EFFECT OF DIVIDEND FINANCING ON SHAREHOLDER VALUE CREATION OF NON-FINANCIAL FIRMS QUOTED AT THE NAIROBI SECURITIES EXCHANGE

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ABSTRACT

Purpose of the Study: This study examined the effect of dividend financing on shareholder value creation of non-financial firms quoted at the Nairobi Securities Exchange for the period 2008-2014. The study was informed by Pecking Order Theory and Capital Asset Pricing Model. 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. Dividend decisions of a company determine what proportion of earnings is distributed to shareholders by way of dividends and what proportion is ploughed back for reinvestment purposes. Dividend policy involves options which managers pursue in deciding the amount, mode and pattern of cash distribution to the shareholders over time. Shareholder value creation focuses more on long term sustainability of returns and not just profitability. Rational investors expect good long term yield of their investment. Dividend financing play an imperative role in general performance of a company and shareholder value creation.

Statement of the Problem: 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.

Research Methodology: 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 CMA publications comprising of annual financial statements, income statements and accompanying notes. Ordinary Least Square regression analysis was conducted to examine the effect of dividend financing on shareholder value creation.
Results: The results revealed that dividend 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 dividend 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, Autocorrelation, Homoskedasticity tests. Study model tests showed that, there was non-violation the assumptions and hence the model found fit for further analysis.

Conclusion: The study concluded that, dividend financing is generally the cheapest source of funds; however, it has a psychological effect on investors and other fund providers.

Recommendation: 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: Dividend, Financing, Shareholder, Value Creation, Non-financial, Firms

1.1 BACKGROUND OF THE STUDY

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. 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. In addition it is necessary to implement effective instruments which are able to evaluate real value created.

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.

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. 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. 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).

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). 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. 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 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.

Since the 1990s there has been a strong interest towards shareholders value among practitioners’ academicians, regulators, investors and other stakeholders. Jalaja, (2010) observed that, in a contemporary globalised economic landscape, competition for shareholders funds are becoming increasingly intense thus companies must strive to offer adequate rate of return to investors in order to remain relevant and ensure continuous funding. 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. 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. 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.

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,
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. 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.

The concept of shareholder value creation is based on several factors such as capital appreciation, market value, regular income return on investment, leverage, dividend payout ratio profit consistency among other variables. 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.

Dividend decisions of a company determine what proportion of earnings is distributed to shareholders by way of dividends and what proportion is ploughed back for reinvestment purposes. Kapoor (2009) posits that dividend policy involves options which managers pursue in deciding the amount, mode and pattern of cash distribution to the shareholders overtime. The best dividend policy is the one that maximizes a company’s stock price which leads to maximization of shareholders wealth and also ensures quick economic growth. Management should determine a dividend policy that enhances shareholder value creation. Dividend policy adopted by a company determines the amount to be shared by shareholders as well as the portion to be retained which forms dividend financing.
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 and 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).

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. 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. 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.

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. Generally, securities market and financial sectors play an important role in the growth and development of any economy. 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 factors. The current study excluded financial firms due to their unique nature in as far as financing decisions are concerned.

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. 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). 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 losses 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.

1.2 STATEMENT OF THE PROBLEM

Dividend decisions of a company determine what proportion of earnings is distributed to shareholders by way of dividends and what proportion is ploughed back for reinvestment purposes. The primary objective of a firm 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). 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.

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 25.7 billion. Mumias Sugar 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).

Mwenje and Olweny (2016) investigated the impact of private equity on value creation among listed firms in Kenya. This study found that financial modification had no or little impact on shareholder value creation while strategic and operational indicator demonstrated significant
impact. 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. Mafouan and Moez (2015) investigated the impact of corporate governance on shareholder value creation in Tunisia. Study results showed that, capital concentration have a negative effect on performance and value creation. Limited research studies are available on the effect of dividend financing on shareholder value creation in developing economies. This study therefore, sought to establish the effect of divided financing on shareholder value creation using EVA, which is an economic value based metric as an indicator of shareholder value creation.

1.3 OBJECTIVE OF THE STUDY
To establish the effect of dividend financing on shareholder value creation of non-financial firms quoted at the Nairobi Securities Exchange.

