## ANALYSIS OF FINANCIAL DETERMINANTS OF DIVIDEND PAYOUT AMONG CONSTRUCTION AND ALLIED COMPANIES LISTED IN NAIROBI SECURITIES EXCHANGE, KENYA

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A Thesis Submitted in Partial Fulfillment of The Requirements for Award of Master of Business Administration Degree (Finance Option) Of Kenya Methodist University

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#### DECLARATION

I declare that this thesis is my original work and has not been presented in any other University or Institution

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### **Declaration by the Supervisor**

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## DEDICATION

To the Almighty God, the granter of life and wisdom. My special dedication goes to my mum Ndikumana Speciose and my two sisters Ndibanje Paisible and Gakiza Irene who cheered me through this process of thesis writing until to completion.

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#### ABSTRACT

Despite the potential benefit listed firms stand to accrue from paying dividends, including improvement in stock prices and increasing investor demand raising the stock value, an evaluation of dividend payouts by listed construction and allied companies at the Nairobi Security Exchange over a 10-year period reveals dismal payout trends, in comparison with other listed companies. This brings to question; what factors determine dividend payout among listed construction companies. While existing research in the Kenya academia have looked into the factors that influence dividend payments, none have concentrated on construction firms registered on the Nairobi Securities Exchange, warranting the present study. The goal of this investigation was thus to look at the factors that influence dividend payout among construction organizations quoted on Nairobi Security Exchange. The study specifically sought to determine the influence of the profit level, leverage, liquidity and firm size regarding the distribution of dividends among constructing and related businesses quoted on the stock exchange at Nairobi Security Exchange. The study used a descriptive design and was based on signaling theory, pecking order theory, and the bird in the hand theory. A census was undertaken of all five construction and related enterprises that are listed on the Nairobi Securities Exchange. A secondary data collecting schedule was used to obtain secondary data. The investigation used panel data for a 10-year period from 2011 to 2020. The study performed both descriptive analysis including means and standard deviations and inferential analysis including Pearson correlation and simple linear regression models. Results indicate that profitability ( $\beta = .417$ , p = .029<.05), leverage ( $\beta$  = .523, p = .043<.05), liquidity ( $\beta$  = .431, p = .035<.05) and firm size ( $\beta$  = .661, p = .019 < .05) significantly influence dividend payout among construction and allied companies listed at Nairobi Security Exchange. The investigation thus concludes that dividend payout for constructing and allied firms quoted at Nairobi Security Exchange is significantly determined by the profit level, liquidity, leverage and firm size do not. According to the report, building and related firms listed on the Nairobi Securities Exchange must try to raise their earnings in place to enable dividends payment arrangements; ensure that they have the capacity to fulfill both anticipated and unanticipated cash demands; and work towards growth for operational efficiency.

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## LIST OF ABBREVIATION AND ACRONYMS

AMEX	American Express
ANOVA	Analysis of Variance
$\mathbf{D}^2$	Mahalanobis distance
EPS	Earnings Per Share
FY	Financial Year
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
KNBS	Kenya National Bureau of Statistics
KPMG	Klynveld Peat Marwick Goerdeler
KSE	Karachi Stock Exchange
KSh	Kenya Shillings
Lev	Leverage
NACOSTI	National Commission for Science, Technology and Innovation
NASDAQ	National Association of Securities Dealers Automated Quotations
NSE	Nairobi Security Exchange
NYSE	New York Stock Exchange
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Squares
PAT	Profit After Tax
P/E	Price to Earning
ROA	Return on Asset
ROE	Return on Equity
ROI	Return on Investment
UAE	United Arab Emirates
UK	United Kingdom
US	United State
VIF	Variance Inflation Factor

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### **1.1 Introduction**

The justification for researching the effects of determinants of payment of dividends among companies quoted on Nairobi Security Exchange (NSE) with reference to construction companies is made in this chapter. To that purpose, it delves into the constructs of the study's primary variables and the study's situational rationale. The backdrop to the study is discussed in detail in this chapter, accompanied by an in-depth explanation of the research model, which include profit margin, leverage, dividend payout, liquidity and business size. The problem definition, aims, assumptions, importance, and scope of research are also discussed in this chapter.

#### **1.2 Background of the Study**

The resolve of any listed business entity is to generate profits and maximize wealth for the owners and shareholders, while carrying out its product or service offering (Kania & Bacon, 2017). As such, listed firms may either reinvest profits generated from their business activities or pay out the same to shareholders as dividends (Hafeez & Javid, 2017). The decision as to whether or not to pay dividends is underpinned by a mix of theories, which elucidate the various objectives of dividend payout by firms. These include Ross's (1977) signaling theory, which states that payouts are viewed by stockholders as indications of company's expected profitability. The study is also supported by the Pecking order theory Myers and Majluf, (1984) which suggests that companies favor internal finance sources as compared to external funding, and may therefore adjust their target ratios of dividend payout to suit their opportunities of investment. Gordon and Lintner's (1963) bird in the hand proposition, that advances states that investors

prefer current dividends above capital gains, further back up the study. Gordon and Lintner (1963) argue in their study that present dividends serve to resolve investor uncertainties about the future.

Dividend payout policies and practices differ in various developed and developing economic contexts across the globe (Al-Najjar & Kilincarslan, 2019). Extant studies report that compared to other developed countries including the United States (US), Japan, and Germany, listed firms in the United Kingdom (UK) have a record of significantly higher dividend payout rates (Bahreini & Adaoglu, 2018; Kilincarslan & Ozdemir, 2018). A majority of listed firms in the UK are reported to adopt stable dividend policies by having long-term payout ratios and adjusting their cash dividends by gradually moving towards their target at a notable extent of smoothing (Al-Najjar & Kilincarslan, 2019.). It is also reported that among listed UK firms, the global financial crisis did not have a significant effect on the dividend payout ratios (Kilincarslan & Ozdemir, 2018).

The Organization for Economic Co-Operation and Development (OECD, 2020) opines that globally, listed firms in developed economies are on average subject to a 10% withholding tax on dividends, 100% capital goods' deduction allowances and a 30% corporate tax rate. OECD (2020) also reports that in most developed economies, there exist listed firms that have dissimilar shares, which offer either payment of dividends as an economic right or social rights through corporate social responsibility.

In Malaysia, a majority of listed firms have been reported to adopt A long-time period dividend coverage of a 40% to 60% dividend payout ratio primarily based totally on pronounced internet earnings on account of shareholders (Zainudin et al., 2018). Since Financial Year (FY) 2010

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however, the average dividend payout ratio in the country has ranged between 79.9% in the year 2010 and 71.9% in 2013 (Lee et al., 2020). Zainudin et al. (2018) attribute this growth in dividend payout to since the final payment of FY2010, the Dividends Plan has been in existence, and total cash payouts for FY2019 culminated in a dividend per share of 87.8%.

According to the World Economic Forum on Africa (2015), as a matter of urgency, governments in Africa ought to enable listed firms to fully realize and benefit from their dividend payout potential by take up transformative policies aimed at conforming to the global international tax system. This will result in a transnational economy, that builds an equitable fair exchange information, and that provides quality investment opportunities. African governments ought to also avoid running the risk of uncoordinated tax measures in their dividend payout policies.

In Ghana, Marfo-Yiadom and Agyei (2016) computed the financial statements' mean indices of factors for all listed firms between the year 2012 and 2016. It is reported that the mean dividend yield (dividend divided by operating profits) was 30.16 % (32.92 %), with a mean (median) revenue of 11.54 % (10.01 %). This implies that on the mean, for majorities of the listed firms in Ghana dividends account for around 30% of earnings, while the mean asset turnover is 11.54 %. Highly profitable firms were found to pay and declare high dividend and showed high payout ratios.

Also in Ghana, Amidu and Abor (2006) explored the dividend payout ratios' determinants. Findings of the study revealed that tax, cash flow and profitability exert a significantly positive influence on dividend payout ratios. It is also shown in the results that positive associations exist between book-to-market value, risk, dividend payout, growth, and institutional holding. The significant variables in the study are however, market-to-book value, cash flow, profitability and sale growth.

In the country, at the firm's Annual General Meeting, NSE listed firms choose the dividend amount to pay out each year, which can be expressed as a cash sum or a proportion of the business earnings. Dividends paid to common stockholders, on the other hand, are often optional. Dividend to ordinary shareholders may be withdrawn if the directors of corporations decide to hold earnings to capitalize in business operations or if the business is poor. The dividend is similar for all stakeholders of a particular class (that is ideal shares or ordinary shares) and a dividend becomes a liability to the firm once declared (Nairobi Security Exchange [NSE], 2019).

In Kenya, Wambui (2017) investigated how NSE-quoted firms' share returns are affected by dividend policy. It was noted in the study that whereas the payout ratio of dividend contributed positively to returns of share for listed firms, the influence was not significant. The study reported a similar finding in capital structure. Share returns were found to be positively and significantly linked to both inflation and firm size. Different results were yielded for each year with 2013 and 2012 revealing that both share returns and firm size positively affected dividend payout ratio.

Further, in Kenya, Nyangenya (2017) studied the association between stock performance and dividend payout among service and commercial companies that are listed. The variables of interest in the study included firm size, return on assets, leverage ratios and dividend payout ratio. It was revealed in the study, that the single-most important predictor of performance of stock was payout of dividends, followed by firm size while leverage was insignificant.

Dividend policies vary by company, based on the individual company's decision by the board of directors (Dennis et al., 2017). Of particular interest in the present study are listed construction companies in Kenya, owing to the dismal dividend payout, in comparison with other listed companies following a 5-year data review. Kenya's building industry makes a substantial contribution to the nation's GDP as well as job generation (Jepkemoi et al., 2019). According to the administration's 'Big Four Agenda,' the state puts a strong emphasis on infrastructure development, which is leading in the establishment of the country's building firms (Office of the President, 2017).

#### **Determinants of Dividend Payout**

The assessment of the sum to be distributed to shareholders as profits deposited in values of shares, as well as the quantity to be reinvested, is a critical financial task (Subba, 2015). Manon et al. (2015) observe that dividend payout is the implicit or explicit judgment by a corporate governance body with respect to the quantity of outstanding pays (present and previous) that ought to be distributed to corporate shareholders. This choice is regarded as among the critical financing decisions since the corporation's profit is a significant source of funding available to the company (Angelina, 2019).

Dividend determinants are numerously categorized into non-quantitative and quantitative measures. Quantitative measures entail earnings or profits, cash flow, dividends previously paid, liquidity, among others while non-quantitative include firm size, business risk, growth prospects, ownership structure of the industry among others (Dennis et al., 2017). A number of determinants of dividend payout has been identified in empirical literature, albeit with no undeniable elucidation on the constituents of decisions on paying out dividends. These include

leverage, Agyei and Marfo-Yiadom, (2016), profit level, Hermuningsih and Wardani, (2018), liquidity, Jumah and Pacheco, (2018) and firm size, Habib et al. (2018).

The profit level may influence the dividend payout policy since dividend is a fraction of the company's net income. As such, the amount of dividends paid out to the shareholders is hinged on the profit level made after the firm meets its fixed obligations, which is taxes and interest (Hafeez & Javid, 2017). Accordingly, Kania and Bacon (2017) observe that the higher the firm the profit it earns, the more likely it will compensate the shareholders by paying dividend. Whereas a number of studies have found a positive and significant association between profit level and dividend payout, others report a positive and significant association. For instance, Hermuningsih and Wardani (2018) in Indonesia report a positive and significant association between profit level and dividend payout, Ahmad et al. (2017) in Pakistan report a positive and significant association (Ahmad et al., 2017).

Leverage may influence the amount of dividend paid out to the shareholders is hinged on the terms exercised on dividend by lenders (Izadinya & Rasaeyan, 2019). Whereas a number of studies have found a positive and significant association between leverage and dividend payout, others report either a non-significant or a positive and significant association. For instance, in Ghana, Marfo-Yiadom and Agyei, (2016) found a positive and significant association between leverage and dividend payout. In contrast, Al Shabibi and Ramesh (2016) report a non-significant influence, while Ajayi et al. (2018) reported a positive and significant association in Nigeria.

Liquidity may also influence dividend payout, as the more the cash a firm hold, the higher the dividends since a larger amount of cash results in the firm's ability to pay dividends without

putting its future liquidity needs at risk (He & Li, 2015). Whereas a number of investigations have found a positive and significant association between liquidity and dividend payout, others report either a non-significant or a positive and significant association. For instance, Jumah and Pacheco (2018) found a significant and positive association between liquidity and dividend payout in the United States, while Imran (2018) report a non-significant association between liquidity and dividend payout in Pakistan. In contrast, Ajayi et al., (2018) found a significant and positive association between liquidity and dividend payout in Nigeria.

Further, the amount of dividend per share is determined by the dividend payout ratio. As such, large firms may ideally have high stock prices and return, firm value, hence paying high dividend (Jumah & Pacheco, 2018). Whereas a number of studies have found a positive and significant association between firm size and dividend payout, others report either a non-significant while others report or a positive and significant association. For instance, Habib et al. (2018) found a positive and significant association between firm size and dividend payout Malaysia. In contrast, Imran (2018) reports either a non-significant between firm size and dividend payout in Pakistan, while Biswajit and Kailash (2020) report a positive and significant association between firm size and significant

Pruitt and Gitman (2016) examined the dividend features of quoted companies on the Stock Exchange in Kuala Lumpur and found that companies' payout decisions are influenced by past dividends as well as current earnings. The study also discovered that corporations have lengthy dividend targets based on their potential to earn. Al-Malkawi (2017) used an organizational panel collection of data from all businesses traded on the Amman Stock Exchange from 1989 to 2000 to analyze the precursors of corporate dividend policy with a focus on Jordan. The survey's results indicate that a firm 's investment policy is strongly and substantially influenced by its size, seniority, and revenue, whereas leverage has a favorable impact on dividend policy.

