OWNERSHIP CONCENTRATION, CAPITAL STRUCTURE, DIVIDEND POLICY AND STOCK RETURNS OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES,

UNIVERSITY OF NAIROBI

November,2023

DECLARATION

This thesis is my original work and has not been presented for a degree in any institution of higher learning

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DEDICATION

This thesis is dedicated to God and my late parents, Mr. Benjamin Ndua and Rachael Ndua, who instilled an academic culture in the family and laid a solid foundation through their hard work.

ACKNOWLEDGEMENT

My greatest appreciation is to the Almighty God who has been with me as I undertook this noble task. I would like to most sincerely thank my lead supervisor Prof. Nyamute Winnie Iminza for the constant critic and for always challenging me to do better. Special thanks to my other supervisors Prof. Kithinji Angela M and Prof. James Njihia, for their support throughout the study. I sincerely thank you for your inspiration and encouraging comments during the study.

Special thanks to my elder brother Mr. Francis Mbugua Ndua and my sister Miriam Mwihaki for providing the necessary financial support and constantly encouraging me to complete the Ph.D. To my other siblings Mr. James Mwaura and Rahab Wanjiru, thank you for your constant prayers and encouragement to keep aiming higher. To my wife Mary and my children Ndua, Mbugua, Ngure and Wangui, thank you for the constant prayers and for offering a peaceful environment for my studies.

To my friends Daniel Kahihia and David Nyamu, thank you for offering your input whenever you were called upon to do so. I would like to thank my fellow Doctor of philosophy candidate Mr. Jeff Arodi and Dr Tabitha Njuguna, for offering their expertise and positive feedback on this thesis.

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ABBREVIATIONS AND ACRONYMS

CMA Capital Markets Authority

CS: Capital Structure

CSE: Colombo Stock Exchange

DPR: Dividend Pay-Out Ratio

DY: Dividend yield

FTSE: Financial Times Stock Exchange

MENA: Middle East and North Africa

MM: Modigliani and Miller

MSCI: Morgan Stanley Capital International

NSE: Nairobi Securities Exchange

NSEASI: Nairobi Securities Exchange All Share Index

OC: Ownership Concentration

SR: Stock Returns

VIF: Variance Inflation Factor

WACC: Weighted Average Cost of Capital

ABSTRACT

Ownership concentration enables majority shareholders to influence the capital structure and dividend policies; two key financing decisions that are independently linked to firm performance. Ideally, firm managers should strive to maximize stock returns by selecting an appropriate dividend policy and optimal capital composition that maximize the trade-off between the cost of leverage and gains. However, the performance benefits are not always realized because the controlling shareholders may adversely affect stock returns by extracting private benefits at the expense of the minority shareholders, leading potential investors to consider the firm as a risky and unattractive investment, hence lowering stock demand and price. This research sought to determine the interrelationship among ownership concentration, capital structure, dividend policy and stock returns of companies listed at the Nairobi Securities Exchange (NSE). It seeks to determine whether shareholders with majority shares affect stock performance. In particular, the study examined the effect of ownership concentration on stock returns, the intervening effect of capital structure on the ownership concentration and stock returns relationship, the moderating effect of dividend policy on the ownership concentration and stock returns relationship, and the joint effect of ownership concentration, capital structure and dividend policy on stock returns. The study was anchored on agency theory which explains the interactions among the four research variables by linking the alignment and entrenchment effects on stock performance. Stakeholder, liquidity preference, and trade-off theories were used as support to the agency theory. To test the research hypothesis, the study applied the positivist research philosophy. A census survey was done on sixty-seven firms listed at NSE from 2006 to 2019 and data was obtained from sixty firms that had been listed for at least two years. The study adopted a panel longitudinal research design to analyze the secondary panel data. Descriptive statistics were conducted to assist in identifying relationships among the variables, detect outliers and data visualization. Correlation analysis was done to determine the strength and direction of the relationship between the four variables. Diagnostic tests of multicollinearity, normality, stationarity, serial correlation and heteroskedasticity were undertaken before data analysis to check on the assumptions of the model. The model specification test points out that the fixed effects model was the most applicable for this study. To address the non-normality the data on the four variables were log-transformed. Hypotheses test results found a negative and significant relationship between ownership concentration and stock returns. Secondly, the four-step mediation process showed that capital structure mediated the connection between ownership concentration and stock returns. However, the dividend policy did not moderate the relationship. Finally, the study found that ownership concentration, capital structure and dividend policy jointly affected stock returns. Therefore, the results contribute to the empirical literature by reducing the conflicting positions on the link between ownership concentration and stock returns by introducing capital structure into the relationship and confirming the role of capital structure in performance management. Further, the study has policy implications in that proper degrees of ownership concentration serve as an effective way of eliminating agency conflicts as postulated by agency theory. Thus, the study recommends that listed companies should adopt appropriate levels of ownership concentration and caution corporate managers against high levels of ownership concentration as it may adversely affect stock performance. Further, the study recommends that agents be given incentives through monitoring and regulation to ensure that management interests and those of their principals are aligned when important financing decisions are being made to serve the interests of both majority and minority shareholders. The Study performed a linearity test and found that all the variables were linearly related but did not consider the possibility of other types of relationships, such as curve linear relationships. To determine whether the findings would hold in different contexts, a comparable study may be conducted in other emerging and developed economies.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

There is an immense interest among scholars, practitioners, regulators, and investors in how ownership concentration (OC) affects Stock returns (SR). One of the key areas of investigation, mainly in developed economies, has been the question of whether the proportion of shares held by shareholders and their relative power influence stock returns. Ownership concentration is associated with increased monitoring and reduced agency costs as majority shareholders exercise control over the management. Due to active monitoring by majority shareholders, Managers' interests are aligned with shareholders' interest in value creation; leading to better firm performance. The effectiveness of monitoring brings about the alignment effect that directly impacts on stock returns (Kamran &Shah, 2014). However, the performance benefits are not always realized because the controlling shareholders may adversely affect stock returns by extracting private benefits at the expense of the minority shareholders, leading potential investors to consider the firm as a risky and unattractive investment, hence lowering stock demand and price (Wang & Shailer, 2015).

Moreover, research on how capital structure and dividend policy interact with Ownership concentration to shape performance has also produced imprecise outcomes (Azam, 2010; Iturriaga & Crisóstomo, 2010; Romdhane, 2016). With an increase in ownership concentration, it is expected that majority owners will influence debt to equity ratio, with a preference for a high debt to equity ratio aimed at increasing leverage and preventing managerial opportunism, leading to positive stock performance. Higher debts reduce the cost of funds due to the interest tax shield and hence highly geared firms experience lower costs of funds and higher expected

stock returns (Wakaisuka, 2017). However, the increased leverage poses bankruptcy risks, financial distress, and financial risk, hence reducing the attractiveness of the stock and lowering stock performance (Zhang, 2018). Therefore, a higher debt-to-equity preference by concentrated owners may have mixed effects on performance. Similarly, majority shareholders may influence management's decision to pay dividends as a means to reduce cash available to managers and send positive signals about the future profitability of the company which directly impacts stock performance. Dividend payout is likely to amplify the positive stock performance in a firm with high ownership concentration because stockholders will attach a higher value to the firm shares and will be more willing to pay a higher share price (Madhani, 2016).

Agency theory is the anchoring theory of the study because it helps in the conceptualization of how stock returns interact with ownership concentration. The advancement of personal interests by managers against those of the shareholders results in agency conflict. Through ownership concentration, the agency theory contends that shareholders can align management's interests with their interests to promote better performance (Romdhane, 2016). Agency theory recommends best internal governance mechanism to control management actions by recommending two solutions. To begin with, the principals can design performance-based contracts, where the agents' performance can be checked against set targets. Secondly, the principal can gather intelligence information on the actions of his agents; this helps the principal to hold the agents accountable for all their actions by instituting disciplinary actions on errant managers (Jensen & Mechling, 1976). The trade-off theory helps in the conceptualization of capital structure in the ownership concentration and stock returns link. Optimal leverage will constitute the debt and equity combination that will yield a high value

to the firm through high stock prices. Trade-off theory suggests that firms should have optimal leverage that helps balance the interest tax shield of debt with the cost of financial distress, agency benefits, and the cost of debt (Culata & Gunarsih, 2012). Liquidity preference theory conceptualized dividend policy as a moderating link as it suggests that shareholders should demand higher returns for stocks with longer maturities because they carry higher risks. When all other factors are constant, stockholders prefer cash in the form of dividends or other highly liquid assets. Based on Keynes's Liquidity Preference Theory (1973), shareholders prefer current earnings to future earnings but can trade their preference for current returns if future returns are guaranteed. Therefore, an increase in the dividend retention rate may increase stock returns (Malietso, 2017).

Globally the top three shareholders in listed firms have majority control in about 50% of the world's largest companies in developing countries and 40 % in developed countries (De La Cruz, Medina & Tang, 2019). On stock returns, the MSCI World Index reported a 24% market gain in 2019, the strongest since the global financial crisis in 2008, mainly due to rapid technological innovations among US technology giants and a strong recovery of Eurozone and Asian stocks. The FTSE 100, a measure of the performance of British blue-chip stocks, increased by 12% to close at 7542 points in 2019 compared to 6,728 in 2018 (Brătian, Mihaiu, & Șerban, 2022). On the capital structure, corporate debt levels have increased relative to GDP over the last 15 years, in both progressive economies and developing markets. This upsurge has been more rapid in developing markets as their markets have deepened. Countries with higher investor protection have reported high dividend payouts while firms with high growth opportunities have reported low dividend payouts (Ramcharran, 2001).

In Kenya, the 2019/20 fiscal year had a considerable fall in market performance, which could be linked to the market impact of Covid-19. The NSE 20 Share Index, Market Capitalization, and Bonds Turnover all fell by 26.25%, 7.63%, and 4.66%, respectively. Nonetheless, the Equity Turnover and Share Volume jumped by 8.43% and 0.14%, respectively, as a result of the significant panic trading that happened following the disclosure of Covid-19 existence in Kenya (CMA, 2020). The (NSE) 20-Share index decreased by 23.7% from 3,712 points in 2017 to 2,834 points in 2018, with a market capitalization of KSh 2,102 billion. The value of bonds traded rose from KSh 429 billion in 2017 to KSh 558 billion in 2018(Economic survey,2019). Companies have mixed ownership structures, with institutional and foreign shareholders accounting for 41% and 34% of total ownership, respectively (Oltetia, 2002). Firms listed at NSE have had inconsistent dividend policies due to microeconomic factors such as taxes, regulations, and market demand and supply that face firms in different sectors. Dividend policies are seen as an important indicator of a firm's performance and thus where there is a need for a review of dividend policy, the review should be cautious about sending negative signals about firm performance which may adversely affect stock returns. On the capital structure, most listed firms have grown their debt levels over the last decade. According to a report by cyton investments (2019), only 5% of firms listed at NSE sourced their financing from the capital markets while 95% of the firms took bank loans as a source of funding their operations.

1.1.1 Ownership Concentration

Ownership concentration is defined as a situation in which more control is given to one or a few dominant owners (Gaur et al, 2015). Madhani (2016) defined ownership concentration as an internal governance tool in which proprietors' control and sway the firm's decision-making

to safeguard their benefits. This study adopted the definition by Berle and Means (1932) who defined ownership concentration as a situation where ownership and control are separated by having shareholders who own a proportionate share of the company. This control is exercised by having a majority share which gives the majority shareholder the power to vote to influence the outcome of the various decisions of the company.

Ownership concentration is important because it gives the shareholder the ability to control the firm's important decisions through the crucial role of monitoring and supervising management interests. The effectiveness of monitoring brings about the alignment effect and managers are forced to pursue profit maximization which results in to increase in stock performance. Malietso (2017) showed that concentrated ownership may improve the performance of a firm by increasing monitoring and alleviating possibilities of hostile takeovers. However, with high ownership majority shareholders become entrenched, transfer resources to other firms that they control, and deny their minority counterparts the right to receive dividends through their voting power. The entrenchment effects are associated with increased information asymmetries and increased debt as majority owners avoid dilution of their equity, causing investors to consider the firm a risky investment, thus leading to volatility in stock performance (Wang & Shailer, 2015).

Ownership concentration has been measured in previous studies as percentage of shares possessed by the major stockholder and the proportion of stocks held by the five largest shareholders (Sousa and Galdi, 2016; Narang, 2018; Madhani, 2016;). Other researchers used the Herfindahl-Hirschman Index (HHI) which measures the equity stake of the largest shareholder. HHI provides concentration measures for the whole company but does not effectively clarify the qualified power of the single shareholder; making it unsuitable for

analysing the relationship on principal-principal shareholder conflict. This study operationalized ownership concentration through the percentage of shares held by the five largest stockholders to broaden the concept of concentration by capturing the principal-principal shareholder agency relationship.

1.1.2 Capital Structure

Dieu &Thi (2016) defined capital structure as a mixture of long-standing debt and equity. Debt constitutes that part of the financing that a company receives from its lenders, in the form of loans, bonds, and debentures; while equity concerns that part of the capital funded by the stockholders. Capital structure denotes the debt-to-equity funding ratio (Phung & Mishra, 2016). This study adopted the definition by Pandey (2015) who defined capital structure as the mixture of common share capital, preferred share capital, term loans, retained profit, debts, and other long-term sources of capital that a business can raise to form part of its total capital.

Capital structure is used in this study due to its effect on the cost of capital which in turn affects firm performance and the value of the firm. Capital structure is important because it shows the result of being highly geared to the weighted cost of capital (WACC), the wealth of shareholders, and firm value. Ordinarily, geared firms experience a lesser cost of funds and greater value owing to interest tax shields (Wakaisuka, 2017). At higher gearing levels, the expected returns on the stock both by the creditor and the shareholder increase since they perceive the firm's debt as risky, thus driving WACC higher. The firm's capital structure is crucial to its overall stability; a firm with a strong capital structure can boost its stock returns through an increase in share price. However, over-reliance on debt exposes the firm to financial distress, financial risks, and bankruptcy thereby impacting stock returns.

Capital structure has been measured using various indicators. Mihai &Mihai (2013) measured capital structure through the debt-to-asset ratio, which measures the long-term liabilities that are attributed to the assets of companies. Higher debt to corporate assets is considered to be riskier to equity investors and vice versa (Madhani, 2016). Berggren & Bergqvist (2015) measured capital structure using the debt-to-equity ratio, which is the proportion of capital contributed by shareholders to each shilling borrowed. In the current study, the capital structure is operationalized through a debt-to-equity ratio as recommended by Berggren &Bergqvist (2015). This ratio is selected because it helps one to know how leveraged the company is, as well as to give stocks that are at high risk to shareholders if the company has a high leverage ratio (Siyanbola et al., 2013).

1.1.3 Dividend Policy

Dividend policy is defined as rules or guidelines that articulate how shareholders can share profits (Albert, 2013). A dividend policy is effectively a financial decision that denotes the percentage of the company's revenues to be rewarded to shareholders. Here, a company decides on the share of revenue to be circulated to the owners as dividends or to be cultivated back into the company. Similarly, Alfaraih, Alanezi, and Almujamed (2012) defined dividend policy as a company's plan of action to guide how shareholders can benefit from the profits generated. The definition adopted by this study articulates dividend policy as the practice followed by the management of a firm in making decisions on dividend payments, or the size and pattern of dividend payments (Lease et al., 2000). In this case, dividend policy refers to actions to be followed when decisions on dividends are taken. It relates, in effect, to those decisions on earnings, on what is to be paid as dividends, and what is to be reinvested.

Dividend policy is fundamental for shareholders, managers, investors, creditors and other stakeholders. Dividends assist investors in making investment decisions by assessing the capacity of a firm to consistently generate cash. By gathering information on the dividend pay-out ratio and dividend yield, investors can assess the performance of a company. The dividend pay-out ratio has a strong effect on the growth prospects of earnings for a firm (Sigh et al, 2019). Since dividend yield and dividend pay-out ratio play a key role in investment decisions by investors, dividend policy may, therefore, influence stock return. Jiang (2012) argued that dividend policies are relevant to the firm because they influence the investment decisions of the firm. Malietso (2017) noted that due to fluctuations in earnings per share, a firm adopting a residual dividend policy is more likely to have a high cost of capital. However, a stable predictable dividend policy emphasizes that the specific dividend paid per share leads to lower risk which increases the value of the firm (Madhani, 2016).

Various scholars have used various measures to measure the dividend policy. Sindhu, Hashmi & UlHaq (2016) measured dividend policy using the dividend payout ratio, expressed as the share of earnings after tax distributed to the shareholders calculated as dividend per share divided by earnings per share. Kamau (2018) measured dividend policy as the proportion of profits distributed as dividends expressed as total dividends paid divided by net income. This study used the dividend pay-out ratio expressed as (DPS/EPS) and dividend yield expressed (DPS/MPS) as measures of dividend policy because they are of key significance to stockholders since they contribute to a higher value and shareholders would be prepared to reward a higher price for shares that pay dividends (Baker &Weigand, 2015). Dividend yield as a measure of dividend policy is important because it is an indicator of the total return

originating from dividends, with the rest originating from a price increase (Baker &Weigand, 2015).

1.1.4 Stock Returns

Stock returns are defined as the dividend or capital gains earned on a stock; it is a stimulating force and a major reward in the investment process and a vital method for investors to compare alternative investments (Owolabi &Inyang, 2013). According to Violita & Soeharto (2019), the stock return is a percentage that includes income and capital gains relative to investment. This study adopted Fama (1981) definition of Stock returns, which described stock returns as a reflection of time compensation, the expected rate of inflation, and the risk of return on investment in stocks.

Stock returns are important because the movement in stock prices is closely related to changes in macroeconomic variables. This is because the stock markets contain fundamental information about the macro economy and understanding factors that affect stock returns plays a fundamental role in making corporate decisions for better performance. Stock returns are affected by ownership concentration, capital structure and dividend policy. Ownership concentration has always been presented as an internal governance system that enables greater monitoring and boosts performance (Ongore, 2008). However, because of the potential inefficiency of disciplinary actions brought on by immature capital markets, the impact of ownership concentration on stock performance could be adverse. External block holders may prefer the use of leverage to prevent managers from awarding themselves large perquisites to reduce managerial opportunism. Risk and return trade-offs are involved in leverage decisions where shareholders expect a higher return because the risk of bankruptcy rises with debt (Zhang, 2018).

In previous studies, stock returns were measured using return on equity (ROE) and return on asset (Ben, 2014 & Hatem 2017). ROE was measured as the ratio of the net profit to the share capital. With higher performance, there was an increase in the price of the corporation's stocks, and then a return on the market. The return on assets was measured as the ratio of net profit to total assets, where the increase in shareholder wealth was due to high performance and the return on the stock market. In this study, the stock return was measured by taking changes in price during the financial year plus any dividends paid, divided by the original price of the stock. This measure is important because it determines the gain from the price change as well as the current dividend paid by the company and therefore gives the total return on the stock.

1.1.5 Firms listed at the Nairobi Securities Exchange

Firms listed at the Nairobi Securities Exchange (NSE) have a history that can be traced since the formation of the NSE. NSE was formed in 1920 when traders were engaged in trading securities without a trading floor and was officially registered as a joint stockbroker association in 1954(NSE, 2018). The NSE facilitates the listing of firms and offers a trading floor for investors interested in buying and selling securities. The Capital markets authority (CMA) is the regulatory body in charge of promoting and facilitating the development of ordinary, fair and efficient capital markets. The Nairobi Securities Exchange All Share Index (NSEASI) helps in tracking the movement in share price for all firms and is supported by the NSE 20 share index. In 2014, the NSE included 194,625,000 issued and fully paid-up shares in the main investment market segment. Currently, the NSE has a daily trading volume of more than 100 million shares and plays a major role in boosting economic growth in Kenya (NSE, 2018). There were sixty-seven listed firms and twenty-three brokers at the NSE as of 31 December 2019.

Stock returns often measured using the Nairobi Securities Exchange 20-Share index have witnessed price and trade volume fluctuations. The 2019/20 fiscal year had a considerable fall in market performance, which could be linked to the market impact of Covid-19. The NSE 20 Share Index, Market Capitalization, and Bonds Turnover all fell by 26.25%, 7.63%, and 4.66%, respectively. Nonetheless, the Equity Turnover and Share Volume jumped by 8.43% and 0.14%, respectively, as a result of the significant panic trading that happened following the disclosure of Covid-19 existence in Kenya (CMA, 2020). Most firms listed at the NSE have mixed ownership structures. Mainly the firms have their ownership composed of individual, institutional, government, foreign and domestic shareholders. The capital markets authority restricts ownership by individuals to not more than 5% of the total shares except where an investor undergoes vetting for ethical values and financial capability by the regulator. The company act 2015 requires branch foreign companies to give 30% of ownership to Kenyan citizens by birth while those incorporated in Kenya can have 100% foreign ownership (CMA, 2016). High levels of ownership concentration are a common feature among listed firms in Kenya with institutional and foreign shareholders accounting for 41% and 34% of total ownership, respectively (Oltetia, 2002).

