making the study population small. This had potential effect of lowering the quantity of data available for analysis to produce results sufficient to make meaningful statistical inferences. To overcome this, panel data was used in order to increase the quantity of data.

5.7 Areas for Further Research

The research gaps documented from the study provide some basis for further empirical investigations. Firstly, the study noted that the R- square was low for the general model of the main variables of the study. This despite the importance attached to the role of financial management decision making unit in the Organisation. An empirical study to determine the causes of such low R-square is necessary which would form the basis for identifying other factors outside the financial management decision making unit that could better explain the changes in firm value.

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APPENDICES

Appendix I: Data Extraction Tool

| YEAR | Market capitalization | Total debt | Total Assets | Total dividends Declared | Total earnings | Expenditure | Cash | GDP Growth Rate |
|------|-----------------------|------------|--------------|--------------------------|----------------|-------------|------|-----------------|
| 2008 | | | | | | | | |
| 2009 | | | | | | | | |
| 2010 | | | | | | | | |
| 2011 | | | | | | | | |
| 2012 | | | | | | | | |
| 2013 | | | | | | | | |
| 2014 | | | | | | | | |
| 2015 | | | | | | | | |
| 2016 | | | | | | | | |

Source: researcher (2019)

Appendix II: List of Selected Firms Listed at Nairobi Securities Exchange

| | | | |
|----|---|----|---------------------------------------|
| 1 | Eaagads Ltd Ord | 24 | Express Ltd |
| 2 | Kapchorua Tea Co. Ltd | 25 | Kenya Airways Ltd |
| 3 | Kakuzi | 26 | Nation Media Group Ltd |
| 4 | Limuru Tea Co. Ltd | 27 | Standard Group Ltd |
| 5 | Rea Vipingo Plantations Ltd | 28 | TPS Eastern Africa (Serena) Ltd |
| 6 | Sasini Ltd | 29 | Scangroup Ltd Ord |
| 7 | Williamson Tea Kenya Ltd | 30 | Uchumi Supermarket Ltd |
| 8 | Car and General (K) Ltd | 31 | Hutchings Biemer Ltd |
| 9 | Sameer Africa Ltd | 32 | Longhorn Publishers Ltd |
| 10 | Marshalls (E.A.) Ltd | 33 | Nairobi Business Ventures Ltd |
| 11 | Atlas Development | 34 | Athi River Mining |
| 12 | Support Services Deacons (East Africa) | 35 | Bamburi Cement Ltd |
| 13 | Umeme Ltd | 36 | Crown Berger Ltd |
| 14 | Safaricom Ltd | 37 | E.A.Cables Ltd |
| 15 | HF Group Ltd | 38 | E.A.Portland Cement Ltd |
| 16 | New Gold Issuer (RP) Ltd | 39 | KenolKobil Ltd |
| 17 | Stanlib Fahari I-REIT | 40 | Total Kenya Ltd |
| 18 | Mumias Sugar Co. Ltd | 41 | KenGen Ltd |
| 19 | Unga Group Ltd | 42 | Kenya Power & Lighting Co Ltd |
| 20 | Eveready East Africa Ltd | 43 | B.O.C Kenya Ltd |
| 21 | Kenya Orchards Ltd | 44 | British American Tobacco Kenya Ltd |
| 22 | A. Baumann CO Ltd | 45 | Carbacid Investments Ltd |
| 23 | Flame Tree Group Holdings Ltd | 46 | East African Breweries Ltd |

Source: Nairobi Securities Exchange, 2019

Appendix III: Stationarity Tests

Null Hypothesis: CAPITAL_STRUCTURE has a unit root[1st differences]
 Exogenous: None
 Lag Length: 10 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | 3.160769 | 0.0097 |
| Test critical values: | | |
| 1% level | -2.570756 | |
| 5% level | -1.941617 | |
| 10% level | -1.616168 | |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(CAPITAL_STRUCTURE)

Method: Least Squares

Date: 10/22/18 Time: 17:50

Sample (adjusted): 12 411

Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------------------|-------------|------------|-------------|--------|
| CAPITAL_STRUCTURE(-1) | 0.023730 | 0.007508 | 3.160769 | 0.0017 |
| D(CAPITAL_STRUCTURE(-1)) | -0.044547 | 0.053186 | -0.837580 | 0.4028 |
| D(CAPITAL_STRUCTURE(-2)) | 0.246067 | 0.053607 | 4.590229 | 0.0000 |
| D(CAPITAL_STRUCTURE(-3)) | 0.302978 | 0.055421 | 5.466848 | 0.0000 |
| D(CAPITAL_STRUCTURE(-4)) | 0.299313 | 0.061238 | 4.887673 | 0.0000 |
| D(CAPITAL_STRUCTURE(-5)) | 0.170835 | 0.067612 | 2.526689 | 0.0119 |
| D(CAPITAL_STRUCTURE(-6)) | 0.077370 | 0.056257 | 1.375300 | 0.1698 |
| D(CAPITAL_STRUCTURE(-7)) | 0.022394 | 0.044775 | 0.500152 | 0.6173 |
| D(CAPITAL_STRUCTURE(-8)) | 0.000971 | 0.032610 | 0.029788 | 0.9763 |
| D(CAPITAL_STRUCTURE(-9)) | -0.023094 | 0.015271 | -1.512243 | 0.1313 |
| D(CAPITAL_STRUCTURE(-10)) | -0.014399 | 0.009926 | -1.450666 | 0.1477 |

