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Abstract

Debt finance may either be long term or short term; a company may prefer long-term debt because of the tax deduction on interest payment which is a distinct advantage over equity. The amount of debt a firm utilizes to fund its activities depends on interest charged on debts, corporate income taxes rates, withholding taxes, and cost of financial distress and covenant restrictions in financial agreements. Rational investors expect good long term yield of their investment. Debt financing play an imperative role in general performance of a company and shareholder value creation. Shareholder value creation and profit maximizing are among the primary objectives of a firm. Shareholder value creation focuses more on long term sustainability of returns and not just profitability. There have been a number of firms facing financial crisis among them; Mumias Sugar Ltd, Uchumi Supermarkets Ltd and Kenya Airways Ltd. All these companies are quoted at the Nairobi Securities Exchange. Due to declining performance of these companies, share prices have been dropping and shareholders do not receive dividends. The aim of this study was to investigate the effect of debt financing on shareholder value creation of non-financial firms quoted at the Nairobi Securities Exchange for the period 2008-2014. The study was guided by Modigliani and Miller theory. The study used general and empirical models from previous studies as a basis for studying specific models which were modified to suit the current study. The study was guided by the positivism philosophy. The study employed explanatory design which is non-experimental. Census design was used as the number of non- financial firms at the time of the study was 40 companies. The data was gathered from NSE handbooks and

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CMA publications comprising of annual financial statements, income statements and accompanying notes. Ordinary Least Square regression analysis was conducted to examine the effect of debt financing decision on shareholder value creation. The results revealed that debt financing had a statistically significant positive effect on EVA. The study further analyzed sector based differences among companies listed at the NSE. The results indicated significant differences among various sectors in respect to the effects of debt financing on shareholder value creation. Feasible generalized least squares were used to estimate the model. Diagnostic tests were conducted to ensure non-violation of the assumptions of Classical Linear Regression Model. Among the tests conducted; includes panel unit root test and Autocorrelation. Study model tests showed that, there was non-violation the assumptions and hence the model found fit for further analysis. The study recommends that managers of quoted non-financial companies should strive and practice periodic shareholder value creation analysis for continuous assessment of growth process. The government through the CMA should come up with regulatory framework that guide firm listed in enacted dividend policies. Further it is recommended that shareholder value creation report is enforced as an additional statement published by the firms quoted at the NSE, Kenya.

Key Words: *Debt, Financing, Shareholder, Value Creation, Non-financial, Firms*

1.1 Background of the study

Managers strive to achieve this objective by making rational financing decisions regarding combination of finances which would minimize its cost of funds. Hartomo (2014) opines that, creation of shareholder value is becoming increasingly challenging as owners and managers are forced to make appropriate financial decisions that contribute to the management of operations that create value and also identify activities that destroy value. The main purpose of any firm is to enhance its shareholders' wealth. Investors, management and other stakeholders need to be aware of the company's performance to enable them make informed decisions about the future. Rational investors expect good long term return on their investment. Chauhan and Patel (2013) observed that maximizing shareholders' value is becoming the new co-operate standard. In addition it is necessary to implement effective instruments which are able to evaluate real value created.

Vijayalakshmi and Manoharan (2013) note that, equity shareholders as the owners of the company expect high and stable return on capital supplied by them and are more concerned with utilization of funds by the company. Capital markets are becoming increasingly global and this has made it possible and easy for investors to change their investments focus to higher yielding and well diversified portfolios, often foreign opportunities. Salehi, Valipour and Yousefi (2011) argue that, shareholders find value creating firms attractive and are motivated to invest in. Sharma and Kumar (2010) observe that, there has been increasing pressure on corporate executive to measure, manage and report the creation of shareholder value on regular basis. There are a number of performance measures available for analysis. The diversity features of companies make value determination process complex. Different firms have unique

characteristics and thus measures decided on by a firm are dependent on business objectives and performance being measured.

According to Hall (2013) a move towards shareholder value has been driven by continued globalization of capital markets, increased focus on co-operate governance, rising shareholders activism and investors move towards cash flow based evaluation. Capital markets are becoming increasingly global and investors can rapidly shift their investment in higher yielding opportunities. In addition, investors are becoming socially responsible by limiting their investment funds to companies that care about all stakeholders. Furthermore, the company that is destroying value always fights to attract further funding to finance growth. Most competitive management teams are responding to increased pressure to create value by embracing new metrics and new models for managing companies. Kumar and Tawari (2015) note that, investment funds are scarce and are more mobile, thus, to attract the funds, firms should submit themselves to the scrutiny of all stakeholders. Jalaja (2010) observed that rewarding shareholders is one of the best ways of ensuring that other stakeholders are served as well.

Value creation occurs in a company when its business is able to generate returns above the demands of investors or returns of capital invested are more than the cost of a company's capital (Hartomo, 2014). According to Oladele (2013), shareholder value creation occurs when a company generates more wealth for shareholders than they are able to generate for themselves. Jalaja (2010) observes that value creation involves much more than merely monitoring firms' performance; rather management team should be actively involved in the process of value creation. Lukayu and Mukanzi (2015) posit that shareholders' perspective could have a bearing on how well the management of a company articulates the creation of shareholder value. Moreover, maximizing shareholders' value requires knowledge about sources of value creation and destruction within the firm as well as the value implication of any new strategy and policies contemplated (Hall, 2013).

