INFLUENCE OF CASH FLOW TRENDS ON SHAREHOLDERS RETURNS AMONG MANUFACTURING AND ALLIED COMPANIES LISTED IN THE NAIROBI SECURITIES EXCHANGE

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DECLARATION

This research project is my original work and has not been presented for any academic award in any university or institution of higher learning.

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DEDICATION

I would like to dedicate this research project to my family for their prayers and support, without them I could not have accomplish this far. Finally, I wish to dedicate it to my daughter Lyne Gathu, my niece Ivon Wanjiku and my nephew Seth Raymond, I encourage them to work hard in school.

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ABBREVIATIONS AND ACRONYMS

BOC	British Oxygen Company
CIA	Cash Flows from Investing Activities
CMA	Capital Market Authority
COA	Cash flows from Operating Activities
EABL	East African Breweries Limited
EPS	Earning Per Share
FCF	Cash Flows from Financing Activities
GDP	Gross Domestic Product
NPV	Net Present Value
NSE	Nairobi Securities Exchange
P/E	Price Earnings ratio
ROE	Return on Equity
ROI	Return on Investments
SPSS	Statistical Package for Social Science
TSR	Total Shareholders Returns
UK	United Kingdom

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OPERATIONAL DEFINITION OF TERMS

Cash Flow: Is the total amount of money that gets in and out of the company (Lev, & Sougiannis, 2010).

Cash flow from operating activities: Is the amount of money paid for the acquisition of merchandise, taxes, payments made to vendors, payments of wages and services (Gordon, Henry, Jorgensen, & Linthicum, 2017).

Cash flow from investing activities: Is the amount cash inflow and outflow generated from sale and acquisition of fixed assets (Gordon, Henry, Jorgensen, &Linthicum, 2017).

Cash flow from financing activities: Is the amount of cash flow and outflow relating to non-current owners equity and noncurrent liabilities (Farshadfar & Monem, 2013).

Dividend: Is the share of the firm profits that is paid to shareholders at a given financial year (Elston, 1996)

EPS Ratio: Involves a proportion of the firm profits in a given financial year that is allocated to equity stock holders (Khan, Aleemi & Qureshi, 2016).

Liquidity: Is a measure of the extent at which a firm has cash to meet its immediate short-term obligations? It also refers on how easy a firm can easily convert its assets into cash (Drehmann, & Nikolaou, 2013).

Marketable securities: Refers to any unrestricted financial instrument that is sold and bought in a recognized bourse. Marketable securities include equity and debt instruments (Abor, 2017).

P/E Ratio: It is a proportion that measure firm current share price on its earnings per share (Demirguc-Kunt, Detragiache & Merrouche, 2013).

ABSTRACT

The study investigated the effect of cash flow trends on shareholders returns among listed manufacturing and allied companies in Kenya. Over the recent times most manufacturing and allied firms in Kenya have been showing serious cash flow difficulties. Some of those firms include Mumias Sugar Company, Eveready East African Limited, Unga group, frame tree holding group, Kenya Orchard among others firms within manufacturing and allied sector. Most these firms were unable to generate adequate cash flows from their operation, financing and investing activities. For example, Mumias sugar was unable to meet its operating cost including paying famers, but through the injection of money by the Kenyan government the company resume its operation but still struggling in debts. Eveready East Africa has also been struggling to meet its operations and its performance has significantly declined. Therefore, the specific objectives of the study were to examine the influence of cash from operating activities, investing activities, and financing activities on shareholders' returns. The free cash flow theory, Keynesian theory of money, Millers and Orr's cash management model, and Baumol model of cash management guided the study. The study adopted a descriptive research design. The target population comprised accounts and finance staff working with manufacturing and allied firms listed in the Nairobi Security Exchange. The study population constituted 227 such staff. A sample of 54 respondents was obtained from the sampling frame using stratified random sampling technique. The data collected were processed and analyzed using Statistical Package for Social Science Version 24 software. The results of the analysis were presented using tables. The study found that cash flows from operating activities had marginal consequences on returns of shareholders. However, it was established that cash flows from both investing ($t = 3.849$; $p < 0.05$) and financing ($t = 6.821$; $p < 0.05$) activities significantly influenced shareholders' returns. In general, cash flow trends were found to be important in relation to shareholders' returns among listed manufacturing and allied firms in Kenya. The study concluded that whereas cash flows from operating activities were of less importance to shareholders' returns, cash flows from investing and financing activities were highly important. The study recommended that manufacturing and allied firms should ensure that there is increased interest from investments. These firms are advised to increase investment in shares. The study further recommended that the foregoing firms should increase the payment of dividends

CHAPTERONE

INTRODUCTTION

1.1. Background of the Study

The success of corporate entities including manufacturing and allied companies depends on efficient management and utilization of cash flows. Cash flow is a key matrix that shows liquidity position of a company (Lev, Li, & Sougiannis, 2010). Cash flow involves the amount of cash and cash equivalent that a firm receives or gives out through payments. Cash flow indicates the amount of money coming in and out of the company (Andreas, 2017). The inflow may include receivables and receipts from customers while cash outflow includes payments of organization overheads which include mortgages, taxes, accounts payables and taxes.

In accounting and finance cash flow involves the amount of money available at the beginning of the financial period and money at the closing of the company fiscal year (Faulkender, Flannery, Hankins, & Smith, 2012). A positive cash flow occurs when there is a higher closing balance as compared to the opening balance. Cash flows statement among the three components that make up a company financial statement. Cash flow is classified into three categories namely cash flows from operating activities, investing activities and cash flow from financing activities (Farshadfar, & Monem, 2013).

Farshadfar, and Monem (2013) argued that Cash flow is important in business because it helps to meet daily organization operations. However, there is no direct relationship between cash flow profitability of a company because positive cash flow does not imply that a firm is profitable. A company might be having positive cash flow because it has not yet paid its creditors. Also, such a company could have sold one of its fixed assets and hence, it does not mean that a company with positive cash flows it has an improved its liquidity position (Jeppson, Ruddy, & Salerno, 2016). When making an investment decision, investors should not concentrate on analyzing cash flows because cash flow is not the most suitable metric for analyzing a firm when making investments decisions. Other financial statements such as income statement and balance sheet should be utilized when making investment decisions because if a company is not investing cash, it may act

as a negative sign that indicates that the firm is not using its liquidity to diversify or expand the business (Collins, Hribar, & Tian, 2014).

Manufacturing and allied sector contribute to a significant proportion of the world GDP, in particular among the developed countries. The global manufacturing sector continued to expand where Europe continue to dominate the list of the top global economies that have the higher volume of manufactured exports. Also, China, Korea, United States and the UK are among the top economies that form a significant proportion of manufactured items for exports (National Association of Manufacturers, 2017). Manufacturing is a tenth largest sector of the U.S economy; it contributes a total value in the U.S economy amounting to 1.84 trillion dollars in 2011. The United States tend to produce most of the manufactured goods and services and are followed closely by China, Japan, and Germany. Other emerging economies like Brazil and Indian economy have been shown significant improvement in their manufacturing volumes. The America manufactures account a larger amount of production than India, Korea and Canada (National Association of Manufacturers, 2012).

There has been an increased strength in the United Kingdom's manufacturing sector. Despite having ongoing negotiations and uncertainties on Brexit, the UK manufacturing sectors has continued showing positive trends as compared to that of The U.S which was affected by the fluctuation of the U.S dollars. The process of Brexit could take a maximum of two years. It implies that the United Kingdom could be out of European Union by the mid-2019. The recent developments have caused British pound to appreciate by 1.7 percent over the past months. The appreciation has also been spurred on by the court ruling. Nonetheless, the pound has fallen 19.4 % percent since the June 23 Brexit vote. This should provide a buffer to help the British manufacturing sector and the U.K. economy (National Association of Manufacturers, 2017).

The manufacturing sector in Africa has been facing numerous challenges which inhibit its growth. Lack of proper production capacities and enough industries in Africa explains the reasons why Africa still lags behind development. In 1970's Africa contributed to 30% of manufacturing output in the world economy. However, in 2010 the level of African output has declined significantly to 1.5 %. Such decline explains the reason why there

have been higher cases of unemployment and manufactured export products (National Association of Manufacturers, 2012).African Development Bank (2013) indicates that the Kenya manufacturing sector has been contributing 13% to the GDP every year for the past five years up to 2009 when the GDP declined to 1.3%. However, the GDP attributed to manufacturing and allied sector increased to 4.5% in 2010 and later dropped to 3.3% in 2011.

There are nine firms in Kenya Listed in under manufacturing and allied sector in the Nairobi Security Exchange (NSE).Currently, Kenya has sixty-seven listed companies in the NSE whereby the companies fall under two segments namely main and alternative segments. All the listed firms in the Nairobi securities exchange are classified based on the economic sectors in which they operate. There are ten sectors in the NSE each containing several companies. The study focused on the nine firms because Eveready East Africa had already been delisted and hence reducing the number to nine firms operating in manufacturing and allied sector (Nairobi Security Exchange, 2012). There has been a sharp declining in the manufacturing and allied sector GDP since 2011. Kenya National Bureau of statistics (2016) showed that in 2014 the Kenya manufacturing and allied sector grew at a rate of 3.2% and increased slightly to 3.5% in 2015 which led to a contribution of 10.36 in Gross Domestic Products (GDP). However, despite a slight improvement in growth of manufacturing and allied sector, the GDP attributed to manufacturing, and allied sector has been declining.

Economic Survey (2012) showed that the manufacturing sector contribution to GDP has worsened from 9.6 percent in 2011 to 9.2 percent in 2012, In addition the growth rate deteriorated from 3.4% in 2011 to 3.1% in 2012. The survey further showed that surviving firms have less debt outstanding than those companies that have cash flow crises. The average ratio of total debt to total assets is still very high at 87.68 Percent in the surviving firms, with a median value of 81.10 percent. On average 36.90 percent of the assets of surviving firms are financed through debt (World Economic Forum, 2013). The decline is attributed to numerous factors including poor management of cash flows. Also, the decrease in the performance of Kenyan manufacturing and allied sector tend to be attributed to increasing the cost of production.

Most of the primary inputs such as fuel tend to be expensive which reduces the Cash flows from Operating Activities of manufacturing companies. Most of the operating cash flow of such firms tend to be channeled towards meeting the higher input cost. Also, depreciation of Kenya shillings about foreign currencies has been among the key factors that have led to a decrease in the GDP of manufacturing and allied sector in Kenya. In 2000, the manufacturing sector was the second largest sector in the Kenyan economy after agriculture. However, in 2011 it declined and emerged as the fourth largest sector in the Kenyan behind agriculture, wholesale and retail trade, financial services, transport and communication. More than 247,600 were formally employed in manufacturing private sector in 2011 (African Development Bank, 2013).

1.2. Statement of the Problem

In the past few years, several manufacturing and allied companies in Kenya have been facing critical cash flow problems to finance their operation. For example, Eveready East African Limited, Mumias sugar, Unga group and others have been showing a decline in performance. Most of those companies have been facing severe cash flow problems. Mumias have been highly leveraged, and could not secure additional financing through borrowing and hence bringing its operation to a halt. The government had to intervene to revive the company by injecting over 3.2 billion shillings to boost its cash flow and ensure that its operations return to normalcy (Republic of Kenya, 2015). The manufacturing sector has been identified as one of the key sectors to support the Kenya Vision 2030 strategy. Economic Survey (2012) was conducted and compared revised growth of 4.5 percent in 2010. The survey showed that the manufacturing sector contribution to GDP worsened from 9.6 percent in 2011 to 9.2 percent in 2012, while the growth rate deteriorated from 3.4% in 2011 to 3.1% in 2012. The Global Economic Report of 2012 to 2013 indicated that surviving firms have less debt outstanding than those companies that have cash flow crises. The average ratio of total debt to total assets is still very high at 87.68 Percent in the surviving firms, with a median value of 81.10 percent. On average 36.90 percent of the assets of surviving firms are financed through debt (World Economic Forum, 2013). Research indicates that approximately 40% of the manufacturing companies are owned by foreign entities and tends to control a significant

proportion of the Kenyan market share (National Association of Manufacturers, 2012). Among the foreign owned manufacturing companies include but not limited to common brands such as Coca-Cola, General Motors, coca cola. Most of the Kenyan owned firms have been reporting millions of losses. They lack adequate cash flows to sustain their operations. The study aims to investigate the effect of cash flow on shareholders returns among listed manufacturing and allied companies in Kenya. There is no specific research that has been carried out in Kenya to determine how cash flows affect the shareholder's returns.

