

**EFFECT OF FINANCIAL STATEMENT INFORMATION  
ON STOCK RETURNS OF FIRMS LISTED AT THE  
NAIROBI SECURITIES EXCHANGE**

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## **DECLARATION**

I, Francis Kimani Kagiri hereby declare that this is my original work and has not been submitted for presentation and examination for any award of Degree in this university or any other university.

Signature ..... Date.....

**Francis Kimani Kagiri**

**D63/77045/2015**

This research project has been submitted for examination with my approval as the University of Nairobi supervisor

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To Almighty God, thank you for the wisdom and favour that brought this far!

## **DEDICATION**

This work is dedicated to my wife and children for their sacrifice and understanding when I was out to study.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ASE</b>	Athens Stock Exchange
<b>CBK</b>	Central Bank of Kenya
<b>CDS</b>	Central Depository System
<b>CMA</b>	Capital Markets Authority
<b>CSE</b>	Columbian Stock Exchange
<b>EPS</b>	Earning Per Share
<b>GMM</b>	Generalized Methods Moments
<b>KES</b>	Kenya Shillings
<b>NSE</b>	Nairobi Securities Exchange
<b>OLS</b>	Ordinary Least Square
<b>PE</b>	Price Earnings
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity

## ABSTRACT

Accounting information mitigates information asymmetries which brings about adverse selection during transactions in the capital market. It also boosts liquidity; this minimizes discounts that firms are forced to issue capital. Accounting information is regarded as the most powerful resource utilized by investors, since investment decisions are made on account of the firm's stock and price which is reflective of the firm's future profit. The study was set out to establish the effect of financial statement information on stock returns of firms quoted at the NSE. A descriptive research design was employed to detect the association between variables in all listed firms that had been operational between the years 2014 and 2018. Data collected was analyzed using quantitative data analysis methods whereby inferential statistics: regression and correlation analysis were used. All the study parameters (stock prices, earnings management, ROE, cashflows and dividends) recorded an upward trend during the research period. Research concluded of an existence of a significant connection amid financial statement information and stock prices. Dividends was significantly associated to stock prices while cashflows, earnings management and profitability were insignificantly linked to stock prices. Output from correlation established of an existence of a moderately strong correlation among dividends and stock prices. Similarly, a weak correlation was realized among cashflows and stock prices. There was non-existence of a correlation among earnings management and profits with stock prices. Overall regression model adopted by the researcher was found to be significant since p-value (0.000) was smaller than 5 per cent. Coefficient of determination was found to be 48.1%, which signaled that the regression equation was an adequate fit for the data. Research recommends the need for the government to strengthen its supervision of listed firms to ensure a true disclosure of financial statement. The main shortcoming of this study is that, the researcher has solely relied on secondary data which is historical in nature, and prone to manipulation, this could easily have impacted negatively on the quality of the research findings because this kind of data is easily manipulatable. Another limitation for this study is the time frame. Five years is not adequate to establish a clear relationship between variables. A longer duration of time like 15-20 years can enable the researcher to establish more accurate and reliable research findings.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Accounting information is critical in managing the expectations of the investor's cash flows in future and cause of price changes (Scott, 2009). Even though investors depend on non-financial information to make decisions on investment, there exists a huge difference with conventional investors who depend on financial information. Accounting has a primary goal of providing investors with crucial information to make decisions on investments (Redovisningsradet, 1995). Based on a survey conducted by Boston College (2010), 62% of key informants noted that financial information was useful in making financial and investment decisions. However, only 38% of the respondents indicated that non-financial information was useful.

The theories guiding this study include; Fundamental Analysis theory, Random Walk Theory and Behavioural Finance Theory. Fundamental Analysis theory supports the importance of use of public information to determine the firm's efficiency and predict the future. Ulys (2007) argues that a comprehensive analysis of the firms' activities informs investors' decision to invest. Random Walk theory holds that stock market prices evolve and thus it's hard to forecast. The theory abides to efficient market hypothesis; it argues that markets and share prices are random thus not affected by past events. Behavioural Finance Theory holds that individual investors face challenges in choosing the right investment decisions as compared to large firms since they lack resources to get accurate and reliable information to invest (Chen, 2011).

Kenya's security market is semi-strong since prices of stock are reflective of accessible information. Sources of public information entail; reports, announcement as well as annual filings.

Thus, it is hard for investors to earn profits above average by relying on this information to base their financial decisions because prices reflect publicly available information (Jeboisho, 2014). Maina (2014) indicates that in a strong efficient market, prices of stock accurately reflect information from the public and private sources (Maronga, Nyamosi & Onsando, 2015).

### **1.1.1 Financial Statement Information**

Financial statements have a variety of information. This information can be classified into accounting as well as non-accounting information. When it comes to accounting data, it represents the type of information, which a utility's account. It serves in processing financial transactions used in providing external reporting to stakeholders outside the organization. Such stakeholders may comprise of investors, government agencies, and creditors (Alexakis, Patra & Sunil, 2010). Non-accounting data entails information that is impossible to measure on the basis of monetary terms when investors want to make investment decisions. Financial statements play a major role of providing crucial information to all stakeholders. According to Durgham and Durgham (2010), different stakeholders such as managers, owners, employees, financial organizations, creditors, investors, clients, government, and suppliers among others rely on this information in arriving at rational decisions relating to investment as well as credit issues.

Publicly listed firms utilize financial statements as a means of communicating with the stakeholders. Regulators of stock market as well as accounting standards work towards improving the value of financial information so as to enhance the level of transparency in financial reporting (Vishnani & Shah, 2008). Financial statement is considered a key source of information for making financial decisions.

Financial statement provides essential information to current, prospective investors as well as creditors in making the right decisions relating to investment, together with loans and portfolios. Financial statements cover adequate information that is impactful to the behaviour of the investor particularly stocks or portfolio, it could also affect the trading volumes because financial statements consist of public information that is accessible to the users (Binh, Diem & Hai, 2015). Through financial statements, investors can easily assess the viability to invest in a firm and make major predictions in dividends based on disclosed profits in the financial statements. Financial statement provide important information regarding the financial position of a firm, its performance as well as changes in financial position that is of central to multiple users in making economic decisions. The law requires firms to provide quality financial information that complies with accounting standards. Investors can utilize risks that are linked to certain investments can be assessed through financial statements for example profits fluctuation may signal high levels of risks (Scott, 2009).

### **1.1.2 Stock Returns**

Stock return is an increase in share prices; Brennan and Hughes (1991) define share price as the price of a specific firm's shares at a given instance. Price of shares depicts

the firm's financial status for instance increase in profitability results to high prices in stock. However, high levels of debt could result to a decrease in stock prices. Stock prices have a huge impact on the firm's overall performance for example, a decline in stock prices could make it difficult to a firm to secure loan. When employees hold stock options, a decline in share price can lower their morale. In extreme cases, when share prices declines with significant margins, the firm can easily be delisted from the stock market.

The value of the share is based on the firm's performance. Even though the management of the firm might lack price control in the short-term, however, when a firm performs poorly in the long-run, this could be a sign of underperformance by the management. In some extreme cases, poor performance could be attributable to underperformance by the management and shareholders could choose to overthrow the current management in a proxy battle. Thus, the management of the firm is concerned about the prices of shares since it reflects the performance of the firm (Baker & Gallagher, 1998). Changes in market capitalization result from share price fluctuation and from issue of new and bonus shares. Thus, high activity at the stock market is a sign of more investment. There are two methodologies that are utilized to determine securities exchange returns: that is basic returns arrangement and logarithm returns (Adam, Marcet & Nicolini, 2016). The logarithm returns have the advantage of having a normal distribution which is an advantage over the basic returns and which means they are better suited for statistical methods of analysis and are easier to control and manage (Bollerslev, Xu & Zhou, 2015).

According to Edelen and Kadlec (2016) share prices change daily, sometimes more than once on the same day in response to the offers and the uptake in the market. This implies that share prices are controlled by free market forces as well as incorporating organization essentials, market conduct and other factors. Stock market returns in developed economies have generally exhibited a trend whereby stocks that have done poorly during the year experience unusual selling pressure towards end year which increases the level of trading and could lower prices.

### **1.1.3 The Relationship between Financial Statement Information and Stock Returns**

Going by semi-strong kind of efficient market hypothesis, any information that is available to the public like financial statement cannot be utilized to spot mispriced securities. In view of this, Javid and Faraz (2011) argue that it is difficult for an investment strategy that is designed on account of published financial reports to be profitable. On the contrary, fundamental analysts maintain that in the short-run, markets might misprice securities even though the right price will at last be realized in the long-run. Profits can be generated through either buying or selling securities that are undervalued or overvalued. When the market notices of its mistake, it reprices its securities thus the strategy employed to trade earns better gains (Perera & Thrikawala, 2010). Most scholars support fundamental analysis indicating that making financial projections is possible because they are informed with the help of financial statement information and earn constant returns (Hayati, 2013). Research has demonstrated that analysts apply fundamental analysis during valuation of shares of the firm (Baker & Gallagher, 1998), with emphasizes to financial statements information (balance sheet and income statement).

Hayati (2013) indicated that financial statements can be used in estimating precise and rational future prospects of the firm. The market quickly reacted to information on financial statements. Issuers were found to be late in providing financial statements that created a bad impression to investors; this in turn weakened the confidence of the investors in the company. Thus, the reaction was captured in the stock prices. Opong (2011), in his view looked at the association of hourly price response and the publication of preliminary financial reports yearly by UK based firms and the study established that that investors acted to information signals in annual reports.