Most listed firms have grown their debt levels over the last decade. According to a report by cyton investments (2019), only 5% of firms listed at NSE sourced their financing from the capital markets while 95% of the firms took bank loans as a source of funding their operations. Maina et al (2019) reported an increased uptake of bank loans, with most companies keeping away from corporate bonds. According to the cyton (2019) report, the drop in corporate bond issuance was caused by bondholder losses as a result of defaults by various companies including; Nakumatt supermarkets, Imperial Bank, ARM cement, and Chase Bank. In addition,

the capital markets authority (2018) report notes that five new listings on the stock exchange occurred between 2013 and 2017, versus a target of four listings annually, indicating that the majority of businesses preferred borrowed funding. Furthermore, Firms listed in the various sectors had inconsistent dividend payments due to liquidity and insolvency issues over the past ten years. In 2017, sixty-four companies traded on the stock exchange, and fifteen of those reported losses, two fewer than in the previous fiscal year of 2015, while 25 of the companies, or 39%, reported declining after-tax profits. In total, two-thirds of the companies that were active on the stock exchange reported losses or reduced earnings (www.nation.co.ke).

The challenges facing firms listed at NSE has been sending shakes in the east African regional markets considering that the NSE has 62 out 110 listed firms at the East African community exchange. Further fear has dampened the investors' confidence in the bourse as firms struggle to obtain financing through listing and consequent increase in borrowed funding. The erosion of investors' confidence can be linked to high levels of ownership concentration, inadequate regulatory framework, poor dividend policy and financial distress. Local investors are shying away from trading at the bourse due to poor results posted in the last decade as evidenced by declining share price and poor outcomes of firms offering new listings at the exchange (CMA,2019). Market players agree the trend at the NSE bourse is not good and interventions need to be developed before it extends to the entire East African Exchange market. There is need for policy interventions through research on whether stock returns are affected by ownership concentration and how capital structure and dividend policy impact this relationship, hence necessitating the current study.

1.2 Research Problem

A critical role for management boards, investors, and regulatory bodies is to design and implement regulations, policies, and strategies that enhance stock performance. To achieve this objective, firms require an appropriate level of ownership concentration and capital structure. Ownership concentration is a key corporate control and governance instrument that addresses the agency problem and enhances firm performance by allowing the majority owners to influence managers' decisions, align owners' and managers' interests, and escalate owners' monitoring of managers. Ownership concentration enables majority shareholders to influence the capital structure and dividend policies; two key mechanisms that are independently linked to firm performance. At higher gearing levels, the expected returns on the stock increase since investors perceive the firm's debt as risky, thus driving WACC higher. over-reliance on debt exposes the firm to financial distress, financial risks, and bankruptcy thereby impacting stock returns. Ideally, firm managers should strive to maximize stock returns by selecting an optimal capital composition that maximizes the trade-off between the cost of leverage and gains. Besides, firms with an appropriate dividend policy can enhance stock performance by signaling positive prospects for growth in earnings. However, with little information being availed to potential investors and the possibility of insider trading, companies with concentrated ownership tend to experience volatility in stock prices (Demsetz &Lehn, 1985)

The stock returns at the Nairobi Securities Exchange has witnessed significant price volatility with the overall trend indicating that stock returns have experienced turbulence in the previous decades. In 2016, eleven NSE-listed firms issued profit warnings, which increased to twelve in 2017, fifteen in 2018, and seventeen in 2019.The firms blamed bad weather, sluggish growth in private sector credit as a result of interest rate caps, and low economic activity after the

protracted electioneering period. Profit warnings sparked negative investor sentiment, causing share prices to fall and overall stock market performance to suffer (Cyton,2018). In 2016, investors experienced a decline of 25% in share prices compared to the year 2015 which lead to equity loss of 500 billion. Further, the 2019/20 fiscal year had a considerable fall in market performance, which could be linked to the market impact of Covid-19. The NSE 20 Share Index, Market Capitalization, and Bonds Turnover all fell by 26.25%, 7.63%, and 4.66%, respectively. In the period between 2008 to 2014 the Nairobi Securities exchange all share index (NSEASI) reported positive total returns when no dividends were reinvested in the index and remained positive when dividends were reinvested in the index. In 2018, the 20-Share index fell by 23.7% from 3,712 points in 2017 to 2,834 points in 2018, with a market capitalization of KSh 2,102 billion. However, between January to December 2015, the NSEASI reported negative total returns that were attributed to the declining value of the Kenyan shilling against the dollar and rising interest rates both locally and internationally (Economic survey, 2015).

High levels of ownership concentration are a common feature among listed firms in Kenya with institutional and foreign shareholders accounting for 41% and 34% of total ownership, respectively (Oltetia, 2002). The increase in ownership concentration has been accompanied by growth in debt for most listed firms over the last decade. Cyton investments (2019) report indicated that only 5% of firms listed at NSE sourced their financing from the capital markets while 95% of the firms took bank loans. Maina et al (2019) reported an increased uptake of bank loans, with most companies keeping away from corporate bonds. According to the cyton (2019) report, the drop in corporate bond issuance was caused by bondholder losses as a result

of defaults by various companies. Additionally; the NSE-listed firms have reported inconsistent dividend payouts due to liquidity and insolvency issues.

Researchers linking ownership concentration and stock returns have arrived at different and conflicting results. Panda (2022) found a negative correlation between concentrated ownership and stock returns among Indian firms. similarly, Clark and Wojcik (2005) contend that performance is negatively affected by ownership concentration after controlling for size due to large capital requirements for big firms, something that cannot be attained unless through expansion of the capital base. On the contrary, Shumali and Abuamsha (2022) found a Positive link between foreign holding, managerial ownership, large ownership and stock returns. The positive effect is confirmed by Zou and Adam (2008) who contend that ownership through large block holders increased stock returns among Chinese firms. Hegde et al. (2020) established that ownership concentration positively affects stock returns. Further, Warrad et al. (2013) indicate that concentrated ownership has no significant effect on stock performance. Panda (2022) Opined stockholding through institutions had no effect on stock market returns since profitability and firm age enhanced stock returns before the financial crisis. However, the study took a sample of 85 out of 213 firms that were listed, this could have brought selection bias between small, medium and large firms and thus the results could not be attributed to all companies. Also, the study was conducted at the heart of the global financial crisis, during the crisis there is increased volatility in stock returns, hence the need to extend the study to cover pre and post-financial crisis as envisaged in this study.

However, the study by Clark and Wojcik (2005) and Zou and Adam (2008) was conducted among firms listed at the Frankfurt stock exchange in German and china respectively which are developed economies with different cultural, economic, and political factors from Kenya,

hence creating a contextual gap. The study by Shumali and Abuamsha (2022) used OLS regression analysis which does not take care of fixed effects and may lead to misleading results, creating a methodological gap. The current study used panel regression that has greater control of endogeneity due to causal relationships, greater data variability, control of any possible collinearity between variables, and greater information availability (Cheng, 2007). The study by Warrad et al. (2013) used cross-sectional and time series approaches; the cross-sectional model fails to account for unobserved heterogeneity. Thus, the findings may be skewed due misspecification of the variables, creating a methodological gap. This study used panel fixed regression that takes care of fixed effects. The mixed results could also be caused by the failure to incorporate the potential effect of capital structure and dividend policy, creating a conceptual gap.

Empirical literature linking Ownership concentration, leverage, dividend policy and stock returns has reported mixed relationships. Berggren and Bergqvist (2015) found that capital structure positively affects stock returns. Rajverma et al. (2018) investigated the relationships among ownership structure, dividend and cost of capital in India. Firms with family holdings reported lower dividends, increased leverage and low-cost capital in comparison to non-family-owned enterprises. Mulyani et al. (2016) contend that Ownership concentration through family shareholding affects the combined determination of dividend and capital structure among Indonesian firms. Muriungi (2021) examined the influence of ownership concentration on dividends, leverage and value of NSE-listed firms. From the results, ownership concentration did not affect firm value while dividend policy had a positive impact on the association. Ownership concentration and leverage had a complimentary impact on the relationship. However, the studies investigated the variables separately and did not consider

the mediation effect of capital and the moderating effect of dividend policy in the relationship between ownership concentration and stock returns as envisaged in this study, creating a conceptual gap.

The interrelationship among ownership concentration, capital structure, dividend policy and stock returns have been examined individually and with mixed and contradictory findings. These variables are interrelated and their joint interactions need to be examined. Further, there is a scarcity of studies on the ownership concentration and stock returns relationship; most studies were conducted in developed countries whose macroeconomic environment is different from the Kenyan context due to different social, political, economic, and regulatory factors. This study examines whether firms with concentrated ownership affect stock returns. Secondly, the study examines the effect of capital structure on the relationship between ownership concentration and stock returns. Further, the study examines the moderating effect of dividend policy on the relationship. Therefore, the question is: What are the interrelationships among ownership concentration, capital structure, dividend policy and stock returns of companies listed at the Nairobi Securities Exchange?

1.3 Research Objectives

1.3.1 General Objective

The overall objective of this study was to determine the interrelationships among ownership concentration, capital structure, dividend policy and stock returns of firms listed at the Nairobi securities exchange.

1.3.2 Specific Objectives

The specific objectives of the study are:

i. Determine the relationship between ownership concentration and stock returns of firms listed at the Nairobi Securities Exchange
ii. Examine the effect of capital structure on the relationship between ownership concentration and stock returns of firms listed at the Nairobi Securities Exchange
iii. Investigate the effect of dividend policy on the relationship between ownership concentration and stock returns of firms listed at the Nairobi Securities Exchange
iv. To determine the joint effect among ownership concentration, capital structure dividend policy and stock returns

1.4 Value of the Study

The study reduced the controversy surrounding the effect of ownership concentration on stock performance as entrenched in agency theory. This study confirms the agency theories assertion of the need to balance the levels of ownership concentration to balance between the entrenchment and alignment effects for better stock performance. Therefore, through monitoring and regulation, management interests and those of their principals should be aligned when important financing and dividend decisions are being made to serve the interests of both majority and minority shareholders for better stock returns. The findings and

recommendations add value to the inconclusive debates on the variables as well asserting the importance of managing agency conflict as postulated by agency theory.

The study offered a theoretical contribution as it extended the debate on the link between concentrated ownership and stock returns by introducing capital structure and dividend policy thus improving the scholarly rigor. The research sought to explain the intervening role of capital structure in the link between ownership concentration and stock returns. The study investigated the joint relationship among ownership concentration, capital structure, dividend policy, and Stock returns. Therefore, the study provided a clear road map on the significance of ownership concentration, leverage, and dividend policy on the attainment of better stock returns. Therefore, the findings and recommendations of this study benefited theoretical literature and assist future scholars in understanding the inconclusive debates on the variables as well asserting the importance of managing agency conflict as postulated by agency theory.

The outcomes of the study provide managers and practitioners with more insight into the link between ownership concentration and stock and prompt the management on the actions they need to take to reduce the risk of high levels of ownership concentration that may adversely affect stock returns. Secondly, the findings assist managers to know the need for an optimal capital structure and influence their financing decisions to ensure they can leverage between the interest tax shield of debt and the cost of liquidation, hence enhancing shareholders' value. Finally, the findings helped to sensitize managers on dividend policy effects on stock returns and guide them when making dividend decisions to avoid sending negative signals that may adversely affect stock returns.

The study informed policy decisions by Capital Markets Authority on the effect of ownership concentration on stock returns. It is expected that the findings will motivate CMA to review policies on ownership concentration among listed firms as well as offer guidelines on the debt-equity combination to avoid bankruptcy problems and promote wealth maximization for the shareholders. Furthermore, the results will offer insights into the role of dividend policy and act as a reference point while formulating regulations to guide dividend payments.

1.5 Organization of the Thesis

This research has been divided into six chapters. The first chapter was an introduction that briefly described the background of the study. This was followed by a discussion of the main variables namely: ownership concentration, capital structure, dividend policy and stock returns. There was also a discussion about the context, followed by the problem statement, the importance of the study, and thesis organization.

The second chapter discusses the study's theoretical foundation and review of the literature that explains the interrelationships between study variables. Theories of agency, trade-off, stakeholder, and liquidity preference are all discussed. A review of the empirical studies is also included in the chapter. In conclusion, the chapter discusses the conceptual model and research hypotheses derived from the research objectives.

The third chapter comprises the research methodology, research design, study philosophy, population, data collection, measurement of variables, diagnostic tests and model specification. The fourth chapter discusses regression results on stock returns, descriptive statistics, and panel data diagnostic tests.

The fifth chapter includes a test of hypotheses and a discussion of the results. This includes the association between ownership concentration and stock returns, the effect of capital structure on the nexus between ownership concentration and stock returns, and the impact of dividend policy on the nexus between ownership concentration and stock returns. It also discusses the interaction of ownership concentration, capital structure, dividend policy, and stock returns. In conclusion, the sixth chapter provides a summary of outcomes, conclusions, contributions, recommendations, limitations and further research direction.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter comprises a discussion of the literature around the study variables, ownership concentration, capital structure, dividend policy and stock returns. It describes the theories, knowledge gaps, conceptual framework and an outline of the research hypothesis.

2.2 Theoretical Foundation

This study is premised on agency theory, trade-off, stakeholder, and liquidity preference theories that helped in the conceptualization of the four variables. Agency theory is the anchor theory as it explains the interrelationships among the four variables. Agency theory contends that managing of agency conflicts brings a balance between the alignment and entrenchment effects by ensuring sound financial controls, dividend decisions and investment decisions that help to promote the wealth of the shareholders and consequently enhance stock returns through increase in share value. Tradeoff theory asserts that the existence of high debt helps to reduce agency problems as managers have to pay debt interest to avoid bankruptcy and enhance stock performance through increase in share prices. Thus, trade off theory explains the link among ownership concentration, capital structure and stock returns. Liquidity preference theory suggests that shareholders should demand higher returns for stocks with longer maturities because they carry higher risks. Thus, it conceptualized dividend policy as a moderating link between ownership concentration and stock returns. stakeholder theory asserts that the corporate managers have to make sure that shareholders get a fair return on their investments through the declaration of dividends as well as adhere to debt covenants that the firm may have entered into with other stakeholders. Thus, it explains the effect of capital structure and dividend policy in the ownership and stock return relationship.

2.2.1 Agency Theory

The agency theory popularized by Ross and Mitnick (1973) contends that the separation between ownership and management brings forth agency conflicts and seeks the resolution of these problems. Conflict of interest is inevitable in any firm where there is more than one interested party due to a variance of interest between owners and agents (Bosse & Phillips, 2016). The owners are employing managers to increase their wealth but, in most cases, managers act contrary to the expectations of their principals and manage the firm to serve their private interests by awarding themselves huge salaries, and allowances and directing the firm's cash to unproductive projects. Agency theory seeks the resolution of agency conflict through the implementation of the best internal governance mechanism to control management actions by recommending two solutions. To begin with, the principals can design performance-based contracts, where the agents' performance can be checked against set targets. Secondly, the principal can gather intelligence information on the actions of his agents; this helps the principal to hold the agents accountable for all their actions by instituting disciplinary actions on errant managers (Jensen & Mechling, 1976)

Agency theory presupposes incompatibility and lack of trust between the principal and his agents. According to Pepper and Gore (2015), agents are expected to express a high level of integrity and professionalism while performing duties and responsibilities delegated to them by the principal, while the principal is expected to delegate the appropriate decision-making authority and fulfill its part of the contract. The argument that the existence of contracts restricts management from advancing private interests is, however, not true. Contracts do not sufficiently remove mismanagement because dispersed shareholders do not have the necessary information or institutional mechanism to negotiate terms of employment or to carry out

monitoring activities. Agency theory tends to over-concentrate on problems caused by the agents and fails to consider principals who could betray and exploit their agents. Principals may drug the agents to an unfavorable working environment and with their opportunistic behavior exploits their agents, leading to demotivation and poor performance (Panda & Leepsa, 2017).

Agency theory is essential in this research as it represents the interactions between ownership concentration and stock return. It helps understand the relationship between shareholders who are the principals and managers who act as agents. The agency theory informs us of the importance of managing the shareholder-manager relationship to avoid agency conflict, hence enhancing stock returns. Shliefer (1986) contends that Ownership concentration helps in monitoring management actions leading to a reduction in agency costs. As a result, the agents make investment decisions that are likely to maximize the wealth of stockholders through increased returns (Jensen and Mecklin, 1976). Agency theory presupposes that agency costs and debt are indirectly proportional and they affect firm performance through reduced agency costs (Onguka, 2021). It, therefore, explains the mediating effect of leverage in the link between ownership concentration and stock returns. The payment of high dividends can be used to mitigate agency conflicts; instead of being the consequence of fewer agency conflicts. Therefore, dividend payments can be used to substitute monitoring by majority shareholders. Since most of the monitoring cost is incurred by majority shareholders, large owners have the motivation to demand more dividends to compensate for their monitoring expenses (Easterbrook, 1984). Therefore, in agency relationship, the role of majority shareholders is to exercise monitoring by ensuring that managers establish sound financial controls, dividend

decisions and investment decisions that help to promote the wealth of the shareholders and consequently enhance stock returns through increase in share value.

2.2.2 Trade-off theory

The trade-off theory (TOT) was formed by Kraus and Lichtenberger in 1973 who asserted that an ideal capital structure could be achieved when the extra gain from increased debt, equals the extra cost of debt. TOT predicts a positive nexus between Leverage and profitability. Profitability is linked with high stock returns, lower risk of bankruptcy, and consequently lower cost of borrowing. TOT recommends that firms should have an optimal capital structure that helps balance the interest tax shield of debt with the cost of financial distress, agency benefits, and the cost of debt (Culata & Gunarsih., 2012). Optimal leverage will constitute the debt and equity combination that will yield a high value to the firm through high stock prices. However, market frictions occasioned by refinancing costs may dampen the positive nexus between leverage and profitability.

The arguments of TOT were based on Modigliani-Miller's theory after the inclusion of taxes in their original work. Under such conditions, the tax shield effect of debt made it preferable to equity (Modigliani &Miller, 1963). However, the cost of financial distress outweighs the tax shield effect of debt as firms try to move towards previously set levels of debt, to balance between the incremental tax shield advantage and the marginal cost of debt (Myers, 1984). Thus, tax structures are more complicated in realism than in theory and diverse tax conventions might subsequently lead to fluctuating target ratios (Frank and Goyal, 2008). TOT assumes that weak firms will source their funding from financial institutions without taking into consideration their financing choices. This view is in complete disregard of the fact that most

small and weak firms keep away from public borrowing as they have limited access to such financing and the cost of borrowing is too high for them to afford (Onguka, 2021)

Trade-off theory is significant in this study as it helps the conceptualization of capital structure as a mediator variable in the nexus between ownership concentration and stock returns. The existence of high debt helps to reduce agency problems as managers have to pay debt interest to avoid bankruptcy. Thus, managers have to balance between the interest tax shield benefit of debt and the cost of bankruptcy. TOT envisages that profitable firms will take high debt levels to take the advantage of tax shield benefits as well as increase debt availability which ultimately increases the value of a company (Frank & Goyal, 2008). Thus, high debts in the capital structure promotes efficiency through reduction in agency costs due to fear of bankruptcy, which would result to reputation damage, loss of executive rewards and work pressures to generate cashflows for the payment of principal and interests. The interrelationship between management and shareholders' decisions to protect their interests, leverage decisions, and the effort to maximize stock returns to avoid bankruptcy help conceptualize the association, predicting the mediating effect of leverage in the relationship between ownership concentration and stock return.

2.2.3 Liquidity Preference Theory

Keynes's Liquidity Preference theory was pioneered by J.M. Keynes in 1936 and argues that investors hold money for three fundamental reasons: transactional motivation, precautionary motivation, and speculative purpose. The theory suggests that investors in any economic system can decide to hold cash (liquidity) given that the forces of demand and the supply of money are certain (Kregel, 2014). Also, the model indicates that a shareholder will claim a higher return on securities that are held for a long period because they bear the greater risk,

and if all other factors are held constant, investors prefer cash or other highly liquid assets. According to Keynes (1973), investments that possess high liquidity are easier to cash at their full value. Investors in any economic system can invest money in stocks with future speculation that prices will rise. The theory argues that stockholders are risk-averse and prefer to remain liquid. However, when higher interest rates are offered, investors can forfeit their liquidity at higher interest rates.

Although the theory has been commonly used in research work, it has many shortcomings in that it assumes investors can substitute their current earnings perfectly with future high earnings in utter disregard for the urgency of the current need. The theory also suggests that investors can accurately forecast future cash flows that are not always the case as it needs reliable prediction information that is not always available (Yu, 2013; Phung & Mishra, 2016).

The study finds the theory relevant in predicting stock earnings and thus relevant in anchoring dividend policy. As theoretically assumed, shareholders may prefer current earnings in the form of dividends, but if the firm promises higher earnings resulting from the investment of the retained earnings, they may trade the available dividends for future earnings. As a result, it is assumed that an upsurge in the retention rate would lead to an upsurge in stock returns. Also, the theory explains why individuals and investors prefer to hold liquid cash instead of investing in assets that are motivated by the need to save part of their income, as such the reward for giving up this liquidity preference must be high enough to convince individuals to invest their cash.

