# INFLUENCE OF FIRM SPECIFIC CHARACTERISTICS ON DIVIDEND POLICY FOR MANUFACTURING COMPANIES ON THE NAIROBI SECURITIES EXCHANGE

BY

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# A DISSERTATION REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF BUSINESS ADMINISTRATION (CORPORATE MANAGEMENT) IN THE SCHOOL OF BUSINESS AT KCA UNIVERISTY

SEPTEMBER, 2018

# **DECLARATION**

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for examination or academic purposes. I also declare that this dissertation contains no material written or published by other people except where due reference is made and author duly acknowledged.

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\_\_\_\_\_ Date: \_\_\_\_\_

I do hereby confirm that I have examined the master's dissertation of

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And have approved it for examination.

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### ABSTRACT

Dividend policy is the major decision faced by corporate financial managers besides financing, investment and working capital management. Dividend policy analysis affects all the facets of the company in that it determines what funds are available for every operation and how the funds will be utilized to increase shareholders wealth. It is therefore considered to be one of the most important financial decisions that corporate managers encounter. This study sought to establish the influence of selected firm characteristics on dividend policy for manufacturing companies at the Nairobi Securities Exchange (NSE). The objective of the study was to establish how and the extent to which liquidity, leverage, and asset tangibility influence dividend policy for manufacturing firms at the NSE. The study used descriptive research design and relied on secondary data from the Nairobi Securities Exchange website and other publications. The data comprised of annual published financial statements of the manufacturing firms at the Nairobi Securities Exchange for the years 2008 to 2017 to give current inferences. The study used panel regressions techniques to analyze the data of all the 8 manufacturing companies at Nairobi Securities Exchange (NSE) for the period 2008-2017. The overall model was found to be significant (P-value of 0.000) in ascertaining the influence of the factors on dividend policy of the listed manufacturing firms in Kenva. The study found an  $R^2$  of 72.16 % which meant that 72.16 % of the variations in dividend policy were explained by the changes in liquidity, leverage and asset tangibility. Both liquidity and asset tangibility had a positive and significant effect and leverage had a negative and significant effect on dividend policy of the listed manufacturing firms. The study recommended that firms should foster their liquidity management practices, enhance their asset tangibility and manage their debts prudently as the returns to shareholders are significantly affected by these firm specific characteristics.

**Keywords:** Dividend policy, Nairobi Securities Exchange (NSE), Panel Regression Techniques.

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# DEDICATION

Dedicated to the memory of my mother for facilitating my childhood education which formed the base of my education without which I couldn't have made it this far.

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# **ACRONYMS AND ABREVIATION**

AMEX-	American Stock Exchange.
CMA -	Capital Market Authority
COMESA -	Common Market for East and Southern Africa
DPS -	Dividend per share
EAC -	East African Community
EPS -	Earnings per share
FMCG-	Fast Moving Consumer Goods
GCC -	Gulf Co-operation Council
GDP -	Gross Domestic Product
HNX -	Hanoi Stock Exchange
HOSE -	Hochiminh Stock Exchange
MM -	Modigliani and Miller
MS -	Microsoft
NASDAQ-	National Association of Securities Dealers Automated Quotations
	Exchange.
NSE -	Nairobi Securities Exchange
NYSE -	New York Stock Exchange.
OLS -	Ordinary Least Square
OTC -	Over the Counter
SEZs –	Special Export Zones
SPSS -	Statistical Package for Social Sciences
UAE -	United Arab Emirates

#### **OPERATIONAL DEFINITION OF TERMS**

**Asset Tangibility**- Tangibility refers to the ability of assets to be utilized as collateral. Firms with tangible assets are able to pledge them in order to access additional financing for investment allowing them to distribute high dividends. Moreover, tangible assets improve production efficiency and enhance performance

**Dividend policy** - Dividend policy is the practice that management follows in making dividend payout decisions out of a firm's earnings by determining how much dividend to pay to shareholders and how much to reinvest.

**Leverage**- This refers to a company's use of debt to finance acquisition of assets. Ideally, use of debt increases operation cost hence reducing net earnings available for distribution to shareholders.

**Liquidity-** This is the availability of liquid assets to a company to meet its financialobligation. Firms with more liquidity are likely to pay dividends as compared to the firms that have liquidity problems.

**Nairobi Securities Exchange** – formerly the Nairobi Stock Exchange (July 2011) is the only firm mandated to list companies. The NSE was established in 1954 and currently is the leading securities exchange in East and Central Africa. The products traded at the NSE are shares (equity) and bonds (debt/leverage instruments) which are financial instruments that are jointly referred to as securities. NSE facilitates investments and savings by bringing together borrowers and lenders. Currently a total of sixty-five firms are listed at the NSE spanning eleven market sectors: agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum, and growth enterprise market segment.

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#### **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

The analysis of dividend policy has a special significance for the management in their attempt to maintain the company's stability and increase its value which in effect will increase the shareholder's wealth. Corporate financial management has four major decision areas; that is dividend or profit allocation, financing, investment and working capital management. Dividend policy is therefore, considered to be one of the most important financial decisions that corporate managers encounter (Botoc&Pirtea, 2014). Ross, Westerfield and Jaffe (2002) noted that companies view the dividend decision as important because it determines whether and what proportion of earnings is paid to shareholders by way of dividend and what proportion is ploughed back for reinvestment purposes. When a company makes profit, management must decide on what to do with those profits. They could continue to retain the profits within the company for reinvestment, or pay out the profits to the owners of the firm in the form of dividends.

Dividends represent the distribution of earnings to shareholders of a company that are usually declared at the annual general meeting. Pandey (2004) defines dividend as that portion of a firm's net earnings recommended by the directors for distribution to shareholders in proportion to their shareholdings in the company. These earnings can be distributed as cash dividends, share repurchase and stock dividends. Of these, cash dividend is the most common method of paying dividends where dividends are paid out in currency and are taxable to the recipient in the year they are paid while stock dividends are paid out to shareholders in form of additional stocks of the issuing firm.

These stocks are issued out to each shareholder in proportion to the number of shares held. Shareholders invest in a firm with the aim of earning a return on their investments. For the firm to meet the shareholders' expectations, it is required to ensure that there is growth of the invested wealth. According to Azhagaiah and Priya, (2008) firms achieve creation of shareholder wealth through growth in sales, operation efficiency, improved profit margin, capital investment decisions and capital structure decisions.

Baker, Veit and Powell (2001) posit that dividend policy affects the value of the firm and in turn the wealth of shareholders. Dividend policy plays an important role in determining firm capital structure and agency cost. In most countries Kenya being one of them, it is a requirement that a firm should have a dividend policy for it to be listed in order to protect the stakeholders' interest. Dividend payout plays a major role in the firm's capital structure decisions. Fama and French (2001) found out that, if a firm's capital budgeting decision is independent of its dividend policy, a high dividend payment will call for greater dependence on external financing and vice versa. This is because the firm doesn't retain earnings to finance investment and thus will have to rely on external funding. The issue of dividend is also important as a mechanism for signaling to the outsiders regarding the stability and growth prospects of the firm.

According to Anand (2004), dividend payout is used as a signaling mechanism to investors both current and future, and other stakeholders to convey information on the present and future prospects of the firm hence affects its market value. A firm that pays dividend is thus considered to be profitable and stable hence attracting prospective investors. This raises the demand for its shares and with it the share prices which in turn raises the value of the company. Lintner (1956) observes that firms follow well-established payout strategies which managers are averse to changing in response to changes in earnings particularly when earnings decline. This is because changes to a dividend policy create uncertainty on the return to stockholders' investments hence sending unintended signals of the firm's performance or convey the impression of dividend instability which can have negative implications for stock prices particularly in the event low or no dividends are paid. With time and under compelling circumstances, companies may change their dividend policy. However, it is recommended that a company establishes and sticks to its dividend policy. Dividend policy approaches could therefore be constant, stable predictable, residual or low regular.

As the main objective for investment is to maximize shareholders' wealth, management should strike a balance their needs against the requirement of running a company when formulating and implementing policies. Dhanani (2005) contends that it is possible for a firm to develop a dividend policy that takes into consideration the different circumstances of its shareholders. In line with the bird in hand theory Gordon (1963), shareholders may prefer cash dividends due to market imperfections and uncertainty, others dividend stability while others would prefer capital gains earned through reinvestment of dividends. Depending on the various shareholders' preferences, a company should formulate a dividend policy that meets the needs of its shareholders. Malcolm and Wurgler (2004) agree with this and demonstrated that firms design dividend policy in response to shareholders' preference for dividends. This is consistent with the clientele effect theory.

Companies are not merely concerned with dividend payout in a single year but with the continuous course of action over the years forming a trend. The dividend decision is not an independent decision but rather one that takes into consideration various related aspects and factors. Jafari and Ajayi, (2012) argued that corporate dividend policy is not driven by a

single factor. Anupam (2012) found that Dividend distribution may be pegged on legal provisions that provide that dividends payments be made out of earnings. Dividend payment may also be restricted by contractual constraints.

Previous empirical studies have identified several factors that are important for dividend policy. Lintner (1956) identified that the dividend policy of a corporation is substantially attributed to current year earnings and previous year dividends. It is therefore evident that there is no single explanation to the dividend policy in corporations.

## **1.1.1 Firm Characteristics**

Determinants of a company's dividend policy can be classified into two categories namely; micro-economic and macro-economic factors (Jensen & Johnson, 1995; Jensen & Smith, 1984; Lintner, 1956). Micro-economic factors are firm related while macro-economic factors are industry related also referred to as external factors. Firm characteristics are internally generated within the firm hence affect the firm directly. They look at how a specific company could maximize its production and capacity so it could lower prices and better compete in its industry (Gujrati 2015). They consist of financial and non- financial factors. Financial factors include: efficiency, liquidity, and leverage. Non-financial factors include; Shareholding, labour, age of the firm and board of director characteristics. Trends in dividend policy of a firm are mainly influenced by internal factors such as profitability, liquidity, stability in earnings, asset structure, the financial structure and investment strategies (Alkuwar, 2009). External factors such as the rate of inflation, exchange rates, money supply and interest rates also influence the dividend policy of a firm as they dictate the operating environment (Roberto, 2002). As much as industry specific factors affect the dividend policy, it is of importance to note that firm specific factors contribute more to variances in earnings from which dividends are paid as the firm has control of these factors (Khan, 2008).How well the firm utilizes its internal resources/ characteristics to align with the external environment is vital in determining its performance and hence its dividend policy. It is these factors that enable the firm to devise operation strategies in order to create value.