Karimi (2010) opines that investors do not fully consider information that is disclosed in key accounting measures. It is not always the case that investors will behave in a rational manner, speculative investors are on the rise and the quality of reported financial statements is declining. In view of this, Bollerslev et al. (2015) contend that prices fail to efficiently factor in available information into stock prices in a more precise and timely approach in emerging markets. Chen (2011) indicates that fundamental analysis is a more valuable and appropriate tool to apply in identifying securities that are temporary mispriced.

#### **1.1.4 Firms Listed At the Nairobi Securities Exchange**

Nairobi Securities Exchange (NSE) is Africa's leading exchange that is situated in Kenya. It can be traced back from 1954, during its establishment, and has been listing equity and debt securities. It provides an integrated platform whereby global and local investors get to learn about Kenya's security market and contribute towards Africa's economic growth through investment. NSE did self-listing and demutualization in 2014, the board of directors and executive management team consists of Africa's top



capital market professionals who aspire to be leaders in operational excellence at NSE through innovation and diversification (CMA, 2018).

NSE offers an automated platform where trading and listing of securities take place. Examples of some of the actively traded securities include debt securities, equity securities, and derivative securities. NSE introduced an automated system of trading that ensures orders are automatically matched and brokers are served based on priority. This system is integrated with Central Bank of Kenya (CBK) as well as the Central Depository System (CDS) hence allows automated trading state-bonds.

NSE contributes significantly to the economy of Kenya through attracting investments and savings and aiding local and global firms in gaining access to cost-efficient capital. NSE performs its roles under Capital Markets Authority (CMA) jurisdiction (CMA, 2018). CMA is a government regulator that is responsible for licensing as well as regulating the capital markets. It conducts approvals for public offers and listing of securities traded at NSE. Financial statement information gives an overview of firm performance and enables investors to make the right decisions on investments through a reliable source. Investors and institutions use accounting information to predict risks and evaluate firm value when making key decisions on investment. This view has also been echoed by Onkoba (2013) who insists on the usefulness of accounting information to predict prices of stocks. Financial statement information communicates the performance of the firm and allows investors to make the right decisions based on reliable information from different sources. Insiders optimize this knowledge to make decisions and controls while external parties use it for investment decisions and performance appraisal. Ngure (2014) contend that investment strategies are based on

essential information for example financial and economic ratios. Investors utilize disclosures and financial records to assess risks and firm value in investment decisions. Thus, it is important to understand the worth of accounting information to forecast stock prices (Ondari, 2008).

## **1.2 Research Problem**

Accounting information helps to explain measures of stock market (Angahar & Malizu, 2015). In markets that are efficient, prices of stock react efficiently to new information and this could impact on stock image of firms operating in such markets (Glezakos, 2012).

Arkan (2016) contends that price of stocks issued by firms must reflect all available information: this information is reflective of historical prices of stocks or financial statements. Thus, the stock is priced fairly and its intrinsic value equated to its fair value which generates enough return to pay-off investors in that stock with a fair return based on systematic risk.

Although Kenya government and CMA play an instrumental role of stabilizing the market for investors, absence of technical and fundamental knowledge of NSE market by users of financial statement information has significantly weakened activities of CMA (Jenrola & Daisi, 2012). Share prices of listed firms tend to react to information in a manner that fails to reflect the fundamentals such that there is no rationale that available public information is reflective of a company's future. In some cases, there are extreme price fluctuations, as was the case of CFC Bank on January, 2008 when its shares did not trade for one week after prices shoot from KES. 110 to KES. 900 in

a day (Ondari, 2008). Maronga et al. (2015) noted similar distortions and recommended that NSE needed to adopt rules of trading that could change the movement of share prices when new information is released in the market.

In their research, Alexakis et al. (2010) delved the link between predictability of stock returns and accounting information of ASE and the findings established an insignificant connection between the two. Binh, Diem and Hai (2015) explored the link between the two variables among Vietnamese listed firms and the results showed a weak association between the variables Vietnam. Shukairi (2015) tested the effect of financial statement information disclosure on stock prices of industrial shareholding firms in Amman Stock Exchange and the results found no relationship between the variables. As a result, investors did not use this information to earn abnormal returns. Ngunjiri (2016) and Maina (2015) investigated the link between financial performance and stock returns of Kenyan listed firms and commercial banks and the outcomes of both studies concluded that there existed a major relationship between financial performance and stock returns. Another study conducted by Maronga, Nyamosi and Onsando (2015) studied pricing efficiency after announcements of listed firms and the results showed excess returns before as well as after the day of announcement.

Related studies (Alexakis et al. 2010; Shukairi, 2015; Binh et al. 2015; Maronga et al. 2015; Maina, 2016) have been carried out in relation to financial statement information and stock returns. However, little has been done with regards to the effect of financial statement information on stock returns of firms listed at NSE. It is because of this limitation that the study finds it worthwhile to address this gap by

seeking an answer to the question: what was the impact of financial statement information on stock returns of firms listed at NSE?

### **1.3 Research Objective**

The objective of this study was to establish the effect of financial statement information on stock returns of firms listed at the Nairobi Securities Exchange in Kenya.

### **1.4 Value of the Study**

The findings of this study was useful to policy makers like CMA in setting policies to regulate the markets and ensure that they were efficient as well as to protect investors. Structure of accounting information matters and thus policy makers worked towards establishing an optimal financial reporting framework.

Through the research findings the firms got informed on the significance of financial statement information in making key financial and investment decisions. Other firms in other industries such as commercial banks appreciated the significance of financial statement information in shaping investment strategies based on market efficiency. Finance practitioners understood correct measures to apply when assessing financial statement information and stock returns of listed firms. Students and researchers found the study to be helpful since they learnt the theories that support financial statement information and stock returns, their relevance and application to the study. Researchers who are curious about this line of research may utilize the study findings as a basis for future investigation.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter provides a review of theories that gives an understanding of the way to use accounting information in predicting stock returns. The chapter also discusses various factors that affect stock returns, empirical literature on the link between stock returns together with accounting information, conceptual framework and chapter summary.

#### **2.2 Theoretical Framework**

The section evaluates the theories in support the study: Fundamental Analysis Theory, Random Walk Theory and Behavioural Finance Theory. This includes theoretical developments, assumptions, relevance and application of the theories to the study.

##### **2.2.1 Fundamental Analysis Theory**

The theory was first mentioned in the works of Graham and Dodd (1934). Fundamental analysis involves selection methods of securities and use of available public information to assess the firm's efficiency and predicting its future. This theory is also referred to as the "keys to make rational investment decisions" (Bernstein 1975). It is a method of security analysis and interpretation of key economic indicators and evaluation of a country's economic factor (Cibulskien & Buktus, 2009). Valentinavicius (2010) supports that adoption of this theory by describing its significance in examining price movements depending on macro-economic factors, trade balances, interest rates and other various economic indicators. Kancerevicius

(2010) explains that the fundamental analysis is a method of analysis used in determining long-term facts.

This entails conducting a long-term fundamental influence towards development, changes in price or value through company analysis, financial instrument and economic development. Lileikiene and Derviniene (2010) and Kancerevicius (2009) contend that to succeed in fundamental analysis, the competence of top management, dividends, the market, profits and branch network are considered for economic analysis.

The underlying assumption of this theory is that a security's actual value while in the market is caused by both micro and macroeconomic factors as well as specific factors of the issuer. Kartsova and Venclauskiene (2014) contend that the two alternative methods on fundamental analysis largely used by analysts and investors include top-down as well as bottom-up approach. However, top-down method of fundamental analysis is mostly used (Lithuanian, 2010); many investors prefer this approach because of the logical principle that in order to do a comprehensive analysis of the organization's activities it is imperative to first analyze the macro-economic factors of the country since indicators of the firm's efficiency directly depend on it. Fundamental analysis does not assess the capital market situation. It mainly covers indicators that are related to the firm: sales, income, dividend and profits (Ullys, 2007).

The relevance of this theory is that when performing fundamental analysis, it is important to evaluate the firm's level of efficiency in a more detailed approach that requires examining the results of an activity for several years. Under the bottom-up approach, investors are interested with the firm's basics, or fundamentals. They analyse the firm's products or services, its competitive position, financial position, earnings and its market value.

Considerable time and efforts are needed to produce this kind of detailed financial analysis so as to help in understanding even smaller firms. The objective of this approach is to find firms with promising long-term growth prospects, with reliable earnings estimates.

### **2.2.2 Random Walk Theory**

French economist: Jules Augustin Frédéric Regnault (1863) was the first to introduce the notion of the theory. Later, this concept was extended by Louis Bachelier, (1900). Further, the concept strengthened through empirical findings by Cowles (1933), who contended that random nature of price change disallowed the investor from always beating the market to realize supernormal profits. The theory posits that changes in prices of stocks possess similar distribution and are also independent of each one another. Thus, the theory assumes previous movement or trends in stock prices or market cannot be utilized to make prediction for future trend. In simpler terms, this theory asserts that stocks adopt a random and unpredictable path; this makes available methods of predicting stock prices ineffective in the long-run. The theory holds that it's difficult to outdo the market without disregarding further risk. Technical analysis is considered to be unpredictable since chartists can only buy or sell securities

following the development of an established trend. Similarly, the theory considers fundamental analysis to be unpredictable because of unreliable information and the possibility of misinterpretation. The critics of this theory indicate that stocks can uphold price trends for some time (Lo, 2004).

The relevance of this theory is that efficient market hypothesis contends that stock prices are a true reflection of all information and expectations; hence the current stock prices serve as the best measure of the firm's intrinsic value.