Chauhan and Patel (2013) note that, shareholders' wealth is measured in terms of returns received on investments which could either be in form of dividends, capital appreciation or both. The choice among financing options aims at finding the right financial structure that will maximize stockholders wealth. Oladele (2013) opines that organizations seek efficiency in performance and create value in terms of improved wealth for their shareholders and increase satisfaction to their customers and other stakeholders. Company value is estimated by means of future cash flows and new value is created only when the income obtained from capital invested cover the attracted capital expenses (Alaxei, 2015). Capital appreciation depends on the changes in the market value of stocks. Market value of stock depends upon a number of factors ranging from company specific to market specific (Sharma, 2010). Changes in shareholders wealth are inferred mostly from changes in stock prices, dividend paid and equity raised during the period. Andrei and Oleg (2013) observe that stock prices reflect investors' expectations about future cash flows which reflect the intrinsic value of the firm. Creating wealth for shareholders requires

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firms to undertake investment decisions that have a positive net present value (NPV). Projects are expected to earn return above the cost of fund and cumulative appreciation in value.

Jalaja (2010) observes that, value creation involves much more than solely monitoring firm performance value; rather, value is created when managers actively participate in firm's process of identifying good investment opportunities and taking steps to capture their potential value, which promotes growth and sustained improvement. Shareholder value creation and reporting is slowly becoming the global yardstick for measuring organization performance (Jalala, 2010). According to Hall (2013) the 2008 economic turmoil experienced in the world market changed the financial climate and perception of value. It has become apparent for companies to recognize and rectify ways of determining value, value drivers and improve returns from investments. Some of the financial changes noted include investment returns, which are more uncertain, volatile and relatively lower than they were a decade ago.

Debt finance may either be long term or short term; a company may prefer long-term debt because of the tax deduction on interest payment which is a distinct advantage over equity. The amount of debt a firm utilizes to fund its activities depends on interest charged on debts, corporate income taxes rates, withholding taxes, and cost of financial distress and covenant restrictions in financial agreements (Floarea, 2008).The lower the rates of interest on long term debt the higher will be the desire of the firm to incline to that option. Sagwa (2013) argues that firms with optimal amount of debt in their financial structure increase their value through improved competence. On the other hand firms with sub-optimal use of debts in their financial structure usually suffer from a number of financial setbacks among them; high taxes, high proportions of accounts payables, large deficits in the firms' cash flow and in some cases corporate failure. Company management should continuously monitor their leverage level to avoid financial crisis which can negatively affect the shareholder value.

Every company strives to achieve success, yet success can be defined in many different ways. As a result, management teams of companies should make decisions based on a set of goals and values that aims at optimizing value for different stakeholder in the company. Oladele (2013) notes that, shareholders wealth maximization is considered as one of the most appropriate goal as it encompasses incentive for efficiency, long-term growth, development and value creation. Shareholders wealth is represented in market price of company's ordinary stock. According to Marouan and Moez; (2015) shareholder wealth is a function of a company's investment, financing and dividend decisions. Floarea (2008) asserts that suitable financing options allow corporations to increase their net income thus appeasing shareholders. Residual income above shareholders expectations represents value created. This excess is assumed to be reflected within the share price of a company, thus in estimating value creation it is important to consider market perception towards the company.

Shareholder value analysis should be applied since it provides a framework for linking management decisions and strategies of creating value. Panigrahi, Zainuddin and Azizan (2014) argue that management is required to pay attention to decisions that can create value for

shareholders while making investments and financing strategies as they have an impact on value generated for the shareholder. There is satisfactory literature that supports shareholder value approach; however there is ambiguity as to how shareholder value should be measured (Shayan, 2013). Companies may employ accounting measures or value based measures. Accounting measures are viewed to be short term, subjective and prone to manipulation. Value based measures are objective, and focuses on long term multilateral perspective on company's performance. There are a number of shareholder value creation indicators including Economic Value Added (EVA) and Market Value Added (MVA). Proponents of value based measures argue that they offer a basis for comparison between companies and incorporate cost of capital which accounts for the degree of risk of a company. Sirbu (2012) supported the same and observed that Value based management models are more correlated with economic profit unlike the accounting based ratios

Companies are created to benefit their owners by providing them with maximum return. Hall (2010) observes that, increasing shareholder value requires knowledge about the sources of value creation and destruction within a company and industry. Value drivers can be classified as either financial variables or non-financial variables. Firms have different unique characteristic and the management of a firm should identify special variables that have higher influence on the market value. Continuous application of such variables in a firm will eventually increase shareholder value (Tiwari & Kumar, 2015).Chauhan (2012) notes that firms analyze value creation for different reasons, key among them; formulating and examining strategy, influence peoples' behaviors and to externally validate firm performance. According to Kumar (2015), identification of financial factors with highest impact on value creation in a firm may facilitate establishment of an acceptable standard for appropriate strategy. However, strategies adopted have varying effects on shareholder value creation which depends on the metrics employed in a model (Atiyet 2012; Kapoor 2009).

In Russia, Ankudinov and Oleg (2014) assert that, investment in long-term financial assets is negatively related to both company market value and return for its shareholders. Hartomo (2014) observes that, Indonesian companies with operational excellence and strong competitiveness succeeded in value creation in the long term. Furthermore, a company's ability to properly manage its financial structure produced low cost of capital which supported the process of the value creation. Atiyet (2012) observed that, French firms' shareholder value creation is dependent on the measure taken. Oladele (2013) notes that, in Nigeria, Shareholder value creation is highly dependent on operating expenses, profit margins return on capital employed and expenses ratio. Hall (2010) observes that efficient financing, appropriate fixed asset and working capital management becomes top priorities in South African companies. Empirical literature shows that shareholders' value orientation builds more attractive companies not only for investors, but for employees, customers and also other stakeholders. The studies observed different variables affecting the shareholder value creation on financial and non- financial companies.

