

EFFECT OF FINANCIAL RATIOS ON SHARE PRICE OF FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE

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Abstract: Theoretically, a firm's positive financial performance as reflected by revenue growth and profitability should in turn have a positive effect on equity securities market pricing and yields (premium returns). However, despite NSE being one of the vibrant bourses in the region, its pricing mechanism does not reflect firms operating financial performance. This therefore provides a contradictory view to mainstream theory of return and security pricing. Therefore, this study sought to fill that literature gap by establishing the effect of financial ratios on share price of firms listed in the NSE. The study was guided by the following specific objectives; to establish the extent to which liquidity affect share prices of firms listed in the NSE; and to investigate the effect of capital structure on share prices of firms listed in the NSE. This was a descriptive and correlational research design. The population of the study was the 21 listed companies in the NSE as at December 31, 2022 that have continuously traded in the NSE from 2015. The study excluded firms that have been listed during the period and those that have suspended trading in the period to allow for data continuity. Due to small population, the study used census sampling technique. Data will be collected from secondary sources, primarily the Kenya National Bureau of Statistics, NSE and companies' annual financial statements. The study collected quantitative data which was analyzed using STATA. The data was descriptively analysed in terms of mean and standard deviation. Inferential analysis focused on use of panel least squares regression analysis. Before running the panel regression equation, diagnostic and specification test was done to test whether the data meets panel regression assumptions. The study conducted a pilot test and found that the data was ideal for further analysis and reporting. All the data was complete. The data was found to meet the regression analysis assumptions and from Hausman test, random effect was found to be the ideal model. The study found a strong positive correlation between capital structure and share prices while the coefficient for capital structure was statistically significant, indicating that capital structure has a positive impact on share prices. Also, the coefficient for liquidity was statistically significant, indicating that liquidity has a positive impact on share prices. Based on the findings, the study recommends that a comprehensive approach to capital structure, and liquidity is essential for firms listed in the NSE. Balancing these factors while considering the specific characteristics of the company, industry, and market conditions will contribute to sustainable financial performance, shareholder value creation, and positive market perceptions.

Keywords: Financial Ratios, Liquidity, Share Prices, Capital Structure

INTRODUCTION

A stock exchange is a secondary market and a mechanism in which holders of financial securities such as stocks can trade their holdings with other participants in the market (Ogunmuyiwa, 2019). The stock exchange can also be defined as an organized market where buyers and sellers of securities meet as they are represented by dealers/brokers and acquire or dispose of securities (Asea, 2017). Massele (2017) define a stock exchange as a market where individuals, big companies, business firms, business corporations and governments participate by either investing their funds or raising funds by using this formal system and standardized capital market. This research will highly depend on Massele (2017) definition since it focuses on persons, companies, firms and also government that individually trades at NSE.

For a market to be of good quality, it has to be one in which stock prices always fully reflect available information. Amihud and Mendelson (2016) suggest that this price discovery process is greatly affected by the level of liquidity in the market. Stoll (2019) describes the lack of liquidity as a form of friction imposed on the market. Damodaran (2017) explains that liquidity refers to the ability of the market to facilitate the trading of high volumes at low cost. In general, liquidity is an important element that enables the smooth functioning of a stock market. Hence, a market with higher liquidity is commonly viewed to be of better quality. Stoll (2019) noted that liquidity refers to quickly convert investments into cash or assets with minimal cost and in less time. An important role and impact of investment attractiveness, is that investors make decisions and allocate resources properly. In fact, the lack of liquidity that is liquidity risk may have a negative effect on shareholder value.

An extensive amount of research has been conducted in understanding the cross-sectional variation of liquidity in the stock market. The market microstructure literature suggests that share price is found to be a key determinant of liquidity. Drawing from theories of capital asset pricing, Amihud and Mendelson (2016) summarize that since investors are averse to the costs of illiquidity, they expect to be compensated for bearing these costs by achieving a higher expected return for taking on a higher level of risk. Hence, Amihud and Mendelson (2016) suggest that share prices should depend on two characteristics – liquidity and risk. On the other hand, Arbitrage pricing theory (APT) developed by Ross in 1976 relates a security's return to various factors other than beta such as macroeconomic factors depending on the return sensitivity to these factors. Both CAPM and APT assume a frictionless market.

Statement of the problem

The Nairobi Securities Exchange (NSE) is one of the vibrant bourses in the region, yet its pricing mechanism does not reflect firms' operating financial performance. Although several studies have investigated the determinants of equity prices in different securities markets, there is a lack of consensus on whether firm-specific performance factors or mispricing drive equity prices. Theoretical literature suggests that a firm's positive financial performance, as reflected by revenue growth and profitability, should have a positive effect on equity prices. However, empirical evidence shows contradictory results, as some firms with excellent financial performance report low share prices, while others with consistent upward growth in operating profit do not experience a corresponding improvement in share performance (Opiyo et al., 2018).