1.3 Objectives of the Study

1.3.1 General Objectives

The general objective of the study was to establish the influence of cash flow trends on shareholders returns among manufacturing and allied companies listed in the Nairobi Security Exchange.

1.3.2. Specific Objectives

The following specific objectives guided the research study:

i. To examine the influence of cash flow from operating activities on shareholders returns among listed manufacturing and allied companies listed in the NSE
ii. To determine the influence of cash flows from investing activities on shareholders returns among listed manufacturing and allied companies listed in the NSE
iii. To establish influence of cash flow from financing activities on shareholders returns among listed manufacturing and allied companies listed in the NSE

1.4 Research Hypotheses

H_{01}: There is no significant influence of cash flow from operating activities on shareholders returns among manufacturing and allied companies listed in the NSE.

H_{02}: There is no significant influence of cash flows from investing activities on shareholders returns among manufacturing and allied companies listed in the NSE.

H_{03}: There is no significant influence of cash flow from financing activities on shareholders returns among manufacturing and allied companies listed in the NSE.

1.5 Significance of the Study

The rationale for conducting this study was because it would form a fundamental basis for further research. It will provide researchers and scholars with an in-depth understanding of cash flow trends and shareholders returns. The study will contribute to the body of knowledge and provide scholars and researchers on ways they can establish new theories relating to the world of finance. Also, the study will contribute towards a realignment of previous theories to modern technological innovations.

Conducting the study will help manufacturing and allied companies to know effects of cash flows on shareholders return and hence make an informed decision regarding their cash flow management. Manufacturing businesses in Kenya have been facing numerous financial challenges including cash flow problems. Some tend to have massive bank loans that they are unable to pay. Besides, the cost of financing such loans tends to be high which consequently affect their cash flows. The study wills emphasis on the importance of cash flow management and its effects shareholders returns. It is clear that a firm may be profitable without necessarily having positive cash flows. Therefore, cash flows should be managed in such a way to obtain an optimal level and ensure smooth operations of the firm daily activities (Kroes, & Manikas, 2014).

The research will provide policy makers such as the government and regulators with vital information that will assist them in making policies that can create a conducive business environment for the firms to flourish. Also, the study should be conducted because it will help shareholders and corporate investors to know how to make informed investment decisions by looking at the cash flows and its effects on shareholders return among manufacturing and allied companies listed in the Nairobi Security Exchange. Besides, the study will be of significant benefits to other firms trading in the NSE because they will know how to make pro-active strategies regarding their cash flow management. The employees need information to know how to deal with the factors affecting them in their work environment and how to improve them for the overall performance of the entire

organization. The study will give creditors information on whether the company will be able to meet its financial obligations when they fall due. The lenders would use the study findings to enable them to make informed financial decisions when lending.

1.6. Scope of the Study

The study focused on the nine manufacturing and allied companies listed in the Nairobi Security Exchange as at 2017. The nine companies include British Oxygen Company (BOC) Kenya, British American Tobacco limited, Carbide Investments Limited, and East African Breweries, Mumias Sugar Company Limited, Unga Group limited, Kenya Orchards limited, A. Baumann Company limited company and Flame Tree Group Holdings Limited. The study will carry out an assessment of the effect cash flows on shareholders returns among manufacturing and allied companies listed on Nairobi Securities Exchange for the last ten years commencing 2007 to 2016. The study used financial statements of the enterprises of the year 2007 to extract data from and use for analysis. Those manufacturing and allied companies that had not yet listed within the specified window period will be identified and the periods in which they had listed taken into consideration when carrying out the analysis. The total cost of the study was budgeted at Ksh 100,000.

1.7. Limitations of the study

There are numerous manufacturing and allied companies in Kenya that have not yet listed their shares on the NSE, the study only considered the nine listed firms under manufacturing and allied sector. This is quite a small sample, and the results may not be generalizable to other firms listed in the NSE. The study overcame the limitation in that, out of the nine selected firms for this study they are well diversified regarding the products they manufacture and hence form a fair representation of the Kenyan companies within manufacturing and allied sector. The study experienced a limitation of obtaining relevant data from the credible sources. The limitation was overcome by having the information that was not obtained from the Nairobi Securities Exchange being obtained from the Capital Markets Authority. The study was conducted within limited time and resources and hence it was likely not to fully capture all the requisite information. This

limitation was overcome by ensuring that the researcher dedicated more time including weekends in conducting the study in order to ensure that it succeeded. Besides, the researcher designed a work plan schedule that ensured that all the information needed to make the research became a success was effectively captured.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The chapter reviews the literature that relates to cash flows and shareholders' returns. The literature review has been organized in the following sections. The first section focuses on the theories underlying the effects of cash flows on shareholders returns. The second section covers the empirical studies on the subject area covered and summary of the section to be included in the proposal and the research.

2.2 Theoretical Review

Theoretical review section covers the theories that form the foundations of the research upon which a conceptual framework of the study is derived. Trochim (2006) argued that a theory is imperative in providing a guide on how the research should be undertaken. Also, theories help in guiding the study through identification of variables and finding up the statistical relationship that should be measured to come up with the research findings. Therefore, this study was guided by various theories which include; free cash flow theory, Keynesian theory of money, Miller and Orr's cash management model, and Baumolinventory model.

2.2.1 Free Cash Flow Theory

Free cash flow theory was established by Jensen in 1986. The theory argues that firms that generate excess cash as compared to the fund required to finance a project that has a positive Net Present Value, tend to face greater agency problems because free cash flow tends to heighten conflict of interest between managers and shareholder (Thiruvadi, Huang, Wheatley, & Thiruvadi, 2016). Corporate manager of listed firms that have higher levels of free cash flows tends to initiate investment that reduces the firm value. Most of such managers initiate takeovers and other investments projects that may not add value to the company. Jensen further argued that listed companies that have more free cash flows face a lot of pressure to pay the excess cash flows to the shareholders rather than invest the money into investment opportunities that are less profitable. More pay out

to shareholders increase the price of shares due to higher demand by investors to buy stocks of a company that is paying higher dividends (Opler & Titman, 1993).

Jensen argues that a firm that tends to retain excess cash reduces the available investment marginal utility which consequently causes a decline in value of its shares. When there is a deterioration in the stock price of a company that has more free cash flow happens, such a firm become less attractive not only to the investors but also to the takeovers firms (Kadioglu, Kilic, & Yilmaz, 2017). Jensen argued that such excess free cash flows should not be retained in the business because such funds could be invested in more profitable opportunities or it could be paid out to the investors who could consequently help to increase the value of company shares (Richardson, 2006). Jensen in his free cash flow theory postulated that in most big firms especially those listed on recognized stock exchanges such as New York, London, and Nairobi Stock exchange face agency problems between stock holders and managers. Managers tend to have a conflict of interest with stock holders as they undertake investment projects that are contrary to the interest of owners (Al-Dhamari, Ismail, Izah, & Al-Gamrh, 2016).

The most affected stock holders are the individual stock holders who hold fewer shares in a company as compared to corporate shareholders. Individual shareholders lack incentives to control and monitor the affairs of the company, and hence they become prone to the abuse of the directors. The only remedy that such individual investor may pursue when they become frustrated by the manner in which directors are misusing company cash flows is to sell out their shares. On the other hand institution, investors may have the power to reduce agency problem because they hold bulk of stocks and it is difficult for them to sell on the stock markets. Therefore, institution investors play a critical role in monitoring managers, and to some extent, they may initiate and remove using their higher voting right attributed to a large number of share ownership that they have in the company (Nobanee, & Abraham, 2017). Jensen in his theory of free cash flow suggested that agency problem can be reduced by ensuring that the firm is committed in debt whereby managers will be forced not to misuses free cash flows because they have a debt contract they have to honour. However, care should be taken because greater

reliance on debt escalates interest rates risks which may consequently lead to project failure (Bhundia, 2012).

Jensen theory was found to be relevant to this study because it support the reason why cash flows should be effectively managed by reducing conflict of interest between shareholders and the directors to ensure that shareholders wealth is maximized. Also, the theory supports the shareholders return variable used in this study by identify how cash flow should be managed to ensure that shareholders gain derive value for their investments in a company (Richardson, 2006).

2.2.2. Keynesian Theory of Money

Keynesian theory of money was put forth by Keynes (1936) where he conducted a study on "The general theory of employment and interest." Keynes identified that the three motives why holding cash flows are imperative. The three motives include precautionary motive, transaction, and speculative. Under the speculative motives, firms and individuals should hold cash to be able to take advantages of profitable investment opportunities that may arise. For example, a firm should hold cash flows so that in the event it finds out profitable investment opportunities it can invest and anticipate profitable gains in the future (Nayan, Kadir, Yusof, & Ali, 2015). Keynes argued that speculative motives can be satisfied through firm borrowing ability and purchase marketable securities. Precautionary motives involve holding money for safety reason (Keynes, 2016). For example, in cases of unforeseen invents that may have adverse impacts on individual or organization it is possible to address such problem if a firm has cash. Holding money for the above motives is good, but the value of money market instruments tends to be relatively certain (Sardoni, 2017).

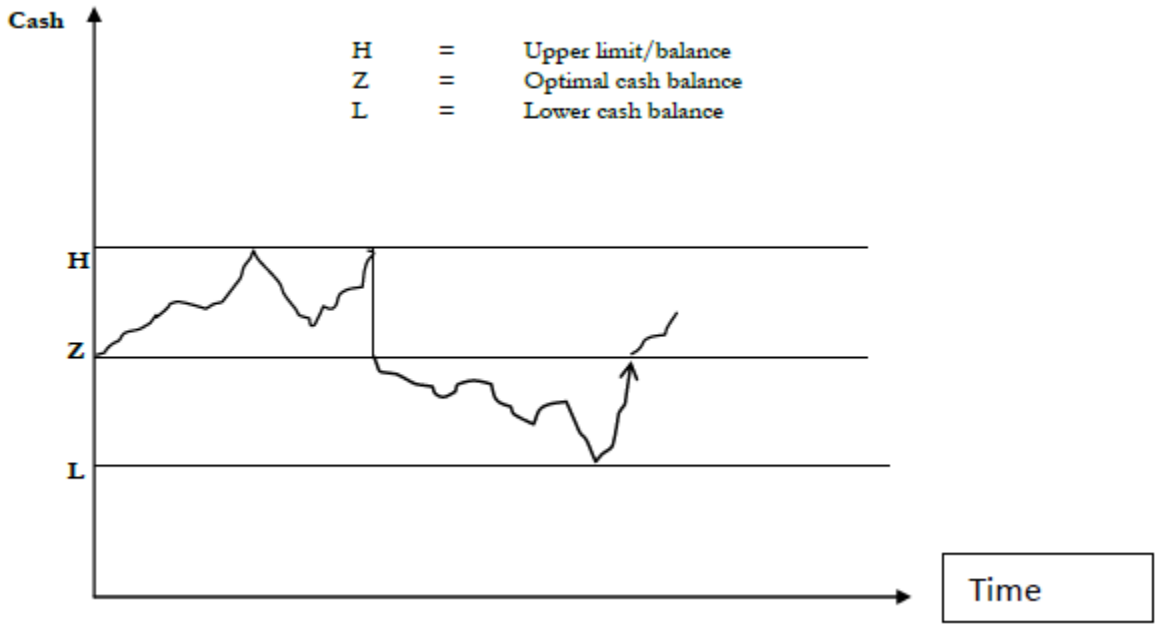
Some instruments such as treasury bills tend to be highly liquid and hence there is no need to have excess money to cater for precautionary motives because some marketable securities are available and can be easily converted into cash in case precautionary needs arises (Sardoni, 2017). Keynes further postulated that the need to hold cash is due to transaction motives. Transaction motives relates to the firm collective activities that include meeting daily operating expense of the firm. Transaction motives for holding

cash help the firm to pay wages, salaries, dividends, tax, and debts. Keynes concluded that a company should keep the money so that it can be able to meet the three motives. The implication of Keynesian Theory of Money is that a firm should maintain some degree of cash flows which may have effects on its profitability level (Deleplace, & Nell, 2016).

The Keynesian theory of money is relevant in this study because it substantiate the three main reasons why firms should have cash flows. Besides, the theory support the variables for this research on why organisation should have operating cash flows to meet their transaction motives and also cater for speculative precautionary motive. The research variable on cash flow from investing activity is substantiated by Keynesian theory through speculative motive for holding cash where firms should have cash flows to take advantage of profitable investment opportunities that may arise in the course of doing business (Deleplace, & Nell, 2016).

