EFFECT OF FREE CASH FLOWS ON DIVIDEND PAYOUT AMONG COMMERCIAL AND SERVICES FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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D61/84478/2016

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

NOVEMBER 2022

DECLARATION

This research project is my original work and has not been presented to any other institution of learning for any academic award.

Signature  Date 20/11/2022

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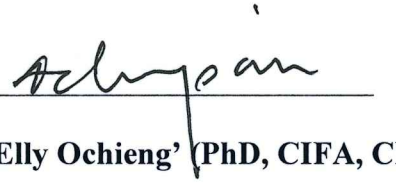
This research project has been submitted for examination with my approval as the university supervisor.

Signature  Date 21/11/2022

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ACKNOWLEDGEMENT

First, I would like to sincerely thank God for giving me wisdom, courage and guidance throughout my life, because without Him I may not have reached this far.

Special appreciation to my supervisor, Dr. Duncan Elly for providing positive, valuable and helpful guidance. His leadership skills and extensive knowledge in the field helped me shape the study proposal into the product it is currently.

Secondly, I am grateful to various people, who contributed to the completion of this draft, particularly my course mates at the University of Nairobi. Lastly, I express all my affection and deepest appreciation to my family for their unconditional support and affection. They provided me with the opportunity to acquire and to nurture my academic curiosity. I shall always give them the biggest and most sincere love.

DEDICATION

I dedicate this study project to Almighty God, the creator, my steadfast pillar, my inspiration, for knowledge, astuteness and understanding.

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LIST OF ABBREVIATIONS

DPR - Dividend Payout Ratio

FCF - Free Cash Flow

MM - Miller and Modigliani

NPV - Net Present Value

NSE - Nairobi Securities Exchange

SPSS - Statistical Package for the Social Sciences

ABSTRACT

Corporate finance literature shows that a company's dividend payout strategy as free cash flows can be used to finance investments and pay dividend. However, dividend payout decision remains a contentious corporate finance topic, as it needs to balance contradictory interests between shareholders and managers. In Kenya, NSE provides an excellent platform for international and local investors seeking to get access to the Kenyan market. Thus, as a requirement for a firm to be quoted at the bourse it ought to have well-outlined future dividends pay out strategy that will make dividends payout a key consideration for any entity intending to be listed. However, most companies under the commercial and services sector have not met their wishes, resulting in limited investment in the sector. In addition, the distribution of profits by the firms under the sector is low and uncertain. Further, there are a number of corporations listed under the commercial and services segment that failed to pay dividends in the past because of cash flow related imperatives. This research aims at examining how organization free cash flows affects dividend payout ratio among service and commercial enterprises listed at the Nairobi Stock Exchange. The agency theory, Miller and Modigliani dividend irrelevance theory and free cash flows theory formed the theoretical basis for this study. The survey employed a descriptive study strategy and the research's population covered the 13 commercial and services firms quoted at the NSE as at 31st December 2021. The paper used secondary data that was gathered via the collection data sheet for a period of 5 years (2017 -2021) and was obtained from the quoted commercial and services companies published financial statements and annual audited reports. Through the SPSS software, the descriptive and inferential statistics were adopted for the analysis of data. Inferential statistics entailed correlation and regression analysis. The research outcomes documented that free cash flows (FCF) had a positive and significant impact on dividend payout while profitability had a direct and significant relationship on the DPR respectively. Further, the results also documented that firm size had a negative and insignificant impact on DPR while firm age had a negative and significant impact on DPR respectively. This survey revealed that free cash flows, profitability and firm age significantly influence listed commercial and service company's dividend payout. This research recommended that that the executives of the quoted commercial and services firms should utilize the available free cash flows to increase the corporations' investments or distribute them as dividends to shareholders instead of investing in projects with negative NPVs.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Corporate dividend strategy is a key finance decision that has been an emphasis of academic research for years. It is documented that companies' dividend payout policies are influenced by company characteristics such as free cash flows, liquidity, financial strength, investment opportunities and other characteristics (Chang, Chang & Dutta, 2020). Free cash flow remains a substantial element of dividends payout, since free cash flows are the key source of cash used by companies to make dividend payments, and the optimal dividend policy is aimed at distributing the firms' available free cash flows (Djafar & Ratnaningsih, 2014). The higher an entity's free cash flow, the healthier it is since the entity has accessible cash for leverage repayment, growth and disbursements. Therefore, the higher an entity's free cash flows, the larger the dividend it can pay since the corporation has adequate cash (Febriani & Margaretha, 2019).

This study shall be pegged on the free cash flow (FCF), the agency and the Miller and Modigliani theories. The free cash flows theory indicates that if an entity has excessive free cash flows executive will be tempted to use the cashflow to maximize their own interest rather than shareholders interest thus to reduce this conflict, higher dividend payout is recommended (Ayodeji & Kysburn, 2020). The agency theory states that shareholders can control managers through dividends, as companies can reduce agency costs between shareholders and managers by repaying dividends, and dividend payments provide signs regarding the company's prospective value and cash flows (Abdioğlu, 2016). However, the Miller and Modigliani (1961) the irrelevance concept indicates that the firm's payout policy

is irrelevant hence, it does not affect an entity stock value; that is, has no effect on shareholder's wealth (Ergün, 2020).

In Kenya, the (NSE) is the only agency in Kenya authorized to list companies and aids to settle transactions in debt derivatives, equities and other linked financial securities (Ngure, Mutea & Muema, 2018). The listed firms account for an important proportion of the gross domestic product (GDP). However, statistics indicate that since independence, the country has witnessed several financial difficulties by listed corporations. This is evidenced by the large number of companies undergoing financial reorganization and others in receiverships and being wound up eventually. Several firms at the bourse including ARM cement, East Africa Portland, East Africa Cables, Mumias Sugar, Uchumi, Kenya Power among other quoted companies are currently undergoing serious financial difficulties (Kathuo & Kimoro, 2020). This phenomenon of financial difficulties in Kenyan public corporations has been observed by the increased delisting of companies (Oruko & Tibbs, 2020).

1.1.1 Free Cash Flows

Free cash flow (FCF) denotes a corporation's funds or cash that is distributable to shareholders or creditors without being used as short term capital or invested in long term assets (Widyanti & Widyasari, 2020)). Moreover, free cash flow indicates the accessible cash flows to providers of funds for reinvestment purposes, after meeting all the business requirements (Sindhu, 2014). It is the available extra cash of what is desired to sustain the resources of the business and to fund new and viable investment projects (Djafar & Ratnaningsih, 2014). Further, it denotes the cash, which is in surplus of the capital necessary for the positive NPV investments. Free cash flows have significant uses for stockholders in assessing a company's financial health (Sindhu, 2014).

Free cash flows have important and useful implication for companies' management and the shareholders (Mirza & Afza, 2014). High free cash flows level permits executives to invest internally generated funds in investment with positive NPV and aid to maximize stockholders' wealth (Mehanna, 2018). Managers also utilize high free cash flows to increase the corporations' investments or distribute them as dividends to shareholders. In addition, high free level of cash flow gives managers the flexibility to undertake additional investments to strengthen the entities profitability. An entity's high performance indicates positive signals regarding the future prospects aimed at increasing shareholder's value (Widyanti & Widyasari, 2020).

The availability of free cash flows in an entity is a positive signal that can be conveyed to stockholders about the corporation's future projections that illustrate the capacity for future cash creation (Mehanna, 2018). The availability of cash flows in an entity is indicated by the difference between capital expenditure and the operating cash flows. Positive free cash flows show than an entity has surplus cash after making payments of the existing commitments and essential investments. Negative free cash flows arise when an entity's outflow is in excess of the available cash and should always be assessed to determine the cause (Djafar & Ratnaningsih, 2014). FCF is measured through subtracting operating cash flows from the changes in fixed assets then dividing by total assets.

1.1.2 Dividend Payout

Dividend payout denotes the relative quantity of earnings, which are distributed by any corporation through dividends from the net business income (Aigbovo & Evbayiro-Osagie, 2022). Dividends are profits (bonus issue or cash dividends) which in proportion to their equity ownership, are distributed to the company's shareholders. Dividends are paid on the

profits that a company has made over a period. Dividend payments also indicate the percentage of net earnings paid by an entity to ordinary shareholders (Tahir & Mushtaq, 2016). Dividend payments represent the aggregate sum of dividends disbursed to stockholders in proportion to the company's net earnings and gives the idea that net earnings may be traced in the entity's income statement (Kılınçarslan, 2018).

