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EFFECT OF COST OF CAPITAL ON FINANCIAL PERFORMANCE AMONG MANUFACTURING FIRMS IN KENYA

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ABSTRACT

The objective of this study was to analyse the effect of cost of capital on financial performance of manufacturing firms in Kenya. The target population of the study being 741 manufacturing firms in Kenya and a sample of 252 firms taken to be a representative of all manufacturing firms in Kenya. In order to collect data from the sampled respondents, cluster sampling was used to classify each of the twelve sub sectors into individual Stratas. Simple random sampling procedure was then used to select the sample in order to ensure each and every firm in the target population was represented. The study adopted a survey design that was descriptive in collecting data. A structured questionnaire was distributed targeting manufacturing firms in Kenya. Statistical analysis was done using correlation and multiple regression model in order to establish the linear relationships between one or more variables and to test the significance of the relationships between the dependent and independent variables. The data analysis was done using Statistical Package for Social Scientists (SPSS) version 24 to facilitate computation of descriptive statistics, multiple regression and Pearson correlation to get answers to the study questions. To test the hypothesis for this study, the independent variable was regressed against financial performance as the dependent variable. The key findings were that cost of capital had a positive influence on the financial performance of manufacturing firms. There was a significant positive relationship between cost of capital and manufacturing firm's financial performance. Managers who were consulted about these results attributed the low explanatory power of variables to stiff competition, quality of the product and government policies. The key recommendations were that managers need to adopt the determinant of financial performance according to their firm requirements in order to improve performance. The study assists policy makers in coming up with better policies on improvement of financial performance.

Key Words: Cost of Equity, Cost of Debt, Cost of Preference Shares

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INTRODUCTION

Cost of capital is primarily a risk measure, but it is also related to firm value and can be considered a key determinant of firm's value other than accounting performance measures. Value is created when the firm is able to enjoy a cheaper source of capital. Given a rate of interest or cost of capital, an investor would choose a project whose internal rate of return exceeded the cost of capital. If investments were expected to earn a return below their cost of capital, investors would have a superior alternative for their funds. They could find other projects with the same expected return but lower risk, or projects with the same risk, but a higher expected return. In addition, the cost of capital is very important for a firm in order to assess future investment opportunities and to reevaluate existing investments (Okiro, 2014). The cost of equity for a firm is affected by several factors, some of which are related to characteristics of the firm itself, while others stem from the macroeconomic environment in which it operates. A study by Ahmad (2012), found that greater firm size and greater liquidity of a firm's stock are associated with a lower cost of capital.

Fiscal tax incentive is a deduction, exclusion or exemption from tax liability offered as an enticement to engage in a specified investment activity (Njuru, 2015). The most dominant fiscal tax incentives in Kenya take the form of investment allowances, tax credit, special economic zones, reduced tax rates and tax exemption. Specific fiscal tax incentives offered include capital allowances, capital market incentives, EPZ benefits and tax remissions for exports. For fiscal tax incentive to be justifiable, the benefits derived from any tax incentives should be significantly higher than the cost of administering them.

Manufacturing sector acts as a catalyst to transform the economic structure of countries from simple, slow growing and low value activities to more vibrant and productive economies (Kungu, 2015). Despite the decline in manufacturing sector in the west, in UK, the sector was third largest in 2015 after business services and wholesale/retail in terms of share of UK GDP. Manufacturing sector generated one hundred billion pounds in gross value added. This represents more than 12% of the UK economy. It employed 2.8 million people, representing over 8% of total UK employment (BIS, 2014). In Ireland, the sector accounts for 46% of its GDP, 29% of total employment and 80% of its exports.

In Africa, manufacturing sector is equally important. In South Africa, the sector accounts for an average of 17.4% of its GDP, 9% employment and 40% of its total exports. As nations achieve higher levels of economic growth, manufacturing sector seems to contribute more to the GDP, employment levels, innovation and trade (Kungu, 2015). The manufacturing sector plays a big role in national income of African countries. The sector contributes to the progress of the African economies, increased rate of economic growth, diversified production, reduced imports, and expanded the economic infrastructure (Rotich & Namusonge, 2016). The share of the manufacturing sector in total employment and per capita manufacturing value added are rough indicators of industry's contributions in the social, economic and environmental dimensions of African countries. The economic role of industry in sustainable development presents per capita manufacturing value added as a general indicator of industrial development in the economic perspective. One important contribution of industry to the social component in sustainable development is creation of employment (Rissa, 2014).

In Kenyan Manufacturing firms have become an important contributor to the economy. The sector contributes to the national objective of creating employment opportunities and generating income for the economy (Njoroge, 2014). The sector leads in foreign exchange earning accounting for 34% of the total earnings (Kenya Association Manufacturers (KAM, 2014). The KAM is a membership organization whose role is to provide leadership and services aimed at enhancing the development of a competitive manufacturing sector in Kenya. In Kenya the manufacturing sector is expected to remain a vibrant and strong contributor to sustained recovery and growth of the Kenyan economy (Kungu, 2015). Majority of manufacturing firms in Kenya, employ up to 100 workers (GOK, 2015).

Kenya Vision 2030 is the country's development blueprint aimed at transforming Kenya into a newly industrialized middle income country providing a high quality of life to all citizens by the year 2030. The strategy aims to realize the objective through creating a vibrant and globally competitive financial sector promoting high-levels of savings and financing for Kenya's investment needs (Aroni & Namusonge, 2014). The vision 2030 identified the manufacturing sector as one of the key drivers for realizing a sustained annual GDP growth of 10 per cent. This has impacted positively on other millennium development goals such as health, education and infrastructure development. Kungu, (2014) postulates that manufacturing sector has high potential in employment creation and poverty alleviation. Kenya aims to become the provider of choice for basic manufactured goods in Eastern and Central Africa. This will be achieved through improved efficiency and competitiveness at firm levels.

Kenya also aims to strategically increase the level of value addition in niche exports by additional processing of local agriculture products. The manufacturing sector contributed 8.9 per cent of GDP and provided 12.4 per cent of employment in the formal sector in 2013 (Kenya Economic Report, 2014). Although this seems to be a good performance, it is below the 10 per cent contribution target per annum anticipated in the Kenya's vision 2030. The major problem attributed to this is unfair competition emanating from illicit and illegal trade (Kenya manufacturing survey, 2014).