Liquidity is the ability of an asset to be converted into cash quickly and at low cost to meet the firm's obligations (Brealey et, al. 2004). Hafeez and Javad, (2009) in their study on the dynamics and determinants of dividend policy in Pakistan found that the liquidity position of a company has a positive effect on its dividend payout. Musiega et al. (2013) agreed with this finding in their study on determinants of dividend payout policy among non-financial firms listed at the Nairobi Securities Exchange where firms with more liquidity were found to be more likely to pay dividends compared to those that had liquidity problems. A poor liquidity position implies fewer or no dividend due to shortage of cash.

Firm size is a factor to consider in determining the dividend policy of a firm. Al-Twaijry (2007) agreed that there is strong significant positive relationship between firm size and dividend payment decision as large firms tend to be more diversified than smaller firms and hence less likely to be susceptible to financial distress, and more able to pay dividends to the shareholders. This is because large companies have easier access to the capital market to raise funds for investment hence are less dependent on the internal funds that is, retained earnings, making them to more capable to pay the dividends.

Investment opportunity has been defined as options available to a firm to grow its wealth (Pandey, 2004). While undertaking investment opportunities, a firm should consider its financing needs. Retained earnings is a source of finance that attracts lower cost and risk compared to external funding making it more attractive for investment. Studies have shown significant and inverse correlation between investment opportunities and dividend policy (Amidu and Abor,2006).Investment opportunities require a substantial amount of funds hence precedence is given to the retention of earnings over payment of dividends. This in effect means that firms experiencing growth are less likely to pay dividends. It's on these bases that a firm needs to assess its investment policy needs against its dividend policy as it strives to achieve its strategic goal.

Profitability is the condition of yielding a financialprofit or gain. Musiengaet. al, (2013) found that profitability is positively related to dividend payout ratio. It is evident that firms are more likely to pay dividends if they are profitable. Profitable firms have stable net earnings and can afford larger free cash flows and therefore pay larger dividends. Alkuwar (2009) agree with this line of thought that the firm profitability ratio appeared to be a very strong and statistically significant determinant of the dividend payout ratio.

Leverage is defined as the investment strategy of a firm using borrowed money, ideally, it's the use of various financial instruments or borrowed capital to increase the potential return of an investment. Simply put, it's the amount of debt used to finance assets. A firm's capital structure is the relationship between debt and equity finance in its long-term funding arrangement (Brealey and Myers 2005). Pandey, (2004) found that higher leverage is closely associated with dividend reduction and omission. Firms that finance their business activities through debt commit themselves to fixed financial charges that include payments of interest

and the principal amounts affecting the firm's ability to pay dividend. This is a contractual undertaking whose failure to make these payments by the due time subjects the firm to risk of liquidation and bankruptcy.

Asif, Rasool and Kama (2011) evaluated the impact of leverage on dividend payout of Pakistan firms and concluded that it reduced dividend payments as the firm has to incur financial expenses to service the debt. In addition, certain debt covenants have restrictions on dividend distributions. On a different point of view, dividend payment reduces the amount of internal funds available thereby increasing the need and cost for external financing.

Tangibility refers to the ability of assets to be utilized as collateral. Booth et al. (2010) defines tangibility as the ratio of book value of tangible fixed assets to the book value of total assets. Tangible assets include both fixed and current assets such as inventory and cash. A firm in possession of tangible assets is able to pledge the assets as collateral assessing the funds needed for investment and at the same time, protect the debt holder in the event of liquidation (Bayrakdaroğlu1 et al, 2013). Usually, debt holders require collateral to secure their interests hence the direct proportional relationship between the leverage level and liquidity of a firm (Majumdar, 2012). According to Almeida and Campello (2007), when corporations are able to pledge their assets as collateral, investment and borrowing become endogenous, pledgeable assets. Consequently, this has a twofold effect where the firm has more funds available for distribution as dividends as it doesn't rely on the retained earnings for reinvestment and also improved performance that will lead to increased earnings translating to a rise in dividends. Booth et al. (2010) associate with this school of thought that firms with

high levels of tangibility use them as collateral for debt hence distribute more cash in dividend.

Earnings typically refer to after-tax net income. Ultimately, a firm's earnings are a determinant of its dividend policy, because earnings and the circumstances relating to them indicate whether the firm will pay out dividends and be successful in the long run. Goaied, Naceur and Belanes (2006) argued that the high profitable firms with more stable earnings can manage larger cash flows and because of this they pay larger dividends. Moreover, the firms with fast growth distribute higher dividends so as attract to investors as a high payout ratio indicates management's confidence in the stability and growth of the firm's future earnings. Even with declined earnings, managers would be reluctant to cut dividends when earnings drop as this can send unintended signals to investors.

### **1.1.2 Dividend policy**

Dividend policy is the governing principles that corporates follow in determining the ratio of earnings to be distributed as dividends. It has been an active field of research for many years without a globally accepted or observed position. Dividend policy remains a controversial subject despite it been extensively researched earning the definition as an unexplained problem in finance (Brealey & Myers 2005). Since the work of Black (1976), the dividend decision has puzzled corporate managers. It is one of the most important financial decisions they encounter in the running of the firm since it influences the value of the firm (Botoc&Pritea, 2014). Dividend policy is the practice that management follows in making dividend payout decisions out of a firm's earnings by determining how much dividend to pay to shareholders and how much to reinvest (Pandey, 2010). In his argument, that a perfect dividend policy should strike a balance between current dividends and future growth.

Dividend policy is therefore, the division of earnings between shareholders and the firm in form of reinvestment towards future growth. If the policy is irrelevant all earnings should be retained to be reinvested back to the business.

The three main methods to dividend policy are; residual, stable and hybrid policy. Firms under residual policy only distribute dividends from the balance of earnings after retaining cash for reinvestment in available and desirable projects. The management view of under this policy is that the value of firm and the wealth of its shareholders will be maximized by investing the earnings in the appropriate investment projects, rather than paying them out as dividends to shareholders (Botoc&Pritea, 2014). This policy supports the dividend irrelevance theory as the value of the firm is a function of investment decision thus factors affecting dividend policy will not be taken into consideration in determining amount to be paid out as dividend. Dividends will only be paid when retained earnings exceed the funds required to finance the viable investment projects. Conversely when the total funds required for investment exceed retained earnings, no dividend will be paid.

The stable dividend policy sets dividend as a percentage of earnings reducing uncertainty associated with the residual policy and providing investors with stable income. A firm with this policy must consider its debt to equity ratio as earnings are paid out as dividend hence the firm would have to seek debt financing for its investment. According to Bhat, (2007) the firm must have sufficient liquidity to settle its obligations and must be profitable since dividends can only be paid out if it's making profits. Under this policy, dividends take priority while investment decisions are passive consequently inhibiting growth(Brigham &Ehrhardt 2012). This policy has major shortcomings in that; it is difficult to change as this will affect investors' attitude and its financial position. Change would have an adverse effect

on the market price of shares and as a result the firm's value. The firm will suffer a long run effect where it has to borrow funds to pay dividend in the event there earnings are insufficient. This policy supports the dividend relevance theory and the effect of liquidity on dividend policy.

The hybrid dividend policy is a combination of both the residual and stability policies. Firms under this policy usually pay dividend on a low proportion of the earnings which is sustainable and only pay additional dividends if the actual earning exceed the budgeted levels (Marsh, 2012). This policy follows the stable dividend policy where a percentage is paid as dividends as opposed to letting dividends fluctuate with the level of residual earnings. Dividends payable under this policy are influenced by growth, size and profitability where a large firm with high profit will tend to distribute high dividends while high growth will lead to low dividend as earnings are ploughed back to fund investment projects. In essence firms that plan to pay out dividends must have sufficient liquidity as dividends represent a real cash outflow from the company. They must also consider the impact dividend payout have on leverage which will affect their ability to finance its investments in future.

Miller and Modigliani (1961) argued that dividend policy was irrelevant in influencing the value of a company in a perfect capital market. Their assumptions is that there exists perfect capital markets without transaction costs, managers are perfect stewards of investors, free and costless access to information, perfect certainty and indifferent behaviour of investors thus dividend policy is a residual of the firm's financing requirement. As such it doesn't matter how the firm's earnings are apportioned between payment to shareholders and reinvestment affirming that dividends are irrelevant to the firm's value. But, in reality capital markets are imperfect due to taxes, agency and transaction costs and information asymmetry which

negate the dividend irrelevance theory. These market imperfections led to development of several other dividend theories including the signaling theory, tax clientele theory, preference theory and agency theory.

Al-makawi (2007) opposed the dividend irrelevance theory and asserted that dividend payment affects the value of the firm suggesting dividend relevant theory. Gordon (1963) deduced that due to market imperfection and uncertainty, investors prefer to receive dividends 'today' as they are certain as opposed to future capital gains that might be realized from ploughing back earnings making the firm distribute dividend to meet shareholders' preference. However according to the tax preference theory, investors will prefer capital gains as they attract less tax compared to dividends and the tax is only payable when the capital gains are realized at disposal of the stock.

Under the signaling theory, dividend payment will have an effect on the market price of the firm's shares where a high dividend raises the firm's value but it also reflects the firm's investment plans. When a firm has viable investment opportunities, it will retain the earnings hence not pay dividend. Payment of dividend therefore may imply that the firm does not have investment opportunities.

### **1.1.3 Manufacturing Sector**

Manufacturing is an important sector that makes substantial contribution to a country's economic development. Since the industrial revolution in the 19th Century, manufacturing has been the engine of innovation and economic growth. It has the potential to generate foreign exchange earnings through exports, create employment and diversify the country's economy. The sector has grown over time both in terms of its contribution to the country's

gross domestic product (currently at 8%) and employment as envisioned in the vision 2030. This sector still has high potential for growth and investment. The government has tried to provide a conducive environment for investment through development of Special Economic Zones (SEZs), Industrial Parks, Industrial Clusters, promotion of small and medium scale manufacturing firms, development of niche products, and commercialization of research and development results.

There is high demand for locally manufactured goods and regional markets are accessible owing to its membership to two key regional economic blocs the East African Community (EAC) and Common Market for East and Southern Africa (COMESA). Investment opportunities exist for direct and joint-venture investments in various for both domestic and export markets. The government continues to play catch up with the global manufacturing landscape which is setting a worrying trend. Its efforts are too little too late and are not geared for a global outlook. The Government still has a vital role to provide an enabling environment for existing and new investors to operate.