| | | | |
|--------------------|----------|-------------------|-----------|
| R-squared | 0.437563 | Mean dependent | |
| | | var | 0.038096 |
| | | S.D. dependent | |
| Adjusted R-squared | 0.423105 | var | 0.216328 |
| | | Akaike info | |
| S.E. of regression | 0.164309 | criterion | -0.747017 |
| Sum squared resid | 10.50204 | Schwarz criterion | -0.637252 |
| | | Hannan-Quinn | |
| Log likelihood | 160.4035 | criter. | -0.703549 |
| Durbin-Watson stat | 2.005402 | | |

Null Hypothesis: D(CASH_HOLDING) has a unit root t[1st differences]
 Exogenous: None
 Lag Length: 14 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | 3.121448 | 0.006 |
| Test critical values: 1% level | -2.570785 | |
| 5% level | -1.941621 | |
| 10% level | -1.616165 | |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(CASH_HOLDING,2)
 Method: Least Squares
 Date: 10/22/18 Time: 17:55
 Sample (adjusted): 17 414
 Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|------------------------|-------------|-----------------------|-------------|--------|
| D(CASH_HOLDING(-1)) | 2.962965 | 0.949228 | 3.121448 | 0.0019 |
| D(CASH_HOLDING(-1),2) | -3.925593 | 0.941990 | -4.167341 | 0.0000 |
| D(CASH_HOLDING(-2),2) | -3.488667 | 0.939557 | -3.713099 | 0.0002 |
| D(CASH_HOLDING(-3),2) | -3.335160 | 0.918851 | -3.629707 | 0.0003 |
| D(CASH_HOLDING(-4),2) | -2.008888 | 0.909614 | -2.208506 | 0.0278 |
| D(CASH_HOLDING(-5),2) | -2.707066 | 0.929826 | -2.911370 | 0.0038 |
| D(CASH_HOLDING(-6),2) | -3.526123 | 0.953194 | -3.699269 | 0.0002 |
| D(CASH_HOLDING(-7),2) | -4.435065 | 1.079026 | -4.110248 | 0.0000 |
| D(CASH_HOLDING(-8),2) | -6.711417 | 1.154678 | -5.812372 | 0.0000 |
| D(CASH_HOLDING(-9),2) | -3.954264 | 1.209728 | -3.268720 | 0.0012 |
| D(CASH_HOLDING(-10),2) | -2.322704 | 1.206845 | -1.924608 | 0.0550 |
| D(CASH_HOLDING(-11),2) | -8.188203 | 1.222613 | -6.697299 | 0.0000 |
| D(CASH_HOLDING(-12),2) | -2.469119 | 1.141660 | -2.162744 | 0.0312 |
| D(CASH_HOLDING(-13),2) | -8.279456 | 1.037116 | -7.983157 | 0.0000 |
| D(CASH_HOLDING(-14),2) | -4.867709 | 0.763076 | -6.379061 | 0.0000 |
| R-squared | 0.952772 | Mean dependent var | -3.72E-05 | |
| Adjusted R-squared | 0.951045 | S.D. dependent var | 0.338623 | |
| S.E. of regression | 0.074923 | Akaike info criterion | -2.307755 | |
| Sum squared resid | 2.149947 | Schwarz criterion | -2.157512 | |
| Log likelihood | 474.2432 | Hannan-Quinn criter. | -2.248245 | |
| Durbin-Watson stat | 1.912504 | | | |

Null Hypothesis: D(CASH_HOLDING,2) has a unit root t[2nd differences]
 Exogenous: None
 Lag Length: 13 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -9.339487 | 0.0000 |
| Test critical values: | | |
| 1% level | -2.570785 | |
| 5% level | -1.941621 | |
| 10% level | -1.616165 | |