2.2.4 Stakeholder Theory

The stakeholder theory popularized by Freeman (1984) holds that other than value creation for its shareholders a firm should take a key interest in the welfare of all stakeholders. According to Freeman (1984), a firm's stakeholders are the groups without which the organization would not exist and they include; suppliers, customers, environmental groups, government, the local community, and any other persons directly or indirectly interacting with the company. Stakeholder theory seeks to avoid conflict by advocating for the inclusion of all stakeholders in decision-making processes. Stakeholder theory asserts that for any firm to perform, all shareholders and any other interested party's welfare must be taken into consideration. Thus, for better performance, an organization must be managed in an efficient, effective, and ethical manner (Harrison &Freeman, 2015).

Stakeholder theory is limited to the extent that it disregards corporate social responsibility and maintains that only people can have responsibilities. The theory maintains that a business exists to earn a profit in a competitive environment that completely disregards corporate social responsibility (Fontaine, 2006). Additionally, because there are so many stakeholders, it is nearly impossible to serve them all and managers must choose which stakeholders to focus on given their limited time and resources (Harrison, 2015). The argument that a firm's shareholders are just a part of a bigger group of stakeholders is misleading since in Kenya, the companies act gives more prominence to shareholders who have the right to vote and influence critical decisions (Onguka,2021)

Stakeholder theory is essential in this scholarship as it emphasizes the importance of accommodating all stakeholders' interests when making decisions on capital structure, dividend, or ownership. The theory asserts that, other than the specific and distinct

responsibilities that a firm owes to its investors, it must also take care of other commitments to diverse stakeholders. Stakeholders are given an authentic claim on all resource allocation decisions and the selection of the board must be seen to represent all parties (Ongore, 2008). The corporate managers have to make sure that shareholders get a fair return on their investments through the declaration of dividends as well as adhere to debt covenants that the firm may have entered into with other stakeholders. Therefore, stakeholder theory benefited this study through the conceptualization of the mediation effect of Capital structure and the effect of dividend policy in the ownership concentration and stock returns relationship.

2.3 Empirical Literature Review

The subsection reviews the literature on past studies relating to the four variables: ownership concentration, capital structure, dividend policy and stock returns. Studies have been analyzed in terms of their focus, knowledge gaps, methodology, findings, and critique of the study.

2.3.1 Ownership Concentration and Stock Returns

Contradictory findings have been reported among studies on the association between ownership concentration and stock returns. Panda (2022) and Clark &Wojcik (2005) reported a negative link whereas others reported a positive association (Shumali and Abuamsha 2022; Alzeaideen and AL-Rawash, 2014). Panda (2022) applied the Generalized Method of Moments (GMM) to examine the relationship between ownership concentration and stock returns among Indian firms. Pre (2000-2008 and post (2009-2016) financial crisis periods were considered with the year 2008 as the base. Ownership concentration negatively impacted stock returns in the pre-financial crisis phase, while there was no effect in the post-financial crisis period. This outcome was achieved despite the control for dividend payout, leverage, age, liquidity, size and risk. Similarly, Clark and Wojcik (2005) found a negative relationship after controlling for

size. This could be attributed to large capital requirements for big firms, something that cannot be attained unless through expansion of the capital base (Demsetz, 1985). The study by Clark and Wojcik (2005) was done among firms listed at the Frankfurt stock exchange in German from 1997-2001. Germany is a developed economy and the findings cannot be inferred in Kenya which is an emerging economy, hence creating a contextual gap. The study by Panda (2022) used GMM which suffers from difficulties of weak and several instruments that may lead to biased estimates, hence creating a methodological gap.

Shumali and Abuamsha (2022) used the OLS method to investigate the link between ownership concentration and the stock returns of Palestinian-listed firms from 2016-2020. Foreign holding, managerial ownership, large ownership and stock returns had a positive relationship. The positive effect is confirmed by Zou and Adam (2008) who contend that ownership through large block holders increased stock returns among Chinese firms. However, these studies used OLS regression analysis which does not take care of fixed effects and may lead to misleading results, creating a methodological gap. Also, the study by Zou and Adam (2008) was done in china which is an advanced economy with different cultural and economic factors from the local context, leading to a contextual gap.

Using seemingly unrelated regressions (SUR) and OLS on 51 listed Jordan firms from 2005-2009, Alzeaideen &AL-Rawash (2014) examined the effect of ownership concentration on share price volatility. The outcomes pointed to a positive nexus between the five largest shareholders and stock price volatility when SUR was used while no relationship was reported when OLS was used. The different results could be due to the fact OLS does not take care of fixed effect, hence the need to use a more robust model in this relationship. The current study used panel regression analysis to fill the methodological gap.

Elghouty (2017) investigated the impact of ownership structure on firm stock returns on the Egyptian stock exchange from 2005-2011.using a panel model, the research found no relationship between ownership concentration and stock returns. Panda (2022) Opined stockholding through institutions had no effect on stock market returns since profitability and firm age enhanced stock returns before the financial crisis. However, the study took a sample of 85 out of 213 firms that were listed, this could have brought selection bias between small, medium and large firms and thus the results could not be attributed to all companies. Also, the study was conducted at the heart of the global financial crisis, during the crisis there is increased volatility in stock returns, hence the need to extend the study to cover pre and post-financial crisis as envisaged in this study.

Džanić (2012) examined the link between ownership structure and firm performance at Zagreb Stock Exchange from 2003-2009. Using panel data with fixed effects, the study found a negative relationship between a block holder owning more than 30% of the stock and firm value. Allam and Wajeeh (2015) confirm the existence of a negative connection between OC and performance. However, the use of Tobin's Q as a performance measure suffers from endogeneity issues. In particular, inefficiencies caused by underinvestment reduce firm performance while increasing Tobin's. As a result, a high Tobin's Q is not a good predictor of performance, creating a methodological gap.

De Sousa and Galdi (2016) studied the relationship between ownership concentration and earning quality for firms listed at Brazil's stock exchange from 1999-2014. Earnings persistence and asymmetric timeliness were used as proxies of earning quality. From the results, Earnings signify a more reliable pointer of future performance when the ownership structure becomes more spread. However, the study was conducted in Brazil, which is an

emerging economy hence the findings may not be inferred in Kenya, leading to a contextual gap. Also, the study focused more on earnings per share as a measure of performance which suffers from its inability to reflect the shareholder value, managing of earnings, and intrinsic bias towards optimistic EPS growth, hence the presence of a conceptual gap (Galdi, 2016).

Bathula and Singh (2015) studied the correlation between ownership concentration, Board, and the performance of firms listed at the New Zealand Stock Exchange between 2004 and 2007. The study established that lack of ownership concentration brings forth agency issues, resulting in poor performance. With high ownership concentration, the positive effect of board impartiality is reduced. However, the study used ROA as the measure of performance but did not show the relationship between OC and return on the stock as a performance measure, hence the conceptual gap. Besides, the study focused on firm performance in New Zealand, which is a developed market with different governance and regulatory environment from Kenya, hence, the presence of a contextual gap.

Ozili &Uadiale (2017) used a static and dynamic panel model to establish that banks with high OC have higher ROA, higher net interest margins and higher recurring earning power whereas banks with dispersed ownership have lower ROA but higher ROE. However, the research employed a static and dynamic panel model which suffers from the difficulties of weak and several instruments and may lead to biased estimates, hence, the presence of a methodological gap. The current study used panel regression that has greater control of endogeneity due to causal relationships, greater data variability, control of any possible collinearity between variables and greater information availability (Cheng, 2007). The study was also limited in scope as it concentrated on banks while the current study will apply to all listed firms making it more inclusive and applicable to different industries. Besides the use of ROE as a measure

of performance may motivate managers to shift more to debt to avoid dilution of ROE which may be tied to their executive stock option plans.

Muhammad et al. (2020) studied the impact of ownership concentration on the financial performance of 36 firms on the Karachi stock exchange. The study concluded that there is a positive connection between OC and Tobin's Q and ROA for firms with non-family ownership. However, the study appeared to imply that shareholders could benefit simply by increasing the proportion of their holdings and/or rearranging their investments. It failed to offer a theory on ownership structure to back up its findings. Thus, ownership concentration is an endogenous outcome whose advantages and disadvantages must be balanced for a firm to be in equilibrium. The use of Tobin's Q as a performance measure suffers from endogeneity issues. In particular, inefficiencies caused by underinvestment reduce firm performance while increasing Tobin's, hence creating a methodological gap

In Kenya, Ongore (2008) used Cross-sectional models to find a significant negative nexus between ownership concentration, board effectiveness, government ownership and firm performance of NSE-listed firms in 2006. However, Cross-sectional models are unable to take unobserved heterogeneity into account and the results may be biased due to variable misspecification, creating a methodological gap. The panel regression with fixed effects method was used in the present work to try to close the gap. Due to causal linkages, panel regression analysis enables better control of endogeneity (Cheng, 2007). Additionally, because panel data uses both time series and cross-sectional data, it is more effective, has less multicollinearity, and has more latitude and flexibility (Njuguna, 2022).

Nyarururu et al. (2013) studied the nexus between ownership structure and the performance of Thirty-three Kenyan firms from 2007 -2010. The study used descriptive research design while ROE and ROA were used as measures of performance. The study reported a negative relationship between ownership concentration and performance. However, the study was limited in scope as it studied thirty-three out of sixty listed firms for four years. Further, the study used ROE and ROA to measure performance while the current study used stock returns hence the presence of a conceptual gap. Moreover, the study used a descriptive survey design while the current study will use a descriptive longitudinal research design, hence the presence of a methodological gap.

2.3.2 Ownership Concentration, Capital Structure and Stock Returns

The interaction between ownership concentration, capital structure and stock returns are underpinned by the trade-off theory which suggests that optimal leverage will yield a high value to the firm through high stock prices. Thus, Risk and return trade-offs are involved in leverage decisions where shareholders expect a higher return because the risk of bankruptcy rises with debt. As a result, the capital structure of a company determines its performance (Zhang, 2018). Farooq (2015) used Pooled regression analysis to find that capital structure was negatively affected by ownership concentration among companies in the Middle East and North Africa from 2005 to 2009. Further, the study noted that the proportion of debt in the Capital structure increased for a given degree of OC as information asymmetries decreased. However, Pooled OLS does not account for unobserved heterogeneity, leading to variable misspecification. The current study used panel regression analysis that allows for greater control of endogeneity due to causal relationships (Cheng, 2007).

Farooq (2015) proposition is extended by Al-Thuneibat (2018) who used panel regression analysis to study the relationship between the ownership structure, capital structure and performance of companies listed at the Amman Stock Exchange (ASE) from 2010-2014. The outcomes showed a positive nexus between ownership structure and performance proxied through Return on assets. Furthermore, institutional and foreign ownership had a negative impact on Performance. Moreover, financial leverage positively impacted the relationship between ownership structure and Performance. However, the study was conducted in service and industrial firms, leaving open the applicability of the results to other sectors, hence creating a contextual gap. Additionally, the return on asset can only be used to relate performance in firms belonging to the same business sector due to different asset structures across different industries, creating a conceptual gap.

In a related study on companies listed at Pakistan Securities Exchange from 2010 -2016, Ali et al. (2022) investigated the relationship between leverage, ownership structure and performance after accounting for size and net income. Using panel regressions, the results revealed a negative relationship between capital structure and ROE as a proxy of performance. Moreover, Family, institutional and managerial ownership negatively impacted performance. However, ROE shows the performance of firms' investments in equity, therefore, a highly leveraged firm whose debt is generating income may show an improvement in ROE which may not be a true reflection of the true performance. Thus, ROE must be used together with other performance metrics such as ROA for it to be effective, hence creating a methodological gap.

In a similar study, Rasyid and Linda (2019) extended the analysis by Ali et al. (2022) through the inclusion of ROA, Tobins Q and Market book value (MBV) as proxies of performance.

Rasyid &Linda (2019) used panel regressions to investigate the link between insider ownership, institutional ownership, CS and the performance of manufacturing firms in Indonesia from 2010 to 2016. The results indicated a significant link between institutional ownership and performance proxied through MBV and Tobin's Q. Conversely, the relationship was not significant when ROA was used as a performance metric. There was no relationship between insider ownership and ROA. Further, after accounting for liquidity and size, leverage negatively affected ROA while there was no effect on Tobin's Q and MBV metrics. However, MBV cannot be used to compare performance for firms in the same industry since the book value differs due to diverse methods of depreciation, resulting in a methodological gap.

Zhamg (2013) studied the impact of ownership on CS of non-financial listed Chinese firms from 2007-2012. Pooled ordinary least square regression was used to conclude that there exists a reversed non-linear connection between OC and capital structure. However, this study was based on Chinese-listed firms with a different regulatory environment from Kenya's NSE, hence the presence of a contextual gap. Further, pooled regressions fail to account for firm fixed effects and give misleading estimates due to model misspecification, creating a methodological gap. The proposition by Zhamg (2013) that ownership concentration has an inverse relationship with leverage was investigated by Vyle (2015) who expanded the study by analyzing the connection among ownership structure, leverage and firm performance of non-financial companies in Vietnam. The study used unbalanced panel data from 2007 to 2012 and applied pooled OLS, GMM, and fixed and random regression models for data analysis. The findings revealed that foreign ownership, state ownership, and managerial ownership had negative, positive, and positive effects on leverage, respectively. However, despite the use of multiple data analysis methods, it was unclear whether endogeneity issues were completely

controlled. This is because random effect models primarily capture unobserved heterogeneity; they do not address endogeneity issues, which arise as a result of reverse causality, measurement errors, and time-invariant variables, all of which are common in financial research.

Mustafa and Wasfi (2016) used correlation and regression analysis to find a positive nexus between leverage and stock returns in a study of 86 companies listed on the Oman stock exchange market from 2007 to 2014. Besides, stock liquidity and return on assets showed a positive effect on stock return. However, the capital structure was evaluated as a predictor variable while the current study looks into the mediation effect of CS in the nexus between OC and stock returns and therefore indicates the presence of a conceptual gap. Additionally, the study was conducted among industrial firms in Egypt and therefore its findings may not be generalized in Kenya, hence the presence of contextual gaps

using panel regression analysis, Ceylan (2018) studied the impact of ownership concentration on Capital structure of ten deposit banks listed on Borsa Istanbul from 2005-2015; the study indicated that the ownership structure variables as measured through major shareholders have a significant impact on CS. However, the leverage was evaluated as a response variable while the current study evaluated it as an intervener, creating a conceptual gap. The research was based on data collected from banks listed at the Istanbul stock exchange and may not be generalized to all firms listed at NSE, hence the presence of a contextual gap.

Examining the relationship between leverage and ownership structure for thirty-eight listed firms at Colombo Stock Exchange (CSE) in Sri Lanka from 201-2015, Kulathunga, Perera, and Anagipura (2018) used fixed effect regression analysis to find that ownership by managers

and ownership concentration has a significant effect on leverage. However, this study was limited in scope since it examined the nexus between capital structure and ownership structure only while this study focused on including the effect of other variables such as dividend policy and stock returns, hence the presence of a conceptual gap.

In the East African context, Okiro et.al (2015) conducted a census of listed firms to study the effect of corporate governance and CS on firm performance from 2009-2013. Leverage was found to positively mediate the nexus between corporate governance and firm performance. Thus, high debt in a firm's capital structure leads to efficiency as managers attempt to balance between gains and costs of debt. The findings also showed a positive correlation between corporate governance and stock performance. However, while this study looked at the debt-equity ratio to profitability the current study looked at leverage with stock returns, creating a conceptual gap.

2.3.3 Ownership Concentration, Dividend Policy and Stock Returns

The effect of ownership concentration, dividend policy, and stock returns is widely investigated and with mixed outcomes. Zulfikar et al. (2020) investigated the moderating influence of ownership concentration in the relationship between dividend policy and Firm value among Indonesian firms from 2014-2018. Using a panel model, the study found a positive nexus between dividend policy and firm value while ownership concentration weakened the relationship. Ismail et al. (2019) contend that the distribution of dividends sends positive information signals about prospects of increased income, leading to an increase in firm value. Equally, low dividend payments could be a negative pointer about low-income prospects in the future, hence lowering firm value (Ismail et al., 2019). However, the study used dividend policy as a predictor variable while the current study seeks to test its moderating effect in this

relationship, creating a conceptual gap. Further, the study employed price-to-book value as a measure of firm value; this performance metric is affected by variations in the asset structure and changing accounting rules across different industries and thus may not be applied to all listed firms that cut across different sectors of the economy. The current study used stock returns to measure the performance across all the listed firms at the NSE.

Murtaza et.al (2020) used the generalized least square model to study the role of Dividend Policy and ownership concentration on the performance of chemical firms listed at the Karachi stock exchange from 2012 -2017. The study reported a positive effect of Ownership Concentration on performance while dividend policy had a positive link with ROA. This essentially meant that shareholders are in a position to exercise monitoring on the management team and align their interests towards a common goal. In contrast, Munyao (2015) used a descriptive research design to show that there was a negative connection between OC and dividend smoothing. However, only firms in the chemical sector were studied while the current research studies all sectors, creating a contextual gap. Secondly, the study explored dividend policy as an independent variable, creating a conceptual gap.

Mufidah and Sucipto (2020) studied the moderating role of dividend policy on the relationship between liquidity, leverage, investment, opportunity, profitability and stock returns in the Jakarta Islamic index. Descriptive and least square analysis methods were used to study listed firms from 2014-2018. The dividend policy was found not to moderate the relationship between profitability, investment and stock returns while a moderation effect was present in the relationship between liquidity, leverage and stock returns. However, the study was done at the Jakarta Islamic index where the rules of engagement differ from the Kenyan context due to social, cultural, political and religious factors.

While Investigating the effect of dividend policy on stock prices of 45 non-financial institutions listed on the KSE-100 index in Pakistan from 2001-2012, Sharif, Adnan, and Jan (2015) showed that dividend payout ratio and EPS have a significant positive relationship with stock prices. Nevertheless, dividend policy was modeled as an independent variable, creating a conceptual gap. Further, the results were based on firms listed at Pakistan Stock Exchange with different regulatory environments from Kenya and the results may thus not be generalized to firms listed at NSE, hence creating a contextual gap. The proposition by Sharif, Adnan, and Jan (2015) was reviewed by Khan et al. (2011) who studied the effect of dividend policy on stock prices after controlling for variables such as EPS, Profit after Tax, and ROE. A sample of 55 companies from the KSE-100 Index was chosen for the period 2001-2010 and OLS regressions were used to study the relationship. The findings showed that dividend yield, EPS, ROE, and Profit after Tax are positively related to stock prices, whereas the Retention Ratio is negatively related to stock prices. However, the use of OLS regression fails to account for fixed effects, the current study employed panel regression analysis with fixed effects to address the methodological gap.

Investigating the impact of dividend policy on the stock price volatility of non-financial, Taofeek et al. (2019) indicated that stock price volatility is influenced by dividend payout ratio, dividend yield, the volatility of earnings, and the size of the company in Nigeria. However, dividend policy was used in this study as an independent variable and therefore did not show the moderating effect of dividend policy on the association between ownership concentration and stock returns, generating a conceptual gap. Besides, the study used a panel autoregressive distribution lag which requires that the data should be normal, creating a methodological gap. Panel regressions were applied in this study to fill this gap.

Ramli (2010) considered the influence of ownership structure on the Dividend Policy of listed Malaysian firms. The study analyzed non–financial public listed firms using panel data over the period 2002-2006. The study employed systematic random sampling of one company for every two and the sample size contained 245 companies. Tobit regression was used to analyze the influence of large shareholders on dividend payouts. The outcomes presented that dividend pay-out increased with an increase in large shareholders. Further, dividend payout was positively impacted by the presence of a second large shareholder. Thus, the size of the payout increased when the second largest shareholder was present. However, the use of systematic sampling creates the risk of data manipulation to achieve a predetermined outcome, rather than letting a random sample produce a representative outcome. This study conducted a census of all listed firms to ensure that all companies were well represented.

Anh and Tuan (2019) studied the nexus between ownership structure and dividend policy of Vietnamese listed firms from 2009-2015. HHI was used to measure ownership concentration and the outcomes indicated that ownership concentration has a positively affected DPR. However, HHI provides concentration measures for the whole company, it does not effectively clarify the qualified power of the single shareholder; making it unsuitable for analyzing the relationship on principal-principal shareholder conflict, creating an operationalization gap. In a similar study, Hamdan, Elali, &Khamis (2015) studied how institutional ownership and dividends affected the performance of companies at Bahrain Stock Exchange. 42 companies were included in the study from 2007 to 2011 using ROA and Tobin's Q measures of performance. Dividends positively impacted on performance. However, when ROA was used as a measure of performance; institutional ownership negatively impacted performance while a positive relationship was reported when using Tobin’s Q. The use of Tobin's Q as a

performance measure suffers from endogeneity issues. In particular, inefficiencies caused by underinvestment reduce firm performance while increasing Tobin's, hence creating a methodological gap

A study on the effect of ownership structure on dividend policy was conducted by Lundgren and Lantz (2016) among 284 firms listed at OMX stock exchanges in Sweden from 2010-2015. Multiple regressions were used to report a positive and significant relationship between institutional ownership and dividend yield as well as a positive and significant relationship between institutional ownership and dividend payout. However, the data that was used had missing values, was heteroskedastic and some variables such as family ownership were missing. Further dividend policy was treated as a dependent variable while the current study sought to investigate the moderating effect of dividend policy on the relationship between ownership concentration and stock returns.