In Ghana, Amidu and Abor (2006) established other determinants of dividend payouts as including retained earnings, taxation, cash flow, profitability and board structured. Also in Ghana, Marfo-Yiadom and Agyei (2016) conducted a study on the influences of dividend policy of Ghanaian banks. The findings of the study showed that collateral capacity, profitability, variations in bonuses and debt were the factors with notable positive influence on Ghanaian banks' dividend policy.

In the Kenyan literature, a myriad of antecedents of dividend payout have been established from extant studies, including investment decisions, company earnings and growth opportunities (Nyangau, 2016). Angelina (2019) carried out a study on the financial causes of plans of dividend payment among commercial bank in Kenya. The study found that the levels of profits among Kenyan commercial banks had a significant influence on plans of dividend payment (p-value < 0.05). It was also found that among Kenyan commercial banks, liquidity exerts a notable influence on plans of dividend payment (p-value < 0.05). The study also found that bank size exerts a notable impact on plans of dividend payment of Kenyan commercial banks (p-value < 0.05). Leverage was however found to not have a notable influence on plans of dividend payment among Kenyan commercial banks (p-value < 0.05). This study will therefore investigate and attempt to establish the influence of profit, liquidity, leverage and the companies' size on the dividend payout, evidence from construction and allied companies quoted at the NSE.

#### **Kenyan Perspective of Construction Industry**

The Kenya National Bureau of Statistics (KNBS, 2021) reports that in 2021, the construction sector in Kenya is expected to record a 4.5% growth, attributed by large infrastructural projects in roads, airports and ports. The sector made an 11.8% construction to GDP in 2020 and provided employment to 235,000 people. According to Klynveld Peat Marwick Goerdeler (KPMG, 2019), the construction industry in East Africa is experiencing an exponential growth and driving up numbers as a result, in productivity and employment. According to the African Construction report, between 2017 and 2018, the increase in the total value of projects in East Africa has risen by 20.7%, following the number of construction projects going up by 65.1%. The report adds that the confidence of international investors in the region has been boosted by both getting more international exposure through trade associations and growth, which is a significant driver of development and economic activity.

In 2018, KNBS (2019) reported a fast-tracked rise of 6.7 percent in the building and construction industry, compared to a corrected 5.8 % in 2017. This was due in large part to the restoration of the road system and a rise in money allotted for rail and road development. Along with communications, transportation, and financial services, Kenya's construction sector is the nation's top performer. Contrasting to a poor 0.3 percent growth in 2017, the industry grew by 0.7 percent in 2018 and generated Sh12.6 billion to the country's Gross Domestic Product (GDP), thanks to major road development projects around the nation (KNBS, 2019).

Whereas the exact number of construction companies in Kenya is unpublished, Yahoo Finance (2021) records profiles of 20 Chinese and Kenyan firms dominating the civil construction market in the country, while firms engaged in residential buildings and non-residential buildings operate in their thousands. There have been five (5) building and affiliated businesses listed on the

NSE by the close of 2019 (NSE, 2021). NSE categorizes listed firms based on the various market segments, and the construction and allied consists of firms whose products and service offerings are in pertinent to building and construction (NSE, 2021). Construction businesses are under the NSE's company's dividend arrangements, much like the rest of the NSE's public firms. A review of dividend payouts by construction companies listed at NSE reveals dismal performance highlighted by non-payments over the last 5 years (NSE, 2019).

Bamburi Cement's net income fell dramatically in 2018, to KSh614 million in 2018 from KSh1.97 billion in 2017. The decline in earnings was attributed to falling cement demand and fierce rivalry, according to the business. Despite the reduction, Bamburi's board of directors suggested a total per share dividend of KSh4.10, up 69 percent from a year earlier year, as well as Kshs60 cent in 2017 and 2016. Bamburi cement also paid a share dividend of 410 cents in 2019. The remaining four contractors listed on the NSE, on the other hand, have shown negative trends across the same time period. On the other hand, Crown Paints Kenya has proposed a dividend payment of Kshs60 cents a share in 2019 and 2018, a significant decrease from the Kshs1.75 per share declared in 2017 and 2016. East African Cables Ltd declared a Kshs50 cents a share distribution in 2019, marking the company's first imbursement in five years. In the same way, the East African Portland Cement Company hasn't paid a dividend in five years. On the other hand, Athi-River Mining Limited paid a Kshs60 cents a share reward in 2015 through 2016, but has failed to do so in 2017 (NSE, 2019).

#### **1.3 Statement of Research Problem**

Whereas it is not compulsory, paying dividends can pose a notable impact on the firm (Marfo-Yiadom & Agyei, 2016). Paying dividend may for instance improve a company's overall stock price, as once declared a dividend, investors become interested in the stock, which in return generates demand rising the stock value (Pruitt & Gitman, 2016). Despite the potential benefit, listed firms stand to accrue from paying dividends, a 10-year dividend payment review by building firms reveal dismal payout trends, in comparison with other listed companies.

In Kenya, the construction sector plays a vital role in the country's economic development. In 2019, the constructions sector contributed 5.6% to Kenya's GDP and provided employment to 222,000 people (KNBS, 2020). In 2020, the building industry also boosted Kenya's GDP by almost 448 billion Kenyan shillings (KSh), or about 4.1 billion US dollars (KNBS, 2021). The building company's success has a direct impact on the creation and administration of infrastructural programs and amenities envisioned in the Kenya Vision 2030 (Government of Kenya, 2008). As such, from the investor's perspective, dividend payment by listed firms in the sector has a lot of promise in terms of capital appreciation.

Against this backdrop, it is eminent to uncover the factors determining dividend payouts among construction and allied companies listed at the NSE, given the dismal payment for last 5-years. Empirical studies in this regard are however dearth. For example, Faruk et al. (2018) investigated the factors that influence dividend payments in the Turkish Stock Market and discovered that internal funds, taxes, and structure of the board all influence dividend payments. With regard to enterprises listed on the Ghana stock exchange, Amidu and Abor (2006) investigated the factors influencing dividend distribution plans in Ghana. As per Amidu and Abor (2006), cash flow, competitiveness, taxes, and dividend payment ratios all have substantial correlations.

In Kenya, Wambui (2017) examined all public different companies' payment policies and how they impacted their share returns, finding that dividend policy has a favorable impact on stock return of domestically listed enterprises. Nyangenya (2017) studied the association between

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stock performance and dividend payout among service and commercial companies that are listed and established a notable linkage between dividend payout and stock performance. In his review of the firm's features extracted on the execution of dividend policies, Nyangau (2016) concentrated on listed banking firms and found investment decisions, company earnings and growth opportunities influence that implementation. As such, extant related Kenyan studies have largely focused on contexts other than construction and allied firms. These include financial institutions (Nyangau, 2016), service and commercial companies (Nyangenya, 2017) and all listed firms with no particular focus on construction and allied firms Wambui (2017). The foregoing presents a knowledge gap in the Kenyan knowledge body in respect to the financial dividend payment precursors in Kenya, with an emphasis on construction businesses registered on NSE, warranting the present study.

#### **1.4 Research Objectives**

The following were the study objectives

#### **General Objective**

To analyze the financial determinants of dividend payout among construction and allied companies listed in Nairobi Securities Exchange, Kenya

#### **Specific Objectives**

The specific objectives of the study were:

- i. To determine the influence of profit level on the dividend payout for NSE-quoted construction and allied firms
- ii. To establish the influence of leverage on the dividend payout for NSE-quoted construction and allied firms

- iii. To examine the influence of liquidity on the dividend payout for NSE-quoted construction and allied firms
- iv. To find out the influence of the firm size on the dividend payout for NSE-quoted construction and allied firms

#### **1.5 Research Hypotheses**

The following research hypotheses were tested.

 $H_{01}$ : Profit level does not have a significant influence on dividend payout of NSE-quoted construction and allied firms

H<sub>02</sub>: Leverage does not significantly influence listed construction and allied companies' dividend payout at NSE

 $H_{03}$ : Liquidity does not have a significant influence on payment of dividends among quoted construction companies

H<sub>04</sub>: Firm size does not significantly influence dividend payout of construction and allied companies listed at NSE

#### 1.6 Significance of the Study

The present study is of benefit to various stakeholders. Firstly, managers from the listed construction and allied firms will benefit the most from this research since their prime objectives is to maximize the shareholder's wealth which will be shown in the dividend they distribute. Managers from the listed construction and allied firms will be empowered with literature that will help them elaborate a sound dividend policy and make a rational decision regarding the dividend to pay.

The outcomes of the study will be of benefit to policy makers comprising the government of Kenya and the Capital Markets Authority as well as NSE companies since they will assist them in formulating successful dividend payout strategies., having in consideration, how the same is influenced by profit level, leverage, liquidity and firm size. The policy makers and regulators will thus be equipped with empirical knowledge to enable them formulate informed policies and regulations.

Thirdly, investors are interested in getting a return on their investment. This study will help them in their choice on where to invest or not to invest. It will give them an insight on some of the decision that is being performed by the managers in terms of the return on their investment. The research will also be useful to investors when it comes to picking and developing stock portfolios based on dividend payment inclinations.

Fourth, scholars will gain from the investigation as future authors and academics who will be able to use the results as a foundation for future investigation. This study will add a pool of knowledge and will help scholars get an insight in the business world, how decision is made, which parameters they consider in making those decisions. As a result, the research will contribute to what is already known about payout ratio and its drivers.

Finally, yet importantly, this study will add value to companies listed at NSE and those who are not public in making their decision to distribute the dividend. Management of companies will be enriched with reliable parameters that should be applied in future to tackle the perennial trouble linked to Dividend payouts.

#### **1.7 Limitations of the Study**

The key limitation expected in the study was the ability to generalize the study findings to all construction and allied firms in the country, including the unlisted. This owes to the realization that listed and unlisted firms may be subject to peculiar factors to their respective natures that were not studied in this research. The study also collected secondary data, which lacked a first-hand perspective from the experience of practitioners in the listed construction firms.

#### **1.8 Delimitation of the study**

To address the limitation to generalization, the study generalizes the findings only to all NSE listed companies. To address the limitation of data to secondary sources, the study triangulated the data during analysis by enriching discussions with previous findings from primary research. In spite of these limitations, the study did not compromise the quality of the study.

#### **1.9 The Scope of the Study**

This study concentrated on construction and allied companies quoted at NSE owing to the dismal trends recorded in dividend payouts by construction companies from a 10-year review. The study collected panel data from the five NSE-quoted construction firms over a 10-year span from 2011 to 2020. This study focused on the mentioned variables above (profit level, level of leverage, liquidity, the firm size). The population selected for this study was limited to five constructions and allied companies listed at NSE only. Two of the 5 construction and allied companies are located in industrial area in Nairobi City County, including East African Cables Ltd and Crown paints Kenya PLC, 3 of them including Bamburi Cement Ltd, East African Portland cement and Athi River Mining are located in Athi River.

#### 1.10 Assumptions of the Study

This research was grounded on the following assumptions:

- i. Data would be readily available and accessible from the NSE
- ii. The secondary sources of data would have all the metrics used in the study, to measure variables
- iii. Data collected would be sufficient for data analysis
- iv. There exist other determinants of dividend payout, beyond the financial determinants explored in this study.

#### **1.11 Definition of Operational Terms**

#### Dividend

According to Divesh (2016), the dividend refers to the profit portion from a firm's net profit legally available for disbursement to shareholders. As such, dividend is a return on share capital paid to and subscribed by a company's shareholders.

#### Leverage

Leverage refers to utilization of borrowed capital or different financial instruments to grow the potential investment returns. It is also the quantity of debt utilized to fund a company's assets. A company with more debt compared to equity significantly is regarded as highly leveraged (Faruk et al., 2018).

#### Liquidity

Liquidity denotes the available funds that that can easily be used for expenditure or an investment. It also indicates a firm's capability to meet its obligations when due (Hafeez & Javid, 2017).

#### Firm size

Firm size indicates the level of scale economics a firm enjoys. Larger firms (Deudon et al., 2015) enjoy economics of scale, lower cost of production and more operational efficient activities.

#### **Dividend Payout**

Dividend payout refers to the implicit or explicit judgment of the Board of Directors with respect to the quantity of outstanding earnings (present and past) that ought to be distributed to corporate shareholders (Manon et al., 2015).

#### **Dividend Payout Ratio**

The dividend payout ratio is defined as the share of the total dividend amount paid out to shareholders in relation to a company's net income (Deudon et al., 2015). It can also be defined as the earnings percentage that shareholders are paid through dividends (Al Shabibi & Ramesh, 2016).

#### Nairobi Securities Exchange

Nairobi Securities Exchange refers to Kenya's principal securities exchange providing a platform that is automated for the trading and listing of different securities such as derivative securities, equity and debt. Through its company, Nairobi Securities Exchange offers settlement and clearing services for derivative securities related transactions. Nairobi Securities Exchange in addition acts as a principal counterparty in transactions that are derivative securities related (NSE, 2019).

## **Securities Market**

The securities market is a structured market for selling and buying corporate and other securities in accordance with certain well-defined regulations and rules (Pruitt & Gitman, 2016).

## **Construction Companies**

Companies established to develop a variety of facilities, properties, buildings, infrastructure, apartment, developments, motorway, roads among others, and/or produce materials used in construction projects (Muhammad et al., 2012).

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

The theoretical is review that was employed in conducting this research is presented in this chapter. It details an account on some of the literature and empirical review of other studies regarding dividends payout decision, and the conceptual framework and the operational framework.

#### **2.2 Theoretical Literature Review**

#### **Signaling Ttheory**

Ross (1977) introduced this idea, which states that stockholders consider dividends as signs of company's expected earnings. There is a presumption that corporate leaders will reduce or boost dividends as needed, whether the company is facing financial difficulties or expects to maintain a large dividend in the foreseeable. Investors interpret a decline or rise in payments as negative or positive news, and as a result, firm stock prices fall or rise appropriately. Increases in dividend payments are viewed as a positive indicator, while decreases are viewed as a positive criterion of a company's future income prospects, resulting in a decline or gain in stock values.