Dividend payment is an important financial indicator that shows the sustainability of an entity's dividend payout. This is because a company for growth invests the amount that is not distributed as dividends to shareholders, while the amount that the company retains is called retained earnings (Surwanti & Pamungkas, 2021). Corporations with a high dividend payout tend to attract stakeholders who prefer to secure stable earnings to high stock price growth potential. Corporations paying a lower dividend mean that the entity may be reinvesting in business growth, hence prospects of high future capital gains for investors. Investors also monitor dividend payments when deciding whether to buy shares in a profitable dividend company or in companies with high growth prospects (Aigbovo & Evbayiro-Osagie, 2022).

Dividend payouts provide a way to assess whether a company is capable of generating cash (Ayodeji & Kysburn, 2020). Dividend payouts are measured in several ways, including dividend per share (DPS) ratio, the dividend yield (DY) ratio and the dividend payout ratio (DPR). DPS denotes the quantity of dividends declared by the corporation for each outstanding stock. DY is considered as interest income from the investment, which is calculated by dividing the DPS with the MPS (Surwanti & Pamungkas, 2021). DPR is a share of the net profit that the company pays to its owners as dividends. DPR is the ratio

of the amount of a dividend to a unit of total profit and represents the fraction of earnings that is dispersed to investors' as dividends (Kılınçarslan, 2018).

1.1.3 Free Cash Flows and Dividend Payout

Corporate and finance managers acknowledge the importance of free cashflow in influencing dividend payout decisions. The free cash flows theory indicates that excess cash in companies can lead to inefficiencies and increased agency costs. Therefore, it is desirable to distribute the surplus cash as dividends to shareholders (Al-Fasfus, 2020).The agency cost theory indicates that a direct correlation always exist between cash flows and DPR, companies make payments to reduce the costs of agency of free cashflow (Mirza & Afza, 2014). The agency theory further states that cash payout discipline is one of the solutions to minimize the firms' agency costs by the use of free cash movement of the company to solve the manager-shareholder problem (Sukkaew, 2018).

Empirically, several authors have explored the link between FCFs and dividend payout. Abdulrahman (2017) for instance explored cash flows and its effect on dividend payout and documented and significant interrelationship. Mirza and Azfa (2014) studied corporate characteristics and its influence on payout decisions and showed that cash flow sensitivity and payout were negatively correlated whilst profitability and operating cash flows directly affected dividends payments. Rahmawati and Narsa (2020) found that operating cash flow had a direct influence on dividends payment whereas debt levels had an adverse effect, Liquidity and profitability did not affect dividend payout while Suhartono (2015) revealed that cash flows positively affected payment of dividends.

1.1.4 Commercial and Services Firms Listed at the Nairobi Securities Exchange

The NSE is one of the Africa's prominent stock markets, it was incorporated to support Kenya's economic development by providing international and local investors with economic investment savings opportunities and acting as a way to access capital for domestic and international companies (Ngure, Mutea & Muema, 2018). It facilitates the trading of instruments floated by publicly traded corporations and the Kenyan Government. The NSE also facilitates clearance and trading of equity, derivatives, debt and other related securities. The Capital Markets Authority regulates the bourse. The CMA also monitors NSE's securities trading and operations to ensure stability and market liquidity (Oruko & Tibbs, 2020).

Firms that are recognised at the NSE's commercial and services industry include Kenya Airways (KQ), Express Kenya, Standard Group, the Nation Media, TPS East Africa, Uchumi Supermarkets, WPP Scangroup, Eveready East Africa and Longhorn Publishers. Others include Deacons (East Africa), Sameer Africa, Nairobi Business Ventures and Homeboyz Entertainment. The service and commercial sector denotes the type of businesses that provides services to retail and commercial buyers (Onsongo, Muathe & Mwangi, 2020). Both trade and service sectors are key to the development and expansion of the Kenyan economy as they generate employment opportunities, increase GDP and foreign earnings for the main post-independence period. In the Kenyan economy, the service industry contributes to the balance of trade (Mwaniki & Omagwa, 2017).

Companies which are registered in service and trade sector of the NSE, provides primary services in Kenya. The NSE, despite being under regulation by the Kenyan Capital Markets Authority and despite the importance of commercial and service in Kenya's economic

growth, various service and commercial companies such as Kenya Airways and Uchumi have experienced difficulties in their financial operations (Mwaniki & Omagwa, 2017). Over the past few years, the NSE has shown mixed fluctuations in profits of entities quoted under the commercial and services segment. For instance Kenya Airways (KQ), quoted under the sector posted its worst ever business results of $258 million in year 2015–2016 (Onsongo, Muathe & Mwangi, 2020).

1.2 Research Problem

Corporate finance literature shows that a company's dividend payout strategy and free cash flows can be used to finance investments and pay dividend (Al-Fasfus, 2020). However, dividend payout decision remains a contentious corporate finance topic, as it needs to balance conflicting interests between managers and shareholders (Kılınçarslan, 2018). Many models and theories have been put forward to examine issues such as factors impacting dividend policy, the reasons for dividend payments, dividend trends and the influence of dividend payments on corporation value (Boţoc & Pirtea, 2014). For instance, the agency and free cashflow supports that payment of dividend can reduce the free cash flows obtainable by executives thus reducing the shareholder-management conflicts. The MM (1961) theory however indicates that if an entity has excess funds it may decide to retain the funds hence price per share will not change thus valuation of the firm remains. Thus, determination of an optimal dividend payout policy is still controversial and entails serious decision making (Parsian & Shams, 2018).

In Kenya, the NSE provides an excellent system for international and local investors seeking to get access to the Kenyan market. Thus, as requirement for a firm to be quoted at the bourse, it ought to have a well-outlined future dividend payout strategy that will

make dividends payout a key consideration for any entity intending to be listed (Oruko & Tibbs, 2020). However, most companies under the commercial and services sector have not met this condition, resulting in limited investment in the sector. In addition, the distribution of profits by the firms under the sector is low and uncertain. Further, there are a number of corporations listed under the commercial and services segment that have not paid dividend in the recent past because of cash flow related imperatives (Kathuo & Kimoro, 2020). Specifically, firms like Uchumi Supermarkets, Eveready East Africa, Standard Group, Kenya Airways and the Scan group listed under the commercial sector have experience financial distress over the years and have stayed for a long period without paying dividends.

Numerous authors have also explored the existing interrelationship between FCF and DPR. Dwiyanti and Rahadian (2017) examined whether free cash flows affect dividends payment and revealed a significant interrelationship while Mehanna (2018) in Egypt studied whether free cash flows affect payout decisions and revealed an insignificant interrelationship. Dwiyanti and Rahadian (2017) examined how free cash flows affect cash dividend payments and revealed that cashflow, leverage and the life cycle simultaneously have significant effect on payout policy, but the study focused on telecommunication firms. In Nigeria, Tijjani and Sani (2019) studied cash flow and payout decisions and revealed that cash flows positively impacted dividend payout though the study's context was in oil and gas firms.

In Kenya, Kaloki (2018) examined free cashflow and its effect on capital expenditure among manufacturing firms and documented a significant interrelationship though dividend payout was not incorporated as a variable. Waswa, Jagongo and Ndede (2014)

studied the dividend payout among Kenyan Agricultural firms and revealed a direct relation between liquidity, profitability and DPR, but this study focused on agricultural entities. The above-cited studies broadly acknowledge that free cash flow impact dividend payout. However, these studies provide conflicting results oscillating from negative to positive interrelationships. In addition, the various regional and international studies were not conducted in Kenya and therefore their findings cannot be replicated to the Kenyan context. Further, the studies have been undertaken in different industrial settings ranging from oil and gas sector, manufacturing, telecommunication among other sectors. Thus, in light of these empirical gaps, the goal is to survey; how free cash flows affects dividend payout among NSE listed commercial and services firms.

1.3 Research Objective

To examine how organization free cash flows affect dividend payout ratio among commercial and services corporations quoted at the NSE.