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Generally, securities market and financial sectors play an important role in the growth and development of any economy. In Kenya, the idea of the Nairobi Stock Exchange was facilitated by the birth of the Company Act 1948 (Cap 486). The Nairobi Securities Exchange voluntary association of stockbrokers in the European community was constituted in 1954 as registered under the societies Act. The Nairobi Securities Exchanges is a full service securities exchange which supports trading, clearing and settlement of equities, debts derivatives and other investment tools. Empirical studies confirmed that a well-functioning capital market increases economic efficiency, investment and growth. The NSE has classified listed companies into ten sectors which include; the agricultural sector, automobiles and accessories, banking sector, commercial and services sector, investment sector, manufacturing and allied sector and telecommunication and technology sector. These sectors are further grouped into two main categories; financial firms and non- financial firms. Financial firms are highly regulated by the central bank on issues of liquidity, asset and capital holding and provisions among other factor. The current study excluded financial firms due to their unique nature in as far as financing decisions are concerned.

An analysis of the NSE performance for the period between 2008 and 2010 revealed that the macro-economic environment has been very volatile slowing down a sustained stable financial market for long term resource mobilization (Aroni, 2011). Share prices of companies listed at the NSE has a substantial impact on the investors' decision as to whether to buy, sell or hold their shares. Oyuga (2014) notes that some investors especially long term investors are interested in capital gains and are keen on movement of share prices. An increase in share prices for an investor would mean a growth in the value of their investment and a share price decrease would be viewed as a decrease in the value of their investment. Reddy (2012) opines that stock prices of quoted companies are affected either positively or negatively by a number of factors occurring within or without the economic system. Factors affecting market returns could be micro-economic such as profits, business growth and dividend announcements among other factors or macro-economic factors such as inflation, GDP and interest rates which also affect the overall return in the market (Omondi & Muturi, 2012).

The operating loss reported by Kenya Airways Company Ltd went up by 69.8% from 2012/13 to 2013/14 financial year. The capital reserve went down by 9.8% in the same period while loss per share went up by 68.6% from 2013/14 to 2014/15 financial year (CMA, 2015). In Mumias Sugar Company Ltd dividend per share was 0.40 in 2010 and 0.00 in 2014. Earnings per share dropped from Ksh 1.03 in 2010 to (1.77) in 2014 (NSE, 2015). A number of companies that were delisted or suspended from 2005 to 2015 caused financial loses to their shareholders since they could not transact or liquidate their shareholdings (Capital Market Authority, 2015). Majority of financially distressed companies are non-financial firms; this motivated the contextual choice of the study.

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1.2 Statement of the Problem

Whenever value is destroyed there is always a high possible threat of hostile takeover, drop of stock price, failure to meet financial obligations which could lead to receivership and consequent liquidation. Such threats have a negative impact on shareholders stake in a company, loss of employment, inadequate supply of consumer products, failure to contribute to economic activities among others. The main aim of an organization is to maximize the shareholders' value. Companies are formed to benefit their owners by providing them with maximum returns and capital appreciation. A Company's shareholder value creation is a function of financing decisions and investment decisions made by the management. However, in a value driven economy some companies create value while others destroy shareholder value (Narang & Mandeep, 2014).

From 2008 to 2014 Kenya has witnessed a number of companies facing financial crises; some of which are listed at the NSE. Kenya Airways Ltd reported huge losses in their 2013/14 financial year ending March 2015, to a tune of 25.7billion.MumiasSugar Company Ltd has been struggling financially; in June 2015 the government bailed it out to a tune of one billion shillings to try and stem a 6 billion shillings cash crunch. During this period, investors lost in terms of value of their investments to a tune of close to Ksh 84 billion (NSE, 2014). As a result a number of investing public lost confidence with the stock market and they would rather invest where they perceive growth and value addition. The average individual holdings at the NSE dropped from 26.9% in 2007 to 13.0% in 2014 (CMA, 2015).

Mafouan and Moez (2015) investigated the impact of corporate governance on shareholder value creation in Tunisia Mbuvi (2015) studied the effect of dividend policy on value creation for shareholders of companies listed in the NSE. The study results showed that dividend decisions, positively affect shareholder value creation. Lukayu and Mukanzi (2015) conducted a study to assess firm attributes on shareholder value in listed Banks in Kenya. The study found that risk and profitability had a strong influence on shareholder value creation. Study results showed that, capital concentration have a negative effect on performance and value creation. Atiyet (2012) analyzed the impact of financing decisions on shareholder value creation in France; self-financing was found to positively influence shareholder value, while debt financing negatively influenced shareholder value. Available studies analyzed financing variables separately, thus making it extremely difficult for cumulative effect on shareholder value creation to be ascertained. Limited research studies are available on the effect of debt financing decisions on shareholder value creation in developing economies. In addition, most of these studies used accounting ratios which focus more on historical aspects and do not incorporate the cost of capital. This study therefore sought to fill this gap by determining the effect debt financing has on shareholder value creation using EVA, which is an economic value based metric as an indicator of shareholder value creation.

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1.3 Specific Objectives

To establish the effect of debt financing on shareholder value creation of non-financial firms at Nairobi Securities Exchange.

1.4 Research Hypothesis

H_0: Debt financing does not have significant effect on shareholder value creation of firms quoted at the Nairobi Securities Exchange.