In Kenya, Munyao (2015) used a descriptive research design to show that there was a negative association between ownership concentration and dividend smoothing. Consistent with this study Aury and Pajuste (2002) found a negative nexus between OC and dividend policy in Finland. Gugler and Yurtoglu (2003) noted that the entrenchment effect of majority shareholders who take private benefits against the interest of minority shareholders is linked to the payment of lower dividend amounts in enterprises with concentrated ownership in Germany. However, these studies were conducted in developed economies with different social, cultural and regulatory environments, creating a contextual gap. Furthermore, the bulk of research employed dividend policy as a dependent variable, but the current research examined the impact of DP on the nexus between ownership concentration and stock return, hence the presence of a conceptual gap.

2.3.4 Ownership Concentration, Capital structure, Dividend Policy and Stock Returns

Ownership concentration, leverage, dividend policy, and stock returns have a diverse relationship with each other. Using multiple regressions, Berggren and Bergqvist (2015) investigated the relationship between capital structure and stock returns on Swedish large-cap companies from 2009 to 2013. Results showed that firm leverage had a positive effect on stock returns. The findings demonstrate that the behaviour among Swedish firms was best described by the pecking order theory. The study further found that stock returns have no impact on leverage. Conversely, Adami et al (2010) argued that the connection between leverage and stock return is negative and significant when leverage is used as the sole independent variable. Corporate managers can enhance stock returns by avoiding debt in their capital structure, when tax rate and ownership concentration are added as explanatory variables, leverage remains negative and significant. However, the intervening role of capital structure in the relationship was not considered, hence the presence of a conceptual gap. In addition, the study did not include small firms which play a key role in influencing the market price of a stock in the stock markets. Furthermore, the study was done in Sweden which is a developed capital market leaving open the applicability of the findings in a developing market like Kenya, hence the presence of a contextual gap.

Rajverma et al. (2018) used three-stage least squares (3SLS) to investigate the relationships among ownership structure, dividend and cost of capital in India from 2006 to 2017. Firms with family holdings reported lower dividends, increased leverage and low-cost capital in comparison to non-family-owned enterprises. Mulyani et al. (2016) contend that Ownership concentration through family shareholding affects the combined determination of dividend and capital structure among Indonesian firms. However, the use of 3SLS is sensitive to outliers and

is unreliable for non-normal distributions, creating a methodological gap. To address the methodological gap the current study employed a panel least squares methodology that is more robust. Further, ownership concentration was proxied through the five largest shareholders to capture concentrations of all owners as opposed to family ownership, hence addressing the conceptual gap.

Sari and Patrisia (2019) used multiple regression to study whether institutional ownership, dividend policy, growth of a company and capital structure has any effect on firm value among Real estate firms listed at the Indonesian stock exchange from 2012-2017. Institutional ownership had no effect on firm value, while dividend policy and capital structure positively impact firm value. However, this study applied dividend policy as an independent variable and failed to consider its moderating role in the relationship as envisaged in this study. Furthermore, the study used institutional ownership which does not capture all ownership identities; the current study used ownership concentration measured through five large shareholders to capture all ownership identities.

Mubaraq et.al (2021) studied whether ownership structure has a moderating influence on the relationship between leverage, dividend policy and firm value on the Indonesian stock exchange from 2014-2018. Corporate governance moderated the relationship between dividend policy and firm value. Corporate governance had no moderation effect on the link between Capital structure and the value of the firm. However, the study was conducted among manufacturing firms and the results could not be inferred on other sectors, creating a contextual gap. The current study treats ownership concentration as a main variable while looking at the moderation and mediation effects of dividend policy and capital structure in the OC and stock return relationship.

In Kenya, Muriungi (2021) examined the influence of ownership concentration on dividends, leverage and value of NSE-listed firms from 2008 to 2017. From the results, ownership concentration did not affect firm value while dividend policy had a positive impact on the association. Ownership concentration and leverage had a complimentary impact on the relationship. However, the use of Tobin's Q as a measure of value suffers from endogeneity issues. In particular, inefficiencies caused by underinvestment reduce firm performance while increasing Tobin's. The current study used Stock returns to bridge the conceptual gap.

2.4 Summary of Literature Review and Research Gaps.

This chapter examined previous studies on the connection between ownership concentration, leverage, dividend policy, and stock returns. Table 2.1 shows the summary of studies reviewed from selected existing empirical studies about the variables in the study, knowledge gaps, methodology, findings, and the focus of the current research to address the gaps.

Table 2. 1: Summary of Literature Review and Research Gaps

Author(s) and year	Focus of Study	Methodology	Findings	Knowledge Gaps	The Focus of the Current Study
Shumali & Abuamsha (2022)	Ownership concentration and stock returns	Ordinary least square (OLS) among Palestinian-listed firms from 2016-2020.	Foreign holding, managerial ownership, large ownership & stock returns had a positive relationship	The five-year data is short to observe the impact of OC on SR. OLS regression does not take care of fixed effects and may lead to misleading results. There were no mediator and moderating variables.	This study was done for 14 years using Panel regressions that take care of fixed effects is used as a moderator & CS used as a mediator
Panda (2022)	ownership concentration and stock returns	Generalized Method of Moments (GMM) among Indian firms. Pre(2000-2008 and post (2009-2016) financial crisis periods	OC negatively impacted stock returns in the pre-financial crisis phase while there was no effect in the post-financial crisis period	GMM suffers from the difficulties of weak and several instruments that may lead to biased estimates. The study was conducted in India with different cultural, social and economic factors from the local context	Panel regression was used. DP is used as a moderator while CS is used as a mediator. The current study was conducted in the Kenyan context which is a developing economy

Mubaraq Et al. (2021)	Corporate Governance On the nexus Between Dividend Policy, CS and Firm Value	Inferential analysis was used. Purposive sampling on Firms listed at the Indonesian stock exchange from 2014-2018	DP positively influences firm value. No moderation of corporate governance on the relationship between CS and firm value.	Variables on ownership structure were not applied. Limited period of five years. Different measures of value with conflicting outcomes. Capital structure and dividend policy were applied as independent variables	OC was measured through the five largest shareholders. The period of study stretched to fourteen years. A single measure of stock return was used in this study. The intervening effect of CS and the moderation effect of dividend policy were included in this study
Muriungi (2021)	Influence of ownership concentration on dividends, leverage and value.	Multiple regression NSE-listed firms from 2008 to 2017	OC did not influence value while the Dividend policy had a positive impact. OC and leverage had a complimentary effect on value.	Tobin's Q suffers from endogeneity issues due to inefficiencies caused by underinvestment that reduce firm performance while increasing Tobin's. DP was an independent variable	SR is used as a dependent variable. Dividend Policy was modeled as a moderating variable.

Mufidah &Sucipto (2020).	DP on the liquidity, leverage, investment, opportunity, profitability& stock returns	Descriptive and least square analysis methods were used to study listed firms at Jakarta Islamic index from 2014-2018.	DP moderates the relationship between liquidity, leverage and stock returns. DP does not moderate the relationship between profitability, investment and stock returns	Ownership concentration is not considered. used OLS which does not take care of fixed effects	OC is measured through the five largest shareholders. Panel regression method used in data analysis to take care of fixed effects.
Zulfikar et al.(2020)	Ownership concentration, dividend policy and Firm Value	panel regressions listed Indonesian firms from 2014-2018	A positive relationship between DP and firm value while OC weakened the relationship. OC was used as a moderating variable	The price-to-book value used to measure firm value is affected by variations in the asset structure and changing accounting rules. DP used as an independent variable	Stock returns were considered a dependent variable. DP was used as a moderator. OC considered was applied as an independent variable

Sari& Patrisia (2019)	Institutional ownership, Dividend Policy, company growth and CS and the value	Multiple regression on Real estate firms listed at the Indonesian stock exchange from 2012-2017.	Institutional ownership had no significant effect on firm value. Dividend policy and CS positively impact firm value	Dividend policy was an independent variable and failed to consider its moderating. Only institutional ownership was considered. Only real estate firms were studied	Dividend Policy is used as a moderator. Five large shareholders were used as a proxy of OC. Studied all firms listed at the NSE.
Ceylan (2018)	Ownership concentration and Capital Structure	used panel regression analysis on ten deposit banks listed on Borsa Istanbul from 2005-2015	OC has a statistically significant influence on the banks' CS.	Capital Structure was used as the dependent variable. The study considered deposit banks only. .	The intervening effect of CS in the nexus between OC and SR. all listed firms studied
Kulathunga et al.(2018)	Capital Structure and Ownership Structure	OLS regression analysis was used on Listed Companies in The Hotel and Manufacturing Sectors in the CSE in Sri Lanka from 2011-2015.	OC and managerial ownership have a significant influence on CS.	Used OLS which does not take care of fixed effects. A short period of five years only. The study focused on only listed firms in the hotel industry and manufacturing sectors	Panel regression to capture unobserved heterogeneity for an extended period of 14 years in Kenya. Stock returns used as an independent variable

Rajverma et al. (2018)	Ownership Structure, Dividend and Cost Of Capital	three-stage least squares (3SLS) on Indian firms from 2006 to 2017	family holdings had lower dividends, increased leverage and low-cost capital than non-family-owned enterprises	3SLS is sensitive to outliers and is unreliable for non-normal distributions. Did not consider stock returns.	Panel least squares methodology that is more robust. Stock returns are used as a dependent variable.
Al Salamat and Mustafa (2016)	Capital Structure and Stock Return	correlation and regression on 86 companies listed on the Oman stock exchange market from 2007 to 2014	CS negatively affects stock Return. Stock liquidity and ROE significantly and positively influence SR	The study did not examine the effect of the intervening CS Conducted on industrial firms	CS is included as a mediator on the nexus between OC and stock returns. The study was set in Kenya which is a different context. The current study used a panel longitudinal research design.
Dieu and Thi (2016)	Corporate Governance and firm Performance of Firm in China	cross-sectional research design quota sampling technique	OC positively affects performance	Cross-sectional regressions do not take care of fixed effects. The study was done in the Chinese stock market which has different cultural and economic characteristics	used panel regression to take care of fixed effects. The study was done in the Kenyan context

Lundgren &Lantz (2016)	Ownership Structure and Dividend Policy	Multiple regressions 284 firms listed at OMX stock exchanges in Sweden from 2010-2015.	Institutional ownership positively related to dividend yield dividend pay-out	Heteroskedastic data. stock returns not considered The study was conducted in a developed economy that is culturally and economically different from Kenya	The breusch-Pagan test was conducted to ensure data was not heteroskedastic. Stock returns were included as a dependent variable. The current context is Kenyan-listed firms
Farooq (2015)	Ownership Concentration, A Proxy for Agency Conflicts on The Capital Structure	Pooled regression analysis In Emerging Markets from 2005-2009	Ownership concentration adversely affects CS	Pooled regression analysis does not account for fixed effects and may result in inefficient coefficients due to variable misspecification Failed to show how ownership concentration affects stock returns. intervening effect of CS and the moderating effect of dividend policy were not factored in	Panel regression used to account for fixed effects Stock returns are included as the dependent variable and Ownership concentration is used as an independent variable Capital structure and Dividend Policy applied as intervening and moderating variables respectively .

Bathula & Singh (2015)	Ownership concentration, Board Characteristics and Firm Performance	Cross-sectional regressions on firms listed at New Zeal and Stock Exchange between 2004 and 2007	Positive correlation between OC and performance. A negative association between board mix and independence	Cross-sectional regression fails to account for fixed effects and leads to biased results due to variable misspecification. The study focused on firm performance in New Zealand which is a developed country.	Panel regression is applied to account for fixed effects. This study is based was done in Kenya which is a developing economy
Mule et al. (2013)	Ownership Concentration and Financial Performance	Econometric analysis using panel data	OC negatively affects performance	Stock return as a performance metric was not considered. mediation and moderation effect were not considered The study used ROE as a measure of performance which may motivate managers to shift more to debt to avoid dilution of ROE which may be tied to their executive stock option plans.	Stock returns are included as the dependent variable. CS and DP as intervening and moderating variables respectively. Employed
Nyarururu et al (2013)	Ownership Structure and Performance of Firms.	Cross-sectional regression on firms listed at the NSE from 2007 -2010	A negative connection between OC and performance	Cross-sectional regression fails to account for fixed effects and leads to biased results due to variable misspecification.	Panel regression is applied to account for fixed effects. Stock returns are applied as a dependent variable.

Source: Author, 2023

2.5 Conceptual Model

The conceptual model considers how ownership concentration, dividend policy and capital structure can be employed in decision-making to attain high-quality decisions that would improve stock returns as a dependent performance variable in firms. Stock return is the dependent variable because it can be influenced by management decisions, and will be measured through capital gain or loss plus any dividend paid on the shares divided by the original value of the share. This measure is important because it factors in the capital gain from the change in the price of the stock as well as the current earnings from the dividend paid by the firm and hence giving out the total return from the stock.

Ownership concentration is the independent variable operationalized through the percentage of shares possessed by the five largest shareholders. It has been demonstrated empirically that ownership concentration can be used as a governing mechanism to address the principal-agent agency problem thus resulting in greater competitiveness and performance of concentrated firms. Ownership concentration increases the value of a company by incentivizing the majority shareholders to engage in monitoring behaviours that reduce agency costs of sub-optimal managers' decisions, cost structuring, and agent behaviours that conflict with shareholders.

Capital structure operationalized through debt to equity ratio is assumed to intervene in the relationship between ownership concentration and stock returns. The level of ownership concentration affects the capital structure adopted by the firm due to the influence of the majority shareholder(s) based on their appetite for risk. Capital structure significantly affects performance, the value of the firm, and the cost of capital. Debt to equity ratio is important because it assists one

to know how levered a company is as well as gives stocks that are of high risk to shareholders if the firm has a high leverage ratio.

The dividend policy is assumed to moderate the relationship between ownership concentration and stock returns. Dividend policy forms an important role in the valuation of the stocks of a company where the market value of a share is given by the present value of an infinite stream of dividends received. This study used dividend pay-out and dividend yield because they are of key significance to stockholders since they contribute to a higher value and stockholders would be ready to pay a higher price for shares that pay dividends.

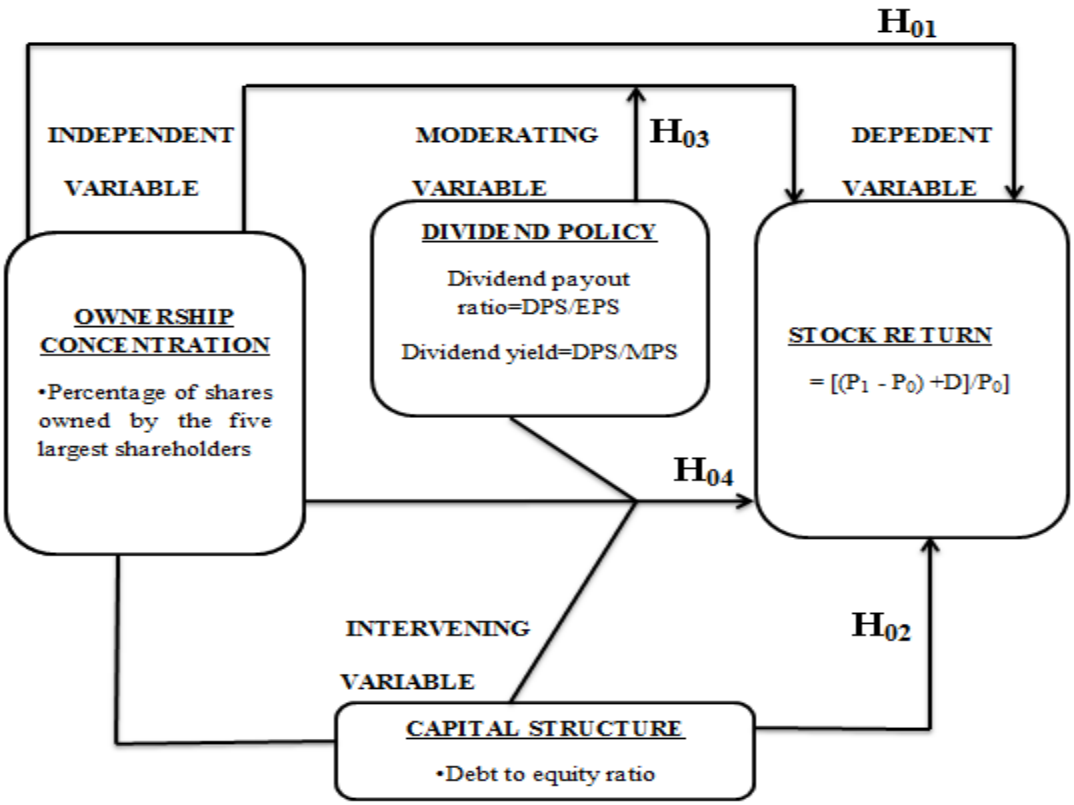

Figure 2. 1: Conceptual Model **Source: Author, 2023**

2.6 Research Hypotheses

H_{01}: There is no relationship between ownership concentration and stock returns.

H_{02}: Capital structure has no intervening role in the relationship between ownership concentration and stock returns.

H_{03}: Dividend policy has no moderating effect the relationship between ownership concentration and stock returns.

H_{031}: Dividend pay-out ratio does not affect the relationship between ownership concentration and stock returns.

H_{032}: Dividend yield does not affect the relationship between ownership concentration and stock returns.

H_{04}: There is no joint effect among ownership concentration, Capital structure, Dividend Policy and stock returns.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section describes the methodology applied to conduct the research. It explains the different types of research philosophies and the rationale behind the adoption of positivist research philosophy. The chapter also describes the research design, the various types of research designs and the rationale behind the adoption of panel longitudinal research design. Further, the chapter describes the study population, measurement of variables, data collection and analysis techniques.

3.2 Research Philosophy

This study was anchored on positivist research philosophy because it facilitates the collection, analysis, and presentation of data using a quantitative approach and helps the testing of assumptions centered on the rules of cause and effect. Positivist believes in the rules of cause and effect through the test of hypothesis. Positivism is premised on values of reason, truth and validity and believes on factual information obtained by observation and can be measured quantitatively (Saunders, 2009). The quantitative nature of data in the current study stems from a positivist philosophy, which embraces the existence of an unbiased truth that can be, conveyed mathematically (Bryman & Bell, 2015). The use of positivism facilitates the discovery of new knowledge using scientific methods (Fisher, 2010). The inquiry was based on facts and no abstractions implying that the relationship between the study's constructs was predicated through analysis using scientific tools (Fisher, 2010).

3.3 Research Design

This study adopted a panel longitudinal design; the design was selected as the most appropriate since it permits the scholar to collect data and match diverse populations over time. The design was adopted because the variables namely; ownership concentration, dividend policy and stock returns vary over time. Therefore, the use of this design enables the researcher to correct data on the four variables repeatedly for an extended period of time to observe the trend and establish certain relationships. This design was used to enable the researcher to make an empirical inquiry into the subject matter without control of variables as their manifestation has already occurred and cannot be manipulated (Bryman &Bell, 2015). Further, the design was adopted to determine the existence of certain relationships among the research variables that are definite. Moreover, the design enabled the researcher to test assumptions to answer queries regarding the existing status of the phenomena being studied (Marshall and Rossman, 2014). Finally, the design gave more data points that help reduce collinearity and increase the degrees of freedom between the independent variable.

3.4 Population

The target population in the current study was all firms that were listed on the NSE. According to NSE (2019), there were 67 listed firms at the NSE as shown in Appendix I. However, after cleaning and sorting 60 firms had the complete information that was needed for analysis. The firms that were excluded from the study were either suspended, had incomplete data, or had been delisted from the securities exchange.

3.5 Data Collection

The research used secondary panel data on Ownership concentration, capital structure, dividend policy and stock returns from 2006 to 2019. This period was selected because in 2006 the NSE introduced the Automated Trading System (ATS) which lead to the automatic matching of orders and execution of the same by stockbrokers. The efficiency of order initiation and execution leads to a more accurate market value of the stocks which is approximate to the intrinsic value of the stock. Data relating to ownership concentration was obtained from audited books of accounts published on the firm's websites, NSE database and licensed data vendors after payment of requisite fees. Consequently, data on the number of stocks held by the five largest shareholders and the total number of stocks outstanding was collected.

The study also collected data on the capital structure which included the total book value of debt and the market value of shareholders' equity (closing MPS*outstanding shares). To measure dividend policy, the study used the dividend yield and dividend payout ratio. Dividend yield and dividend pay-out required data on dividend per share, earnings per share and market price per share. Annual data on dividends per share, and earnings per share were obtained from audited books of accounts published on the company's websites, NSE database and licensed data vendors after payment of requisite fees while data on the MPS was obtained from the NSE database and NSE licensed data vendors after payment of requisite fees. To calculate the stock returns, we collected data on the opening Market price per share, closing MPS and Dividend per share. Data on opening MPS and closing market price per share was collected from NSE and NSE licensed data vendor's websites while data on DPS was sourced from audited books of accounts published

in the company's websites, NSE database and licensed data vendors after payment of requisite fees.