1.4 Value of the Study

The outcomes shall be useful to the management of the quoted commercial and services corporations in the making of appropriate response strategies for managing fee cash flows, hence dividend payment improvement. The firms' management shall use the survey approvals and conclusions to convey suitable strategies on improving their company's free cash flows and dividend payout.

Policymaking entities like the capital markets authority and other agencies who are tasked with developing policies among listed firms. Policymaking entities can use the research

conclusions and recommendation to advance the strategic policies which aids in the management of free cash flows and also to ensure stable dividend payouts.

The research findings shall as well form a base for upcoming researchers as well as forthcoming scholars can adopt the study to be a base for their individual study. It will further supplement the obtainable theoretic literature on the study models. Further, the study will complement the available empirical literature on free cash flows and DPR.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This survey brings out author's guiding theoretical framework and it gives a review of various empirical reviews. The section further comprises of the conceptual model and summary for the gaps arising from the surveys.

2.2 Theoretical Review

The agency theory the Miller and Modigliani (MM) dividend irrelevance model and free cash flows theory formed the theoretical basis for this study.

2.2.1 Free Cash flows Theory

Jensen (1986) advanced the FCF model that explains that companies with low growth prospects and excessive cash flows will use leverage to oversight the management. The theory suggests that leverage directly reduces the firm's free cash flow due to interest and principal payment obligations. The theory indicates that debt contains fixed obligations (maturing principal and interest repayment) that the company must meet. Such obligations are expected to reduce the company's free cash flow (if any) and thus prevent executives from over-spending the company's financial resources. The theory indicates that an entity's value is contingent to the entities anticipated future FCFs, calculated as operating income after tax less the capital costs needed to keep the business afloat (Abdioğlu, 2020).

This theory originates from the concern that executives may invest too much money in unsuitable investments (Mehanna, 2018). Consequently, FCF denotes the cash amount that is essentially accessible for dispersal to stockholders and raising the amount of FCF is one of the strategies for executive to make an entity more valuable (Abdioğlu, 2020). The

theory dictates that dividends are paid out of the remainder after investing in gainful investments. In the corporation's viewpoint, the most significant source of cash dividends is money that is generated from the company operations. If an entity's operating cash is insufficient to for cash dividends payment, the entity may fail to sustain its future payouts. However, the primary drawback of FCF is that it depends on the effectiveness of governance mechanisms (Mirza & Afza, 2014).

The FCF theory postulates that if an entity has surplus cash, it is recommendable to distribute the extra FCFs as dividends to reduce discretionary funds accessible by executives that will reduce agency costs. Theoretically, dividend and debt policy is the main mechanism to reduce the agency costs (Mirza & Azfa, 2014). According to the theory, one approach of reducing FCF problem is payment of dividends instead of having surplus free cash flows. Thus, cash distribution to investors in form of dividends reduces the likelihood that executives will use the accessible FCFs inaptly. In this study, FCF theory indicates that payment of dividends is considered a strategy of reducing FCF that executives can use at their discretion.

2.2.2 Agency Theory

Jensen and Meckling (1976) conceptualized this model, which postulates that the human being is rational, has his own interests, and is opportunistic. The theory explains that control and ownership separation in organizations creates conflicts of interest between managers and owners (Rahmawati & Narsa, 2020). Because the manager's own interest takes precedence over the shareholder's representation costs that, the principal has incurred in supervising its agents. Representation costs are incurred when a conflicting interest between owners and managers arise. Management can spend generously under the

necessary conditions or overinvest to exceed the optimal size, because executive remuneration is often related to the size of the company (Ayodeji & Kysburn, 2020).

The theory holds that agents must effectively and efficiently manage a company on behalf of the owners and maximize shareholder wealth. Agents however have different interests, they desire to attract rewards and amuse themselves at the owners' expense through the entity's free cash flows for their private entertainment and convenience and undertaking negative NPV investments (Ayodeji & Kysburn, 2020). However, critique emanates from the assumptions behind the theory about personal utilitarian motives that lead to differences in the interests of the stockholders and executive may not be applicable for all executives; and thus overall reliance on the theory is not desirable since it disregards the complexity of corporate life (Rostamlu, Pirayesh & Hasani, 2020).

The theory argues that dividend payment reduces the FCF accessible by managers, so investment opportunities are undervalued. Furthermore, owing to declining cash flows, corporations approach stock markets to get funds, opening them up to scrutiny, which reduces monitoring costs (Sanan, 2019). Further, the theory explains the role played by dividends to monitor issues related to the ownership and management. It supports that disbursement of payouts reduces the quantity of cash under the control of executives' stopping them from spending on unprofitable projects and using the funds for private purposes, while forcing managers to go into external funds markets to raise extra capital, thus increasing monitoring and supervision from the market side.

2.2.3 Miller and Modigliani Dividend Irrelevance Theory

The MM (1958) dividend irrelevance model argues that dividend payout plan does not affect an entity's value. This theory shows that corporate investment and financial decisions are independent of their dividend policy. Therefore, the dividend payout policies are nor relevant for investors. MM suggests that dividend clienteles may arise due to different investor attributes. They postulate that the stockholders who are not interested in payouts proceeds prefer companies that pay low payouts. Therefore, the interrelationship between the corporation's payout strategy and its stockholders' dividend preferences is expected (Abdioğlu, 2016). MM shows that no dividend policy is better than another under efficient capital market conditions and therefore assumes that the dividends payment is not related to the company value (Sanan, 2019).

The MM model suggests that an entity's value is not related to its payout proportion, but to its earning power and asset risk. In a perfect world, dividend distribution decisions have a nil influence on an entity's value (Ergün, 2020). In order to realize the MM model, various assumption were made among them, zero transaction costs and there are no taxes. It is further assumed that there is a perfect capital market in which a single buyer or seller cannot influence the market price and that market information is freely available to everyone. However, the assumption that there is a perfect capital market, zero transaction costs, zero taxes and there is no information asymmetry have been believed to be unrealistic in the real world (Surwanti & Pamungkas, 2021).

MM argues that the ability to generate positive future cash flows determines a company's value, not dividend payments (Tahir & Mushtaq, 2016). MM shows that no dividend policy is better than another under the conditions of an efficient market, and therefore posits that

dividend payment is not related to an entity's value. However, in definite market practices, dividend policy has been found to really matter, and often relaxation of some of M&M's ideal funds market conventions has shaped the ground for competing models of dividends decisions. Due to uncertainty about future FCFs, shareholders essentially favor dividends to capital appreciation. Thus, a higher payout will minimize the yield which is required and thus the company's value is increased.

2.3 Determinants of Dividend Payout

2.3.1 Free Cash Flows

The decision of an entity to make payments depends on the cash availability. The remaining primary method of returning cash to investors is by dividends. A company cannot distribute dividends to its shareholders if it has insufficient cash but it can make profits (Widyanti & Widyasari, 2020). For discretionary uses, free cash flow may be used for capital expenditures and acquisitions with growth directed toward shareholder payments and debt repayment in the form of cash payments. A healthy company is characterized by payment of debts, available cash for growth and dividends (Mirza & Afza, 2014). Exceptions may not pay a fast-growing company a dividend for years and keep all of its profits to help fund its development (Ullah, 2018). Furthermore, the amount of FCF proxied by the amount of earnings. When debt levels are high, FCF is usually low, indicating that profits will also be low (Widyanti & Widyasari, 2020).

2.3.2 Profitability

Profitability is an index of performance and efficiency, although profitability does not necessarily mean management efficiency (Rahmawati & Narsa, 2020). Profit is a key

financial indicator in dividend payout determination, as profit-making companies are likely to distribute dividends than loss making establishments. Profitable corporations distribute dividends to communicate they are performing well financially and tend pay large amounts of cash dividends to investors to signal good market performance when the less profitable companies are facing a poor financial situation (Al-Najjar & Kilincarslan, 2018). According to signal theory, the distribution of dividends can become a signal to investors about the state of the company. Profitability is thus employed by board members as one of the reasons for paying dividends, because the more profitable a company is, the greater its cash flow.