Investors measure overall company performance in order to be able to make the right investment decisions. The financial performance measures have a variety of users but they are assumed to be of primary interest to shareholders as they entrust their money to company managers who are responsible for the application of capital but may have no incentives to increase shareholders value (Njeru, 2015). Additionally, agency theory argues that unless managers are monitored constantly they act in self-interest, which might be at variance with interests of shareholders. But this variance can be reduced through the added costs of monitoring or designing appropriate incentive structures. In order to achieve goal congruence, managers' compensation is often linked with the performance of the responsibility centers and also with overall company performance (Uzel, 2015).

Moreover, for the case of Kenya it is valid to note that members want to earn a dividend and how much dividends manufacturing firms can pay is a function of how well assets have been deployed to generate revenue, and how well cost elements have been managed. Further, applying the profit maximization approach to modeling financial performance would not negate the principal of maximizing member's profitability benefit (Rotich, 2016). Since in this study the objective is to identify the determinants of financial performance of manufacturing in Kenya, two issues have to be addressed. These are how to measure financial performance and then how to attribute financial performance to variables posited to be the determinants of performance. Traditionally, analysis of financial statements using ratio analysis is the most common method employed in measuring financial performance of business entities. For instance, Okelo (2015) notes that return on equity (ROE) ratio is one of the most important relationship in financial analysis. Additionally Ogindo (2015), observes that profitability indicators such as return on equity (ROE) and return on assets (ROA) tend to summarize performance in all areas of the company. If portfolio quality is poor or efficiency is low, this will tend to be reflected in these ratios. Gupta, (2012) uses both ROE and ROA to measure profitability.

Statement of the Problem

In Kenya, manufacturing sector is the second most important sector after agriculture. It is important in terms of contribution to gross domestic product, employment and foreign exchange earnings. The rapid growth of the manufacturing sector in most developing countries like Kenya has a number of implications for activities in this sector to implement reforms necessary to strengthen such sectors (Rotich & Namusonge 2016). Such improvements may include steps such as privatization, trade development, regulatory and competitive framework reviews and industrial productivity and tax reforms. Akhabonje and Namusonge (2016) argued that there is a positive effect between capital intensity and financial performance of enterprises in Kitale town.

The manufacturing sector in Kenya is large and contributes significantly to economic development, innovation and productivity. However many manufacturing firms have relocated or restructured their operations opting to serve the local market through importing from low-cost manufacturing areas such as Egypt, South Africa and India therefore resulting in job losses (Kariithi & Kihara, 2016). This is an indication that many manufacturing firms in Kenya are experiencing performance challenges with many reporting profit warnings due to challenges in the operating environment (GoK, 2017). Therefore the manufacturing sector has been struggling to thrive and some key firms in the sector have closed operations due to unfavorable working conditions (Kungu, 2015). For example Sameer East Africa closed its Yana Tyres manufacturing factory in Nairobi, citing increased competition from cheaper imports. Other manufacturers who have shut down operations include Proctor and Gamble and everyday East Africa. Statistics from World Bank show that manufacturers operating in Kenya registered stagnation and declining profits for the last five years due to a turbulent operating environment (World Bank, 2017). Manufacturing sector in Kenya contributed barely 13.6 per cent to the GDP in the year 2016 indicating a decline from the previous year 2015 where it had reported a 5.6 per cent growth (KNBS, 2017).

There is need to understand the determinants of financial performance of manufacturing firms. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large (Kung'u, 2015). Kiaritha (2016) found a positive relationship between financial performance and access to finance. Bunyasi, Namusonge and Bwisa (2014), argued that access to entrepreneurial finance has a positive influence on the performance of SMEs. Kinyanjui (2015) found a positive relationship between access to financial resources and firm performance. Additionally Nanagaki and Namusonge (2014) argues that there is a positive relationship between access to finance and performance of enterprises.

Additionally, Gupta, Srivasta and Sharma (2015) postulates that companies that have high profitability and good performance have less debt. Ummar, Tanveer and Aslam (2014) in their study on the impact of capital structure on financial performance in Pakistan concluded that capital structure choice is an important determinant of financial performance of firms. Javed and Akhta (2016) found a positive relationship between leverage, financial performance, and growth. Okelo (2016) argues that capital structure affects financial performance of firms. Earlier work on performance in Kenya only focused on business performance of small and medium enterprises (Namusonge, 2017). Otieno (2017) postulates that investment strategies influences the performance of Kenya's manufacturing firms. Wawire (2015) postulates that taxation was negatively related to financial performance as it increases the cost of running business. Mwangi (2016) argues that equity financing was positively related to financial performance. Lack of enough studies targeting financial performance in the manufacturing sector necessitated the carrying out of this study. The study aimed at establishing the determinants of financial performance of manufacturing firms in Kenya.

Measures of firm performance would be a combination of both financial and non-financial measures. Financial measures can be represented by profit, revenue, returns on investment (ROI), returns on equity (ROE) and earnings per share (EPS) (Omar, 2017). They have the advantage of being objective, simple and easy to understand. However, they have the drawback of being not easily available and being historical, therefore offering only lagged information. They can also be subject to manipulations and incompleteness (Ng'ang'a, 2017). Non-financial measures include number of employees, revenue growth, revenue per employee, market share, customers' satisfaction, employees' satisfaction. The non-financial measures have the disadvantage of being subjective (Njeru, 2015). Owing to the limitations of the financial and non-financial measures, the study employed a hybrid approach combining both financial and non-financial measures of performance.

Research Objectives

The objective of the study was to analyse the effect of cost of capital on financial performance among manufacturing firms in Kenya. The researcher tested the following null hypothesis:

- **H₀:** Cost of capital does not significantly affect financial performance among manufacturing firms in Kenya.

LITERATURE REVIEW

Theoretical Framework

Trade-off Theory

Trade-off theory suggested by Jensen and Meckling allows bankruptcy cost to exist (Okelo, 2015). The theory looks at the tradeoff between tax benefit of debt and the costs of bankruptcy. It argues that firms will use debt as much as possible but watch out for any disadvantage that may arise as a result of a bankruptcy. It states that there is an advantage to financing with debt, that is the tax benefits of debt and that there is a cost of financing with debt that is the bankruptcy costs and the financial distress costs of debt (Mwangi, 2015). The marginal benefit of debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing (Migiro, 2013). Okelo (2015) believes that debts payment decreases cash flows available for managers. But, on the other hand, he states that this decrease will reduce the opportunities of profitable investing. Thus, companies with less debt have more opportunities for investment and in comparison with other active firms in industry, have more liquidity. Additional costs of debt include potential bankruptcy costs and agency costs associated with the monitoring of investments by bondholders.