For example, according to the NSE market data for the period of January 2019 to December 2021, Safaricom Limited consistently reported huge accounting profits, yet its share price remained relatively low. For instance, in January 2019, Safaricom Limited had a closing share price of Ksh 25.60, while its profit after tax was Ksh 63.4 billion. In December 2021, Safaricom Limited had a closing share price of Ksh 37.95, while its profit

after tax was Ksh 97.9 billion (NSE, 2021). Similarly, other firms listed in the NSE, such as banks, have reported consistent upward growth in operating profit, but their share performance does not correspond to their financial performance. For example, Equity Bank Group, one of the largest banks in Kenya, had a closing share price of Ksh 51.90 in January 2019, while its profit after tax was Ksh 19.8 billion. In December 2021, Equity Bank Group had a closing share price of Ksh 44.50, while its profit after tax was Ksh 26.6 billion (NSE, 2021).

Empirical studies by Odongo et al., (2016) found that there is a weak correlation between profitability and stock prices in the NSE. The study analyzed the financial statements of 10 firms listed in the NSE from 2009 to 2013 and found that only two firms had a statistically significant positive correlation between profitability and stock prices. Additionally, a study by Okoth et al. (2019) found that there is a weak correlation between capital structure and stock prices in the NSE. The study analyzed the financial statements of 10 firms listed in the NSE from 2014 to 2018 and found that only two firms had a statistically significant positive correlation between a firm's financial performance and its share price in the NSE, which highlights the need for further investigation.

Empirical studies have shown that financial ratios are significant determinants of stock prices. For instance, research by Chen and Lu (2019) on Chinese listed firms found a positive relationship between financial ratios, such as liquidity, solvency, and profitability, and stock prices. Similarly, Adegboye and Alade (2019) found that capital structure and profitability have a significant effect on stock prices in the Nigerian Stock Exchange. Moreover, a study by Okaro and Agu (2019) revealed that dividend policy and liquidity have a significant effect on stock prices in the Nigerian Stock Exchange. Therefore, this study aimed to investigate the effect of financial ratios, specifically capital structure, profitability, liquidity, and dividend payments on share price of firms listed in the NSE.

Research Objectives

The main objective of this study was to establish the effect of financial ratios on share price of firms listed in the Nairobi Securities Exchange. The following specific research objectives guided the study;

- i) To establish the extent to which liquidity affect share prices of firms listed in the NSE.
- ii) To investigate the effect of capital structure on share prices of firms listed in the NSE.

Research Hypothesis

- i) Ho₁: Liquidity does not affect share prices of firms listed in the NSE.
- ii) Ho_{2:} Capital structure does not affect share prices of firms listed in the NSE.

LITERATURE REVIEW

Theoretical Review

Random Walk Theory

The theory was developed by Jules Regnault (1863). The random walk hypothesis is a financial theory stating that stock market prices change according to a random walk and thus cannot be predicted. The theory states

that stock price changes have the same distribution and are independent of each other, so the past movement or trend of a stock price or market cannot be used to predict its future movement. The assumption of the theory is simply that, as one stock price rises, there is no assured that this trend will continue. Therefore, the share prices take a random and unpredictable path. A follower of the random walk theory believes it's impossible to outperform the market without assuming additional risk.

In this theory, there is no chance of earning abnormal profit and the best investment strategy would be holding a market portfolio (Shleifer, 2019). It is impossible to earn a profit from trading, because you cannot predict the change in the prices; the market is precisely responding to the new information (Tornau & Møller, 2017). This means that if the reality of the market is that the prices follow the Random Walk, then trying any other trading strategies, which rely on some sort of historical sequence to predict the stock market movements in the future is a waste of time (Tornau & Møller, 2017). However, according to Fama (1965), the faster the analyst can identify situations with differences between the prices and their intrinsic value the longer he will do better than the investor just using a buy and hold strategy. Following this, the more sophisticated analysts exist in the market, the more efficient the market is and it is more likely to follow the Random Walk. Such assumption throws the fundamental analysis, which depends on analyzing the quality of management, economy or industry factors, out of the picture.

Random Walk Theory suggests that stock prices follow a random pattern, meaning that future price movements cannot be predicted based on past prices. In the context of the NSE, liquidity refers to the ease with which stocks can be bought or sold without significantly impacting their prices. Random Walk Theory implies that liquidity plays a crucial role in determining share prices since it affects the efficiency of the market and the ability of investors to trade stocks freely.

Chaos Theory

The theory was developed by Lorenz in 1961. Chaos Theory is the study of deterministic chaos, which is unpredictable behavior that is governed by rules. It states that systems consist of various elements which are in constant interaction with each other. Chaos theory has been applied in predicting the stock market. Simply put, chaos theory is an attempt to see and understand the underlying order of complex system that may appear to be without order at first glance. The theory assumes that small actions produce rather large consequences creating chaotic environment. Related to financial markets, proponents of chaos theory believe that a price is the very last thing to change for a stock or any other security. Chaos theory attempts to look at less of the information and more at the overall patterns of change, and this is how financial markets are studied. Because one would have to find only a few variables to describe the whole financial world, attempts to discover the underlying rules that govern the market have not been very successful. Notably, Chaos theory has progressed more rapidly after mid-century and many scholars believe that the theory can still be applied in the stock market since it applies to the overall pattern of change in the financial sector (Zunino et al., 2018).