Thus, this excludes market players from taking advantage of mispriced stocks consistently since movement of prices is commonly random and driven by unexpected events. Returns are short-term and random; most investors prefer to invest passively in a well-diversified fund. In an efficient market, asset prices reflect the best estimates of anticipated risk together with return of the asset considering all information available that time. An efficient stock market is critical for establishing positive associations between developed stock market activities as well as economic growth.

### **2.2.3 Behavioural Finance Theory**

The theory was postulated by Kahneman and Tversky (1979), who explains why and how markets are inefficient. Chen (2011) individual investors are likely to encounter more issues as they attempt to make rational decisions on investments unlike large firms since they have a large pool of resources to get important information on their investment goals. Lu (2010) argues that small investors face challenges while processing financial information and this makes it difficult for them to make rational decisions compared to large firms. Finkelstein and Greenwald (2009) contends that



shortage of data is not the only factor that affect investors but also the impatience of irrational investors. Knowledgeable investors are more likely to consider corporate governance while less-experienced investors rely on financial information (Wei, 2010). This is because investors make hasty decisions and invest in trendy markets unlike pushing for their original investment plans. Finkelstein and Greenwald (2009) insist that it is worthwhile to factor in experience as an important factor that affects individual investor's process of decision making (Shleifer & Vishny, 1997). Sudhir (2012) opines that the most common mistake made by investors is relying on new information without any verification. This kind of information is mainly derived from magazines and the internet and thus cannot be used as a basis to make decisions.

In line with this study, the theory assumes that structured information and traits of market participant's impact on the investment decisions of an individual and market outcomes. In some cases, investors can use shortcuts to get information which is biased, inaccurate and unreliable to make financial decisions. This could result to suboptimal decision which goes against traditional finance claim of rationality. It is important to note that suboptimal financial decisions by investors impacts on capital market efficiency, personal wealth and firm performance. Irrational decisions could either be as a result of processing wrong information or interpretations of inconsistent decisions. It is further assumed that investors will not always act or behave in a manner that is rational, unbiased, and predictable as evidenced by Quantative models. Behavioural finance emphasizes on investor behaviour as the cause of market anomalies (Sewell, 2007).

## **2.3 Determinants of Stock Returns**

There are various factors that impact stock returns of firms however; this research will discuss the following specific factors namely earnings management, dividends policy, cashflows and firm profitability.

### **2.3.1 Earnings Management**

Earnings is a product of cashflows and accruals and its management is done through changing in capital structure, accruals and changes in accounting methods (Jones, 2011). Sayari and Omri (2006) have categorized earnings management into value-enhancing earnings as well as opportunistic earnings management. Value-enhancing earnings management is an approach adopted by managers to build and establish relationships with the owners by maintaining goodwill. Opportunistic earnings management occurs when conflict of interest exists between management and owners. Nicholson (2009) argues that stock market returns declines when the investors' willingness to pay falls and when price paid per stock by the investors' increases at a slow pace as compared to earnings per share. A high price earning is an indicator that the market is in a position to pay more so as to get the company earnings since there's a high possibility of the firm increasing its earnings. Scott, Michelle and Edward (2011) contend that earnings management leads to disclosure of false financial information of the firm since it is not presented based on actual circumstances. This might pose a huge risk to investors since they might not be able to assess the risk and return of an investment correctly (Qiang, Qiao & Rong, 2010). Earnings management actions are helpful as additional information for users of financial statement by enabling them to take protective measures when analyzing financial information and these impacts on stock returns. Scott et al. (2011) further indicated that public

announcement of accounting results in the US markets resulted into a significant variation of stock returns that day, showing an increased surprise effect (good or bad news) led to major market reaction.

### **2.3.2 Dividends Policy**

Dividend policy is imperative for various stakeholders such as managers, investors, and creditors. For investors, they do not only take into consideration dividends as an income source only, but also as a means of evaluating the organization from the investment approach. It is a process of ascertaining whether a firm is generating cash or experiencing loss. Coming up with the right dividend policy is crucial for the organization in that it informs the flexibility of investing in projects in the future because the dividends paid has a major impact.

In a situation where more dividends are paid by an organization, it translates to a situation where the amount of funds available for investments in the future is less. In the different studies carried out by Travlos et al. (2001), Myers and Frank (2004), Baker et al. (2009), Maditinos et al. (2007), and Dong et al. (2011), the findings supported the dividend relevance theory. In a different study carried out by Black and Scholes (1974), the scholars failed to identify any association between dividend policies together with stock returns. The study findings demonstrated dividend policy does not impact stock prices and it relies on the decision of investors to maintain either low or high securities; the return they earn in the two cases are similar. In a study conducted by Pradhan (2003), the researcher evaluated the impact of dividend pay-out as well as retained earnings on stock market price among Nepalese firms.

The study findings revealed that there is a strong association between dividend payment and stock price. Additionally, there was a weak nexus between dividend payment and stock market price. In their study, Nishat and Irfan (2009) evaluated 160 organizations that operated in Karachi Stock Exchange from 1991-2010. The two realized a positive correlation between dividend yield together with payout ratio as well as the volatility of share price.

### **2.3.3 Cashflows**

Cash flow comprises of three crucial roles; operational, investment, as well as financing practices. Operating roles entail estimation of the amount of funds organizations require to generate from daily delivery of its goods and services. In the income statement, this is equated with the operating income. Financing role reveals whether as well as the amount of investment and operating activities that external sources or equity have been used in financing.

Lastly, investment role reveals cash flow details regarding the amount of money the organization made and used in investing in other businesses. Khanji and Siam (2015) revealed a major relationship between operating cashflows changes and stock return changes. Al-saedi (2014) found no significant relationship between cashflows of Iraqi firms as well as market value; this implied that investors ignored the cash flow statement while arriving at investment decisions. Abu-Abbas (2014) found out that earnings recorded a higher explanatory power while compared to cash flows. However, the variation was not statistically major (Ahmed, 2013). Durgham and Durgham (2010) showed the existence of a positive link between cashflows from

operations, stock returns and finance activities as well as an adverse association between cashflows from investments and stock returns.

#### **2.3.4 Firm Profitability**

It is possible to define profitability as the firm's capacity to generate earnings compared to its expenses and other costs. There are several measures used in measuring profitability however, this study will focus on ROA and ROE. These measures determine how efficient the management is in generating profits from the firm's investment and assets. In view of this, the relationship between firm profitability together with stock returns has been discussed using the following studies: Dehuan and Jin (2008) explored the connection between a company's performance and stock returns of Shanghai stock exchange and the outcomes showed no relationship between stock prices together with profitability (i.e ROA and ROE). Foroghi et al. (2015) assessed the impact of ROA on stock returns in Tehran Stock Exchange and the results showed that profitability impacted positively on stock returns. Issah (2015) tested the link between profitability ratios as well as market share prices among listed banks Ghana from the year 2009 through 2013.

It was concluded that ROE, ROA were significantly related to market share prices. Nurah and Ghassan (2015) examined the link between financial indicators as well as measures of leverage together with stock returns at Amman Stock Exchange, Jordan. The outcomes demonstrated that ROA, ROE and EPS recorded a major relationship with stock return.

## **2.4 Empirical Review**

In this section, the study provided empirical evidence locally and globally highly scholars, year, subject of investigation, methodology used and the findings obtained.

### **2.4.1 Global Studies**

In their study, Dang et al. (2017) evaluated the link between accounting data in financial statements as well as stock returns of listed companies in Vietnam Stock Market. The study adopted Ordinary Least Square (OLS) and GMM model of regression to test the link of earnings, volatility, size, leveraging ratios and rate of growth of stock returns of 274 firms from 2012 through 2016. The findings revealed a positive connection between accounting information (gearing ratio, growth rate, and change in the rate of return) as well as stock returns. However, firm assets (size) were negatively associated with stock returns. This research was executed in a global setting whose situations are unique from the local setting.

Binh et al. (2015) sought the link between stock returns and accounting data: Evidence from Vietnam. A sample population of 108 businesses listed in the Ho Chi Minh stock market was conducted within 4-year duration (2010-2013). The researchers relied on a pooled regression model together with a fixed effects model as well as random effects model. Study results showed existence of a weak connection between accounting data together with stock returns in the case of Vietnam.

This implied that accounting information was less useful in making investment and financial decisions in the Vietnamese stock markets. The research was executed in an environment that is different from local setting in-terms of technology, regulations

and culture. Arkan (2012) examined the effect of financial ratios in predicting trends of stock price. The study used 12 financial ratios that were tested based on data from 15 firms drawn from 3 sectors in period 2005 through 2014 in the Kuwait financial market. A regression equation was utilized in estimating the stock price in the three sectors and aligned to various regression models after elimination of non-effective variables using STEPWISE approach.

The findings demonstrated that some ratios gave major positive relationships to stock price and behavior trends, with the most effective ratios on stock price for industrial sector comprise of ROA, ROE as well as the net profit ratio. Same ratios were found to be most effective in the investment sector. It was concluded that various financial ratios for an industry was effective in predicting stock prices. Financial analysis presented through financial ratios was relied on by investors to make financial and operational decisions.

Goslin et al. (2012) studied the importance of financial statement data to predict stock returns in New Zealand. Using information obtained from the financial statement, the study developed logit models to predict annual stock returns using a returns-based approach. Coefficients estimates of the models were used in generating price aspects that were used in formulating investment strategies. The utilized investment strategy involved examination of purchasing stocks with high Pr values as well as selling stocks with lower price values. It was established that the two measures generated positive outcomes for holding periods from 6-18 months.