In practice however, firms do not operate with a 100% debt financing due to distress, bankruptcy and agency costs hence the need to match the costs and benefits. Moreover, the theory predicts that there is a positive effect of the tax rate and leverage due to allowable financial expenses against taxable income, it does not specify the effect of tax rate and leverage (Mwangi, 2015). Trade-off theory is adopted in this study because costs and benefits of alternate financial sources are “traded off” until the marginal cost of equity equals the marginal cost of debt, yielding the optimal capital structure, and maximizing the value of the firm.

Mwangi (2015) postulates that the theory was first suggested by Donaldson in 1961 and further developed by Myers and Majluf in 1984. It argues that firms have a preferred hierarchy for financing decisions with the highest preference being to use internal financing before resorting to any form of external funds. This is because internal funds incur no flotation costs and require no additional disclosure of financial information that may lead to a possible loss of competitive advantage in the market. Thus, issuing new shares may harm existing shareholders through value transfer from old to new shareholders.

Managers will prefer financing new investments by internal sources (i.e. retained earnings) first, if this source is not enough then managers seek for external sources from debt as second and equity as last. Thus, according to the pecking order theory firms that are profitable and, therefore, generate high earnings to be retained are expected to use less debt in their capital structure than those do not generate high earnings, since they are able to finance their investment opportunities with retained earnings. Pecking Order theory states that companies prioritize their sources of financing from internal financing to equity. Therefore internal financing is used first then when that is depleted, debt is issued and when it is no longer sensible to issue any more debt, equity is issued.

The theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required. The theory however assumes that firm's managers know more about the company's current earnings and future growth

opportunities than outside investors and they will act in the best interests of the company's existing shareholders (Sheikh & Wang, 2013). There is a strong desire to keep such information proprietary as the use of internal funds precludes managers from having to make public disclosures about the company's investment opportunities and potential profits to be realized from investing in them (Mwangi, 2015). In safeguarding the interest of the existing shareholders, managers may even forgo a positive return project if it would require the issue of new equity, since this would give much of the project's value to new shareholders.

Aroni (2015) argues that equity is a less preferred means to raise capital because when managers issue new equity, investors believe that managers think that the firm is overvalued and managers are taking advantage of this over-valuation. As a result, investors will place a lower value to the new equity issuance. Okelo (2015), postulates that high tax rate firms use debt more than low tax rate firms in order to take advantage of tax shields on interest payments. Pecking order theory is therefore adopted in this study because the form of financing sources a firm chooses can act as a signal of its ability to access finance and consequently financial performance.

Conceptual Framework

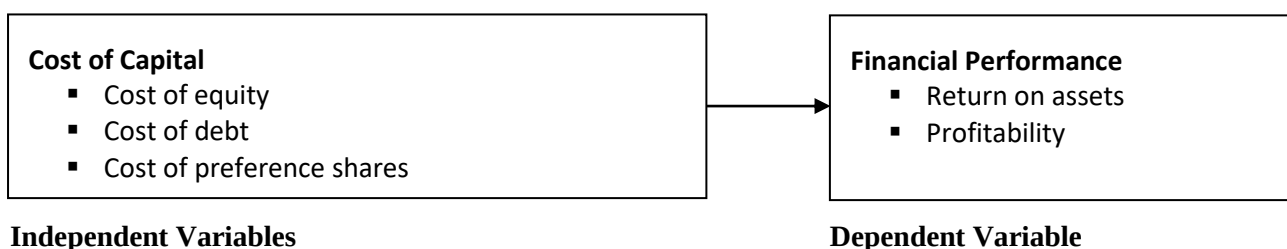


Figure 1: Conceptual Framework

Cost of Capital

From an investor's point of view a firm's cost of capital is the rate of return required by them for supplying capital for financing the enterprise. It is a vital aspect of good business planning and it reflects the opportunity cost of funds for investment in companies (Okelo, 2015). Cost of capital may be used to evaluate investment decisions as well as design a firm's debt policy. It represents a financial standard for allocating a firm's funds, supplied by owners and creditors to the various investment projects in an efficient manner Capon *et al.*, (2008). Njuru *et al.* (2013) argues that various investment projects can be ranked depending on their internal rate of return.

Thus, given a rate of interest or cost of capital, an investor would choose a project whose internal rate of return exceeded the cost of capital. If investments were expected to earn a return below their cost of capital, investors would have a superior alternative for their funds. They could find other projects with the same expected return but lower risk, or projects with the same risk, but a higher expected return. Cost of capital is primarily a risk measure, but it is also related to firm value and can be considered a key determinant of firm's value other than market and accounting performance measures. Value is created when the firm is able to enjoy a cheaper source of capital. In addition, the cost of capital is very important for a firm in order to assess future investment opportunities and to reevaluate existing investments (Okiro, 2014). The cost of equity for a firm is affected by several factors, some of which are related to characteristics of the firm itself, while others stem from the macroeconomic environment in which it operates. A study by Ahmad (2012) found that greater firm size and greater liquidity of a firm's stock are associated with a lower cost of equity.

Attar (2014) investigated the relationship between capital structure and corporate strategy of Saudi Arabian manufacturing firms. The results illustrated that the cost of servicing debt remained a significant factor that influences the capital structure decisions of Saudi manufacturing firms, despite the availability of cheap government financing. Differences in the cost of equity across firms can be affected by such variables as the

degree of financial market segmentation, unexpected movements in exchange rates, inflation uncertainty, differences in personal taxes, and different legal and regulatory environments, including enforcement (Mariana, 2012).

Debt holders are exposed to the risk of default since a firm may default on its obligation to pay interest and principal (Okelo, 2015). A company may raise debt by borrowing funds from financial institutions or public deposits or debentures for a specified period of time at a certain rate of interest. The debt policy of a firm is influenced by cost consideration. Debt helps to save taxes, as interest on debt is a tax deductible expense. A firm financed by debt is under a legal obligation to pay interest and repay principal. Okelo (2015) argues that the higher the rate of return demanded by a firm's investors for the capital they provide to the firm, the more costly it is for a firm to finance itself. Secondly, the cost of capital is the rate that investors use to discount a firm's future cash flows. The higher the cost of capital, the lower the present value of the firm's future cash flows, hence the higher the financial risk. Kungu (2015) avers that firms face several financing options, with internal finance being the least costly, debt financing next, and financing by issuing new equity the most expensive.

The preference stock dividends are paid to shareholders before common stock dividends are paid out. In the event of a company bankruptcy, preferred stock shareholders have a right to be paid company assets first. Preference shares typically pay a fixed dividend, whereas common stocks do not (Ahmad, 2012). And unlike common shareholders, preference share shareholders usually do not have voting rights.