2.2.3. Miller and Orr's Cash Management Model

Miller and Orr (1966) put forth with a theory called Miller and Orr's Cash management model that describes cash inflows and outflows. The model deals with cash flows that tend to fluctuate in a random manner on a daily basis. The model is based on the assumption that net cash flow distribution is usually distributed and has a zero standard deviation and the mean. The model helps firms to manage their cash flows by taking into consideration fluctuations of money on a daily basis. Miller and Orr (1966) postulated that a firm allows movement of cash within the two limits namely lower and the upper limit. They argued that firms tend to buy and sell marketable securities if their cash balance is equal to those two limits. For example, if the company cash balances come into contact with the upper bound such firm purchase certain number of marketable securities that will help the firm to come back to its desired level of cash (Michalski, 2014). However, if the company cash balances come into contact with the lower limit, such firm tends to sell its marketable security so that it can come back to its desired level of cash. The model appears graphically in terms of upper limit (H) and the lower limit (L) and returning point (z).



Miller and Orr model assumes that the average distribution value of net cash flows is zero and the standard deviation is also zero and the distribution of cash within the firm assumes a normal distribution curve (Premachandra, 2004).

Miller and Orr model of cash management tend to be applied in different firms. However, the application of the model requires managers of those firms to follow certain procedures which include choosing the possible levels of cash flows that they firm intends to hold (Alvarez, Lippi, & Robatto, 2017). Secondly, managers should look at the interest rates, and compute regular cash flows standard deviation. Thirdly, a manager must identify the estimated prices at which marketable securities may be purchased and sold (Da Costa Moraes, Nagano, & Sobreiro, 2015). Miller and Orr's Cash Management Model theory is relevant in this study because it supports the key variables used in the research. One of the key variable that the theory support is the variable pertaining cash flow from investing activities where firms tends to buy and sell marketable securities to maintain standard level of cash flows within the organisation. When cash flows go below the lower limit firms tends to sell marketable securities to retain cash flows within a standard level. On the other hand, when cash flows goes up to the upper limit firms tends

to invest in buying marketable securities such shares to maintain cash flows within a standard level.

2.2.4. Baumol Model of Cash Management

Baumol Model of cash management was established by Baumol in 1952. The model helps firms to identify the desired level of cash balances that a firm should hold under the condition of certainty. Baumol model depends on the trade-off between interest forgone by holding certain asset in the form of non-interest bearing money and liquidity. Baumol model is based on four assumptions. The first assumption is that the opportunity cost of holding cash is known and does not change with time. Holding cash tend to incur a cost in terms of opportunity forgone. Secondly, firms tend to have a steady outflow of cash. Thirdly, firms tend to incur transaction cost all the times it converts marketable securities into money. The fourth assumption is that shorter marketable securities can be purchased and sold. Baumol model holds that the key variable for cash demands is the level of real income, interest rates, that corresponds to the desired transaction cost as well as the fixed cost incurred in transferring wealth between cash and interest bearing securities or assets. Baumol argued that the firm tends to incur holding cost to maintain cash balances (Alvarez, & Lippi, 2017).

Baumol equation model of cash management is Total Cost = k(C/2) + c (T/C)
Where
K(C/2) = Holding cost
c (T/C)=Transaction Cost
T= is the total fund requirement
C=is the cash balance
K= is the opportunity cost &
c= is the cost per transaction.

The Baumol model tries to identify the correct balance by combining holding and transaction costs to reduce total cost of holding cash and hence coming up with an optimal cash level as follows:
$\sqrt{}$ (2FT / k) = Optimal Cash Level

Where C = Cash required each time to restore balance to minimum cash

F= Total cash required during the year

T= Cost of each transaction between cash and marketable securities

r = Rate of interest on marketable securities

Based on the Baumol's Model, companies should start each period with the cash balance equaling to 'C' and spend gradually until its balance comes to zero. At that time, the firm should replenish the equaling 'C' from the sale of marketable securities. Baumol postulated that as that as the demand for cash which is denoted by "C" increases holding cost also escalates while the cost of transactions declines. Such decline is transaction cost is attributed to the decrease in the number of transactions. The model concludes that there is a correlation between holding cash and transaction cost. On the contrary, whenever there is an increase in cost per transaction and required funds the optimal cash balances may end up increasing. Despite having a positive application, Baumol model tends to have some limitations which include it does allow fluctuation of cash flow which is not feasible in real life situations. Secondly, it tends to create uncertainties of future cash flows and does not consider overdraft (Da Costa Moraes, & Nagano, 2014).

Baumol Model of cash management is relevant in this study because it substantiate the research variables under investigation. For example, model indicates that it is imperative for the firm to hold an optimal level of cash flow but they should do so by taking into consideration holding cost and transaction cost. The optimal level of cash can be maintained by buying and selling marketable securities and hence supporting the variable of cash flow from investing activities as used in this research.

2.3 Empirical Review

Empirical studies have been conducted by other researchers in an attempt to understand how cash flows affect shareholders returns of the firm. Pawlina and Renneboog, (2005) conducted a study in the United Kingdom to investigates the sensitivity of the listed UK firms on cash flows. The study confirmed that investment is strongly sensitive to cash flows. Pawlina and Renneboog, (2005) postulated that the observed sensitivity of cash flows was attributed to agency cost of free cash flow that was put forth by Jensen. M.

1986. Positive relationship exists between investment and free cash flows and hence a company may have under investment when external financing such as debt end up being too costly as the company may not have adequate cash flows to invest in profitable opportunities. The increase in growth opportunities and higher sensitivity of cash flows tends to act as a symptom of under investment. Jensen (1986) argued that firm generating cash flows that are excess of the required amount of money to finance positive projects tend to face greater agency problems because free cash flows tends to escalate conflict of interest between managers and shareholders.

2.3.1 Cash Flow from Operating Activities and Shareholders Returns

Cash flow from Operating Activities involves a transaction that helps in determining the net income.

Net income involves the net amount of profits generated by the firm after subtracting the cost of doing business such as interest expense, non-cash items like depreciation, and taxes and subtracting them from the revenues. Working capital changes are also part of cash flow from operating activities which is obtains by finding the difference between current assets and current liabilities. Some of the cash inflows falling under the operating activities include revenues from sale of goods, receivables from debtors, interest on investments, and dividends that a company may get from its investments. Also, cash out flows from operating activities include the amount of money paid for the acquisition of merchandise, taxes, payments made to vendors, payments of wages and services (Gordon, Henry, Jorgensen, & Linthicum, 2017).

When a firm purchase stocks two things happens namely the company cash account decreases when inventory account decreases. A decline in cash account tends to reduce the amount of money flow from operating activities because it involves the movement of cash out of business. Besides, when the firm borrows money from the bank it increases cash account which consequently increases cash flow from operating activities. On the other hand the liability account increases with the same amount of money that has been borrowed from the bank as it follows the rule of double entry. Also, when a firm pays some of its account payable the rule of double entry applies whereby the cash from

operating activities is decreased by the amount paid to creditors while the creditor's liability account is reduced by the same amount paid (Barth, Clinch, & Israeli, 2016).

There is no concrete evidence indicating that there is a direct relationship between operating cash flow and shareholders returns. The available evidence tries to establish an indirect relationship between cash flows and profitability. Research conducted by Hubbard (1998) indicates that there is a significant relationship between profitability and free cash flow. Hubbard (1998) noted that increase in levels of cash flows leads to a rise in corresponding profit levels. It is evident that a company may have positive profits but lack cash balances in the bank account. Also, a company may have positive cash flows but is not profitable. Hubbard (1998) noted that the increase in profitability was attributed to investing free cash flows on projects with positive returns. A firm should hold cash flow for speculative objectives so that they can wait for profitable investments opportunities for good future returns (Das, & Parida, 2016).

Cash flow from operating activities was measured by adding the net income of the firm in a given financial year with non-cash expenses and changes in working capital (Ball, Gerakos, Linnainmaa, & Nikolaev, 2016). When preparing financial statement most listed companies use the indirect method to make their cash flows statements. Under the indirect methods, firms start with net income and subtract gain and losses from the net income and adding noncash changes such as amortization of goodwill and depreciations of property plant and equipment. In case a firm decides to use direct methods, all cash receipts and payments are added. The fundamental difference between the direct and indirect method of preparing cash flow is at the beginning of the statements. Indirect methods start with net income while direct methods start with receipts and payments. Irrespective of the methods all the other components of cash flow are the same between the two approaches (Chang, Dasgupta, Wong, & Yao, 2014). Cash Flow from Operating Activities may be obtained by adding Net income, Noncash Expenses and Changes in Working Capital.

2.3.2 Cash Flows from Investing Activities and Shareholders Returns

Cash flow from investing activities is the cash attributed to noncurrent assets. It includes amount cash inflow and outflow generated from sale and acquisition of fixed assets. Some of the cash inflow from investing activities includes sales of property, plant, and equipment (Gordon, Henry, Jorgensen, & Linthicum, 2017). It may also include sales of intangible assets, and cash generated from investments in shares, securities, and debentures. Changes in Securities Investment include increase and decrease in cash flows due to investment or sales of securities. On the contrary, cash outflow from investing activities includes cash channelled in the purchase of fixed assets and payments of long term assets (Baik, Cho, Choi, & Lee, 2016). Prudent investments should be made using free cash flows because if such cash flows are invested in projects that are not profitable, the firm may end up incurring losses (Griffith & Carroll, 2001).

There is no direct relationship between Cash Flows from Investing Activities and shareholders returns because some companies engage in profitable investment projects and generating more profits. However, despite generating more profits from investing activities, it is not a guarantee that higher profits will automatically result in higher dividends among the shareholders. Depending on the dividends policy of the company, some firms may not pay dividends after generating profits from investments because their dividend policy focuses on business growth and expansion. For example, a company with irregular dividend policy it may not reward shareholders with dividends in certain financial years even after generating higher profits from investments. Also, a firm that employs “no immediate dividend policy” may not pay a dividend at all after generating more cash flows from capital investment projects. However, those companies that have regular and extra dividend policy must pay their shareholders dividend irrespective of whether the firm made a loss from its investment projects (Michaely, & Qian, 2016).

Cash flow from investing activities measures the investments the firm has made in other company. Normally net cash flow from financing activity should be negative in most healthy businesses because it is an indication that such company has been spending on business growth and expansion. Some of the common components of Cash Flows from Investing Activities include capital expenditure and investments in subsidiaries. Capital

expenditure (Capex) involves cash outflow where the firm has invested in the acquisition of property, plant, and equipment the figure tends to be negative because it involves spending of money by the firm. It is imperative to ensure firm assess the industrial trends when engaging in capital investment project. Such assessment may help the firm to make a sound investment decision that has minimal risks. The growth of the firm can only be sustained if the company engages in capital investment expenditure that enables the firm to expand. Investing cash flow may be measured by adding all the line items that appear under investing activities (Collins, Hribar, & Tian, 2014). Cash flows from investing activities may be obtained by adding capital expenditure; Sales of property plant and equipment, then less purchase of securities and add changes investments in securities.

2.3.3 Cash flows from Financing Activities and Shareholders Returns

Cash flow from financing activities involves the amount of cash flow and outflow relating to non-current owners equity and noncurrent liabilities (Farshadfar, & Monem, 2013). Cash flow from financing activities includes sales and re-purchasing of ordinary shares, payments of dividends and long-term debts. Cash from issuing stocks is part of cash flow from financing activities categorised as cash inflow received by the firm as a result of selling share. Under the financing activities, cash inflows include amount sales proceeds that are obtained from the sale of stocks, long and short term borrowings. Cash flows from financing activities involves three main transactions namely securities transactions, loan, and dividends transaction. Cash outflow that falls under financing activities includes dividends paid to equity stock owners, payments of account payables, and loan repayment.

Securities transactions are part of Cash flows from financing activities and involve issuance and purchase of shares (Blasi, Kruse, & Freeman, 2017). When form issue stocks to the public it increase its cash flows from financing activities as security buyers subscribe for stock in exchange for cash. However, when a company issues shares, it tends to dilute company ownership by increase additional owners into the enterprise. Such additional owners may influence the company decision and control. Issue common stock is not a bad thing because it is one way of raising additional capital for business expansion. However, it tends to dilute company ownership. Besides, selling additional

shares implies that fewer shareholders returns may be realized to the existing shareholders because if a company makes profits and decide to distribute the benefits in the form of a dividend to shareholders, each share holders may end up receiving fewer returns because of their large number (Lan, 2012).