After an analysis of the influence of stock traits, price measures generated using a direct method showed a major impact on stock returns. Further, the study established that the results were consistent in several sensitivity tests. Research was executed in a developed country while the current study will be done in a developing country. Alexakis et al. (2010) sought to ascertain the link between predictability of stock returns and accounting information of Athens Stock Exchange (ASE) in the period from 1993 through 2006. Relying on panel data analysis, the study established that selected set of financial ratios contained essential information to predict cross-section of stock returns. The established showed that the portfolios chosen based on financial ratios recorded above average returns, this was an indication of an emerging Greek market that failed to take into consideration accounting data into prices of stock making the market was not semi-strong. The research was performed in an international environment that is different from the local one.

#### **2.4.2 Regional Studies**

Amahalu and Nweze (2018) analyzed the manner accounting information impacts information on market share price among Communication and Technology (ICT) organizations trading on the Nigeria Stock Exchange. Specifically, the researchers sought to ascertain the impact of Earnings per Share, Dividend per share as well as Return on Equity on Market Share price of ICT organizations trading in the Nigeria Stock Exchange from year 2010 through 2016.

In his study, Musallam (2018) evaluated the association between market stock returns and financial ratios among 26 companies listed in Tanzania from the year 2009 through 2015. Weighted Least Square (WLS) outcomes reveal that earnings yield



ration and dividend ratio together and earnings per share have a positive and significant link with market stock returns. At the same time, market to book value ratio, return on equity, return on assets, dividend earnings ratio, net profit margin as well as price to earnings ratio are insignificantly related to market stock returns. The study implications are for government policymakers while making policy decisions. It will also help managers and investors to arrive at better decisions.

Obazibwe (2014) explored the effect of voluntary disclosures on stock returns of firms listed at USE. A sample consisting of different sectors was utilized, this includes the banking sector, construction and allied industries. A test of regression analysis was done and secondary sources of data were used. Findings established that voluntary disclosure of the firm's financial information was positively associated with stock returns. The findings established existence of disclosure of business data, information on firm's intangible assets was positively linked to returns from stocks.

### **2.4.3 Local Studies**

Ngunjiri (2016) delved the connection between company's financial performances together with stock returns of organizations listed at NSE. The study adopted a descriptive design and had a target population of 67 firms listed at NSE. Secondary sources of data spanning for a period of 5 years (2011-2015) was used. The study used OLS and a regression approach in estimating the parameters of market model. The researcher relied on multivariate correlation analysis in establishing the association between financial performance and stock returns where the results depicted a major and positive connection between financial performance, share price levels as well as stock returns. The outcomes further revealed existence of positive

and insignificant association between the ratio of dividend pay-out and stock returns among listed firms.

This research considers financial performance as its independent variable as opposed to financial statement information. Maronga, Nyamosi and Onsando (2015) studied pricing efficiency after announcements of listed firms. A descriptive form of research design was used in a population of 67 listed firms. A sample of 35 firms that were utilized, secondary data sources spanning for a five-year duration was retrieved from CMA and regression analysis was done. The output depicted presence of excess returns before as well as after the day of announcement. The research explicitly focused on pricing efficiency and ignored accounting information and its effect on stock returns.

Maina (2014) did an investigation on the effect of voluntary disclosures on stock returns of organizations listed at the NSE. A sample of three different sectors was used and this included the banking sector, construction and allied industries. Regression analysis was conducted with secondary data equally applied. The results showed that voluntary disclosure of the firm's information was positively linked to stock return. Disclosure of business data, information on firms' intangible assets (undisclosed information in financial statements) was positively linked to stock returns.

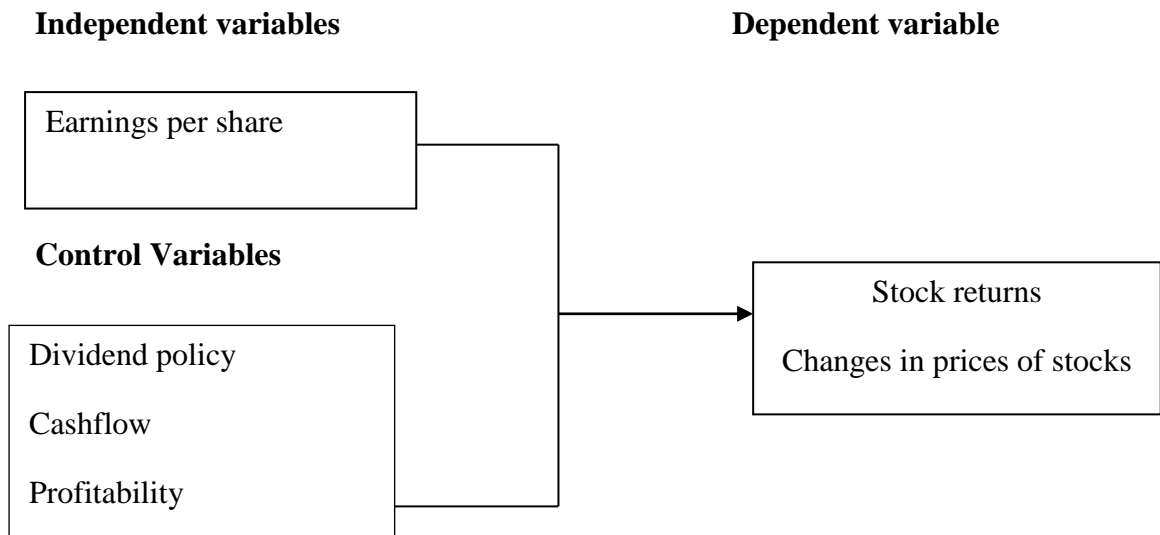
Ngure (2014) did an investigation on the manner announcing interim financial statement impacted the stock return as volume of shares traded among Kenyan commercial banks that are listed. The study employed an event study approach, with

a sample of only 3 listed commercial banks (Equity bank, Barclays bank and Standard Chartered bank). Secondary sources of data was obtained from NSE to assess changes in share prices and traded volumes from 2009-2013. Abnormal returns in the event window of 15 days was ascertained with the help of a market model and trading activity. Interim financial announcement resulted to an increase in stock returns. The results further established that abnormal returns together with cumulative abnormal returns in the period of announcing interim financial statements were positive. It was concluded that prices of securities reacted to interim financial statement announcement. The research employed an event study while the current study uses a descriptive type of research design.

Onkoba (2013) explored the impact of selected accounting variable on liquidity of stock among companies trading at NSE. The sample comprised of NSE-20 share index firms. Analysis of data based on regression and the outcome demonstrated that debt to equity ratio had a positive connection with stock liquidity. Dividend yield also had an effect on stock liquidity. Asset turnover ratio was negatively and significantly linked to stock liquidity. The researchers arrived at a conclusion that financial statement data was significantly linked to stock liquidity. The study considers liquidity of stock returns as it's dependent variable as opposed to purely stock returns.

## **2.5 Conceptual Framework**

It is expected that accounting information (independent variable) will affect stock returns (dependent variable). Control variables include dividends, cashflows and profitability.



**Figure 2.1: Conceptual Framework**

## 2.6 Summary of the Literature Review

From the reviewed literature, the study concluded that financial statement information was useful in helping investors and financial institutions to predict stock returns. This argument was also supported by the study theories. The chapter highlights key determinants of stock returns and how they relate to the research, empirical literature covers global studies (Alexakis et al. 2010; Arkan, 2012; Goslin et al., 2012; Shukairi, 2015; Binh et al. 2015) showing a mixer of reactions between financial statement information and stock returns. Locally, studies (Onkoba, 2013; Ngunjiri, 2016) have paid much concentration to financial performance, voluntary disclosures and how they relate to stock returns however; a restricted focus has been given to the impact of financial statement information on stock returns of companies listed at NSE and hence the need to conduct this research.

**Table 2.1: Summary of literature Review and Research Gaps**

<b>Author(s)</b>	<b>Objective of the Study</b>	<b>Methodology</b>	<b>Gaps</b>	<b>Focus of current study</b>
Dang et al. (2017)	Delved the nexus between accounting information and stock prices of Vietnamese quoted firms	Target population included 274 firms between 2012-2016. Published sources of data. OLS was employed and regression model.	This research was executed in a global setting that is dissimilar from the local setting.	The current study focuses on firms listed under NSE.
Ngunjiri (2016)	Investigation on the link between firm's financial performance and stock returns of listed firm	Population involved 67 listed firms. Published sources were utilized for a period of 5 years (2011-2015). OLS and regression model were adopted.	The study limited itself to financial performance which is a component of financial statement information.	The current research looks at financial statement information in general.
Binh et al. (2015)	Establish the association between accounting information and stock returns of listed firms in Vietnam.	A sample of 108 quoted firms was studied for duration of 4 years (2010-2013). Analysis was done using regression analysis.	Research conducted in a developed world.	The study limits itself to listed firms at NSE.
Shukairi (2015)	Test the contribution of financial statement disclosure on stock prices of industrial shareholding firms in Amman.	An explanatory design was adopted and a census of industrial firms in Amman. Use of secondary sources of data and parametric tests; paired sample tests in analysis.	The study focused on financial statement disclosure as opposed to financial statement information.	The research looks primarily at financial statement information and its effect on stock returns.
Maina (2014)	Effect of voluntary disclosures on stock prices of NSE listed firms.	A descriptive design was utilized. A sample of three different sectors was involved: banking, construction and allied sectors. Secondary data was utilized and regression analysis.	The study considered voluntary disclosures as independent variable as opposed to financial statement information.	The research focuses on the effect exuded by financial statement information on stock prices.
Ngure (2014)	Interim financial statement announcement and volume of	An event study was employed with a sample of 3 listed banks. Panel sources of data	The study restricted itself purely on interim financial statements.	The study's unit of analysis is broad enough as it covers all listed firms at the NSE.