The sector is riddled with mirth of issues ranging from insufficient power supply, poor or lack of infrastructure, mismanagement, high taxation rate, low firm productivity due to low automation, low investment plans and imperfect competition from the multinational firms. This unfavorable field has claimed several casualties such as Eveready Ltd, Cadbury Kenya, Propter & Gamble, Bridgestone, Colgate Palmolive, Johnson & Johnson and Unilever who have relocated their operations to favorable markets. These closures have led to losses of jobs, revenue in missed corporate and income taxes and foreign currency from imports and missed global market. Investors and managers alike need to understand intrigues of running firms in the changing business landscape to navigate these pitfalls. The interest on the manufacturing sector cannot be over emphasized as it's the flagship of the vision 2030 towards achieving a sustainable economy.

### 1.1.4 Nairobi Securities Exchange

In Kenya, the Nairobi Securities Exchange (formerly the Nairobi Stock Exchange up to July 2011) is the only firm mandated to list companies. The NSE was established in 1954 and is currently the leading securities exchange in East and Central Africa. The NSE is an ideal frontier market that offers foreign investors exposure to the Kenyan economy, and because many listed firms have expanded beyond Kenya's borders it also serves as an entry point to the regional economy. The products traded at the NSE are shares (equity) and bonds (debt/leverage instruments) which are financial instruments that are jointly referred to as securities.

NSE facilitates investments and savings by bringing together borrowers and lenders. Trading has been facilitated with introduction of central depository accounts systems (CDS). Members on NSE are required by law to publish its financial statements. Currently a total of sixty-eight (68) firms are listed at the NSE spanning twelve market sectors: agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum, real estate investment fund and exchange traded fund.

### **1.2 Statement of the Problem**

Managements' primary goal is to maximize its shareholders' wealth which will result in maximization of the firm's value. This would be achieved by paying shareholders fair return for their investment and or investing in viable ventures. Dividend policy is a critical part of

financial management decisions that denotes the proportion of earnings to be paid out to its owners and what is to be invested thereby influencing the value of the firm (Pandey, 2015). The manufacturing sector in Kenya has potential to create wealth for investors and spur economic growth. It has been hailed as the flagship for the vision 2030 and one of the key pillars of the Bid Four Agenda in achieving economic development. However, the sector's performance has been on a nose dive diminishing hopes of industrialization led growth (2018 economic survey). For most of the firms, profitability declined by 15% over the period under consideration. The diminished revenues and increased expenses in the sector have resulted to a depressing trend of fewer or no dividends for the investors. The depressed performance reflects failed strategies by management despite the government expecting it to anchor high economic growth to contribute at least 15% to the gross domestic product (2018 economic survey). The loss-making stretch has had investors reconsidering their investment decisions leading to capital flight. Investors have had to relocate their operations to other markets or sectors that offer better returns for their investment. It is against this backdrop that investors and managers need to understand the effect of firm factors that can mitigate the current situation by aligning the strengths and opportunities of the firm and turn it around. Since the firm has no direct control of the macro-economic factors, proper management of internal factors will ensure that the firm realizes sustainable profits which will translate into dividends.

Various studies have identified profitability, earnings, company size, ownership structure, investment opportunities and liquidity as some of the main factors that determine dividend policy (Fama& French, 2001; Al- Malkawi, 2007; Hafeez&Attiya, 2008; Musiega et al., 2013). Jafari and Ajayi, (2012) contends that despite numerous studies in this crucial field, the verdict is still out on what factors determine dividend policy. It is worth noting that

studies in this field have focused on developed markets with limited attention in developing markets such as Kenya where the capital market is imperfect due to information asymmetry. Application of findings on studies in developed markets may not suit the local environment as different countries have unique regulatory environment, tax regimes and rules (Chay& Suh, 2008). Local studies on firms in various sectors listed at the Nairobi securities exchange have established that profitability, financial needs, size, growth, liquidity and earnings have significant effect on dividend payout (Muchiri, 2006; Ndungu. 2009; Arumba, 2012; Musiega et al, 2013). These studies have analysed factors that affect dividend payout directly without considering the underlying factors that affect them. This study therefore sought to address the gap on the underlying factors influencing dividend policy. The study sought to evaluate whether and how liquidity, leverage and asset tangibility influence dividend policy of manufacturing companies at the Nairobi Securities Exchange.

# **1.3 Objectives of the Study**

# **1.3.1 General Objective**

To investigate firm characteristics that influence dividend policy for manufacturing firms at the Nairobi Securities Exchange.

# **1.3.2 Specific Objectives**

- i. To establish the relationship between liquidity and a firm's dividend policy for manufacturing firms at the Nairobi Securities Exchange.
- To evaluate how leverage affect dividend policy for manufacturing firms at the Nairobi Securities Exchange.
- iii. To find out the extent to which asset tangibility determines dividend policy for manufacturing firms at the Nairobi Securities Exchange.

### **1.4 Research Questions**

- 1. What is the relationship between the liquidity position and the dividends policy for manufacturing companies at the Nairobi Securities Exchange?
- 2. How does leverage affect the dividend policy for the manufacturing firms at the Nairobi Securities exchange?
- 3. To what extent does asset tangibility determine the dividend policy for the manufacturing firms at the Nairobi Securities Exchange?

# 1.5 Significance of the Study

## 1.5.1 Managers

The findings of this study are important to managers by informing them on what internal factors to utilize in order to run a profitable organization in the unfavourable economic environment. It provides an insight on the optimal levels of liquidity, asset structure and debt to maintain in order to adapt to the operating environment and create value for its stakeholders. Directors and mangers will be able to match and align their resources with the available viable opportunities as opposed to business as usual. It will provide guidelines to the managers in formulating appropriate dividends policy in line with their firm's strategic plan.

# 1.5.2 Investors

The information will also be of great help to investors when selecting and building their investment portfolio depending on their dividend payout preferences and an analysis of predictability of returns in the securities market. Investors will be able to analyze the contents of a firm's financial statement and appropriately evaluate its strengths to establish its likelihood to pay returns for their investment. A sound dividend policy is important since a high and regular dividend set would create a benchmark for efficiency thereby increasing dividend distributed. The study will also assist in provision of investors' education by capital market regulators and securities exchange that will avail fundamental insights to both the existing and potential investors as well as investment advisors.

## **1.5.3 Investment Officers/Financial Advisors**

The study is of significance to investment officers/financial advisors while managing investors' portfolio in terms of selecting securities for inclusion and which to leave out for a given investor's preference. The findings will enlighten investment officers among them brokers and market analysts in evaluating the trends of firm performance based on the factors influencing dividend policy decision over the years in order to provide timely and quality advice to members of the public to enable them make quality investment decisions. This will minimize the existing challenge of stock dealing by the public which heavily relies on a word of mouth often leading to financial losses among the local investors due to inaccurate information.

#### **1.5.4 Students, Academicians and Researchers**

Students, academicians and other researchers will find the study useful as it contributes to literature concerning financial market in Kenya. It enriches literature in dividend policy solidity and individual firm reliable strength. This study is value- added to the existing body of knowledge as it analyses factors influencing dividend policy. Reliance on information available at the Nairobi Securities Exchange about the firms considered is authentic and the data thereby collected is reliable for research purposes. Moving forward, the study serves as a stepping stone for further research on dividend policy.

#### **1.5.5 Policy Makers and the Government**

The study findings will be of importance to policy makers and the government's regulatory agencies that intend to promote financial market development by unearthing firm characteristics that influence financial performance and consequently dividend payout. The findings will equip the Capital Market Authority with the necessary resources to formulate policies and guidelines on best practices that will protect and encourage investments thus creating a vibrant local market

# 1.6 Scope of the Study

The study focuses on the internal factors influencing dividend policy of manufacturing firms listed on NSE and the various dividend theories that have been advanced in an attempt to explain the concept of dividends over a ten-year period to 2017. The manufacturing Segment is made up of nine (9) companies; BOC Kenya, British American Tobacco, Carbacid Investments Ltd, East African Breweries Ltd, Mumias Sugar, Unga Group Ltd, Eveready East Africa Ltd, Kenya Orchards Ltd, and Flame tree Group Holdings Ltd.

#### **CHAPTER TWO**

### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter focuses on dividend policy theories and review of empirical studies undertaken on firm characteristics influencing dividend policy. Dividend policy is very important to a firm as it communicate to the public of its stability and growth prospects hence affecting its stock prices, it also influences the firm's capital structure and specifically the residual policy that requires dividend be paid only if the firm doesn't have viable investment opportunities to finance.

### **2.2 Theoretical Review**

Various theories have been put forth to examine the numerous facets of Dividend study. Researchers have developed and empirically tested various models to explain dividend behavior. There are those that consider dividend decision to be irrelevant in that it doesn't affect the firm's value that is; dividend irrelevance theory (Miller & Modigliani, 1961). On the other hand there are those that consider dividend decision to be an active variable that influence the value of a firm. These include agency theory; bird-in-hand theory; information signaling theory; tax differential theory and clientele effect theory (Jensen &Meckling, 1976; Gordon, 1963; Litzenberger, 1979; Pettit, 1977).

# 2.2.1 Dividend Irrelevance Theory (Modigliani and Miller)

Modigliani and Miller (1961) in their contribution to research on Dividend policy argued that the value of the firm was independent of its dividend policy. It asserts that a firm's dividend policy has no effect on its market value or its cost of capital. The key premise of this theory is that to investors, payment of dividends is irrelevant as investors can always create their own cash flow if needed. MM argued that the value of a firm depends only on the income produced by firm assets and not on how this income is split between dividends and retained earnings. Thus investors only require a firm's investment policy depicted by its asset base since its industry is public information to make an investment decision. According to this theory investors can indeed create their own cash inflows from their stocks according to their cash needs regardless of whether the stocks they own pay dividends or not. As such an investor in a dividend paying stock who doesn't have a current need for the money availed by a particular stock's dividend, will simply reinvest it in the stock that is capitalization. Likewise, an investor in a non-dividend paying stock who needs more money than availed by the dividend will simply sell part of his stock to meet his present cash need.

This theory assumes that there exist perfect capital markets without taxes or transactional cost, the market price cannot be influenced by a single buyer or seller and free and costless access to information about the market; that investors are rational and that they value securities based on the value of discounted future cash flow to investors; that managers act as the best agents of shareholders; and that there is certainty about the investment policy of the firm, with full knowledge of future cash flows. However, the validity of this theory is highly dependent on these assumptions, which unfortunately are not tenable in the real world (Dhanani, 2005). Despite the dividend irrelevance theory, investors will always focus on dividend when managing their portfolio. When a firm pays or announces dividend, it should be in a good liquidity position as it entails a large cash outflow (Hafeez&Javad, 2009). This attracts investors pushing the stock prices up and vice versa. Dividend payments have an effect on a firm's stock market prices and hence its value thus factors influencing a firm's dividend are very relevant to an investor.