2.3.4 Firm Size

Company size is a major element affecting dividend decisions. Large companies face higher possible representation problems, but usually have easy accessibility to funds markets to obtain capital from the outside at lower cost than companies have. Therefore, due to lower costs of transaction and a higher probability of agency cost problems, large companies pay high dividends as a control tool (Kılınçarslan, 2018). Larger companies are also less dependent on internal resources because they have the advantage of raising external capital from the capital markets. In addition, larger companies are more difficult to monitor, which raises the issue of representation between managers and shareholders. In this case, larger companies have a better chance of paying dividends. The logarithm of aggregate assets is the key proxy of company size. Abdioğlu (2016) posits that small companies pay low payout and describe this relationship by the higher level of information asymmetry and higher costs that small businesses face when issuing securities.

2.3.5 Firm Age

Company age is metric that indicates how many years a company has been operating since its inception (Muslih & Marbun, 2020). Relatively younger companies have more investment opportunities, low returns and significant barriers to obtaining external financing to cover their capital expenditures, leading them to save cash generated internally and pay less or no dividends. The maturity hypothesis states that higher dividend growth indicates a change in the company's life cycle. Companies tend to pay high payouts as they move from a growth phase to the mature phase. Such shift ensues as growth and investment opportunities slow or even decline and begin to generate more free cash flows (Al-Najjar & Kilincarslan, 2018). As corporations age, they begin to have a steady income with decreasing investment projects and are thus they are in a position to sustain high level of funds which allows the firms to pay high payout as supported by the maturity hypothesis (Al-Fasfus, 2020).

2.4 Empirical Review

2.4.1 Global Studies

Al-Fasfus (2020) examined whether free cash flows, leverage, bank age, bank size and profitability influences dividend payment among Jordanian banking institutions. Information was collected for a whole decade (2004 to 2015). Employing the multiple regression model, the research documented that profitability, leverage and free cash movements were significant dividend payout determinants. The study however indicated that size and age had no significant impact on the banking entities dividend payout.

Widyanti and Widyasari (2020) examined whether free cash flows, leverage, board independence and board structure affects dividend payments. The study was undertaken among listed Indonesian manufacturing firms. Data was collected from 29 firms for 3 years (2016 -2018). The path analysis technique was adopted for the analysis of data. This research documented a significant link between board size and FCF while leverage and board independence had an insignificant effect. Further, it was documented that FCF negatively and significantly affected the firms' dividend payouts.

Hejazi and Moshtaghin (2016) examined how agency costs associated with free cash flow affect corporates leverage and payout strategy in Iran. The study sampled 101 listed companies between 2007 and 2012 and the regression model for the analysis of data. This research documented a direct significant impact between free cash flows on both leverage and dividends. This research further found that entity size and profitability directly and significantly impacts dividend payment.

Dwiyanti and Rahadian (2017) explored the leverage effect, corporate life cycle and free cash flows on telecommunication sector, media industry and dividend strategy of technology that are recognised on Indonesia stock Exchange as at 2006 – 2014. Using regression analysis the authors documented that FCF, leverage and the life cycle significantly influenced dividend strategy. The study also found that companies with a life cycle, government ownership, and free cash flows have direct influence on payout strategy while leverage has indirect significance on the dividend strategy.

Sindhu (2014) studied how free cash flow affect dividend payment among listed firms in Pakistan. Firm size was incorporated as a moderator and data collected for a 10 years period (2000 to 2009) from the entities financials. Employing the regression model, the results

indicated that free cashflow significantly and directly affected payment of dividend. However, firm size had an insignificant effect on dividend payout.

2.4.2 Local Studies

Hersi (2021) examined how cash flows affect capital expenditure of the quoted NSE enterprises. The data was collected was from the 64 entities quoted at the NSE whereas a descriptive survey was used. Gathering of data as from 2016 to 2020 (5 years) and analysis was undertaken through the regression and correlation models. The outcomes indicated that entity size, financing, investing and cashflow considerably affected the capital expenditure of an entity. This research concluded how free cash flows affects capital expenditure of the quoted entities.

Bulla (2021) examined how profitability, growth prospects, previous dividend payments, and business risk predict dividend payout decisions at the NSE. Panel data techniques and logistic regression was documented for the analysis of data. This survey documented that business risks and prior dividend payouts significantly affected payment of dividends. The study also indicated that growth prospects and profitability affected dividend payments. The study concluded that firm-specific characteristics affect payment of dividends among NSE listed firms.

Gatumo and Omukaga (2019) examined whether free cash flows affects Kenyan quoted investment firms performance. This research adopted a descriptive survey and information gathered from 5 listed investment firms from 2011 to 2017 (5 years) through a data collection sheet. For data analysis, a regression model was implemented. The authors

revealed that free cash flows significantly impacted the quoted investment enterprise's performance in financial terms.

Mangwaya (2018) examined how FCFs affects the capital expenditure of entities quoted at NSE listed non-financial sectors. A descriptive survey was implemented for this research. Gathering of data was undertaken from the 32 listed nonfinancial entities from 2013 to 2017 (5 years). Using the regression technique, the data collected was analysed through the E-views statistical software. Results indicated that free cash flow negatively and insignificantly affected capital expenditure. This research concluded that FCFs insignificantly influences capital expenditure.

Njuguna and Jagongo (2015) examined the dividend payout determinants by listed Kenyan enterprises. This research implemented an exploratory research design upon which primary data was gathered through questionnaires. Through regression analysis, the outcomes indicated how future profitability and listed entities current, cash position, capital structure and investment prospects are determinants among the quoted firms in dividend payment. The study also found that company size, industry type and bank age were insignificant determinants of dividend payment.

2.5 Conceptual Framework

This study conceptual model comprised of DPR (response variable) and free cash flows (explanatory variable) while profitability and size were integrated as control variables. Figure 2.1 depicts the conceptual model.

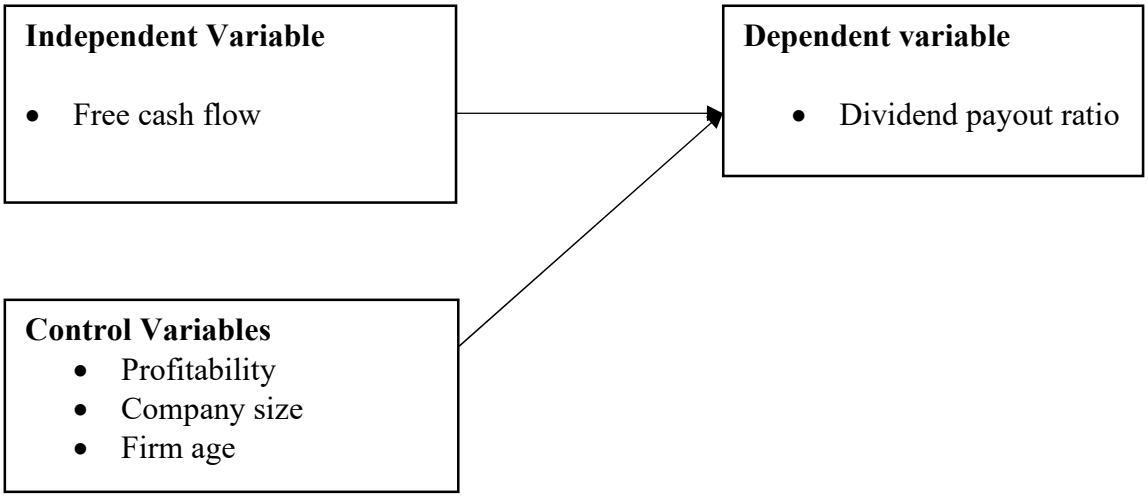

Figure 2.1: Conceptual Framework

Source: Author (2022)

2.6 Summary of Literature Review

This study studied various past studies that have been undertaken on FCFs and DPR. However, several literature gaps were identified as documented in table 2.1.