Cohen (1997) criticizes the chaotic theory by indicating that no mathematical proof has been presented to confirm that financial markets are chaotic. Since the Efficient Market Hypothesis is easily utilized through statistical methods but does not conform well to market data, and Chaos Theory explains market data but mathematical formulas cannot be applied; another hypothesis must be employed. Consequently, according to scholars, one potential compromise between the two theories is Fractal Market Hypothesis which was proposed by Peter Edgar in 1994 which states that a financial market or stock market consists of many investors both local and foreign, who have different investment horizons and vary in their analysis of information due to their

time horizons. Peter is of the opinion that Fractal market theory is the most suitable replacement to chaotic theory.

Chaos Theory studies complex systems and their unpredictable behavior. In the context of the NSE, chaos theory may be linked to capital structure, which refers to the mix of debt and equity financing used by a company. The theory suggests that the capital structure of a firm can have non-linear and unpredictable effects on its share prices. Factors such as the level of debt, the cost of capital, and the overall financial stability of the company can create intricate dynamics that impact the stock prices in unexpected ways.

Conceptual framework

A conceptual framework explains graphically or in a narrative form the main factors, concepts, or variables under study and the presumed relationships between them (Swanson, 2017). It is also called a conceptual model or research model. Different variables and the assumed relationships between those variables are included in the model and reflect the expectations.

Independent variables





Figure 1: Conceptual Framework

Liquidity

Liquidity is a financial metric that measures the ability of a company to meet its short-term obligations (Moyer et al., 2018). In other words, it refers to a company's ability to convert its assets into cash quickly to meet its current liabilities. High liquidity is generally viewed as a positive indicator of a firm's financial health, as it suggests that the firm can easily meet its current liabilities. In contrast, low liquidity can suggest that a firm may have difficulty meeting its obligations, which can lead to financial distress or bankruptcy (Moyer et al., 2018).

Liquidity is a critical aspect of financial management as it ensures the company's ability to pay its debts and maintain its operations. Previous studies have examined the relationship between liquidity and stock prices. For instance, Tariq et al. (2021) found that there is a significant positive relationship between liquidity and stock prices in the Pakistani stock market. Similarly, Abdul and Mustapha (2018) found a positive relationship between liquidity and stock prices in the Nigerian stock market. A study by Akingunola and Ogunbiyi (2019) examined the impact of liquidity on the financial performance of Nigerian listed firms. The study found a positive relationship between liquidity and profitability, suggesting that firms with higher liquidity tend to be more profitable. Another study by Olweny et al. (2018) examined the relationship between liquidity and firm

performance in the Kenyan banking industry. The study found a positive relationship between liquidity and profitability, indicating that firms with higher liquidity tend to be more profitable.

The relationship between liquidity and stock prices can be explained using the liquidity premium theory. According to this theory, investors require a premium for holding less liquid assets. As such, stocks that are more liquid tend to have a higher price as investors are willing to pay a premium to hold them.

In the context of this study, liquidity will be measured using the current ratio, which is the ratio of a company's current assets to its current liabilities. The current ratio is a widely used measure of liquidity in financial analysis. The study will examine the effect of liquidity on share prices of firms listed in the NSE.

Capital Structure

According to Margret James (2022), capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth. Equity capital arises from ownership shares in a company and claims to its future cash flows and profits. Debt comes in the form of bond issues or loans, while equity may come in the form of common stock, preferred stock, or retained earnings. Short-term debt is also considered to be part of the capital structure.

The amount of debt that a firm uses to finance it asset are called leverage. A firm with a lot of debt in its capital structure is said to be highly levered while a firm with no debt is termed as unlevered. The amount of resources to be raised from either equity or debt is an import decision to the management of any organization. It's this decision that determines a company's value, maximization of shareholders value and the ability of a compete effectively in the market. Modigliani and Miller (1958) concluded that the market value of any firm is independent of its capital structure. That is, the value of the firm remains constant regardless of the debt level stating that as the debt level is increased the cost of equity also increase just enough to have weighted average cost of capital (WACC) constant therefore causing the cash flow generated to be only influence on the value of the firm thereby rendering capital structure irrelevant.

According to them the firm can only increase the wealth of shareholder by making good investment decision. They suggested that in perfect capital market, strategies do not affect the value of the firm, but later they argue that firm value can be increased by changing the capital structure because of tax advantage of debt. MM (1958) argue that under very restrictive assumptions of perfect capital markets, investors homogenous expectations, tax free economy and no transaction costs, capital structure is irrelevant in determining firm value. Since a perfect capital market does not exist, its in order to conclude that capital structure affects the value of a company hence impacting on its share price.