1.4 RESEARCH HYPOTHESIS
H₀: Dividend 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
2.1.1 Pecking Order Theory
The pecking order theory was developed by Myers and Majluf (1984) and its extensions by Lukas and Mac Donald (1990). According to this theory firms prefer internal funding over external funding. In case the firm requires external funding they would prefer debt over equity and equity is generated as a last resort. So the firms do not have predetermined or optimum debt to equity ratio due to information asymmetry. Firms adopt a conservative approach when it comes to dividends and use debt financing to maximize the value of the firm. One of the aspects of the pecking order theory implies that when it comes to profitable firms, they would always prefer internal financing rather than taking up new debts or equity.

Myers (1984) observes that firm managers have better information about the firm and its projects than less informed investors. Moreover, managers know more about the intrinsic value and riskiness of the firm than the shareholders and other stakeholders. This argument was supported by Famma and French (2000) who found out that a profitable firm tends to be less levered as compared to a non-profitable firm. The theory stands on presumptions that debt issuance sends a market signal that the firm is confident in its ability to service debt regularly while equity issuance sends a market signal that the firm may be overvalued, potentially leading to a share price drop. Frank and Goyal (2003) observe that the greatest supporters of the pecking order theory are large firms that are expected to face the least adverse selection problems because they receive better coverage by equity analysts. Based on these assumptions this study sought to investigate whether non-financial firms’ choice of financing affects the shareholder value creation.
2.1.2 Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) was developed by Sharpe (1964); Lintner (1965) and Mossin (1966). CAPM is based on the assumption that not all risks should affect asset price. In particular a risk that can be diversified away when held along with other investments in a portfolio is considered not risky. The CAPM gives insight about what kind of risk is related to asset return. Moreover, the theory argues that the returns both received and expected by the investor are related to the risk incurred by owing particular financial assets. The main insight of the CAPM model which is central to the shareholder view is that, there is a risk weighted discount factor which allows the investor assess the value of today’s and tomorrow’s development profits and cash flows (Mossin, 1969; Weston, 1973; Copeland & Weston, 1988). CAPM allows for investment valuation at the firm level without consideration of investor preferences and gives the expected return for any asset or portfolio as a function of a measure of risk called beta.

Numerous contributions have been devoted to verifying whether real life decision makers comply with the CAPM paradigm and it was noted that managers and practitioners often violate the stance while making capital budget decisions (Graham and Harvey 2002). The only aspect that determines the preference of risk is weight (share). A risk free rate is fixed thus; it is only the market risk that is relevant for predicting return. The risk return relation (trade-off) is linear. The model combines linear risk and return trade off with the beta to find the price of risk. The optimal risk- return trade-off is shown by Capital Market Line (CML). The CAPM formula is often graphed as the Security Market Line (SML) which shows the relationship between expected rate of return of a project and its beta. This study is based on shareholder value creation whose main focus is in appreciation of invested capital. The cost of equity, which is part of WACC, was estimated using CAPM formula.

2.2 Empirical Literature Review

Chowdhury and Chowdhury (2010) examined the impact of capital structure on the value of a firm in the context of Bangladesh economy on industrial sector. The study gathered secondary data of publicly listed company traded in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) and used various statistical tools to analyze all the financial information. The share price was considered as proxy for value and various ratios. The findings revealed that maximizing the wealth of shareholders requires a perfect combination of debt and equity, whereas the cost of capital had a negative correlation and it had to be as minimal as possible. The study also found that by changing the capital structure composition a firm can increase its value in the market. Furthermore the utilization of debt to form optimal capital structure was found to be important in maximizing shareholder wealth. The study focused on one component of financing decision that is capital structure. This study added dividend financing and working capital financing as well as GDP growth rate as a moderating variable.

Boujjat (2016) study examined the impact of dividend policy on firm performance among 44 quoted firms in Morocco. The study sought to determine how dividend policy can be used as a source of finance and its effect on the shareholders’ wealth maximization. To achieve this objective, the study used two models using dividend payments as proxy for dividend policy and net profit after tax and market capitalization for financial performance and shareholder wealth respectively. The total asset was used as a control variable. The data extracted from the financial statements of sampled firms were analyzed using panel data regression model. The findings
show that dividend affect firm performance and had strong and positive relationship. The current study combined equity financing, debt financing, working capital financing and dividend payout as independent variable and GDP growth rate as a moderating variable.

Tahir and Raja (2014) did a study aimed at analyzing the impact of divided policy on shareholder wealth of oil and gas exploration companies of Pakistan during the year 1999 to 2006. The study employed statistical tools such as regression and correlation methods to ascertain best fitted model for predicting the impact dividend policy on shareholders wealth. The study used dividend payout ratio, price/earnings ratio and book value/market value equity ratio as independent variables and holding period yield as dependent variable. The coefficient of determination was tested with the help of F-test to determine the proportion of explained variation in dependent variable. The result indicates very low correlation between independent variable and dependent variables for all companies showing insignificant relationship between variable. The study investigated one sector and dividend policy as its independent variable. The present study investigated all non-financial sectors and additional financial decision variables using value based variables.