	listed Kenyan commercial banks.	were used in a period of 5 years (2009-2013).	Secondly, the study was based on commercial banks.	
Onkoba (2013)	Impact of selected accounting parameters on stock liquidity of listed firms in Kenya.	Use of a descriptive research design. Study sample involved NSE-20 share index. Panel data was used and regression analysis.	The study explored specific accounting variables. The study excluded stock returns as dependent variable.	The study uses all financial statement information. The study considers stock returns as its dependent variable.
Arkan (2012)	Explored effect of financial ratios to predict the trends in stock prices.	Target population included 15 firms; 5 firms in 3 sectors in a period of 10 years. Panel data was utilized and analysis was done using regression analysis	The study limited itself to financial ratios as opposed to the whole information on financial statement.	The current study is too broad hence considering the whole of financial statement information.
Goslin et al. (2012)	Usefulness of financial statement information to predict stock prices in New Zealand.	An event study was adopted and panel data for a period of 6-18 months was utilized.	The study was executed in a developed country.	The current study will be conducted in a developing country.
Alexakis (2010)	The link between stock returns and accounting information at Athens Stock Exchange	Panel data was used in a period of 14 years (1993-2006).	The study was carried out in a developed country whose situations are very different from the local setting.	The current study will involve firms that are listed at the NSE..

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter provided the applied methodology to realize the research objective. Research methodology entails the process of collecting as well as analyzing data to come up with answers to the research question. It discussed the following sections: design for research, target population, data collection as well as analysis.

#### **3.2 Research Design**

The current study used descriptive form of research design. Cooper and Schindler (2008) indicate that a descriptive research design entails an overall strategy which is chosen by the scholar to integrate various aspects in a research, in a manner that is consistent as well as logical by ensuring that the questions in the research are addressed. This form of study design was applied to establish the nature of current and existing conditions. The researcher adopted this design to establish the association between financial statement information and stock returns of listed firms at NSE.

#### **3.3 Target Population**

Population is regarded as the sum total of items that have similar traits. Target population consists of people and objects that the researcher seeks to generalize study findings (Mugenda & Mugenda, 2003). The study's target population included all listed firms that have been operational over the last five years. A census was used since the population is small and thus no sampling.

### **3.4 Data Collection**

The study employed secondary sources of data. Data was obtained from CMA reports. The choice of secondary data was because of its accessibility and verifiability. Kothari (2005) defines data collection as a systematic approach that is utilized in collecting and assessing data from many sources to achieve a clearer picture of the area of interest. The study spanned for a period of 5 years (2013-2017). This period was considered adequate for establishing the link between financial statement information and stock returns.

### **3.5 Data Analysis**

Data was cleaned, sorted and coded and then analysis conducted using Statistical Package for Social Sciences (SPSS). This analysis tool was considered since it provided a complex range of statistical and physical data analysis tools and alternatives. Kothari (2002) opines that data analysis uses reasoning to deduce the data collected with the objective of establishing uniformity of key components of the investigation. The study utilized inferential statistics: and regression analysis together with correlation analysis to establish the link between variables. Mean and standard deviation were used for data presentation to depict the trends and association between variables.

#### **3.5.1 Analytical Model**

A regression equation was adopted for this study comprising of independent and dependent variables. The independent variables include; earnings, dividends, cash flows and profitability. Dependent variable was stock returns. The regression model for this study was as follows:



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

Where:

Y = Stock returns that was evaluated using changes in stock prices

X<sub>1</sub> = Earnings management which was measured using earnings per share

X<sub>2</sub> = Dividends which was measured using dividend per share

X<sub>3</sub> = Cashflows which was measured using operating cashflows

X<sub>4</sub> = Profitability which was measured using ROE

$\alpha$  = Regression constant

$\varepsilon$  = Error term

$\beta_1 \dots \beta_n$  = coefficients of variation

### **3.6 Tests of Significance**

The study conducted two important tests: F-test and T-test. When conducting F-test, the value of F and critical value of F were highly considered. The critical value of F was also regarded as F-statistics. When the calculated F-statistics value was higher than the value of F in the Table, null hypothesis was declined. Besides, the value of P was established through use of F-statistics which means that there was a possibility that the results was be probabilistic. T-tests were performed to find out whether regression coefficients was significant at a given point in time.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter provides results from analyzed data, interpretation and discussion of findings. These includes descriptive statistics, diagnostic tests showing the trend and pattern of financial statement information and stock returns in the study period. The analysis, results and findings have been done in line with the research objective which was assessing the effect of financial statement information on stock returns of firms listed at the Nairobi Securities Exchange.

#### 4.2 Descriptive Statistics

Descriptive statistics involves use of simple summaries of a sample with observations made. It is measured using some of the following common measures: mean, standard deviation, maximum values, minimum values and skewness as provided in Table 4.1 below.

**Table 4.1: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
Stock returns	320	-0.87	35.67	0.0552	2.03404	16.931
Earnings management	320	-1697.23	134.03	1.2745	97.31138	-16.762
Dividends	320	-1.95	45.75	3.8270	7.66415	3.686
Cashflows	320	1.18	2.11	1.6347	0.24454	0.019
Profitability	320	-1.25	1.05	0.2433	0.15830	-3.484

Results depict that stock returns attained a minimum value of -0.87 and a maximum value of 35.67, a mean of 0.055 and a standard deviation of 1.467. The rise in stock returns during the study period might have been attributed to effective use of financial statement information. Earnings management recorded a minimum value of -1697.23, maximum value of 134.03, mean of 1.2457 and standard deviation of 97.31. The rapid rise in earnings management during the study period could might have been attributable to increase in profits by listed firms.

Dividends increase from -1.95 to 45.75, with a mean of 3.83 and standard deviation of 7.66. Similarly, operating cashflow ratio rose from 1.18 to 2.11, with a mean of 1.63 and standard deviation of 0.24, these imply that listed firms recorded an increase in profits in the study period. Profits as measured by ROE, increased from -1.25 to 1.05, with a mean of 0.24 and standard deviation of 0.16, these increases might have been a consequence of an increase in net income.

#### **4.3 Diagnostic Tests**

There are tests that are conducted to find out if the data set is modeled in a normal distribution and determine the likelihood of a random variable which underlie the data set to a normal distribution curve. The results are provided in Table 4.2.

**Table 4.2: Normality Tests**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Stock returns	.159	320	.200*	.937	320	.621
Earnings management	.204	320	.198	.861	320	.383
Dividends	.175	320	.200*	.853	320	.542
Cashflows	.141	320	.200*	.965	320	.857
Profitability	.195	320	.172*	.931	320	.232

The results depict that all the study variables fall under a normal distribution curve since their significance levels (p-values) exceed 5% (0.621, 0.383, 0.542, 0.857 & 0.232, respectively).

#### **4.4 Pearson Product-Moment Correlation Coefficient**

Pearson correlation analysis was conducted to examine the strength of relationship between the study variables. The strength of association between variables is well explained by Pearson correlation scale whereby values between 0.0 – 0.3 indicate that there is no correlation, 0.31 – 0.5 shows a weak correlation, 0.51 – 0.7 a moderate correlation and between 0.71 – 1.0 indicated existence of a strong correlation between variables. The results are shown in Table 4.3.

**Table 4.3: Correlation Analysis**

	<b>Stock returns</b>	<b>Earnings management</b>	<b>Dividends</b>	<b>Cashflows</b>	<b>Profitability</b>
Stock returns	1				
earnings management	-.211	1			
Dividends	.533**	-.131*	1		
Cashflows	-.433**	.242	-.180*	1	
Profitability	-.090	.058	.051	.318*	1

Table 4.3 illustrates a moderately strong correlation between dividends and stock returns, with a correlation value of 0.533. There was a weak correlation between cashflows and stock returns (R=0.434). Findings further established non-existence of a correlation between earnings management and profitability with stock returns, their correlation values were as follows: R=-0.211 and R= - 0.090, respectively.

#### 4.5 Regression Analysis

A regression model was employed to test the link between financial statement information and stock returns of firms. The results are as follows:

**Table 4.4: Model Summary**

<b>Model Summary</b>				
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.481 <sup>a</sup>	.263	.198	.689

The results illustrate that the coefficient of determination is 0.481%, which is an indication that the independent variables explained 48.1% of variation in stock returns among quoted firms. Adjusted R<sup>2</sup> is 0.263, implying that the proportion of variation explained by accounting information that has an effect on stock returns is 26.3%.

**Table 4.5: Analysis of Variance**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.056	4	2.264	1.088	.008 <sup>b</sup>
	Residual	655.049	315	2.080		
	Total	664.105	319			

The regression equation adopted in this research is significant as it consists of two predictor variables (earnings management and cashflows). P-value was less than 5% (0.00).