#### 2.2.2 Dividend Preference or Bird-In-Hand Theory

Bird in hand theory proposes that a relationship exists between firm value and dividend payout. Gordon (1963) and Lintner (1962) asserted that dividends are significant to the value of the firm. The theory assumes that equity holders are risk averse and prefer current dividends. Gordon (1963) argued that investors prefer to receive dividends 'today' than in future because current dividends are more certain than future capital gains that might be realized from investing retained earnings in growth opportunities. Dividend payments reduce uncertainty hence increase share value. "A bird in hand (dividend) is worth more than two in the bush (capital gains)". Hence dividend policy relevance.

According to Gordon's model, future dividends, expected growth rate and the current share price are determinants of cost of equity hence the firm's value. Dividend yield and growth therefore provide return to equity holders. The model argues that dividend yield is superior as a measure of return on equity to cost. Capital gains of a firm cannot be accurately determined as growth is not guaranteed and stock can lose its market value and become bankrupt. When a firm doesn't pay dividends, investors are uncertain if they will realize the anticipated capital gains hence affecting the market value. Mayo and Amidu (2007) support that because of this uncertainty, investors prefer current dividends even if at a lower required rate of return on equity to future capital gains. To maximise stock prices, firms should therefore offer high dividend yield and set high dividend payout since dividends are supposedly less risky than capital gains. These payouts are dependent on the firm's liquidity as they require high cash outflows thereby affecting the dividend policy. By distributing dividends, the firm retains fewer earnings which reduce its ability to acquire tangible assets.

### 2.2.3 The Clientele Effect Theory

This theory states that a company's stock price will move according to the demands and goals of investors in reaction to a tax, dividend or other policy change affecting the company (Miller & Scholes, 1978). The clientele effect assumes that investors are attracted to different company policies, and that when a company's policy changes, investors will adjust their stock holdingsaccordingly. As a result of this adjustment, the stock price will move. Litzenberger and Ramaswamy, (1979) deduced that due to clientele effect, firms will make their dividend policy based on the customers they would like to be attach to.

Where a company that currently pays a high dividend and has attracted clientele whose investment goal is to obtain stock with a high dividend payout decides to decrease its dividend, these investors will sell their stock and move to another company that pays a higher dividend. As a result, the company's share price will decline. It assumes that investors are risk averse and thus will buy stock in a company that is offering high dividend. The preference for dividend by its shareholders will require the firm to make a cash outflow that will only be possible if the firm's liquidity level is positive. This therefore identifies liquidity as an important variable to be considered in determining dividend policy where there is preference for dividends.

# **2.2.4 Signaling Effect Theory**

Contrary to Miller and Modigliani (1961), the assumption that investors and management have perfect knowledge about a firm in the real market, information asymmetry exists as managers who run the firm tend to have more precise and timely information about it than investors creating a gap. Dividends provide a useful tool for managers to bridge the gap in conveying inside information about the firm's prospects because investors used visible cash flows to equity as a way of valuing a firm. Annunciation of cash dividend can infer to investors valuable information on the management's assessment of the firm's future prospects reducing information asymmetry (Al-Malkawi, 2007).

According to this hypothesis, investors perceive dividend as a reflection of the managements' assessment of a firm's performance and prospects. Grinblatt and Titman (1996) agreed that an increase in dividend payout is an indication of management's confidence in the future profitability of the firm and therefore its share prices will react positively while a reduction in dividend may be considered as a sign of financial weakness the firm could be going through hence the share price will react unfavorably.

Ross (1977) and Petit (1972) concurred that the number of dividends paid seems to carry great information about the prospects of a firm; an increase in dividends is often accompanied by increases in the prices of stocks while a decline in dividends generally leads to a stock price decline. However, management is reluctant to reduce dividends even when the firm's earnings dip and only increase dividends when they predict an upward trend in earnings (Linter, 1956). Hence dividend policy under this model is relevant.

However, for this theory to hold, managers should possess private information about a firm's prospects, and have incentives to convey this information to the market. The signal should be true; that is, a firm with poor future prospects should not be able to mimic and send false signals to the market by increasing dividend payments. To make these dividend pay-outs, the firm needs to afford the cash outflow involved which is determined by its liquidity position.

#### **2.3 Empirical Review**

A company's dividend policy is its approach to distributing profits back to its shareholders. Dividend policy attempts to determine what amount of earnings is to be distributed to shareholders and the amount to be retained in the firm for reinvestment. Retained earnings are a cheap internal source of funds to finance the growth of the firm whilst dividends, from shareholders point of view are a source of income or rather return on their investment. This is where a firm has to strike a balance between the desires of shareholders and the needs of the firm in formulating a dividend policy that will ensure stability and creation of wealth.

#### 2.3.1 Liquidity and Dividend Policy

Kania and Bacon (2005) empirically examined the data for a sample of 542 firms taken from the Multex Investor Database that contain over 10,000 companies traded on NASDAQ, AMEX, NYSE, and OTC exchanges to assess the impact of selected financial variables on the dividend decision using OLS Regression. The study used the firm's dividend payout ratio as the dependent variable while independent variables tested include: return on equity, sales growth, beta, current ratio, debt to total assets, percent of insider ownership, percent of institutional ownership, expansion, and the estimated five-year growth rate for earnings per share. They concluded that the dividend payout ratio is significantly affected by the profitability (return on equity), growth (sales growth), risk (beta), liquidity (current ratio), control (insider ownership) and expansion (growth in capital spending). As hypothesized, profitability and liquidity had a positive effect on dividend payout while growth, expansion and insider ownership produced the anticipated negative relationship with dividend policy. These findings complemented Ndungu (2009) study on the determinant of dividend policy at the Nairobi stock exchange who concluded that company profitability, size, growth and liquidity positively influenced dividend payout ratio.

Ahmed (2015) undertook a study to investigate the impact of liquidity and profitability on the dividend policy in the UAE banking sector and examine variations between Islamic and conventional banks. The study analysed the data of 18 national banks over the period 2005-

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2012 using correlation and regression analysis. It considered the dividend payout ratio in relation to liquidity and profitability ratios. The main finding is that the dividend payout ratio has a significant and positive correlation with liquidity but negative and insignificant correlation with profitability. It also revealed significant variations of the variables in Islamic banks but not significant with the period.

Juma'h and Pacheco (2008) sought to analyse financial factors influencing manufacturing companies in the U.S. They studied 132 manufacturing companies in U.S. for the period between 1994 and 2003. Using regression analysis, the research considered the influence of profitability ratios, liquidity ratios, expansion, investment, investor's perception, company risk and size on dividend policy. The research findings conclude that profitability, liquidity, risk and company size are significant determinants of cash dividend decision with profitability and liquidity determining the availability of cash to distribute while company size influenced the ability of a firm to raise funds in the public market.

Trang (2012) sought to identify whether firms' characteristics and corporate governance affect their dividend payments. The firms' characteristics analysed included profitability, firm size, debt level, liquidity, asset tangibility, industry type, growth opportunities plus business risk; corporate governance comprises management ownership, ownership concentration, board of directors along with audit quality. The study relied on a sample of 116 companies listed on the Hochiminh Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX) for the year of 2009 in Viet Nam. It was found that, profitability, liquidity, firm size and asset tangibility positively influences dividend payments while business risk, high debt level impacts negatively on dividend disbursement. Liquidity is a vital firm characteristic in dividend policy as it influences the firm's ability to afford a sizeable cash outflows to be

distributed to shareholders. Firms with a strong liquidity position are able to afford this cash outflow and hence are more likely to pay dividend than firm with poor liquidity.

On the contrary, Arumba (2014) analysed what determined dividend payment for forty-one companies quoted at the NSE for a period of six years beginning 2008 to 2013 and used multiple regression analysis. The research evaluated how and the extent to which company earnings, liquidity, profitability, and company size determine dividend payout. The research concluded that there is an association between dividend payout and all the four variables. He found that earnings and profitability have a positive and significant effect with dividend payout while liquidity though significant had a negative correlation to dividend payout. However, company size was found to have an insignificant positive relationship.

John and Muthusamy (2010) noted that there exists a negative relationship between liquidity and dividend policy. Their study showed that the cash paid out to investors as dividend reduces cash on hand to the firm hence reducing the liquidity of the firm. Firms going through development and growth are not likely to pay dividend as the funds may go into permanent working capital and fixed assets hence will distribute little or no dividend. Firms can manage their liquidity position by adjusting their expenditure and cash holding policies.

#### 2.3.2 Leverage and Dividend Policy

Asif et al, (2011) examined the relationship between dividend policy and financial leverage of 403 companies, listed with Karachi Stock Exchange during the period 2002 to 2008. He tested dividend policy followed by the companies with debt ratio of the firm, previous year's dividend yield as the independent variables. Regression analysis on panel data was done to examine the significance and magnitude through fixed and random effects models. The model justified that the level of corporate debt (leverage) significantly, affect the dividend policy of the Pakistani firms. Leverage has a negative impact on dividend payout, indicating less dividend payments by high-debt firms.

Al-Kuwari (2009) investigated the determinants of dividend policies for non-financial firms listed on Gulf Co-operation Council (GCC) country stock exchanges. The study focused on emerging stock exchanges, where the determinants of dividend policy have received little attention. Using the tobit models to examine seven hypotheses relating to agency cost theory, the results indicated that dividend policy is positively and strongly related to ownership by the government, size of the firm and the firm profitability and a reverse relation to the leverage ratio. The study further postulated that dividends are paid out to combat the agency problem and maintain the company status since there is limited protection for external shareholders. Dividend policy was found to be heavily dependent on profitability and companies change their dividend policy to adopt a set target.

Pandey (2016) in a paper sought to analyse the determinants of dividend policy of 12 companies in the Fast-Moving Consumer Goods (FMCG) sector in India. The study analysed data over a 10-year period, from 2003 to 2013. He considered various factors affecting dividend policy such as dividend payout ratio, leverage, earnings, corporate tax, earnings per share, and firm size using multiple regression analysis. The study reveals that dividend payout ratio, leverage, earnings and corporate tax have significant impact on earnings per share and are good predictors of dividend payout in FMCG sector. Further, the study indicates that dividend payout ratio, firm size and earnings positively affect dividend policy while leverage and corporation tax had a negative effect confirming the theoretical assumption that leverage increase cash outflow hence reduce funds available for distribution

resulting reduces earnings as the firm has to make periodic payments in line with the debt covenant.