Convertible preferred stock converts to common stock after a specific period of time. Conversion is either mandatory or voluntary, at a fixed price or market price at the time of conversion. Redeemable preferred stock can be bought back after a specific period of time, usually at a fixed rate of the issue price. Redemption is mandatory or voluntary, dependent on the specific terms of the stock, and usually only initiated by the issuer. Cumulative preferred stock implies that any dividends outstanding to preferred shareholders are carried forward and must be paid before any dividends can be paid to common shareholders (Aroni, 2015).

Preferred stock is a hybrid security with senior claim on fixed rate dividends relative to common stock. Moreover, preferred shareholders have senior claim on assets in the event of liquidation, and hence preferred stock is junior to debt, but senior to common equity in the capital structure (Berk, DeMarzo & Harford, 2012). Preferred stock is legally treated as equity, but as a financial instrument it has more in common with debt (Berk *et al.*, 2012). Like debt, preferred stock offers a fixed dividend (coupon), and is thus sensitive to changes in market interest rates. On the other hand, dividend payments are not considered a mandatory obligation, and hence failure to pay dividends does not constitute a default event. From an investor perspective, preferred stock is most similar to debt when the issuing firm is financially healthy. When the issuing firm's financial stability weakens, preferred stock becomes more similar to equity, as the risk of failure to meet the obligations on the security increase.

Financial Performance

Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. It is the process of measuring the results of a firm's policies and operations in monetary terms (Mwangi, 2016). It identifies the financial strengths and weaknesses of a firm by establishing relationships between the items of the financial position and income statement. The term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure firms' performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Njeru, 2012). Lyria *et al.* (2017) argues that financial Performance can be measured by return on

investment, competitive position, market share growth, overall profitability, sales volume growth, and cash flow and profit improvement.

Measures of firm performance would be a combination of both financial and non-financial measures. Financial measures can be represented by profit, revenue, return on investment (ROI), return on equity (ROE) and earnings per share (EPS) (Omar, 2017). They have the advantage of being objective, simple and easy to understand. However, they have the drawback of being not easily available and being historical, therefore offering only lagged information. They can also be subject to manipulations, and incompleteness (Ng'ang'a, 2017). Non-financial measures include number of employees, revenue growth, revenue per employee, market share, customers' satisfaction and employees' satisfaction. The non-financial measures have the disadvantage of being subjective (Uzel, 2015). Owing to the limitations of the financial and non-financial measures, it has become the generally acceptable standard to employ a hybrid approach combining both financial and non-financial measures of performance.

The independent variables are both subjective and objective measures. Although subjective measures offer useful insight into the business environment, they have some shortcomings. Firstly, subjective measures are firm perceptions of the business environment and this could reflect idiosyncratic differences in the degree of optimism or pessimism of the respondents (Omar, 2017). Also, answers could be influenced by the experience and performance of the firm (Omar, 2017). In light of this, it is important to use objective measures to examine how the independent variables influence the dependent variable.

Quantitative measures of firm performance include profitability measures such as gross margin, net margin for example return on sales, return on equity, economic value added, return on equity less cost of equity and return on capital employed. Other measures of performance include cash flow measures such as free cash flow over sales and growth measures for example historical revenue growth. Ideally, forward-looking measures such as expected profitability, cash flow and growth should be used to measure a firm's performance (Kiaritha, 2015).

Management researchers prefer accounting variables as performance measures such as return on equity (ROE), return on investment (ROI), and return on assets (ROA). Other common measures of performance include Earnings per share (EPS); Price/Earning (P/E) ratio and net interest margin (NIM). The NIM variable is defined as the net interest income divided by total assets. Okiro (2014) use net interest margin and before tax profit/total assets as measures of financial performance. Earlier studies typically measure accounting rates of return. These include: Return on Investment (ROI), return on capital (ROC), return on assets (ROA) and return on sales (ROS). The idea behind these measures is perhaps to evaluate managerial performance-how well is a firm's management using the assets to generate accounting returns per unit of investment, assets or sales (Memba, 2011). The problems with these measures are well known. Accounting returns include depreciation and inventory costs and affect the accurate reporting of earnings. Asset values are also recorded historically.

Return of total assets (ROA) reflects how well management uses the firms real investments resources to generate profit (Ongore, 2013). Return on assets indicates how profitable a business is relative to its assets. It measures the ability of the firm management to generate income by utilizing company assets at their disposal. Nyabwanga, Ojera, Otieno and Nyakundi (2013) assert that return on assets must be positive and the standard figure for return on assets is 10% - 12%. The higher the ROA the better because the business is earning more money on the capital invested. ROA takes into consideration the return on investment (ROI) and indicates the effectiveness in generating profits with its available assets.

Firm performance is concerned with the overall productivity in an organization in terms of stock turnover, customers, profitability and market share (Uzel *et.al*, 2015). When corporate profitability increases, the earnings from the production and operation would be much, and the company has more funds to return the due

debt. Profitability refers to the profitability level of enterprise production and management. The more corporate profitability is, the more profits a firm gets from the production and operations, the more able to guarantee of debt due for repayment (Fu Gang, 2012). The amount of profit can be a good measure of performance of a company. So profit is used as a measure of financial performance of a company as well as a promise for the company to remain a going concern in the world of business (Agha, 2014). Migiro (2013) highlights performance measurement as one of the tools which helps firms in monitoring performance, identifying the areas that need attention, enhancing motivation, improving communication and strengthening accountability.

It is widely believed that firm growth and profit rates are related to each other (Coad, 2010, Goddard *et al.*, 2014). There are a number of theoretical claims that growth rates have a positive impact on profit rate. Firm growth could lead to an increase in firm size resulting to larger firms which could benefit from economies of scale and in turn enhanced profits. Sales growth shows the rate of increase in a company's sales per share, based on several periodic time periods, and is considered the best gauge of how rapidly a company's core business is growing (Javed & Akhta, 2012). Cash flow tells you how much cash a business is actually generating in its earnings before depreciation, amortization, and noncash charges. Sometimes called cash earnings, it's considered a gauge of liquidity and solvency. Cash-flow growth shows the rate of increase in a company's cash flow per share, based on several time periods.

Measures of financial performance include return on sales which reveals how much a company earns in relation to its sales, return on assets determines an organization's ability to make use of its assets and return on equity reveals what return investors take for their investments. Asset turnover refers to the ratio of sales to average total assets of the firm. It measures the organizations' efficiency in deploying and utilizing its assets to generate sales revenue (Ongore & Kusa, 2013). Sales revenue has an effect on financial performance and since asset turnover is related to sales, it can therefore be concluded that asset turnover also has an impact on the eventual financial performance of the organization.