**Table 4.6 Coefficients**

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.316	.899		1.461	.152
earnings management	-.083	.061	-.098	.324	.670
1 dividends	.485	.203	.307	3.341	.000
cashflows	.391	.184	.130	2.109	.060
profitability	.077	.153	.067	.504	.417

The resultant regression equation is as follows:

$$\text{Stock returns} = 1.316 - 0.083X_1 + 0.485X_2 + 0.391X_3 + 0.077X_4 + \varepsilon$$

Dividends, cashflows and profitability were positively linked to stock returns as follows (0.485, 0.391 & 0.77, respectively), implying that an increment of a unit of this variable led to a corresponding increase in stock returns. On the other hand, earnings management was inversely linked to stock returns (-0.083). Earnings management, cashflows and profitability were non-significantly linked to stock returns as their p-values exceeded 5% (0.670, 0.60 & 0.417, respectively). However, dividends was significantly linked to stock returns as its p-value was smaller than 5% (0.000)

#### **4.6 Interpretation of Findings**

Stock returns recorded a minimum value of -0.87, maximum of 35.67, a standard deviation of 1.467 and a mean of 0.055. The rise in stock return in the study period was as a result of adequate access to financial statement information. Earnings management recorded a mean value of 1.2457, the minimum value of -1697.23 and a maximum value of 134.03. The increase in profits by the listed firms might have triggered the rapid rise in earnings management during the study period. Dividends increased to 45.75 from -1.95 with a standard deviation of 7.66 and a mean of 3.83. Similarly, the operating cash flow ratio increased to 2.11 from 1.88, with a standard deviation of 0.24 and a mean of 1.63. This is an implication that during the study period, the listed firms recorded profits. As a measure of ROI, profits increased to 1.05 from -1.25 with a standard deviation of 0.16 and a mean of 0.24. An increase in the net income might have triggered these increments.

Results of correlation analysis demonstrate existence of a moderate but strong correlation between dividends and stock returns (0.533). A weak correlation was found between cashflows and stock returns ( $R=0.434$ ). No correlation was detected between earnings management and profitability with stock returns ( $R=-0.211$  &  $R=-0.090$ , respectively). Findings abide with a study by Al-saedi (2014), who established that cashflows and dividends were moderately correlated with stock returns.

Coefficient of determination was 0.463%, which reveals that variation in stock return among quoted organizations varied by 46.3%. Adjusted  $R^2$  is 0.408, revealing that accounting information explains a proportion of variation on stock returns of 40.8%. In the current study, the adopted regression equation is significant. It was further established that dividends, profitability, cashflow and stock returns were positively related. An insignificant nexus was established between profitability, cashflows, and

earnings management to stock returns at -0.077, -0.391 & -0.29, respectively. Stock returns were significantly connected with earnings management together with cashflows as they had P-values of below 5% at 0.040 both. Consistent to these findings are the views of Angahar and Malizu (2015), who revealed that stock returns was negatively linked to cashflows, earnings management and profitability. However, there was a insignificant relationship between profitability and dividends with stock returns.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter presents a discussion of study findings, conclusion, recommendations, limitations and suggestions for further research. This has been done in line with the objective of this research which was the effect of financial statement information on stock returns of firms that are listed at the NSE.

#### **5.2 Summary**

Descriptive results depicted that stock returns, attained -0.87 as minimum value and 35.67 as maximum value, and a mean of 0.005. This tremendous rise in stock returns may have been triggered by effective use of financial statement information. Earning management records depicts a minimum value of -1697.23, the standard deviation of 97.31, and mean value of 1.2457 and a maximum value of 134.03. The significant increase in earning management can be attributed to listed firms profit maximization. The dividends recorded an increment, rising from -1.95 to 45.75, with a standard deviation of 7.66 and a mean value of 3.83. Comparably, the operating cash flow ratio increased from 1.18 to 2.11, with a standard deviation of 0.24 and a mean value of 1.63. Therefore, the listed firms recorded profit increment during the study period. ROE, as the standard measure of profits, indicates that the profits increased from -1.25 to 1.05, marking a standard deviation of 0.16 and a mean value of 0.24. The rise in net income might have triggered these increments.

Correlation analysis depicted existence of a moderately strong correlation between dividend and stock returns. In view of this, are findings by Bollerslev, Xu and Zhou (2015) where the researchers identified a moderate but strong correlation between dividends and stock returns. A weak correlation existed between cashflows and stock returns while there was no correlation between earnings management and profitability with stock returns.

Regression analysis output revealed that the coefficient of determination to be 26.3%, which means that independent variables demonstrated 46.3% of variation in stock returns of listed firms. The entire model of regression adopted was found to be significant since its probability value was smaller than 5%. Dividends, cashflow and profitability were positively linked to stock returns. This means that when a unit of any of these variables increase, there will be an equivalent increase in stock returns. Consistent to these findings is the views by Khanji and Siam (2015), who revealed of an existence of a positive association between dividends and firm profitability with stock returns. Contrary to this, earnings management was negatively associated to stock returns. These findings contradict with the observations of Edelen et al. (2016), who found that earnings management was positively linked to stock returns. Dividends was significantly associated with stock returns however, an insignificant connection existed between earnings management, ROE and cashflow with stock returns. Supporting this finding is, Nurah and Ghassan (2015), who concluded of an existence of insignificant connection among earnings and stock returns and a significant connection among dividends and stock returns.

### **5.3 Conclusion**

The study found that effective utilization of financial statement information led to an increase in stock returns. All the study parameters recorded significant increases in the study period with dividends and earnings management attaining the highest levels of increase. However, cashflows attained the lowest level of increase. This trend was mainly attributable to increases in profits and an improvement of overall performance of firms.

Results of correlation analysis illustrate of an existence of a strong and moderate correlation among dividends and stock returns. A weak correlation among cashflows and stock returns was found, while there was non-existence of a correlation among earnings management and profitability with stock returns. The model of regression implemented in this study was found to be significant and a better fit for the data. Output from the regression analysis exemplifies that profitability, cashflows and dividends were positively linked to returns from stocks. However, earnings management was negatively linked to stock returns. Dividends was significantly linked to stock returns while cashflows, earnings and profitability were insignificant.

### **5.4 Recommendation**

Top management of listed firms should ensure that listed firms publish their financial statements on time, and all the necessary disclosures of financial statements, audit reports including board reports for use by investors and institutions to allow them make timely and accurate financial and investment decisions. This will help build investors' confidence on the transparency of listed firms and improve their corporate values that attracts potential investors.

The study recommends the need for CMA to set policies that can strengthen the supervision of listed firms. This can be achieved through regular audits and close monitoring of listed firms to ensure there is adequate disclosure of financial statements, and that the reports are true and normative. This will also help to curb manipulation of financial statements and ensure that user of annual reports can use and rely on information that is accurate and reliable to make financial decisions.

Theories anchoring this research match with the study findings. Fundamental Analysis Theory puts more emphasis on the selection approaches of securities and how investors can use financial statement information to examine efficiency of the firm and forecast stock returns, this has been proved to be true in this study. Access to correct and truthful accounting information guides investors on investment decisions.

The other theory is Random Walk Theory, this theory maintains that in an efficient market hypothesis, prices serve as the real reflection of all information as well as expectations, thus the current stock prices are the best measure of the intrinsic value of a company. On the other hand, investors can make use of financial statement information to make financial decisions like analyzing stocks and predicting returns from stocks. This theory is supported by this study.

#### **5.4 Limitations of the Study**

The researcher took precaution to counter the following limitations. Though, in research it is impossible to avoid such limitations. The study utilized secondary form of data, that consists of general-purpose reports which are usually historical and very easy to manipulate. This kind of data could be incorrect hence not reliable and thus interfere with the quality and reliability of findings.

The study spans for a duration of only 5 years (2014-2018), and this limits the scope of the study since the period is clearly not enough. With a longer duration of time for example 10 or 15 years, the researcher can establish a clearer relationship among variables. This will result to quality findings that are reflects a true picture of the effectiveness of financial statements information and its contribution towards predicting stock returns.

This research employed a descriptive form of research design with a clear research question. The shortcoming of this study design is that it cannot be applied to establish the ‘cause and effect’ among variables. Although with this design, the researcher was able to establish existing relationships among variables, it was not possible to find out the cause of the effects between variables and relationships between them hence the study does not provide a clear basis why with regard to how financial statement information affects stock returns.

### **5.5 Suggestions for Further Research**

The study insists on the need to conduct future research in other regions for example a country like Uganda that have relatively similar stock exchange market in order to do a comparative analysis and shed more light with regard to the “effect of accounting information on stock returns” in similar situations and conditions as NSE. As such, researchers can compare findings and this will form a basis of a more concrete conclusion.

The study considered only four determinants of stock returns namely cashflow, profitability, dividends and earnings management. There are so many other factors that affect stock returns for example liquidity and firm size, among other factors that have not been factored under this research. Therefore, it is desirable for future researchers to ponder doing a replica of this research and factor in other determinants of stock returns other than what has been covered in this study. Findings can then be compared after which a more credible conclusion will be drawn.

The environment where firms conduct business is turbulent in nature, it is engulfed by uncertainties and risks because of macro-economic factors such as technological changes, government regulations and investor needs. In future, say like 20 years from now, researchers can do a replica of this study and find out whether the findings can hold. Then, a comparison of findings can be done and a conclusion drawn based on tangible facts and evidence.

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## APPENDICES

### APPENDIX I: DATA COLLECTION SCHEDULE

The researcher will get a letter from the University of Nairobi to grant him permission to proceed with data collection. The secondary data will be collected from CMA in one day. Provided below is the schedule for data collection that will guide the researcher on the data to collect based on the specific study variables within the study period.