There is no direct relationship between cash flows from financing activities and shareholders returns. However, shareholders returns may be passed by looking for some dividends that are paid to shareholders by a company in each financial year. A dividend is another measure of shareholders return and a component of financing cash flow (Lewellen, & Lewellen, 2016). Dividends are outflows that fall under financing activities. When a company pays higher dividends to shareholders, it means that shareholders returns are higher. On the contrary, higher dividends payments tend to reduce the number of cash flows from financing activities. It is imperative to evaluate individual line items in cash flow statements to find out how each item affects the overall firm cash flows (Harris, 2016). For example, a company that decreases the number of dividends it has been paying to its shareholders in the previous period is a wrong signal that the company is facing difficulties or is having some financial problems.

However, depending on the dividend policy of the company it is not common to see that some firms do not pay any dividend to their shareholders which does not imply they are facing financial problems. Such firms that do not pay a dividend may have concentrated on expanding the company. Other firms may not pay a dividend because they have focused on business growth (Renneboog, & Szilagyi, 2015). Loan repayments are another important aspect of cash flow from financing activities. Payment of loan to the bank tends to reduce cash flows from financing activities because it involves the movement of cash out of business. However, payment of interest on the loan is not included as part of financing cash flow because in terms payments are considered as part of normal business operations, and hence it is factored as a component of cash flows from operating activities (Lan, 2012). Cash flow from financing actives may be obtained by adding cash from issuing stock stocks, payment of debt and cash incurred in Paying cash dividends.

2.4 Conceptual Framework

The conceptual framework as shown in Figure 2.1, is a diagrammatic illustration of study variables and how they are hypothesized to relate. The independent variables include cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities. The dependent variable used in the study is shareholders return which was measured using earnings per share ratio. Where earnings per share are applicable because it measures the actual amount of net income allocate to each outstanding share. In addition, total shareholders return was also appropriate because it measure both share price appreciations and dividends received by the shareholders.

Independent Variables

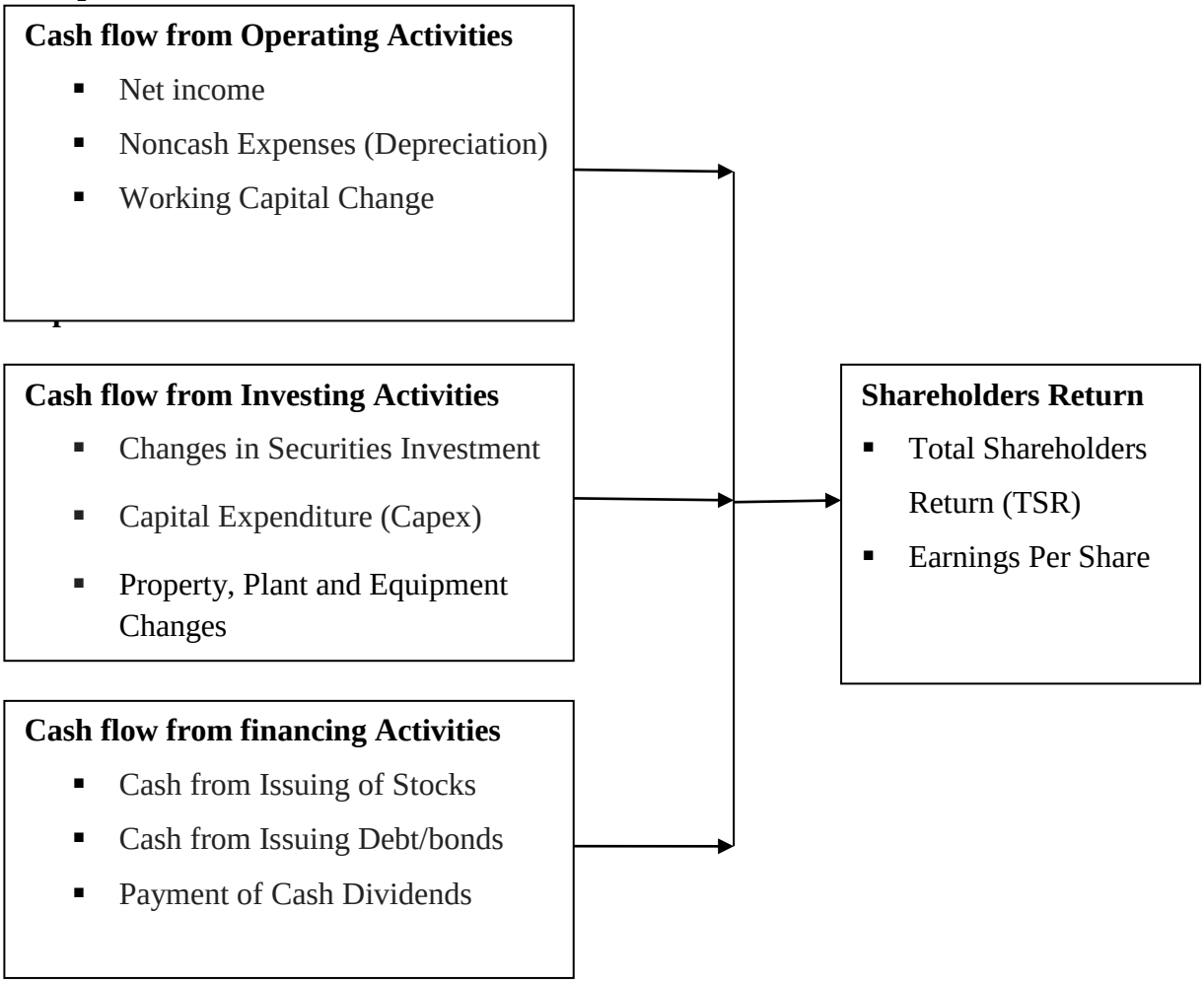


Figure 2.1: Conceptual Framework

2.5. Critique of the Existing Literature

Despite having numerous benefits of the existing literature on cash flows, the theory tends to face some limitations. For example, free cash flow theories do not assess the organization level of solvency. An organization with a proper liquidity cannot evaluate by looking at cash flows, and hence cash flows statements must be complimented with other financial statements such as income statements and statements of financial position (Richardson, 2006). Besides, cash flow theories fail to show the firm net income because it only takes into consideration non-cash items. Cash flows may not be used to assess the performance of the company because it does not take into account on revenues and cost, but rather it takes into account the only movement of cash inside and outside the firm (Almeida, Campello, & Weisbach, 2004). The other criticism is based on the theories of cash flows. For example, the theory of free cash flow by Jensen 1986 argues that managers of firms with excess cash flows and to engage in projects on investment projects that have do not provide value to shareholders and hence leading to agency problem between managers and shareholders (Vogt, 1994).

Jensen theory may be criticized in the sense that the firm level of investment does not relate to cash flow generated within the firm as put forth by Modigliani and Miller, (1958). However, some research was done earlier overcome such criticism by indicating that there is a positive correlation between investment and cash flow. The two interpretations pertaining positive relationship between Cash Flows From Investing Activities and investments shows that conflict of interest between managers and shareholders occurs as a result of managers using excess cash flow to invest in a project that does not provide returns to shareholders (Jensen, 1986). The second arguments are that practically overcome such criticism is based on market imperfection whereby costly external financing forces the firm to use excess cash flow within the company to carry out investments that may yield shareholders returns (Fazzari, Hubbard, & Petersen, 1998).

Keynesian theory of holding money tends to face criticism because Keynes argued that there are only three motives of holding money which is not always the case. The theory does not adequately explain what leads to divergences in the rates of interest because it

holds that no uncertainty may affect rates of interest and hence interest rate will remain fixed for a given period which is not the case in the actual situation. Keynes ignored factors that may influence liquidity and rates of interest by regarding interest rate as phenomena that are purely monetary (Meghana, 2017).

2.6. Summary of Reviewed Literature

The chapters are about the effects of cash flows on shareholders return of manufacturing and allied companies Kenya. The chapter has discussed the underlying theories relating to cash flows about shareholders return. Some of the theories that have been debated include Free Cash Flow Theory by Jensen, Keynesian Theory of Money, Miller and Orr's Cash Management Model, and Baumol Inventory Model. The chapter has also provided literature review concerning each of the variables. Global and local literature relating to Cash flows from Operating Activities, investing and financing cash flow has also been put forth. The chapter has also included a conceptual framework that provides a visual summary of all the variables under the study. Conclusively, Critique of the existing literature relevant to the research has also been provided.

2.7. Research Gaps

Limited studies that have been conducted on areas of cash flow concerning the value that shareholder gets among listed manufacturing and allied companies in Kenya. Much literature and empirical studies dwell on assessing the relationship between cash flow and profitability. Some studies focus on cash flows sensitivity to investments. Other studies focus on determining the' relationship between cash flow and investments. A study conducted by Fezzari et al. (2000) agreed that there is a low correlation between cash flow and investment in financially constrained organisation. Their studies formed basis for more research.

Carroll and Graffith (2001) conducted a study to investigate whether there is a correlation between cash flow and fixed asset acquisition. The study showed that firms with excess financial capacity tend to be cautious when investing in projects that have a negative net present value. The researcher argued that it would be advisable for such firms to consider their free cash flows in paying dividends pay out and debt rather than investing in

projects with negative NPV. Another study was conducted by Dasgupta and Sengupta (2007) they were investigating investment level among finically troubled firms in relation to the firms net worth and interest rate reduction. They study suggested that firms with less cash flows at the end of recessions tends to increase their levels of investment as compared to those firms that have more cash flows at the end of recession. Generally most studies have concentrated on relationship between free cash flow and investments. There is limited specific literature that tries to explain the effects of cash flow on shareholders return among manufacturing and allied companies in Kenya and hence, creating a need to conduct this study to fill this gap. For this reason this study seeks to evaluate the effects of cash flow on shareholders returns among listed manufacturing and allied companies in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter covers research methodologies and techniques that were used to conduct the study. The section included the research design that was employed to carry out the study. Also, the chapter identified data collection, procedure, and techniques to analyze the data. The section included population being targeted, sample size and sampling techniques as well as instruments that were utilized to gather data.

3.2 Research Design

Cooper and Schidler (2006) argued that a research design is a plan and structure that can be used to investigate, and to provide answers to the research questions. Research design helps to express research problem and provide a plan that was employed to obtain evidence that supports the study (Montgomery, 2017). This study used descriptive research design because of it helpful at investigating cause and effect relationship between independent and dependent variables and hence making it more appropriate at examining effects of cash flows on shareholders return among listed manufacturing and allied firms in Kenya. Descriptive research design assisted in conducting an advanced level analysis like regression and correlation analysis that helped to establish the nature and extents of the relationship between the independent and dependent variables discussed in this study (De Vaus, & De Vaus, 2001). Quantitative secondary data was collected from the published financial statements. In addition, primary data was collected from finance officers and accountants of the nine manufacturing and allied firmslisted in the Nairobi Securities exchanges

3.3. Target Population

In research, a population is a whole group that the research is focusing on. It includes the entire elements where the researcher focuses on making inferences from Cooper and Schidler (2006). The target population for the study constituted the accounts and finance staff working with the 9manufacturing and allied firms listed in the Nairobi Securities

Exchange as at January 2017.The reason for choosing the aforestated was because there was limited research that had hitherto been conducted in relation to cash flow trends and shareholders' returns among listed manufacturing and allied companies in Kenya**.** A total of 227 accounts and finance officers working with the aforestated firms comprised the study population.

3.4. Sampling Frame

A sample is a representative and manageable subset of the entire population where significant estimates and inferences pertaining the whole population can be obtained (Saunders, Lewis, & Thornhill, 2012). A sampling frame is a list of all those item or element in the population. In this case, the sampling frame was made up of accounts and finance staff working with all listed manufacturing and allied firms in Kenya. The sampling is as shown in Table 3.1.

Table 3.1: Sampling Frame

Name of Firm	Accountants	Finance Officers	Sub-Total
B.O.C Kenya Ltd	15	8	23
BAT Kenya Ltd	17	12	29
Carbacid Investments Ltd	8	7	15
EABL Ltd	24	14	38
Eveready East Africa Ltd	9	4	13
Frame Tree Group Holdings Ltd	12	7	19
Kenya Orchards Ltd	13	8	21
Mumias Sugar Co. Ltd	21	16	37
Unga Group Ltd	20	12	32
Grand Total	**139**	**88**	**227**

3.5. Sample Size and Sampling Technique

The study employed the Nassiuma's (2008) formula to calculate the sample size as shown below.

$$n = \frac{N \times C^2}{C^2 + (N-1)e^2}$$

Where:

n = sample size

N = Study population

C = Coefficient of Variation (21% - 30%)

e = Error margin

The above equation was substituted as illustrated below:

$$n = \frac{227 \times 0.21^2}{0.21^2 + (227)0.025^2}$$

n = 54.0

n =54 respondents

The sampling technique used was stratified random sampling because the distribution of finance and accounts staff across the nine listed manufacturing and allied firms as shown in Table 3.1 varied across the entities. This sampling method ensured that there was proportionate representation of all the nine firms hence reducing sampling bias.