Yegon Cheruiyot and Sang (2014) studied the effect of dividend policy on firm’s performance of manufacturing firms listed at the NSE, Kenya. The study sought to ascertain the relationship between dividend policy and firms’ profitability, investment and earnings per share. Data for the study was extracted from annual reports and accounting reports. The study analyzed the data using regression analysis with aid of E-views software. The findings showed that there is a significant positive relationship between dividend policy and investment; and a negative relationship between dividend policy and earnings per share. The study investigated one sector and dividend policy only as variable affecting shareholder value creation. In addition the researcher used the accounting measures as proxy for performance. The present study covered all non-financial sectors and added more variables affecting shareholder value creation. Furthermore, value based measures were used as proxy for shareholder value creation.

Asogwa (2009) sought to investigate empirically the determinants of shareholders value creation of banks listed in the Nigeria Stock Exchange from 2004-2008. The study used a random effect Probit model. The hypothesis such as financial policy hypothesis, dividend policy hypothesis, profitability and earnings hypothesis as well as variables such as size, age and structure in capturing firm value creation of the listed banks supplemented by information financial publication were used. The results showed that dividend policy is more important for value creation than profitability. The study focused on variables that affect shareholder value creation earnings growth. The financial debt policy variables, bank size and structure do not effect value creation but unobservable bank characteristics such as management quality or strategy may be important in banking sector. The current study analyzed how these factors affect the shareholder creation plus additional variables in non-financial sector using value based methods.
2.3 CONCEPTUAL FRAMEWORK

Independent Variables

<table>
<thead>
<tr>
<th>Dividend Financing</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dividend paid</td>
<td>• Shareholder Value Creation</td>
</tr>
<tr>
<td>• Total earnings</td>
<td>• Economic Value Added (EVA)</td>
</tr>
</tbody>
</table>

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

To analyze the effect of dividend 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) \( Y_{it} = \alpha + X_{it}\beta + C_i + \epsilon_{it}; \ i=1...\ N, \ t=1...\ T \), the independent variables are expressed in a multiple regression equation, where shareholder value creation is measured using EVA expressed as:

\[
\text{EVA}_t = \text{NOPAT}_t - (\text{WACC} \times \text{IC}_{t-1})
\]

Where, \( \text{NOPAT}_t \) = Net Operating Profit after Tax at time \( t \)

\( \text{WACC} = \) Weighted Average Cost of Capital.

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

Where: Rd = interest rate
Re = investors cost (investors expected return).

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

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

\[ Re = R_f + \beta_i ((R_m) - R_f) \]

\[ \beta = \frac{\Delta R_i}{\Delta R_m} \]

Where; \( Re \) = Cost of equity
\( \beta_i \) = Market beta; representing a coefficient of the change of the company’s share price compared to overall market index.

\( R_m \) = Return in the Market
\( R_f \) = 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.

\[ Y_{it} = \alpha_t + X_{it} \beta + \epsilon_{it} \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots (3.1a) \]

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

\[ \epsilon_{it} = V_i + U_{it} \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots (3.1b) \]

Where \( Y_{it} \) is the dependent variable denoting shareholder value creation of company \( i \) at time \( t \). \( i \) denotes the target companies, \( I = 1 \ldots 40 \) while \( t \) represents the observed time period \( t = 2008, \ldots 2014 \); \( X_{it} \) is 1xK vector of explanatory variables \( \beta \) are coefficients to be estimated, \( \alpha \) is a constant term and \( \epsilon_{it} \) 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.

\[ \log EVA_{it} = \alpha + \beta \log DIV_{it} \ldots \ldots (3.2) \]

Where;
\( DIV_{it} \)= Dividend finance of company \( i \) at time \( t \)
\( \epsilon_{it} \) = composite error term.
\( \beta \) = coefficients of explanatory variable.
\( \alpha \) = constant term
4.0 RESEARCH FINDINGS, INTERPRETATION AND DISCUSSIONS

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA(billions)</td>
<td>-939895.550</td>
<td>0.61504807</td>
<td>-478.814</td>
<td>59992.529</td>
</tr>
<tr>
<td></td>
<td>21437610255</td>
<td>130637299</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend financing (Millions)</td>
<td>0.00</td>
<td>0</td>
<td>6</td>
<td>12683129895</td>
</tr>
</tbody>
</table>