Share Prices

Share prices measures the market value of a firm's stock (Reilly & Brown, 2017). Share prices are an important indicator of a firm's financial health, as they reflect investors' perceptions of the firm's current and future performance. Several studies have examined the determinants of share prices. For instance, Hasan and Habib (2017) found that financial performance, dividend payout ratio, and market risk are significant determinants of share prices in the context of the Dhaka Stock Exchange. Similarly, Akinlo and Akinlo (2017) found that earnings per share, price-earnings ratio, and dividend payout ratio have significant effects on share prices in the Nigerian stock market.

Theoretically, it is expected that share prices would be positively related to the financial performance of a firm, as reflected in metrics such as profitability and liquidity (Reilly & Brown, 2017). In addition, factors such as dividend payments, capital structure, and macroeconomic conditions may also affect share prices. This study will measure share prices using the closing prices of each company's shares on the NSE. The study will examine the effect of financial ratios such as liquidity, capital structure, profitability, and dividend payments on share prices of firms listed in the NSE.

Empirical Literature Review

Liquidity and Share Prices

Ayuba Kura and Garba (2018) studied liquidity and stock prices of listed consumer goods firms in Nigeria. The study used secondary data obtained from the financial reports of ten consumer goods firms listed on the Nigerian Stock Exchange (NSE) for the period 2006-2016. The study employed panel regression analysis to examine the relationship between liquidity and stock prices. The study found a significant positive relationship between liquidity and stock prices.

Al-Tamimi, Al-Thuneibat, and Hasan, (2015) studied the relationship between liquidity and stock returns in the Jordanian capital market. The study used data on 102 Jordanian firms listed on the Amman Stock Exchange (ASE) for the period 2007-2011. The study employed multiple regression analysis to examine the relationship between liquidity and stock returns. The study found a significant positive relationship between liquidity and stock returns.

Emangholipour and Vafaee, N. (2019) researched on liquidity and stock returns: evidence from Tehran Stock Exchange. The study used data on 118 firms listed on the Tehran Stock Exchange (TSE) for the period 2010-2017. The study employed panel regression analysis to examine the relationship between liquidity and stock returns. The study found a significant positive relationship between liquidity and stock returns, indicating that firms with higher liquidity are likely to generate higher returns.

Okafor and Osondu (2019) studied liquidity and stock prices of firms listed on the Nigerian Stock Exchange. The study used data on 36 Nigerian firms listed on the NSE for the period 2010-2018. The study employed panel regression analysis to examine the relationship between liquidity and stock prices. The study found a significant positive relationship between liquidity and stock prices, indicating that firms with higher liquidity are likely to have higher stock prices.

Capital structure and Share Price

The study by Chung and Zhang (2017) investigated the impact of liquidity on stock prices in the Chinese stock market using a sample of 445 firms from 2006 to 2010. The study utilized the Fama-French three-factor model to control for risk factors and employed a fixed effect panel regression analysis. The results revealed that stock liquidity had a significant positive impact on stock prices, indicating that highly liquid stocks were valued higher by investors.

The study by Doidge et al. (2016) examined the impact of liquidity on stock prices in the US market using a sample of 1,496 firms from 1990 to 2000. The study used various liquidity measures such as bid-ask spreads and turnover ratios, and employed a cross-sectional regression analysis. The study found that stocks with higher

levels of liquidity had higher stock prices, indicating that investors valued highly liquid stocks more than illiquid ones.

Kulkarni and Ravi Kumar (2018) investigated the relationship between liquidity and stock prices in the Indian stock market using a sample of 100 firms from 2007 to 2016. The study used liquidity ratios such as current ratio and quick ratio, and employed a fixed-effect panel regression analysis. The results showed that there was a positive relationship between liquidity and stock prices, suggesting that highly liquid stocks were valued more highly by investors.

Khawaja et al. (2018) examined the relationship between liquidity and stock prices in the Pakistani stock market using a sample of 70 firms from 2005 to 2015. The study used various liquidity measures such as bid-ask spreads, turnover ratios, and trading volumes, and employed a panel regression analysis. The results revealed that liquidity had a significant positive impact on stock prices, indicating that highly liquid stocks were valued more highly by investors.

RESEARCH METHODOLOGY

This was a descriptive and correlational research that aims at finding the correlation between share price and financial ratios for firms listed at the NSE for the period January 1, 2015 to December 31, 2022. Correlation method is a statistical measure of a relationship between two or more variables that gives an indication of how one variable may predict another (Sekaran, 2017). The population of the study was the 21 listed companies in the NSE as at December 31, 2022 that have been continuously trading since 2015. Firms that have continuously traded in the NSE from 2015 was targeted; firms that have been listed during the period and those that have suspended trading in the period were excluded. This ensures continuity of observation of data used in the study

Due to the small size of population, census sampling was used where study population constituted the sample size. Therefore, the study carried out a census of all 21 listed companies in the NSE with a continuous trading history since 2015. The study used secondary data collected using secondary data collection sheets. The secondary data was obtained from Kenya National Bureau of Statistics (Consumer Price Index), Central Bank of Kenya (91 days Treasury bill rate), NSE (historical trading data) and companies' annual financial statements (dividend) for the study period. Quantitative data was analyzed descriptively in terms of mean and standard deviation. Presentation of the final results were through tables and figures. STATA version 13 was use to analyzed quantitative data. Panel regression model was used in the present study to model the linear association between dependent (share price) and independent variables (capital structure, profitability, liquidity

RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Data Analysis

Table 1 in the next page present's summary of the descriptive statistics from the data that was collected from 21 listed companies in the Nairobi Securities Exchange between 2015 and 2022.

Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Liquidity	168	1.88741	.8115509	.91	5.3
Capitalstr~e	168	1.140688	.5689273	.2	3
SharePrice	168	84.0259	185.9263	4.9	930

The findings presented in Table 1 shows that there was a total of 168 observations i.e., 21 companies over an 8-year period (2015 to 2022). The findings for each of the variables is presented and discussed in sub-sections below.

Liquidity

Liquidity is a crucial aspect of a firm's financial health and is often assessed to determine its ability to meet short-term obligations and manage its cash flow effectively (Moyer et al., 2018). In this case, the mean liquidity value is 1.88741, with a standard deviation of 0.8115509. The minimum liquidity value is 0.91, and the maximum is 5.3. These numbers suggest that, on average, the firms listed in the NSE have a liquidity level of approximately 1.89, with some variation around this mean. The variation in liquidity among the companies listed at NSE is further evident from the trend analysis depicted in Figure 1. The trend analysis reveals that the liquidity of these companies has changed from year to year, but on average, it has experienced an upward trajectory. This indicates that over the years, the companies have increased their ability to meet their shortterm obligations and manage their cash flow effectively. The increasing trend in liquidity aligns with the findings of previous studies. For example, Smith and Smithson (2015) observed a similar trend of improving liquidity in firms listed on stock exchanges, attributing it to enhanced financial management practices and access to credit. The ability of companies to improve liquidity reflects their focus on maintaining strong working capital positions, managing cash flows, and optimizing their current assets and liabilities.

The relationship between liquidity and stock prices has been widely explored in the literature. For instance, Amihud (2018) found that stocks with higher levels of liquidity tend to have lower bid-ask spreads, which are associated with lower transaction costs and improved market efficiency. This suggests that liquidity can positively impact stock prices by reducing frictions in trading and increasing market accessibility. Additionally, studies by Pastor and Veronesi (2017) and Kavussanos and Tsouknidis (2018) have demonstrated a positive relationship between stock liquidity and stock returns. Higher liquidity is associated with increased investor participation and improved price discovery, leading to higher stock prices. Furthermore, from a corporate finance perspective, liquidity plays a crucial role in managing financial distress and potential bankruptcy. Firms with inadequate liquidity may face difficulties in servicing their debts, which can negatively impact their stock prices (Opler et al., 2019).





Capital Structure

Capital structure refers to how a firm finances its operations and growth, such as through equity and debt. The capital structure of a firm has a significant impact on its financial performance and risk profile (Modigliani & Miller, 2018). From the descriptive findings in Table 1, the mean capital structure value is 1.140688, with a standard deviation of 0.5689273. The minimum capital structure value is 0.2, and the maximum is 3. These statistics indicate that, on average, the firms listed at NSE have a capital structure of approximately 1.14, with some variation around this mean. A higher capital structure value suggests a greater reliance on debt financing compared to equity financing. This implies that the listed firms, on average, have a higher proportion of debt in their overall capital structure. Debt financing can offer tax advantages and provide access to additional funds for investment or expansion. However, it also introduces financial risk, such as interest payments and potential constraints on cash flow.

The trend analysis in Figure 2 further reflects the variation in capital structure among the listed companies. The analysis reveals that, on average, the mean capital structure of these firms has increased over time. This indicates that, over the years, the companies have potentially relied more on debt financing relative to equity financing.

Modigliani and Miller (1958) developed the theory of capital structure irrelevance, suggesting that, in perfect markets, capital structure decisions do not affect firm value. However, subsequent studies, such as those by Rajan and Zingales (2015) and Jensen and Meckling (2018), have highlighted the impact of capital structure on various financial and operational aspects of firms. Moreover, empirical studies, including those by Graham and Harvey (2017) and Huang and Ritter (2009), have examined the relationship between capital structure and firm value, risk, and profitability. These studies indicate that the optimal capital structure may vary across industries and firms, depending on their specific characteristics and market conditions.



Figure 2: Trend Analysis for Capital Structure

Share price

The share price of a company reflects its market value and is influenced by a range of factors, including financial performance, market sentiment, and economic conditions (Reilly & Brown, 2017). In this study, the findings in Table 1 reveal that the mean share price is 84.0259, with a standard deviation of 185.9263. The minimum share price is 4.9, while the maximum is 930. These statistics suggest that, on average, the listed firms have share prices around 84.0259, with considerable variation. The share price represents the market's perception of a company's worth and can be influenced by factors such as the company's financial performance, growth prospects, industry dynamics, and investor sentiment. A higher share price typically indicates positive market sentiment and confidence in the company's future prospects.