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CASH_HOLDING,3)
Method: Least Squares
Date: 10/22/18 Time: 17:57
Sample (adjusted): 17 414
Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------------------|-------------|------------|-------------|--------|
| D(CASH_HOLDING(-1),2) | -24.02737 | 2.572665 | -9.339487 | 0.0000 |
| D(CASH_HOLDING(-1),3) | 22.03744 | 2.547434 | 8.650838 | 0.0000 |
| D(CASH_HOLDING(-2),3) | 21.47349 | 2.511768 | 8.549155 | 0.0000 |
| D(CASH_HOLDING(-3),3) | 20.99048 | 2.437831 | 8.610311 | 0.0000 |
| D(CASH_HOLDING(-4),3) | 21.80660 | 2.386574 | 9.137197 | 0.0000 |
| D(CASH_HOLDING(-5),3) | 21.97987 | 2.402494 | 9.148771 | 0.0000 |
| D(CASH_HOLDING(-6),3) | 21.40013 | 2.471802 | 8.657703 | 0.0000 |
| D(CASH_HOLDING(-7),3) | 20.21484 | 2.693234 | 7.505788 | 0.0000 |
| D(CASH_HOLDING(-8),3) | 16.99521 | 2.876137 | 5.909040 | 0.0000 |
| D(CASH_HOLDING(-9),3) | 16.67889 | 2.990508 | 5.577277 | 0.0000 |

Null Hypothesis: CORPORATE_INVESTMENT has a unit root[At level]
Exogenous: None
Lag Length: 15 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | 0.993767 | 0.0156 |
| Test critical values: | | |
| 1% level | -2.570785 | |
| 5% level | -1.941621 | |
| 10% level | -1.616165 | |

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CORPORATE_INVESTMENT)
Method: Least Squares
Date: 10/22/18 Time: 18:03
Sample (adjusted): 17 414
Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|------------------------------|-------------|-----------------------|-------------|----------|
| CORPORATE_INVESTMENT(-1) | 0.317065 | 0.319054 | 0.993767 | 0.3210 |
| D(CORPORATE_INVESTMENT(-1)) | 10.54178 | 0.411140 | 25.64034 | 0.0000 |
| D(CORPORATE_INVESTMENT(-2)) | -13.35695 | 0.939136 | -14.22259 | 0.0000 |
| D(CORPORATE_INVESTMENT(-3)) | -6.687162 | 1.192542 | -5.607487 | 0.0000 |
| D(CORPORATE_INVESTMENT(-4)) | 3.545048 | 1.220804 | 2.903864 | 0.0039 |
| D(CORPORATE_INVESTMENT(-5)) | -2.558500 | 1.212013 | -2.110950 | 0.0354 |
| D(CORPORATE_INVESTMENT(-6)) | -16.93676 | 1.363286 | -12.42348 | 0.0000 |
| D(CORPORATE_INVESTMENT(-7)) | 36.94649 | 2.731105 | 13.52804 | 0.0000 |
| D(CORPORATE_INVESTMENT(-8)) | 18.73171 | 3.355344 | 5.582651 | 0.0000 |
| D(CORPORATE_INVESTMENT(-9)) | -11.25057 | 3.482913 | -3.230218 | 0.0013 |
| D(CORPORATE_INVESTMENT(-10)) | 3.011509 | 3.430754 | 0.877798 | 0.3806 |
| D(CORPORATE_INVESTMENT(-11)) | 76.59946 | 4.886588 | 15.67545 | 0.0000 |
| D(CORPORATE_INVESTMENT(-12)) | 28.90119 | 6.517045 | 4.434707 | 0.0000 |
| D(CORPORATE_INVESTMENT(-13)) | -35.97694 | 6.345726 | -5.669476 | 0.0000 |
| D(CORPORATE_INVESTMENT(-14)) | -47.63655 | 6.483066 | -7.347843 | 0.0000 |
| D(CORPORATE_INVESTMENT(-15)) | -30.32794 | 6.945039 | -4.366849 | 0.0000 |
| R-squared | 0.999018 | Mean dependent var | | 2.413062 |
| Adjusted R-squared | 0.998980 | S.D. dependent var | | 44.46307 |
| S.E. of regression | 1.420105 | Akaike info criterion | | 3.578710 |
| Sum squared resid | 770.3789 | Schwarz criterion | | 3.738969 |
| Log likelihood | -696.1632 | Hannan-Quinn criter. | | 3.642187 |
| Durbin-Watson stat | 2.022426 | | | |