3.6. Research Instruments

The study employed secondary data and primary data whereby secondary data was obtained from published financial statements of the manufacturing and allied companies in the NSE. Primary data was collected using structured questionnaires from the targeted respondents. Secondary data was recorded in a data collection sheet. A data collection sheet is an important tool for collecting data (Ho et al., 2016). Data collection sheet has been included in the appendices.3. The data collection sheet included data on net cash flow from operating activities, net cash flows from investing activities, and net cash flow from financing activities. Also, data on shareholders return for each firm under investigation was also being recorded.

3.7 Pilot Study

Pilot study involves pre-testing questionnaire to test validity, credibility and accuracy of the research questions prior to the actual collection of data from actual respondents (Yin, 2013). The pilot study was conducted in Nakuru town prior to administering the research questionnaire on the actual respondents in Nairobi. The respondents for pilot study were drawn from the branches of listed manufacturing and allied firms in Nakuru town. The rationale of conducting the pilot study was to determine both validity and reliability of the data collection tool. Validity was determined through consultation with the University supervisor whose views were deemed sufficient in determining the content validity of the research questionnaire. The Cronbach alpha coefficient was used to test the reliability of the data collection instrument. The results of the reliability testing are as shown in Table 3.2.

Table 3.2: Reliability Test Results

Study Variable	Test Items	Alpha Coefficient
Cash flow from operating activities	7	0.81
Cash flow from investing activities	7	0.84
Cash flow from financing activities	7	0.78
Shareholders' returns	7	0.85

As shown in Table 3.2, it is clear that all the four study variables (cash flow from operating activities, cash flow from investing activities, cash flow from financing activities, and shareholders' returns) returned Cronbach alpha coefficients greater than the recommended threshold of 0.7. Therefore, the research questionnaire was found to be reliable.

3.8 Data Collection Procedure

The study reviewed relevant books, published financial statements and annual financial reports from 2007 to 2016 in relation to listed manufacturing and allied firms in Kenya. In addition, primary data were collected using self-administered questionnaires. The questionnaires were distributed within three days and collected thereafter.

3.9 Data Processing and Analysis

The collected data were processed with the aid of the Statistical Package for Social Sciences (SPSS) Version 24 tool. The data were reviewed for completeness, accuracy, consistency, and relevance prior to analysis. The analysis incorporated both descriptive and inferential statistics. Wagner, and Raghunathan, (2007) stipulated that regression model can be employed in explanatory research to predict the value of a dependent variable based on independent variable values. Therefore, a regression model was utilized in this study to determine the effect of each cash flow trend variable on the shareholders' returns. The following regression model was used:

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

Where:

Y = Shareholders' returns

β_0= Constant

X_1= cash flow from operating activities

X_2 = Cash flow from investing activities

X_3 = Cash flow financing activities

ε= Error term at 95% confidence level

$\beta_1, \beta_2, \beta_3$ = Régression coefficients

Total Shareholders Return (TSR) was determined using the following formula:

$$TSR = \frac{Pe - Pb + Dividend}{Pb}$$

Where

Pe = Price at end

Pb=Price at the Beginning

The reason why Total Shareholders Return (TSR) ratio was used is because unlike other ratios it measures both dividends paid and share price appreciation. The reason why the study employed TSR ratio is because unlike other measures of shareholders return such as ROE which focuses more on measuring firm profitability, TSR ratio tend to be a direct measure of total shareholders receive at the end of a given financial year. However, due to limitation of earning per share where some firm may report their earning per share based on operating cash flows instead of net income, earning per share will be complemented TSR.

The test for significance of the regression model involved the use of F-test to measure multiple variables which in this case included operating cash flow, investing cash flow and financing cash flow. The F-test framework has two frameworks namely restricted and unrestricted framework which helps to explain variation in the independent variables

(Sanderson, & Windmeijer, 2016). The coefficient of determination (R^2) represents the explained variation. It involves the sum of squares due to regression divided by the total sum of square. A coefficient of determination of 1 implies that regression line has perfectly fitted the data. R^2 is the explained variation of the dependent variable (Nakagawa & Schielzeth, 2017). The results of the analysis were presented in form of tables.

CHAPTER FOUR
FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter captures the response rate, the background information of the respondents, and also the results of data analysis in respect of cash flow trends and shareholders' returns amongst manufacturing and allied firms listed in the Nairobi Securities Exchange. The results, which are both descriptive and inferential, are accompanied by pertinent interpretations and discussions.

4.2 Response Rate

The number of questionnaires that are filled and returned by or collected from the respondents against the total number of questionnaires issued constitutes the response rate. The researcher had issued a total of 54 questionnaires to the respondents, out of which, 40 were filled and returned. This represented 74.07% response rate.

4.3 Descriptive Results and Interpretations

The study analyzed the views of the finance officers and chief accountants regarding cash flow trends and shareholders returns. Their views were captured on a Likert scale where 'strongly disagree', 'disagree', 'not sure', 'agree, and 'strongly agree' were represented by integers 1, 2, 3, 4, and 5 respectively.

4.3.1 Cash Flow from Operating Activities

This section brings out the descriptive results and related interpretations and discussions relative to cash flow from operating activities. The results to this effect are indicated in Table 4.1.

Table 4.1: Descriptive Statistics for Cash Flow from Operating Activities

	N	SA	A	NS	D	SD	Mean	Std. Dev.
Increase in interest from investments increases shareholders returns	40	47.5	42.5	7.5	2.5	0	4.35	.736
Proceeds from sales of goods and services increases shareholders returns	40	50.0	40.0	2.5	5.0	2.5	4.30	.939
A change in net income has an influence on shareholders returns	40	30.0	55.0	12.5	2.5	0	4.13	.723
Working capital changes such as accounts receivables and payables influence shareholders returns	40	15.0	40.0	20.0	7.5	17.5	3.28	1.320
Cash payments for acquisition to suppliers of merchandize and raw materials reduces shareholders returns	40	12.5	40.0	12.5	20.0	15.0	3.15	1.312
Increase in non-cash expenses such as amortization and depreciation reduces shareholders returns	40	17.5	25.0	22.5	22.5	12.5	3.12	1.305
Payment of interest on loan reduces shareholders return	40	17.5	30.0	7.5	17.5	27.5	2.92	1.526

The study noted that 47.5% and 42.5% strongly agreed and agreed respectively with the assertion that increases in interest from investments increases shareholders returns among manufacturing and allied firms listed in the Nairobi Securities Exchange. Cumulatively, 90.0% of the respondents either agreed or strongly agreed that proceeds from sales of goods and services increases shareholders' returns. It was generally concurred (mean = 4.13) that a change in net income has an influence on shareholders' returns. There was insignificant variation regarding this proposition (stddev = 0.723).

Though a significant number of respondents (55.0%) at least agreed that working capital changes such as accounts receivables and payables influence shareholders returns, respondents were generally not sure (mean = 3.28) regarding the same; a fact that further supported by the significant variation in their views (stddev = 1.320). In the same light, respondents were, on average, not certain whether or not cash payments for acquisition to suppliers of merchandize and raw materials reduces shareholders' returns (mean = 3.15); and if or not increase in non-cash expenses such as amortization and depreciation reduces shareholders' returns (mean =3.12). In respect of the foregoing assertions, there was significant variation in the opinions of the respondents (stddev> 1.000).

4.3.2 Cash Flow from Investing Activities

The study analyzed the views of selected staff working with manufacturing and allied firms listed with the NSE in regard to cash flow from investing activities. The results shown in Table 4.2 outlines a summary of these views.

Table 4.2: Descriptive Statistics for Cash Flow from Investing Activities

	N	SA	A	NS	D	SD	Mean	Std. Dev.
Returns from investments in shares increase shareholders return	40	57.5	22.5	12.5	5.0	2.5	4.28	1.037
Cash received from security investments from other companies increases returns of shareholders	40	27.5	52.5	7.5	2.5	10.0	3.85	1.167
Increase in capital expenditure (Capex) reduces shareholders returns	40	27.5	40.0	20.0	12.2	0	3.83	.984
Purchase of property plant and equipment reduces shareholders returns	40	22.5	50.0	10.0	12.5	5.0	3.73	1.109
Purchase of shares reduces shareholders return	40	25.0	32.5	15.0	15.0	12.5	3.43	1.357
Payment of long term debt reduces shareholders returns	40	17.5	25.0	10.0	27.5	20.0	2.93	1.439
Cash flows from investing activities decreases shareholders return	40	17.5	20.0	12.5	25.0	25.0	2.80	1.471

The study found that in total, 80% of the respondents at least admitted that returns from investments in shares increase shareholders return among manufacturing and allied companies listed in the Nairobi Securities Exchange. An equal number of respondents (80%) held similar views on the assertion that cash received from security investments from other companies increases returns of the aforesaid entities. On average, it was admitted (mean = 3.83) that increase in capital expenditure (Capex) among manufacturing and allied companied listed in the Nairobi Security Exchanges reduces shareholders returns. The variation in the respondents' opinions was not significant (stddev = 0.984).

It was also revealed that half of the respondents (50.0%) concurred that purchase of property plant and equipment reduces shareholders' returns. While 32.5% of the

respondents admitted that purchase of shares reduces shareholders' returns, 25.0% others strongly agreed with this view. It was generally not clear (mean = 2.93) regarding the assertion that payment of long term debt by manufacturing and allied companies listed in the NSE reduces shareholders' returns. Respondents were also not sure whether cash flows from investing activities decreases shareholders' returns (mean = 2.80). In respect of these two statements, there were significant variations in the views of the respondents (stddev> 1.000).

4.3.3 Cash Flow from Financing Activities

In addition, the study examined the perceptions of the selected staff working with listed manufacturing in relation to cash flow from financing activities. The respondents' views to this effect are as shown in Table 4.3.

Table 4.3: Descriptive Statistics for Cash Flow from Financing Activities

	N	SA	A	NS	D	SD	Mean	Std. Dev.
Dividend payments by manufacturing and allied companies listed in the Nairobi Security Exchange increases shareholders returns	40	42.5	30.0	7.5	12.5	5.0	5.23	8.163
Principal payments on new investment project reduces shareholders returns	40	37.5	32.5	17.5	10.0	2.5	4.45	3.012
Increasing cash flow from financing activities increases shareholders returns	40	22.5	47.5	12.5	10.0	7.5	3.68	1.163
Payment of creditors decreases shareholders returns	40	25.0	35.0	12.5	20.0	7.5	3.50	1.281
Cash received from issuing shares increases shareholders returns	40	2.5	40.0	12.5	20.0	22.5	3.00	1.812
Issuance of debts/bonds increases shareholders returns	40	15.0	20.0	10.0	35.0	20.0	2.75	1.391
Purchase of shares increases returns of shareholders	40	12.5	25.0	10.0	25.0	27.5	2.70	1.436

The study established that 42.5% of the respondents strongly agreed that dividend payments increase shareholders' returns. In total, 70.0% of the respondents were in agreement that principal payments on new investment project reduce shareholders, returns amongst the studied firms. Although, there was general admission that increased cash flow from financing activities among these entities increases shareholders' returns (mean = 3.68), there was considerable variation in the respondents' views (stddev = 1.163). Payment of creditors was admitted by most of the respondents (60.0%) to result in decrease in shareholders' returns.

A significant number of respondents (42.5%) disputed that cash received from issuing shares increases shareholders' returns. However, a similar number of respondents

(42.5%) concurred with this argument. This was further reinforced by the general uncertainty (mean = 3.00) and significant variation of respondents' views (stddev = 1.812) regarding this proposition. Similarly, while 10.0% of the respondents were not sure regarding the statement those issuance debts or bonds increases shareholders' returns, 55.0% of the respondents disputed this proposition. In the same breadth, majority of the respondents disagreed that purchase of shares by manufacturing and allied companies listed in the Nairobi Securities Exchange increases returns of shareholders.

4.3.4 Total Shareholders' Returns

In respect of returns of shareholders, the study sought and analyzed the opinions held by the selected employees working with manufacturing firms. A summary of their views is as shown in Table 4.4.