Profitability of the firm is net income to average assets. Holding margins and other operating expenses constant, it can be predicted that the higher the asset turnover, the higher the profitability of the firm (Mwirie & Birundi, 2015). A study by Ongore, (2013) on determinants of banks financial performance concluded that quality of assets has a significant influence on performance. Total assets can have a positive effect on financial performance because larger firms can use this advantage to get some financial benefits in business relations. The advantages of financial measures are the easiness of calculations and that definitions are agreed worldwide.

Traditionally, the success of a manufacturing system or company has been evaluated by the use of financial measures (Migiro, 2013). Cornett *et al.* (2008) avers that analyzing financial statement using ratio analysis is one way of identifying weaknesses and problem areas of firms as well as evaluating financial performance. Brigham and Ehrhardt (2015) commenting on analysis of financial statements, observe that financial statement analysis involves comparing the firms performance with that of other firms in the same industry and evaluating trends in the firm's financial position overtime. They note that financial ratios provide a useful tool to evaluate financial statements and single out return on equity (ROE) as the most important accounting ratio.

METHODOLOGY

The study adopted both cross-sectional research design and descriptive survey design. The study focused on manufacturing firms in Kenya (KMA, 2016). The study's target population was 741 manufacturing firms operating in Kenya. The respondents were managers of manufacturing firms registered with KAM and were in KAM's 2016 directory. The study focused exclusively on the manufacturing firms that deal with transformation of raw materials and semi-finished products into more complex form or for the final consumers. Those in services and consultancy and fresh produce were omitted. The sampling frame for this

study consisted of all firms in Kenya registered with Kenya Association of Manufacturers (KAM), 2016 as they appear in the KAM listing manual (KAM,2016). The study adopted multistage sampling technique to select the sample size. The study used purposive sampling to select the 252 managers of departments from a target population of 741.

The primary data was collected through a self-administered semi-structured questionnaire. The questionnaire contained closed-ended questions and a customized five-part Likert scale which was used to collect data on the variables from the departmental heads. Respondents were asked to indicate agreement with each item. Each item had a five-point scale ranging from 1 = strongly disagree, 2 = disagree, 3 = indifferent, 4 = agree, and 5 = strongly agree.

Secondary data was acquired through analysis of companies published accounts, from web sites of different manufacturing firms, from manufacturing firms' offices and from the registrar of companies. The data was collected for span a period of five years covering 2012 to 2016. The reason to restrict the period of the study to five years was that the latest data was readily available for this period.

Qualitative research was used to provide deep interpretation of the research problem by exploring causal relationships among the variables selected in the study. Semi-structured interview was used to collect data with an interviewer-administered questionnaire. Analysis of Variance (ANOVA-F test) which determines the effect of independent variable on the dependent variable was carried out based on which the set hypothesis was accepted or rejected.

Quantitative research was used to describe, explain and quantify relationships between different variables. The data analysis was done using Statistical Package for Social Scientists (SPSS) version 24 to facilitate computation of descriptive statistics, multiple regression and Pearson correlation to get answers to the study questions.

FINDINGS AND DISCUSSIONS

The total population of manufacturing firms in Kenya was 741 where a sample of 252 firms was targeted. A total 252 questionnaires were delivered to the respondents in the sample. However, 110 questionnaires were not returned leaving a total of 142 in usable form. This represents a response rate of 56% for the manufacturing firms in the sample. This response rate was considered to be adequate compared to the usually expected response rate of 50-75% for hand delivered questionnaires (Saunders *et. al.*, 2009). This was comparable to previous studies for manufacturing firms that achieved almost a similar response rate.

Financial Performance of Manufacturing Firms

In order to find out the factors that were driving financial performance measures in manufacturing firms, data analysis on financial performance was done to facilitate computation of descriptive statistics and multiple regression to get answers to the study questions. To test the hypothesis for this study, the independent variables were regressed against financial performance as the dependent variable. The analysis was carried out for both primary and secondary data.

Descriptive Results on Financial Performance

The manufacturing firms financial performance were assessed by nine measures but after factor analysis these measures were reduced to seven namely enhanced operating income, improved market share, enhanced liquidity position, increased profitability levels, enhanced return on assets, enhanced return on equity and increased sales. The significant results showed that the means were statistically different and the null hypothesis was rejected.

The next section shows the relevant statistical results of financial performance of manufacturing firms. The highest mean score was registered by increased sales growth with a mean of 3.9859 and the second were

improved market share with a mean of 3.9085. The third were increased profitability levels with a mean of 3.8099 while enhanced return on assets had a mean of 3.7042.

Enhanced return on equity registered a mean of 3.6901. The implication of the mean scores is that the higher the mean the higher the influence of the construct on financial performance. The overall mean score for all the measures was moderate at 3.7776.

Table 1: Descriptive Results on Financial Performance of Manufacturing Firms (primary data)

Opinion statement	N	Mean	Std. Dev.
We have achieved enhanced operating income	142	3.7887	.08352
We have had an improved market share over the last five years	142	3.9085	.09889
We have achieved an enhanced liquidity position over the last five years	142	3.5563	.10412
We have experienced improved profitability levels over the last five years	142	3.8099	.08418
We have achieved an enhanced return on assets over the last five years	142	3.7042	.08701
We have achieved an enhanced return on equity over the last 5 years	142	3.6901	.09115
We have experienced increased sales growth over the last five years	142	3.9859	.08994

Key, scale: 1-1.8 strongly disagree, 1.8-2.6 disagree, 2.6-3.4 neither agree nor disagree, 3.4-4.2 agree, 4.2-5 strongly agree.

The mean scores differed from one manufacturing firm to another with highest difference being noted in increased sales growth. The least variance was noted in enhanced liquidity position. The implication of the results is that most respondents felt that increased sales growth was the highest determinant of manufacturing firm performance with the highest mean of 3.9859 while enhanced liquidity position had the least influence at 3.5563.

Table 2: Descriptive Results on Financial Performance of Manufacturing Firms (secondary data).

	N	Mean	Std. Deviation
Return on asset year 1	142	.527672	.1718861
Return on asset year 2	142	.553214	.1798842
Return on asset year 3	142	.539896	.1598329
Return on asset year 4	142	.546245	.1699252
Return on asset year 5	142	.562129	.1849431

The mean scores differed from one year to another with highest difference being noted in return on asset in year five at 0.562129. Return on assets in year 2 has a moderate influence with a mean of 0.553214 while return on asset year 1 had the least influence at 0.527672. The implication of the mean scores is that the higher the mean the higher the influence of the construct on financial performance.