2.0 Literature Review

2.1 Theoretical Literature Review

This study was guided by Modigliani and Miller model. The model as the name suggests was proposed by Modigliani and Miller (1958). The model advocated for the capital structure irrelevancy theory. The model suggested that valuation of a firm is irrelevant to the capital mix of a company. The theory states that value of a firm is not dependent on choice of capital structure or financing decisions of a firm. The theory further stated that market value of a firm is affected by its future growth prospect apart from the risk involved in investment. However, in a subsequent paper, Modigliani and Miller (1963) relaxed the conditions in Modigliani and Miller (1958) and showed that under capital market imperfection where interest expenses are tax deductible, a firm's value will increase with higher financial leverage. Models based on the impact of tax suggest that profitable firms have more need for a tax management in corporation's profits. This approach acknowledges tax savings and thus infers that a change in debt equity ratio has an effect on Weighed Average Cost of Capital (WACC), implying that the higher the debt the lower the WACC. The major drawback however is that increasing debt results in an increased probability of bankruptcy. Hence the optimal capital structure represents a level of leverage that balances bankruptcy costs and benefits of debt finance. The study considered the argument put across by this theory in that the value of the firm is determined by the choice of finances and the argument that, the more the debt the lower the WACC.

2.2 Empirical Literature Review

Debt Financing and Shareholder Value Creation

Onwumere, Imo and Izhoh (2012) investigated the impact of outsiders' funds on firms' shareholders wealth maximization. The study used indicators; Net profit margin, dividend per share and current ratio from 2004 to 2008 in the Nigerian economy. The study results revealed that outsiders fund has a positive though not significant relationship. Dividend per share and current ratio was negative and significant on net profit margin. The study examined one of the financing decisions and used accounting ratios. The present study considered additional variables such as equity financing dividend financing and working capital financing. The study used EVA and MVA as indicators of shareholder value creation.

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Olokoyo (2012) observed that, a firm's leverage had a significant negative impact on the firms (ROA). The study revealed that all the leverage measures had a positive and highly significant relationship with market performance measure (Tobin's Q). It also established that the maturity of debt structure affects the performance of firms significantly and the size of the firm has a significant positive effect on the performance of firms in Nigeria. Floarea (2008) sought to identify the shareholder value creation strategies of Anglo-Saxon and European countries. The study results showed that corporate debt does not necessarily lead to high created shareholder value despite the claim of higher return. Cost minimization strategies as well as controlled asset expansion relative to employees numbers were identified as significant in shareholder value creating process.

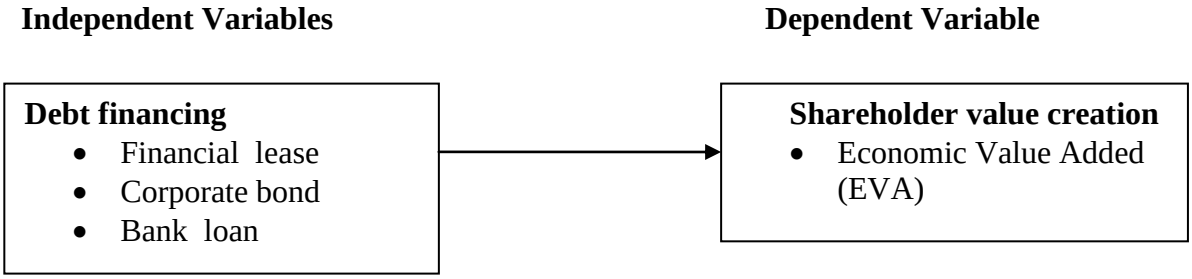

Figure 1: Conceptual Framework

3.0 Research Methodology

The study was founded on the positivism paradigm. Gephart (1999) classified research paradigm into three philosophically distinct categories as positivism, interpretivism and critical postmodernism. Positivism is grounded on the theoretical belief that there is an objective reality that can be known to the researcher if correct methods are applied in the correct manner (Saunders, Lewis & Thornhill, 2009). The current study followed the positivism stance within epistemology which involves perception of knowledge. Furthermore the result was generalized and the researcher had no direct influence on the variables. This study adopted the explanatory, which is non-experimental. Kerlinger and Lee (2000) observe that is used this research design is used when variables of interest cannot be manipulated. The study focused on all non-financial quoted in the Nairobi Securities Exchange (NSE). The NSE had 41 non-financial companies as at 31st December 2015. The unit of analysis was motivated by the fact that quoted companies invite the public to invest their hard earned income. The target companies were screened against various factors which included availability of data and integrity of data, thus the study only considered unqualified audited reports. The total number of non- financial companies listed at the NSE, as at 31st December 2015 was 41. This study therefore considered census approach as more appropriate. The study used panel data which was estimated using various models among them; pooled effect, random effects and fixed effect. The key consideration in company fixed effects and random effects estimator was based on whether the unit effects are correlated with

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any of the explanatory variables and therefore random effect biased (Hausman, 1978; Wooldridge, 2012; Baum, 2005).

To analyze the effect of debt financing on shareholder value creation of listed companies at the NSE. The study adopted and modified the basic static model as proposed in Radic (2015) Y_{it} **=** $\boldsymbol{\alpha_t + X_{it}\beta + C_i + \varepsilon_{it}}$**;** $\boldsymbol{i=1\ldots N, t=1\ldots T,}$ the independent variables are expressed in a multiple regression equation, where shareholder value creation is measured using EVA expressed as:-

$EVA_t = NOPAT_t - (WACC^* IC_{t-1})$

Where, $NOPAT_t$= Net Operating Profit after Tax at time t

WACC= Weighted Average Cost of Capital.

$$WACC= \frac{Debt}{Debt+Equity} Rd \times (1 - tax\ rate) + \frac{Equity}{Debt+Equity} Re$$

Where: Rd = interest rate

Re = investors cost (investors expected return).

IC_{t-1} = Invested Capital at time (t-1)

The cost of debt finance was estimated using CAPM formula. The model was adopted and modified as proposed in (Stewart, 1990; Mamun & Mansor 2012). It was expressed as follows;

$Re = Rf + \beta i ((Rm) - Rf)$

$$\beta = \frac{\Delta Ri}{\Delta Rm}$$

Where; Re =Cost of equity

βi = Market beta; representing a coefficient of the change of the company's share price compared to overall market index.