Table 2.1: Summary of Literature Review and Gaps

Author (s) & year	Research focus	Methodology	Findings	Research gaps
Al-Fasfus (2020)	Free cash flows, leverage, bank age, bank size and profitability influences dividend payment among Jordanian banking institutions	Multiple regression model	Free cash flows, leverage, profitability were significant dividend payout determinants	The study's context was banking institutions hence a conceptual gap
Widyanti and Widyasari (2020)	Free cash flows, leverage, board independence and board structure affect dividend payments	Path analysis technique	FCF negatively and significantly impacted the firm's dividend payouts	The study's context was manufacturing firms thus a contextual gap
Sindhu (2014)	Cash flows and dividend payment among quoted firms in Pakistan.	Regression model	Free cashflow significantly and directly affects payment of dividend	The study covered firms listed under different sectors thus a contextual gap
Hersi (2021)	Cash flows effects on capital expenditure	Regression and correlation models	Free cash flows significantly affect listed entities capital expenditure	The study covered all NSE firms listed under different sectors thus a contextual gap
Gatumo and Omukaga (2019)	Whether free cash flows affect Kenyan quoted investment firms' performance	Regression model	Free cash flows significantly impacted the quoted investment enterprise's performance	The study was undertaken under the investment firms listed at NSE and not commercial and services firms.
Mangwaya (2018)	How free cash flow affects the capital expenditure	Regression model	Free cash flows negatively and insignificantly affected capital investments	The study covered all NSE firms listed under different sectors thus a contextual gap
Njuguna and Jagongo (2015)	Dividend payout determinants among Kenyan listed firms.	Regression model	Capital structure, cash flow and investments were the key dividend payout determinants	The study covered all NSE firms listed under different sectors thus a contextual gap

Source: Author (2022)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter encompasses the study design, the targeted population, data collection procedures and lastly the data analysis techniques.

3.2 Research Design

This study adopted a descriptive study design. Tis study design involves the collection of data to describe a trend, case or phenomenon (Kothari, 2012). Thus, this design will be used to examine variables without manipulating them and to report the different attributes that define competencies. In addition, this design precisely reflects a wide variety of variables that include the behavior, opinions, beliefs, knowledge and skills of a particular person, group or situation. The design allows the discovery of relationships between different variables to determine if variables are independent (or not) and if they are, and then to determine the strength or dimension of the relationship (Sekaran & Bougie, 2013). Descriptive research was employed, as it is appropriate for collection of data to describe the nature of the preexisting situation.

3.3 Population of the Study

This study's population comprised of the 13 commercial and services corporations quoted at the NSE as of 31st December 2021. To aid in undertaking the research, a census of the 13 commercial and services firms was undertaken. A census is possible for a small population and is necessary when the factors are very different. Using the census for this research is suitable, as the population is not large and the number of commercial and services firms is certainly assessable.

3.4 Data Collection

The paper used secondary data, which was gathered via a data collection sheet. The key data that was collected included data on dividend payout (dividend payout ratio), profitability (net income and total assets), firm size and firm age. The data was gathered for a 5 years period from 2017 to 2021 and was retrieved from the listed commercial and services corporations annual audited and published financials.

3.5 Diagnostic Tests

This study conducted multiple correlation test, homogeneity, auto-correlation test and normality tests. The assumption of normality establishes how likely it is that the data set will be distributed normally and was assessed by use of Shapiro Wilk test of residuals. Multiple correlation suggests that at least two probing variables are closely related in the research model and the Variance Inflation Factors (VIF) was employed for multicollinearity testing. The homogeneity assumption states that the fallacy of term weaknesses should be similar for the values of explanatory variables and the Breusch-Pagan test was used for homogeneity testing. Autocorrelation occurs when the fallacy terms of the observation pair are not independent of each other and was assessed using the Breusch-Godfrey test.

3.6 Data Analysis

Descriptive and inferential statistics were employed for the analysis through the SPSS software. Descriptive analysis were used in organizing, describing and summarizing the data. Inferential statistics entailed correlation and regression analysis that were adopted to

determine if there exist a connection between independent variables (free cash flows, profitability, entity size and firm age) and the response variable (dividend payout).

3.6.1 Analytical Model

The regression equation was as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y = Dividend Payout measured using the dividend payout ratio (DPR)

X_1 –Free cash flows (FCF) calculated as operating cash flows less capital expenditure divided by aggregate assets

X_2 – Profitability measured using ROA

X_3 – Firm size measured using the $Natural\ Log\ (ln)\ of\ total\ assets$

X_4 – Firm age measured using the number of years the firms have been in operation

β_1,β_2, β_3 β_4= Coefficients

β_0 = intercept.

ε = Error term.

3.6.2 Test of Significance

The t-test and the F-test were utilized in testing the statistical significance of the explanatory variables and the response variable correspondingly. The statistical significance test were done at 5% levels of significance.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This section documents outcomes for the data analyzed and results explanation. It entails the descriptive analysis outcomes, diagnostic test results, correlation results, regression outcomes and the analysis of the study outcomes.

4.2 Response Rate

This research undertook a census of the 13 commercial and services corporations and used secondary data that was gathered via the collection sheet for a 5 years (2017 -2021) period. This survey managed to gather complete data from 10 firms. Data from Uchumi Supermarkets and Deacons East Africa was not accessible as the firms had been suspended from trading and had not published the financials while Homeboys was listed in 2020 and did not have data for five years. The ten firms made up a response rates of 76.9%, which was considered enough for this research as it exceeded 50% respectively. According to Babbie (2004), 50% response is reasonable for publication and analysis, 60 percent is good whereas 70 percent is excellent.

4.3 Descriptive Statistics

For the summarizing study data, descriptive statistics inclusive of the standard deviation, mean, maximum and minimum values were employed. Table 4.1 depicts the findings.

Table 4.1: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
DPR	50	.000	.972	.22216	.331693
FCF	50	-.379	.574	.02194	.175669
Profitability	50	-.890	.346	-.0706	.208427
Firm size	50	5.202	8.292	6.7920	.842219
Firm age	50	7.000	119.000	49.900	33.8346

Source: Study Data (2022)

Table 4.1 depict that the DPR had mean of 0.22216 (SD=0.331693) and has minimum and maximum values of 0.000 and 0.972, correspondingly. This shows that the average DPR of companies is 22.216% with a minimum of 0.000, which means that some companies have not paid dividends for several years. Free Cash Flow (FCF) had a mean of 0.02194 (SD=0.175669), with a minimum of -0.379 and a maximum of 0.574. This depicts that the average FCF of the companies is 0.02194 with a minimum value of -0.379, which means that some companies had negative free cash flow. The average profitability for the entities was -0.0706 (SD=0.204827) with a minimum of -0.890 and a maximum of 0.346. This depicts that the average ROA in the sector is -7.06%, which means that the profitability of the industry is negative. The average size of the firms was 6.7920 (SD=0.842219) with a minimum of 5.202 and a maximum of 8.292. Furthermore, company age had a mean of 49,900 (SD=33.8346) with a minimum of 7.00 and a maximum of 119.0 correspondingly.

4.4 Diagnostic Tests

To evaluate the appropriateness of the assumption underlying the classical linear regression concept that was used in the data analysis this research undertook a normality, autocorrelation, heteroscedasticity and multicollinearity tests which informed the results on regression analysis. The obtained results were documented as follows.

4.4.1 Normality Test

Normality test assesses if the sample data at hand was acquired from a normally distributed population. Through the Shapiro Wilk test normality was evaluated as indicated under table 4.2.

Table 4.2: Normality Test

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.111	50	.167	.961	50	.097
a. Lilliefors Significance Correction						

Source: Study Data (2022)

Normality in this study was evaluated through the Kolmogorov-Shapiro Wilk tests. Table 4.2 shows the information was distributed normally as shown by the P-values of 0.167 and 0.097 >0.05 correspondingly. This point out that the normality assumption was not violated thus the data is fit for the study.

4.4.2 Heteroscedasticity Test

Heteroscedasticity denotes to a condition where variance of the residual varies over a range of measured values. For the assessment of heteroscedasticity, The Breusch-Pagan test was used as indicated under table 4.3.

Table 4.3: Heteroscedasticity Test

Breusch-Pagan test for heteroscedasticity
Test statistic: LM = 6.635496,
with p-value = P(Chi-square(4) > 6.635496) = 0.156451

Source: Study Data (2022)

The existence of heteroscedasticity suggests that the error terms variance is not constant over the range of the explanatory variables. Table 4.3 shows that the homoscedasticity was not violated and the study's data was homoscedastic. This is shown by the chi square value of 6.635496, P=0.15451>0.05 respectively.

4.4.3 Autocorrelation Test

The Breusch-Godfrey approach was employed for autocorrelation testing as indicated under table 4.4

Table 4.4: Autocorrelation Test

Breusch-Godfrey test for first-order autocorrelation
Test statistic: LMF = 0.972638,
with p-value = P(F(1,44) > 0.972638) = 0.329

Source: Study Data (2022)

Autocorrelation arises when residuals in different periods are not independent of each other. An autocorrelation test was performed via the Breusch-Godfrey approach. Table 4.4 shows that the homoscedasticity was not violated and the study's data was homoscedastic. This is shown by the chi square value of 0.972638, P=0.329>0.05 respectively.