3.6 Operationalization and Measurement of Research Variables

Operationalization involves the assignment of numbers to facilitate the measurement of variables quantitatively. Variables are operationalized by looking for a valid, measurable, and quantifiable index (Saunders et al., 2011). Operationalization helps in strengthening the hypotheses, defining the exact variable, clearing and standardization of variables as well as measuring variables that would have otherwise been very difficult to quantify (Saunders et al., 2011). The study variables namely: Ownership concentration, capital structure, dividend policy, and stock returns were operationalized as indicated in Table 3.1.

Table 3. 1: Variables, Operational Definitions, and their Measurements

Variable	Nature	Indicator	Operational definition	Measurement	Scale	Source
Stock return	Dependent	changes in price during the financial year plus any dividends paid, divided by the original price of the stock	A percentage that includes income and capital gains relative to investment.	[(P1 - P0) +D]/P0]	Ratio	Owolabi & Inyang, 2013.
Ownership concentration	independent	Five largest shareholders	shareholders who own a proportionate share of the company	Shares held by the Five largest shareholders/outstanding shares	Ratio	Hussein, 2017
Capital structure	Intervening variable	Debt equity ratio	denotes the debt-to-equity funding	Debt/Equity	Ratio	Mokaya& Jagongo, 2015
Dividend policy	Moderating variable	DPR DY	Guidelines on the share of profits.	DPS/ EPS DPS/MPS	Ratio	Sindhu,Hashmi,& UlHaq, 2016

Source: Author, 2023

3.7 Diagnostic Tests

The diagnostic tests are conducted before data analysis to confirm if the assumptions of the model are met to obtain reasonable results (Saunders et al., 2011). To confirm the statistical assumptions of the panel regression model, diagnostic tests such as Multicollinearity, Linearity, Heteroskedasticity, Model Specification, Stationarity, and Autocorrelation Test were done.

3.7.1 Test for Multicollinearity

Multicollinearity arises when the explanatory variables are linearly related to other independent variables (Kothari, 2004). The presence of multicollinearity may cause estimators of variables and their standard errors to be susceptible to small changes in the data (Sekaran, 2011). Multicollinearity causes serious challenges among them; problems in isolating the effects of individual regressors, inflation of standard errors, an increased variance of estimates, information redundancy and reduced t-value in the regression model. Consequently, the results in the regression model may be skewed.

Different methods can be used to treat the multicollinearity problem. To begin with, if multicollinearity is present, the variables can be considered for exclusion using component factor analysis. Although variable exclusion may help to solve the multicollinearity problem, it may lead to specification bias if not theoretically supported. Alternatively, other methods that can be used to solve the multicollinearity problem include; enlarging the sample size, variable standardization and centring the variables. The multicollinearity test was done using the Variance Inflation Factor (VIF) and for VIF below 10 and a tolerance level of more than 0.1 (VIF<10, tolerance >0.1, multicollinearity was considered absent.

In this study, the VIF was <10 indicating that multicollinearity was not present, which inferred that the study model was good for further inquiry.

3.7.2 Test for Normality

When conducting regression analysis, it is expected that data on all variables are normally distributed. The main assumption is that the error terms are constant inferring that they have a zero mean and a constant variance. When data is normally distributed, the error terms are bell-shaped and usually take a symmetrical pattern. The normality assumption is an important assurance that the P values for F and t-tests are statistically valid. When normality is violated, OLS estimators remain unbiased and consistent, but they are not asymptotically efficient, suggesting that the T-test and F-test are only valid in large samples (Njuguna, 2022).

Normality can be examined using the Shapiro-Wilk test which investigates whether the distributions come from normal data. The test has more predictive power to detect non-normal data and is the most widely used. A variable is normally distributed if the P-value> 0.05. The Bera and Jarque test is an alternative test for normality that examines whether the level of Kurtosis and skewness are jointly zero. Bera and Jarque hypothesize that the disturbances are normally distributed and the levels of excess Kurtosis and skewness are equal to zero. When dealing with non-normal data, outliers are removed, the sample size is increased, or the data is log-transformed (Wooldridge, 2001). The current study applied the Shapiro-wilk test and data failed the normality assumption as P values were <0.05. To address the lack of normality, the data were log transformed. The use of logarithmic transformation tends to provide values that approximate a

normal distribution and for which conventional linear regressions and analysis of variance (ANOVA) models are appropriate (Petrie, Bulman & Osborn, 2002).

3.7.3 Linearity Test.

Linearity is performed to ensure that all variables are linearly related. The relationship between the independent and response variables should be linear with a constant slope. Linearity is considered important because, in most correlation, general least squares and regression models, linearity is assumed (Petrie, Bulman & Osborn, 2002). Non-linear interactions frequently result in the creation of type I and type II errors, both of which have a high potential for overestimating or underestimating the associations between the study variables.

The study assessed for the paired interaction linearity using analysis of variance (ANOVA). linear and non-linear components of the variables were calculated. In the event of a non-significant F value, nonlinearity was considered present, that is $P<0.05$, and where the calculated F value was greater than 0.05, the variables were considered to be linearly related. If not linearly related, variables were considered for exclusion with a possibility of replacement. The relationships between groups or between the response and all predictor variables in this study were linear.

3.7.4 Test for Heteroskedasticity

The panel regression model assumes that the collected data is not heteroskedastic. The heteroskedasticity test helps to detect if the error terms remain constant across all observed values of the independent variable. If the variance of the error term varies across observations, the random variables are said to be heteroskedastic. Pure heteroskedasticity occurs where there is a big difference between the maximum and minimum observed values of the response variable and

where there are errors during data input or deteriorating data quality. Impure heteroskedasticity occurs due to specification error or where a variable has been omitted. When heteroskedasticity exists, regression analysis is not optimal because it gives equal weight to all observations when, in fact, observations with larger disturbance variance contain less information than observations with smaller disturbance variance. Furthermore, in the presence of heteroskedasticity, the standard errors are biased, which may result in a biased interpretation. To resolve heteroskedasticity the remedies include; redefining the variables by switching from linear to log models, checking for specifications errors, applying the weighted OLS method, or use of heteroskedasticity-corrected standard errors (Studenmund & Johnson,2016).

The Breusch Pagan test was used to test if the error term was constant. Breusch pagan test investigates for heteroskedasticity in the error term by examining whether the squared residuals can be described by possible proportionality factors (Studenmund & Johnson, 2016). If P is less than 0.05, reject the null hypotheses, inferring that heteroskedasticity exists and if P is greater than 0.05, conclude that there is no heteroskedasticity. The data in this study were homoscedastic and thus suitable for analysis.

3.7.5 Test for Stationarity

Data from panel regression models have time series components, necessitating stationarity tests to avoid biased estimates. In a stationary series, the basic features such as the mean and variance do not vary over time while in a non-stationary series, the mean and variance vary over time. The stationarity test investigates whether the data under examination is stationary or non-stationary. The presence of a Non-stationary variable Mean that the t-values and R –squared in the regression

models do not follow the distribution, hence, making it impossible to continue with hypothesis testing. Thus, testing for stationarity is critical to avoid the fabrication of regression results. To avoid spurious regression results, a time trend can be included especially on variables that change rapidly over time (Studenmund & Johnson, 2016).

The study used the Augmented Dickey-Fuller test to test the hypothesis that the series was non-stationary. If P>0.05 non -stationarity is present. Thus, if non-stationarity is present, de-trend the data before conducting regression to obtain more accurate results. In this study, the data was stationary, and thus no possibility of having spurious estimates.

3.7.6 Test for Autocorrelation

Autocorrelation, also known as Serial correlation, violates the classical linear regression principles, which state that an error term should not display positive or negative correlation patterns (Gujarati, 2003). It is always assumed that the error terms are independent unless there are justifications to the contrary. Autocorrelation may be caused by the omission of variables that need to be included leading to specification bias, or inertia in time series data. Autocorrelation may also arise due to data manipulation for example generating semi-annual data from monthly data (Studenmund & Johnson, 2016). One solution for autocorrelation is to utilize a dynamic panel data model with a lag-dependent variable as a predictor. A robust regression model can also be applied to remedy the serial autocorrelation problem.

To detect serial correlation, Woodridge (2002) test was undertaken. The null hypothesis was that there is no autocorrelation. The results were based on P value where if P>0.05, there was no autocorrelation. The variables in this study were not autocorrelated.

3.7.7 Model Specification Test

The choice of a regression equation can be done using fixed, random, and pooled ordinary least square regression (OLS) models. In this study, model selection was between Fixed and random effects models because Pooled OLS is used when different samples are chosen for each year while the current study observed the same sample of data over fourteen years (Onguka, 2021). To check for suitability between fixed and random effect models, the Hausman test was performed. The null hypothesis was that the fixed effect was the most appropriate. The results were centered on P value where if $P<0.05$, the fixed effect model was appropriate. If the fixed effect model is not appropriate, the random effect model would be used. The fixed effect model was appropriate in this study.

3.7.8 Correlation Analysis

Correlation analysis is the statistical test done to assess the association between the response and predictor variable. The product Moment correlation coefficient (r) was used to measure the strength of the association and was stated at 0.05 significance. The correlation coefficient (r) provides information on the strength of the association between the response and predictor variable (Simidi, 2021). r revolves between +1 and -1, representing perfectly positive and perfectly negative correlated variables respectively. Zero coefficients show no correlation while a correlation coefficient of more than one means that as one variable increases, the other increase. Equally, a correlation coefficient of less than zero implies that as one variable decreases, the other variable decreases. Pearson correlation can also be used to test predictor variables for multicollinearity. Collinearity exists when the correlation coefficient between two predictor variables is > 0.80 (Simidi, 2021).

Table 3. 2: Summary of Diagnostic Tests

No.	Diagnostic Test	Test Conducted	Decision Criteria	Outcome /Remedy
1.	Multi-collinearity Test	Variance Inflation Factor (VIF)	If VIF> 0 <10 absence of Multi-collinearity	No multicollinearity which meant that the model was good for further analysis
2.	Model Specification Test	Hausman test	If P < 0.05; the fixed effect model is appropriate	The fixed effect model was appropriate
3.	Normality Test	Shapiro Wilk test	If P > 0.05 the data is normally distributed	Data failed the normality assumption as P values were <0.05. To address the lack of normality, the data were transformed using natural logarithms.
4.	Linearity Test	ANOVA)	If P > 0.05 linearity present	Dependent and all independent variables were in a linear form.

5.	Heteroscedasticity Test	Breusch-Pagan	P<0.05 presence of heteroskedasticity.	data were homoscedastic and thus fit for analysis
6.	Stationarity test	ADF	P>0.05 stationarity is present	The data was stationary and thus no possibility of having spurious estimates
7.	Autocorrelation test	Woodridge test	P>0.05 no autocorrelation	The variables in this study were not auto-correlated.

Source: Author, 2023

3.8 Data Analysis and Presentation

Descriptive statistics were conducted in the form of frequencies, standard deviation percentages, and mean scores. Descriptive statistics were used in this study as they enabled the researcher to provide an expressive explanation of the distribution of scores using a few indices (Bogdan & Devault, 2015). Further, inferential data analysis such as Pearson's correlation analysis and panel regression analysis were adopted to test the statistical effect among variables. The analysed statistics were represented in form of tables and figures.

The coefficient of determination (R squared) was used to test the predictive power of the model. To test the overall significance of the model, F-statistic at a 95% confidence level was used. Hypotheses testing was conducted using a panel regression model with the decision made using P-values based on the significance level. A significance level of 0.05 was used since it is the level frequently used in business and social research (Sekaran & Bougie, 2016).

3.9 Model Specification

To test for the association among all the study variables, the study used the panel data regression model because the study collected data on each variable for each year for 14 years. The study examined the relationship among ownership concentration, capital structure, dividend policy and stock returns of firms listed at the NSE. The general model for the study was, therefore, specified as follows;

$$SR_{it} = \beta_0 + \beta_1 OC_{it} + \beta_2 CS_{it} + \beta_3 DP_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots \text{Equation 3.9.0}$$

Where:

$\boldsymbol{SR_{it}}$ = Stock Returns

$\boldsymbol{OC_t}$= Ownership concentration

$\boldsymbol{CS_{it}}$= Capital Structure

$\boldsymbol{DP_{it}}$=dividend policy

$\boldsymbol{\beta_0}$**=Y**-intercept, which is independent of i and t,

$\boldsymbol{\beta_1, \beta_2}$ ***and*** $\boldsymbol{\beta_3}$ = coefficients of variables

ε_{it} = the error term

3.9.1 Ownership Concentration and Stock Returns

The first objective was to determine the relationship between ownership concentration and stock returns of firms listed at the NSE. Stock returns were expressed as a function of ownership concentration. Ownership concentration was measured as the percentage of shares possessed by the five largest shareholders and abbreviated as OC. Stock returns were measured as the proportion of change in the price of the stock plus any dividends paid on the stock during the year and abbreviated as SR. The direct relationship was specified as follows;

$SR_{it} = \beta_0 + \beta_1 OC_{it} + \varepsilon_{it}$ .....Equation 3.9.1

Where:

$\boldsymbol{SR_{it}}$ = Stock Returns

$\boldsymbol{OC_t}$= Ownership concentration

$\boldsymbol{\beta_0}$=**Y**-intercept, which is independent of i and t,

$\boldsymbol{\beta_1}$, = coefficients of variables

$\boldsymbol{\varepsilon_{it}}$ = the error term

If B_1 is significant at $P<0.05$, then ownership concentration significantly predicts stock returns

3.9.2 Intervening Effect of Capital Structure

Objective two was to test the intervening effect of capital structure on the nexus between ownership concentration and stock returns. The four causal steps approach proposed by Baron and Kenny (1986) was used as discussed below.

3.9.2.1 First Step of Testing Intervening Effect of Capital Structure

Baron and Kenny (1986) suggest that the independent variable must relate directly to the regressed variable in step one. In the first step, the stock returns were regressed on ownership concentration and the significance of the coefficient of ownership concentration was noted. The panel regression model was similar to equation 3.9.1 in section 3.9.1 and was restated as;

$SR_{it} = \beta_0 + \beta_1 OC_{it} + \varepsilon_{it}$ .....Equation 3.9.1

Where:

$\boldsymbol{SR_{it}}$ = Stock Returns

$\boldsymbol{OC_t}$= Ownership concentration

$\boldsymbol{\beta_0}$**=Y**-intercept, which is independent of i and t,

$\boldsymbol{\beta_1}$, = coefficients of variables

$\boldsymbol{\varepsilon_{it}}$ = the error term

3.9.2.2 Second Step of Testing Intervening Effect of Capital Structure

The independent variable must relate directly to the mediating variable in step two. Baron and Kenny (1986) suggest that there must be a significant relationship between the predictor and the intervening variables in the absence of the response variable. In the second step, Capital Structure was regressed on ownership concentration, as shown in equation 3.9.2, and the significance of the coefficient of capital structure was noted.

$CS_{it} = \beta_0 + \beta_2 OC_{it} + \varepsilon_{it}$ ……Equation 3.9.2

Where:

$\boldsymbol{CS_{it}}$= Capital Structure

$\boldsymbol{OC_t}$= Ownership concentration

$\boldsymbol{\beta_0}$**=Y**-intercept, which is independent of i and t,

$\boldsymbol{\beta_2}$ = coefficients of variables

$\boldsymbol{\varepsilon_{it}}$ = the error term

3.9.2.3 Third Step of Testing Intervening Effect of Capital Structure

For the intervention to exist in step three, Baron and Kenny (1986) suggest that there must be a significant relationship between the intervening variable and the dependent variable. In the third step, the stock returns were regressed on capital structure, as shown in equation 3.9.3, and the significance of the coefficient of stock return was noted.

$SR_{it} = \beta_0 + \beta_3 CS_{it} + \varepsilon_{it}$ ……Equation 3.9.3

Where:

SR_{it}= Stock Returns

CS_{it}= Capital Structure

β_0=**Y**-intercept, which is independent of i and t,

β_3 = coefficients of variables

ε_{it} = the error term

3.9.2.4 Fourth Step of Testing Intervening Effect of Capital Structure

For full mediation to occur in step four, the direct relationship between ownership concentration and the stock returns becomes insignificant (Baron and Kenny, 1986). Alternatively, the effect reduces materially for a partial intervention to have occurred. In the fourth step, stock returns were regressed on both ownership concentration and capital structure, as shown in equation 3.9.4, and the significance of the coefficient of OC and capital structure was noted.

$$SR_{it} = \beta_0 + \beta_4 OC_{it} + \beta_5 CS_{it} + \varepsilon_{it} \quad \text{.....Equation 3.9.4}$$

SR_{it}= Stock Returns

OC_t= Ownership concentration

CS_{it}= Capital Structure

β_0=**Y**-intercept, which is independent of i and t,

β_4 and β_5= coefficients of variables

ε_{it} = the error term

3.9.3 Moderating Effect of Dividend Policy

The third objective was to test the moderation effect of dividend policy on the relationship between ownership concentration and stock returns. Dividend policy was based on two measures namely: dividend yield and DPR, therefore, the study disintegrated the hypotheses into two sub-null hypotheses namely:

> H_{031} Dividend pay-out ratio has no moderating effect on the association between ownership concentration and stock returns
>
> H_{032} Dividend yield has no moderating effect on the nexus between ownership concentration and stock returns.

The study adopted Baron and Kenny (1986) two-step panel regression model. In step one stock returns were regressed on ownership concentration as shown in equation 3.9.1 and the value of R square (R^2) for the model was observed. At the same time, the significance of ownership concentration was also noted at ($P < 0.05$). In step two, each of the components of dividend policy and the interactive term between ownership concentration and the components of dividend policy (OC*DPR and OC*DY) were introduced into the model as shown in Equations 3.9.5 and 3.9.6. The value of R square (R^2) for the model was observed again. Further, the significance of ownership concentration and that of the interactive term was noted.

The creation of an interaction term involved centring each of the components of dividend policy and ownership concentration to create an interaction term (DPR*OC and DY*OC). However, multicollinearity could occur in the generation of the interactive term between DP and OC scores. The presence of multicollinearity would weaken the predictive power of the model. To test for

multicollinearity between the interactive term and the individual variables the study used Pearson's correlation coefficient to determine the relationship between the variables. To eliminate the problem of multicollinearity, standardized (Z) scores would be used to standardize the data. To create the interaction variable, the standardized variables (DP and OC) were multiplied. The study adopted a panel regression model as shown in equations 3.9.5 and 3.9.6.

$SR_{it} = \beta_0 + \beta_6 OC_{it} + \beta_7 DPR_{it} + \beta_8 OC_{it} * DPR_{it} + \varepsilon_{it}$…… Equation 3.9.5

$SR_{it} = \beta_0 + \beta_9 OC_{it} + \beta_{10} DY_{it} + \beta_{11} OC_{it} * DY_{it} + \varepsilon_{it}$……...Equation 3.9.6

$\boldsymbol{SR_{it}}$= Stock Returns

$\boldsymbol{OC_{it}}$= Ownership concentration

$\boldsymbol{DY_{it}}$ = Dividend yield

$\boldsymbol{DPR_{it}}$ = Dividend payout ratio

$\boldsymbol{CS_{it}}$= Capital Structure

$\boldsymbol{\beta_0}$=**Y**-intercept, which is independent of i and t,

$\boldsymbol{\beta_{6\ to}\ \beta_{11}}$= coefficients of variables

$\boldsymbol{\varepsilon_{it}}$ = the error term

$\boldsymbol{OC_{it*}\ DPR_{i\,t}}$ =interaction term

$\boldsymbol{OC_{it*}\ DY_{it}}$ =interaction term

3.9.4 Ownership Concentration, Capital Structure, Dividend Policy and Stock Returns

The fourth object was to test the joint effect among ownership concentration, Capital structure, dividend policy and stock returns. The study adopted panel regression models as shown in equations 3.9.6 and 3.9.7.

$SR_{it} = \beta_0 + \beta_{12} OC_{it} + \beta_{13} DPR_{it} + \beta_{14} CS_{it} + \varepsilon_{it}$ ……Equation 3.9.7

$SR_{it} = \beta_0 + \beta_{15} OC_{it} + \beta_{16} DY_{it} + \beta_{17} CS_{it} + \varepsilon_{it}$……...Equation 3.9.8

SR_{it}= Stock Returns

OC_{it}= Ownership concentration

DY_{it} = Dividend yield

DPR_{it} = Dividend payout ratio

CS_{it}= Capital Structure

β_0=**Y**-intercept, which is independent of i and t,

β_{12} to β_{17}= coefficients of variables

ε_{it} = Error term

The decision on the joint effect was based on the F-statistic and its significance based on the P-values at ($P < 0.05$).