Rm= Return in the Market

Rf = Risk free (Treasury bond rate of return).

The data includes both time series and cross section dimensions; hence, a linear panel regression was estimated as proposed in Baltagi (2005).

The study's general empirical model was defined as follows.

$$\boldsymbol{Y_{it} = \alpha_t + X_{it}\beta k + \varepsilon_{it}} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \textbf{(3.1a)}$$

The Equation was transformed to Random Effects Model by specifying ε_{it} and was expressed as shown in Equation 3.1b.

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$\varepsilon_{it} = V_i + U_{it}$ **… (3.1b)**

Where $Y_{it}$is the dependent variable denoting shareholder value creation of company *i* at time t.*i* denotes the target companies, *I* =1… 40 while t represents the observed time period t = 2008 2014;. X_{it} is 1xK vector of explanatory variables β are coefficients to be estimated, α is a constant term and ε_{it} is a composite error term. V_i denotes heterogeneity effects and U_{it} denotes idiosyncratic disturbances as cited Baltagi (2005).

The equation 3.1 was expanded to obtain equation 3.2 which was used for estimation.

Log EVA_{it} = α+ β_1Log DT_{it} …… (3.2)

Where;

DT_{it} = Debt finance of company *i* at time t

ε_{it} = composite error term.

β_1 = coefficients of explanatory variable.

α, = constant term

4.0 Research Findings, Interpretation and Discussions

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
EVA(billions)	-939895.550	0.61504807	-478.814	59992.529
Debt Financing	1.09	259854000	10189677	30256338

As indicated in the table 1, the total mean of EVA for the period 2008 to 2014 was ksh-478.814 million with a standard deviation of ksh59992.529 million indicating a large variability in EVA over time. This implies that some companies created huge value while others reduced shareholders value. The negative EVA value shows that, on average the companies listed at the NSE did not realize return exceeding cost of equity, thus decreased shareholders' value within the period of study. The Minimum and maximum, values of EVA over the same period of time were Ksh –939895.55million and Ksh0.61504807 million respectively. Positive return indicates that some companies created shareholders value. Negative EVA shows there were companies that destroyed shareholder value within the period of study as observed in Narang and Mandeep (2014). The huge negative as compared with small positive indicates that investors' hard earned investments reduced in terms value. This is an indication that the capital invested did not fetch enough return to cover cost of that capital, thus shareholder wealth destruction. Unfortunately most of these companies reported good profits as recorded in the income statement over the

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period under review. This observation implies that there is a difference between reporting profits and value creation. However, reporting profits consistently plays a vital role in eventual value creation as profits drives value. According to Venugopal and Reddy (2016) profit maximization is viewed as part of shareholder value creation. A profitable company pulls shareholders to contribute funds and motive them for regular reinvestment.

The results also show that the total mean of Debt financing for the period 2008 to 2014 was ksh10, 189, 677 million with a standard deviation of ksh30, 256,338 million indicating a large variability in debt financing over time. The Minimum and Maximum, values of debt financing over the same period of time were ksh1.09 million and Ksh259, 854, 000Million respectively. Working capital financing mean, for the period 2008 to 2014 was ksh1, 360,793 million with a standard deviation of Ksh6, 859,514 million indicating a large variability in working capital financing over time. The Minimum and Maximum, values of working capital over the same period of time were Ksh0.3412 million and ksh52, 635, 049 million respectively.

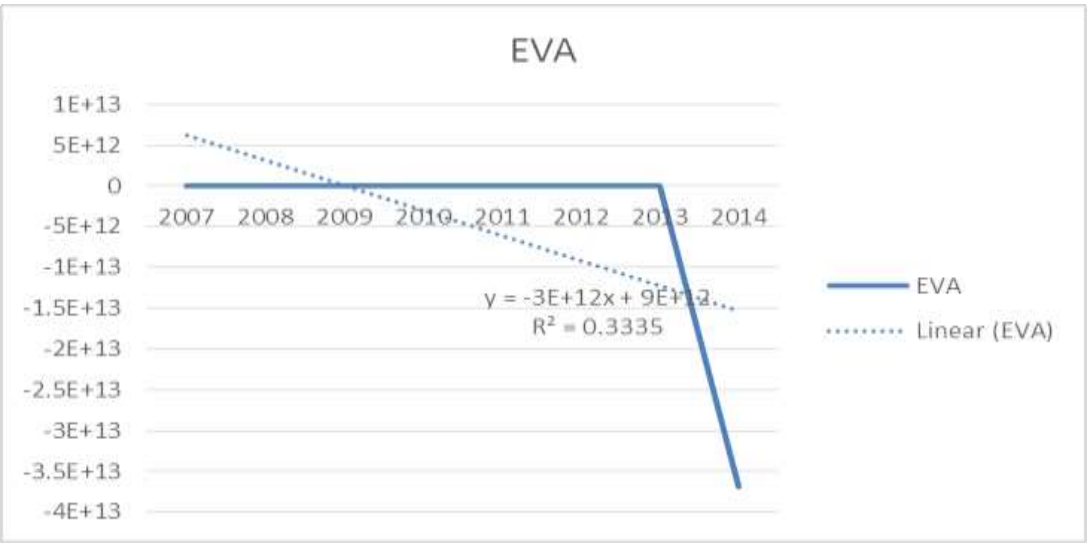

Figure 2: Trend of EVA for the year 2008-2014

Figure 2 shows the EVA trend for the 40 companies from the year 2008 to 2014.The trend line indicates that EVA has been consistent from the year 2008 to 2012. The values remain zero or almost zero indicating in general the firms quoted at the NSE did not create any value for their shareholders. It then dropped sharply in the year 2013. The results indicate a decrease in value creation among the firms under observation. From 2013 to 2014 the results show that most companies destroyed shareholders' value. Gaunder and Venkateshwarlu (2017) observed that the higher the EVA the higher the shareholder value created. According to Stewart (1991) positive EVA companies provide higher returns than they can earn investing the same funds elsewhere. The investors could sell their investments for a premium- book- value. When EVA is zero it

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implies that the firm just met investors' expectation, the shares sell at book value. The negative EVA indicates that firms destroy investors value thus should sell at a discount to book value.