Study variables	Listed firms	Years				
		2014	2015	2016	2017	2018
Earnings management (earnings per share).						
Dividends (dividends per share)						
Cashflows (measured using operating cashflows).						
Profitability (ROE)						

## APPENDIX II: SECONDARY DATA

Stock returns	Earnings Management	Dividends	Cashflows	Profitability
-0.363	-1.3	2.43	1.34	-0.0923
-0.058	8.17	5	1.18	0.0793
0.145	-5.82	6	1.52	0.1975
-0.483	-0.02	0.875	1.48	0.0803
0.062	0.2	1	2.11	0.0792
-0.325	81.36	39.75	1.22	-1.2472
-0.057	8.33	0.73	1.78	-0.151
0.024	-0.17	2.14	1.56	0.0799
-0.483	-0.32	0.35	1.83	-0.8015
-0.044	1.54	1	1.44	-0.089
-0.339	14.38	7.635	2.02	0.0045
0.141	23.58	2.75	1.42	-0.5607
-0.315	4.63	2.28	1.72	-0.141
-0.185	4.14	1.35	1.38	0.091
-0.123	13.56	13	1.62	0.091
-0.467	5.25	2.05	1.54	0.0457
-0.331	3.11	0.46	1.27	0.4388
-0.124	6.43	1	1.74	0.0354
-0.431	33.21	19.25	1.21	0.7128
-0.176	1.69	0.8	1.68	0.0416
0.12	-0.04	2.26	2.04	0.3665
-0.065	0.5	0.5	1.95	1.0526
-0.106	-28.06	0.78	1.46	0.1396
-0.871	-2.26	1.55	1.84	0.254
-0.583	0.93	0.07	1.55	0.4329
0.333	-0.19	1.85	1.41	0.433
0.848	13.05	6.25	1.32	0.052
-0.481	2.7	0.5	1.77	0.268399705
-0.146	0.91	0.28	2.09	0.326435206
-0.657	1.45	0.45	1.25	0.34464785
-0.409	3.16	0.45	1.7	0.432099756
-0.263	3.02	0.67	1.98	0.477861038
-0.203	9.8	13.75	1.66	0.2015
-0.292	9.26	0.85	1.53	0.2503
-0.826	2.66	0.33	1.23	0.2273
-0.573	-4.2959	1.75	1.57	0.1749
-0.264	1.29	0.55	1.61	0.1839
0.615	0.97	0.33	1.92	0.242
-0.501	3.58	0.5	1.33	0.25
-0.407	2.26	1.02	2.1	0.222
-0.179	62.61	36.1	1.57	0.195
0.361	1.29	0.325	1.76	0.219

-0.553	0.42	0.11	1.59	0.154
0.17	51.82	9.25	1.47	0.128
-0.396	4.48	0.9	1.51	0.11
-0.251	2.14	0.6	2.03	0.1
0.057	9.07	5.5	1.91	0.141
-0.311	2.3	0.6	1.31	0.297
-0.189	4.54	0.7	1.45	0.255
-0.229	0.02	0.85	1.28	0.215
-0.207	-55.6	1.85	1.96	0.215
-0.331	1.13	0.1	1.49	0.209
-0.4	-8.13	0.4	1.86	0.238
-0.508	11.76	5.275	1.59	0.216
-0.24	42.55	45.75	1.37	0.173
-0.299	14.44	-1.95	1.66	0.16
-0.046	8.67	5.5	1.42	0.168
-0.177	-0.85	0.2	2.1	0.209
-0.266	0.95	0.15	1.28	0.187
-0.856	1.99	1.25	1.54	0.155
-0.473	-1.77	1.15	1.87	0.129
0.36	5.06	0.75	1.43	0.121
-0.333	0.57	0.76	1.99	0.275
-0.17	0	0.5	1.19	0.151
0.513	0.66	0.65	1.67	0.211
-0.451	26.92	5	2.05	0.153
-0.5	-2.91	5	1.35	0.175
0.127	0.45	1	1.44	0.229
-0.261	4.83	1.25	1.68	0.209
0.023	-26	40	1.32	0.206
-0.027	3.8	0.6	1.74	0.155
-0.165	-1.42	0.45	1.55	0.138
0.065	-0.51	0.55	1.28	0.245
-0.181	1.55	1	1.22	0.168
-0.057	12.41	5.4	1.94	0.224
0.513	27.26	2.5	1.64	0.281
0.536	4.59	2	1.82	0.267
-0.107	3.4	1.3	1.45	0.195
-0.222	17.12	3.5	1.36	0.215
0.021	5.45	2	1.74	0.185
-0.04	-4.12	1.2	1.52	0.177
-0.327	13.32	1	1.89	0.255
0.055	19.97	17	1.76	0.275
-0.483	2.31	0.8	1.29	0.218
0.627	-0.04	0.75	1.88	0.194
0.325	0.92	0.5	1.66	0.241

-0.257	-1697.23	0.45	1.47	0.195
0.411	-17.2	0.35	1.98	0.165
0.487	0.7	0.15	1.54	0.225
0.299	-0.07	4.5	1.87	0.285
0.298	11.79	10	1.38	0.207
0.149	-3.54	1.75	1.93	0.172
0.101	-0.78	0.25	1.28	0.198
0.212	-9.37	0.4	1.86	0.235
-0.421	3.36	0.5	2.08	0.258
0.021	-5.84	0.2	1.26	0.244
0.056	14.49	13	1.84	0.262
-0.187	11.44	0.6	1.42	0.184
1.932	-5.66	1.2	1.74	0.252
0.125	79.523	1.4	1.64	0.192
-0.576	5.24	0.65	1.36	0.242
0.247	1.68	0.25	1.92	0.238
0.047	3.81	0.5	1.58	0.224
1.242	2.57	0.77	1.22	0.162
0.585	65.19	35.2	1.21	0.235
0.165	-0.5	0.3	1.94	0.248
-0.49	0.43	0.11	1.56	0.256
0.125	47.37	8.5	1.85	0.278
0.905	4.91	0.75	1.65	0.264
-0.084	1.37	1.15	1.99	0.432
0.149	0.19	0.85	1.41	0.155
0.474	2.3	0.49	1.61	0.198
-0.06	10.45	5	2.05	0.174
0.117	-0.96	2.25	1.54	0.228
0.382	-149.35	0.375	1.98	0.249
-0.007	0.35	0.245	1.86	0.353
0.335	-8.64	0.45	1.67	0.186
-0.072	7.61	5.2	1.72	0.157
0.474	49.76	42.5	1.32	0.344
0.018	1.55	0.7	1.77	0.256
-0.196	12.06	7.5	1.59	0.288
0.009	-0.37	5.05	1.55	0.216
0.182	1.1	7.5	1.82	0.436
0.228	0.99	1.45	1.76	0.233
-0.118	-3.04	1.05	1.85	0.282
0.337	5.68	0.75	1.63	0.245
0.305	0.8	0.64	1.96	0.158
-0.164	0	0.65	1.84	0.192
-0.093	-1.3	3.75	2.07	0.266
-0.025	8.17	7	1.54	0.222

0.021	-5.82	1	1.78	0.298
-0.154	-0.02	0.25	1.34	0.425
-0.159	0.2	7	1.88	0.332
0.964	81.36	0.8	1.58	0.272
0.397	8.33	0.45	1.42	0.348
-0.338	-0.17	0.3	1.98	0.258
-0.108	-0.32	1	1.72	0.294
0.167	1.54	5.2	1.57	0.191
0.021	14.38	2.4	1.38	0.239
0.345	23.58	1.8	1.95	0.315
-0.082	4.63	1.5	1.65	0.272
0.019	4.14	45	1.56	0.188
-0.025	13.56	2	2.1	0.157
-0.6	5.25	1.5	1.62	0.241
-0.512	3.11	1	1.32	0.422
-0.04	6.43	17	1.92	0.355
-0.018	33.21	0.5	1.61	0.276
-0.536	1.69	1.1	1.76	0.168
-0.316	-0.04	0.25	1.52	0.238
0.295	0.5	2.4	1.33	0.345
-0.356	-28.06	1.45	1.28	0.274
-0.253	-2.26	1.2	1.77	0.284
-0.331	0.93	0.25	1.8	0.358
-0.139	-0.19	2.5	1.51	0.159
-0.369	13.05	0.5	1.99	0.184
-0.25	2.7	1.35	1.45	0.259
-0.371	0.91	0.3	1.58	0.434
-0.1	1.45	0.5	1.39	0.328
-0.343	3.16	0.6	1.74	0.173
-0.543	3.02	12	1.56	0.427
-0.399	9.8	1.75	1.92	0.337
-0.145	9.26	0.5	2.01	0.318
-0.031	2.66	0.25	1.91	0.422
-0.267	-4.2959	0.4	1.34	0.184
0.545	1.29	0.2	1.66	0.193
-0.13	0.97	0.5	1.84	0.317
-0.211	3.58	0.7	1.94	0.338
-0.4	2.26	16.8	1.44	0.384
0.194	62.61	0.3	1.82	0.423
0.067	1.29	0.1	1.54	0.337
35.667	0.42	8.5	1.24	0.256
-0.513	51.82	0.7	1.96	0.372
-0.395	4.48	0.4	1.32	0.345
-0.411	2.14	4.5	2.02	0.305