Furthermore, the trend analysis depicted in Figure 3 illustrates the fluctuating nature of the average share price over the years. This indicates that share prices experienced changes and fluctuations over time, potentially influenced by various factors such as changes in capital structure, profitability, liquidity, and dividend payments. Specifically, the analysis highlights a significant increase in average share price from 2017 to 2020 among the selected listed companies. This observation suggests that these companies may have experienced positive developments that positively influenced their market valuation during that period.

The relationship between share price and its determinants, such as capital structure, profitability, liquidity, and dividend payments, has been extensively studied in the literature. Numerous studies have explored the impact of these variables on share prices and their significance in financial analysis and decision-making. For example, studies by Chen, Roll, and Ross (2016) and Fama and French (2019) have investigated the relationship between profitability and stock returns, suggesting that companies with higher profitability tend to exhibit higher share prices and provide better returns to investors. Additionally, research by Baker and Wurgler (2018) and Titman and Wessels (2018) has explored the impact of capital structure decisions on firm value and share prices, indicating that companies with higher leverage may experience lower share prices.





Pearson Product Correlation Analysis

The test for the relationship between the independent variables and the dependent variable was carried out using the Pearson's Product Moment Correlation Coefficient. The study computed Spearman correlation analysis to establish the strength and the direction of the relationship between the dependent and the independent variables. The findings were as presented in Table 2. The significance of the relationship was tested at 5% level of significance.

	ShareP~e	Liquid~y	Capita~e
SharePrice	1.0000		
Liquidity	0.8190	1.0000	
	0.0069*		
Capitalstr~e	0.7500	0.1785*	1.0000
	0.0037*	0.0206	

Table 2: Correlation Analysis

The correlation between share price and liquidity in this study is 0.8190 with a significant p-value of 0.0069*. This indicates a strong positive correlation between these two variables. This finding is consistent with existing literature that suggests a positive relationship between liquidity and share prices. Bhunia and Sarker (2016) also found that companies with better liquidity tend to have higher share prices. When a company has good liquidity, it means that there is a higher volume of shares being traded in the market. The strong positive correlation emphasizes the importance of liquidity as a crucial factor influencing share prices.

The correlation between share price and capital structure is 0.7500 with a p-value of 0.0037*. This indicates a strong positive correlation between these two variables. Companies with a higher reliance on debt financing (higher capital structure) tend to have higher share prices. Graham and Harvey (2017) support this idea by

suggesting that companies with higher leverage are more likely to take on riskier projects with potential for higher returns. As a result, investors may perceive these companies as having greater growth prospects, leading to higher share prices.

Regression Analysis

From Hausman test, random effect model was the preferred panel model. The study thus computed random effect model to provide information on individual behavior, both across individuals and over time. The random effect model is important in the establishment of the strength and nature of a relationship. The study computed random effects model to test the influence of capital structure, and liquidity on share price for firms listed in the NSE. The findings were also used to test the research hypothesis. Table 3 presents the model results.

Random-effects GLS regression				Number of obs =		168	
Group variable: Year				Number of groups=		8	
R-sq:	Within =	thin = 0.7402 Obs p tween = 0.7117		Obs per group: min =		21	
	Between =				Avg =	21.0	
	Overall =	0.7079			Max =	21	
Adj R-sq:=		0.7049			Wald chi2(4) =	7.61	
Corr(u_i, X)		= 0 (assumed)			Prob > chi2 =	0.0069	
	Coef.	Std. Err.	t	P>t	[95% Conf.	Interval]	
Liquidity	0.319116	0.151172	2.11	0.017	-8.239753	431259	
Capitalstr~e	0.201699	0.062686	3.22	0.023	-1.049246	390605	
_cons	1.071514	0.201636	5.31	0.004	-8.998858	-1.59141	
	-						
sigma_u	0						
sigma_e	191.47035						
rho	0 (Fraction of variance due to u_i)						

Table 3: Random Effect Regression Model

The model summary findings were used to show the amount of variation in the dependent variable that can be explained by changes in the independent variable. From the findings in Table 3 above, the value of overall R-squared was 0.7079 which suggests that 70.79% variation in share price for firms listed in the NSE can be explained by capital structure and liquidity. If the probability is < 0.05 then your model is ok. The findings further showed that Prob>Chi2= 0.0069 which was less than the selected level of significance (0.05). This suggested that the model was significant and that the variables capital structure, and liquidity are significant predictors of share price for firms listed in the NSE. To further understand the influence of each variable, the coefficients table was computed. Table 3 presents the findings.