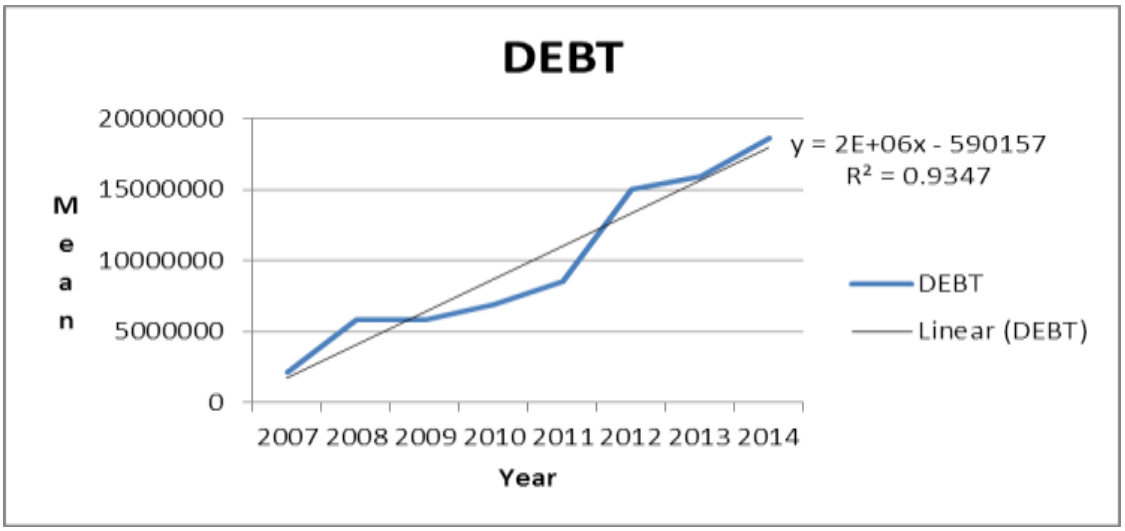

Figure 3: Trend of Debt for the year 2008-2014

Figure 3 shows the total asset trend for the 40 companies from the year 2008 to 2014. The trend line indicates that the debt has been increasing within the study period. The upward trend is an indication of increased uptake of debt financing among the firms under consideration. Venugopal and Reddy (2015) observed that, the amount and extent of debt financing is generally subject to a number of factors, among them, economic growth, availability of credit in the capital market and legal and financial structure. World Bank (2012) report indicates that the Central Bank of Kenya in an attempt to stimulate growth, relaxed monetary policy and in particular lowered key interest rates. This may have motivated increased borrowing as it lowers general cost of borrowing as well as financial risk.

Table 2: Unit root results

Variable	Level	Test	Unit Root Tests			
			ADF test		PP Test	
			Statistics	P-value	Statistics	P-value
EVA	Level	Inverse chi square	37.034	0.000	82.476	0.000
		Inverse normal	24.704	0.000	59.453	0.000
		Inverse logit	38.79	0.000	86.068	0.000
		Modified Inverse chi square	42.006	0.000	68.187	0.000
Debt	Level	Inverse chi square	45.066	0.000	27.677	0.000

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Results in Table 2 indicated that both the variables are stationary (i.e. absence of unit roots) at 5% level of significance.

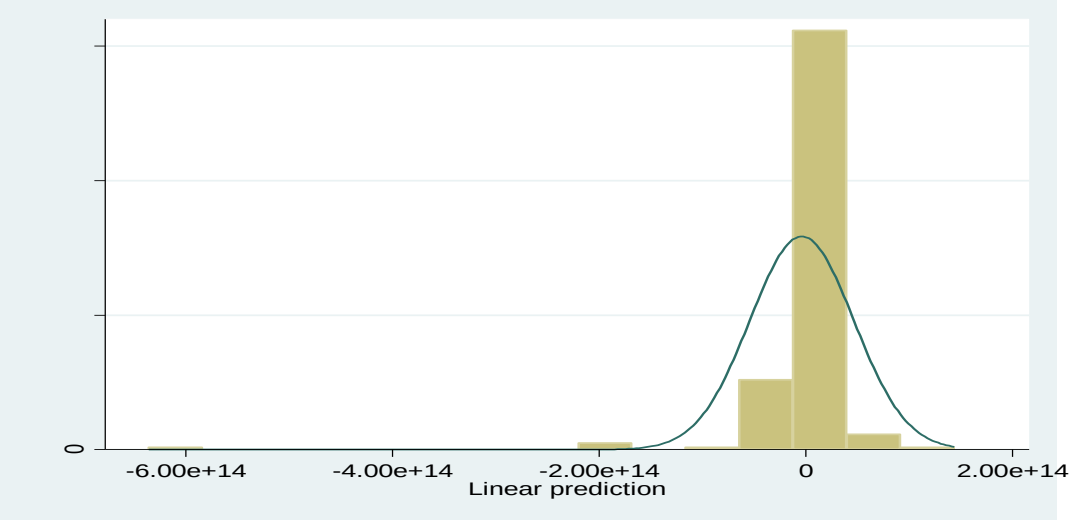

Figure 4: Histogram before using log of residuals

The residuals were transformed into their natural logs. The results from the graphical method are presented in Figure 5. They indicate that the natural logs of the residuals are normally distributed.