Descriptive Results on Independent Variables

In order to find out the factors that were driving financial performance measures in manufacturing firms, data analysis on independent variable was done to facilitate computation of descriptive statistics to get answers to the study questions. To test the hypothesis for this study, the independent variable was regressed against financial performance as the dependent variable.

Descriptive Results on Cost of Capital.

The manufacturing firms cost of capital were assessed by nine measures but after factor analysis these measures were reduced to six namely interest paid to debt holders have impacted negatively on financial performance, cost of equity impacts negatively on performance, cost of equity discourages our firm from using it, cost of equity determines our choice of financing and interest rates have an impact on financial performance. This is because factor analysis identified three major factors which had the biggest influence on manufacturing firm's performance. The significant results showed that the means were statistically different

and the null hypothesis was rejected. Factor 1 was cost of equity which had the two constructs, factor two was named interest rates with the last construct, factor three was named cost of debt which had two constructs whose means have been identified in Table 3.

Table 3: Descriptive Results on Cost of Capital

Opinion Statement	N	Mean	Std. Dev.
Interest paid to debt holders have impacted negatively on our firms financial performance	142	3.0423	.08590
The high cost of debt discourages our firm from using it.	142	2.9366	.07427
Cost of equity impacts negatively on financial performance	142	2.5845	.09064
The high cost of equity discourages our firm from using it	142	3.0775	.08660
In our firm the cost of debt determines our choice of financing	142	2.9718	.08299
Interest rates have an impact on our firms financial performance	142	2.1972	.09956

Key, scale: 1-1.8 strongly disagree, 1.8-2.6 disagree, 2.6-3.4 neither agree nor disagree, 3.4-4.2 agree, 4.2-5 strongly agree.

The highest mean score was registered by the high cost of equity discourages our firm from using it with a mean of 3.0775 and the second were interest paid to debt-holders impacts negatively on financial performance with a mean of 3.0423. The fourth were the high cost of debt discourages our firm from using it. The fourth were cost of equity determines our choice of financing with a mean of 2.9718 while cost of equity impacts negatively on financial performance had a mean of 2.5845. The last construct were interest rates have an impact on financial performance with a mean of 2.1972. The implication of the mean scores is that the higher the mean the higher the influence of the construct on cost of capital. The overall mean scores for all the measures was moderate at 2.8016. The mean scores differed from one manufacturing firm to another with highest difference being noted in cost of equity discourages our firm from using it. The least variance was noted in interest rates have an impact on firm's financial performance. The implication of the results is that most respondents felt that the high cost of equity discourages firms from using it was the highest determinant of manufacturing firm performance with the highest mean of 3.1268 while interest rates have an impact on firms financial performance had the least influence at 2.1972.

The manufacturing firms cost of capital were assessed by nine measures but after factor analysis these measures were reduced to seven namely interest paid to debt holders have impacted negatively on financial performance, cost of equity impacts negatively on performance, cost of equity discourages our firm from using it, cost of equity determines our choice of financing and interest rates have an impact on financial performance. This is because factor analysis identified three major factors which had the biggest influence on manufacturing firm's performance. The significant results showed that the means were statistically different and the null hypothesis was rejected. Factor 1 was cost of equity which had the two constructs, factor two was named interest rates with the last construct, factor three was named cost of debt which had two constructs.

Cost of Capital Factor Results

Cost of capital is the rate of return required by owners for supplying capital for financing the enterprise. Cost of capital may be used to evaluate investment decisions as well as design a firm's debt policy. It represents a financial standard for allocating a firms funds, supplied by owners and creditors to the various investment projects in an efficient manner (Okelo, 2015). A Principal Component Analysis with varimax rotation was performed on nine cost of capital measures in order to examine the dimensionality of cost of capital and financial performance and also to find out if all the variables were significant to financial performance. The other objective was to group the common factors and to retain a small number of factors which had the highest influence (Sabana, 2014).

In order to find out the factors that were driving cost of capital in manufacturing firms, KMO and Bartlett's test were performed. KMO measures sampling adequacy which explains the extent to which indicators of a construct belong to each other. The results of factor analysis were shown in tables 4.

Table 4: Cost of Capital Measures KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	.772
Bartlett's Test of Sphericity	Approx. Square df	Chi-377.728
	Sig.	36
		.000

KMO test measures sample adequacy and it ranges between 0 and 1. A value close to 1 indicates that patterns of correlations are compact and hence the Factor Analysis is reliable and appropriate for the study. KMO measures on cost of capital had 0.772 which represented great acceptability of the use of factor analysis and sufficient intercorrelations.

Bartlett's test of Sphericity is significant (chi-square=377.728, $p < 0.000$). Bartlett's test checks if the observed correlation matrix diverges significantly from the identity matrix. The total variance explained in the cost of capital constructs was explained in table 5.

Table 5: Total Variance Explained for Cost of Capital Measures

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.981	49.812	49.812	4.981	49.812	49.812	4.968	49.685	49.685
2	2.112	21.124	70.937	2.112	21.124	70.937	2.125	21.252	70.937
3	.980	10.890	81.827						
4	.682	7.580	89.407						
5	.489	5.434	94.841						
6	.247	2.749	97.590						
7	.115	1.279	98.870						
8	.066	.736	99.606						
9	.035	.394	100.000						

Extraction Method: Varimax Rotation.

The analysis of variance identified the Eigen values are the elements that describe the degree of change in each variable in relationship to the total overall variables. In the analysis of variance other elements include the percentage of variance and also the cumulative percentages which were explained by the extracted factors before and after the rotation. The nine measures of cost of capital were subjected to factor analysis and the results show that there were two important factors driving cost of capital use in manufacturing firms which accumulated to 70.937% of the total variance.

Factor I had the highest variance of 49.812% while factor two had 21.124%. These two factors had the greatest influence on cost of capital and hence the financial performance of manufacturing firms. This is because they all had Eigen values of more than 1.0. The analysis of variance identified the Eigen values which is the variance of each factor or component in comparison with the total variance of all the items in the construct.

From the Variance matrix, there were two variables that had Eigen values of more than 1.0 which meant that these were the cost of capital variables that had the highest influence on manufacturing firm's performance.

The cumulative results showed that there were three important factors driving the use of cost of capital in manufacturing firms which accumulated to 70.937% of the total variance in this construct. Further relationships as shown in the rotated component matrix in table 6.