Null Hypothesis: DIVIDENT_POLICY has a unit root[At level]
Exogenous: None
Lag Length: 16 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -3.249835 | 0.0012 |
| Test critical values: | | |
| 1% level | -2.570800 | |
| 5% level | -1.941623 | |
| 10% level | -1.616164 | |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(DIVIDENT_POLICY)
Method: Least Squares
Date: 10/22/18 Time: 18:06
Sample (adjusted): 18 414
Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-------------------------|-------------|-----------------------|-------------|-----------|
| DIVIDENT_POLICY(-1) | -0.102197 | 0.031447 | -3.249835 | 0.0013 |
| D(DIVIDENT_POLICY(-1)) | 0.452274 | 0.059030 | 7.661783 | 0.0000 |
| D(DIVIDENT_POLICY(-2)) | 0.843919 | 0.075993 | 11.10522 | 0.0000 |
| D(DIVIDENT_POLICY(-3)) | -0.720944 | 0.094857 | -7.600358 | 0.0000 |
| D(DIVIDENT_POLICY(-4)) | 1.728622 | 0.114853 | 15.05072 | 0.0000 |
| D(DIVIDENT_POLICY(-5)) | -0.308813 | 0.144035 | -2.144016 | 0.0327 |
| D(DIVIDENT_POLICY(-6)) | -10.13043 | 0.746038 | -13.57897 | 0.0000 |
| D(DIVIDENT_POLICY(-7)) | 1.588469 | 0.902485 | 1.760106 | 0.0792 |
| D(DIVIDENT_POLICY(-8)) | -5.686887 | 0.902949 | -6.298127 | 0.0000 |
| D(DIVIDENT_POLICY(-9)) | 1.233786 | 1.017570 | 1.212483 | 0.2261 |
| D(DIVIDENT_POLICY(-10)) | -1.757896 | 1.025134 | -1.714796 | 0.0872 |
| D(DIVIDENT_POLICY(-11)) | 10.37663 | 0.931003 | 11.14565 | 0.0000 |
| D(DIVIDENT_POLICY(-12)) | 22.46545 | 1.068283 | 21.02949 | 0.0000 |
| D(DIVIDENT_POLICY(-13)) | -0.292150 | 1.592832 | -0.183416 | 0.8546 |
| D(DIVIDENT_POLICY(-14)) | -5.096763 | 1.515160 | -3.363844 | 0.0008 |
| D(DIVIDENT_POLICY(-15)) | -2.352455 | 1.546777 | -1.520875 | 0.1291 |
| D(DIVIDENT_POLICY(-16)) | 6.569866 | 1.578822 | 4.161246 | 0.0000 |
| R-squared | 0.909322 | Mean dependent var | | 0.005231 |
| Adjusted R-squared | 0.905504 | S.D. dependent var | | 0.043806 |
| S.E. of regression | 0.013466 | Akaike info criterion | | -5.735425 |
| Sum squared resid | 0.068906 | Schwarz criterion | | -5.564828 |
| Log likelihood | 1155.482 | Hannan-Quinn criter. | | -5.667846 |
| Durbin-Watson stat | 1.978801 | | | |

Null Hypothesis: D(FIRM_VALUE) has a unit root[1st differences]

Exogenous: None

Lag Length: 17 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -11.00537 | 0.0000 |
| Test critical values: | | |
| 1% level | -2.570830 | |
| 5% level | -1.941628 | |
| 10% level | -1.616161 | |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(FIRM_VALUE,2)

Method: Least Squares

Date: 10/22/18 Time: 18:08

Sample (adjusted): 20 414

Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| D(FIRM_VALUE(-1)) | -35.69657 | 3.243558 | -11.00537 | 0.0000 |
| D(FIRM_VALUE(-1),2) | 34.13791 | 3.223606 | 10.58998 | 0.0000 |
| D(FIRM_VALUE(-2),2) | 33.75130 | 3.242210 | 10.40997 | 0.0000 |
| D(FIRM_VALUE(-3),2) | 32.92113 | 3.282281 | 10.02995 | 0.0000 |
| D(FIRM_VALUE(-4),2) | 32.76907 | 3.352163 | 9.775502 | 0.0000 |
| D(FIRM_VALUE(-5),2) | 33.49140 | 3.470771 | 9.649555 | 0.0000 |
| D(FIRM_VALUE(-6),2) | 33.61446 | 3.631954 | 9.255202 | 0.0000 |
| D(FIRM_VALUE(-7),2) | 33.84950 | 3.831722 | 8.834017 | 0.0000 |
| D(FIRM_VALUE(-8),2) | 34.64991 | 4.185414 | 8.278731 | 0.0000 |
| D(FIRM_VALUE(-9),2) | 38.51328 | 3.926489 | 9.808579 | 0.0000 |
| D(FIRM_VALUE(-10),2) | 40.32150 | 3.774481 | 10.68266 | 0.0000 |
| D(FIRM_VALUE(-11),2) | 31.57916 | 3.478344 | 9.078791 | 0.0000 |
| D(FIRM_VALUE(-12),2) | 32.52194 | 3.491510 | 9.314578 | 0.0000 |
| D(FIRM_VALUE(-13),2) | 27.96473 | 3.641352 | 7.679765 | 0.0000 |
| D(FIRM_VALUE(-14),2) | 54.16144 | 3.352538 | 16.15535 | 0.0000 |
| D(FIRM_VALUE(-15),2) | 53.08582 | 4.061067 | 13.07189 | 0.0000 |
| D(FIRM_VALUE(-16),2) | 116.1415 | 3.562357 | 32.60244 | 0.0000 |
| D(FIRM_VALUE(-17),2) | 20.58179 | 5.874451 | 3.503612 | 0.0005 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.991443 | Mean dependent var | 0.000000 |
| Adjusted R-squared | 0.991057 | S.D. dependent var | 34870.89 |
| S.E. of regression | 3297.591 | Akaike info criterion | 19.08427 |
| Sum squared resid | 4.10E+09 | Schwarz criterion | 19.26559 |
| Log likelihood | -3751.143 | Hannan-Quinn criter. | 19.15611 |
| Durbin-Watson stat | 1.988906 | | |