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 –939895.55 million and Ksh 0.61504807 millions 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 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 total mean of Dividend for the period 2008 to 2014 was Ksh1,306,372,996 Million with a standard deviation of Ksh12,683,129,895 Million indicating a large variability in dividend over time. The Minimum and Maximum values of dividend over the same period of time were 0.00 and Ksh214,376,102,550 million respectively. The minimum value (0.00) indicates that some companies did not issue dividends to the shareholders. Dividend paid out are the earnings effectively received by the shareholder and in most cases the only regular flow of income from quoted companies Tahir and Raja (2014). The companies probably retained profits within the period observed. However, on average non-financial companies quoted at the NSE, paid out dividends on their shareholders. Furthermore, it shows that, some companies did not generate profits within the study period.
Trend Analysis

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

Source: Study data (2016)

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 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 Dividends for the year 2008-2014

Figure 3 shows the dividends trend for the 40 companies from the year 2008 to 2014. The trend indicates that the dividends increased sharply in the years 2008 and 2009 and then dropped in the year 2010. The trend line shows that generally the dividends paid out have been on a decrease. The dividend varies depending on circumstances prevailing regarding the profits generated by companies as well as the dividend policy adopted. According to Mbuvi (2015) a reduction or omission of dividend paid out is normally accompanied by a reduction in the share price.

Diagnostic Tests Results

Table 2: Unit root results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>Test</th>
<th>ADF test</th>
<th>PP Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unit Root Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Statistics</td>
<td>P-value</td>
</tr>
<tr>
<td>EVA</td>
<td>Level</td>
<td>Inverse chi square</td>
<td>37.034</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse normal</td>
<td>24.704</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse logit</td>
<td>38.79</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modified Inverse chi square</td>
<td>42.006</td>
<td>0.000</td>
</tr>
<tr>
<td>Dividend</td>
<td>Level</td>
<td>Inverse chi square</td>
<td>76.112</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse normal</td>
<td>5.454</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse logit</td>
<td>101.474</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modified Inverse chi square</td>
<td>100.007</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Results in Table 2 indicated that all 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

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Pr(Skewness)</th>
<th>Pr(Kurtosis)</th>
<th>adj chi2(2)</th>
<th>Prob&gt;chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log residual</td>
<td>140</td>
<td>0.1815</td>
<td>0.0192</td>
<td>6.8</td>
<td>0.0334</td>
</tr>
</tbody>
</table>

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

\[ \text{chi}^2(35) = 1.0e+34 \]
\[ \text{Prob}>\text{chi}^2 = 0.0000 \]

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

\[ F(1, 34) = 0.564 \]
\[ \text{Prob}>F = 0.4577 \]

The results as indicated in Table 5 show p-value=0.4577 and 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.
Table 6: Hausman Results for EVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>(b)</th>
<th>(B)</th>
<th>Difference</th>
<th>sqrt(diag(V_b-V_B))</th>
</tr>
</thead>
</table>

*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

\[ \text{chi2}(1) = (b-B)'[(V_b-V_B)^{-1}](b-B)=0.10 \]

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>EVA</th>
<th>Dividend financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Dividend financing</td>
<td>-0.095</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Rep 5 percent level of significant.

The results are as presented in the correlation matrix in Table 7. Results revealed that dividend Financing is negatively and significantly associated with EVA.

Table 8: Regression Results on Dividend financing and EVA

| LOG EVA             | Coefficient. | Std Err. | z      | P>|z| |
|---------------------|--------------|----------|--------|------|
| Log dividend financing | 0.282314    | 0.0733634 | 3.85   | **0.000** |
| Constant            | 8.919595     | 1.354881  | 6.58   | 0.000  |

R-Squared = 0.1942

F statistic = 5.791, p=0.000

The optimal model is;

Log EVA=8.92 + 0.282X
Where,

\[ X = \log \text{dividend financing} \]

The regression results in Table 8 show that dividend financing is positively and significantly related with EVA (\( r = 0.282, p = 0.000 \)). This means that a unitary increase in dividend financing leads to an increase in EVA by 28.2%. \( R^2 = 0.194 \) indicated that the model explains variation of dependent variable (EVA) 19.42%. Dividend decisions of a company determine what proportion of earnings is distributed to the shareholders by way of dividends and what proportion is ploughed back for reinvestment purposes. The findings corroborate Tiwari and Kumar (2015) study that observed that, high payout ratio is perceived as low level of investment opportunities available to firms and vice versa in the market and hence will lead to higher or lower market value. The results are in consistent with the findings of Yegon et.al. (2014) observed a positive relationship between dividend policy and investment. In addition the study found a negative relationship between dividend policy and earnings per share. Furthermore the results confirm Asogwa (2009) findings that dividend policy is more important for value creation than profitability in the banking sector.