Table 3. 3: Research Objective, Hypothesis, Analytical Model and Interpretation

Objective	Hypothesis	Analytical model	interpretation
Determine the effect of ownership concentration on stock returns	There is no relationship between OC and SR.	Panel regression analysis $SR_{it}= \beta_0+\beta_1 OC_{it}+ \varepsilon_{it}$ $\boldsymbol{SR_{it}}$= Stock Returns;$\boldsymbol{OC_{it}}$= Ownership concentration, $\boldsymbol{\beta_0}$ is the constant, $\boldsymbol{\beta_1}$, = coefficients of variables; $\boldsymbol{\varepsilon_{it}}$ = the error term	There is a relationship if β_1 is significant
Examine the effect of Capital structure on the nexus between ownership concentration and stock returns	Capital structure has no intervening effect in the nexus between OC and stock returns	Baron and Kenney (1986) Hierarchical multiple regression $SR_{it}= \beta_0+\beta_1 OC_{it}+ \varepsilon_{it}$……..step 1 $CS_{it}=\beta_0+\beta_2\ OC_{it}+ \varepsilon_{it}$……...step 2 $SR_{it}= \beta 0+\beta_3 CS_{it}+ \varepsilon_{it}$……step 3 $SR_{it}= \beta_0+\beta_4\ OC_{it}+\beta_5\ CS_{it}+ \varepsilon_{it}$..step 4 $\boldsymbol{CS}$ is capital structure, $\boldsymbol{\beta_1}$ *to* $\boldsymbol{\beta_5}$ are regression coefficients	If β_1, β_2 & β_3 are significant (P<0.05) and β_4 becomes insignificant for a mediation

Investigate the effect of dividend policy on the nexus between ownership concentration and stock returns	Dividend policy has no effect on the nexus between ownership concentration and stock returns.	Hierarchical multiple regression Baron and Kenny (1986) $SR_{it} = \beta_0 + \beta_6 OC_{it} + \beta_7 DPR_{it} + \beta_8 OC_{it} * DPR_{it} + \varepsilon_{it}$ $SR_{it} = \beta_0 + \beta_9 OC_{it} + \beta_{10} DY_{it} + \beta_{11} OC_{it} * DY_{it} + \varepsilon_{it}$	For dividend policy to be eligible as a moderator β_8 and or β_{11} should be significant
To determine the joint effect among ownership concentration, capital structure, dividend policy and stock returns	There is no joint effect among ownership concentration, Capital structure, Dividend Policy, and SR	Multivariate regression analysis $SR_{it} = \beta 0 + \beta_{12} OC_{it} + \beta_{13} DPR_{it} + \beta_{14} CS_{it} + \varepsilon_{it}$ $SR_{it} = \beta_0 + \beta_{15} OC_{it} + \beta_{16} DY_{it} + \beta_{17} CS_{it} + \varepsilon_{it}$	Relationships exist if at least One of $\beta_{12}, \beta_{13}, \beta_{14}$, β_{15}, β_{16} or β_{17} is statistically significant

Source: Author, 2023

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents a descriptive analysis of the research variables. The research variables include ownership concentration, capital structure, dividend policy and stock returns. The mean, standard deviation, minimum, and maximum are all included in the descriptive analysis. Diagnostic tests were carried out including; autocorrelation, linearity, heteroskedasticity, multicollinearity, stationarity, and normality. Model specification and correlation analysis are also presented.

4.2 Characteristics of respondents

A census survey was adopted to select all firms listed at the NSE as of 31 December 2019. Sixty-seven firms that were listed as of this date were considered; however, after sorting and cleaning 60 firms were found to be fit for analysis, representing 89.6% of the total population which was acceptable. For example, Ongore (2011) in a study of listed firms obtained a success rate of 42 out of fifty-four firms. The firms that were left out had gone through some changes either due to mergers, suspension from the stock exchange, delisting, or missing data.

4.3 Descriptive Statistics

Before doing inferential analysis, descriptive analysis was performed to illustrate the distribution of data, spot outliers, and identify correlations between the variables. The mean, standard deviation, minimum and maximum observations are all included in Table 4.1.

Table 4.1: Panel Variables Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
SR	719	.243	.44	-4.86	2.55
OC	719	.66	.169	.11	.97
CS	719	.672	1.81	0	4.663
DPR	719	.318	1.153	0	6.25
DY	719	.033	.038	0	.426

Unbalance panel data of 60 firms listed at NSE from 2006 to 2019
Source: Author, 2023

Table 4.1 above shows that the total units of observation were 719, unlike the estimated 840 observations. This is because the study used unbalanced panel data and the fact that the data category was not observed in some years. Unbalanced panel provides large data set and combines characteristics of both cross-sectional and time-series data, which improves the efficiency of econometric estimations and adds flexibility to the range of variables used as instruments for regulating endogeneity.

From the output in table 4.1 above, the outcomes indicate that the mean stock return over the period was 0.243. These results suggest that on average stock returns as measured by the change in price plus cash distribution as a percentage of the initial cost was 24.3%. The accompanying standard deviation of 0.44 indicates rather significant stock return variability, indicating that individual company stock returns typically deviate from the mean by up to 44%. The results match the lowest and highest values, which are -4.86 and 2.55, respectively. It is established that while some listed

firms posted negative returns associated with a decline in share price and diluted dividends, others reported high returns of 255%.

The outcomes also show that firms listed on the NSE had a mean ownership concentration of 66% over the analysis period. These results suggest that on average ownership concentration was 66%, indicating that for a majority of listed firms, the largest proportion of shares is owned by the top five largest shareholders. The corresponding standard deviations of 16.9% suggest there is a relatively low variability of ownership concentration among the listed firms. However, the spread is wide, with a minimum of 11% and a maximum of 97%. This means that while some listed firms had low ownership concentration, others had very high concentration.

Regarding, capital structure, the research established that the average debt-to-equity ratio was 0.672 indicating that the majority of the listed firms had borrowed 0.672 shillings for every shilling contributed by ordinary shareholders. The standard deviations of 1.81 suggest that there were high variations in the debt-to-equity ratio among the listed firms. This meant that on average the debt-to-equity ratio of individual firms varied from the mean by 1.81. The high value suggests that there were high variations such that while some firms had a debt-to-equity ratio of as low as zero (0) others had a high debt-to-equity ratio of 4.663. A minimum debt-to-equity ratio of zero (0) suggests that some listed firms were all equity financed and had no debt in their leverage. However, a debt-to-equity ratio of 4.663 indicates that for every shilling contributed by the shareholders, the company has borrowed sh. 4.663. This indicates high levels of leverage which may expose the company to financial risk, financial distress, and ultimately liquidation.

On the Dividend Pay-Out ratio, the study established that the average pay-out ratio for listed firms was 0.318 indicating that on average listed firms distributed 31.8% of the earnings available to ordinary shareholders as dividends. High deviations observed were observed with a standard deviation of 1.153. The corresponding lowest and highest values were 0 and 6.25, demonstrating that some companies did not pay dividends by using their revenue reserves, while others paid significant dividends.

Concerning dividend yield, the study established that the mean score for the variable was 0.033 suggesting that on average listed firms generated cash returns of 3.3% on every shilling invested by shareholders in the company. The research also found that there was a lot of variation in these returns, with a standard deviation of 0.038, indicating that while some companies produced high returns, others produced low returns. These results correlated with the minimum and maximum results of 0 and 0.426, implying that while some companies returned zero cash to shareholders, others returned 42.6%.

4.4 Correlation Analysis

This segment presents the results of the correlation analysis used to examine the strength and direction of the association between two variables. The correlation coefficient (r) was used to measure the strength of the association and was stated at 0.05 significance. The correlation coefficient (r) revolves between +1 and -1, representing perfectly positive and perfectly negative correlated variables respectively. Pearson correlation can also be used to test predictor variables for multicollinearity. Collinearity exists when the correlation coefficient between two predictor variables is greater than 0.80 (Simidi, 2021).

Table 4. 2: Correlation Analysis Results

Variables	SR	OC	CS	DPR	DY
SR	1.000				
OC	-0.041(0.03)	1.000			
CS	0.051(0.17)	-0.09*(0.01)	1.000		
DPR	-0.064(0.08)	0.07*(0.04)	-0.037(0.31)	1.000	
DY	-0.14*(0.00)	-0.012(0.74)	-0.064(0.08)	0.20*(0.00)	1.000

** $p<.05$*
Source: Author, 2023

Table 4.2 above represents the coefficient correlation matrix of the main study variables and the P value at the 5 % level of significance. The link between stock returns and ownership concentration was weak and negatively correlated (r = -0.041, P<0.05). This means that as ownership concentration increases, stock returns decrease. The correlation between stock returns and the dividend yield was weakly and significantly negatively correlated (r = -0.14, P<0.05). This meant that as dividend yield increased, stock returns decrease. Stock returns had a strong positive and significant correlation with capital structure (r=0.051, p =.00). This meant that as capital structure increase, stock returns increase. The correlation between stock return and DPR was negative (r = -0.064, P =0.08) but not significant.

Furthermore, there was a statistically significant and weak correlation between ownership concentration and capital structure (r=-0.09, P=0.01), and a significant negative correlation

between dividend payout ratio and dividend yield (r=0.20, P=0.00). While Capital structure and DY had an insignificant negative correlation (r-0.0638, P=0.0875). Moreover, the relationship between ownership concentration and dividend yield was negative and insignificant (r= -0.012, P= 0.74). The correlation between capital structure and dividend payout ratio was negative and insignificant (r-0.037, P =0.31), as well as the correlation between capital structure and Dividend yield (r =-0.064 P=0.08). The correlation between dividend payout ratio and dividend yield was positive and significant (r=0.20, P =0.00). Therefore, there was no multicollinearity problem since all the correlation coefficients were below 0.8; hence data was fit for further analysis.

4.4 Panel Data Diagnostic Tests

Diagnostic tests such as serial correlation, linearity, unit root, panel-level heteroskedasticity multicollinearity, and normality tests were performed to prepare the data for further analysis.

4.4.1 Test for Autocorrelation

Linear regressions require that variables should not be correlated. It is always presumed that the error terms are independent unless there are justifications to the contrary. The test of serial correlation was done using the Woodridge test, as proposed by Woodridge (2002). The null hypothesis was that there was no autocorrelation. The results are presented in table 4.3 below.

Table 4.3: Panel Data Autocorrelation Results

Variables	F (1, 58)	Prob > F
xtserial SR OC	0.919	0.3418
xtserial SR CS	1.020	0.3168
xtserial SR DPR	0.733	0.3953
xtserial SR DY	1.473	0.2298
xtserial SR OC CS DPR DY	1.304	0.2582

Source: Author, 2023

From table 4.3 shown above, the results indicate the absence of autocorrelation since the test results reported $P > 0.05$ for all the regressions.

4.4.2 Linearity Tests Results

The study evaluated linearity using analysis of variance (ANOVA). The variables' linear and non-linear components were calculated and in the event of a non-significant F value, non-linearity was considered present, that is $P<0.05$, and where calculated $F > 0.05$, the variables were considered to be linearly related.

Table 4.4: Results of ANOVA Test

Model			Sum of Squares	Df	Mean Square	F	Sig.
1	OC	Between Groups	5.863	74	.079	.793	.894
		Within Groups	64.346	644	.100		
		Total	70.208	718	.091	.778	.985
2	CS	Between Groups	47.887	527	.117		
		Within Groups	22.322	191			
		Total	70.208	718			
3	DPR	Between Groups	51.034	497	.103	1.183	.075
		Within Groups	19.175	221	.087		
		Total	70.208	718			
4	DY	Between Groups	47.617	478	.100	1.058	.311
		Within Groups	22.591	240	.094		
		Total	70.208	718			

Independent variable: OC, CS, DPR, DY
Dependent variable: SR
Source: Author, 2023

The ANOVA for linearity results as presented in Table 4.4 above indicates that the calculated F was greater than 0.05, Suggesting that variables were linearly related.

4.4.3 Heteroskedasticity Test

The Breusch and Pagan (1979) test was used to assess data heteroskedasticity, which assumes that the error terms are homogeneous. The error terms were hypothesized to be homoscedastic.

Table 4.5: Breusch-Pagan-Godfrey Test Results

Breusch and Pagan	Coef.
chi2(1)	2.27
P	0.1316

Source: Author, 2023

The results indicate the P value of the F statistic is > 0.05. Since p >0.05 the hypothesis is accepted implying that the data was not heteroskedastic, thus the model is suitable for inferential estimation.

4.4.4 Stationarity Test

Panel regression model's data contain time series components; hence the need to carry out stationarity tests to avoid biased estimates. The study used the Augmented Dickey-Fuller to test the hypothesis that the series was non-stationary.

Table 4.6: Augmented Dickey-Fuller Unit Root Test Statistics

Variable	Method	Statistic	p-value
SR	ADF-Fisher chi-squared	405.477	0.000
OC	ADF-Fisher chi-squared	391.425	0.000
CS	ADF-Fisher chi-squared	140.718	0.0020
DPR	ADF-Fisher chi-squared	256.622	0.000
DY	ADF-Fisher chi-squared	156.542	0.0024

Source: Author, 2023

As shown in Table 4.6 above, the ADF Test Statistics reported all P less than 0.05, hence the rejection of the null hypothesis that unit roots are present. This meant that the data was stationary and thus had no possibility of having spurious estimates.

4.4.5 Test for Multicollinearity

Multicollinearity arises when the explanatory variables are linearly related to other independent variables. The presence of multicollinearity may cause estimators of variables and their standard errors to be susceptible to small changes in the data, resulting in unreliable results. The Variance Inflation Factor (VIF) and tolerance (inverse of VIF) were applied to test for multicollinearity between the predictor variables. A VIF of less than 10 and tolerance of >0.1 indicate no multicollinearity.

Table 4.7: Multicollinearity Test Results

Variable	VIF	Tolerance
DPR	1.05	0.953065
DY	1.05	0.955362
OC	1.02	0.984320
CS	1.01	0.986275

Source: Author, 2023

The above outcomes in Table 4.7 indicate that there was no multicollinearity because all the variables had VIF < 10 and tolerance > 0.1.

4.4.6 Model Specification Test

The choice of a regression equation can be done using fixed, random, and pooled OLS regression models. In this study, model selection was between Fixed and random effects models because Pooled OLS is used when different samples are chosen for each year while the current study observed the same sample of data over fourteen years to check for suitability between fixed and random effect models, the Hausman test was performed. The null hypothesis was that the fixed effect was the most appropriate. Table 4.8 shows the results of the Hausman test.

Table 4.8: Hausman Test Result

	Mod 1	**Model 2**	**Model 3**	**Model 4**	**Mode 5**
Chi-square test value	7.638	7.913	30.403	9.352	29.033
P-value	.006	.019	0	.025	0

Source: Author, 2023

Mod 1: The Hausman Test for Estimating Model Effects; Direct relationship between OC and SR

Model 2: The Hausman Test Model Effects Estimation mediated relationship

Model 3: The Hausman Test for Estimating Model Effects - Moderated Relationship *Dividend payout ratio

Model 4: The Hausman Test for Estimating Model Effects - Moderated Relationship *Dividend Yield

Model 5: The Hausman Test for Estimating Model Effects-Joint

As shown in Table 4.8 above the Hausman test results indicate that the p values of the chi-square distribution were < 0.05 for models 1 to 5 suggesting that the null hypothesis should be accepted, making the appropriate model to be fixed effect.

4.4.7 Panel Data Normality Test

When conducting regression analysis, it is expected that data on all variables are normally distributed. The main assumption is that the error terms are constant inferring that they have a zero mean and a constant variance. The data were assumed to be normally distributed. Shapiro-Wilk W test was used to test for normality. Table 4.9 below shows the outcome of Shapiro-wilk test for normal data.

Table 4.9: Panel Variables Shapiro-Wilk W Test Results

Variable	Obs	W	V	Z	Prob>z
SR	719	0.726	128.249	11.856	0.000
OC	719	0.967	15.649	6.718	0.000
CS	719	0.430	266.122	13.639	0.000
DPR	719	0.271	340.488	14.241	0.000
DY	719	0.795	95.701	11.141	0.000

Source: Author, 2023

As shown in Table 4.9 above the findings show that all variables' statistics for both individual and joint tests had corresponding $P<0.05$. This implies that the data were not normally distributed and thus the normality hypothesis is rejected. To address the lack of normality, the data were transformed using natural logarithms. The use of logarithmic transformation tends to provide values that approximate a normal distribution and for which conventional linear regressions and analysis of variance models are appropriate (Petrie, Bulman & Osborn, 2002).

4.5 Chapter Summary

This chapter included a presentation of the descriptive statistics for the data that make up the research variables. The mean, standard deviation, minimum, and maximum were calculated and presented for the variables among them: ownership concentration, capital structure, dividend policy, and stock returns.

A diagnostic test for serial correlation was done using the Woodridge test and the outcomes established the absence of autocorrelation because the test results reported $P > 0.05$ for all regressions. Variance inflation factors were used to conduct multicollinearity test, it was discovered that all variables had a $VIF < 10$, which led to the deduction of no multicollinearity. ANOVA for linearity results revealed that relationships between variables were linearly related. The Unit Root Test revealed that the data was stationary, implying that there was no possibility of false estimates. The Shapiro-Wilk W test for normal data confirmed that the data was not normal, and the data were transformed using natural logarithms to address the lack of normality.

Correlation analysis revealed that the four research variables were interconnected to varying degrees. The findings revealed significant negative relationships between stock return and ownership concentration, Stock return and dividend yield, and ownership concentration and capital structure. Positive and significant nexus were reported between stock return and capital structure, ownership concentration and dividend, and DPR and dividend yield. Finally, the relationships between stock return and DPR, ownership concentration and dividend yield, Capital structure and dividend pay-out ratio, and capital structure and dividend yield were negative and statistically

insignificant. Therefore, since all of the correlation coefficients were below 0.8, there was no multicollinearity issue.

CHAPTER FIVE: HYPOTHESIS TESTING AND DISCUSSION OF FINDINGS

5.1 Introduction

The results of the hypotheses tests and their interpretations are documented in this chapter. Four specific objectives guided the research, which resulted in four hypotheses. To test and interpret the hypotheses and their respective sub-hypotheses, R-squared (R^2), standardized beta coefficient, F-statistics, and the significance of the t-statistics as represented by p-values were used.

5.2 Relationship between Ownership Concentration and Stock Returns

The first objective was to determine the effect of ownership concentration on Stock returns. The statistical effect of the ownership concentration on stock returns was evaluated using a fixed effect model. Hypotheses one (H_{01}) was stated as:

H_{01} Ownership concentration has no effect on stock returns

The prediction equation was given as

$$SR_{it} = \beta_0 + \beta_1 OC_{it} + \varepsilon_{it}$$

Table 5.1 below presents the output of the fixed effect regression model. The independent variable is ownership concentration and the response variable is stock returns.

Table 5.1: Ownership Concentration and Stock Returns

SR	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	-.107	.048	-2.23	.026	-.201	-.013	**
Constant	1.601	.023	70.00	0	1.556	1.646	***

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.0019	Number of obs	719
F-test	4.957	Prob > F	0.000
R^2 – within	0.0075	R^2-between	0.0027
Adjusted -r^2	0.083		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

The outcome of panel least square regression is shown in Table 5.1 above showed a statistically significant and negative linear relationship between stock returns and ownership concentration (β_1 = -.107, P-value = .026). Meaning for every 1% increase in ownership concentration, stock return decreased by 10.7%. The overall model was statistically significant at a 99% confidence level (β = 1.601, Adjusted- R squared = 0.083, P-value = 0.000, F = 4.957). The Adjusted- R squared of 0.083 implied that ownership concentration accounted for 8.3% of the changes in stock returns.

5.3 Effect of Capital Structure on the Relationship between Ownership Concentration and Stock Returns

Objective two was to determine the mediation effect of capital structure on the link between ownership concentration and stock returns. This was represented in hypothesis two (H_{02}) stated:

> ***H_{02}*** Capital structure has no intervening effect on the link between ownership concentration and stock returns.

To determine the intervening effect of capital structure, the Baron and Kenny (1986) four-step model was used. For mediation to exist in step one, ownership concentration must relate directly to stock returns. In step two, the ownership concentration must relate directly to capital structure. In step three there must be a statistically significant relationship between the capital structure and stock returns. Finally, in step four, Baron and Kenny (1986) suggest that the beta coefficient of ownership concentration becomes insignificant for a full mediation to have occurred.

5.3.1 Step one of Testing Intervening Effect of Capital Structure

In the first step, stock returns were regressed against ownership concentration and the output was as given in Table 5.2 below.

Table 5.2: Step One Output on the Intervening Effect of Capital Structure

SR	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	-.107	.048	-2.23	.026	-.201	-.013	**
Constant	1.601	.023	70.00	0	1.556	1.646	***

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.0019	Number of obs	719
F-test	4.957	Prob > F	0.000
R^2- within	0.0075	R^2- between	0.0027
Adjusted R- r^2	0.083		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

The outcome and interpretations of panel least square regression shown in Table 5.2 above are similar to the first hypothesis of the study in Table 5.1. The panel regression model showed a statistically significant and negative linear relationship between stock returns and ownership concentration (β_1 = -.107, P-value = .026). Meaning for every 1% increase in ownership concentration, stock return decreased by 10.7%. The overall model was significant (β = 1.601, overall- R squared = 0.083, P-value = 0.000, F = 4.957). The adjusted –r^2 of 0.083 implied that 8.3% of the variations in stock returns were explained by ownership concentration. The findings are in line with Baron and Kenny (1986) that the predictor must affect the response variable for mediation to exist, hence the study progressed to step two of assessing mediation.

5.3.2 Step two of Testing Intervening Effect of Capital Structure

In the second step of testing for mediation, ownership concentration was regressed against the capital structure. The outcomes are in Table 5.3 below.