Hafeez and Attiya (2008) evaluated the dynamics and determinants of dividend payout policy of 320 non-financial firms listed in Karachi Stock Exchange during the period 2001-2006, using dynamic panel regression. The study considered the impact of leverage, market opportunities, investment opportunities and firm size. Their results consistently support that Pakistani listed non-financial firms rely on both current earnings per share and past dividend per share to set dividend payment policies. Further, the researchers found that profitable firms with more stable net earnings are able to afford large free cash flows and therefore are in a position to pay higher dividends. The study stipulates that investment opportunities and leverage have a negative impact on dividend payout policy, while market capitalization and size of the firm have positive impact on dividend payout policy. Debt financing reduces cash available for distribution as the firm has to honor repayment of the principle and interest before distribution therefore leverage affects dividend policy negatively.

Conversely, Ranti (2013) in a study to investigate the determinants of dividends policy of 50 listed firms in the Nigerian stock exchange market, sought to examine the effects of financial performance of firms, firm size, financial leverage and board independence on the dividend payout decisions of listed firms operating in the Nigerian stock exchange market using the regression analysis method. He observed that there is a significant positive relationship between firms' financial performance, size of firms, financial leverage and board independence on the dividend payout decisions of listed payout decisions of listed firms of firms of firms, financial leverage and board independence on the dividend payout decisions of listed firms in Nigeria. Firms may source external funds to finance investments in order to free the firm's earnings for distribution as dividend. In this case, leverage will positively affect dividend policy. The trade-off between

debt repayment and the earnings generated from investments funded through debt resulting in a favourable effect on dividend policy where the earnings outweigh the cost of funding.

#### 2.3.3 Asset Tangibility and Dividend Policy

Abor, (2017) conducted a study to examine the effect of dividend policy on shareholder value of listed companies in Ghana from 2009 to 2014. He analysed the factors affecting dividend policy and how dividend policy affects shareholders' value. Data was analysed using pooled OLS panel regression. Findings reveal that return on equity, firm age, tax, tangibility, GDP growth and interest rate are statistically significant in explaining dividend policy. Return on equity, tangibility, firm age and GDP growth had a positive effect on the dividend policy while tax and interest rate negatively affect the dividend policy. Firms with tangible assets are able to pledge them as collateral to obtain the necessary funding to invest and boost their operations to make profits. Profitable firms that firms are likely to pay dividends as they have stable earnings and can afford large free cash outflows (Alkuwar, 2009). However, a firm may take up loans to acquire assets thereby raising the firm's leverage level and committing its earnings to repayment of debt hence reducing funds available to pay dividend.

Tariq (2015) carried out a study to identify the joint determinants of leverage and dividend policy of non-financial firms in Pakistan and India. Using multiple regression analysis to analyse data for the period 2010-2014, the study established that liquidity, profitability, tangible assets, institutional ownership of firm and firm size, affect the decisions regarding leverage and dividend payment. Profitability and liquidity negatively impact dividend policy while tangible assets, institutional ownership of firm and firm size, have a positive effect on it. In contrast, Aivazian et al. (2003) in his study on Saudi Arabian listed companies concluded that firms operating in emerging markets with high levels of tangible assets tend to

have lower dividends. This is because firms in emerging markets face more financial constraints relying on short-term bank financing as a major source of debt. Therefore, firms with high levels of tangible assets will have fewer short-term assets that can be held as collateral to obtain the necessary financing. Without the funds to boost their working capital, these firms are not able to generate good profits in order to distribute handsome dividends.

Trang (2012) sought to identify whether firms' characteristics and corporate governance affect their dividend payments. The firms' characteristics analysed included profitability, firm size, debt level, liquidity, asset tangibility, industry type, growth opportunities plus business risk; corporate governance comprises management ownership, ownership concentration, board of directors along with audit quality. The study relied on a sample of 116 companies listed on the Hochiminh Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX) for the year of 2009 in Viet Nam. It was found that, profitability, liquidity, firm size and asset tangibility positively influences dividend payments while business risk, high debt level impacts negatively on dividend disbursement. Tangible assets enable a firm acquire funds as they can be used to secure the loan which will be utilized for investment freeing up earnings to be distributes as dividends.

Tabari and Shirazi (2015) emphatically investigated the influence of institutional ownership, profitability, business risk, tangible assets, liquidity and firm size on dividend policy of the company listed in the Tehran Stock Exchange. For this purpose, 109 companies listed in Tehran Stock Exchange were evaluated for the period from 2008 to 2012. The results of estimated panel regression fixed effect model showed a significant positive relationship between tangible assets, liquidity, growth opportunities and firm size with the payout ratio (dividend policy) and significant negative relationship between institutional ownership and

dividend payout ratio (dividend policy) in listed companies at the Tehran stock Exchange. This agrees with Booth et al. (2010) findings that stipulate that companies with more tangible assets have greater financial slack hence are more able to pay and maintain dividend. Conversely, highly indebted firms with mostly current assets that may not be pledged as collateral are more financially constrained and will be less inclined to make significant dividend payments.

### **2.4 Conceptual Framework**

Conceptual framework is a theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept. Fraenkel and Wallen (2008) posit that most research reports cast the problem statement within the context of a conceptual or theoretical framework as this helps identify research variables, and clarify relationships among the variables. It shows how the subservient variable dividend policy is explained by the explanatory variables.

#### Independent variables

#### Dependent variable

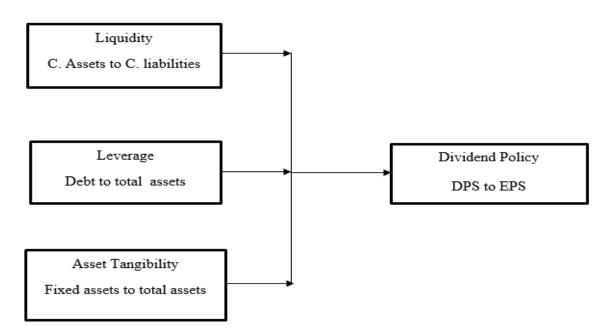


Figure 2: 1Figure 1 Conceptual Framework Source: Author (2018)

# **2.5Operationalization of Variables**

The variables are defined and measure as presented on Table 3.1

Variable	Definition	Measure	
		~	
Liquidity	Availability of liquid Assets to a company to meet its financial obligation.	<u>Current Assets</u> Current liabilities	
Leverage	Amount of debt used to finance assets	Total Debt Total Assets	
Asset Tangibility	Ability of assets to be utilized as collateral.	Tangible Assets Total Assets	
Dividend policy	A company's approach to profit distribution.	Dividend per Share Earnings per Share	

 Table 3: 1Operationalization of Variables

Source: Author (2018)

# **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter emulates the methods and procedures that the researcher followed with the aim of evaluating the influence of selected firm characteristics on dividend policy of manufacturing firms listed in the Nairobi Securities Exchange. The chapter thus outlines the research design, population, sampling design, data collection method and data analysis techniques.

#### 3.2 Research Design

This study employed a descriptive research design. A research design is the scheme, outline or plan that is used to generate answers to a research problem. Kothari (2009) defines a research design as a plan, structure, strategy or investigation conceived so as to obtain answers to research questions and to control variants. A descriptive research is used to obtain information concerning the current status of the phenomena and to describe what relation exists with respect to variables or conditions in a situation (Cooper & Schindler, 2011). Descriptive research design has been chosen as it allows for the analysis and relation of the variables under study.

#### **3.3 Population and Sampling Design.**

### 3.3.1 Population

A population is a set of individuals, objects or cases with some similar observable characteristics (Ngechu, 2006). The manufacturing sector has characteristics that differentiate it from the other sectors in the economy due to its role in industrialization and economic

development. Target population is a set of individuals or observations to which a researcher wants to generalise the results of the study (Mugenda and Mugenda, 2003).

The population of the study comprised nine manufacturing firms listed on the Nairobi Securities Exchange NSE (2017). However, the research focused on 8 firms that met the threshold criteria of having been listed for the entire period under study. Theyinclude; BOC Kenya, British American Tobacco, Carbacid Investments Ltd, East African Breweries Ltd, Mumias Sugar, Unga Group Ltd, Eveready East Africa Ltd and Kenya Orchards Ltd. These firms under investigation constitute 90% of manufacturing firms listed in NSE which is a significant number to represent the entire population.

### **3.3.2 Sampling Design**

Kothari (2009) states that a sampling frame is a list of elements from which the sample is drawn and is closely related to the population under study. It involves selecting a proportionate representation from the total sample size which is the population under study. Sampling is applied to lower cost, accuracy of results, hasten data collection, and availability of population elements (Cooper & Schindler, 2011). Given the size of the whole population consist of nine manufacturing firms from the main investment market segment, a census was carried out on eight manufacturing firms representing 90% of manufacturing firms in Main Investment Market Segment listed on the NSE that met the requirement threshold of being listed during the entire period of study.

Listed firms were suitable for this research study due to the credibility and authenticity of data obtained from them. Listed companies must adhere to the various guidelines and requirements as issued by the NSE and the Capital Markets Authority (CMA) from time to

time. Adherence to these requirements and the various regulations enhances the credibility and authenticity of data collected from these listed companies.

#### 3.4 Data Collection

The research relied on secondary data from the Nairobi Securities Exchange website and other publications. The data comprised of annual published financial statements of the manufacturing firms at the Nairobi Securities Exchange for the years 2008 to 2017 to give current inferences. Secondary data improves the clarity of the problem and the situation surrounding the issue. It also provides depth and act as a road map in the study being undertaken (Kothari, 2009). Data collection sheets were used to calculate and capture the payout ratio measures of liquidity, leverage and asset tangibility. The data collected include, total debt, fixed asset, total assets, current asset, current liabilities, dividend per share and earning per shares.

#### 3.5 Data Analysis Technique

The relationship between the dependent variable and the independent variables was determined using multiple linear regression analysis. The data was analyzed using STATA version 12 and Microsoft (MS) Excel. The process of descriptive statistics involves transforming mass raw data into tables, charts, with frequency distribution and percentages, which are a vital part of making sense of the data and give a clear picture of the research findings Denscombe (2014). Presentation of data using tables and graphs avail a clear picture of the research findings at a glance. Given the ten-year panel structure of sample data gathered, regression analysis was conducted to investigate the relationship between dividend policy indicator and the firm characteristics influencing it under study. Kothari (2009) defines a panel data set as one that follows a given sample of individuals overtime so as to provide multiple observations each individual in the sample.

The following regression model was used for data analysis:

$$Y_{it} = c + \beta_1 C R_{it} + \beta_2 D A R_{it} + \beta_3 T A N G_{it} + \varepsilon$$
(1)

Where:

 $Y_{it}$  is the dividend policy for Manufacturing Firm *i* in period *t* measured as ratio of Dividend per Share to Earnings per Share.

 $CR_{it}$  is the liquidity position of firm*i* in period *t* measured as ratio of current assets to current liabilities.

DAR<sub>it</sub> is the leverage position of firm *i* in period *t* measured as ratio of debt to total assets.