4.4.4 Multicollinearity Test

Multicollinearity arises when the explanatory variables fail to be independent of each other, which indicates that an explanatory indicator can be linearly predicted by alternative variable or other variables. Variance inflation factors (VIF) were employed to evaluate multi-collinearity. The results were as follows.

Table 4.5: Multicollinearity Test

Variable	**Tolerance**	**VIF**
FCF	.955	1.047
Profitability	.935	1.069
Firm size	.774	1.292
Firm age	.746	1.340

Source: Study Data (2022)

Multicollinearity was assessed using the VIF (Tolerance) test. The collinearity results on table 4.5 outlines that the VIFs (1.047, 1.069, 1.292 and 1.340) are below the recommended threshold value of 10. This shows that the multi-collinearity assumption has not been violated.

4.5 Correlation Analysis

In order to evaluate the extent and strength of association among the variables, correlation analysis was used. Correlation is key at is shows the degree of association between two indicators. Table 4.6 depicts the correlation outcomes.

Table 4.6: Correlation Analysis

	DPR	**FCF**	**Profitability**	**Firm size**	**Firm age**
DPR	1				
FCF	.321*	1			
Profitability	.216	.151	1		
Firm size	-.040	.074	.035	1	
Firm age	-.261	.111	.185	-.447**	1

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

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

Source: Study Data (2022)

Table 4.6 depicts that free cash flows (FCF) had a weak and positive (r=0.321) correlation with dividend payout (DPR) indicating a weak association between FCF and DPR respectively. Profitability had weak and positive (r=0.216) correlation to dividend payout indicating that profitability is positively correlated with DPR. Firm size had a weak and negative (r=-0.040) correlation with dividend payout while firm age had a weak negative (r=-0.261) association with DPR respectively.

4.6 Regression Analysis

For the determination of the linkage between the explanatory indicators and the dependent variable, regression analysis was undertaken. The obtained results were documented as follows.

4.6.1 Model Summary

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519[a]	.269	.204	.295917

a. Predictors: (Constant), Firm age, FCF, Profitability, Firm size

Source: Study Data (2022)

Table 4.7 depicts that the R-square (coefficient of determination) value was 0.269. This indicates that the explanatory variables (corporation age, FCF, profitability, entity size) explains 26.9% of the variation in the enlisted commercial and services firms' dividend payout (DPR). Therefore, 73.1% is accounted for by variables not incorporated in this research.

4.6.2 Analysis of Variance

Table 4.8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.450	4	.363	4.141	.006[b]
	Residual	3.941	45	.088		
	Total	5.391	49			

a. Dependent Variable: DPR

b. Predictors: (Constant), Firm age, FCF, Profitability, Firm size

Source: Study Data (2022)

The ANOVA outcomes in table 4.8 above indicates that the F-statistics value of 4.141 is statistically significant. This is shown by the P-value of 0.006<0.05. This depicts that the regression model is appropriate for this study and can be used to examine the independent - dependent variables relationship.

4.6.3 Coefficients

Table 4.9: Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.933	.429		2.174	.035
	FCF	.651	.246	.345	2.644	.011
	Profitability	.199	.052	.250	3.827	.001
	Firm size	-.073	.057	-.185	-1.279	.207
	Firm age	-.004	.001	-.428	-2.903	.006

a. Dependent Variable: DPR

Source: Study Data (2022)

Table 4.9 depicts that a positive (B=0.651) and significant (t=2.644, P=0.011<0.05) link exists between FCF and dividend payout respectively. Profitability had a positive (B=0.199) and significant (t=3.827; P=0.001<0.05) relationship with the DPR respectively. Firm size had a negative (B=0.073) and insignificant (t=-1.279; P=0.207>0.05) effect on DPR respectively. Firm age had a negative (B=-0.004) and significant (t=-2.903; P=0.006<0.05) effect on DPR respectively.

4.7 Interpretation of the Findings

The study outcomes revealed that free cash flows had a significant and direct relation with dividend payout. This suggests that a unit increase in FCFs brings a significant increase the amount of dividends payable to shareholders thus FCF significantly enhances dividend payment. The agency cost theory indicates that a direct correlation always exist between cash flows and DPR, if companies make payments to decrease the costs of agency of FCFs (Mirza & Afza, 2014). A study by Rahmawati and Narsa (2020) found that operating cash flow had a direct influence on dividends payment while Suhartono (2015) revealed that cash flows positively affected payment of dividends. Dwiyanti and Rahadian (2017) also revealed a significant interrelationship between cash flows and payout decisions. However, Abdulrahman (2017) documented a significant interrelationship between FCF and DPR while Mirza and Azfa (2014) showed that cash flow sensitivity and payout were negatively correlated with profitability. Further, Mehanna (2018) revealed an insignificant interrelationship between cash flows and payout decisions.

The results also showed that profitability had a direct and significant impact on dividend payout. This suggests a unit rise in ROA positively affect payment of dividends. That profitability significantly enhance the dividend payout ratio. According to signal theory, the distribution of dividends can become a signal to investors about the state of an enterprise. According to Al-Najjar & Kilincarslan (2018) profitability is thus employed by board members as one of the reasons for paying dividends, because the more profitable a company is, the greater its cash flow. Al-Fasfus (2020) documented that profitability and free cash movements were significant dividend payout determinants.

This research results further documented that corporate size had an indirect and insignificant effect on payment of dividends. This indicates that an increase in firm assets negatively but insignificantly affects dividend payment, which means that purchase of assets, reduces the amount of free cash flows that would be used to pay dividends. Abdioğlu (2016) posits that small companies pay low payout and describe this relationship by the higher level of information asymmetry and higher costs that small businesses face when issuing securities. Al-Fasfus (2020) documented that bank size insignificantly influenced banking entities dividend payout. However, Hejazi and Moshtaghin (2016) found that entity size and profitability directly and significantly affects dividend payment.

The study also documented that firm age had an indirect and significant effect on payment of dividends. This infers that a unit change in firm age significant and adversely affects payment of dividend, which means that young firms may not have the adequate capacity to pay dividends compared to older firms. The maturity hypothesis states that higher dividend growth indicates a change in the company's life cycle. According to Al-Najjar and Kilincarslan (2018) companies tend to pay high payouts as they move from a growth phase to the mature phase. Such shift ensues as growth and investment opportunities slow or even decline and begin to generate more free cash flows. Bulla (2021) concluded that firm-specific characteristics affect payment of dividends among NSE listed firms. Njuguna and Jagongo (2015) found that industry type and bank age were insignificant determinants of dividend payment.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The last chapter encompasses summary results, conclusions and study recommendations. This chapter also presents study limitations and suggests future research directions.

5.2 Summary

This survey sought to study how organization free cash flows affect dividend payout ratio among commercial and service corporations quoted at NSE. The agency, the MM dividend irrelevance and free cash flows theories formed the study's theoretical basis. The research adopted a descriptive study design and the research's population involved the 13 commercial and services corporations enlisted at NSE as at 31st December 2021. In this research, secondary data was used which was gathered via the data collection sheet for 5 years (2017 -2021) period and was obtained from the listed commercial and services corporation's published accounting statements and annual audited reports. A descriptive and inferential statistics, through the SPSS software, was employed for the analyzation of data. Descriptive analysis was used in organizing, describing and summarizing the data. Inferential statistics entailed regression and correlation analysis. Complete data was gathered from ten firms making up a 76.9% response rate that was deemed satisfactory for this survey.

Descriptive statistics outcomes documented that the mean DPR for the entities was 22.216% with the minimum value of 0.000 depicting that some of the companies had not paid dividends in some of the years. The findings also revealed that the mean FCF ratio for

the entities was 0.02194 with a minimum value of -0.379 showing that some companies had negative free cash flows. Further, the results documented that the average ROA for the commercial and services sector was -7.06% indicating that the sectors profitability is negative. The outcomes also documented that average size of the entities was 6.7920 while firm age had a mean of 49.9 years respectively.