-0.18	9.07	0.38	1.28	0.195
-0.639	2.3	4.5	1.78	0.195
-0.389	4.54	0.45	1.42	0.348
-0.086	0.02	2.45	1.97	0.375
-0.311	-55.6	0.25	1.57	0.195
-0.439	1.13	1.15	1.34	0.264
-0.497	-8.13	5.2	1.98	0.373
-0.183	11.76	39	1.24	0.433
0.552	42.55	0.7	1.85	0.254
-0.383	14.44	5.5	1.48	0.174
-0.068	8.67	0.25	1.56	0.215
-0.393	-0.85	1.8	1.39	0.354
-0.231	0.95	2.5	1.72	0.285
-0.326	1.99	1.4	1.53	0.154
-0.387	-1.77	0.75	1.33	0.422
0.012	5.06	0.47	1.94	0.323
0.071	0.57	0.75	1.68	0.217
-0.542	0	3.75	1.54	0.279
-0.204	-1.84	7.5	1.82	0.361
-0.406	8.42	1.25	1.32	0.336
-0.176	32.21	0.25	1.88	0.273
1.208	1.77	7.5	1.66	0.178
-0.196	0.4	0.8	1.41	0.182
0.158	94.36	0.45	1.38	0.289
-0.178	9.45	0.25	1.74	0.257
-0.106	-7.64	0.7	1.87	0.228
-0.031	1.44	2.15	1.32	0.384
-0.188	1.4	2.1	1.25	0.431
0.022	12.97	1.5	1.78	0.343
0.295	23.77	1.75	1.92	0.243
0.175	3.59	35	1.56	0.206
-0.5	4.22	2	1.43	0.193
-0.271	11.75	0.33	1.84	0.278
-0.538	4.16	0.75	1.36	0.263
0.13	3.97	14.5	1.96	0.439
-0.408	5.96	0.5	1.64	0.119
-0.47	29.42	1.45	1.48	0.216
-0.363	2.2	0.4	1.82	0.368
0.761	-0.01	0.75	1.92	0.148
0.46	1.44	3.45	1.71	0.431
0.407	0.01	0.8	1.52	0.276
1.208	-5.25	1.4	1.34	0.314
0.521	1.61	10	1.77	0.239
0.548	-0.03	0.5	1.98	0.154

-0.269	16.12	1.35	1.42	0.237
-0.578	2.32	0.3	1.24	0.193
0.347	2.48	0.4	1.94	0.327
-0.375	1.35	0.6	1.44	0.176
-0.186	2.19	11	1.88	0.169
-0.139	2.72	1.75	1.64	0.156
-0.204	9.55	1	1.32	0.238
-0.2	9.01	0.75	1.42	0.286
-0.514	1.57	0.6	1.54	0.345
-0.187	19.7265	0.1	1.69	0.425
-0.232	2.39	1.75	1.82	0.175
-0.364	0.38	0.6	1.36	0.239
-0.248	2.23	24.8	1.92	0.271
-0.335	2.08	0.25	1.49	0.324
-0.418	51.52	0.1	1.84	0.405
-0.1	12.24	7	1.63	0.294
0.513	0.52	0.6	1.31	0.267
-0.27	41.79	1	1.74	0.235
-0.274	3.99	4.5	1.58	0.194
0.613	2.15	1.5	1.35	0.159
-0.437	13.03	4.4	1.22	0.185
-0.514	0	0.75	1.96	0.228
0.607	1.55	0.45	2.05	0.289
-0.274	0.2	2.25	1.73	0.258
-0.337	0	0.4	1.62	0.354
-0.194	0.2	5.2	1.54	0.318
-0.324	2.29	37	1.86	0.352
0.09	10.38	6	1.78	0.219
-0.515	37.24	5.5	1.39	0.238
0.259	13.99	2.55	1.98	0.281
-0.45	8.25	4.25	1.42	0.159
-0.346	0.21	4	1.82	0.246
-0.194	0.92	1.55	1.56	0.352
-0.311	0	0.75	1.74	0.273
0.103	-1.09	0.31	1.91	0.278
-0.087	3.5	1.25	1.44	0.173
-0.24	0.44	3.75	1.68	0.282
0.06	0	7.5	1.92	0.194
-0.563	1.36	1.25	1.88	0.437
-0.161	19.35	0.75	1.34	0.168
-0.354	20.04	7.5	1.72	0.279
0.076	12.67	0.55	1.47	0.192
0.232	-0.54	0.25	1.95	0.263
-0.5	93.7	0.2	1.24	0.406

-0.238	7.98	1	1.58	0.347
-0.077	-11.5	0.73	1.96	0.181
-0.574	0.67	1.9	1.41	0.151
0.964	1.61	1.25	1.78	0.271
-0.184	9.9	1.4	1.46	0.373
-0.135	18.48	26	1.86	0.241
-0.251	3.26	1.9	1.22	0.284
-0.114	3.15	0.2	1.84	0.195
-0.109	134.03	1	1.26	0.419
-0.179	4.11	12.5	1.76	0.243
-0.151	2.63	0.5	1.92	0.172
-0.327	5.59	0.85	1.74	0.335
0.16	26.6	8.35	1.54	0.375
-0.826	1.84	2.45	1.68	0.199
-0.146	0	0.81	1.87	0.159
-0.366	-0.31	4.5	1.96	0.167
0.1	0.37	6	1.52	0.182
0.207	3.6	10	1.78	0.164
0.768	-0.38	8	1.66	0.254
0.895	-0.07	1.3	1.32	0.164
0.096	15.98	0.3	1.45	0.237
0.542	2.24	0.6	1.78	0.294
0.848	3.33	0.5	1.96	0.383
-0.123	1.03	10.5	1.84	0.417
-0.008	2.25	1.25	1.26	0.356
0.8	2.52	1	1.86	0.371
0.615	12.17	1.55	1.98	0.215
-0.183	5.63	0.6	1.56	0.158
0.143	2.08	1.15	1.45	0.247
-0.051	-10.8079	0.5	1.64	0.176
0.062	1.28	0.2	1.94	0.348
0.224	-4.27	15	1.34	0.424
0.626	2.37	0.25	1.82	0.333
0.452	-0.32	0.1	1.46	0.267
0.025	35.17	7	1.38	0.258
0.206	13.32	0.4	1.56	0.305
-0.139	0.52	0.4	1.66	0.365
-0.042	38.14	3	1.84	0.341
0.425	4	1.75	1.92	0.249
0.102	1.66	3.5	1.56	0.239
0.127	6.25	4	1.78	0.407
0.48	0	2.5	1.62	0.164
0.37	1.79	0.1	1.58	0.317
0.59	0	0.4	1.44	0.387

0.513	0	5.05	1.28	0.342
-0.333	0.16	32.5	1.98	0.285
-0.315	2.7	6	1.48	0.155
-0.187	10.11	8.75	1.36	0.417
-0.162	32.71	4.2	1.52	0.355
-0.062	11.46	2	1.44	0.307
0.337	14.15	0.75	1.94	0.295
-0.187	0.33	0.5	1.96	0.154
-0.483	0	0.75	1.22	0.183
-0.044	0	0.22	1.32	0.162
-0.338	1.32	0.35	1.54	0.412
0.48	4.6	0.25	1.68	0.337
-0.033	0.32	8.5	1.38	0.277
-0.159	0	0.41	1.74	0.51

## **APPENDIX III: LIST OF FIRMS LISTED AT THE NSE**

### **AGRICULTURAL**

Eaagads Ltd  
Kakuzi Plc  
Kapchorua Tea Co. Ltd  
The Limuru Tea Co. Plc  
Sasini Plc  
Williamson Tea Kenya Ltd  
Automobiles & Accessories  
Car & General (K) Ltd Ord 5.00

### **BANKING**

Barclays Bank of Kenya Ltd  
BK Group Plc  
Diamond Trust Bank Kenya Ltd  
Equity Group Holdings Plc  
HF Group Plc  
I&M Holdings Plc  
KCB Group Plc  
National Bank of Kenya  
NIC Group Plc  
Stanbic Holdings Plc  
Standard Chartered Bank Kenya Ltd  
The Co-operative Bank of Kenya Ltd

### **COMMERCIAL AND SERVICES**

Atlas African Industries Ltd GEMS  
Deacons (East Africa) Plc Ord 2.50AIMS  
Eveready East Africa Ltd  
Express Kenya Ltd  
Kenya Airways Ltd  
Longhorn Publishers Plc  
Nairobi Business Ventures Ltd  
Nation Media Group Ltd  
Sameer Africa Plc  
Standard Group Plc  
TPS Eastern Africa Ltd  
Uchumi Supermarket Plc  
WPP Scangroup Plc

### **CONSTRUCTION & ALLIED**

ARM Cement Plc  
Bamburi Cement Ltd  
Crown Paints Kenya Plc  
E.A.Cables Ltd

E.A.Portland Cement Co. Ltd

**ENERGY & PETROLEUM**

KenGen Co. Plc

KenolKobil Ltd

Kenya Power & Lighting Co Ltd

Total Kenya Ltd

Umeme Ltd

**INSURANCE**

Britam Holdings Plc

CIC Insurance Group Ltd

Jubilee Holdings Ltd

Kenya Re Insurance Corporation Ltd

Liberty Kenya Holdings Ltd

Sanlam Kenya Plc

**INVESTMENT**

Centum Investment Co

Home Afrika Ltd

Kurwitu Ventures Ltd

Olympia Capital Holdings Ltd

Trans-Century Plc

**INVESTMENT SERVICES**

Nairobi Securities Exchange Plc

**MANUFACTURING & ALLIED**

B.O.C Kenya Plc

British American Tobacco Kenya Plc

Carbacid Investments Ltd

East African Breweries Ltd

Flame Tree Group Holdings Ltd

Kenya Orchards Ltd

Mumias Sugar Co. Ltd

Unga Group Ltd

**TELECOMMUNICATION**

Safaricom Plc

**REAL ESTATE INVESTMENT TRUST**

Stanlib Fahari I-Reit

**EXCHANGE TRADED FUNDS**

New Gold ETF