TANG<sub>it</sub> is asset tangibility of firm i in period t measured as ratio of net fixed assets to total assets.

- c- Constant of regression
- $\epsilon$  Error term of the model

There are various methods of analyzing panel data namely time series analysis also called trend analysis, Cross sectional data, and panel data analysis. Time series analysis is a set of observations on values that a variable takes at different times. Cross-sectional data is data of one or more variables, collected at the same point in time. Panel data involves the pooling of observations on a cross-section of units or individuals over several time periods. This makes panel data analysis superior to time series and cross section analysis as it doesn't encounter observation deficiencies since the cross observations collected over time are combined and diminishes the interaction between variables (multicollinearity) enhancing variation (Gujarati, 2003).

Models formed to make inferences using panel data analysis are based on assumptions on features of error terms and on the instability of coefficients. These models supply statistical information among groups of variables and among time periods. The most common models are the fixed effects model and random effects model. They give statistical information among groups of variables and among time periods. The fixed effects model assumes that the coefficiencies are the change among the units or among units and time. That is, changes in behavior of units are determined by changes in the fixed effect taking the slope coefficient as constant (Greene, 2003). The random effects model assumes that the constant is determined randomly to obtain unconsidered independent variables or the error. It compensates for the loss of the degree of significance in the fixed effects model and accepts that constant coefficiencies among the units do not vary.

#### 3.5.1 Hausman Specification Test

Hausman specification test was used to determine which one of the alternative panel analysis methods; fixed effects model and random effects model will be applied. (Gujarati, 2007) posits that where the slope coefficients are constant but the intercept varies over individuals then the appropriate model to use would be the fixed effects model. On the other hand where the individual heterogeneity is random rather than systematic in the model then the model to use is random effect model.

#### **3.5.2 Multicollinearity**

Multicollinearity is the relationship among independent variables which refers to high intercorrelation among variables. A correlation is significant if the probability value is equal or below the p value. Due to the problem of multicollinearity in the data the relation of dependent and independent cannot be measured precisely making statistical inferences about the data unreliable. Variance inflation factor was used to test for multicollinearity where if the value is less than 10 then there is no multicollinearity (Gujarati, 2007).

#### **3.5.3 Heteroscedasticity**

To properly define a regression model, it is important to have the variance of the residual or error term in a regression model constant. Heteroscedasticity is where there is a difference of variance across observations. This complicates data analysis because regression analysis assumes of equal variance across the various levels of independent data. Where the p value is significant and variance of the variable is constant, then no heteroscedasticity problem exists in the data (Gujarati, 2007). This study used the modified Wald test to test for heteroscedasticity.

#### 3.5.4 Autocorrelation

Autocorrelation describes a characteristic of data in which the correlation between values of the same variable is based on related objects. This violates the assumption of independence where a change in one independent variable affects another independent variable. It can lead to understatement of the standard error and cause the predictor appear significant when they are not. The study used the Woolridge test to test for the presence of autocorrelation in the linear secondary data.

The significance of the independent variables as a predictor of dividend policy was tested PraisWinstein regression while the significance of the overall model in explaining performance dividend policy through the independent variables was measured through the f-test. The coefficient of determination ( $R^2$ ) measures the strength to which independent variables explain variations in the dependent variables. The analysed data was presented using statistical tables.

#### **CHAPTER FOUR**

#### FINDINGS AND DISCUSSION

# 4.1 Introduction to the Chapter

This is the fourth chapter of the study and entails a comprehensive data analysis and a discussion of the findings. The study had the general objective of determining the factors that influenced dividend policy of firms in Kenya. The study was a case study of the manufacturing firms that are listed at the Nairobi Securities Exchange. Data was analysed using descriptive statistics and in order to ascertain the nature and magnitude of the relationship between the variables, a multiple regression was adopted. The data was analysed using STATA version 12.0 since it is efficient in analyzing panel data.

# 4.2 Data Analysis

The study was undertaken with the aim of finding out the influence of firm specific characteristics on dividend policy of manufacturing firms listed at the NSE. This section harbors the data analysis. Data analysis was done in two phases: descriptive statistics and panel regression modeling. Descriptive statistics seeks to describe the trend of the variables while regression modeling is meant to ascertain whether there exists significance relationship between the dependent variables and the dependent variable.

## 4.3 Descriptive Data Analysis

It was vital to compute the descriptive statistics. These statistics included the mean, standard deviation, the minimum and the maximum. The study indicated that a total of 80 entries were considered in data analysis where the time period was from 2008 to 2017 for all the 8 companies. The results reveal that the leverage had a mean of 0.099, and a standard deviation

of 0.088 while the minimum was zero and the maximum was 0.35. This indicates that the leverage was high for the firms. Leverage was measured in terms of debt to total assets of the companies. On the side of liquidity, the mean was 0.146 with a standard deviation of 0.092, while the minimum was zero and the maximum was 0.58. Liquidity was measured in terms of current ratio and this indicates that most of the forms did not keep liquid assets. It is important to note that liquid assets are not preferred since they do not earn income as compared to the noncurrent assets. Asset tangibility had a mean of 0.376 with a standard deviation of 0.135, a minimum of zero and a maximum of 0.76. Tangibility of assets was measured in terms of fixed assets to total assets. This indicates that firms kept a combination of both current and noncurrent assets. The dividend payout had a mean of 0.398 with a minimum of zero and a maximum of 1.54. This indicates that dividend payout ratio was low among the companies under consideration. Table 4.1.exhibits these findings.

# Table 4: 1 Descriptive Statistics

Variable	Ôbŝ	Mean	Std. Dev.	Min	Max
liquidity	80	.145875	.0919644	0	.58
leverage	80	.099	.0883119	0	.35
tangibility	80	:37625	.1355381	0	.76
dp	80	.398125	.3285145	0	1.54

. sum liquidity leverage tangibility dp

## 4.3.1 Exploratory Data Analysis

It was important to carry out exploratory data analysis for the dependent variable in order to understand the trend and whether there existed time related fixed effects. Further, exploratory statistics are crucial because they form good basis of making the decision of whether to adopt pooled regression analysis or panel data analysis. The growth plots are also important in showing if the dependent variable has a common Y-intercept for all the companies. As shown in the Figure 4.1 and Figure 4.2, the company's exhibited a similar trend and the intercept was different. Except for company 2 which had an outlier the others indicate that there are not time related fixed effects. The single outlier doesn't hamper the use of panel data analysis in reporting of the effects of firm specific characteristics on dividend policy of manufacturing firms listed at the NSE.

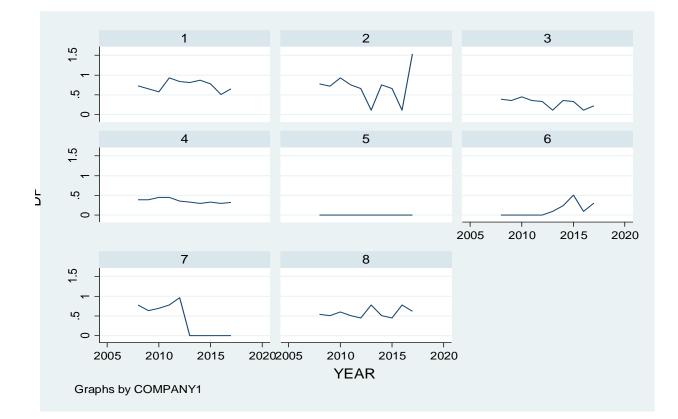
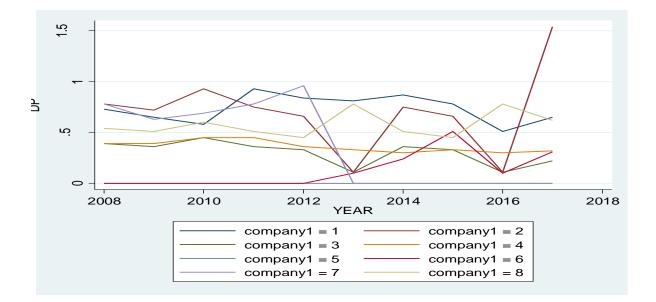


Figure 4: 1 Dividend Policy Single Company Plot



**Figure 4: 2 Overlain Graph for Dividend Policy** 

# **4.3.2** Pearson's Correlation Matrix

Correlation is the likelihood that variables are a match of one another. The study found out that the variable did not have perfect correlation. Liquidity had a correlation of 0.1708 with leverage and 0.4299 with asset tangibility. Leverage had a correlation of 0.4189 with asset tangibility. These findings are as reported on Table 4.2

# Table 4: 2 Correlation Matrix

```
    correlate liquidity leverage tangibility
(obs=80)
```

	liquid~y	leverage	tangib~y
liquidity leverage tangibility	1:0000 0:1708 0:4299	1.0000 0.4189	1.0000

# 4.4 Analytical Model

The study was aimedat establishing the influence of firm specific characteristics on dividend policy among manufacturing firms listed at the NSE.A multiple regression model was developed in order to describe the effect of leverage, liquidity and asset tangibility on dividend policy of manufacturing firms. But, before reporting on the regression coefficients and model significance, diagnostic tests were carried out.

# **4.4.1 Diagnostic Tests**

Several diagnostic tests were undertaken to describe whether the linear regression modelling assumptions were violated. Further, tests form a basis for deciding whether to adopt pooled regression or panel data analysis. The following tests were carried out: serial correlation tests, multicollinearity tests, heteroscedasticity tests, measures of normality and Hausman Tests for model selection.

# 4.4.2 First Order Serial Correlation

This is a situation that complicates regression modelling because when it occurs in a given set of data, it assumes that error term is actually correlated for successive time periods. Occurrence of first order serial correlation is bad news since it significantly distorts validity of the model. The study used the Woolridge test that uses the *xterial* STATA command. The study found Wooldridge statistic of 0.1641 which indicates that the data set did not serial correlate. The rule of the thumb is that where the P-value is less than 0.05, then a given set of data has serial correlation.