Correlation analysis results revealed that free cash flows (FCF) had a weak and direct link with dividend payout (DPR) while Profitability had weak and positive correlation dividend payout respectively. The outcomes further documented that company size had a negative and weak association with dividend payout while firm age had a weak negative association with dividend payout correspondingly.

Regression findings revealed a direct and significant interrelationship exists between FCFs and dividend payout of the quoted commercial and services entities while profitability had a direct and significant relationship with the DPR correspondingly. Further, the outcomes indicated that corporate size had a negative and insignificant impact on DPR of the quoted commercial and services entities. Lastly, this study documented that firm age had a negative and significant impact on DPR of the quoted commercial and services corporations respectively.

5.3 Conclusions

This research results revealed that FCFS had a significant and positive relation with dividend payout among the listed commercial and services firms. As per this result, this survey concludes that a unit increase in free cash flows significantly increases the amount of dividends payable to shareholders thus FCF significantly enhances dividend payment.

The findings also documented that profitability had a positive and significant impact on dividend payout among the enlisted commercial and services corporations. As per this observation, this study concludes that a unit increase in profitability directly affect payment of dividends that profitability significantly enhances the dividend payout ratio.

The study further documented that firm size had a negative but insignificant effect on dividend payout among the enlisted commercial and services companies. The research thus concludes that an increase in firm assets negatively but insignificantly affects dividend payment, which means that purchase of assets, reduces the amount of free cash flows that would be used for dividends payment. The study also documented that company age had a negative and significant influence on dividend payout among the enlisted commercial and services entities. This study thus concludes that a unit change in firm age significantly affects payment of dividends by listed commercial and services firms.

5.4 Recommendations

This research concluded that FCF significantly influences dividend payment among the enlisted commercial and services companies. This survey thus recommends that the executives of the quoted commercial and services enterprises should utilize the available free cash flows to increase the corporations' investments or distribute them as dividends to shareholders instead of investing in projects with negative NPVs.

This research also concluded that profitability significantly enhances the dividend payout ratio among the said commercial and services corporation. This survey thus recommends that the executives of the enlisted commercial and services firms should ensure their firms

are profitable to ensure they generate adequate cash flows to pay out dividends and for investment purposes.

Further, this research concluded that the size of a firm does not significantly affect payment dividends by the enlisted commercial and services enterprises at the NSE. This survey however recommends that the executives of the enlisted commercial and services corporations should invest more in assets since assets are key in revenue generation making it possible for the firms to generate profits that enhances shareholders wealth and value.

This survey also concluded that firm age significantly affects dividend payout by quoted commercial and services corporations at the NSE. This research thus recommends that the executives of the NSE enlisted commercial and services corporations should use the learning and experience their firms have acquired over the years to make effective dividend payout policies and enhance shareholders value.

5.5 Limitations of the Study

This survey employed secondary data and accounting ratios, that have inherent characteristics such as being historical and does not incorporate the qualitative opinions of the executives running the organizations. Secondly, secondary data is for the past therefore it may not signify the existing conditions among quoted commercial and services corporations. The study's context was 13 sampled corporations hence the finding may not be replicated to the other segments for entities listed at NSE.

The collected research data was analysed by use the regression model that is based on several restrictive assumptions of multiple correlation, homogeneity, auto-correlation and normality and failure of any of the assumption may lead to biased results. Further, the study

used specific measures of the explanatory variables as well as the response variable. The study is therefore limited to the adopted indicators. This survey was undertaken in Kenya therefore its findings may not be generalized to other nations around the world since dividend payment and free cash flows differ across countries.

5.6 Suggestions for Further Research

The research's model summary depicted that firm age, FCF, profitability, firm size explains 26.9% of the variation in the listed commercial and services corporations dividend payout (DPR). Therefore, 73.1% is explained by other variables not incorporated in this survey. This indicates several other quantitative and qualitative factors influence listed commercial and services firms' dividend payout. Hence, a study can be undertaken to cover other firm specific, macroeconomic as well as qualitative factors influencing dividend payment among listed entities. A similar study can also be undertaken among all corporations quoted at NSE.

This study also relied on secondary data on the study variables. However, in secondary data there is no incorporation of views and opinions from policy makers, administrators, and citizens. Thus, related research may be undertaken using primary data collected through interviews due to the limitations linked with secondary data sources. Further, the regression model was applied in this survey for the data analysis despite its restrictive assumptions. To circumvent this problem, this study suggests a similar study, which can used non-parametric techniques like chi square or general mores that do not limit the researcher's scope.

REFERENCES

Abdioğlu, N. (2020). On the determinants of corporate dividend policy: A Tobit Model Approach. *Yönetim ve Ekonomi Araştırmaları Dergisi*, 14(1), 332-345.

Abdulrahman, S. (2017). Ownership structure, cash flow and dividend policy: A study of listed oil and gas industries in Nigeria. *International Journal of Innovative Research and Advanced Studies,* 4(11), 195-199.

Aigbovo, O., & Evbayiro-Osagie, I. E. (2022). Firm life cycle stage and dividend payout of listed non-financial firms in selected Sub-Saharan African Countries: A sectoral analysis. *Sriwijaya International Journal of Dynamic Economics and Business*, 5(3), 207-228.

Al-Fasfus, F. S. (2020). Impact of free cash flows on dividend payout in Jordanian banks. *Asian Economic and Financial Review*, 10(5), 547-558.

Al-Najjar, B., & Kilincarslan, E. (2018). Revisiting firm-specific determinants of dividend policy: Evidence from Turkey. *Economic Issues,* 23(1), 1-46.

Ayodeji, A. T. & Kysburn, M. K. (2020). Firm characteristics and dividend policy of quoted manufacturing firms in Sub-Sahara Africa. *Asian Journal of Economics, Business and Accounting*, 14(3), 50-57.

Boţoc, C., & Pirtea, M. (2014). Dividend payout-policy drivers: Evidence from emerging countries. *Emerging Markets Finance and Trade*, 50(4), 95-112.

Chang, M., Chang, B., & Dutta, S. (2020). National culture, firm characteristics, and dividend policy. *Emerging Markets Finance and Trade*, 56(1), 149-163.

Djafar, I. A., & Ratnaningsih, D. (2014). *The impact of free cash flow on dividend payout ratio of manufacturing firms listed in Indonesia Stock Exchange*. Universitas Atma Jaya-Yogyakarta.

Dwiyanti, I., & Rahadian, D. (2017). The effects of free cash flow, life cycle, and leverage on dividend policy of technology, media, and telecommunication companies listed in the Indonesia Stock Exchange. *International Journal of Economics, Commerce and Management,* 5(4), 2348-0386.

Ergün, B. (2020). Determinants of payout policy: an analysis on Turkish manufacturing firms. *Business & Management Studies: An International Journal*, 8(2), 1803.

Febriani, M., & Margaretha, F. (2019). Factors that determine dividend policy on banking in the Indonesia Stock Exchange. *Business and Entrepreneurial Review,* 18(2), 145-164.

Gatumo, F. M., & Omukaga, K. (2019). A review of free cash flow hypothesis on the investment firms listed in Kenya. *IOSR Journal of Business and Management,* 21(1), 53-55.

Hejazi, R., & Moshtaghin, F. S. (2016). Impact of agency costs of free cash flow on dividend policy, and leverage of firms in Iran. *Journal of Novel Applied Sciences*, 3(1), 14-21.

Hersi, I. A. (2021). The relationship between cash flow and capital expenditure of firms listed at the Nairobi Security Exchange, *Unpublished MBA Project*, University of Nairobi.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.

Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. *In Corporate Governance (pp. 77-132).* Gower.

Kaloki, K. I. (2018). The relationship between free cash flows and capital expenditure of manufacturing firms quoted at the Nairobi Securities Exchange. *Unpublished MBA Project*, University of Nairobi.

Kathuo, S., & Kimoro, J. (2020). Determinants of dividend policy decisions of the listed banks in Kenya. *International Journal of Management and Business Studies*, 7(2), 16-21.

Kılınçarslan, E. (2018). The factors determining dividend policy of financial firms listed on the Borsa Istanbul. *Boğaziçi Journal Review of Social, Economic and Administrative Studies*, 32(1), 75-109.

Mangwaya, F. (2018). Effect of free cash flow on capital expenditure of non-financial firms listed at Nairobi Securities Exchange. *Unpublished MBA Project*, University of Nairobi.