Table 4.4: Descriptive Statistics for Total Shareholders' Returns

	N	ML	L	NS	LL	NA	Mean	Std. Dev.
Issuing of shares to the public by manufacturing and allied companies listed in the Nairobi Securities Exchange affect the price of share	40	40.0	47.5	10.0	2.5	0	4.25	.742
Insufficient cash flow affect the price of its share	40	30.0	42.5	17.5	10.0	0	3.92	.944
Issuing of shares to the public affect dividend issued to shareholders	40	32.5	40.0	12.5	5.0	10.0	3.80	1.244
Increase in cash flow increase the total dividend issued to shareholders	40	32.5	37.5	12.5	12.5	5.0	3.80	1.181
Insufficient cash flow affect the total dividend issued to shareholders	40	37.5	20.0	17.5	22.5	2.5	3.68	1.269
Increase in cash flow increase the price of share	40	22.5	27.5	15.0	17.5	17.5	3.20	1.436
Purchase of plant and equipment, payment of long term debt and purchase of shares always affect share price and dividend paid to shareholders	40	25.0	12.5	15.0	32.5	15.0	3.00	1.450

The study found that 47.5% of the respondents agreed while 40.0% others strongly agreed that issuing of shares to the public by manufacturing and allied companies listed in the Nairobi Securities Exchange affect the price of share. It was generally admitted that insufficient cash flow in the listed firms affect the price of their shares (mean = 3.92). There was insignificant variation in opinions of the respondents in this regard (stddev = 0.944). Though there was substantive variation in opinions (stddev = 1.244), it was generally admitted that issuing of shares to the public affect dividend issued to shareholders (mean = 3.80).

It was further established that 70.0% of the respondents at least admitted that increase in cash flow increase the total dividend issued to shareholders. In the same perspective, it was disputed by 25.0% of the respondents that insufficient cash flow affected the total dividends issued to shareholders. It was generally not certain (mean = 3.20) whether or not increase in cash flow in manufacturing and allied companies listed in the Nairobi Securities Exchange increase the price of shares. Moreover, respondents were not sure regarding the statement that purchase of plant and equipment, payment of long term debt and purchase of shares by the stated companies always affect share price and dividends paid to shareholders. There was significant variation in the opinions held by the participating respondents (stddev = 1.450).

4.4 Inferential Results and Interpretations

The study determined the relationship between the various cash flow trends and shareholders' returns amongst listed manufacturing and allied entities operating in Kenya. In addition, the influence of the cash flow trends on the shareholders' returns was evaluated. Both the primary and secondary data were employed to come up with inferential statistics.

4.4.1 Relationship between Cash Flow Trends and Shareholders' Returns

The study analyzed the relationship between cash flow trends and shareholders' returns using both Pearson's correlation coefficient. The individual trends which included cash flows from operating activities, cash flows from investing activities and cash flows from financing activities were correlated against total shareholders'' returns. The results indicated in Table 4.5 are in relation to the analysis of the primary data.

Table 4.5: Correlation between Cash Flow Trends and Shareholders Returns

		1	2	3	4
Cash Flows from Operating Activities and Shareholders Returns	Correlation Coefficient	1.000	.397*	.361*	.024
	Sig. (2-tailed)	.	.011	.022	.882
Cash Flows from Investing Activities and Shareholders Returns	Correlation Coefficient	.397*	1.000	.222	-.023
	Sig. (2-tailed)	.011	.	.168	.890
Cash Flows from Financing Activities and Shareholders Returns	Correlation Coefficient	.361*	.222	1.000	.046
	Sig. (2-tailed)	.022	.168	.	.777
Total Shareholders Returns	Correlation Coefficient	.024	-.023	.046	1.000
	Sig. (2-tailed)	.882	.890	.777	.
	N	40	40	40	40

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

The results shown in Table 4.5 indicated that there was a positive, weak and statistically not significant relationship between cash flow from operating activities and shareholders' returns ($r = 0.024$; $p > 0.05$). The correlation results meant that though the relationship between the two variables was positive, it was not only weak but of no substantive implications. The study also revealed that there existed a negative, weak and statistically not significant relationship between cash flow from investing activities and shareholders' returns ($r = -0.023$; $p > 0.05$). The correlation findings were interpreted to mean that cash flows from investing activities had only marginal relationship with returns of shareholders and that the stated relationship was not considerable. In addition, as shown in Table 4.5, the relationship between cash flow from financing activities and shareholders' returns was found to be positive, weak and statistically not significant ($r = 0.046$; $p > 0.05$). The results implied that in spite of the finding that increasing cash flows

from financing activities was likely to increase the returns of shareholders, the latter increase was likely to be marginal.

The correlation results emanating from the analysis of the primary data as illustrated in Table 4.6 were juxtaposed against similar results from analysis of secondary data. The correlation results of secondary analysis are outlined in Table 4.6.

Table 4.6: Correlation between Cash Flow Trends and Shareholders Returns

		1	2	3	4
Cash flow from operating activities	Correlation Coefficient	1.000	-.983**	.000	-.017
	Sig. (2-tailed)	.	.000	1.000	.966
Cash flow from investing activities	Correlation Coefficient	-.983**	1.000	-.117	.117
	Sig. (2-tailed)	.000	.	.765	.765
Cash flow from financing activities	Correlation Coefficient	.000	-.117	1.000	-.783*
	Sig. (2-tailed)	1.000	.765	.	.013
Earning per share	Correlation Coefficient	-.017	.117	-.783*	1.000
	Sig. (2-tailed)	.966	.765	.013	.

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

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

The correlation results shown in Table 4.6 indicate there existed a negative, strong and statistically significant relationship between cash flows from financing activities and shareholders' returns ($r = -0.783$; $p < 0.05$). The results which contradicted the findings from analysis of the primary data (Table 4.5), implied that cash flow from financing activities had a huge and significant negative implication on shareholders' returns amongst manufacturing and allied firms. The relationship between cash flow from operating activities and shareholders' returns (-0.17; $p > 0.05$), and between cash flows

from investing activities and shareholders' returns (0.117; p <0.05) mirrored similar correlation results depicted in Table 4.5.

These results were contrary to earlier observations made in a study conducted by Hubbard (1988). The latter study had found that there exists a significant relationship between profitability and cash flows from operating activities. This is premised on the fact that profitability is often directly associated with shareholders' returns. The foregoing findings are supported by Michaely and Qian (2016) who argued that dividends which are a parameter of shareholders' returns are not necessarily pegged on profitability emanating from among others, cash flows from investing activities. These findings, however, were contrary to results of an earlier study conducted by Lan (2012) which found that increment in cash flows from financing activities may lead to increased but due to a rising number of investors, the returns of each shareholders are likely to be fewer.

4.5.2 Influence of Cash Flow Trends on Shareholders' Returns

The study evaluated how various cash flow trends influenced returns of shareholders in listed manufacturing and allied companies. This was achieved through pertinent regression analysis where the results of coefficient of determination, analysis of variance, and regression coefficients are as shown in Tables 4.7 to 4.10.

Table 4.7: Model Summary of Primary Data

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.162[a]	.026	-.055	.60597

a. Predictors: (Constant),Cash Flows from Financing Activities, Cash Flows from Investing Activities, Cash Flows from Operating Activities

The study as indicated in Table 4.7 observed that the relationship between cash flows trends and total shareholders' returns was positive but weak (R = 0.162). The results of the coefficient of determination (R^2 = 0.026) indicated that only 2.6% of the shareholders' returns could be attributed to the various cash flow trends that were studied.

In this respect, therefore, the implications of these results was that cash flow trends played a very marginal role in light of returns of shareholders amongst the listed manufacturing and allied firms. Further results interpretation was that there existed other factors that played a far much more important role relative to shareholders' returns in comparison to cash flow trends. The results of analysis of secondary data indicated improvements in relation to both R and R^2 as shown in Table 4.8.

Table 4.8: Model Summary of Secondary Data

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778[a]	.605	.582	.36717

a. Predictors: (Constant), Cash Flows from Financing Activities, Cash Flows from Investing Activities, Cash Flows from Operating Activities

The study as indicated in Table 4.8 observed that the relationship between cash flows trends and total shareholders' returns was both positive and strong (R = 0.778). The results of the coefficient of determination (R^2 = 0.605) indicated that 60.5% of the shareholders' returns could be attributed to the various cash flow trends that were studied. In this respect, therefore, the implications of these results was that cash flow trends played an important role in light of returns of shareholders amongst the listed manufacturing and allied firms in Kenya. Further results interpretation was that there existed other factors represented by 39.5% that played a role relative to shareholders' returns among the studied firms.

The analysis of variance (ANOVA) results are as shown in Table 4.9 and Table 4.10. The results indicated that that the regression model was statistically significant.

Table 4.9: ANOVA of Primary Data

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.354	3	.118	0.322	.810[a]
	Residual	13.219	36	.367		
	Total	13.573	39			

a. Predictors:(Constant),Cash Flows from Financing Activities, Cash Flows from Investing Activities, Cash Flows from Operating Activities

b. Dependent Variable: Total Shareholders Returns

However, the results of ANOVA in relation to secondary data as shown in Table 4.10 indicated that that the regression model was statistically significant ($F = 2.370$; $p < 0.05$).

Table 4.13: ANOVA of Secondary Data

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	555.502	3	185.167	2.370	.003[a]
	Residual	675.596	5	135.119		
	Total	1231.098	8			

a. Predictors: (Constant), Cash Flows from Financing Activities, Cash Flows from Investing Activities, Cash Flows from Operating Activities

b. Dependent Variable: Earning per Share

The study further examined the influence of the various cash flow trends on shareholders' returns amongst listed manufacturing and allied firms. The results regarding this are as depicted in Table 4.11 and Table 4.12. The following regression model was employed.

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

Table 4.11: Regression Coefficients for Primary Data

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	3.956	.784		5.044	.000
	Cash Flows from Operating Activities	-.021	.224	-.018	-.095	.925
	Cash Flows from Investing Activities	-.010	.194	-.010	-.052	.959
	Cash Flows from Financing Activities	-.050	.053	-.157	-.942	.353

a. Dependent Variable: Total Shareholders Returns

The results shown in Table 4.11 are substituted as follows:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

$$\mathbf{Y= 3.956 - 0.021 X_1 - 0.010 X_2 - 0.050 X_3}$$

The above model was interpreted to mean that a unit change in shareholders' returns as was subject to decrease in cash flow returns from operating activities, investing activities, and financing activities at 0.021unit, 0.010 unit, and 0.050 unit respectively given that other factors were held constant (3.956).

Table 4.12: Regression Coefficients for Secondary Data

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.341	.664		.521	.651
	Cash flow from operating activities	.081	.145	.063	.432	.541
	Cash flow from investing activities	.456	.116	.431	3.849	.001
	Cash flow from financing activities	.623	.052	.710	6.821	.000

a. Dependent Variable: Earning per share

The results shown in Table 4.12 are substituted as follows:

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

$$\mathbf{Y= 0.341 + 0.081 X_1 + 0.456 X_2 + 0.623 X_3}$$

The above model was interpreted to mean that a unit change in shareholders' returns was subject to increase in cash flow returns from operating activities, investing activities, and financing activities at 0.081unit, 0.456 unit, and 0.623 unit respectively given that other factors were held constant (0.341). It is evident according to the regression coefficients resulting from analysis of the secondary data that the cash flow trends studied had substantive effect on returns of shareholders among manufacturing and allied firms in Kenya.

Given that the results of the analysis of secondary data returned a number of positive results as opposed to analysis of primary data (in respect of F-statistics and t-statistics), the former (secondary data) was used in further analysis and testing of null hypotheses as shown below.

4.5.3 Testing Null Hypotheses

The results of the T-statistics as shown in Table 4.8 were employed to test the null hypotheses as follows:

Testing Null Hypothesis One (H_{01})

H_{01}: There is no significant influence of cash flow from operating activities on shareholders returns among manufacturing and allied companies listed in the NSE

H_A: There is significant influence of cash flow from operating activities on shareholders returns among manufacturing and allied companies listed in the NSE

Results of t-statistics = (0.432; $p > 0.05$)

The results of the t-statistics were interpreted to mean that the influence of cash flow from operating activities on shareholders returns among listed manufacturing and allied firms was not statistically significant.

The results led to failure to reject the first null hypothesis. The results implied that cash flow from operating activities were not adequate at influencing returns of shareholders of manufacturing and allied companies listed on the Nairobi Securities Exchange.

Testing Null Hypothesis Two (H_{02})

H_{02}: There is no significant influence of cash flow from investing activities on shareholders returns among manufacturing and allied companies listed in the NSE

H_A: There is significant influence of cash flow from investing activities on shareholders returns among manufacturing and allied companies listed in the NSE

Results of t-statistics = (3.849; $p < 0.05$)

The results of the t-statistics were interpreted to mean that the influence of cash flow from investing activities on shareholders returns among listed manufacturing and allied firms was statistically significant. The second null hypothesis was, therefore, rejected.