Table 5. 3: Step Two Output on the intervening Effect of Capital Structure

CS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	.209	.054	3.90	0	.104	.314	***
Constant	3.65	.025	143.4	0	3.6	3.7	***

Mean dependent var	3.554	SD dependent var	0.180
Overall-r^2	0.0162	Number of obs	719
F-test	15.219	Prob > F	0.000
R^2- within	0.0226	R^2- between	0.0768
Adjusted r^2	0.0665		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

The results of step two shown in Table 5.3 above indicate a statistically significant and positive link between ownership concentration and the mediator, capital structure (β = .209, P-value = 0.0). These results imply that a 1% Change in ownership concentration leads to an increase in capital structure by 20.9%. The overall model is significant (Adjusted R-squared =0.0665, F=15.039 P<0.05) the adjusted r-squared implies that 6.65% of the variations in capital structure are explained by ownership concentration. The findings are in line with Baron and Kenny (1986) that the predictor must affect the Mediator variable for mediation to exist, hence the study progressed to step three of assessing mediation.

5.3.3 Step Three of Testing the Intervening Effect of Capital Structure

In step three, the mediator must have a direct and significant nexus with the response variable. The study regressed Capital structure against stock returns, and the outcomes are in Table 5.4 below.

Table 5. 4: Step Three Output on Intervening Effect of Capital Structure

SR	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
CS	-.17	.049	-3.44	.001	-.267	-.073	***
Constant	1.647	.008	203.4	0	1.632	1.663	***

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.0428	Number of obs	719
F-test	11.849	Prob > F	0.000
R^2- within	0.2712	R^2- between	0.0177
Adjusted r^2	0.0718		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

The findings in Table 5.4 above indicate a statistically significant and negative nexus between stock returns and capital structure (β =-. 17, P-value = 0.001). These results imply that a 1% Change in capital structure leads to a decrease in stock returns by 17%. The over Model is statistically significant since the P value is < 0.05(Adjusted r^2=0. 0.0718, F=11.849, P<0.05). The Adjusted r-squared implies that capital structure accounted for 7.18% of the variations in stock returns.

5.3.4 Step Four of Testing the Intervening Effect of Capital Structure

In step four, the effect of the ownership concentration on the stock returns becomes statistically insignificant for full mediation to occur when the study accounts for the mediation effect in the model. Ownership concentration and capital structure were regressed against stock returns as shown in Table 5.5.

Table 5. 5: Step Four Output on intervening Effect of Capital Structure

SR	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	-.063	.132	-0.48	.631	-.322	.195	
CS	-.17	.049	-3.44	.001	-.267	-.073	***
Constant	1.598	.024	67.68	0	1.552	1.644	

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.0348	Number of obs	719
F-test	6.033	Prob > F	0.000
R^2- within	0.0180	R^2- between	0.1613
Adjusted r^2	0.0731		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

Table 5.5 shown above indicates an insignificant negative relationship between SR and ownership concentration (β = -.063, P-value = 0.631). The results also revealed a significant and negative nexus between stock returns and capital structure (β =-.17, P-value = 0.001). The overall model produced an Adjusted r-squared of 0.0731, F=6.033, and P<0.05. This meant that ownership concentration and capital structure jointly explain 7.31% of the variation in stock returns. From

the results in step 4, the beta coefficient of ownership concentration became statistically insignificant after controlling for capital structure (β = -.063, P-value = 0.631). Thus, Based on Baron and Kenny (1986) approach, these results suggest that capital structure mediates the relationship between ownership concentration and SR. Hence, the null Hypothesis (H_{02}) was rejected

5.4 Effect of Dividend Policy on the Relationship between Ownership Concentration and Stock Return

Objective three evaluated the moderation effect of dividend policy on the nexus between ownership concentration and stock returns. Hypothesis three (H_{03}) was stated as;

> ***H_{03}*** Dividend policy has no moderating effect on the nexus between ownership concentration and stock returns.

The third hypothesis was further disintegrated into two sub-hypotheses (H_{031}) and (H_{032}) Stated as

> ***H_{031}*** Dividend pay-out ratio has no moderating effect on the nexus between ownership concentration and stock returns.
>
> ***H_{32}*** Dividend yield has no moderating effect on the nexus between ownership concentration and stock returns

Table 5.6 below presents the results of the first sub-hypothesis under the third objective stated as;

> ***H_{031}*** Dividend pay-out ratio has no moderating effect on the nexus between ownership concentration and stock returns.

Table 5. 6: Regression Output of Stock Returns, Ownership concentration, dividend Payout Ratio and the Interaction Term (OC*DPR)

	Model 1[a]	**Model 2[b]**
Constant	1.616(0)	1.572(0)
OC	-.099(0.04)	-.109(0.024)
DPR	-.009(0.102)	.027(0.187)
OC*DPR		.062(0.07)
R-square within	0.0115	0.0164
R-Square between	0.0005	0.0011
R-squared overall	0.0024	0.0023
Adjusted r-square	0.0802	0.076
F	3.825(0.00)	3.656(0.00)

P-Value in Parenthesis
a. Independent :(Constant), Ownership Concentration, Dividend Payout Ratio
b. Independent :(Constant), Ownership Concentration, Dividend Payout Ratio, OC*DPR
Source: Author, 2023

The outcomes of hierarchical multiple regression predicting stock return from ownership concentration, DPR, and the interaction term (OC*DPR) are reported in Table 5.6 above. In step one, stock returns were regressed against ownership concentration and dividend pay-out ratio (Model 1). The output of step one (Model 1) revealed the existence of a significant connection between OC, dividend pay-out ratio, and stock return ($P<0.05$, $F = 3.825$, Adjusted r-squared= 0.0802). Model1 results indicate that ownership concentration and DPR accounted for 8.02% of the variance in stock returns before the interaction effect. The inclusion of the interactive term in model 2 changes F and R-squared values by 0.169 and 0.42% respectively

In the second step (model 2) the interaction term (OC*DPR) was entered into the regression. The output in step two (Model 2) indicates that ownership concentration, DPR, and the interaction term (OC*DPR) significantly predict stock returns (F = 3.656, P <0.05, adjusted R^2 = 0.076). Adjusted R^2 implies that ownership concentration and DPR accounted for 7.6% of the changes in stock returns. This suggests that both models are useful, subject to the test of slope

The test of the slope was done and reported in Table 5.6 above. The test of regression coefficients (β) in model 2 indicates that ownership concentration is statistically significant (β=-.109, P=0.024) while coefficients (β) of dividend pay-out ratio was insignificant (β=027, P = 0.187.The interaction term (OC*DPR) was also insignificant (β=0.06218, P = 0.007). From the output it is manifest that adjustment in the variance of stock return accounted for 0.42% (0.0802-0.076) after adding the interaction term in Model 2. However, the interaction term was insignificant (P>0.05), implying that the Dividend pay-out ratio does not affect the relationship between ownership concentration and stock returns. Hence, the study failed to reject the first sub-null hypothesis (H_{031})

Table 5.7 below presents the outcomes of the second sub-hypotheses ($H_{032)}$ under the third objective stated as:

> ***H_{032}*** Dividend yield has no moderating effect on the nexus between ownership concentration and stock returns.

Table 5. 7: Regression Output of Stock Returns, Ownership concentration, Dividend yield and the Interaction Term (OC*DY)

	Model 1[c]	**Model 2[d]**
Constant	1.608 (0)	1.603 (0)
OC	-.104 (0.03)	-.115 (0.024)
DY	-.193 (0.346)	.381 (0.967)
OC*DY		.351 (0.07)
R-square within	0.0088	0.009
R-Square between	0.0050	0.0045
R-squared overall	0.003	0.003
Adjusted r-squared	0.0832	0.0843
F	2.925 (0.00)	2.049 (0.00)

P-Value in Parenthesis
c. Independent :(Constant), Ownership Concentration, Dividend Yield
d. Independent :(Constant), Ownership Concentration, Dividend Payout Ratio, OC*DY
Source: Author, 2023

The outcomes of hierarchical multiple regression predicting stock return from Ownership concentration, dividend yield and the interaction term (OC*DY) are reported in Table 5.7 above. In step one, stock returns were regressed against ownership concentration and dividend yield (Model 1). Model 1 revealed the existence of a significant nexus between ownership concentration, dividend yield, and stock returns ($P<0.05$, $F = 22.925$, adjusted R-squared=0.0832). Model 1 results indicate that ownership concentration and Dividend yield accounted for 8.32% of the variance in stock returns. The inclusion of the interactive term in model 2 changed F and adjusted r- squared values by 0.876 and 0.11% respectively.

In step two (model 2) the interaction term (OC*DY) was entered into the regression. In model 2 ownership concentration, dividend yield and the interaction term (OC*DY) significantly predict stock returns ($F = 2.925$, $P < 0.05$, adjusted $r^2 = 0.0843$). Results meant that 8.43% of the variation in stock returns was explained by ownership concentration and Dividend yield. This suggests that models 1 and 2 are useful for prediction subject to tests of regression coefficients.

The slope test for the regression coefficients was done as shown in Table 5.7 above. model 2 results indicate ownership concentration was statistically significant ($\beta = -.115$, $P = 0.024$).The β value of dividend yield was insignificant ($\beta = 381$, $P = 0.967$) while the β value of the interaction term (OC*DY) was statistically insignificant ($\beta = .351$, P-value = 0.07).From the results in model 2,it is manifest that adjustment in the variance of stock return accounted for 0.11% (0.0843-0.0832) after adding the interaction term. However, the regression coefficient of the interaction term was insignificant ($P > 0.05$). Indicating that, dividend yield has no significant moderating effect on the nexus between ownership concentration and stock returns. Hence, the second sub-null hypothesis (H_{032}) was not rejected.

5.5 The Joint Effect of Ownership Concentration, Capital Structure and Dividend Policy on Stock Returns

The fourth specific objective was to evaluate the joint effect among ownership concentration, Capital structure, dividend policy and stock returns. The fourth hypothesis was stated as:

> ***H_{04}***: There is no joint effect among ownership concentration, capital structure, dividend policy and stock returns.

Two fixed effect panel regression models were used to examine the joint effect. In the first regression, stock returns were regressed against ownership concentration, capital structure and dividend payout ratio. The outcomes are shown in Table 5.8 below

Table 5. 8: Ownership Concentration, Capital Structure, Dividend pay-out ratio and Stock Returns

SR	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	-.099	.048	-2.06	.04	-.193	-.005	**
CS	-.172	-.049	-3.47	.001	-.269	-.075	
DPR	-.009	.005	-1.61	.107	-.019	.002	
Constant	1.614	.025	63.74	0	1.564	1.663	***

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.003	Number of obs	719
F-test	2.605	Prob > F	0.000
R^2- within	0.0118	R^2- between	0.0013
Adjusted r^2	0.0816		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

The output in Table 5.8 above shows that the overall model is statistically significant (F=2.605, adjusted r-squared=0.0816, P =0.0). The adjusted r^2 of 0.0816 meant that 8.16% of the variations in stock returns were jointly explained by ownership concentration, capital structure and dividend pay-out ratio. The regression outcomes for ownership concentration (β=-.099, P<0.05) meant that a 1% change in ownership concentration leads to a 9.9% decrease in stock returns. For capital structure (β=.172, P<0.05), it was established that a 1% change in capital structure lead to a 17.2%

decrease in stock returns. For the dividend pay-out ratio (β=-.009, t= -1.61, P>0.05), it is deduced that a 1% change in dividend pay-out would lead to a 9% decrease in stock returns but insignificant. In the second regression to test the joint effect, stock returns were regressed against ownership concentration, capital structure and dividend yield. The outputs are in Table 5.9 below

Table 5. 9: Ownership Concentration, Dividend Yield, Capital Structure and Stock Returns

SR	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
OC	-.106	.049	-2.18	.03	-.201	-.01	**
CS	-.172	.049	-.47	.001	269	-075	
DY	-.193	.205	-0.94	.346	-.595	.209	
Constant	1.585	.129	12.24	0	1.331	1.839	***

Mean dependent var	1.650	SD dependent var	0.158
Overall-r^2	0.003	Number of obs	719
F-test	1.958	Prob > F	0.000
R^2- within	0.0089	R^2- between	0.0049
Adjusted r^2	0.084		

*** p<.01, ** p<.05, * p<.1
Source: Author, 2023

From table 5.9 shown above the overall model was statistically significant (F=1.958, Adjusted r-squared =0.084, P<0.05). From the model, 8.4% of the disparity in stock returns is jointly explained by ownership concentration, capital structure, and dividend yield. For ownership concentration (β=-.106, P<0.05), it was found that a 1% change in ownership concentration leads to a 10.6% decrease in stock returns. For capital structure (β=-.172, P<0.05), it was found that a 1% change in capital structure lead to a 17.2% decline in stock returns. For dividend yield (β=-.193, P>0.05), it is deduced that a 1% change in dividend yield would lead to a 19.3% decrease in stock returns but insignificant.

Since the indicators of dividend policy namely: dividend yield and dividend pay-out ratio are insignificant, they are explained together with other variables that are statistically significant namely ownership concentration and capital structure. Therefore, since the overall models in Table 5.8 and 5.9 are statistically significant, it implies that stock returns are jointly explained by ownership concentration, capital structure and dividend policy. Hence the rejection of the fourth hypothesis (H_{04})

5.6 Discussions of the Results

The main objective of the study was to determine the connection among ownership concentration, Capital structure, dividend policy and stock returns of NSE-listed companies. This section provides a discussion of the findings presented in sections 5.2 to 5.5 above.

5.6.1 Relationship between Ownership Concentration and Stock Returns

The first specific objective was to determine the relationship between ownership concentration and stock returns. A hypothesis was presented stating that there was no nexus between ownership concentration and stock returns. The findings showed a significant negative nexus between ownership concentration and Stock returns. The finding of an inverse relationship implies that ownership concentration could have adverse entrenchment effects as controlling shareholders extract private benefits at the expense of minority shareholders. The lack of protection for minority shareholders may make investors divest from firms with high levels of ownership concentration or consider such firms as high risk. Before investing in a company's stock, potential investors consider factors such as the level of ownership concentration. Concentrated corporations are associated with more information asymmetry, and the companies are negatively rewarded.

The results were Consistent with the findings of Clark and Wojcik (2005) and Panda (2022) who established a statistically negative association between ownership concentration and stock returns. The findings supported the current study and indicated that firms with high ownership concentration experience adverse effects on stock returns, this is due to the entrenchment effects of majority shareholders as postulated by the agency theory. However, the results contradicted studies that reported a positive correlation between ownership concentration and stock performance (Shumali and Abuamsha, 2022; Alzeaideen and AL-Rawash, 2014). The mixed outcomes could be due to methodological differences; studies by Alzeaideen and AL-Rawash (2014); Shumali and Abuamsha (2022) used Pooled OLS regression analysis which does not account for unobserved heterogeneity, leading to variable misspecification. The unobserved heterogeneity implies that the results based on the data may be biased or incorrect. This study employed panel regression analysis that allows for greater control of endogeneity due to causal relationships, leading to more accurate results. Panda (2022) Opined stockholding through institutions had no effect on stock market returns since profitability and firm age enhanced stock returns before the financial crisis. However, the study was conducted at the heart of the global financial crisis, during the crisis there is increased volatility in stock returns, hence the divergent findings from the current study. The differences in findings could as well be due to country specific factors like regulations, level of economic development and cultural factors that may affect the relationship.

5.6.2 Mediating Effect of Capital structure

The second research Objective two examined the effect of capital structure on the nexus between ownership concentration and stock returns. The hypothesis was that capital structure has no

mediating role in the nexus between ownership concentration and stock returns. The study ascertained that capital structure mediates the nexus between ownership concentration and stock returns. The findings of a significant impact imply capital structure decisions are critical to the overall performance of the company. This means that Managers must strike a compromise between the expense of bankruptcy, interest tax shield, the relationship between corporate actions and the best levels of debt, investment choices, and firms' efforts to maximize shareholder value. Thus, firms should have an optimal capital structure that helps balance the interest tax shield of debt with the cost of financial distress, agency benefits, and the cost of debt (Culata & Gunarsih, 2012). The findings confirm the assertions of an optimal capital structure by trade off theory; to derive maximum benefits from increased debt capital for better stock returns.

The finding of a positive relationship between ownership concentration and capital structure is consistent with Mustafa and Wasfi (2016), Ceylan (2018) and Okiro et.al (2015). The results of a direct negative association between capital structure and stock returns conflict with Berggren and Bergqvist (2015) who observed that leverage had a positive effect on stock returns, Sari and Patrisia (2019) who reported that capital structure positively impacts firm value in Real estate firms and Zhang (2006) who observed that change in leverage has no effect on stock returns. The findings of a negative relationship between capital structure and stock returns imply that firms need to maintain their leverage up to a certain level to avoid the adverse effects of too much leverage and ensure the firm maximizes the tax shield benefit of debt to maximize returns. Kraus and Lichtenberger (1973) contend that an ideal capital structure could be achieved when the extra gain from increased debt, equals the extra cost of debt. The conflicting findings could be because empirical studies examined the relationship between ownership concentration, capital structure

and stock return separately. The current study examined the intervening effect of capital structure on the link between ownership concentration and stock returns and confirmed the effect.

5.6.3 Moderating Effect of Dividend Policy

The third objective investigated the effect of dividend policy on the nexus between ownership concentration and stock returns. It was hypothesized Dividend policy does not affect the relationship between ownership concentration and stock returns. The main hypothesis was split into two sub-hypotheses.

The first sub-hypothesis under the third objective conjectured that the dividend pay-out ratio does not affect the relationship between ownership concentration and stock returns. The findings confirmed that the dividend pay-out ratio does not moderate the nexus between ownership concentration and stock returns. This means that the dividend pay-out ratio has no effect on the price of the stock and therefore, the distribution dividends do not affect stock returns. Thus, the value of a company is independent of its dividend policy and the return on investment is based on risk and future earnings. These results are consistent with Zakaria et al. (2012), Onyango (2018), and Mufidah and Sucipto (2020) who established that dividend pay-out has no effect on the changes in the firm's stock returns but contradict studies by Hooi et al. (2015) whose results stated that dividend pay-out ratio was statistically significant and negatively related to share price volatility.

The second Sub-hypothesis under the third objective was presented as dividend yield does not affect the nexus between ownership concentration and Stock return. The findings confirmed that dividend yield does not moderate the ownership concentration and stock returns nexus. These

findings concur with those of Marshal et al. (2020), who found that dividend yield had a positive but insignificant impact on return on investment. Additionally, Mufidah and Sucipto (2020) observed that the nexus between profitability, investment, and stock returns is not moderated by dividend yield. This indicates that regardless of the dividend policy, corporations would still report improved stock returns. Therefore, shareholders and investors need not be concerned about the payment of dividends as they can make home-grown dividends by amending their portfolios to conform to their preferences. However, this study contradicts studies by Mustafa et al. (2014), and Hooi (2015) who found that dividend yield negatively affects stock returns.

Therefore, since the first (H_{031}) and second hypotheses (H_{032}) under the third objective were accepted, the study concluded that dividend policy does not moderate the link between ownership concentration and stock returns. The results contradict Taofeek et al. (2019) who showed that stock price volatility, in the long run, is influenced by dividend policy. The findings agree with the other studies (Zakaria et al., 2012; Onyango, 2018; Mufidah &Sucipto, 2020) which established that dividend pay-out does not influence the changes in the firm's stock returns. The differences could be attributed to country-specific factors that could affect the relationship. Furthermore, the literature investigated the relationship between ownership concentration, dividend policy and stock return independently. The current study sought to examine the effect of dividend policy on the link between ownership concentration and stock returns.

5.6.4 Joint Effect of Ownership Concentration, Capital Structure and Dividend Policy on Stock Returns

The fourth objective evaluated the joint effect of ownership concentration, capital structure and dividend policy on stock returns. It was hypothesized that; there is no joint effect of ownership concentration, dividend policy and capital structure on the stock returns. The research found that there is a significant joint effect of ownership concentration, capital structure and dividend policy on stock returns. Through the use of their voting powers, majority shareholders align their interests with those of management to ensure maximum returns. The existence of high debt helps to reduce agency problems as managers have to pay debt interest to avoid bankruptcy. These findings are consistent with Onguka (2021) who observed a significant joint effect of ownership concentration, leverage, and corporate governance on corporate value, and Okiro et al. (2015) who observed a positive effect of corporate governance on value after controlling for leverage.