The signaling theory was proposed by Lintner (1956), upon realization that when dividend payments changes when a company's stock prices change. According to the proponents of the theory Modigliani and Miller, (1961), concerning capital markets that are perfect, in the real world, dividend offers an information leverage that can affect the stock prices. Additionally, Bhattacharya (1979) argued that dividends offer a signaling effect of the anticipated cash flows, whereby anticipated higher cash flows are indicated by a growth in dividends. According to

Escherich (2000), although a tax disadvantage exists for dividends, under these circumstances, companies would opt, under these conditions to pay dividends with a view to indicate positive signals to outside investors and shareholders.

According to Lintner (1956), business managers can use dividend payouts to communicate market information about their firms' value, based on the signaling hypothesis. Dividends provide a signaling evidence, and the marketplace uses dividend releases to assess a company's stock. In fact, buyers may fail to pay attention to dividends in particular, preferring instead to focus on deviations from firms' annual payment plans. Changes in dividend payout are viewed by investors as a sign of the company's future prospects. When management increases dividend payments, it is received favorably, and the share market responds favorably as well, whereas a decrease in dividend payout signals poor performance, and the share market responds favorably as a result.

More than three decades ago, plans of dividend payment was referred as a conundrum, attracting a myriad of empirical investigations and practitioner discourse with a view to demystify the dividend conundrum (Subba, 2015). Despite the fact that a slew of ideas has been advanced in the empirical literature to explain their predominance, dividends remain one of the most perplexing issues in corporate accounting (Kent et al., 2013). Various hypotheses exist to explain why companies would disperse or distribute their earnings as cash dividends. Agency problem, signaling and regulating costs of asymmetric information are among the motivations for dividend payout. Funding requirements, the flexibility to postpone a development, investor preferences, and the cost of external funds may all influence dividend payout (Dennis et al., 2017). Miller and Rock (1985) offer in their study that a corporation's dividend policy is fashioned to indicate prospects of earnings to investors. It was evident in their study that despite increasing growth, firms are willing to raise debt to finance growing dividends. Berkeley and Myers (2005) regard in their study, dividend cash flow as an indicative device among shareholders, where companies choose to relay a positive indicator to investors on the outside with a view to access capital and enhance reputation. According to Baker et al. (2006), signaling is among the imperative indicators used by executives in Canada to influence dividend policy.

Al-Malkawi (2017) studied signaling effects hypothesis on share price, investors can deduce information regarding a company's earnings in the future by signal from announcements on dividends, both with regard to the changes in and stability of dividends. Dividend cuts may be regarded as an indication that the company forecasts dismal performance, which will deal unfavorably with the share price. Managers possess information that is asymmetric implying that they possess some information, which outside investors' lack and this is of the implication that any action a firm takes, offers an indication to investors who are less informed. Empirical findings Koch and Shenoy, (2015) have demonstrated that when companies offer new common stock to accumulate finances, the per share stock value decreases. Should the requirements be met, the dividend increase announcements will cause the market to react favorably, and the opposite is true if the announcement is otherwise.

Since there is a likelihood that corporate executives will have richer information concerning the company's prospects in the future as compared to investors on the outside, they are in a position to leverage dividend changes as a tool to relay market information regarding a company's growth and future earnings. Investors on the outside may regard announcements on dividends as an indication of the corporate executives' evaluation of the company's prospects and performance.

Outside investors may perceive a rise in the payout of dividend as the company forecasting promising profitability in the future, and as such, the prices of the company's shares will receive a positive market reaction.

According to Black et. al. (1995), the association between dividends announcements and share price relies on the amount of information in the announcements as well as the extent to which information determines the expectations of the investors. For most public firms, announcement on cash dividend is a significant element for shareholder value maximization (Escherich, 2000; Keown et. al., 2012). According to Pettit (1972), the announcements of dividend pass on important market information, and dividend increases result in positive market reactions while decreases translate to negative market reactions indicated by notable stock prices reductions.

Aharony and Swary (1980) explored quarterly earnings announcements and cash dividends made on different dates within a quarter. The study found that in addition to the announcements on quarterly earnings, alterations in quarterly dividends offered market information. The study found that stock prices quickly respond to the announcement of dividends, which is in support of the semi-strong method of market efficiency hypothesis. Kane et al. (1984) proposed an anticipation model of earnings and dividends grounded on a formula determining what forms an unexpected change in earnings or dividends. The study concluded that earnings and dividend announcements influence stock price individually and significantly.

In another study, Bhattacharya (1979) explored a model that seeks to articulate why several companies opt to pay dividends regardless of a tax disadvantage. The study presumed that investors on the outside possess an imperfect information concerning a firm's information such as accounting and profitability is not adequately reliable in determining the firm's earnings. The

study concluded that if investors acquire desirable indicator that the company will in the future have greater value, they are ready to pay a higher tax rate. Dividend is therefore a helpful indicative device for external investors to evaluate a company's future profitability. Asquith and Mullins (1983) offered empirical proof in support of the theory. They assert that a growth in dividend payments appears to grow the shareholder's wealth.

Since a result, this theory is applicable to the amount of profit framework in this research, as it demonstrates how managers utilize annual dividend as a technique to send a positive signal to investors. The hypothesis underlies the link between profitability and dividend yield of NSE-listed building and associated firms, as building companies may disclose dividend distributions as a medium to promote profits, but the absence of disclosures may also imply poor result.

#### **Pecking Order Theory**

This Pecking Order theory, coined by Myers and Majluf (1984), opined that companies favor internal finance sources as compared to external funding. As such, the firms adjust their target ratios of dividend payout to suit their opportunities of investment even though payout ratios and dividends are adjusted gradually to changes in the degree of valuable opportunities of investment. Accordingly, Myers and Majluf (1984) intimated that in case external finance is necessary, companies are highly likely to give out first the safest security, in that they begin with debt followed by convertible then as last resort, equity (Robert & Kaiser, 2013).

The pecking order theory argues in support of low payout. It opines that when sourcing for funds required for capital project, resources internally generated are a priority. Compared to external funding, retained earnings are a less expensive source. Payment of dividend is discouraged as it adds to less expensive internal finance sources as compared to borrowing to finance expansion or even issuing equity. It thus proposes that firms that pay high dividends undergo slow growth (Dennis et al., 2017).

Pecking order theory is therefore suitable for this study, as it underpins how leverage influences payment of dividends among NSE-quoted construction companies. The study was used to determine whether construction companies listed at NSE opt to retain their profits for expansion and operational purposes in order to avoid or lessen external funding, hence the observed low payout.

#### **Bird in the Hand Theory**

Proposed by Gordon and Lintner (1963), the bird in the hand theory posits that investors opt for present dividends as compared to capital gains. They argue in their study that present dividends serve to resolve investor uncertainties about the future. In consideration of investors' risk aversion, they opt for current to future dividends. As such, near dividends are in comparison to future dividends discounted at a lower rate. As a result of this, with high payout ratios, equity costs reduce. Stock prices grow as shareholders acquire more cash dividends as they consider the stock as more desirable therefore raising the value of common stock while decreasing the cost of capital. Coined by Lintner (1956) and advanced by Gordon and Lintner (1963) and Al-Malkawi (2017), the Bird in Hand theory opines that in an environment of information asymmetry and uncertainty, dividends are differently valued in comparison to capital gains (retained earnings). Across the plethora of studies in support of the notion that company values are positively correlated to its dividends, the concept of "bird in hand" is used.

Keown et.al. (2012) in their study concluded that based on the assumption that compared to two in the bush, a bird in the hand is more worthy. Compared to capital gains, current dividends are more predictable since the market forces and not managers determine the stock prices. Owing to future cash flow uncertainty, investors will often favor dividends at the expense of retained earnings. Gordon and Lintner (1963) studied three probable causes of investors' decision to buy a particularly stock, which is to get the earnings, to get dividends and to get earnings and dividends. Using different models of regression, the author estimated the respective strengths of the causes sampling four industries; foods, chemicals, machine tools and steels for a four-year period from 1951 to 1954. Results indicated that compared to retained earnings, share price are more significantly impacted by dividends. The author argued in addition that the retained earnings effect on the anticipated rate of return on a share owing to the indecision linked with future earnings.

Fisher (1961) found that retained earnings and share prices are impacted heavily by dividends. This is owing to the high extent of indecision associated with dividends and capital gains that are not presently paid. In comparison to capital gains, present dividends are more predictable because the stock price is influenced not by executives but by market forces (Gordon, 1963; Keown et al., 2012). Dividend model is grounded on various assumptions, that financing that is external and that the company is wholly financed by equity. This is of the implication that all investment by the firm funds is financed with retained earnings, that cost of capital, retention ratio, and internal rate of return is continuous and that the firm has an eternal existence. The fundamental Gordon's model assumptions grounded by the notion of the obtainable futuristically vis-a-vis the obtainable presently. This is based on the uncertainty concerning futuristic dividends and capital gains gets higher the more distant the future is (Jain & Khan, 2008). Whereas in the future capital gains could offer a higher return compared to the current dividends,

guarantee lacks as to whether the investor will, owing to the high extent of uncertainty accrue higher returns (Gordon & Lintner, 1963).

Khan et al. (2017) asserted that investors are unwilling to invest in companies, which does not pay the dividend. Therefore, an investor would be more accepting to pay a greater amount for companies, which pay present dividends. On the contrary, the investor is likely to leverage a greater rate of markdown from organizations not paying present dividends, with a view to rebate the incomes and therefore the companies' worth would be lower compared to companies that pay present dividends. This implies that the rate of discount gets higher as the retained earnings in the firm rises. On the other hand, firms that pay present dividends have a lower retained earnings level that contributes to lower rates of discount that contributes in turn to a great firm value. Towards the bird in hand theory, Lintner's (1956) main assertions are grounded on most companies being traditional in their financing policy and therefore dividend payments are grounded on an optimal ratio of payout. According to Myers and Bacon (2004), the main contributor to deviances outside of the optimum fraction of payout because of firm's earnings variations in the, and payment of dividends ought to worsen if the profit increases proportionately.

Pruitt and Gitman (2016) examined the dividend features of listed firms on the KSE and found that companies' payout decisions are influenced by past dividends as well as current earnings. The study also discovered that corporations have lengthy dividend targets based on their potential to earn. Al-Malkawi (2017) used a company panel data model of all companies traded on the Amman Stock Exchange from 1989 to 2000 to analyze the precursors of dividend policies with a focus on Jordan. The survey's findings show that an industry's dividend policy is
considerably and favorably influenced by its size, seniority, and revenue, whereas leverage has a favorable impact on dividend policy.

According to Friend and Puckett (1964), the dividends of the firm is also affected by indecision concerning future earnings. If projected future risks are greater compared to risks in the present, the ratio of payment of dividends may be lowered by the firm with a view to prevent lowering profits in the future. Arguing against the proposition, Keown et al. (2012) said that the rises in present dividends do not lower the company's riskiness; the opposite direction does not work. Since if a rise in payments of dividends is made, new stocks have to be issued with a view to raise the required capital. As such, a dividend payment only shifts the risk to the new shareholders from the old. Keown et al. (2012) asserted that still exists a lot of financial institutions and individual investors who regard bonuses as significant.

Therefore, this theory is a good fit for this study. The theory was employed to understand whether and how construction companies listed at NSE consider paying out dividends in order to raise the value of common stocks and how the same is reflected in both the liquidity and firm size among construction and allied companies listed at NSE. The theory will therefore help in understanding the extent to which liquidity and company size influence the payment of dividend of NSE-listed construction companies.

### **Theoretical Framework**

The foregoing theories can be conceptualized as influencing dividend payout decision as illustrated in Figure 2.1. While signaling theory Shows the link between income and dividends distribution of NSE-listed construction and related businesses, while pecking order theory is particularly instrumental in espousing why the construction companies listed at NSE announce

low payments. The Bird in the hand theory further helps in understanding the extent to which liquidity and company size influence the payment of dividend of NSE-listed construction companies.

# Figure 2.1 Theoretical Framework



Source: (Author, 2021) 2.3 Empirical Review

# **Profit and Dividend Payout**

Kisaka et al. (2015) looked into the relationship between dividend distribution and earnings in Kenyan commercial banks, focusing on the NSE's top ten continually listed firms. To demonstrate the link with earnings prior taxes and payout ratio, the researchers used both Karl Regression and correlation analysis. Earnings and dividend have a substantial positive link, according to the research.

With reference to enterprises registered on the Ghana stock exchange, Amidu and Abor (2006) investigated the factors influencing dividend payout strategies. The study found strong connections among cash inflows, productivity, tax, and dividends payment ratios using Ordinary Least Squares (OLS) to forecast regression. Industry value, corporate holding, volatility, development, and payout ratio all had positive correlations. Successful companies pay greater

dividends; firms with more working capital pay more profits; and corporations with a higher economy value pay higher dividends because they have greater investment choices.

With respect to 58 factories listed on the Indonesia Capital Market from 2013 to 2015, Arfah et al. (2017) aimed to examine the impact of corporate governance ratio and earnings on both firm valuation and dividend policy. The findings reveal that productivity has a strong and positive impact on dividend payout ratio and value of the firm, and that mediation dividends have an insignificant but positive impact on the profitability-firm value relationship.

Al-Najjar (2010) investigated dividend payout and its drivers by sampling enterprises in Jordan and found that success has such a large impact on dividend policy that it impacts all companies, irrespective of size or seniority. The study also found that it has an impact on both advanced and emerging economies. A further in-depth investigation of Gulf Cooperation Council (GCC) countries revealed a strong positive link between dividend payout trends and revenue.

Malietso (2017) investigated the factors that influence dividend payment in Kenya using NSE public manufacturing companies from 2007 to 2016. Profit had a p-value of 0.003, which is less than 0.05, meaning that it has a substantial impact on how manufacturers pay dividends to investors, according to the results of this study. In order to avoid liquidation, the study indicated that management must also undertake proper research, but also engage in beneficial investments while having to borrow.

Aftab et al. (2017) looked at the factors that influence dividend payment ratios in listed Pakistani industrial companies between 2003 and 2012. Other factors, such as overall sales, current liabilities, working capital, and tax, are found to influence dividend distribution decisions in addition to business profitability. According to Aftab et al. (2017), working capital, taxation, and

competitiveness all have a substantial impact on dividend payout ratio, although debt to capital and revenue growth do not.