Mehanna, S. F. (2018). Free cash flow, dividend policy and leverage: Do growth opportunities matter? Empirical Evidence from Egyptian Stock Exchange. *Journal of Accounting Research,* 5(2), 1-28.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411-433.

Mirza, H. H., & Afza, T. (2014). Impact of corporate cash flow on dividend payouts: Evidence from South Asia. *Middle-East Journal of Scientific Research,* 19(4), 472-478.

Muslih, M., & Marbun, S. O. (2020). The effect of risk management, firm age, and firm size on the performance of banking companies registered in Indonesia Stock Exchange moderated by corporate governance and budget as control variable. *International Journal of Science and Society*, 2(4), 274-290.

Mwaniki, G., & Omagwa, J. (2017). Asset structure and financial performance: A case of firms quoted under commercial and services sector at the Nairobi Securities Exchange, Kenya. *Research Journal of Finance and Accounting*, 8(4), 192-200.

Ngure, E. G., Mutea, F., & Muema, W. (2018). Relationship between financial structure and financial performance of listed firms at the NSE. *International Journal of Advanced Research in Engineering& Management*, 4(8), 01-40.

Njuguna, I., & Jagongo, A. (2015). Factors considered in dividend payout decisions: The case for listed companies in Kenya. *Research Journal of Finance and Accounting*, 6(13), 68-74.

Onsongo, S. K., Muathe, S. M., & Mwangi, L. W. (2020). Financial risk and financial performance: Evidence and insights from commercial and services listed companies at NSE, Kenya. *International Journal of Financial Studies*, 8(3), 51-60.

Oruko, F., & Tibbs, C. Y. (2020). Influence of financial risk on financial performance of agricultural firms listed at NSE. *IOSR Journal of Economics and Finance*, 11(4), 05-12.

Parsian, D., & Shams Koloukhi, A. (2018). A study on the effect of free cash flow and profitability current ratio on dividend payout ratio: Evidence from Tehran Stock Exchange. *Management Science Letters*, 4, 63-70.

Rahmawati, R., & Narsa, I. M. (2020). Operating cash flow, profitability, liquidity, leverage, and dividend policy. *International Journal of Innovation, Creativity and Change*, 11(9), 121-148.

Rostamlu, A., Pirayesh, R., & Hasani, K. (2020). The effect of free cash flow-based agency costs on dividends in companies listed on the Tehran Stock Exchange (TSE). *Mediterranean Journal of Social Sciences*, 7(4), 131-138

Sanan, N. K. (2019). Impact of board characteristics on firm dividends: evidence from India. *Corporate Governance: International Journal of Business in Society*, 19(6), 1204-1215.

Sindhu, M. I. (2014). Relationship between free cash flow and dividend: Moderating role of firm size. *Research Journal of Finance and Accounting*, 5(5), 16-23.

Suhartono, A. (2015). The effect of free cash flow and ownership structure on dividend payout ratio in manufacturing companies in Indonesia. *The Indonesian Accounting Review*, 5(2), 129-140.

Sukkaew, D. (2018). Agency costs and free cash flow hypothesis of dividend payout policy in Thailand. *Review of Integrative Business and Economics Research*, 4(2), 315-327

Surwanti, A., & Pamungkas, W. S. (2021). Dividend policy, firms' characteristics and the impact on the Southeast Asian firms' value. *In 4th International Conference on Sustainable Innovation 2020-Accounting and Management* (ICoSIAMS 2020) (pp. 150-156). Atlantis Press.

Tahir, M., & Mushtaq, M. (2016). Determinants of dividend payout: Evidence from listed oil and gas companies of Pakistan. *The Journal of Asian Finance, Economics and Business*, 3(4), 25-37.

Tijjani, B., & Sani, A. U. (2019). An empirical analysis of free cash flow and dividend policy in the Nigerian oil and gas sector. *Research Journal of Finance and Accounting*, 7(12), 154-160

Ullah, S. (2018). Impact of free cash flow, dividend and financial leverage on earnings management; Evidence from Pakistan. *Unpublished Dissertation*, Capital University.

Waswa, C. W., Ndede, F. W., & Jagongo, A. O. (2014). Dividend payout by agricultural firms in Kenya. An empirical analysis of firms listed on the Nairobi security exchange. *International Journal of Business and Social Science*, 5(11), 63-74

Widyanti, N., & Widyasari, W. (2020). Factors affecting free-cash-flow (FCF) with dividend policy as a mediating variable. *In 8th International Conference of Entrepreneurship and Business Management Untar (ICEBM 2019)* (pp. 340-345). Atlantis Press.

APPENDICES

Appendix I: Data Collection Sheet

	2017	2018	2019	2020	2021
Net Income					
Total assets					
Plant property and equipment (PPE)					
Operating Cash flows					
Capital expenditure					
Years in operation					

Appendix II: Commercial and Service Firms Listed at the NSE

1. Deacons (East Africa).
2. Eveready East Africa.
3. Express Kenya.
4. Homeboyz Entertainment.
5. Kenya Airways.
6. Longhorn.
7. Nairobi Business Ventures.
8. Nation Media.
9. Sameer Africa.
10. The Standard.
11. TPS Eastern Africa
12. Uchumi Supermarket.
13. Scan group.

Appendix III: Research Data

Firm	Year	DPR	FCF	ROA	Size	Age
Eveready	2021	0.00	-0.22	-0.22	5.20	54
	2020	0.00	0.01	-0.33	5.32	53
	2019	0.00	-0.02	-0.12	5.40	52
	2018	0.00	-0.31	-0.20	5.76	51
	2017	0.79	-0.33	0.35	5.89	50
Express kenya	2021	0.00	0.01	-0.07	6.08	103
	2020	0.00	0.00	-0.02	6.11	102
	2019	0.00	-0.07	-0.05	5.67	101
	2018	0.00	-0.25	-0.22	5.51	100
	2017	0.00	-0.13	-0.07	5.57	99
KQ	2021	0.00	0.00	0.00	8.19	44
	2020	0.00	0.00	0.00	8.23	43
	2019	0.00	0.00	0.00	8.29	42
	2018	0.00	0.00	-0.06	8.14	41
	2017	0.00	0.00	-0.04	8.16	40
Longhorn	2021	0.87	0.08	0.01	6.46	28
	2020	0.00	0.03	-0.09	6.39	27
	2019	0.76	0.04	0.08	6.37	26
	2018	0.63	0.22	0.08	6.38	25
	2017	0.59	0.13	0.07	6.27	24
NBV	2021	0.00	-0.12	0.19	8.25	11
	2020	0.00	-0.06	-0.57	6.84	10
	2019	0.00	-0.38	-0.57	7.79	9
	2018	0.00	-0.04	-0.89	7.93	8
	2017	0.00	-0.18	-0.23	8.16	7
NMG	2021	0.60	0.11	0.00	7.10	62
	2020	0.63	0.04	0.00	7.07	61
	2019	0.33	0.57	0.07	7.08	60
	2018	0.85	0.57	0.10	7.05	59
	2017	0.72	0.19	0.12	7.05	58
Sameer	2021	0.00	0.25	0.19	6.05	52
	2020	0.00	0.19	0.04	6.02	51
	2019	0.00	0.08	-0.49	6.18	50
	2018	0.00	-0.13	-0.20	6.41	49
	2017	0.00	0.19	0.00	6.47	48
Scan group	2021	0.00	0.01	0.00	6.98	22
	2020	0.00	-0.03	-0.20	6.94	21
	2019	0.83	0.05	0.01	7.11	20
	2018	0.67	0.07	0.04	7.16	19
	2017	0.67	0.01	0.03	7.14	18
Standard media	2021	0.00	0.04	-0.02	6.64	119
	2020	0.00	0.04	-0.07	6.61	118
	2019	0.00	0.13	-0.12	6.62	117
	2018	0.25	0.06	0.06	6.67	116
	2017	0.00	0.15	-0.05	6.65	115
TPS serena	2021	0.00	0.01	-0.04	7.24	24
	2020	0.00	-0.05	-0.07	7.24	23
	2019	0.43	0.06	0.01	7.25	22
	2018	0.51	0.04	0.01	7.25	21
	2017	0.97	0.05	0.01	7.24	20