Null Hypothesis: D(GDP_GDP_GROWTH_RATE_) has a unit root[1st differences]

Exogenous: None

Lag Length: 0 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|-----------|
| Augmented Dickey-Fuller test statistic | -20.27313 | 0.0000 |
| Test critical values: | | |
| | 1% level | -2.570587 |
| | 5% level | -1.941594 |
| | 10% level | -1.616183 |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(GDP_GDP_GROWTH_RATE_,2)

Method: Least Squares

Date: 10/22/18 Time: 18:11

Sample (adjusted): 3 414

Included observations: 360 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------------------------|-------------|-----------------------|-------------|-----------|
| D(GDP_GDP_GROWTH_RATE_(-1)) | -1.000000 | 0.049326 | -20.27313 | 0.0000 |
| R-squared | 0.500000 | Mean dependent var | | -3.86E-18 |
| Adjusted R-squared | 0.500000 | S.D. dependent var | | 0.819437 |
| S.E. of regression | 0.579430 | Akaike info criterion | | 1.748879 |
| Sum squared resid | 137.9885 | Schwarz criterion | | 1.758639 |
| Log likelihood | -359.2690 | Hannan-Quinn criter. | | 1.752739 |
| Durbin-Watson stat | 2.000000 | | | |

Null Hypothesis: D(POLITICAL_RISK) has a unit root[1st differences]

Exogenous: None

Lag Length: 0 (Automatic - based on SIC, maxlag=17)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -20.27313 | 0.0000 |
| Test critical values: | | |
| 1% level | -2.570587 | |
| 5% level | -1.941594 | |
| 10% level | -1.616183 | |

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(POLITICAL_RISK,2)

Method: Least Squares

Date: 10/22/18 Time: 18:13

Sample (adjusted): 3 414

Included observations: 412 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------------------|-------------|-----------------------|-------------|-----------|
| D(POLITICAL_RISK(-1)) | -1.000000 | 0.049326 | -20.27313 | 0.0000 |
| R-squared | 0.500000 | Mean dependent var | | 0.000000 |
| Adjusted R-squared | 0.500000 | S.D. dependent var | | 0.170872 |
| S.E. of regression | 0.120824 | Akaike info criterion | | -1.386532 |
| Sum squared resid | 6.000000 | Schwarz criterion | | -1.376773 |
| Log likelihood | 286.6257 | Hannan-Quinn criter. | | -1.382672 |
| Durbin-Watson stat | 2.000000 | | | |

Appendix IV Test for Autocorrelation

Wald Test:

Equation: Untitled

| Test Statistic | Value | df | Probability |
|----------------|----------|----------|-------------|
| F-statistic | 15197.41 | (4, 316) | 0.0000 |
| Chi-square | 60789.65 | 4 | 0.0000 |

Null Hypothesis: $C(1)=0, C(2)=0, C(3)=2*(4), C(4)=C(2)$

Null Hypothesis Summary:

| Normalized Restriction (= 0) | Value | Std. Err. |
|------------------------------|-----------|-----------|
| C(1) | 1.546821 | 0.438373 |
| C(2) | -0.007035 | 0.011843 |
| C(3) | -3.679771 | 2.809175 |
| C(4) | -19.13165 | 9.023251 |

Restrictions are linear in coefficients.

Appendix V: Heteroscedasticity Test

Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in weighted residuals

Equation: Untitled

Periods included: 9

Cross-sections included: 40

Total panel observations: 360

Cross-section effects were removed during estimation

| Test | Statistic | d.f. | Prob. |
|--------------------------|-----------|------|--------|
| Breusch-Pagan LM | 3968.072 | 780 | 0.0000 |
| Pesaran scaled LM | 79.70440 | | 0.0000 |
| Bias-corrected scaled LM | 77.20440 | | 0.0000 |
| Pesaran CD | 22.27754 | | 0.0000 |

Appendix VI : Model Specification Test

Dependent Variable: FIRM_VALUE
 Method: Panel EGLS (Period random effects)
 Date: 10/22/18 Time: 18:49
 Sample: 1 414
 Periods included: 46
 Cross-sections included: 6
 Total panel (unbalanced) observations: 243
 Swamy and Arora estimator of component variances