# **Table 4: 3 Serial Correlation Test**

```
: xtserial dp liquidity leverage tangibility
```

Wooldridge test for autocorrelation in panel data H0: No first-order autocorrelation F( 1, 7) = 2:416 ProB > F = 0:1641

#### 4.4.3 Multicollinearity

The study used the Variance Inflation Factor (VIF) in testing multicollinearity. Multicollinearity is the relationship among independent variables which refers to high intercorrelation among variables. A correlation is significant if the probability value is equal or below the p value. Asset tangibility had a VIF of 1.44 and a tolerance of 0.6922. Liquidity had a VIF of 1.23 with a tolerance of 0.815 and leverage had a VIF of 1.21 and a tolerance of 0.824. The rule is that VIF of more than 10 indicates that the data has multicollinearity which violates linear modelling. These statistics indicates that the set of data did not have multicollinearity. The findings are presented on Table 4.4

 Table 4: 4 Test of Multicollinearity

: ⊽if

Variable	VIF	1/VIF
tangibility liquidity leverage	1:44 1:23 1:21	0:692224 0:815049 0:824427
Mean VIF	1:29	

#### 4.4.4 Testing for Heteroskedasticity

Heteroscedasticity is where there is a difference of variance across observations. This complicates data analysis because regression analysis assumes of equal variance across the various levels of independent data. Heteroscedasticity is major concern because it amplifies the chance of committing type two errors, which is, not rejecting the null hypothesis as it could have been if the data was homoscedastic. The study adopted the Modified Wald Test in order to test for the presence of heteroscedasticity. The P-Value was 0.0000 which is less than 0.05 indicating that the data had heteroscedasticity problem. In this respect, the study adopted then PraisWinstein regression in order to eliminate Heteroskedasticity.

#### Table 4: 5 Modified Wald Test for Heteroskedasticity

: Xttest3

Modified Wald test for groupwise heteroskedasticity in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (8) = 8981.06 Prob>chi2 = 0.0000

#### 4.4.5 Measures of Normality

The study adopted skewness and kurtosis in determining whether the dataset exhibited normal characteristics. The statistics indicated that the data had normal features since all the statistics for skewness were within the range of -3 and 3 and the kurtosis statistics were within the permitted range of -10 and 10. These findings are presented on Table 4.6

# **Table 4: 6 Measures of Normality**

. sktest dp liquidity leverage tangibility

Skewness/Kurtosis tests for Normality

Variable	Ôbs	Pr(Skewness)	Pr(Kurtosis)	adj Chi2(2)	joint — Prob>chi2
dþ	80	0:0526	0:5555	4:24	0.1201
liguidity	80	0:0000	0:0001	26:39	0.0000
leverage	80	0:0142	0:1839	7:08	0.0290
tangibility	80	0:0243	0:0021	11:97	0.0025

#### 4.4.6 Model Selection and Fitting

Hausman specification test was used to determine which one of the alternative panel analysis methods; fixed effects model and random effects model will be applied. TheHausman Test seeks to establish which model is relevant in fitting the regression coefficients and testing of the null hypothesis. The Hausman test provided a P-value of 0.4794 which was more than 0.05 meaning that the suitable model was the Random Effects regression Model. However, the data set had heteroskedasticity problem hence adopting the PraisWinstein regression that eliminates heteroskedasticity. The Hausman Test is presented on Table 4.7

# Table 4: 7Hausman Test

. hausman fe re

	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fē	Fē	Difference	S.E.
liquidity	2.661824	2.646591	.0152338	.1615012
leverage	.1848918	=.3299223	.5148141	.5237478
tangibility	0914275	.1214522	=.2128797	.1895174

b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(3) = (b=B)'[(V\_b=V\_B)^(=1)](b=B) = 2:48 Prob>chi2 = 0:4794

# 4.4.7 Analytical Regression Model Coefficients

Due to the presence of heteroskedasticity,modeling was done using the PraisWinstein regression that eliminates violations of regression in the data. The study found P-Value of 0.000 is less than 0.05 meaning that the overall model was found to be suitable in explaining the influence of firm selected characteristics on dividend policy of manufacturing firms listed at the NSE. The study found an  $R^2$  of 0.7216 which means that 72.16% of variations in dividend policy is influenced by leverage, liquidity and asset tangibility. These findings are presented on Table 4.8

#### Table 4: 8PraisWinstein Regression Model

. xtpcse dp liquidity leverage tangibility, hetonly correlation(psar1)

Prais-Winsten regression, heteroskedastic panels corrected standard errors

Group variable:	companyl		Number of obs	=	80
Time variable:	year		Number of groups	=	8
Panels:	heteroskedastic	c (balanced)	Obs per group: mi	n =	10
Autocorrelation:	panel-specific	AR(1)	an	/g =	10
			ma	x =	10
Estimated covaria	nces =	8	R-squared	=	0.7216
Estimated autocor	relations =	8	Wald chi2(3)	=	127.41
Estimated coeffic	ients =	4	Prob > chi2	=	0.0000

đp	Coef.	Het-correct Std. Err.		₽> z	[95% Conf.	Interval]
liquidity leverage tangibility _cons	2.305948 6787318 .3809355 .0344326	.295794 .2554069 .1485499 .0407018	7.80 =2.66 2.56 0.85	0.000 0.008 0.010 0.398	1.726203 -1.17932 .089783 0453415	2.885694 =.1781435 .6720879 .1142068
rhos =	7863808 -	.1370336	.0481006	.382899	.9531977	1904471

The analytical model was set up as:

 $Y_{it} = c + \beta_1 CR_{it} + \beta_2 DAR_{it} + \beta_3 TANG_{it} + \epsilon$  and on fitting the coefficients, the model was developed as

Y = 0.0344 + 2.3059 CR - 0.6887 DAR + 0.3809 TANG

Where 0.0344 is the dividend policy in the absence of the independent variables.

2.3059 is the increase in dividend policy in response to a unit increase in liquidity of the firm, -0.6887 is the decrease in dividend policy as a result of a unit increase in leverage of the firm and 0.3809 is the increase in dividend policy as a result of an increase in a unit of asset tangibility.The P-value for liquidity was 0.000, that of leverage 0.008 and that of asset tangibility was 0.010. The test of significance was conducted at 95 % confidence level thus where the P-value was 0.05 or below, the impact of that independent variable was statistically significant. In this regard, all the variables affected dividend policy in a statistically significant manner.

#### **4.5 DISCUSSIONS**

#### 4.5.1 Liquidity and Dividend Policy of Manufacturing firms Listed at the NSE.

From the findings, liquidity had a positive and statistically significant influence on dividend policy of listed manufacturing firms at the NSE.Since dividend payout involves a substantial cash outflow, it is therefore paramount that a firm should be of good liquidity to meet this obligation when it falls due.These findings are in line with those of Ahmed (2015) who undertook a study to investigate the impact of liquidity and profitability on the dividend policy in the UAE banking sector and examine variations between Islamic and conventional and revealed that the dividend payout ratio has a significant and positive correlation with liquidity. In a separate study, Trang (2012) found that liquidity positively affected dividend payout among firms in Vietnam. On the contrary this study disagrees with the findings of Arumba (2014) who analysed what determined dividend payment for forty-one companies quoted at the NSE for a period of six years beginning 2008 to 2013 and the study of John and Muthusamy (2010)who in both cases noted that there exists a negative relationship between liquidity and dividend policy.

## 4.5.2 Leverage and Dividend Policy of Manufacturing firms Listed at the NSE.

The study found that leverage has a negative significant influenceat P value 0.008 on dividend policy among the manufacturing firms in Kenya. Leverage is a measureof the amount of debt used to finance firms' assets.Firms that finance their business activities through debt commit themselves to fixed financial charges that include payments of interest and the principal amounts affecting the firm's ability to pay dividendIt is important to note that these charges must be paid first before the residual income is distributed to members of

the firm in form of dividends hence reducing funds available for distribution. High leveraged firms are therefore likely to pay low or no dividend (Pandey, 2016).

The study results agree with Asif et al, (2011) who examined the relationship between dividend policy and financial leverage of 403 companies, listed with Karachi Stock Exchange during the period 2002 to 2008 and revealed that the level of corporate debt (leverage) significantly, affect the dividend policy of the Pakistani firms. Similarly, Pandey (2016) sought to analyse the determinants of dividend policy of 12 companies in the Fast Moving Consumer Goods (FMCG) sector in India and revealed leverage and corporation tax had a negative effect on dividend policy. Equally, Hafeez and Attiya (2008) evaluated the dynamics and determinants of dividend policy of 320 non-financial firms listed in Karachi Stock Exchange during the period 2001-2006 and found that investment opportunities and leverage have a negative impact on dividend payout policy.

#### 4.5.3 Asset Tangibility and Dividend Policy of Manufacturing firms Listed at the NSE.

Asset tangibility was found to have a positive significant influence on dividend policy of listed manufacturing firms at the NSE (P-Value of 0.01). This indicates that an increase in tangible assets increase the dividend pay-out ratio. Asset tangibility is measured as the ratio of fixed assets to total assets. This agrees with the findings of Abor, (2017) on a study to examine the factors affecting dividend policy and how dividend policy affects shareholders' value. Results revealed that asset tangibility, GDP growth and interest rate had a positive effect and were statistically significant in explaining dividend policy. Similarly, studies by Tariq (2015), Booth et al. (2010) and Aivazian et al. (2003) support this finding in that firms with tangible assets are able to pledge them as collateral to obtain the necessary funding to invest and boost their operations to make profitsfreeing up earnings to be distributes as dividends.

#### **CHAPTER FIVE**

## CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

The study objective was to assess the influence of firm specific characteristics on dividend policy for manufacturing companies on the Nairobi securities exchange. This presents the summary of findings, conclusions and recommendations. Further, a suggestion for further studies is also made at the end of the chapter.

## 5.2 Summary of Findings

The study investigated the influence of firm specific characteristics namelyliquidity, leverage and asset tangibility on dividend policy of listed manufacturing firms in Kenya. The overall model was found to be significant at a P-value of 0.000 in ascertaining the influence of the factors on dividend policy of the listed manufacturing firms in Kenya. The analysis revealed an R<sup>2</sup> of 0.7216 which meant that 72.16 % of the variations in dividend policy were explained by the changes in liquidity, leverage and asset tangibility.Liquidity had a positive and statistically significant influence on dividend policy of listed manufacturing firms at the NSE. Since dividend payout involves a substantial cash outflow, it is therefore paramount that a firm should be of good liquidity to meet this obligation when it falls due. Similarly, asset tangibility was found to have a positive significant influence on dividend policy of listed manufacturing firms at the NSE (P-Value of 0.01). This indicates that an increase in tangible assets increase the dividend pay-out ratio. Asset tangibility is measured as the ratio of fixed assets to total assets.

However, leverage has a negative significant influence at P value 0.008 on dividend policy among the manufacturing firms in Kenya. Firms that finance their business activities through debt commit themselves to fixed financial charges that include payments of interest and the principal amounts affecting the firm's ability to pay dividend. High leveraged firms are therefore likely to pay low or no dividend.