Testing Null Hypothesis Three (H_{03})

H_{03}: There is no significant influence of cash flow from financing activities on shareholders returns among manufacturing and allied companies listed in the NSE

H_A: There is significant influence of cash flow from financing activities on shareholders returns among manufacturing and allied companies listed in the NSE

Results of t-statistics = (6.821; $p < 0.05$)

The results of the t-statistics were interpreted to mean that the influence of cash flow from financing activities on shareholders returns among listed manufacturing and allied firms was statistically significant. The third null hypothesis was consequently rejected.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter summarizes key study findings in relation to the results of descriptive and inferential statistics. The chapter also presents the conclusions drawn from the findings and recommendations suggested.

5.2 Summary

The findings are summarized according to study objectives and variables.

5.2.1 Cash Flow from Operating Activities

The study found that increase in interest from investments increases shareholders returns among manufacturing and allied firms listed in the NSE. It was also found that proceeds from sales of goods and services increases shareholders' returns. It was also established that a change in net income has an influence on shareholders' returns. Moreover, it was agreed that working capital changes such as accounts receivables and payables influence shareholders returns. It was not clear regarding cash payments for acquisition to suppliers of merchandize and raw materials reducing shareholders' returns. The influence of cash flow from operating activities was established to be largely inconsequential to shareholders' returns.

5.2.2 Cash Flow from Investing Activities

It was found that that returns from investments in shares increase shareholders return among manufacturing and allied companies listed in the NSE. It was also established that that cash received from security investments from other companies' increases returns. It was also established that increase in capital expenditure reduces shareholders returns. According to the findings, purchase of property plant and equipment reduces shareholders' returns, and purchase of shares reduces shareholders' returns. The findings indicated that the effect of cash flow from investing activities was significant.

5.2.3 Cash Flow from Financing Activities

The study established that dividend payments increase shareholders' returns. It was found that increased cash flow from financing activities among these entities increases shareholders' returns. Payment of creditors decreased shareholders' returns. It was not clear whether cash flows from investing activities decrease shareholders' returns. It was uncertain whether cash received from issuing shares increases shareholders' returns. It was unclear regarding the assertion that issuance of debts or bonds increases shareholders' returns. Cash flow from financing activities had significant influence on shareholders' returns.

5.2.4 Shareholders' Returns

It was found that that issuing of shares to the public by manufacturing and allied companies listed in the Nairobi Securities Exchange affect the price of share. It was established that insufficient cash flow in the listed firms affect the price of their shares. It was revealed that issuing of shares to the public affect dividend issued to shareholders. The study found that increase in cash flow increase the total dividend issued to shareholders. It was unclear whether or not increase in cash flow increases the price of shares. It was unclear regarding the proposition that purchase of plant and equipment, payment of long term debt and purchase of shares always affect share price and dividends paid to shareholders. The study further established that cash flow trends had only substantive effect on shareholders' returns.

5.3 Conclusions

The study concluded that increase in interest from investments resulted in increased shareholders returns. It was also concluded that proceeds from sales of goods and services increases shareholders' returns of manufacturing and allied firms. A change in net income was inferred to influence shareholders' returns. The study concluded that it remained largely uncertain working capital changes influencing shareholders returns. It was also concluded that cash flow from operating activities had only marginal effect on shareholders' returns.

In respect of cash flow from investing activities, the study inferred that investments in shares increase shareholders' return. It was also concluded that that cash received from security investments from other companies' increases returns. Increase in capital expenditure was concluded to reduce shareholders returns. The study further found and deduced that cash flow from investing activities were substantively consequential to shareholders' returns among manufacturing and allied firms listed on the NSE.

The study concluded that dividend payments increase shareholders' returns. According to the study findings, it was concluded that payment of creditors decreased shareholders' returns. The study concluded that there was uncertainty whether cash received from issuing shares increases shareholders' returns. Moreover, cash flow from financing activities was found to have significant influence on shareholders' returns.

5.4 Recommendations

The study recommended that manufacturing and allied firms should ensure that there is increased interest from investments. In the same breadth, it was recommended that these firms ought to increase the sales of both their goods and services with the aim of improving returns of their shareholders. These firms are further advised to lay down strategies that can enable them to increase their net income.

In respect of cash flow from investing activities, the study recommended that the manufacturing and allied firms ought to increase investment in shares. In addition, they were advised to increase cash received from security investments. It was further recommended that the firms should essentially their capital expenditure as one of the crucial ways of increasing returns of their shareholders. Moreover, they should reduce their focus on procuring property, plant and equipment.

Relative to cash flow from financing activities and shareholders' returns, the study recommended that the manufacturing and allied firms listed in the NSE should increase the payment of dividends. In the same breadth, they should increase cash flow from financing activities. The study further advised that payment to creditors ought to be reduced in order to increase shareholders' returns.

5.5 Suggestions for Further Studies

The study recommends further research relative to other factors that may influence shareholders' returns. More so, it is advisable to study the relationship between cash flow trends and shareholders' returns among other listed firms besides manufacturing and allied companies. It is also recommended that it would be advisable to evaluate the influence of cash flow trends on other financial factors such as profitability and financial sustainability of listed manufacturing and allied firms.

REFERENCES

Abor, J. Y. (2017). Working Capital Management. In *Entrepreneurial Finance for MSMEs* (pp. 225-255). Springer International Publishing.

African Development Bank Group. (2014). *Eastern Africa's Manufacturing Sector: Promoting Technology, Innovation, Productivity and Linkages*. Retrieved: https://www.afdb.org/fileadmin/uploads/afdb/Documents/GenericDocuments/Regional_Manufacturing_Study_07_2014.pdf

African Development Bank. (2013).*The State of Kenya's Private Sector*. Retrieved: http://kenya chamber.co.ke/wpcontent/uploads/2017/02/The_State_of_Kenya_s_Private_Sector.pdf

Al-Dhamari, R. A., Ismail, K., Izah, K. N., & Al-Gamrh, B. (2016). *Board Diversity and Corporate Payout Policy: Do Free Cash Flow and Ownership Concentration Matter*.

Almeida, H., Campello, M., & Weisbach, M. S. (2004). The cash flow sensitivity of cash. *The Journal of Finance*, *59*(4), 1777-1804.

Alvarez, F., & Lippi, F. (2017). Cash burns: An inventory model with a cash-credit choice. *Journal of Monetary Economics*.

Alvarez, F., Lippi, F., & Robatto, R. (2017). *Cost of Inflation in Inventory Theoretical Models.*

Andreas, A. (2017). Analysis of Operating Cash Flow to Detect Real Activity Manipulation and Its Effect on Market Performance. *International Journal of Economics and Financial Issues*, *7*(1).

Baik, B., Cho, H., Choi, W., & Lee, K. (2016). Who classifies interest payments as financing activities? An analysis of classification shifting in the statement of cash flows at the adoption of IFRS. *Journal of Accounting and Public Policy*, *35*(4), 331-351.

Ball, R., Gerakos, J., Linnainmaa, J. T., & Nikolaev, V. (2016). Accruals, cash flows, and operating profitability in the cross section of stock returns. *Journal of Financial Economics*, *121*(1), 28-45.

Barth, M. E., Clinch, G., & Israeli, D. (2016). What do accruals tell us about future cash flows? *Review of Accounting Studies*, *21*(3), 768-807.

Bhundia, A. (2012). A comparative study between free cash flows and earnings management. *Business Intelligence Journal*, *5*(1), 123-129.

Blasi, J., Kruse, D., & Freeman, R. (2017). Having a Stake: Evidence and Implications for Broad-based Employee Stock Ownership and Profit Sharing. *Third Way NEXT*.

Carroll, C., & Griffith, J. M. (2001). Free cash flow, leverage, and investment opportunities. *Quarterly Journal of Business and Economics*, 40(3), 141-153.

Chang, X., Dasgupta, S., Wong, G., & Yao, J. (2014). Cash-flow sensitivities and the allocation of internal cash flow. *The Review of Financial Studies*, *27*(12), 3628-3657.

Collins, D. W., Hribar, P., & Tian, X. S. (2014). Cash flow asymmetry: Causes and implications for conditional conservatism research. *Journal of Accounting and Economics*, *58*(2), 173-200.

Da Costa Moraes, M. B., & Nagano, M. S. (2014). Evolutionary models in cash management policies with multiple assets. *Economic Modeling*, *39*, 1-7.

Da Costa Moraes, M. B., Nagano, M. S., & Sobreiro, V. A. (2015). Stochastic cash flow management models: A literature review since the 1980s. In *Decision Models in Engineering and Management* (pp. 11-28). Springer International Publishing.

Das, C. P., & Parida, M. (2016). A Study on Cash Management and Determinants of Cash Holding. *Splint International Journal of Professionals*, *3*(3), 102.

Dasgupta, S., & Sengupta, K. (2007). Corporate liquidity, investment and financial constraints: Implications from a multi-period model. *Journal of Financial Intermediation*, 16(2), 151-174.

De Vaus, D. A., & De Vaus, D. (2001). *Research design in social research*. Sage.

Deleplace, G., & Nell, E. J. (Eds.). (2016). *Money in Motion: the post-Keynesian and circulation approaches*. Springer. *Economic Review*, 76, 659–665.

Demirguc-Kunt, A., Detragiache, E., & Merrouche, O. (2013). Bank capital: Lessons from the financial crisis. *Journal of Money, Credit and Banking*, *45*(6), 1147-1164.

Drehmann, M., & Nikolaou, K. (2013). Funding liquidity risk: definition and measurement. *Journal of Banking and Finance*, *37*(7), 2173-2182.

Elston, J. A. (1996). Dividend policy and investment: Theory and evidence from us panel data. *Managerial and decision economics*, 267-275.

Fazzari, S. M., Hubbard, R. G., & Petersen, B. G. (2000). Investment-cash flow sensitivities are useful: A comment on Kaplan and Zing ales. *The Quarterly Journal of Economics*, 115(2), 695-705.

Farshadfar, S., & Monem, R. (2013). Further evidence on the usefulness of direct method cash flow components for forecasting future cash flows. *The international journal of accounting*, *48*(1), 111-133.

Faulkender, M., Flannery, M. J., Hankins, K. W., & Smith, J. M. (2012). Cash flows and leverage adjustments. *Journal of Financial Economics*, *103*(3), 632-646.

Fazzari, S.M., Hubbard, R.G., & Petersen, B.G. (1988). *Financing constraints and corporate investment.* N.B.E.R. Working Paper No. 2387.

Gordon, E. A., Henry, E., Jorgensen, B. N., & Linthicum, C. L. (2017). Flexibility in cash-flow classification under IFRS: determinants and consequences. *Review of Accounting Studies*, *22*(2), 839-872.

Griffith, J. M. & Carroll. C. (2001). Free Cash Flow, Leverage and Investment

Harris, P. (2016). A Case Study of the Cash Flow Statement: US GAAP Conversion to IFRS. *Journal of Business Case Studies (JBCS)*, *12*(1), 1-6.

Ho, S., Broucker, B., Crompvoets, J., Buntinx, I., & Pattyn, V. (2016). Its4land: Research instruments.

Hubbard, R. G. (1998). Capital-market imperfections and investment. *Journal of Economic Lit-erature*, 36, 193–225

Jensen, M. C. (1986). Agency costs and free cash flow, corporate finance and takeovers. *American*

Jeppson, N. H., Ruddy, J. A., & Salerno, D. F. (2016). The Statement of Cash Flows and the Direct Method of Presentation. *Management Accounting Quarterly*, *17*(3), 1.

Kadioglu, E., Kilic, S., & Yilmaz, E. A. (2017). Testing the Relationship between Free Cash Flow and Company Performances in Borsa Istanbul. *International Business Research*, *10*(5), 148.

Kaplan, S.N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The Quarterly Journal of Economics*, 112(1), 169-215.

Kenya National Bureau of Statistics. (2016) *Economic Survey 2016*.http://www.knbs.or.ke /index.php? Option=com_phocadownload and view=category download=862: economic-survey-2016andid=107: economic-survey-publications and It emid=1181.

Keynes, J. M. (2016). *General theory of employment, interest and money*. Atlantic Publishers and Dist.

Khan, U. A., Aleemi, A. R., & Qureshi, M. A. (2016). Is Economic Value Added More Associated with Stock Price than Accounting Earnings? Evidence from Pakistan. *City University Research Journal*, *6*(2), 204-216.