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | 1.800508 | 2278.347 | -3.252681 | 0.0013 |
| CAPITAL_STRUCTURE | 0.007781 | 1560.677 | 5.269661 | 0.0000 |
| CASH_HOLDING | 9.447190 | 4171.164 | 4.248686 | 0.0000 |
| CORPORATE_INVESTMENT | -38.31344 | 3205.208 | -3.359714 | 0.0009 |
| DIVIDEND_POLICY | 1.239405 | 21613.11 | -1.868336 | 0.0629 |

| Effects Specification | | S.D. | Rho |
|-----------------------|--|----------|--------|
| Period random | | 0.000000 | 0.0000 |
| Idiosyncratic random | | 18707.60 | 1.0000 |

| Weighted Statistics | | | |
|---------------------|----------|--------------------|----------|
| R-squared | 0.304775 | Mean dependent var | 4288.610 |
| Adjusted R-squared | 0.293091 | S.D. dependent var | 21898.40 |
| S.E. of regression | 18411.72 | Sum squared resid | 8.07E+10 |
| F-statistic | 26.08381 | Durbin-Watson stat | 2.085072 |
| Prob(F-statistic) | 0.000000 | | |

| Unweighted Statistics | | | |
|-----------------------|----------|--------------------|----------|
| R-squared | 0.304775 | Mean dependent var | 4288.610 |
| Sum squared resid | 8.07E+10 | Durbin-Watson stat | 2.085072 |

Dependent Variable: COMPANY_VALUE
 Method: Panel FGLS (Two-way random effects)
 Date: 11/01/18 Time: 06:40
 Sample: 2008 2016
 Periods included: 9
 Cross-sections included: 40
 Total panel (balanced) observations: 360
 Swamy and Arora estimator of component variances

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | 1.800508 | 0.216563 | 8.314022 | 0.0000 |
| CAPITAL_STRUCTURE | 0.007781 | 0.036736 | -0.211818 | 0.8324 |
| CASH_HOLDING | 9.447190 | 1.844372 | 5.122171 | 0.0000 |
| DIVIDEND_DECISION | -38.31344 | 5.317398 | -7.205298 | 0.0000 |
| CORPORATE_INVESTMENT | 1.239405 | 0.156831 | 7.902796 | 0.0000 |

Effects Specification

| | S.D. | Rho |
|----------------------|----------|--------|
| Cross-section random | 0.309290 | 0.0097 |
| Period random | 0.057058 | 0.0003 |
| Idiosyncratic random | 3.122484 | 0.9900 |

Weighted Statistics

| | | | |
|--------------------|----------|--------------------|----------|
| R-squared | 0.210865 | Mean dependent var | 1.400905 |
| Adjusted R-squared | 0.201974 | S.D. dependent var | 3.952838 |
| S.E. of regression | 3.531162 | Sum squared resid | 4426.532 |
| F-statistic | 23.71496 | Durbin-Watson stat | 1.041013 |
| Prob(F-statistic) | 0.000000 | | |

Unweighted Statistics

| | | | |
|-------------------|----------|--------------------|----------|
| R-squared | 0.211639 | Mean dependent var | 1.470390 |
| Sum squared resid | 4468.390 | Durbin-Watson stat | 1.032160 |

Fixed Effect

Dependent Variable: COMPANY_VALUE
Method: Panel FGLS (Cross-section weights-)
Date: 11/01/18 Time: 06:46
Sample: 2008 2016
Periods included: 9
Cross-sections included: 40
Total panel (balanced) observations: 360
Linear estimation after one-step weighting matrix

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | 1.546821 | 0.114504 | 13.50888 | 0.0000 |
| CAPITAL_STRUCTURE | -0.007035 | 0.014556 | -0.483343 | 0.6292 |
| CASH_HOLDING | 4.320229 | 1.150188 | 3.756108 | 0.0002 |
| DIVIDEND_DECISION | -19.13868 | 3.472121 | -5.512102 | 0.0000 |
| CORPORATE_INVESTMENT | 0.842584 | 0.098540 | 8.550722 | 0.0000 |

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

| | | | |
|--------------------|----------|--------------------|----------|
| R-squared | 0.269356 | Mean dependent var | 2.002270 |
| Adjusted R-squared | 0.169933 | S.D. dependent var | 3.660233 |
| S.E. of regression | 3.341509 | Sum squared resid | 3528.355 |
| F-statistic | 2.709195 | Durbin-Watson stat | 1.086187 |
| Prob(F-statistic) | 0.000000 | | |

Unweighted Statistics

| | | | |
|-------------------|----------|--------------------|----------|
| R-squared | 0.247680 | Mean dependent var | 1.470390 |
| Sum squared resid | 4264.107 | Durbin-Watson stat | 1.102935 |