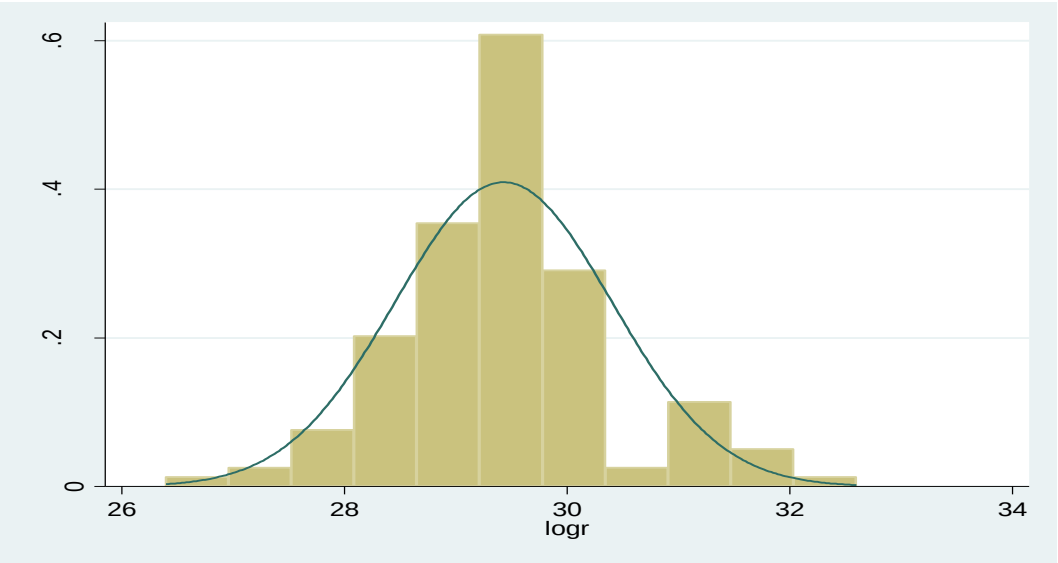

Figure 5: Histograms of residuals

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To further verify the above results, Jarque-Bera test which is a more conclusive test than the graphical method was conducted. The results are as presented in Table 3

Table 3: Jarque-Bera test/Skewness test for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
Log residual	140	0.1815	0.0192	6.8	0.0334

The null hypothesis under this test is that the disturbances are not normally distributed. If the p-value is less than 0.05, the null hypothesis of normality at the 5% level will be rejected. Given that the p-value = 0.0334 is less than 5% for the residual, the null hypothesis was rejected and thus the conclusion is that the residuals are normally distributed.

Table 4: Heteroskedasticity Test Results

Modified Wald test for group wise Heteroskedasticity in fixed effect regression model
H0: sigma(i)^2 = sigma^2 for all i
chi2 (35) = 1.0e+34
Prob>chi2 = 0.0000

The null hypothesis in the test is that error terms have a constant variance (i.e. should be homoscedastic).The likelihood- ratio result shows a chi-square value of 340 and a p-value of 0.0000. The chi-square value was significant at 5%. The null hypothesis of constant variance was rejected, signifying existence of Heteroskedasticity in the study data. To address this problem the study employed FGLS estimation model as suggested in Poi and Wiggins (2001) and Wooldridge (2012).

Table 5: Serial correlation Results

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F(1, 34) = 0.564
Prob> F = 0.4577

The results as indicated in Table 5 show p-value=0.4577and the F test. This implies that at 5% level of significance the F test was not significant hence; the study fails to reject the null hypothesis of no autocorrelation and thus conclude that residuals are not auto correlated.

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Table 6: Hausman Results for EVA

Variable	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Debt Financing	-14850.09	802919.5	-817770	526114.2

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(1) = (b-B)'[(V_b-V_B)^(-1)](b-B)=0.10

Prob>chi2 = 0.7483

In order to choose between fixed and random effects model, the Hausman test was presented in Table 6. The null hypothesis of the Hausman test was that the random effects model was preferred to the fixed effects model. Hausman test result indicates a chi-square of 0.10 with a p-value of 0.7483 implying that at 5 percent level, the chi-square was statistically insignificant. The study therefore failed to reject the null hypothesis that the random effects model was preferred to the fixed effects model as proposed in (Green 2012).

4.2 Correlation Analysis

Table 7: Correlation Matrix Results

Variable	EVA	Debt Financing
EVA	1.000	
Debt Financing	-0.019	1.000

* Rep 5 percent level of significant.

The results are as presented in the correlation matrix in Table 7. Only those variables which were statistically significant were reported. Debt financing is negatively and significantly associated with EVA. The results imply that an increase in debt finance results in a decrease in shareholder value creation as measured by EVA.