5.7 Chapter Summary

In summary, this chapter presented hypothesis tests and a discussion of the findings. Data analysis was done using the fixed model and all the data variables were log transformed as a remedy to non-normality detected during diagnostic testing. The summary results are presented in Table 5.10

Table 5. 10: Summary of Statistical Test of Hypothesis and Interpretation of Results

Objective	Hypothesis	Sub-hypothesis	Statistical test and Results	Interpretation of Test Result
i. Determine the effect of ownership concentration on the stock returns	**H_{01}:** There is no relationship between OC and stock returns		Panel regression established a significantly negative relationship between OC and stock returns	**H_{01}**Rejected, implying that OC significantly predicts stock returns
ii. Examine the effect of capital structure on the relationship between OC and stock returns	**H_{02}**: Capital structure has no intervening effect on the relationship between OC and stock returns		Hierarchical panel regression was applied. Step 1; a significant relationship between OC and stock returns. Step 2; a significant relationship between OC and capital structure. Step three; a significant relationship between CS and stock returns. In step four the relationship between OC and SR became insignificant in the presence of CS confirming full Mediation	H_{02}Rejected implying that capital structure intervenes in the relationship between OC and stock returns

iii.	Investigate the effect of dividend policy on the relationship between ownership concentration and stock returns of firms listed at the NSE	H_{03}: Dividend policy has no moderating effect on the relationship between ownership concentration and stock returns.	H_{031}: Dividend pay-out ratio has no moderating effect on the relationship between OC and stock returns H_{032}: Dividend yield has no moderating effect on the relationship between OC and stock returns	Panel regression analysis was applied The interaction terms were not statistically significant (P>0.05)	Fail to reject H_{03}, H_{031} and H_{032}; implying that dividend policy as measured through DPR and DY does not moderate the relationship between OC and stock returns
iv.	To determine the joint effect of OC, capital structure, and dividend policy on stock returns	H_{04}: There is no joint effect among OC, Capital structure, Dividend Policy and stock returns		Panel regression was applied. The coefficients of OC and CS were statistically significant (P<0.05)	Reject (H_{04}) implying that Stock returns were jointly affected by OC, CS and dividend policy.

Source: Author, 2023

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter documents a summary of the findings, conclusions, recommendations, contribution of the study, limitations and future research directions.

6.2 Summary of the Research Findings

The general objective of the study was to determine the interrelationships among ownership concentration, capital structure, dividend policy and stock returns. A panel longitudinal research design was adopted because the variables vary over time. The period of study was from 2006 to 2019 and the hypotheses tested were either rejected or not rejected.

Objective one was to determine the relationship between ownership concentration and stock returns. It was assumed that ownership concentration does not affect stock returns. The ownership concentration attribute considered in this study was the proportion of shares owned by five large shareholders. Stock return was measured by taking changes in price during the financial year plus any dividends paid, divided by the original price of the stock. Using a Panel regression analysis model, the research found a significant negative relationship between ownership concentration and stock returns. Thus, the first (H_{01}) hypothesis was rejected

Objective two examined the mediating effect of capital structure on the ownership concentration and stock returns relationship. It was conjectured that capital structure has no mediating effect on the association between ownership concentration and stock returns. The debt-to-equity ratio was used as the Capital structure metric. The Baron and Kenny (1986) four-step model was used to test

for mediation. From the results in step 4, the beta coefficient of ownership concentration became statistically insignificant after controlling for capital structure. This result indicates that capital structure intervenes in the ownership concentration and stock returns relationship. Therefore, this led to the rejection of the second hypothesis (H_{02}).

The third objective investigated the moderating effect of dividend policy on the nexus between ownership concentration and stock returns. It was hypothesized that dividend policy has no moderating effect on the ownership concentration and stock returns relationship. Dividend policy attributes considered in the study were dividend pay-out ratio and dividend yield. On the effect of the DPR, the study established a statistically insignificant connection between stock returns and the interaction variable (OC*DPR) which implies that the dividend pay-out ratio does not moderate the association. For dividend yield, the study established a statistically insignificant link between stock returns and the interaction variable (OC*DY) which meant that dividend yield does not moderate the relationship. Therefore, the study concluded that dividend policy did not moderate the nexus between ownership concentration and stock returns. Hence, the third hypothesis (H_{03}) was not rejected.

The fourth objective assessed the joint effect of ownership concentration, capital structure and dividend policy on the stock returns. It was conjectured that there is no joint effect among ownership concentration, capital structure and dividend policy on stock returns. The panel regression established a joint effect among ownership concentration, capital structure and dividend policy on stock returns. Hence, rejecting the fourth hypothesis (H_{04})

6.3 Conclusions

The overall objective of the study was to determine the interrelationships among ownership concentration, capital structure, dividend policy and stock returns of NSE-listed firms. Objective one evaluated the effect of ownership concentration on stock returns. The hypothesis test results provided proof of a statistically negative effect of ownership concentration on stock returns. The inverse relationship stock returns are adversely affected by the levels of ownership concentration in the ownership structure which signifies exposure to idiosyncratic risk due to the risk aversion behaviour of large shareholders with concentrated ownership. A possible explanation is that in the Kenya capital markets most large shareholders have less diversified portfolios and they tend to advocate for less risky investments that may not have high returns for all shareholders. Thus, adverse information on high levels of ownership concentration may send negative signals among minority shareholders leading to the disposal of their stocks and a decline in the market price of stocks which adversely affects the stock returns.

The second objective examined the mediating effect of capital structure on the ownership concentration and stock returns relationship. The hypothesis test results found that capital structure mediates the Nexus between ownership concentration and stock returns. This implies that capital structure has the potential effect of adversely affecting stock returns as shareholders keep away from firms with high levels of debt in their capital structure by selling their shares leading to a drop in the share price which negatively impacts stock returns. A possible explanation is that Kenya's financial sector is still emerging and may not adequately screen the use of funds advanced to firms to reduce agency costs. The lack of enough regulations in the Kenya market implies that

managers may advance their interest by diverting borrowed funds to unproductive investments thus negatively impacting firm performance and adversely affecting stock returns.

The third objective examined the moderating effect of dividend policy on the relationship between ownership concentration and stock returns. The test of hypothesis found that dividend policy does not moderate the relationship. The conclusion implication is that dividend policy may not be effective in influencing stock returns. A possible explanation for this is that in Kenya, the regulatory environment regarding dividend payments by firms is inadequate, leaving payment of dividends at the discretion of management. From the companies' point of view, managers who are aware of the weak regulations may divert money meant for dividends to unproductive investments, undertake projects that serve their interests and fail to enhance stock returns.

The fourth study objective examined whether Stock returns were predicted jointly by ownership concentration, capital structure, and dividend policy. The hypothesis test result found that the overall model was significant. The results confirm that stock returns were jointly affected by ownership concentration, capital structure and dividend policy. The results imply that the adoption of appropriate levels of ownership concentration and appropriate financing decisions help in maximizing stock returns. Thus, the presence of majority shareholders with the motivation and resources to monitor and discipline management demonstrates ownership concentration as a key internal governance mechanism that ensures investors receive a good return on their investment.

6.4 Recommendation

The results confirmed the negative impact of ownership concentration on stock returns. The study, therefore, recommends the need for companies to design appropriate policy frameworks that embrace the use of appropriate levels of ownership concentration to reduce its negative impact on stock returns. Suitable policies help to avoid the concentration of ownership in a few shareholders who may serve their interests at the expense of minority shareholders as well as promote good governance that enhances the performance of companies and hence increased stock returns.

Capital structure is critical in explaining the relationship between ownership concentration and stock returns. This connection should be encouraged through appropriate policies that ensure capital is channelled toward productive projects that seek to maximize the wealth of shareholders. The interest of all stakeholders must be protected to avoid majority shareholders exploiting them through ownership concentration. Debt holders should enter into contracts to have representatives on the board to ensure their debt covenants are adhered to. Governments should take some ownership stake to ensure companies comply with laid down policies and procedures and promote a transparent social, political and economic environment for listed firms. This will promote and enhance corporate performance and increase stock returns.

The mixed and contradictory findings that dividend policy does not moderate the relationship between ownership concentration and stock returns, whereas ownership concentration, Capital Structure, and dividend policy jointly influence stock returns, imply that organizations must design appropriate policies that prioritize shareholder wealth maximization. This could be accomplished by striking a balance between ownership concentration and capital structure, as well as developing

dividend policies that promise a return on investment and are proportional to the level of risk assumed by shareholders. The findings highlight the importance of regulatory agencies such as the CMA developing regulations on levels of ownership concentration among individual shareholders to avoid the negative impact of OC on stock returns.

6.5 Contribution of the Research

The following subsections discuss the research contribution to knowledge, managerial policy and practice about the concepts of ownership concentration, capital structure, dividend policy and stock returns.

6.5.1 Contributions to Knowledge

The research adds value to knowledge about the relationship among stock returns, dividend policy and capital structure and ownership concentration. First, the assertions of negative entrenchment effect as postulated by agency theory are confirmed through findings of a negative relationship between Ownership concentration and stock returns. Thus, the study reduces the controversy surrounding the effect of ownership concentration on stock performance. This confirms the agency theories assertions of the need to balance the levels of ownership concentration to balance between the entrenchment and alignment effects for better stock performance. Therefore, through monitoring and regulation, management interests and those of their principals should be aligned when important financing and dividend decisions are being made to serve the interests of both majority and minority shareholders for better stock returns.

Secondly, by incorporating capital structure and dividend policy into the relationship, the research contributed to the creation of a novel conceptual model to enhance comprehension of ownership

concentration and its impact on stock returns. Since the capital structure was found to fully intervene in the nexus between OC and stock returns, managers must trade between the tax shield benefit of debt and the cost of financial distress and agency benefits. This confirms the trade-off theory assertions that optimal leverage will consist of a debt and equity combination that will result in a high firm value via high stock prices. To maximize stock returns, the management of a publicly traded company must strike a balance between ownership concentration and capital structure. The resultant conceptual model is shown in figure 6.1 below

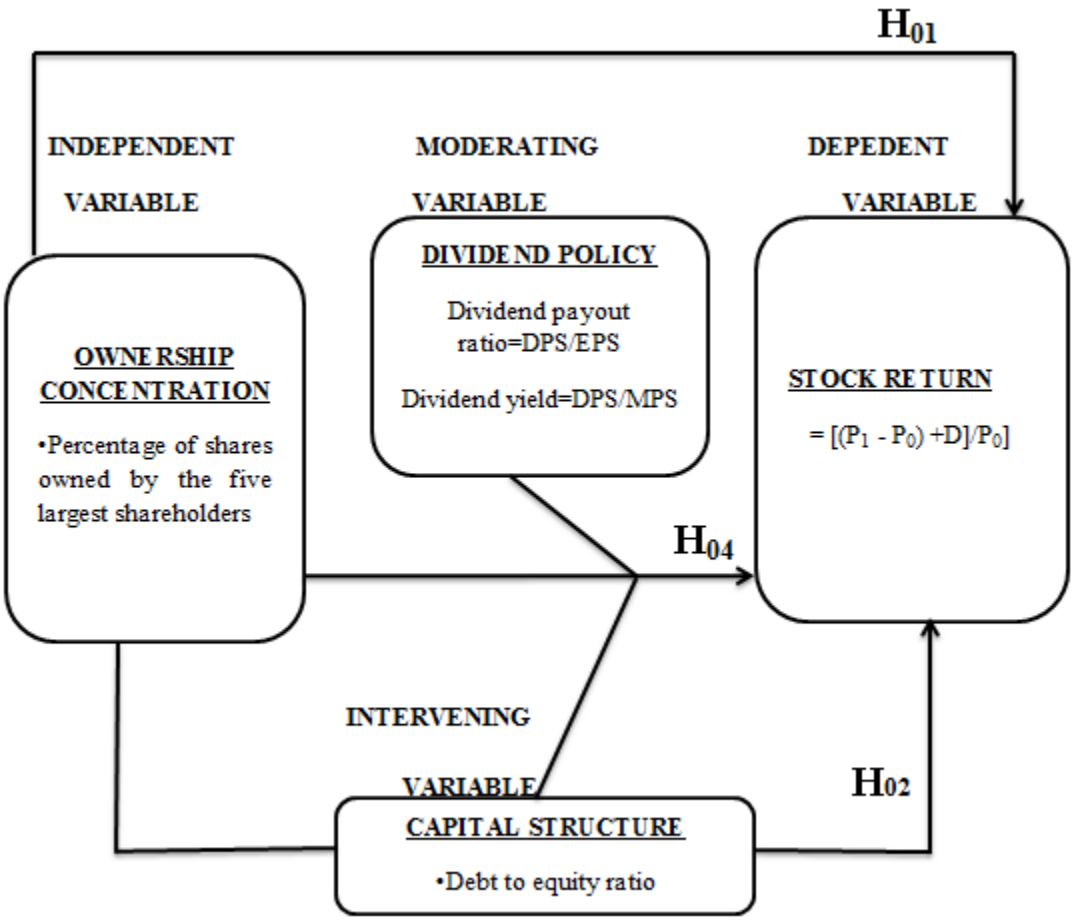

Figure 6. 1: Final Conceptual Model

Source: Author, 2023

In summary, the findings as shown in figure 6.1 above revealed the following: There was a negative association between ownership concentration and stock returns, capital structure significantly mediated the nexus between ownership concentration and Stock returns and there is a joint effect of ownership concentration, capital structure and dividend policy on stock returns.

Finally, methodological contribution arose because some studies used ROE, ROA, ROI, and Tobin's Q as indicators of performance. However, this research used stock returns to measure stock performance. The return on the stock was calculated by dividing the price fluctuations for the fiscal year plus any dividends paid. This metric is significant because it provides the overall return by calculating the gain in capital resulting from the change in the stock price as well as the current dividend profits provided by the company.

6.5.2 Contribution to Policy

The deductions of this research have various applications to policy. The research reported a negative and significant effect of ownership concentration on stock returns. The association was enriched when the joint effect among ownership concentration, CS and dividend policy on stock returns was considered. As a result, the study has policy implications in that proper degrees of ownership concentration serve as an effective way of eliminating agency conflicts and so improving stock returns. Therefore, companies must seek to balance between the levels of ownership concentration to avoid concentration of ownership in a few shareholders who may serve their interests at the expense of minority shareholders. Effective control of OC levels through policy decisions helps promote an ideal internal governance mechanism that enhances the performance of companies and hence increased stock returns.

The findings of full mediation of leverage in the relationship between OC and stock returns are of key interest to various stakeholders. Stakeholders like creditors, shareholders and government agencies who bear the risk if the firms become insolvent and or are declared bankrupt will seek to promote policies that ensure the debt-equity combination that guarantee the going concern status of listed companies. Thus Debt holders enter into contracts to have representatives on board to ensure their debt covenants are adhered to and promote the adoption of policies that seek to limit the amount of debt in the company's capital structure. Governments should take some ownership stake to ensure companies comply with laid down policies and regulations that seek to promote a transparent social, political and economic environment that enhance corporate performance

Regulators such as the CMA and NSE can benefit from the findings of a joint and significant relationship between ownership concentration, capital structure, DP and stock returns. These findings may be used by regulators to issue policy guidelines and regulations concerning ownership concentration, debt-equity combinations, and dividend policies to assist listed firms in remaining competitive and avoid sending negative signals about the going concern status of a firm. Companies that remain competitive in the market attract more investors and increased demand for firm shares. The increase in demand for shares leads to a rise in stock prices, which eventually impacts stock returns.

6.5.3 Contribution to Practice

This study provides evidence that ownership concentration negatively affects stock returns. The study offers insight into the role of ownership in the promotion of good governance practices that seek to promote better performance. The study points to the adverse effects of High levels of

ownership concentration where large owners expropriate resources at the expense of minority shareholders, leading to poor performance and an eventual decline in stock returns. Thus, managers and shareholders are informed of their role to ensure appropriate levels of ownership concentration to avoid adverse effects on stock returns

The study provided proof that capital structure mediates the relationship between ownership concentration and SR. Therefore, the study is important to managers as it offers insight into the effect of financing decisions on stock returns. Poor operational decisions and financing decisions may send negative signals regarding the operational efficiency of the firm leading to a decline in investment uptake of a company share by potential investors and an eventual decline in stock returns. Therefore, this study supports the idea that managers should seek to achieve an optimal capital structure that helps achieve a balance between the interest tax shield benefit of debt and the cost of bankruptcy.

6.6 Limitations of the Study

Although there were minimal limitations in this study, caution was taken to ensure that they did not negatively impact the findings. First, the study assumed that ownership concentration, CS, DP, and stock returns are all linearly related. However, the current study did not consider the possibility of other types of relationships, such as curve linear relationships, particularly concerning the nexus between ownership concentration and stock returns. To cater for this limitation the study used panel regression with fixed effects.

Secondly, the research relied on secondary data from the NSE database as well as audited published reports from companies. These general-purpose reports are used to track the general

soundness and financial health of businesses across a range of industries. As a result, any limitation that is observed and reported within could affect the reliability and validity of the results. To address this limitation the study utilized unbalance panel data and panel regression analysis models with fixed effects robust for standard errors.

6. 7 Suggestions for Further Research

Since the nexus between ownership concentration and stock returns was shown to be unaffected by dividend yield and dividend pay-out ratio. A study should be done to examine various dividend policy characteristics and how they affect this kind of relationship.

In the future, performance metrics other than stock returns, like Return on equity, return on assets, and Tobin's Q, can be used to examine whether there is a connection between OC, dividend policy, and leverage. To determine whether the findings would hold in various circumstances, a comparable study may be conducted in other emerging and developed nations. Given the differences in social, political, regulatory, and economic dynamics between nations, it would be interesting to identify the type of interaction.

To determine whether the results will hold, the capital structure might be employed as a moderating variable. There is much curiosity about what would happen if dividend policy were employed as a mediator variable to determine its influence on the link between OC and stock returns given that it did not moderate the relationship.

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APPENDICES

Appendix I: Listed Firms under Study

S/N	AGRICULTURAL
1.	Eaagads Ltd Ord 1.25 AIM
2.	Kakuzi Plc. Ord.5.00
3.	Kapchorua Tea Co. Ltd Ord 5.00 AIM
4.	The Limuru Tea Co. PlcOrd 20.00AIMS
5.	Sasini Plc Ord 1.00
6.	Williamson Tea Kenya Ltd Ord 5.00 AIM
	AUTOMOBILES & ACCESSORIES
7.	Car & General (K) Ltd Ord 5.00
	BANKING
8.	Barclays Bank of Kenya Ltd Ord 0.50
9.	BK Group PlcOrd 0.80
10.	Diamond Trust Bank Kenya Ltd Ord 4.00
11.	Equity Group Holdings PlcOrd 0.50
12.	HF Group PlcOrd 5.00
13.	I&M Holdings PlcOrd 1.00
14.	KCB Group PlcOrd 1.00
15.	National Bank of Kenya Ltd Ord 5.00
16.	NIC Group PlcOrd 5.00
17.	Stanbic Holdings Plc ord.5.00
18.	Standard Chartered Bank Kenya Ltd Ord 5.00
19.	The Co-operative Bank of Kenya Ltd Ord 1.00
	COMMERCIAL AND SERVICES
20.	Deacons (East Africa) PlcOrd 2.50AIMS
21.	Eveready East Africa Ltd Ord.1.00
22.	Express Kenya Ltd Ord 5.00 AIMS
23.	Kenya Airways Ltd Ord 5.00
24.	Longhorn Publishers PlcOrd 1.00AIMS
25.	Nairobi Business Ventures Ltd Ord. 1.00 GEMS
26.	Nation Media Group Ltd Ord. 2.50
27.	Sameer Africa PlcOrd 5.00
28.	Standard Group PlcOrd 5.00
29.	TPS Eastern Africa Ltd Ord 1.00
30.	Uchumi Supermarket PlcOrd 5.00
31.	WPP ScangroupPlcOrd 1.00

	CONSTRUCTION & ALLIED
32.	ARM Cement PlcOrd 1.00
33.	Bamburi Cement Ltd Ord 5.00
34.	Crown Paints Kenya PlcOrd 5.00
35.	E.A.Cables Ltd Ord 0.50
36.	E.A.Portland Cement Co. Ltd Ord 5.00
	ENERGY & PETROLEUM
37.	KenGen Co. Plc Ord. 2.50
38.	KenolKobil Ltd Ord 0.05
39.	Kenya Power & Lighting Co Ltd Ord 2.50
40.	Total Kenya Ltd Ord 5.00
41.	Umeme Ltd Ord 0.50
	INSURANCE
42.	Britam Holdings PlcOrd 0.10
43.	CIC Insurance Group Ltd ord.1.00
44.	Jubilee Holdings Ltd Ord 5.00
45.	Kenya Re-Insurance Corporation Ltd Ord 2.50
46.	Liberty Kenya Holdings Ltd Ord.1.00
47.	Sanlam Kenya PlcOrd 5.00
	INVESTMENT
48.	Centum Investment Co PlcOrd 0.50
49.	Home Afrika Ltd Ord 1.00
50.	Olympia Capital Holdings Ltd Ord 5.00
51.	Trans-Century PlcOrd 0.50AIMS
	INVESTMENT SERVICES
52.	Nairobi Securities Exchange PlcOrd 4.00
	MANUFACTURING & ALLIED
53.	B.O.C Kenya PlcOrd 5.00
54.	British American Tobacco Kenya PlcOrd 10.00
55.	Carbacid Investments Ltd Ord 1.00
56.	East African Breweries Ltd Ord 2.00
57.	Flame Tree Group Holdings Ltd Ord 0.825
58.	Mumias Sugar Co. Ltd Ord 2.00
59.	Unga Group Ltd Ord 5.00
	TELECOMMUNICATION
60.	Safaricom

Appendix II: Raw Data

Company	Year	Number of Shares Held by The Five Largest Shareholders ("000")	Number of Shares Outstanding ("000")	Opening Price (Kes)	Closing Price (Kes)	DPS	EPS	MPS	Total Debt (Kes. "000")	Total Equity (Kes. "000")