Appendix VII: General Equation For Objective 1 To 4

Sample: 2008 2016
 Periods included: 9
 Cross-sections included: 40
 Total panel (balanced) observations: 360
 Linear estimation after one-step weighting matrix
 White cross-section standard errors & covariance (d.f. corrected)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------------------------------|-------------|--------------------|-------------|----------|
| C | 1.546821 | 0.438373 | 3.528549 | 0.0005 |
| CAPITAL_STRUCTURE | 0.007035 | 0.011843 | -0.594040 | 0.044429 |
| CASH_HOLDING | -4.320229 | 2.809175 | 1.537900 | 0.01251 |
| DIVIDEND_DECISION | 0.001913 | 9.029097 | -2.119668 | 0.0348 |
| CORPORATE_INVESTMENT | 0.842584 | 0.067128 | 12.55194 | 0.0000 |
| Effects Specification | | | | |
| Cross-section fixed (dummy variables) | | | | |
| Weighted Statistics | | | | |
| R-squared | 0.269356 | Mean dependent var | 2.002270 | |
| Adjusted R-squared | 0.169933 | S.D. dependent var | 3.660233 | |
| S.E. of regression | 3.341509 | Sum squared resid | 3528.355 | |
| F-statistic | 2.709195 | Durbin-Watson stat | 1.086187 | |
| Prob(F-statistic) | 0.000000 | | | |
| Unweighted Statistics | | | | |
| R-squared | 0.247680 | Mean dependent var | 1.470390 | |
| Sum squared resid | 4264.107 | Durbin-Watson stat | 1.102935 | |

Coefficient Confidence Intervals
 Date: 11/01/18 Time: 07:35
 Sample: 2008 2016
 Included observations: 360

| Variable | Coefficient | 90% CI | | 95% CI | | 99% CI | |
|----------------------|-------------|-----------|-----------|-----------|-----------|-----------|----------|
| | | Low | High | Low | High | Low | High |
| C | 1.546821 | 0.823641 | 2.270001 | 0.684322 | 2.409320 | 0.410787 | 2.682855 |
| CAPITAL_STRUCTURE | 0.007035 | -0.026573 | 0.012503 | -0.030337 | 0.016266 | -0.037727 | 0.023656 |
| CASH_HOLDING | 4.320229 | -0.314038 | 8.954497 | -1.206821 | 9.847280 | -2.959683 | 11.60014 |
| DIVIDEND_DECISION | 0.0019138 | -34.03389 | -4.243473 | -36.90343 | -1.373940 | -42.53738 | 4.260013 |
| CORPORATE_INVESTMENT | 0.842584 | 0.731844 | 0.953324 | 0.710510 | 0.974658 | 0.668624 | 1.016545 |

Appendix VIII: Moderating Effects

Moderation effect of GDP

Dependent Variable: COMPANY_VALUE
 Method: Panel FGLS (Cross-section weights)
 Date: 11/01/18 Time: 07:56
 Sample: 2008 2016
 Periods included: 9
 Cross-sections included: 40
 Total panel (balanced) observations: 360
 Linear estimation after one-step weighting matrix
 White cross-section standard errors & covariance (d.f. corrected)
 WARNING: estimated coefficient covariance matrix is of reduced rank

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | 0.160536 | 0.153314 | 1.047110 | 0.2959 |
| CAPITAL_STRUCTURE | -0.029142 | 0.007921 | 3.679170 | 0.0003 |
| CASH_HOLDING | 8.482396 | 1.586493 | 5.346632 | 0.0000 |
| DIVIDEND_DECISION | 19.23815 | 5.467544 | 3.518610 | 0.0005 |
| CORPORATE_INVESTMENT | 3.049050 | 0.203899 | 14.95374 | 0.0000 |
| GDP_GDP_GROWTH_RATE_ | 0.380248 | 0.037635 | 10.10351 | 0.0000 |
| CSGDP | 0.076905 | 0.013052 | 5.892270 | 0.0000 |
| CHGDP | 0.374421 | 0.115381 | 3.245087 | 0.0013 |
| DIGDP | 1.628879 | 0.428944 | 3.797413 | 0.0002 |
| CIGDP | 0.223566 | 0.015509 | 14.41517 | 0.0000 |

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

| | | | |
|--------------------|----------|--------------------|----------|
| R-squared | 0.881338 | Mean dependent var | 3.459074 |
| Adjusted R-squared | 0.863024 | S.D. dependent var | 8.210936 |
| S.E. of regression | 2.850316 | Sum squared resid | 2526.657 |
| F-statistic | 48.12279 | Durbin-Watson stat | 1.302447 |
| Prob(F-statistic) | 0.000000 | | |

Unweighted Statistics

| | | | |
|-------------------|----------|--------------------|----------|
| R-squared | 0.479621 | Mean dependent var | 1.470390 |
| Sum squared resid | 2949.479 | Durbin-Watson stat | 1.251109 |

Moderation effect of political risk

Dependent Variable: COMPANY_VALUE

Method: Panel FGLS (Cross-section weights)