Table 6: Rotated Component Matrix for Cost of Capital Measures

Opinion statement	Component	
	Cost of debt	Cost of equity
Interest paid to debt holders have impacted negatively on financial performance	.894	-.049
The firm has employed more debt in order to reduce tax liability and increase value	.947	.017
The high cost of debt impacts negatively on financial performance	.758	-.160
cost of equity impacts negatively on financial performance	.100	.962
The high cost of equity discourages our firm from using it	.018	.932
In our firm the cost of equity determines our choice of financing	.131	.946
Interest rates have an impact on firms financial performance	.613	.165
The company considers cost of preference shares as an important factor in determining financial performance.	.922	.011
The high cost of preference shares discourages our firm from using it	-.147	.192

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

From the rotation matrix in Table 6 all the cost of capital measures were grouped into two factors namely cost of debt and cost of equity. Component one had Interest paid to debt holders have impacted negatively on financial performance, The firm has employed more debt in order to reduce tax liability and increase value, The high cost of debt impacts negatively on financial performance, Interest rates have an impact on firms financial performance and the company considers cost of preference shares as an important factor in determining financial performance. This factor was named cost of debt. Component two had cost of equity impacts negatively on financial performance. The high cost of equity discourages our firm from using it and the company considers cost of preference shares as an important factor in determining financial performance. This factor was named cost of equity. The explanation is that most of the cost of capital influence on manufacturing firm's financial performance was explained by these two factors. The average means of each construct was analyzed. Factor one which was named cost of debt had an average mean of 2.989 while factor two which was named cost of equity had a mean of 2.878. The high cost of preference shares discourages our firm from using it was henceforth excluded from further analysis because it seemed to have low mean and therefore much of its influence could be explained by the other factors.

The agreed respondents indications on financial performance of manufacturing linked with cost of equity was consistent with the studies of Ahmad (2015) who found that greater profitability of a firm is associated with a lower cost of equity. The results were also consistent with the findings of Yassin (2014) who found a significant negative relationship between cost of debt and financial performance.

Linear Regression Model of Financial Performance and Cost of Capital.

Data on independent variables were regressed on the aggregate mean scores of financial performance (dependent variable) and the results were presented in table 7. The coefficient of determination (R^2) and correlation coefficient (R) shows the degree of association between cost of capital and financial performance of manufacturing firms in Kenya.

Table 7: Regression of Financial Performance and Cost of Capital

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 ^a	.461	.457	.76670

a. Predictors: (Constant), Cost of Capital

The results showed that cost of capital had moderate explanatory power on financial performance as it accounted for 46.1% percent of its variability (R square = 0.461). This means that about 46.1% of the variation in financial performance is explained by the results. Additionally 53.9% of the variation in financial performance is unexplained by the model. Adjusted R² is a modified version of R² that has been adjusted for the number of predictors in the model by less than chance. The adjusted R² of 0.457 which is slightly lower than the R² value is a precise indicator of the relationship between the independent and the dependent variable because it is sensitive to the addition of irrelevant variables.

The adjusted R² indicates that 45.7% of the changes in the financial performance is explained by the model and 54.3% is not explained by the model. Therefore cost of capital has a low influence on the financial performance of manufacturing firms in Kenya. Ojeka (2014) supported this study by establishing a moderate positive relationship between cost of capital and financial performance. The results are also supported by a study by Mariana (2015) which established a moderate relationship between cost of capital and financial performance.

Table 8: ANOVA F-Test of Financial Performance and Cost of Capital

Model	Sum of Squares	df	Mean Square	F	Sign.
Regression	70.345	1	70.345	119.668	.000 ^b
Residual	82.297	140	.588		
Total	152.642	141			

A. Dependent Variable: Financial Performance

B. Predictors: (Constant), Cost of Capital

In table 8 Stepwise ANOVA was done to test the significance of the independent variables on the dependent variable and the existence of variable variations within the model. The ANOVA test results on cost of capital revealed F-statistic of 119.668 which was significant at 0.05 ($P < 0.05$). ANOVA test revealed that cost of capital has significant effect on financial performance of manufacturing firms. The P value was 0.000 which was less than 5% level of significance. The P value was 0.000 implying that the model was significant. The study therefore rejected the third null hypothesis.

Ho: Cost of capital does not significantly affect the financial performance of manufacturing firms in Kenya.

Table 9: Model of Coefficients on cost of capital

Model	Unstandardized Coefficients		Standardized Coefficients t		Sign.
	B	Std. Error	Beta		
1 (Constant)	.474	.234		2.031	.002
Cost Of Capital	.794	.073	.679	10.939	.000

Dependent Variable: Financial Performance

The regression constant is also significant; therefore the fitted equation is;

The null hypothesis is rejected since $\beta \neq 0$ and $p\text{-value} < 0.05$. The regression model is summarized by equation 1.

$$Y = \beta_0 + \beta_3 X_3 + \varepsilon$$

$$Y = 0.474 + 0.794X_3 \dots \dots \dots \text{Equation 1}$$

Where,

Y – Financial Performance, X_3 – Cost of capital

From the regression model, it is clear that cost of capital had a higher influence on financial performance.

Correlation Results of Financial Performance and Cost of capital

A correlation test was conducted to test the relationship between cost of capital and financial performance of manufacturing firms in Kenya. The correlation results are presented on Table 10.

Table 10: Correlation Results of Financial Performance

Variable		Cost Of Capital	Financial Performance
Cost Of Capital	Pearson Correlation	1	.679**
	Sig. (2-tailed)		.000
	N	142	142
Financial Performance	Pearson Correlation	.679**	1
	Sig. (2-tailed)	.000	
	N	142	142

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

A correlation test was conducted to test the relationship between cost of capital and financial performance of manufacturing firms in Kenya. The correlation results are presented on Table 11. The results indicated that there is a relationship between cost of capital and financial performance with coefficient of 0.679. This confirms that there is a positive and significant relationship between cost of capital and firms financial performance.

Financial Performance Factor Results

Table 11: KMO and Bartlett's Test for Financial Performance

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	.815
	Approx. Chi-Square	350.095
Bartlett's Test of Sphericity	df	21
	Sig.	.000

KMO test measures sample adequacy and it ranges between 0 and 1. A value close to 1 indicates that patterns of correlations are compact and hence the Factor Analysis is reliable and appropriate for the study. KMO measures on financial performance had 0.815 which represented great acceptability of the use of factor analysis and sufficient intercorrelations.

Bartlett's test of Sphericity is significant (chi-square=350.095, $p < 0.000$). Bartlett's test checks if the observed correlation matrix diverges significantly from the identity matrix. The total variance explained in the financial performance constructs was explained in the next section.

Table 12: Total Variance Explained for Financial Performance Measures

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.072	60.722	60.722	6.072	60.722	60.722
2	.898	12.822	73.544			
3	.674	9.627	83.171			
4	.573	8.190	91.362			
5	.319	4.550	95.912			
6	.181	2.582	98.494			
7	.105	1.506	100.000			

Extraction Method: Principal Component Analysis.