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Table 8: Regression Results for Debt Financing on EVA

LOG EVA	Coefficient.	Std Err.	z	P>|z|
Log Debt Financing	0.5472673	0.0722291	7.58	**0.000**
Constant	6.357656	1.020925	6.23	0.000
R-Squared =0.4301				0.000
F statistic =6.231, p=0.000				

The optimal model is;

Log EVA=6.357656 + 0.547X

Where,

X=Log debt financing

The regression results in Table 8 show that debt financing is positively and significantly related with EVA (r=0.547, p=0.000). This means that a unitary increase in debt financing results in an increase of 54.7% EVA. R squared (0.4301) implies that debt finance explains 43.01% variation of the independent variable(EVA).The study finding is consistent with Onwumere, Imo and Izhoh (2012) in a study whose results indicate that outsiders fund has a positive and significant relationship with shareholder value. According to Sagwa (2013) an optimal amount of debt enhances a company's value. The findings are consistent with Adenugba, Ige and Kesimo (2016) study which observed that debt is a good source of finance as it enables firms to carryout long term projects and reduces tax liability. In addition Olokoyo (2012) study revealed a positive and highly significant relationship with market performance measures. However, the results contradict Floarea (2008) study that indicates that, debt financing does not necessarily lead to shareholder value creation. The finding supports Myers (1977) theory that argues that debt may have a strengthening effective on firm's value creation as the lender monitors the amount of debt in a firm's capital structure and consequently increases firm value. However as observed in Oladele (2013) a trade –off between return and risk must be established to determine the appropriate level of debt financing.

The null hypothesis was that there is no statistically significant effect between debt financing and EVA in non-financial firms quoted at the NSE, Kenya. Since debt financing had a p- value of less than 0.05 (0.000) as shown in Table 9, the hypothesis was rejected. Therefore there is a statistically significant effect between debt financing and EVA in non-financial firms quoted at the NSE, Kenya.

Analysis of variance was conducted to determine if there was a significant difference among sectors in respect to debt financing decisions. The null hypothesis was that there is no significant difference among sectors in respect to debt financing decisions while the alternative hypothesis was that there is a significant difference among sectors in respect to debt financing decisions. The rule of thumb is that reject null hypothesis if the calculated p-value is less than 5% (0.05).

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Table 9: Analysis of Variance between Debt Financing Decisions among Sectors

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.16E+16	5	1.63E+16	25.242	**.000**
Within Groups	1.86E+17	287	6.47E+14		
Total	2.67E+17	292			

The results in Table 9 show that the p value is 0.000<0.05. This leads to rejection of the null hypotheses and thus the study concluded that, there is a significant difference among sectors in respect to debt financing decisions. The results revealed that different sectors had different types of debt as well as a percentage share of debt over the total finance.

5.0 Conclusions

The study concluded that debt financing have a positive effect on shareholder value creation as measured by EVA in non-financial companies listed at the NSE, Kenya. The study findings show that shareholder value creation is dependent on the financing choices adopted by a company. This implies that the capital structure irrelevancy theory which postulates that the value of a firm is not dependent on the choice of capital structure. The CAPM concept and insights proved useful and practical in measuring Weighted Average Cost of Capital as well as cost of equity. Debt financing indicate positive and statistically significant effect on shareholder value creation among firms quoted at the NSE, Kenya. The findings indicate that debt financing affect shareholder value creation positively. This implies that debt financing create shareholder value. Financial managers should consider the implication of financial leverage in making capital structure policies. However the management should analyze the taxation policies in place and benefits accrued thereof. Moreover, management should consider cost implications which are dependent on equity debt ratio. In addition the management should not assume equity finance is free. The CAPM formula is a practical tool to estimate cost of equity and a good basis for estimating WACC.

6.0 Recommendations of the Study

Based on the findings and the conclusions, this study recommends that to enhance and maintain value creation, management should aim at minimizing weighted average cost of capital, analyses inherent risks associated with various capital and investment projects and aim at maintaining firm's credibility. This will ensure continuous supply of both short term and long term finances and boost investors' confidence in a firms going concern. In addition, this study recommends that companies listed at the NSE, should start disclosing EVA statement as part of financial information in their annual reports. The management should endeavor to improve the quality of annual reports in terms of content and disclosures. In addition finance managers should make conscientious attempt to study and gain understanding on value based measures which include EVA as a measurement tools for value creation as well as performance. EVA serves as an

analytical framework for evaluating alternatives and can be used to identify a set of variables creating value and those that destroy value. The financial manager should analyze the cost of various sources of finance as this has a direct effect on WACC as well as value created. Various sectors should keenly evaluate the type of financing decision that creates most value as well as those that destroy value, and act accordingly.

EVA could also be used as a benchmark performance indicator for evaluation and correction purposes. The firm managers should strive and practice periodic shareholder value creation analysis for continuous assessment of growth and development process. In addition EVA values would act as a comparison tool within a company as well as in industries. Moreover, EVA could be used to guide investors and other stakeholders in investment decision making processes. The NOPAT was found to be a key component in determining and measuring shareholder value creation. Thus managers should diverse strategies and policies to continuously improve and maintain its value. The study found that debt financing has influence on shareholder creation among non- financial firms quoted at the NSE, Kenya. The management of the firms should therefore endeavor to enhance the use and management of various components of debt finance.

Statement on shareholder value creation could improve the quality of financial information for better investment decisions, financing decisions and other managerial decisions. Moreover, analyzed information and reports would be more representative for better decision making and ensure investors and other stakeholders are protected. The Capital Market Authority (CMA) which is mandated by the Kenya government to come up with regulatory framework that guides firms listed at the NSE should be more vigilant in ensuring that regulations are enacted to enhance the quality of firms' disclosure of all relevant information. In addition to regular financial statements and reports, CMA should enforce reports on value creation for all companies quoted at the NSE, Kenya. CMA should encourage investors lobby groups involved in creating awareness and seeking information on firms that create shareholder's value as well as the firms that destroy shareholder's value.

The study findings established the importance of various types of finances employed by companies. The study concluded that, various sectors in the economy have unique characteristics and thus managers should analyze various variables, and identify those that create most value. A clear understanding of the meaning of value, value drivers in respective companies and how to measure such value is essential to the management of the company. In additionally managers should endeavor to periodically analyze financing decisions in their environment to ensure sustainable growth and development; this could promote continuous shareholder value creation.

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