Date: 11/01/18 Time: 08:04

Sample: 2008 2016

Periods included: 9

Cross-sections included: 40

Total panel (balanced) observations: 360

Linear estimation after one-step weighting matrix

White cross-section standard errors & covariance (d.f. corrected)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -28.57482 | 26.77626 | -1.067170 | 0.2867 |
| CAPITAL_STRUCTURE | -34.91667 | 8.094048 | -4.313870 | 0.0000 |
| CASH_HOLDING | 146.6330 | 93.39044 | 1.570107 | 0.1174 |
| DIVIDEND_DECISION | 347.6258 | 106.9934 | 3.249040 | 0.0013 |
| CORPORATE_INVESTMENT | 58.44832 | 22.94070 | 2.547800 | 0.0113 |
| POLITICAL_RISK | 0.427553 | 0.402408 | 1.062485 | 0.2888 |
| CSPR | 0.529262 | 0.122584 | 4.317537 | 0.0000 |
| CHPR | 2.038548 | 1.339658 | 1.521693 | 0.1291 |
| DDPR | 5.062931 | 1.536867 | 3.294320 | 0.0011 |
| CPPR | 0.834257 | 0.327427 | 2.547918 | 0.0113 |

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

| | | | |
|--------------------|----------|--------------------|----------|
| R-squared | 0.839116 | Mean dependent var | 3.035993 |
| Adjusted R-squared | 0.814285 | S.D. dependent var | 6.948467 |
| S.E. of regression | 2.827607 | Sum squared resid | 2486.557 |
| F-statistic | 33.79318 | Durbin-Watson stat | 1.376921 |
| Prob(F-statistic) | 0.000000 | | |

Unweighted Statistics

| | | | |
|-------------------|----------|--------------------|----------|
| R-squared | 0.477496 | Mean dependent var | 1.470390 |
| Sum squared resid | 2961.524 | Durbin-Watson stat | 1.271550 |

Coefficient Confidence Intervals

Date: 11/01/18 Time: 08:06

Sample: 2008 2016

Included observations: 360

| Variable | Coefficient | 90% CI | | 95% CI | | 99% CI | |
|----------------------|-------------|-----------|------------|-----------|-----------|-----------|-----------|
| | | Low | High | Low | High | Low | High |
| C | -28.57482 | -72.74943 | 15.59979 | -81.26035 | 24.11071 | -97.97164 | 40.82201 |
| CAPITAL_STRUCTURE | -34.91667 | -48.26997 | -21.56337 | -50.84269 | -18.99065 | -55.89425 | -13.93908 |
| CASH_HOLDING | 146.6330 | 7.7056 | 300.439526 | 37.3900 | 330.12398 | 95.6758 | 388.40977 |
| DIVIDEND_DECISION | 347.6258 | 171.1115 | 524.1400 | 137.1033 | 558.1482 | 70.32784 | 624.9237 |
| CORPORATE_INVESTMENT | 58.44832 | 20.60148 | 96.29515 | 13.30970 | 103.5869 | -1.007794 | 117.9044 |
| POLITICAL_RISK | 0.427553 | -0.236328 | 1.091434 | -0.364234 | 1.219340 | -0.615381 | 1.470487 |
| CSPR | 0.529262 | 0.327026 | 0.731497 | 0.288063 | 0.770461 | 0.211557 | 0.846967 |
| CHPR | 2.038548 | -0.171577 | 4.248673 | -0.597391 | 4.674487 | -1.433484 | 5.510580 |
| DDPR | 5.062931 | 2.598404 | 7.527458 | 2.086902 | 8.038960 | 1.046074 | 9.079788 |
| CPPR | 0.834257 | 0.374435 | 1.294079 | 0.478509 | 1.190005 | 0.682859 | 1.014345 |

Appendix IX: Research Authorization Letter



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

OUR REF: D86/CTY/30598/15

P.O. Box 43844, 00100

NAIROBI, KENYA

Tel. 8710901 Ext. 57530

Date: 29th August, 2018

The Director General,
National Commission for Science, Technology & Innovation,
P.O. Box 30623,
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MR FRANCIS K. GITAGIA REG. NO. D86/CTY/30598/15

I write to introduce **Mr. Gitagia** who is a Postgraduate Student of this University. He is registered for Ph.D. Degree programme in the Department of Accounting & Finance in the School of Business.

Mr. Gitagia intends to conduct research for a Ph.D. thesis entitled “Financial Management Decisions and the Value of Non Financial Companies Listed in Nairobi Securities Exchange, Kenya”.

Any assistance given will be highly appreciated.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'RM'.

REUBEN MURIUKI
FOR: DEAN, GRADUATE SCHOOL

RM/cao


Appendix X: Research Permit

THIS IS TO CERTIFY THAT:
MR. FRANCIS KINYANJUI GITAGIA
of KENYATTA UNIVERSITY, 0-100
NAIROBI, has been permitted to conduct
research in Nairobi County

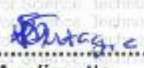
on the topic: FINANCIAL MANAGEMENT
DECISIONS AND THE VALUE OF NON
FINANCIAL COMPANIES LISTED IN
NAIROBI SECURITIES EXCHANGE, KENYA

for the period ending:
12th October,2019


Permit No : NACOSTI/P/18/70824/25594
Date Of Issue : 13th October,2018
Fee Received :Ksh 1000



Applicant's Signature



for Director General
National Commission for Science,
Technology & Innovation




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