## 5.3 Conclusions

The general objective of the study was to investigate firm characteristics that influence dividend policy for manufacturing firms at the Nairobi Securities Exchange. The study assessed the influence of liquidity, leverage and asset tangibility on dividend policy of manufacturing firms in Kenya. The study reveals that liquidity has a positive significant effect on dividend policy of listed manufacturing firms in Kenya. This is because the coefficient was positive and the F-test revealed existence of a positive relationship between the two variables. Liquidity is the ability to repay debts and this means that the firm must have liquid assets to make good it obligations when they fall due. Equally, cash dividends require a substantial cash outflow and thus presence of liquid assets improves the dividend payout ratio. More importantly, the firm cannot declare cash dividends where there are no liquid assets to make good the declaration. Annunciation of cash dividend can infer to investors valuable information on the management's assessment of the firm's future prospects reducing information asymmetry (Al-Malkawi, 2007) as per the signaling theory. Furthermore, investors are more likely to prefer firms that pay dividends to those that choose to capitalize their returns.

The study concluded that leverage has a negative and significant effect on dividend policy of manufacturing firms listed at the NSE. Perhaps, this can be attributed to the fact that interest on debts forms first charge before the residual income is distributed to members of the company. As such, high leveraged firms tend to pay less or no dividends in comparison to those with low or no debt in their capital structure. Even, in the case of a company winding

up, the debt holders are paid first and the last to receive their pay are the stockholders. It therefore implies that debt supersedes equity and thus due to its preference in sharing profits, it is expected that debt reduces the dividend payout ratio. Low or no dividend may be interpreted to mean the firm is facing financial difficulties and has poor or no future prospects leading to massive capital flight that will affect the firm's value. This agrees with the signaling theory(Ross (1977) and Petit (1972). In the event that the company has no debts, no interest is paid and all distributable income goes to the shareholders in form of dividends and in investments. In this respect, investments will also increase the dividend payout in the future.

Results of the study presented a positive significant influence on dividend policy of manufacturing firms at the NSE. Implying that an increase in tangible assets tends to increase the dividend payouts to the members of the firm.Logically, this can be explained in the sense that, asset tangibility denotes an increase in investments. Quality investments will improve the efficiency of a firm's operations raising its turnover rate and earnings. With high profits, firms are able to declare and distributedividend to members. This argument resonates with the dividend preference theory where investors will prefer to receive their return on investment at that time as opposed to in the uncertain future. Similarly,firms in possession of tangible assets are able to pledge them as collateral to obtain the necessary funding for investmentto boost their operations to make profits freeing their earnings for distribution.

#### **5.4Recommendations**

The following recommendations are made with regard to the findings of the study. The study recommends that firms should undertake robust working capital management practices in order to enhance dividend policy. It is crucial that the shareholders are compensated for their investments in the company. This can only be done if the firm is of a good liquidity to warrant payments of dividends. Liquidity ensures that dividends can be declared and once declared are paid in full. On leverage, firm should keenly watch their debt equity structure and where possible reduce the amount of debts in the capital structure. It is important to note that debt attracts interests and wherethe covenant payments are high, they may constrain the firm financially besides the risk of liquidation and receivership. Lastly, the study recommends that management should increase fixed assets holding as this has a positive effect on dividend policy. Asset tangibility increases the amount of investments of the firm and this enhances the operation efficiency and profitability of the firms and as a result dividends. It is recommended that members should lobby for more fixed assets be acquired by the companies in order to increase their dividends in the future.

## **5.5 Recommendations for Further Studies**

This study investigated the influence of firm specific characteristics namely liquidity, leverage and asset tangibility on dividend policy of manufacturing firms listed at the NSE. All the three variables are micro economic factors and had significant relationship with dividend policy. However, it is notable that trouble in the sector not only emanate from mismanagement but also the inhospitable macroeconomic environment. Future investigations should be conducted using multiple factors that consider both micro and macroeconomic variables. This would help establish the effects of microeconomic variables in conjunction with macro-economic variables such inflation, interest rates, taxation and foreign exchange rates on dividend policy for manufacturing companies listed at NSE. Findings of such a study would be more reliable as they would be reflective of the actual market conditions.

This study concentrated on the manufacturing sector only, future studies can bedone considering firms in all sectors at the NSE. This would clearly indicate the variables that determine dividend policy for firms listed at the NSE and also establish if market segmentation has any effect on dividend policy due to industry specific factors.

The studycovered a period of tenyears, similar studies could be conductedcovering an extended period to ensure that more data is collected on the variables to adequately validate the findings.

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# LIST OF APPENDICES

# APPENDIX I: COMPANIES LISTED AT THE NSE

AGRICULTURAL
1 Eaagads Ltd.
2 Kapchorua Tea Company Ltd.
3 Kakuzi Ltd.
4 The Limuru Tea Company Ltd.
5 Rea Vipingo Plantations Ltd.
6 Sasini Ltd.
7 Williamson Tea Kenya Ltd.
AUTOMOBILES AND ACCESSORIES
8 Car & General Kenya Ltd.
BANKING
9 Barclays Bank Ltd
10 Stanbic Holdings PLC
11 I&M Holdings Ltd.
12 Diamond Trust Bank Kenya Ltd
13 H F Group Ltd
14 Equity Bank Limited
15 KCB Group Ltd.
16 I&M Holdings Ltd.
18 National Bank of Kenya Ltd.
19 NIC Group PLC
20 Standard Chartered Bank Ltd.

21 Equity Group Holdings.
22 The Cooperative Bank of Kenya Ltd.
COMMERCIAL AND SERVICES
23 Express Ltd.
24 Sameer Africa PLC
25 Kenya Airways Ltd.
26 Nation Media Group
27 Standard Group Ltd.
28 TPS Eastern Africa (Serena) Ltd.
29 Scangroup Ltd.
30 Uchumi Supermarket Ltd.
31 Longhorn Kenya Ltd.
32 Atlas Development and Support Services
33 Deacons (East Africa) PLC
34 Nairobi Business Ventures
CONSTRUCTION AND ALLIED
35 Athi River Mining
36 Bamburi Cement Ltd.
37 Crown Paints Kenya Ltd.
38 East African Cables Ltd.
39 E.A. Portland Cement Ltd.
ENERGY AND PETROLEUM
40 KenolKobil Ltd.
41 Total Kenya Ltd.

42 Kengen Ltd.
43 Kenya Power & Lighting Co Ltd.
44 Umeme Ltd.
45 Umeme Limited
INSURANCE
46 Jubilee Holdings Ltd.
47 Sanlam Kenya PLC
48 Kenya Re-Insurance Corporation Ltd.
49 Liberty Kenya Holdings Ltd.
50 BRITAM Holdings Ltd.
51 CIC Insurance Group Ltd.
INVESTMENT
52 Olympia Capital Holdings Ltd.
53 Centum Investment Company Ltd.
54 Home Africa Ltd.
55 Kurwitu Ventures
INVESTMENT SERVICES
56 Nairobi Securities Exchange
MANUFACTURING AND ALLIED
57 BOC Kenya Ltd.
58 British American Tobacco Kenya
59 Carbacid Investments Ltd.
60 East African Breweries Ltd
61 Eveready East Africa Ltd.

62 Mumias Sugar Co Ltd.

63 Unga Group Ltd.

64 Kenya Orchards Limited

65 Flame Tree Group Holdings

# TELECOMMUNICATION AND TECHNOLOGY

66 Safaricom PLC

# **REAL ESTATE INVESTMENT TRUST**

67 StanlibFahari I-Reit

# **EXCHANGE TRADED FUND**

68 New Gold Issuer (RP) Ltd.

# APPENDIX II: DATA SUMMARY OF VARIABLES

# **Dividend Policy**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BOC	0.73	0.65	0.58	0.93	0.84	0.81	0.87	0.78	0.51	0.65
BAT	0.78	0.72	0.93	0.75	0.66	0.11	0.75	0.66	0.11	1.54
CARBACID	0.39	0.36	0.45	0.36	0.33	0.11	0.33	0.11	0.11	0.22
EABL	0.39	0.39	0.45	0.45	0.36	0.33	0.3	0.33	0.3	0.32
EVEREADY	0	0	0	0	0	0	0	0	0	0
KOL	0	0	0	0	0	0.1	0.24	0.51	0.1	0.31
MUMIAS	0.78	0.63	0.69	0.78	0.96	0	0	0	0	0
UNGA	0.54	0.51	0.6	0.51	0.48	0.78	0.51	0.45	0.78	0.62

# Liquidity

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BOC	0.23	0.31	0.21	0.21	0.25	0.27	0.25	0.2	0.17	0.19
BAT	0.19	0.23	0.25	0.22	0.18	0.11	0.22	0.18	0.11	0.58
CARBACID	0.1	0.12	0.13	0.12	0.09	0.07	0.12	0.09	0.07	0.08
EABL	0.08	0.08	0.09	0.1	0.09	0.07	0.06	0.07	0.06	0.07
EVEREADY	0.09	0.11	0.12	0.11	0.07	0.12	0.11	0.09	0.07	0.08
KOL	0	0	0	0	0	0.09	0.1	0.08	0.09	0.08
MUMIAS	0.24	0.29	0.32	0.29	0.23	0.21	0.29	0.23	0.21	0.22
UNGA	0.13	0.16	0.17	0.16	0.13	0.12	0.16	0.13	0.12	0.13

# Leverage

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BOC	0.25	0.22	0.19	0.21	0.26	0.35	0.19	0.23	0.28	0.26
BAT	0.03	0.03	0.04	0.03	0.05	0.04	0.03	0.05	0.04	0.05
CARBACID	0.1	0.09	0.1	0.1	0.13	0.11	0.1	0.13	0.11	0.12
EABL	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.02
EVEREADY	0.17	0.16	0.19	0.17	0.17	0.19	0.17	0.24	0.17	0.21
KOL	0	0	0	0	0	0.21	0.17	0.24	0.21	0.23
MUMIAS	0.07	0.07	0.08	0.07	0.1	0.09	0.07	0.1	0.09	0.1
UNGA	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.02

# Asset Tangibility

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BOC	0.56	0.25	0.25	0.49	0.58	0.6	0.49	0.65	0.76	0.71
BAT	0.36	0.43	0.44	0.36	0.48	0.51	0.36	0.48	0.51	0.5
CARBACID	0.3	0.36	0.36	0.3	0.4	0.34	0.3	0.4	0.34	0.37
EABL	0.38	0.38	0.45	0.46	0.38	0.5	0.37	0.5	0.37	0.44
EVEREADY	0.3	0.36	0.37	0.3	0.34	0.37	0.3	0.4	0.34	0.37
KOL	0	0	0	0	0	0.37	0.39	0.41	0.37	0.39
MUMIAS	0.32	0.29	0.38	0.42	0.4	0.37	0.42	0.4	0.37	0.39
UNGA	0.32	0.39	0.39	0.32	0.43	0.27	0.32	0.43	0.27	0.35