Ahmad et al. (2017) studied the association between dividend payout ratio and firm profitability in Pakistan with reference to energy and textile sectors. The results revealed that a firm's next year earnings are positively impacted upon by dividend payout ratio. The study concludes that either the textile or the energy sector dividend has significant and positive influence on profitability and that the earning per share of both sectors is positively affected by dividend.

Sampling 542 companies listed on American Express (AMEX), New York Stock Exchange (NYSE) and National Association of Securities Dealers Automated Quotations (NASDAQ), Kania and Bacon (2017) looked into the elements that determine whether or not a company pays a dividend. The investigation found that growth, revenue, cash, volatility, expansions, and controlling all have a substantial impact on dividend dividend yield using Estimation technique. With regard to industrial enterprises listed on the London Stock Exchange, Hermuningsih and Wardani (2018) investigated the relationship between dividend policy and productivity in the United Kingdom. According to the findings, there is a positive and significant relationship between a company's earnings quality policy.

#### **Liquidity and Dividend Payout**

Jiang et al. (2017) investigated how dividend payouts are affected by stock liquidity among companies listed in China during the period, 2000–2014, and reported a positive association. The study further reports that the positive association between dividend payouts and stock liquidity is more distinct when the environment of information is impervious, and when there is severe conflict between minority investors and controlling shareholders. Further, firms with low stock

liquidity enjoy more favorable market reactions to regulatory stipulations necessitating dividend payouts, indicating that regulations and legal provisions are alternatives to stock liquidity.

Imran (2018) investigated the variables that influence ideas for dividend distribution based on engineering companies listed on Karachi Stock Exchange in Pakistan, from the period 2006 to 2015. Results showed that firm liquidity was not significantly associated with dividend payouts. Banerjee et al. (2007) conducted a study by using US sample and concluded that companies with high stock liquidity are less probable to pay cash dividend, consistent with traditional clientele view that stock liquidity and dividend payout are correlated positively. However, the argument does not cater informational impact of liquidity on dividends payouts. It is rather apparent from the findings that stock liquidity decreases the information irregularities between outsider investors and insider management producing new information as a result of trading. Stock liquidity may help well-informed parties to camouflage the secret information, which is not imitated in price in informed trading model.

Baker et al. (2006) examined managers' perspectives on plans of dividend payment, sampling 121 Oslo-quoted firms. The study found that the level of expected and current future earnings, earnings stability, liquidity constraints and financial leverage have a significant influence on dividend policy among Norwegian firms. Glen et al. (2016) studied the association between dividend policy and behavior in emerging markets. The study assessed firm internal attributes, which may influence the liquidity and found that there exists a positive linkage between stock liquidity and company size. The study also uncovered that asset liquidity is a significant attribute influencing stock liquidity and that there exists a positive and significant association among the asset liquidity and stock liquidity and the positive effect is greater in the event of low growth

prospects. In this study, we therefore hypothetically say that there is a significant and positive impact of liquidity on dividends payout decision as a determinant.

Hafeez and Javid (2017) studied the determinants and dynamics of plans of dividend payment among quoted companies that are not financial, with reference to Karachi. Results indicated that quoted companies that are not financial in Pakistan depended on both current earnings per share and past dividend per share to determine their dividend payments. Compared to prior dividends, it was found that bonuses are more likely to be delicate to present profits. The companies that are listed and not financial with low ratios of payment targets and great adjustment speed indicate their unpredictability in flattening their bonus payouts. The study further demonstrated that firms that are profitable and possessing more steady net earnings could pay larger dividends as they can afford larger free cash flows.

Gul et al. (2017) studied the factors that influence dividend policy among firms quoted on Karachi stock Exchange with reference to 100 non-financial and financial firms between the year 2007 and 2009. Results obtained using the panel data ordinary least square regression revealed that size, earning per share, leverage and liquidity have a positive effect on dividend, while profitability and growth are found to not significantly influence the dividend policy.

Jumah and Pacheco (2018) surveyed 132 American manufacturing companies between 2004 and 2013. The study was focused on a comparison of the features of the firms, which do not, pay cash against firms that do adopt a dividend policy. To verify financial variables, the regression model with t-test statistic was used to analyze data. It was demonstrated in the output of the analysis that firm size, profitability ratios and liquidity ratios are main factors that influence the companies' dividend policy.

Anil and Kapoor (2018) set out to empirically analyze the factors influencing the dividend payout ratio of listed companies in India, with a focus on the Indian Information Technology sector. Multiple linear regression analysis and the correlation matrix was constructed were used for the seven-year period from 2010 to 2016. It was revealed in the study that sales growth, market-to-book value ratio, cash flows and corporate tax do not elucidate the IT sector's dividend payment pattern. Significant influences were found in beta (yearly changes in profits) and liquidity.

#### **Leverage and Dividend Payout**

Al-Twaijry (2017) studied the association between payout ratio and dividend policy with reference to the Kuala Lumpur stock exchange covering the period 2011 to 2015. Sample 300 firms, the study used Pearson correlation. The aim of the study was to establish the variables with a predictable influence on payout ratio and on dividend policy in a developing economy. Aspects including cash available for every share, net earnings for every share, book value for every share, age and firm size, future and past earnings as well as past dividends were discussed. From the Kuala Lumpur Stock Exchange, the study developed and tested eight hypotheses. The findings indicated that both future and pasts prospects affected current dividends. Company's future earnings growth was found to not be strongly affected by payout ratios, but were positively and significantly correlated the company's leverage.

With a focus on Gulf Co-operation Council (GCC) countries, Al-Kuwari (2016) explored the dividend policy antecedents. With reference to listed on the GCC country stock exchanges, the research assessed the influences of dividend policies for non-financial firms. The research sampled 191 companies that are not financial covering the period 2009 to 2013. Using a random

effect Tobit regression, seven hypotheses relevant to agency cost theory were assessed. It was established in the study that the companies do not employ a long-run target dividend policy and that they pay dividends with the purpose of decreasing the agency problem and that dividend policy for listed firms in GCC countries are altered frequently. It was concluded in the study that dividend payments are positively associated to the leverage ratio and directly and strongly associated with firm profitability, firm size and government ownership.

He and Li (2015) focused on China's stock market, using data from listed companies covering the period 2009 and 2013 in their examination of factors influencing the companies' plans of dividend payment. The study used a logistic regression model with cross-sectional and time series approach. The study concluded that the most significant antecedents of plans for dividend payment among companies in China was features of organizational structure. The study found that overall, profitable, highly liquid, low leverage, greater stakeholder protection companies, and state-owned companies before being quoted and carrying out successive equity have a greater likelihood of cashing and paying bonuses.

Marfo-Yiadom and Agyei (2016) conducted a study on the influences of dividend policy of Ghanaian banks. The study analyzed time-series data over the five-year period 2009-2013 inside of the context of random and fixed impacts practice. The findings of the study showed that collateral capacity, profitability, variations in bonuses and debt were the factors with notable positive influence on Ghanaian banks' dividend policy. The study found on the other hand that age and growth significantly and positively influenced bank dividend policy. Dividend policy was positively associated with cash flow albeit the result not being statistically significant. The major influences banks' dividend policy was consequently, leverage, profitability, changes in dividend, age, growth and collateral capacity.

Al Shabibi and Ramesh (2016) found in their study conducted in the United Kingdom that no significant relationship exists between a company's dividend payouts and leverage. This is in contrast to Al-Kuwari's (2016) study, which found a positive and strong association between dividend payout ratio and leverage. The expressed total assets/total debt make up the debt ratio, which is the measurement of leverage Debt to equity ratio, shows the proportions in which creditors finance a firm relative to shareholders. The wider picture of a firm's liabilities reflects the debt ratio.

Alala et al. (2013) analyzed payment determinants of listed local firms that are not financial in nature and found that firm growth, current earnings and return on equity had a considerable impact on dividend distribution, even when moderating characteristics like market risks and volume were taken into account. Amarjit et al. (2010) on the other hand studied the determinants of dividend payout ratios with reference from the United States and found that although all non-financial enterprises were merged, some industries, such as manufacture, face unique operating constraints that affect how they pay dividends when contrasted to the service industry. Faruk et al. (2018) investigated the factors that influence dividend payments in the Turkish stock market and discovered that internal funds, taxes, and structure of the board all influence dividend payments.

Gul et al. (2017) explored how various firm specific factors affected companies' dividend policy, sampling 18 commercial quoted banks over the period of 2010-2015. The predictor variables included leverage, profitability, risk, firm size and firm's growth while dividend policy was the dependent variable whereby Pearson correlation was employed. The findings demonstrated that when the outcome variable is dividend payout ratio and dividend yield, the predictor variables firm size, profitability and growth recorded positive coefficient of correlation. There was

however, a strong linear association between dividend policy and firm size but dividend policy was weakly and positively correlation with the variable growth rate. In contrast, dividend policy recorded an inverse linear relationship with the variables leverage and firm risk.

Vengesai and Kwenda (2018) found in their study a notable linkage between the ratio of earned capital and bonus payment decision to firm size, previous dividend payment history, and profitability of the company, total controlling capital, cash in hand and leverage growth rate. As is the case with retained earnings, dividend payment has a management opportunity that is hidden, raises the money managers' control over the retained earnings, which could be employed for better opportunities for investment but could also be distributed absent any appropriate monitoring. Leverage further determines a company' dividend behavior, given high level of leverage, meaning that it is relatively riskier to invest in the firm in terms of cash flow.

Ajayi et al. (2018) examined how dividend payment behavior is influenced by leverage. The purpose of the study was to assess how dividend payment pattern is influenced by leverage. Findings indicated that 44 firms from five various sectors with regular history of dividend payment were in the sample included. The study used a time-series data running for 6 years from 2011 to 2016. Results further revealed that leverage significantly and positively affects sampled firms' pattern of dividend payment.

Results also showed that relative to other sectors, in sugar and textile industries, the effect of leverage on dividend distribution behave differently. It was further revealed in the study that, the value of a firm relies solely upon the associated risks and the earning power its assets. Leverage is the most factor dominant compared to all other factors that influence corporate dividend policy. The study concluded that, the pattern of dividend payment impacts leverage positively

among the sampled firms. It was hence recommended that, top executives ought to deliberate diligently when making a decision about devising the dividend policy and the employment of debt in capital structure after deciding upon the financial mix.

#### Firm Size and Dividend Payout

Ardekani et al. (2016) investigated in their study, how share price volatility was impacted by dividend policy in the Malaysian Stock Market. From 142 listed consumer companies, a sample of 84 was selected in the Bursa Malaysia main market. The study measured dividend policy with the use of payout and dividend yield. Time-series data was gathered over the span between 2010 to 2014. A number of control and predictor variables were employed a including growth, debt, earning volatility, firm size and leverage. The results of the study showed a notable and inverse association between both share price volatility and payout ratio with dividend yield. Among the control variables of the study, earnings volatility had a positive and notable linkage while firm size was positively and significantly associated.

With reference to Karachi stock exchange, Bashir et al. (2016) sought to assess the reaction of share prices on dividend announcement among the firms listed. The study applied regression analysis to investigate the relationship of dividend announcement and share price reaction as well as firm specific factors on share prices. The results revealed a positive and notable association between announcement of bonuses and share prices. The company-specific attributes which included size, leverage, liquidity and dividend yield registered mixed results where firm size was positively linked while leverage, liquidity and bonus yield had a positive and notable linkage.

Salari et al. (2017) focused on quoted companies that are not financial in their assessment of volatility of stock prices in Karachi. The study surveyed 35 quoted firms grounded on a timeseries for years 2004 to 2014. Dividend yield was the main descriptive variable and the controlled variables included earning volatility, size of the company, growth and earnings for every share. Results of the research indicated a notable and positive association between both earnings per share and dividend yield and the price volatility. There was in addition, a significant positive association between growth of the asset base and firm size price volatility.

Salari et al. (2017) investigated the impact of strategy of dividend payment on stock value volatility in Tehran over the span of 2004-2015. Strategy of dividend payment was gauged using ratio of bonus payment and bonus yield. Results of the study showed a notable and inverse association between share price volatility and ratio of bonus payment. A positive and notable linkage was recorded between earning volatility, size of the company, growth and debt; both debt and size recorded with value volatility.

In India, Biswajit and Kailash (2020) studied the antecedents of strategy of dividend payment and found a notable and inverse association between size and dividend Payout. The findings show that large-sized firms prefer less dividend payment and therefore the study concluded that size is positively associated with dividend payout. In contrast, Anupam (2014) studied UAE firms for a five-year period from 2005 to 2009, deduced that firm size is positively, and significantly associated with the firm's dividend payout in the UAE. Similar to the previous studies, the study also deduces that larger firms, as compared to smaller firms, pay out more dividends. The study also concluded that large firms are less dependent on the internal funds and therefore have easier capital market access, hence the greater ability to pay the dividends. Habib et al. (2018) further focused on quoted non-financial companies quoted on Karachi Stock Exchange to explore the factors influencing dividend payout. Results of the study revealed that firm size significantly determines the bonus payment. Accordingly, the research concluded that firm size exerts a notable role to play in influencing dividend payout. The observed T-Statistics value was also greater in comparison to the tabulated statistics strengthening the level of statistical of significance. As such, a 1% change in the size firm, would translate into 5% dividend payout change. The results indicated that there exists a positive and significant association between dividend payout and firm size.

In another related study, Hafeez and Javid (2017) assessed the association between dynamics and antecedents of dividend payment strategy with reference to nonfinancial listed firms in Karachi stock exchange in Pakistan. Findings indicated a notable and inverse association between size and dividend payout. This result further revealed that large-sized firms pay fewer dividends. Large firms, owing to easy access to credit from financial institutions, have extra advantage against their counterparts (smaller firms) in a number of ways in spite of operating in comparable market conditions. To begin with, quick growth owing to their ease of obtaining funds in this regard without challenges which will certainly yield greater returns if invested in noble projects that are capable of repaying the credit and play a role in the inclination on drafting of the strategy of dividend payment. It is against this backdrop that numerous studies have associated firm size to contribute significantly to dividend payout.