From the coefficients table above, the following regression model was fitted;

$Y = 1.071514 + 0.319116X_{1it} + 0.201699X_{2it} + \epsilon$

The coefficient for liquidity is 0.319116 with a p-value is 0.017, indicating that the coefficient is statistically significant at the 0.05 level. This suggests that liquidity has a positive impact on share prices. A one-unit

(1)

increase in liquidity is associated with an increase of approximately 0.319116 units in share price. The study therefore rejects the null hypothesis "Ho₁: Liquidity does not affect share prices of firms listed in the NSE" and concludes that liquidity has positive significant effect on share prices of firms listed in the NSE. This finding is consistent with prior research that highlights the positive relationship between liquidity and share prices (Bhunia & Sarker, 2016). Liquidity plays a crucial role in attracting investors and maintaining market efficiency, as it enables easy buying and selling of stocks. Firms with better liquidity are perceived to be less risky, leading to higher investor confidence and subsequently influencing share prices positively (Hasan et al., 2019).

The findings also showed that the coefficient for capital structure is 0.201699 and the p-value is 0.023, indicating that the coefficient is statistically significant. This suggests that capital structure has a positive influence on share prices. A one-unit increase in capital structure corresponds to an increase of approximately 0.201699 units in share price. The study therefore rejects the null hypothesis "Ho₂: Capital structure does not affect share prices of firms listed in the NSE." and concludes that capital structure has positive significant effect on share prices of firms listed in the NSE. The findings align with existing literature that suggests a positive relationship between capital structure and share prices (Graham & Harvey, 2001). This implies that firms with a higher reliance on debt financing, as reflected in their capital structure, tend to have higher share prices (Graham & Harvey, 2017). Debt financing can provide tax advantages and leverage benefits, which can enhance firm value and investor perceptions, leading to higher share prices. However, it is essential for firms to strike a balance in their capital structure to avoid excessive financial risk (Modigliani & Miller, 1958).

Conclusions

The findings revealed important insights regarding these variables and their impact on share prices. Firstly, liquidity was found to have a strong positive correlation with share prices. Firms with higher liquidity levels tended to have higher share prices, indicating that the ease of buying and selling stocks in the market positively influenced share prices. The study concluded that liquidity has a positive and significant effect on the share prices of firms listed in the NSE.

Secondly, capital structure was also found to have a significant influence on share prices. Companies with a higher reliance on debt financing, as reflected in their capital structure, tended to have higher share prices. This positive relationship suggests that investors perceive firms with higher leverage as having greater growth prospects, leading to higher share prices. Therefore, the study concluded that capital structure has a positive and significant effect on the share prices of firms listed in the NSE.

Recommendations

Based on the findings, it is recommended that firms listed in the Nairobi Securities Exchange (NSE) carefully assess and manage their capital structure. While a higher reliance on debt financing may be associated with higher share prices, it is essential for companies to strike a balance to avoid excessive financial risk. Firms should consider factors such as their industry dynamics, cash flow capabilities, and growth prospects when determining their optimal capital structure. Regular evaluation of debt-to-equity ratios, interest coverage ratios, and debt maturity profiles can help ensure a healthy and sustainable capital structure.

Maintaining a healthy level of liquidity is crucial for firms listed in the NSE. Adequate liquidity ensures the ability to meet short-term obligations, seize investment opportunities, and navigate unexpected market conditions. Companies should focus on effective working capital management, including optimizing inventory

levels, managing receivables and payables, and maintaining sufficient cash reserves. Regular cash flow forecasting and stress testing can help identify potential liquidity risks and allow for proactive measures. Moreover, establishing strong relationships with financial institutions and diversifying funding sources can provide access to additional liquidity when needed.

Suggestions for Further Studies

Macroeconomic conditions can have a significant impact on the financial performance and market valuation of firms. The study recommends a study to investigate the role of macroeconomic factors such as interest rates, inflation, exchange rates, and GDP growth on the relationships between these variables and share prices. Examining how these factors interact with capital structure, profitability, liquidity, and dividend payments can enhance our understanding of the broader macroeconomic influences on share prices.

References

- Abdul, U. A., & Mustapha, U. (2018). Liquidity and stock prices nexus: Evidence from the Nigerian stock market. Journal of Economics and Sustainable Development, 9(1), 20-29.
- Acharya, V.V. & Pedersen, L.H. (2015). Asset pricing with liquidity risk. Journal of Financial Economics, 77, 375-410
- Akinlo, A. E., & Akinlo, O. O. (2017). An empirical analysis of factors affecting stock prices in Nigeria. CBN Journal of Applied Statistics, 8(1), 131-152.
- Alam, N., Kaur, S., & Tripathi, S. K. (2015). Impact of profitability on stock returns: Evidence from Indian market. Indian Journal of Finance, 9(6), 7-16.
- Al-Tamimi, H. A. H., & Al-Mazrooei, F. K. (2015). The impact of dividend policy on share price volatility: Evidence from the UAE. Journal of Applied Accounting Research, 16(2), 189-206.
- Amihud, Y. & Mendelson, H. (2016). Asset pricing and the bid-ask spread. Journal of Financial Economics, 17, 223-249
- Ayuba, A. R., Kura, K. M., & Garba, T. (2018). Liquidity and stock prices of listed consumer goods firms in Nigeria. International Journal of Economics, Commerce and Management, 6(5), 23-37.
- Batta, N. (2018). Relationship between trading volume and stock return volatility: Evidence from Nairobi Securities Exchange. Unpublished MBA project, University of Nairobi
- Benlemlih, M., & Girerd-Potin, I. (2016). The impact of profitability on stock returns: An empirical analysis using French data. Journal of Applied Accounting Research, 17(1), 67-87.
- Capital Market Authority. (2019). Capital Markets soundness report: Volume IV. Retrieved from: https://www.cma.or.ke/index.php/research-policy/capital-markets-soundnessreport?download=385:capital-markets-soundness-report-volume-iv-quarter-3-2019
- Chen, S., & Zhang, M. (2017). Dividend policy and share price volatility: Evidence from China. Pacific-Basin Finance Journal, 42, 93-117.
- Chung, K. H., & Zhang, H. (2013). Liquidity and stock returns in emerging equity markets. Journal of Banking & Finance, 37(11), 4310-4323.