The null hypothesis was that there is no statistically significant effect between dividend financing and EVA in non-financial firms quoted at the NSE, Kenya. The hypothesis was tested by using the ordinary least square regression. Dividend financing had a p value of less than 0.05 (0.000) as shown in Table 8, thus, the hypothesis was rejected. Therefore there is a statistically significant effect between dividend financing and EVA in non-financial firms quoted at the NSE, Kenya. The result corroborates Yegon, et.al. (2014) study findings that showed that there is a significant positive relationship between dividend policy and investment; and a negative relationship between dividend policy and earnings per share. Furthermore the study results corroborate Mbuvi (2014) findings that indicate that a decrease or omission of a dividend payout is usually accompanied by a decrease in share price, which affects the market value of a firm. The company failure to pay dividend is normally viewed as a company’s inability to generate profits. Most investors are more attracted to invest in companies that are consistent in profit generation as this is viewed as a positive indicator for value creation.

### Table 9: Analysis of Variance between Dividend Financing Decisions and Sectors

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>9.31E+20</td>
<td>5</td>
<td>1.86E+20</td>
<td>1.161</td>
<td>.329</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4.56E+21</td>
<td>284</td>
<td>1.60E+20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.65E+22</td>
<td>289</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis of variance was conducted to determine if there was a significant difference among sectors in respect to dividend financing decisions. The null hypothesis was that there is no significant difference among sectors in respect to dividend financing decisions while the alternative hypothesis was that there is a significant difference among sectors in respect to dividend financing decisions.
The results in Table 9 showed that the p value 0.329>0.05 thus leading to not rejecting the null hypotheses and thus there is no significant difference among sectors in respect to dividend paid out.

**Table 10: Analysis of Variance between Dividend Financing Decisions among Sectors**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.031</td>
<td>5</td>
<td>4.062</td>
<td>5.511</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2.116</td>
<td>287</td>
<td>7.371</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.319</td>
<td>292</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 10 show that the p value is 0.000<0.05. This leads to rejection of the null hypotheses and thus indicates a significant difference among sectors in respect to combined financing decisions. The results are inconsistence with study by Hall (2013) that sought to investigate effects of various drivers on shareholder value creation. The results show a significant difference between sectors. The results imply that, financial managers should analyze and measure the effect of various financing options. Proper planning is essential in determining an optimal financial mix which will ensure profitability, growth, survival and continuous shareholder value creation. However it is worth noting that financing needs varies over time, thus firms may not always be at optimal level. The managers should therefore weigh the benefits of being on target versus the cost of being off target.

**5.0 CONCLUSIONS**

Dividend financing had a positive and statistically significant effect on the shareholder value creation among firms quoted at the NSE, Kenya. Different companies have varying dividend policies and hence dividend paid out and retained earnings are not easy to standardize. The findings indicate that dividend paid out has an effect on shareholder value creation. Dividend financing is generally the cheapest source of funds; however, it has a psychological effect on investors and other fund providers. Management should therefore be keen on the implication of the dividend policy adopted and its effect on long term shareholder value creation.

**6.0 RECOMMENDATIONS OF THE STUDY**

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. The results of this study draw significant policy implications at micro and macroeconomic levels. Decisions related to choice of appropriate sources of fund are crucial since they have impact on continuous value creation and maintenance. This will ensure continuous supply of both short term and long term finances and boost investors’ confidence in a firms going concern.

Further this study recommends that, companies listed at the NSE, should start disclosing EVA statement as part of financial information in their annual reports. 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. The management should
endeavor to improve the quality of annual reports in terms of content and disclosures. In addition, finance managers should make conscientious effort to study and gain understanding on value-based measures which include EVA as a measurement tool 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 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. Statement on shareholder value creation could improve the quality of financial information for better investment decisions, dividend financing 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. 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.

7.0 REFERENCES


Tiwari, R., & Kumar, B. (2015). Driver of Firm’s Value: Panel Data Evidence from Indian Manufacturing Industry. 7 (12)