Mori and Naoya (2016) studied the effects of tax clientele on dividends under intertemporal choices of consumption and established that firms that are larger tend to have payout ratios that are higher compared to small firms, large firms depend less on internal funds and therefore have easier capital markets access. A link between company size and cash dividend ratio was

therefore hypothesized. The study further argued that firm size influences the level at which it enjoys the economics of scale. Larger firms enjoy more efficient operational activities, lower average cost of production and enjoy economics of scale. As such, larger firms yield higher returns on assets. Large firms further enjoy more diversity compared to smaller firms and possess more organizational slack as well as higher market power. Size of a firm has been regarded as a factor influencing a firm's strategy of dividend payment.

#### 2.4 Summary of Literature Review

This chapter examines the study problem is actually theoretical basis, empirical review, and conceptual model. Under the theoretical framework, the study describes and identifies relevant theories. This section dives into the concepts and theories that explain the research. Within the bounds of the bounding standards, the theories are addressed with the goal of understanding, predicting, and explaining events, as well as, in most cases, extending and challenging current knowledge.

The research evidence was used to evaluate past scholarly work in relation to the study's aims. As gaps in knowledge are uncovered, the primary study factors have been investigated in relation to prior contributions by scholars. Lastly, the chapter goes on to show a graphical representation portrayal of the nexus relationship between the survey's topics. In this respect, research evidence is written in such a way that other investigators may comprehend exactly what was investigated and discovered in a certain study so that they can duplicate the research to see if the results are replicated when repeated.

A proposed model has also been offered, which identifies and maps out relevant variables directing the investigation and indicates what the researcher hopes to learn from their

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investigation. The proposed model was used to describe the study's many variables and show how they were related to one another. The proposed model was also utilized to show how the gaps were filled and the assumption was evaluated.

While this study presents a critical literature review of strategic planning, organizational capabilities, stakeholder involvement and service delivery, it was solely based on secondary data. As a result, whereas the review of the literature yielded mixed results, there was no effort to measure the exact interrelationship among these variables or quantify the effectiveness from specific significant personalities or employees on the ground through personal interviews and questionnaires. As such, a similar study ought to be conducted adopting a primary data approach for actual respondent perspectives.

## **2.5 Conceptualization**

The research on antecedents of Dividend payout among the construction firm quoted at the NSE, proposes the following conceptual framework. In this study, the determinants are the independents variables, while the Dividend payout is the dependent variable.





As portrayed, the independent variable, determinants of dividend payout, was indexed by 4 variables, including: profit level, liquidity, leverage and firm size. The independent variables are conceptualized as having a direct effect on dividend payout decision, which forms the dependent variable.

## 2.6 Operationalization

## Figure 2.3



**Operational** framework

As portrayed, the independent variable, firm size, was indexed by two sub-scales, which include total assets and number of outlets, while leverage was measured by three sub-scales including interest coverage ratio, Debt to equity ratio and debt to capital ratio. The third independent variable, liquidity, was measured by three sub-scales including cash total assets, current liabilities and current assets. Four sub-scales including Net income, P/E ratio, Earnings per Share (EPS) and Return on Investment (ROI), on the other hand measured profit level. Finally, payout ratio measured the dependent variable, dividend payout decision.

#### 2.7 Research Gap

The foregoing review presents studies pertinent to the linkage between dividend payout and its various determinants. For instance, Wambui (2017) examined all public different companies' payment policies and how they impacted their share returns, finding that dividend policy has a favorable impact on stock return of domestically listed enterprises. Nyangenya (2017) studied the association between stock performance and dividend payout among service and commercial companies that are listed and established a notable linkage between dividend payout and stock performance. Nyangau (2016) concentrated on listed banking firms and found investment decisions, company earnings and growth opportunities influence that implementation.

Kisaka et al. (2015) looked into the relationship between dividend distribution and earnings in Kenyan commercial banks, focusing on the NSE's top ten continually listed firms and found that earnings and dividend have a substantial positive link, according to the research. Malietso (2017) investigated the factors that influence dividend payment in Kenya using NSE public manufacturing companies from 2007 to 2016. Profit had a p-value of 0.003, which is less than 0.05, meaning that it has a substantial impact on how manufacturers pay dividends to investors, according to the results of this study. Anil and Kapoor (2018) on the other hand empirically analyzed the factors influencing the dividend payout ratio of listed companies in India, with a focus on the Indian Information Technology sector, while Faruk et al. (2018) investigated the factors that influence dividend payments in the Turkish stock market and discovered that internal funds, taxes, and structure of the board all influence dividend payments. Ardekani et al. (2016) investigated in their study, how share price volatility was impacted by dividend policy in the

Malaysian Stock Market. The results of the study showed a notable and inverse association between both share price volatility and payout ratio with dividend yield. In India, Biswajit and Kailash (2020) studied the antecedents of strategy of dividend payment and found a notable and inverse association between size and dividend Payout. The findings show that large-sized firms prefer less dividend payment and therefore the study concluded that size is positively associated with dividend payout.

The available literature richly acknowledges immense contributions done by researchers on this subject matter (Biswajit & Kailash, 2020). None however explores listed construction companies particularly with a focus on leverage, liquidity, firm size and profit level and the extent to which each influences dividend payout hence the knowledge gap warranting this study. This study has further narrowed its investigations specifically on dividend payout determinants on the NSE.

### **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

## **3.1 Introduction**

In this section, the study delves into the research methodology and methods adopted in the design of the study and instruments of data collection, the population and sampling procedures, the gathering of data, the techniques employed in the analyses of the gathered data as well as how the study ensured validity and reliability in the instruments of data collection.

### **3.2 Research Design**

Creswell (2014) defines research design as a procedure and plan for an empirical study that entails the broad assumptions to detailed techniques of gathering and analyzing data. This study adopted a descriptive design because the study sought to articulate the association between the independent and dependent variables. Accordingly, Babbie (2015) observes that a descriptive research design describes the relationship existing between two or more variables. Similarly, Kumar (2011) offers that by defining the qualities of the interest factor circumstances, descriptive survey design is used to provide an accurate description of the population, scenarios, and occurrences. As such, the study adopted the descriptive research design in order to describe the association between the study variables. The variables under study included dividend payout was the dependent variable; and profit level, liquidity, leverage and firm size as the independent variables.

### **3.3 Target Population**

Kothari (2004) defines a target population as the collective of all individuals or entities of a hypothetical or real set of objectives, events or people to which a researcher sets out to

generalize the findings. According to Tashakkori and Teddlie (2010), a population comprises all units, individuals or elements for which the findings will be generalized and from which a sample representation is taken for examination in detail. This study targeted five constructions and allied firms (Appendix IV) quoted on NSE in Kenya. This owes to the dismal trends recorded in dividend payouts by construction companies from a 10-year review.

### **3.4 Data Collection**

The quantifiable nature of the research factors, whose information is available in yearly financials, necessitated the use of secondary data in this study. Mertens (2010) defines secondary data as previously gathered documents and under consideration to be reused for new questions, for which the data was not originally intended. In this case, they include financial books, profit and loss account, balance sheets, among others. Panel data analysis was used. According to Kothari (2004), longitudinal data or panel data, are recurrent over time observations for the same set of cross-sectional units (countries, firms, individuals, states, or portfolios) and have been used widely in finance and economics. They often deliver insights and information unattainable in cross-sectional or time-series data. Panel data for example, have the capability to control individual unobservable specific effects, which could be associated with explanatory observed variables, therefore ensuring consistent approximation for strictures of interest. The study used panel data for a 10-year period from 2011-2020 for a wider data pool to enable the attainment of a normal distribution for purposes of establishing any statistical association among the study variables. It was also timely to use the 10-year timeframe, given that some of the registered construction businesses had not paid for up to four years. Data was obtained by the researcher from both the NSE website and individual listed construction companies' websites and filled as per the secondary data collection schedule.

#### **3.5 Data Analysis**

The study used descriptive statistics including frequencies, standard deviations and means to analyze the collected data. The study also used graphs, charts, frequencies and percentages to present the data. The mass of raw data collected was organized systematically in a manner that facilitated analysis. The raw data was edited and cleaned to enable analysis of quantitative data. The analysis employed both inferential and descriptive statistics with the aid of the Statistical Package for Social Sciences (SPSS) version 27. Descriptive analysis involves the use of minimum, maximum, means and standard deviation in order to show the central tendencies and dispersion in the data. Regression and correlation analytics were utilized in inferential computation. The following multiple linear regression model was used to test the hypotheses by determining whether the model coefficients are statistically significant:

 $Y = \beta_{01} + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_4$ 

Where;

Y= Dividend payout

B = Constant

 $\beta_1, \beta_2, \beta_3, \beta_4$  = Regression Coefficients (Beta Coefficients)

 $X_1 = Profit level$ 

 $X_2 = Liquidity$ 

 $X_3$ = Leverage

X<sub>4</sub>= Firm Size

e = Error term

The study opted for a multiple regression analysis as it allows for the assessment of the strength of the association between predictor variables, an outcome variable, and the notability of each predictor to the association, keeping at constant, other predictors (Kothari, 2004). The linear regression analysis (R) was used to estimate the level to which the variability in payout ratio was described by the variability in financial factors influence enablers, while t was used to calculate the extent whereby the variance in payout ratio was discussed by the variability in financial factors influence enablers. F-statistics were also calculated at a 95 percentage confidence level to see if there was a significant association between financial factors and NSE registered businesses' cash dividends. The results are present in tabular forms and graphically for visual impression and ease of interpretation.

## Variables and Their Measurement

#### A. Measuring Profitability

A company majorly exists for the main reason of making the most of shareholders' wealth. As such, at any one point, a firm aims at profit maximization (Howells & Bain, 2007). The most significant aspect in a firm's financial statement is profitability and it has broadly utilized in previous researches with a view to assess the association with the firm's ratio of dividend payout (Ochieng, 2016). In this study, the price earnings ratio (P/E was used to measure profitability.

### **B.** Measuring Firm Size

Firm size has been measured using different parameters, including sales, employment, capitalization and assets. The company's total asset was utilized in this study to assess firm size. This parameter has widely been utilized by scholars in previous studies (Gill et al., 2011).

Size = Fixed assets + Current assets = Total Assets

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## C. Measuring Liquidity

Liquidity has been measured in previous studies by use of Current Ratio (Al-Kuwari, 2009). As such, in the present study, liquidity was assessed by dividing current assets by current liabilities.

### **D.** Measuring Leverage

In the present study, leverage was assessed by the debt ratio articulated as total debt divide by total assets. According to Li et al. (2010), debt ratio denotes the wider picture of firms' liabilities. It particularly shows the proportions at which a firm financed by shareholders relative to creditors. In this study therefore, as per following formula, the debt-to-equity ratio was acquired by dividing long- and short-term liabilities by total assets.

## **E. Measuring Dividend Payout Ratio:**

This denotes the proportion of available net income for shareholders, obtained by total dividend divided by net profit (Angelina, 2019).

Dividend payout ratio= Total Dividend paid/Net Profit

## **3.7 Test of Regression Assumptions**

### **Test for Outliers**

An anomaly is a data point that deviates from the models while the remainder of the data falls within the range and appears remote from the rest (Collis & Hussey, 2009). In statistical analysis, identifying outliers can contribute to the identification of truly surprising information. Following the criteria, the data was evaluated to discover the prevalence of multivariate outliers in this investigation (Collis & Hussey, 2009). Mahalanobis distance was used to identify multivariate outliers (D2). If the likelihood associated with a case's D2 is 0.001 or less, it's considered an outlier (Collis & Hussey, 2009).

### **Test for Normality**

Both numerical statistical tests and visual assessment of plots and graphs were employed in testing for normality. To this end, the Shapiro-Wilk test, kurtosis and skewness were performed. The Shapiro-Wilk test is better for small sample sizes of fewer than 50, but it can also work for sample sizes as large as two thousand, whereas Kolmogorov-Smirnov is employed for sample sizes more than two thousand (Collis & Hussey, 2009). In Shapiro-Wilk test, the threshold for normality is 0.05. As such, values greater than 0.05 indicate normality. The Shapiro-Wilk test was used to determine the normality of populations in this investigation.

#### **Multicollinearity Diagnostics**

When there is a strong correlation among two or more independent variables, as demonstrated by the correlations, and the result is 9.0 or higher, it is called multicollinearity (Creswell, 2013). To avoid multicollinearity, the researchers used the centering of predictor factors before computing correlations. The Variance Inflation Factor (VIF) whose acceptable limits range from the values of -10 to 10 (Collis & Hussey, 2009) assessed multicollinearity. To further confirm that there is no Multicollinearity, tolerance values was checked to ensure the values are above 0.1, which is the accepted standard.

#### **Homogeneity of Variances**

The Levene measure was employed to check for variance homogenization as it verifies the equality of variance in the samples (Collis & Hussey, 2009). In this study, Levene's test was used to test the null hypothesis that there are equal variances in the data with the acceptable threshold of (p > .05).

### **Linearity Diagnostics**

The Analysis of Variance (ANOVA) test was employed to test for linearity, which calculates both the nonlinear and linear elements of a pair of variables. According to Saunders et al. (2012), "if the value of significance for the linear component is below 0.05, linearity is significant." It assumes that there is an association between predictor and outcome variable in a given study.

## **3.8 Ethical Consideration**

According to Saunders et al. (2012), research ethics concern the appropriateness of a researcher's behavior with regard to the respondents' rights. In the present study, confidentiality of information was the main ethical concern. To address this concern, researcher assured participants that the collected data would be addressed in a manner that is confidential. Before carrying out the study, a recommendation letter from the Kenya Methodist University and a research permit was sought from the NACOSTI.