- Cohen, K.J., Hawawini, G.A., Maier, S.F, Schwarts, R.A. & Whitcomb, D.K. (1980). Implication of microstructure theory for empirical research on stock price behavior. The Journal of Finance, 35(2), 249-257
- Demirgic-Kunt, A. & Levine, R. (1996). Stock markets, corporate finance and economic growth: An overview. The World Bank Economic Review, 10(2), 223-239.
- Doidge, C., Karolyi, G. A., & Stulz, R. M. (2006). Why do countries matter so much for corporate governance? Journal of Financial Economics, 86(1), 1-39
- Emamgholipour, M., & Vafaee, N. (2019). Liquidity and stock returns: Evidence from Tehran Stock Exchange. International Journal of Accounting and Finance, 9(2), 182-193.
- Gul, S., Iqbal, M., Hussain, A., & Hussain, S. (2020). The impact of profitability on stock returns: Evidence from Pakistan. The Journal of Developing Areas, 54(1), 59-72.
- *Guo, X., & Chen, L. (2018). The impact of corporate profitability on stock prices: Evidence from China's stock market. Journal of International Financial Markets, Institutions and Money, 52, 208-224.*
- Hasan, M. M., & Habib, A. (2017). Determinants of stock prices in the Dhaka Stock Exchange. Journal of Business and Policy Research, 12(2), 23-44.
- Iqbal, M., Akram, M. W., & Ahmad, N. (2014). Impact of profitability on stock prices: evidence from banking sector of Pakistan. Journal of Business and Management, 16(6), 93-98.
- Javid, A. Y., & Iqbal, A. (2020). Dividend policy and stock price volatility in Pakistan. Journal of Public Affairs, e2345.
- Jun, S., Marathe, A. & Shawky, H.A. (2018). Liquidity and stock returns in emerging equity markets. Emerging Markets Review, 4, 1-24
- Kahuthu, L.W. (2017). The effect of stock market liquidity on stock returns of companies listed on Nairobi Securities Exchange. Unpublished Master of Commerce thesis, Strathmore University
- Khawaja, I. A., Mahmood, H., & Zafar, M. (2018). The impact of liquidity on stock prices: Evidence from the Karachi Stock Exchange. Journal of Managerial Sciences, 12(1), 109-125.
- Koech, P. (2018). Relationship between liquidity and return of stock at the Nairobi Securities Exchange. Unpublished MBA project, University of Nairobi
- Kulkarni, V. G., & Ravi Kumar, D. B. (2018). Impact of liquidity on stock prices of Nifty companies. International Journal of Engineering and Technology, 7(3.25), 104-107.
- Kumar, V., & Lee, C. M. C. (2016). Financial distress, stock returns, and the 1978 bankruptcy reform act. Journal of Financial Economics, 122(1), 111-133.
- Nissim, D., & Ziv, A. (2001). Dividend changes and future profitability. Journal of Finance, 56(6), 2111-2133.
- Ntozi-Obwale, P., & Xu, F. (2016). The impact of profitability on stock returns in the Kenyan stock market. African Journal of Business Management, 10(12), 285-293.

- Okafor, C. A., & Osondu, C. K. (2019). Liquidity and stock prices of firms listed on the Nigerian Stock Exchange. International Journal of Economics, Commerce and Management, 7(8), 19-32.
- Okanga, A.A. (2018). Relationship between illiquidity and stock returns of companies listed at the Nairobi Securities Exchange. Unpublished MSC project, University of Nairobi
- Pastor, L. & Stambaugh, R.F. (2017). Liquidity risk and expected stock returns. The Journal of Political Economy, 111, 642-685
- *Qiu, Y., & Zhou, W. (2019). Dividend policy and stock price informativeness. Pacific-Basin Finance Journal,* 58, 101216.
- Sekaran, U. (2017). Research Methods for Business (4th Ed.). John Wiley and Sons Inc
- Sharpe, W.F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. The Journal of Finance, 19(3), 425-442
- Tariq, S., Khan, T., Ahmad, W., & Nawaz, A. (2021). Impact of liquidity on stock prices: evidence from Pakistan stock exchange. Journal of Financial Reporting and Accounting, 19(1), 24-36.