Kroes, J. R., &Manikas, A. S. (2014). Cash flow management and manufacturing firm financial performance: A longitudinal perspective. *International Journal of Production Economics*, *148*, 37-50.

Lan.Joe. (2012).The Cash Flow Statement: Tracing the Sources and Uses of Cash**.** *The AAII Journal. Retrieved :*<http://www.aaii.com/journal/article/the-cash-flow-statement-tracing-the-sources-and-uses-of-cash.touch>

Lehmann, M., & Dsouza, N. (2017). What Brexit means for the interpretation and drafting of financial contracts.

Lev, B., Li, S., & Sougiannis, T. (2010). The usefulness of accounting estimates for predicting cash flows and earnings. *Review of Accounting Studies, 15*(4), 779-807.

Lewellen, J., & Lewellen, K. (2016). Investment and cash flow: New evidence. *Journal of Financial and Quantitative Analysis*, *51*(4), 1135-1164.

Meghana. S. (2017). *Keynes's Liquidity Theory of Interest (With Criticisms)*. Retrieved:<http://www.microeconomicsnotes.com/economic-theories/theory-of-interest/keyness-liquidity-theory-of-interest-with-criticisms/1360.

Michaely, R., &Qian, M. (2016). Stock Liquidity and Dividend Policy: Evidence from a Natural Experiment.

Michalski, G. (2014). Value maximizing corporate current assets and cash management in relation to risk sensitivity: Polish firm's case. *Browser Download This Paper*.

Miller, M. H., & Orr, D. (1966). A Model of the Demand for Money by Firms. *The Quarterly journal of economics*, *80*(3), 413-435.

Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic* Review, 48, 261–297.

Montgomery, D. C. (2017). *Design and analysis of experiments*. John Wiley & Sons.

Nairobi Security Exchange. (2017). *Listed Companies*. Retrieved :< https://www.nse.co.ke/listed-companies/list.html?start=50>

Nakagawa, S., & Schielzeth, H. (2017). Coefficient of determination R2 and intra-class correlation coefficient ICC from generalized linear mixed-effects models revisited and expanded. *BioRxiv*, 095851.

National Association of Manufactures. (2012). *Facts about Manufacturing*. Retrieved :<http://www.themanufacturinginstitute.org/Research/Facts-About-Manufacturing/~/media/A9EEE900EAF04B2892177207D9FF23C9.ashx>

National Association of Manufactures. (2017). *Global Manufacturing Economic Update: July* 2017http://www.nam.org/Newsroom/eNewsletters/Global-Manufacturing-Economic-Update/2017/Global-Manufacturing-Economic-Update--July-2017/>>

Nayan, S., Kadir, N., Yusof, A. H., & Ali, N. A. M. (2015). Post Keynesian Theory and Evidence of Money Supply Endogeneity: A Review Essay. *Journal of Finance and Economics*, *3*(4), 01-10.

Nobanee, H., & Abraham, J. (2017). The Impact of Free Cash Flow, Equity Concentration and Agency Costs on Firm's Profitability.

Opler, T. & Titman, S., (1993). The determinants of leveraged buyout activity: Free cash flow vs. financial distress costs. *The Journal of Finance*, *48*(5), pp.1985-1999.Opportunities. *Journal of Business and Economics*, 1(2):1-5.

Pawlina, G., & Renneboog, L. (2005). *Is Investment-Cash Flow Sensitivity Caused by Agency Costs or Asymmetric Information? Evidence from the UK. European Financial Management*, 11(4), 483-513.Singh,

Premachandra, I. M. (2004). A diffusion approximation model for managing cash in firms: An alternative approach to the Miller–Orr model. *European Journal of Operational Research*, *157*(1), 218-226.

Renneboog, L., & Szilagyi, P. G. (2015). How relevant is dividend policy under low shareholder protection? *Journal of International Financial Markets, Institutions and Money*.

Richardson, S. (2006). Over-investment of free cash flow. *Review of accounting studies*, *11*(2-3), 159-189.

Sanderson, E., & Windmeijer, F. (2016). A weak instrument F-test in linear IV models with multiple endogenous variables. *Journal of Econometrics*, *190*(2), 212-221.

Sardoni, C. (2017). Circuitist and Keynesian Approaches to Money: Reconciliation. *Metroeconomica*, *68*(2), 205-227.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students.* Harlow: Pearson Education Limited.

Survey Design Protocols 200. Proceedings of the American Statistical Association, Survey Research Methods Section, pp. 3333-3340.

Thiruvadi, S., Huang, H. W., Wheatley, C. M., & Thiruvadi, S. (2016). Free Cash Flow and Debt Monitoring Hypotheses: Evidence from Material Internal Control Weakness Disclosure. *Journal of Forensic and Investigative Accounting*, *8*(1).

Trochim, W. M. (2006). The Research Methods Knowledge Base, 2nd Ed. Internet WWW page, at URL :< http://www.socialresearchmethods.net/kb/> (version current as of October 20, 2006).

Vogt, S. C. (1994). The cash flow/investment relationship: evidence from US manufacturing firms. *Financial management*, 3-20.

Wagner, J. & Raghunathan, T.E. (2007). *Bayesian Approaches to Sequential Selection of*

World Economic Forum. (2013). Africa Competitiveness Report 2013. *World Economic Forum.* Geneva.

Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.

APPENDICES

APPENDIX I

LETTER OF INTRODUCTION

SIMON GATHU
P.O BOX 10029
NAKURU

JKUAT – NAKURU CBD CAMPUS
P.O. BOX 1063 – 20100,
NAKURU, KENYA.

RE: LETTER OF INTRODUCTION TO UNDER TAKE RESEARCH

I am a student at Jomo Kenyatta University of Agriculture and Technology pursuing Masters of Business Administration in finance. As part of the requirement I am suppose to undertake proposal and research writing.

My area of research interest is on the manufacturing and allied firms listed in the Nairobi Security Exchange. Over the recent period, most manufacturing companies in Kenya have been facing cash flow and debt problems.

Based on the problems faced by those firms, I am currently undertaking a research on the "*Influence of cash flow trends on shareholders returns among listed manufacturing and allied companies in the NSE"* so that I can recommend what can be done to improve their performance.

Yours Sincerely,

Simon Gathu Kariuki

APPENDIX II

RESEARCH QUESTIONNAIRE FOR ACCOUNTS AND FINANANCE STAFF

This questionnaire is an essential part of a study this study whose title is**: Influence of cash flow trends on shareholders returns among manufacturing and allied companies listed in the Nairobi Securities Exchange (NSE).**You are kindly requested to fill in the questionnaire according to the instructions provided. Kindly tick against the correct choice, Please remember not to indicate your name on the questionnaire.

Section I

Background Information

1. What is your highest academic qualification?

   Certificate [ ] Diploma [ ]

   First Degree [ ] Post-Graduate Degree [ ]

2. Do you have any of the following professional qualifications?

   Certified Public Accountants (CPA) [ ]

   Certified Credit Professionals (CCP) [ ]

   Certified Investment and Financial Analysts (CIFA) [ ]

   Certificate in Securities Analysis and Trading (CSAT) [ ]

   None [ ]

3. How long have you been working in this organization?

   Less than 5 years [ ]

   6 years-10 years [ ]

   11 years-15 years [ ]

   More than 16 years [ ]

Section II

Kindly indicate your level of agreement with the various propositions under each of following sections.

Kindly use the following Likert scale:

1 Strongly Disagree (SD)

2 Disagree, (D)

3 Not Sure (NS)

4 Agree (A)

5 Strongly Agree (SA)

Cash Flows from Operating Activities and Shareholders Returns

Statements	SD 1	D 2	NS 3	A 4	SA 5
4. A change in net income has an influence on shareholders returns among manufacturing and allied firms listed in the Nairobi Securities Exchange.					
5. Working capital changes such as accounts receivables and payables influence shareholders returns in manufacturing and allied companies listed in the Nairobi Securities Exchange					
6. Increase in non-cash expenses such as amortization and depreciation reduces shareholders returns among listed manufacturing and allied firms in the Nairobi Securities Exchange.					
7. Increase on interest from investments increases shareholders returns among manufacturing and allied firms listed in the Nairobi Securities Exchange.					
8. Proceeds from sales of goods and services increases shareholders returns among manufacturing and allied companies listed in the Nairobi Securities exchange					

9. Cash payments for acquisition to suppliers of merchandize and raw materials reduces shareholders returns among manufacturing and allied companies listed in the Nairobi Securities exchange					
10. Payment of interest on loan among manufacturing and allied firms listed in the Nairobi Securities Exchange reduces shareholders return.					

Cash Flows from Investing Activities and Shareholders Returns

Statements	**SD 1**	**D 2**	**NS 3**	**A 4**	**SA 5**
11. Cash received from security investments from other companies increases returns of shareholders in manufacturing and allied companies listed in the Nairobi Security Exchange.					
12. Increase in capital expenditure (Capex) among manufacturing and allied companies listed in the Nairobi Security Exchanges reduces shareholders returns.					
13. Returns from investments in shares increase shareholders returns among manufacturing and allied companies listed in the Nairobi Securities Exchange.					
14. Purchase of property plant and equipment reduce shareholders returns manufacturing and allied companies listed in the Nairobi Securities Exchange**.**					
15. Payment of long term debt by manufacturing & allied companies listed in the Nairobi Securities Exchange reduces shareholders returns.					
16. Purchase of shares reduces shareholders return among manufacturing and allied firms listed in the Nairobi Security Exchange					

17. Cash flows from investing activities among listed manufacturing and allied companies in the Nairobi Security Exchange decreases shareholders return.					

Cash flows from Financing Activities and Shareholders Returns

Statements	**SD 1**	**D 2**	**NS 3**	**A 4**	**SA 5**
18. Cash received from issuing shares by manufacturing and allied companies listed in the Nairobi Securities exchange increases shareholders returns.					
19. Issuance debts/bonds by manufacturing and allied companies listed in the Nairobi Security Exchange increases shareholders returns					
20. Dividend payments by manufacturing and allied companies listed in the Nairobi Security Exchange increases shareholders returns					
21. Payment of creditors by manufacturing and allied companies listed in the Nairobi Security Exchange decreases shareholders returns.					
22. Principal payments on new investment project reduces shareholders returns among manufacturing allied companies listed in the Nairobi Security Exchange					
23. Purchase of shares by manufacturing and allied companies listed in the Nairobi Security Exchange increases returns of shareholders of companies.					
24. Cash flow from financing activities among listed manufacturing and companies in the Nairobi Securities Exchange increases shareholders returns.					

Part III

4. Kindly indicate how you agree or disagree with the following statements relating to Total Shareholders Returns (Tick where appropriate)

25. Increase in Cash flow in manufacturing and allied companies listed in the Nairobi Securities Exchange increase the Price of Share

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

26. Increase in Cash flow in manufacturing and allied companies listed in the Nairobi Securities Exchange increase the total Dividend Issued to shareholders

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

27. Insufficient cash flow in manufacturing and allied companies listed in the Nairobi Securities Exchange would affect the price of its shares

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

28. Insufficient cash flow in manufacturing and allied companies listed in the Nairobi Securities Exchange would affect total dividend issued to shareholders

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

29. Issuing of shares to the public by manufacturing and allied companies listed in the Nairobi Securities Exchange affect price of share.

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

30. Issuing of shares to the public by manufacturing and allied companies listed in the Nairobi Securities Exchange affect dividend issued to shareholders.

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

31. Purchase of plant and equipment, payment of long term debt and purchase of shares by manufacturing and allied companies always affect share price and dividend paid to shareholders.

1. Not at All [ ]. **2.** Least Likely [ ]. **3.** I am not sure. []**4.** Likely. [ ]. **5**. Most Likely [ ]

Thank you for your time and cooperation in filling the Questionnaire.

APPENDIX III

SECONDARY DATA COLLECTION SHEET

Below is a data collection sheet that will be utilize to collect data for each firm listed under manufacturing and allied sector

Year	**TSR**	**Operating Cash flow**	**Investing cash Flow**	**Financing Cash Flow**
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				
2015				
2016				

APPENDIX IV

LIST OF MANUFACTURING AND ALLIED FIRMS LISTED IN THE NSE

MANUFACTURING AND ALLIED

B.0.C Kenya Ltd Ord 5.00

British American Tobacco Ltd Ord 10.00

Carbacid Investment Ord 5.00

East African Breweries Ltd Ord 2.00

Mumias Sugar Co. LtdOrd 2.00

UngaGroupLtdOrd 5.00

Eveready East Africa Ord Ltd 1.00

Kenya Orchard Ltd Ord 5.00

Flame Tree Group Holdings Ltd Ord 0.825