#### **CHAPTER FOUR**

## **RESULTS AND DISCUSSIONS**

## **4.1 Introduction**

The research set out to determine the influence of determinants of Payment of dividend among NSE-quoted companies (case study construction companies). The study sought to more specifically determine the influence of the profit level, leverage, liquidity and firm size on the Payment of dividend among NSE-quoted construction and allied firms, which informed the corresponding hypotheses. In the present chapter, both inferential and descriptive analyses are presented. Mean, standard deviation, mminimum and maximum values are presented under descriptive statistics while correlation and multiple regression are presented under inferential statistics.

#### **4.2 Descriptive Statistics**

The research looked at the descriptive analytics of the studied variables, that is profitability, measured by price to earnings ratio; leverage, measured by long term and short-term liabilities divided total assets; liquidity indicated by the current ratio; firm size measured by the total net assets; and payment of dividend measured by the payout ratio. The study utilized time-series data observations over a ten-year period running from the year 2011 to 2020. The maximum, minimum, standard deviation and mean values were established as indicated in the following tables.

## Profitability

The study sought to determine the influence of the profit level on the Dividend payout for NSEquoted construction and allied firms. To this end, the study collected data on profitability from the various participant firms measured by price to earnings ratio. Whereas the data transformation process for price to earnings ratio would require dividing share price by earnings per share, the same was readily obtained from the respective companies' annual financial reports. The descriptive statistics for profitability are as offered in Table 4.1.

## Table 4.1

## Descriptive Statistics for Profitability

	Minimum	Maximum	Mean	Std. Deviation
Profitability	-7.49	33.05	5.2787	11.24878
Period of Study: 2011 to 2020	)			

As Table 4.1 depicts, a mean price to earnings ratio of 5.28 was established in profitability across the 10 years, with a minimum of -7.49 and a maximum of 33.05 at a standard deviation of 11.25. Figure 4.1 illustrates the annual profitability averages for the five listed construction companies in the country. An overall declining trend is observed, growing from an average of 8.37 in 2011, to pick at 1.04 in 2020.

## Figure 4.1



## Average Profitability Trend

## Leverage

The study also sought to establish the influence of leverage on the dividend payment among NSE-quoted construction and allied firms. The study therefore collected data on leverage from the various participant firms measured by the debt-to-equity ratio, which was acquired by dividing long- and short-term liabilities by total assets. The descriptive statistics for leverage are as offered in Table 4.2.

## Table 4.2

## Descriptive Statistics for Leverage

	Minimum	Maximum	Mean	Std. Deviation
Leverage	.25	1.42	.7141	.35342
$\mathbf{P} = \frac{1}{2} \int \mathbf{G} \left( \mathbf{G} \left( 1 - 20 \right) \right) d\mathbf{G} \left( 1 - 20 \right) d$	<b>n</b> 0			

Period of Study: 2011 to 2020

As evident in Table 4.2, the mean leverage was recorded at .71, a maximum of 1.42 and a minimum of .25, a standard deviation of .35 across the 10-year period under study. Figure 4.2 illustrates the annual leverage averages for the five listed construction companies in the country. An overall inclining trend is observed, growing from an average of 0.68 in 2011, to pick at 0.82 in 2018, and then slightly declining to 0.67 in 2020.

## Figure 4.2



#### Average Leverage Trend

## Liquidity

The study further sought to examine the influence of liquidity on the dividend payout among construction and allied companies listed at NSE. The study thus collected data on liquidity from the various participant firms measured by the debt-to-equity ratio, which was acquired by dividing current assets by current liabilities. The descriptive statistics for leverage are as offered in Table 4.3.

## Table 4.3

Descriptive Statistics for Liquid	lity
-----------------------------------	------

	Minimum	Maximum	Mean	Std. Deviation
Liquidity	.07	2.64	1.1034	.76144
Period of Study: 2011 to 2020	)			

As Table 4.3 reveals, liquidity was recorded at an average current ratio of 1.10, a minimum of .07 and a maximum of 2.64 with a standard deviation of .76. Figure 4.3 further illustrates the annual liquidity averages for the five listed construction companies in the country. An overall declining trend is observed across the period, from an average of 1.52 in 2011 to 0.82 in 2020.

# Figure 4.3



# Average Liquidity Trend

# Firm size

The study sought to find out the influence of the firm size on the Dividend payout among construction and allied companies listed at NSE. To this end, the study collected data on firm size from the various participant firms measured by total assets, which was readily acquired from the respective companies' annual financial reports. The descriptive statistics for leverage are as offered in Table 4.4.

## Table 4.4

### Descriptive Statistics for Firm Size

	Minimum	Maximum	Mean	Std. Deviation
Firm Size (Kshs '000)	2215352.00	51936664.00	22275645.142	16433500.226
Period of Study: 2011 to 20	20			

As Table 4.4 shows, the average firm size was valued at Kshs22.3 billion, a minimum of Kshs2.2 billion, a maximum of Kshs51.9 billion and a standard deviation of Kshs16.4 billion. Figure 4.4 further illustrates the annual liquidity averages for the five listed construction companies in the country. An overall inclining trend is observed, growing from an average of Kshs15.1 billion in 2011, growing to a peak of Kshs26.9 billion in 2020.

## Figure 4.4

#### Average Firm Size Trend

30,000,00	26,000,507 26,80	64,378
25,000,00	26,463,871	046.534
20,000,00	18,517,802 21,072,629 23,437,897 15,063,466 19,721,931 21,921,607	
15,000,00		
Avera 10,000,00	00	
5,000,00	0	
	0	
	2011 2012 2013 2014 2015 2016 2017 2018 2019 2 Year	2020

## **Dividend Payout**

The study sought to assess the dividend payout by the respective listed construction companies, as measure by dividend payout ratio. Whereas the data transformation process for dividend payout ratio would require dividing total dividend paid by net profit, the same was readily obtained from the respective companies' annual financial reports. The descriptive statistics for dividend payout are as offered in Table 4.5.

## Table 4.5

## Descriptive Statistics for Dividend Payout

	Minimum	Maximum	Mean	Std. Deviation
Dividend	-10.43	2620.85	108.8468	399.71953
Period of Study: 2011 to 2020	)			

As Table 4.5 shows, dividend was recorded at a mean payout ratio of 108.8%, a minimum of - 10.4%, a maximum of 2620.9% and a standard deviation of 399.7%. Figure 4.5 further illustrates the annual dividend payout averages for the 5 listed construction companies in the country. An overall declining trend is observed, from an average payout ratio of 557.11 in 2011, declining sharply to 40.86% in 2012 then to -1.13% in 2020.

## Figure 4.5

## Average Dividend Payout Trend



### **4.3 Preliminary Diagnostic Tests**

Before analyzing the data, the researchers ran a series of diagnostic checks to ensure that the data was of good quality and that any errors were eliminated in readiness for both inferential and descriptive statistics analyses. Initial tests would ensure the production efficiency as well as the accuracy of the sort of research to be used. Anomalies, normalcy, multi-collinearity, and homogeneity of variations tests were among the data diagnostics used.

## **Test for Outliers**

An anomaly is a data point that deviates from the hypothesis while the remainder of the data falls within the range and appears remote from the rest (Collis & Hussey, 2009). In statistical analysis, identifying anomalies can lead to the identification of truly surprising information. These variables, on the other hand, can have a detrimental impact on the regression equation, as well as the kurtosis and skewness of the dataset. As a result, detecting outliers is critical for effective modeling and presenting the correctness of results.

Following the recommendations, the data was evaluated to see if there were any multivariate anomalies by Collis and Hussey (2009), who opine that a case is found to be an outlier if its Mahalanobis distance  $(D^2)$  value is less than or equal to 0.001. There were no outliers in this study because all items had probability associated with them (D2) that were greater than 0.001. The residuals statistics to this effect is illustrated in Table 4.6.

## Table 4.6

## **Residuals Statistics**

	Minimum	Maximum	Mean	Std. Deviation	Ν
Predicted Value	-217.4101	899.0240	141.0009	238.64836	33
Std. Predicted Value	-1.502	3.176	.000	1.000	33
Standard Error of	99.736	243.905	155.708	38.046	33
Predicted Value					
Adjusted Predicted Value	-319.1245	715.6276	122.3430	243.81055	33
Residual	-531.86780	1721.82629	.00000	384.86524	33
Std. Residual	-1.293	4.185	.000	.935	33
Stud. Residual	-1.480	5.196	.020	1.113	33
Deleted Residual	-697.26288	2654.77612	18.65793	548.36410	33
Stud. Deleted Residual	-1.514	27.039	.682	4.772	33
Mahal. Distance	.911	10.276	3.879	2.447	33
Cook's Distance	.000	2.926	.105	.507	33
Centered Leverage Value	.028	.321	.121	.076	33

a. Dependent Variable: Payout

## **Test for Normality**

Both numerical statistical tests and visual assessment of plots and graphs were employed in testing for normality. To this end, the Shapiro-Wilk test was for numerical statistical tests while Q-Q plots were generated for visual assessment. As per Collis and Hussey (2009), the Shapiro-Wilk test is best suited for small sample sizes of less than 50, although it can also be used for sample sizes of up to 2000. Kolmogorov-Smirnov is used. In Shapiro-Wilk test, the threshold for normality is 0.05 (Collis and Hussey, 2009). As such, values greater than 0.05 indicate normality. In the present study, the Shapiro-Wilk test was used to determine whether the distributions were normal.

#### Table 4.7

### Test for Normality

	Shapiro-Wilk			
	Statistic	df	Sig.	
Profitability	1.008	43	.066	
Leverage	1.012	43	.070	
Liquidity	.994	43	.061	
Firm Size	1.124	43	.102	
Dividend	1.071	43	.082	

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Survey Data (2020)

Because all Shapiro-Wilk values had Statistically significant levels above the accepted level of 0.05, the results in Table 4.7 revealed that distribution is normal for all levels (Tashakkori & Teddlie, 2008). Normality test adds value to the results as it correctly tests whether the population being represented sample is normally distributed, since data that is not normally distributed will result in biased findings. It is stated in the alternative hypothesis that in the population, there is no normal distribution against the null hypothesis that in the population. If the predetermined level of significance is greater than the test p-value, the null hypothesis is rejected and a conclusion made that the population from which the data is sourced is not normally distributed. If the predetermined level of significance does not exceed the p-value, one does not reject the null hypothesis. As a result, the null hypothesis of regularly distributed data was confirmed, supporting the notion that the information is typically distributed.

## **Multicollinearity Diagnostics**

The problem of multicollinearity results in accurate findings owing to use of indistinct or redundant variables. As such, it is important to check for and correct the problem of multicollinearity. When there is a high correlation among more than one predictor variables, as represented by the correlations, and the number is 9.0 or higher, it is called multicollinearity (Creswell, 2013). To avoid multicollinearity, the researchers used the centering of predictor factors before computing correlation structure. Table 4.8 shows the result of multicollinearity testing.

## Table 4.8

Model	Collinearity Statistics		
	Tolerance	VIF	
Profitability	.791	1.264	
Leverage	.425	2.354	
Liquidity	.682	1.466	
Firm Size	.365	2.739	

Source: Survey Data (2020)

Multicollinearity Diagnostics

As offered in Table 4.8, acceptable values were found using multicollinearity, which were all inside the given range of -10 to 10. To ensure that there had been no Multicollinearity, tolerances values were tested and found to be all more than 0.1, which is the acceptable threshold.

## **Homogeneity of Variances**

Levene statistic was used to test for homogeneity of variance as it verifies the equality of variance in the samples (Collis & Hussey, 2009). In this study, Levene's test was used to test the null hypothesis that there are equal variances in the data with the satisfactory threshold of (p >.05). Table 4.9 shows the results of the test for equal variances of error terms.

## Table 4.9

Tests for Test of Homogeneity of Variances

Variable	Levene Statistic	Sig.
Profitability	1.311	.064
Leverage	1.165	.119
Liquidity	1.082	.147
Firm Size	1.178	.093
G G D (2020)		

Source: Survey Data (2020)

P-values larger than 0.05 were found in the study (Table 4.9), showing that the variance was homogeneous. As a result, the Levene's test is not substantial at 0.05. As a result, the supposition that the information has equal variances was accepted, pointing to the fact that the data had homogeneity of variance. Test for homogeneity of variance is of value to the study as a violation of which implies that data are not from a homogeneous population.

## **Linearity Diagnostics**

It is important to test for linearity, as regression analysis assumes a linear association exists between the independent and dependent variables. To test for linearity, scatter diagram for the independent and dependent variables was used. Scatter diagram for profitability and payment of dividend shown by a linear curve is presented in Figure 4.5.


Scatter Plot on profitability and payment of dividend

Figure 4.5 shows that the data points are spread along the line of best fit albeit dispersed, hence weak linearity. Therefore, the relationship between profitability and payment of dividend was linear. Figure 4.6 presents the line of best fit for the relationship between leverage and payment of dividend.



Scatter Plot on leverage and payment of dividend

Figure 4.6 shows that the data points are spread along the line of best fit between leverage and payment of dividend albeit dispersed, hence weak linearity. Thus, linearity assumption was met. Figure 4.7 presents the scatter diagram on the relationship between liquidity and payment of dividend.





Figure 4.7 shows that the data points are spread along the line of best fit between liquidity and payment of dividend albeit dispersed, hence weak linearity. Thus, linearity assumption was met by the study. Figure 4.8 presents the scatter diagram on the relationship between firm size and payment of dividend.



Scatter Plot on firm size and payment of dividend

Figure 4.8 shows that the data points are spread along the line of best fit between payment of dividend and firm size albeit dispersed, hence weak linearity. Thus, linearity assumption was met by the study. Further, to test linearity, Pearson correlation analysis was done. Pearson correlation analysis assumes linearity and therefore a significant coefficient would imply that the data met linearity assumption (Kaltoft et al., 2014). The findings are portrayed in Table 4.10.

#### **Table 4.10**

#### **Correlations**

		Payout	Profitability	Leverage	Liquidity	Firm Size
Payout	Pearson Correlation	1				
	Sig. (2-tailed)					
	Ν	43				
Profitability	Pearson Correlation	.282	1			
	Sig. (2-tailed)	.111				
	Ν	33	37			
Leverage	Pearson Correlation	.135	.291	1		
	Sig. (2-tailed)	.388	.081			
	Ν	43	37	49		
Liquidity	Pearson Correlation	.158	.238	.078	1	
	Sig. (2-tailed)	.311	.155	.596		
	Ν	43	37	49	49	
Firm Size	Pearson Correlation	.033	.257	.629**	.169	1
	Sig. (2-tailed)	.832	.124	.000	.245	
	N	43	37	49	49	49

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

There was a weak, positive and non-significant correlation between profitability and payment of dividend (r = .282; Sig. = .111) and between liquidity and payment of dividend (.158; Sig. = .311). There were also weak, positive and non-significant correlations between leverage and payment of dividend (r = .135; Sig. = .388) and between firm size and payment of dividend (.033; Sig. = .832).

#### 4.4 Inferential statistics

Both multiple regression and correlation analyses were performed under inferential statistics. Whereas the former was used to assess the nature and direction of the association among the study variables, the latter was used to assess the influence of the various determinants on payment of dividend among firms quoted at the Nairobi Security Exchange.

#### **Regression Analysis**

For estimating accuracy, regression studies were conducted with the premise that variables have a normal distribution and that there is a linear linkage between the determinant and resultant variables. The study hypotheses, which were expressed in the null, were tested using simple linear regression analysis. At the 95 percent confidence level, the coefficients linked with each factor were assessed for statistical power.

The study sought to test the null hypotheses that profit level does not influence significantly payment of dividend of listed construction firms at NSE ( $H_{01}$ ); leverage does not influence significantly dividend payout of NSE-quoted construction and allied firms ( $H_{02}$ ); Liquidity does not have a significant influence on payment of dividends among quoted construction companies ( $H_{03}$ ): and that firm size does not influence significantly dividend payout of NSE-quoted construction and allied firms ( $H_{04}$ ). To this end, a multiple regression analysis was conducted. Regression analyses generated the model summary, determination coefficients and Analysis of Variance (ANOVA). At a 95% confidence level, ANOVA was used to determine whether there is a large disparity between the resultant and determinant variables. Tables 4.11, 4.12 and 4.13 below present the test results for the hypothesis test.

#### **Table 4.11**

#### Model Summary

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.527 <sup>a</sup>	.278	.175	411.43825
		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

a. Predictors: (Constant), Firm Size, Profitability, Liquidity, Leverage

As portrayed in Table 4.11, The study found a relatively significant linear association between income and dividend payout, with a correlation value (R) of 527. The investigation also found an

adjusted  $R^2$  of 175, indicating that just 17.5 percent of fluctuations in dividend payout can be attributable to liquidity, leverage, firm size and profitability. The remaining 84.5 percent is related to factors that were not investigated in the predictive model in this study.

#### **Table 4.12**

ANOVA	1					
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1822497.262	4	455624.316	2.692	.051 <sup>b</sup>
	Residual	4739880.072	28	169281.431		
	Total	6562377.334	32			

a. Dependent Variable: Payout

b. Predictors: (Constant), Firm Size, Profitability, Liquidity, Leverage

As shown in Table 4.12, the study also obtained a F - ratio of 2.692 (=0.05), indicating that the regression model used in this investigation is statistically significant. Furthermore, the regression results revealed in Table 4.13 that all predictors, that is profitability ( $\beta$  = .417, p = .029<.05), leverage ( $\beta$  = .523, p = .043<.05), liquidity ( $\beta$  = .431, p = .035<.05) and firm size ( $\beta$  = .661, p = .019<.05) at a 95% confidence level, the payment of dividends was significantly altered.

#### **Table 4.13**

Coefficients:

				Standardized		
		Unstandardized	l Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	557.704	332.713		1.676	.105
	Profitability	17.495	7.585	.417	2.307	.029
	Leverage	6.376	3.000	.523	2.125	.043
	Liquidity	257.833	116.228	.431	2.218	.035
	Firm Size	3.542E-5	.000	.661	2.488	.019

a. Dependent Variable: Payout

#### **Hypothesis Test Results**

As a result, the 0.05 significance level was used to establish the statistical significance of the hypotheses and, as a result, the choice to reject or accept them. The null hypotheses mentioned were rejected when coefficients associated with factors with P-values less than that of the significance levels (P.05), but were accepted when coefficients connected with elements with P-values larger than the degree of evidence (P>.05).

# H<sub>01</sub>: NSE-quoted construction companies' dividend payment is not significantly influenced by profit level

The payment of dividends by construction businesses listed on the NSE was strongly associated with profitability ( $\beta$  =.417, p =.029<.05) The facts above give sufficient proof to fail to accept the null hypothesis that the profit level has no bearing on the payment of dividends by quoted construction businesses on the NSE (H0<sub>1</sub>). As a result, the research concluded that the profit level impacts dividend payout among construction and related NSE-quoted companies.

# H<sub>02</sub>: NSE-quoted construction companies' dividend payment is not significantly influenced by leverage

The payment of dividends by construction businesses listed on the NSE was strongly associated with leverage ( $\beta = .523$ , p = .043<.05) The facts above give sufficient proof to fail to accept the null hypothesis that the leverage has no bearing on the payment of dividends by quoted construction businesses on the NSE (H0<sub>2</sub>). As a result, the research concluded that the leverage impacts dividend payout among construction and related NSE-quoted companies.

# H<sub>03</sub>: NSE-quoted construction companies' dividend payment is not significantly influenced by liquidity

The payment of dividends by construction businesses listed on the NSE was strongly associated with liquidity ( $\beta$  = .431, p = .035<.05) The facts above give sufficient proof to fail to accept the null hypothesis that the liquidity has no bearing on the payment of dividends by quoted construction businesses on the NSE (H0<sub>2</sub>). As a result, the research concluded that the liquidity impacts dividend payout among construction and related NSE-quoted companies.

# H<sub>04</sub>: NSE-quoted construction companies' dividend payment is not significantly influenced

# by firm size

The payment of dividends by construction businesses listed on the NSE was strongly associated with firm size ( $\beta = .661$ , p = .019<.05) The facts above give sufficient proof to fail to accept the null hypothesis that the firm size has no bearing on the payment of dividends by quoted construction businesses on the NSE (H0<sub>2</sub>). As a result, the research concluded that the firm size impacts dividend payout among construction and related NSE-quoted companies

## 4.5 Summary of Hypothesis Test Results

The foregoing hypothesis tests can be summarized as tabulated in Table 4.23.

## **Table 4.14**

	Hypotheses	Test results
H <sub>01</sub>	Dividend payout is not significantly influenced by profit level	Rejected
	among construction and allied companies listed at NSE	
$H_{02}$	Dividend payout is not significantly influenced by Leverage	Rejected
	among construction and allied companies listed at NSE	
H <sub>03</sub>	Liquidity does not have a significant influence on Payment of	Rejected
	dividends among quoted construction companies	
$H_{04}$	Dividend payout is not significantly influenced by firm size of	Rejected
	construction companies listed at NSE	

## Summary of Hypothesis Test Results

#### **4.6 Discussions**

The mean price to earnings ratio of 5.28 recorded in the study is indicative of considerably high profitability among the firms studied. The ratio implies that the market is willing to pay considerably high for a stock among the listed construction companies based on either their past or future earnings. The study also established from regression analysis that profitability based on price to earnings ratio significantly determines the payment of dividends. This is expected, as firms with high profitability have sufficient liquid cash generated as profits, a portion of which may be used to pay up dividends and the remaining retained back into the business.

The results are in agreement with findings by Kisaka et al. (2015), who found a strong favorable link between dividend payment and profits. The difference could be attributed to the difference in industrial contexts, as commercial banks operate differently from construction and allied companies. The findings are also consistent with Amidu and Abor (2006), who explored the dividend payout ratios' determinants. Findings of the study revealed that tax, cash flow and profitability exert a significantly positive influence on dividend payout ratios. It was also shown in the results that positive associations exist between book-to-market value, risk, dividend payout, growth, and institutional holding. The significant variables in the study are however, market-to-book value, cash flow, profitability and sale growth.

The study findings are further in agreement with Al-Najjar (2010), who investigated dividend payout and its drivers by sampling enterprises in Jordan and found that success has such a large impact on dividend policy that it impacts all companies, irrespective of size or seniority. A further in-depth investigation of GCC countries revealed a strong positive link between dividend payout trends and revenue. The findings also agree with Malietso (2017) who investigated the factors that influence dividend payment in Kenya using NSE public manufacturing companies

from 2007 to 2016. Profit had a p-value of 0.003, which is less than 0.05, meaning that it has a substantial impact on how manufacturers pay dividends to investors, according to the results of this study. In order to avoid liquidation, the study indicated that management must also undertake proper research, but also engage in beneficial investments while having to borrow.

The findings are further in line with Aftab et al. (2017) who looked at the factors that influence dividend payment ratios in listed Pakistani industrial companies between 2003 and 2012. Other factors, such as overall sales, current liabilities, working capital, and tax, are found to influence dividend distribution decisions in addition to business profitability. The findings are consistent with Kania and Bacon (2017), who established that the higher the firm the profit it earns, the more likely it will compensate the shareholders by paying dividend.

The mean leverage recorded at .7145 points to considerably low leverage among the companies studied. This is in consideration that whereas leverage is used to increase profitability based on the return on equity, an undue financial leverage amount of surges the risk of failure, as repaying debt becomes more difficult. Financial leverage is thus favorable when the usages of debt can be put to generate returns higher than the interest expense linked to the debt. It was further established that leverage significantly determines payment of dividend. This implies that the amount of dividend paid by firms is hinged on the amount of leverage by the firm. This is tandem with expectation, as lower dividend would ordinarily by paid by firms that have a past of greater leverage normally in order to avoid the greater cost of rising external capital for the firm.

The finding is consistent with Marfo-Yiadom and Agyei (2016) who showed that collateral capacity, profitability, variations in bonuses and debt were the factors with notable positive influence on Ghanaian banks' strategy of dividend payment. The study found on the other hand

that age and growth significantly and positively influenced bank strategy of dividend payment. This is also in agreement with Al-Twaijry (2017) whose study indicated that both future and pasts prospects affected current dividends. Company's future earnings growth was found to not be strongly affected by payout ratios, but were positively and significantly correlated the company's leverage.

Similarly, Al-Kuwari (2016) established that the companies do not adopt a long-run target strategy of dividend payment and that they pay dividends with the purpose of decreasing the agency problem and that strategy of dividend payment for listed firms in GCC countries are altered frequently. It was concluded in the study that dividend payments are positively associated to the leverage ratio and directly and strongly associated with firm profitability, firm size and government ownership.

The results further agree with He and Li (2015) who concluded that the most significant antecedents of plans for dividend payment among companies in China was features of organizational structure. The study found that overall, profitable, highly liquid, low leverage, greater stakeholder protection companies, and state-owned companies before being quoted and carrying out successive equity have a greater likelihood of cashing and paying bonuses. Similarly, Al-Kuwari's (2016) found a positive and strong association between dividend payout ratio and leverage. The expressed total debt/total assets make up the debt ratio, which is the measurement of leverage Debt to equity ratio, shows the proportions in which creditors finance a firm relative to shareholders. The wider picture of a firm's liabilities reflects the debt ratio.

Results are further in agreement with Vengesai and Kwenda (2018) who found in their study, a notable linkage the ratio of earned capital and dividend payment decision to firm size, previous

dividend payment history, profitability of the company, total controlling capital, cash in hand and leverage growth rate. Leverage further determines a company' dividend behavior, given high level of leverage, meaning that it is relatively riskier to invest in the firm in terms of cash flow. This is consistent with Ajayi et al. (2018) who indicated that 44 firms from five various sectors with regular history of dividend payment were in the sample included. The study used a timeseries data running for 6 years from 2011 to 2016. Results further revealed that leverage significantly and positively affects sampled firms' pattern of dividend payment.

The results are however in contrast with Al Shabibi and Ramesh (2016) who found in their study conducted in the United Kingdom that no significant relationship exists between a company's dividend payouts and leverage. Similarly, Gul et al. (2017) found that 11 banks out of 18 banks pay dividends while seven banks did not pay. The findings demonstrated that when the outcome variable is payment of dividend ratio and dividend yield, the predictor variables firm size, profitability and growth recorded positive coefficient of correlation.

The average liquidity recorded at 1.103 indicates a normal range implying that most of the companies avoid either holding too much cash, which may alternatively be used, in other areas or struggling to pay short-term obligations. The established ratio reveals that the firm can cover their short-term debts and meet creditor's demands. The study found a significant effect of liquidity on payment of dividend. This is expected, as firms with extremely low liquidity ratios are exposed to the risk of default and may find it a challenge to raise funds to pay dividends. Companies on the other hand, with high liquidity ratios have sufficient liquid cash to pay up dividends and retain some back into the business.

In tandem with the present study findings, Jiang et al. (2017) investigated how payment of dividends are affected by stock liquidity among companies listed in China during the period, 2000–2014, and reported a positive association. The study further reports that the positive association between payment of dividends and stock liquidity is more distinct when the environment of information is impervious, and when there is severe conflict between minority investors and controlling shareholders. Further, firms with low stock liquidity enjoy more favorable market reactions to regulatory stipulations necessitating payment of dividends, indicating that regulations and legal provisions are alternatives to stock liquidity.

The results further agree with Baker et al. (2006), who found that the level of expected and current future earnings, earnings stability, liquidity constraints and financial leverage have a significant influence on dividend policy among Norwegian firms. Similarly, Glen et al. (2016) found that asset liquidity is a significant attribute influencing stock liquidity and that there exists a positive and significant association among the asset liquidity and stock liquidity and the positive effect is greater in the event of low growth prospects. In this study, we therefore hypothetically say that there is a positive and significant impact of liquidity on dividends payout decision as a determinant.

The findings are further in agreement with Hafeez and Javid (2017) who examined the determinants and dynamics of plans of dividend payment among non-financial firms quoted in Karachi Stock Exchange. The findings of the study indicate that non-financial firms listed in Pakistan depended on both past dividends per share and current earnings per share to determine their dividend payments. Also consistent with the present study findings, Gul et al. (2017) revealed that size, earning per share, leverage and liquidity have a positive effect on dividend,

while profitability and growth are found to not significantly influence the strategy of dividend payment.

Similarly, Jumah and Pacheco (2018) demonstrated in the output of the analysis that firm size, profitability ratios and liquidity ratios are main factors that influence the companies' strategy of dividend payment. The results are further in line with Anil and Kapoor (2018) who revealed in the study that market-to-book value ratio, sales growth, corporate tax and cash flows do not elucidate the IT sector's dividend payment pattern. Only beta and liquidity were found to be significant influences.

The results are however in contrast with Imran (2018) who showed that firm liquidity was not significantly associated with payment of dividends. Similarly, Banerjee et al. (2007) who found that information asymmetries between insider management and outsider investors is reduced by stock liquidity the by generating new information in result of trading. Stock liquidity may help well-informed parties to camouflage the secret information, which is not imitated in price in informed trading model.

The average firm size was valued at Kshs22.3 billion, implying that most of the companies are large. The large sized companies show that the firm is on a good growth trajectory. Companies with large growth will have an easier experience entering the capital market as stockholders obtain positive indications for firms that have great growth so that positive feedback reflects the growing firm value. Consistent with the study's expectations, there exists a significant effect of firm size on payment of dividend. As expected, large firms have, with the ease of reaching the capital market, greater flexibility to obtain the much-needed capital to execute profitable opportunities for investment. The opportunity would thus be to increase profitability in large

firms is greater than that of small companies. Firms investing is a good indicator for investors since the firm has good forecasts in the future therefore company value rises. In line with the study findings, Ardekani et al. (2016) showed a notable association between both payout ratio and share price volatility with dividend yield.

The findings agree with Habib et al. (2018) who concluded that firm size exerts a notable role to play in influencing payment of dividend. The observed T-Statistics value was also greater in comparison to the tabulated statistics strengthening the level of statistical of significance. As such, a 1% change in the size firm, would translate into 5% payment of dividend change. The results indicated that there exists a positive and significant association between payment of dividend and firm size.

The results are further in tandem with Hafeez and Javid (2017) who indicated a notable and inverse association between size and payment of dividend. This result further revealed that largesized firms pay fewer dividends. This is consistent with Mori and Naoya (2016) who established that firms that are larger tend to have payout ratios that are higher compared to small firms; large firms are less dependent on internal funds and therefore have easier access to the capital markets. s such, larger firms yield higher returns on assets. Large firms further enjoy more diversity compared to smaller firms and possess more organizational slack as well as higher market power. Size of a firm has been regarded as a factor influencing a firm's strategy of dividend payment.

In line with the present study findings, Bashir et al. (2016) depicted that there was a positive significant relationship between share prices and dividend announcement. The firm's specific factors, which included size, leverage, liquidity and dividend yield, registered mixed results

where firm size also had positive significant relationship while leverage, liquidity and dividend yield had positive significant relationship. Similarly, Salari et al. (2017) indicated a notable and positive association between both earnings per share and dividend yield and the price volatility. There was in addition, a significant positive association between growth of the asset base and firm size price volatility.

The results are also in agreement with Salari et al. (2017) who showed a notable and inverse association between share price volatility and ratio of bonus payment. A positive and notable linkage was recorded between earning volatility, size of the company, growth and debt; both debt and size recorded with value volatility. Similarly, Anupam (2015) deduces that larger firms, as compared to smaller firms, pay out more dividends. The study also concluded that large firms are less dependent on the internal funds and therefore have easier capital market access, hence the greater ability to pay the dividends.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter provides a summary of key findings, conclusions, recommendations and suggestions for future studies.

#### **5.2 Summary of Findings**

Both descriptive and inferential statistics are performed. Minimum, maximum, mean and standard deviation values are presented under descriptive statistics while correlation and multiple regression are presented under inferential statistics. The study sought to determine the influence of the profit level on the Payment of dividend among construction and allied companies listed at NSE. Dividend was recorded at a mean payout ratio of 108.8%, a minimum of -10.4%, a maximum of 2620.9% and a standard deviation of 399.7%. A mean price to earnings ratio of 5.28 was also established in profitability across the 10 years, with a minimum of -7.49 and a maximum of 33.05 at a standard deviation of 11.25. Regression coefficients further revealed that Profitability ( $\beta$  = .417, p = .029<.05) has a significant effect on payment of dividend at 95% confidence level.

The study also sought to establish the influence of leverage on the payment of dividend among construction and allied companies listed at NSE. The mean leverage was recorded at .71, a maximum of 1.42 and a minimum of .25, a standard deviation of .35 across the 10-year period under study. Regression coefficients further revealed that Leverage ( $\beta = -.520$ , p = .044<.05) exerts a notable effect on payment of dividend at 95% confidence level

The study further sought to examine the influence of liquidity on the payment of dividend among construction and allied companies listed at NSE. Liquidity was recorded at an average current ratio of 1.10, a minimum of .07 and a maximum of 2.64 with a standard deviation of .76. Regression coefficients further revealed that Liquidity ( $\beta = .431$ , p = .035<.05) significantly influences payment of dividend.

The study then sought to find out the influence of the firm size on the Payment of dividend among construction and allied companies listed at NSE. The average firm size was valued at Kshs22.3 billion, a minimum of Kshs2.2 billion, a maximum of Kshs51.9 billion and a standard deviation of Kshs16.4 billion. Regression coefficients further revealed firm size ( $\beta = -.659$ , p = .020<.05) exerts a notable effect on payment of dividend at 95% confidence level.

#### **5.3** Conclusion

Based on the foregoing findings, the study first concludes that profit level significantly determines payment of dividend among construction and allied companies listed at NSE. This is expected, as firms with high profitability have sufficient liquid cash generated as profits, a portion of which may be used to pay up dividends and the remaining retained back into the business. This is consistent with Bose and Hossainey (2018) whose study of Indian firms' dividend behavior indicates that firms raised dividend in accordance with profits. In addition, in agreement, Amidu and Abor (2006) revealed that tax, cash flow and profitability exert a significantly positive influence on dividend payout ratios.

The report also concludes that leverage has a significant impact on dividend payout among listed building firms in the country. This implies that the amount of dividend paid by firms is hinged the amount of leverage by the firm. It can further be deduced from the findings that listed

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construction companies in the country record considerably low leverage. This can be attributed to the difficulty to repay debt as the risk of failure becomes more with an excessive amount of financial leverage. This is in agreement with Marfo-Yiadom and Agyei (2016) who showed that collateral capacity, profitability, variations in bonuses and debt were the factors with notable positive influence on Ghanaian banks' strategy of dividend payment.

It is further concluded that liquidity significantly affects payment of dividend. Most listed construction companies in the country keep liquidity at average, implying that most of the companies avoid either having too excessive cash, which might be used in other areas, or struggling to pay short-term obligations. The established ratio reveals that the firm can cover their short-term debts and meet creditor's demands. This is in line with Zakayo, Fredynandy (2017) who point out those current ratios that are acceptable vary from sector to sector, and that a current ratio will commonly fall between 1.5 and 3 for a healthy business. Salari et al. (2017) also reported similar results.

The study finally concludes that listed construction companies in the country are large in size, which indicates ideal growth. Accordingly, with large progress and growth, investors capture positive signals, which makes it easy for the companies to enter the capital, market, hence the significant effect of firm size on payment of dividend. Established companies have, with the effortlessness of establish linkages with the capital market, superior flexibility to obtain the much-needed finances to execute opportunities for investment that are profitable. The value of the firm increases when companies invest which is a desirable signal for investors since it shows that the firm has in the future, good prospects. Firm size does not however influence dividend payout. The results of this study are in line with a study conducted by Ardekani et al. (2016) which shows that payment of dividend is not significantly affected by size.

#### **5.4 Recommendations**

Profitability was in the study found not significantly affect payment of dividend among the country's publicly traded construction companies. When it comes to dividend decisions, the study suggests that, in comparison to previous revenues, business executives should pay close attention to net profit and prior payments after tax in the present year. Second, previous dividends have a significant impact on future dividends, with former dividends accounting for roughly 80% of expected dividends.

Leverage was found to have a significant effect on strategy of dividend payment payout among listed construction firms in the country. The study therefore recommends that the listed construction companies in the country should focus on improving the variables, which indicated positive and significant effects, including leverage. This work also boldly recommends that leverage structure and dividend consistency can be a consideration when choosing stocks for dividend purposes among listed construction companies in the country.

Results also showed that the effect of leverage on dividend distribution is significant. It was further revealed in the study that, the value of a firm relies solely upon the associated risks and the earning power its assets. Leverage is the most factor dominant compared to all other factors that influence corporate strategy of dividend payment. The study concluded that, the pattern of dividend payment impacts leverage positively among the sampled firms. It is hence recommended that, top executives ought to deliberate diligently when making a decision about devising the strategy of dividend payment and the employment of debt in capital structure after deciding upon the financial mix.

Based on the findings, liquidity was found to positively affect payment of dividend. The study therefore recommends that, corporate managers should ensure they are able to address both anticipated and unanticipated cash demands on a progressive basis. In order for a commercial bank to remain in being for a long time and sustain its business operations, it ought to be liquid and capable of meeting its responsibilities at any time. It is essential for any performing business to manage working capital. With poor working capital management, the company's finances are expected to be entangled in idle assets. This could decrease the company's liquidity and the company will not be capable of paying dividends.

Since the firm size was discovered to have a significant effect on dividend payment. Quoted construction firms in the country, regardless of size, ought to therefore aim for more profitability in order to grow their dividend payout. Whereas larger listed construction companies generate larger returns on assets, they can be less resourceful if the executive lose their control over operational and strategic activities within the firm.

#### **5.5 Recommendations for Further Research**

The present study to assess the determinants of payment of dividend among companies listed at the Nairobi Securities Exchange with reference to construction companies. The study has contributed to the body of knowledge on how dividend payout is influenced by various factors, including profitability, leverage, liquidity and firm size, in the context of listed construction firms in Kenya. It is hereby recommended that future studies explore the same in other listed companies in order to establish any relevant inclinations.

This study was further based on the Positivist philosophy, which necessitated the use of secondary data, which was quantitative in nature. This restricted data to secondary information and left no room for unexpected replies, which may have provided more understanding. To remedy this, the study recommends that future research be based on the post-positivist framework, which permits open-ended surveys to collect responses that were not anticipated

during questionnaire development. This will give the company executives more information about the variables studied in the investigation.

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# **APPENDICES**

# **Appendix I: Secondary Data Collection Schedule**

This schedule is meant to gather quantitative information regarding to determinants of Dividend payout among construction firms listed at the NSE

## **Confidential Clause**

The data to be collected will be used for academic purposes and will be strictly confidential. No name of a person (Respondent) or a Company shall be disclosed anywhere during and after the research period.

# **Section One**

# 1. Profit Level

The profit level is an accounting measure designed to gauge the financial health of a business or industry. In general, it is defined as the ratio of profits earned to total sales receipts (or costs) over some defined period.

# Kindly fill in the following in regards to profitability level.

Aspect of Profitability	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Share price										
Earnings per share										

# 2. Liquidity

Liquidity refers to how easily assets can be converted into cash. Assets like stocks and bonds are very liquid since they can be converted to cash within days.

# Kindly fill in the following in regards to the firm's Liquidity

Aspect of Liquidity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Current Assets										
Current Liabilities										

# 3. Leverage

Leverage results from using borrowed capital as a funding source when investing to expand the firm's asset base and generate returns on risk capital. Leverage is an investment strategy of using borrowed money specifically, the use of various financial instruments or borrowed capital to increase the potential return of an investment.

Kindly	fill in	the follow	wing in	nogonda	to la	wowogo	lovol
isinury	1111 111	the rono	wing m	regarus		everage	

Aspect of Leverage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Asset										
Long-term liabilities										
Short-term liabilities										

# 4. Firm size

The firm size determines the level of economics of scale enjoyed by a firm. When a firm becomes larger, it enjoys economics to scale, the average production cost is lower, and operational activities are more efficient.

# Kindly fill in the following in regards to firm size

Aspect of firm size	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fixed assets										
Current assets										

# 5. Dividend Payout Ratio

The dividend refers to the share of the total dividend amount paid out to shareholders in relation to a company's net income (Deudon, Jean & Marques, 2015).

Kindly	fill in	the following	in	regards to	dividend	payout	of the firm
						1	

Aspect	of	dividend	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
payout r	ratio											
Total Div	viden	d paid										
Net Profi	it											

#### **Appendix II: Authorization Letter**

Wailer et al (2009) Incentory Management Practice: A Review of literature. Archives of pharmacy practice



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# KENYA METHODIST UNIVERSITY

P. O. Box 267 Metu - 60200, Kenya Tel: 254 054 30301/31229/30367/311/1

Our ref: NAC/ MBA/1/2020/24

Fax: 254-64-30162 Email: info@kemu.ac.ke

2nd SEPTEMBER 2020

- Commission Secretary. National Commission for Science, Technology and Innovations, P.O. Box 30623-00100, NAIROBI.

Dear Sir/ Madam,

RE: MAKIRA APPOLON GHYSLAIN (BUS-3-0232-1/2019)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, undertaking masters in Business Administration. He is conducting a research titled: DETERMINANTS OF DIVIDEND PAY OUT AMONG COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE: A CASE STUDY OF CONSTRUCTION COMPANIES.,

We confirm that this thesis proposal has been defended and approved by the university.

In this regard, we are requesting your office to issue a permit to enable him collect data for his masters dissertation.

Any assistance accorded to him will be appreciated.

Yours faithfully,

1

PROF. Evangeline Gichunge, PhD. ASS DIRECTOR POSTGRADUATE STUDIES

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## Appendix III: NACOSTI Permit



## Appendix IV: Construction companies Listed at the NSE

Company	Sector
Bamburi Cement Ltd	Industrials
East African cables Ltd	Industrials
Crown paints Kenya PLC.	Basic materials
East African Portland cement	Industrials
Athi River Mining	Industrials

Source: NSE (2020)