The analysis of variance identified the Eigen values are the elements that describe the degree of change in each variable in relationship to the total overall variables. In the analysis of variance other elements include the percentage of variance and also the cumulative percentages which were explained by the extracted factors before and after the rotation. The nine measures of financial performance were subjected to factor analysis and the results show that there was one critical factor driving financial performance use in manufacturing firms which accumulated to 60.722% of the total variance. The factor had the greatest influence on financial performance of manufacturing firms. This is because it had Eigen values of more than 1.0. Principal component analysis with a Varimax rotation was used to factor the nine items related to financial performance. The factor results are shown in the next section.

Table 13: Component Matrix for Financial Performance Measures

Opinion Statement		Component 1
1	In our firm we have achieved enhanced operating income	.901
2	We have had an improved market share over the last five years	.646
3	In our firm have experienced increased profitability levels over the last five years	.772
4	We have had an increase in number of employees over the last five years	.839
5	In our firm we have achieved enhanced return on assets over the last five years	.654
6	In our firm we have achieved enhanced return on equity over the last five years	.707
7	In our firm we have experienced increased sales growth over the last five years	.891

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The analysis of variance identified the Eigen values which is the variance of each factor or component in comparison with the total variance of all the items in the construct. In the analysis of variance other elements include the percentage of variance and also the cumulative percentages which were explained by the extracted factors before and after the rotation. The cumulative results showed that there was one critical factor driving financial performance in manufacturing firms which accumulated to 60.07% of the total variance in this construct. The other factors also explained the variance at less than 40% which meant that some variance had been explained by latent variables. In evaluating what variables to retain the factor loadings were taken into account and the minimum factor loadings were 0.53 which were considered to be moderately high.

From the extracted matrix all the financial performance measures were grouped into one factor, FP1. Financial performance 1 had enhanced operating income, enhanced liquidity position and increased profitability, enhanced market share, enhanced return on assets, return on equity and increased sales growth. This factor was named financial performance. The explanation is that most of the financial performance influence on manufacturing firm's financial performance was explained by these one factor

The agreed respondents indications on financial performance of manufacturing linked with profitability was consistent with the studies of Mwirie (2015) who established that favorable financial performance of manufacturing firms is related to profitability and high asset turnover. The results were also consistent with the findings of (Ongore and Kusa 2013) who established that manufacturing firms that have high return on equity reported high financial performance.

Correlation Results of Manufacturing Firm's Financial Performance

To establish the relationship among determinants of financial performance and financial performance a correlation matrix was used. Table 15 shows the correlation matrix. The table shows the relationship between determinants of financial performance and financial performance. The correlation analysis was carried out to establish the relationship between independent variables and financial performance. Ng'ang'a *et al.* (2017) argued Pearson Correlation Coefficient is the most widely used method of measuring the degree of relationship between two variables. This ranges from -1 to +1, where -1 indicates a perfect negative correlation, 0 no correlation and +1 a perfect positive correlation. This assists a researcher in determining the magnitude and direction of the relationship between variables. In summary the results show strong implications to the performance of manufacturing firms in Kenya with a significance P- value of 0.000.

Table 15: Correlation Coefficients of Financial Performance and the Independent Variables (Primary data)

		X ₃	Y
Cost Of Capital (X)	Pearson Correlation	1	
	Sig. (2-tailed)		
	n	142	
Financial Performance (Y)	Pearson Correlation	.679**	1
	Sig. (2-tailed)	.000	
	n	142	142

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

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

Cost of capital had moderate to weak relationship with the other determinants. There was a weak positive relationship between cost of capital and financial performance with a correlation coefficient of 0.679. Similarly fiscal tax incentive had a weak relationship with other determinants of financial performance with a correlation coefficient of 0.699 between fiscal tax incentive and financial performance. Wawire (2015) supported the findings of this study by establishing a weak correlation between effective tax rate, interest rate and performance. Additionally, Gatsi *et al.* (2013) in their study of income tax on financial performance of listed manufacturing firms in Ghana found a weak relationship between tax and financial performance.

Hypothesis Testing

Cost of Capital

Cost of capital was measured by seven constructs and the results found a low positive relationship between cost of capital and manufacturing firm's financial performance. The results agree with those of a study that established a low positive relationship between cost of capital and financial performance (Ahmad, 2012). Descriptive results of cost of capital on manufacturing firms financial performance showed that cost of capital

played a role on the firm performance with a mean of 3.176. This is consistent with a study of (Njuru *et. al.*, 2013) which established that cost of capital had a weak relationship with firm's financial performance. This study five top constructs that were frequently used and which had the highest mean scores were: interest paid to debt-holders have impacted negatively on performance with a mean of 3.04, cost of equity impacts negatively on performance with a mean of 2.93, cost of equity discourages our firm from using it with a mean of 3.07, cost of equity determines our choice of financing with a mean of 2.97 and interest rates have an impact on financial performance with a mean of 2.19.

The moderately high means are supported by other studies that established the above constructs as moderate in influencing firm performance. The results also concur with a study of cost of capital and high-tech investment in East Africa that established a negative relationship between cost of capital and financial performance (Mariana, 2012). Regression Analysis was used to test H_{03} : that there is no significant effect of cost of capital on the financial performance of manufacturing firms in Kenya. The regression results showed a moderate positive relationship between cost of capital and financial performance ($R = 0.679$, $P = 0.000$). This means that 67.9% of change in manufacturing firm performance was explained by cost of capital.

CONCLUSIONS AND RECOMMENDATIONS

The study found out that cost of capital had a weak influence on manufacturing firm performance. The cost of capital is very important for a firm in order to assess future investment opportunities and to reevaluate existing investments. It was therefore recommended that manufacturing firms should identify the cheapest cost of capital to avert the negative effect on firm performance. The low effect of cost of capital on firm performance could be attributed to increased cost of doing business as a result of high cost of accessing the funds.

From the findings many companies raise debt by borrowing funds from financial institutions such as banks. Debt helps to save taxes, as interest on debt is a tax deductible expense. Additionally the high cost of debt discourages some manufacturing firms from raising funds through debt capital. From the findings the cost of debt had a bigger influence on the method of financing than the cost of equity. The study found out that manufacturing firms that use too much debt have limited cashflow and interrupted growth patterns. This may be attributed to the fact that lots of finances are used to repay off debts. Additionally the study found out that many manufacturing firms preferred internally generated funds as opposed to debt financing.

The results established that cost of capital was found to significantly but weakly influence manufacturing firm's financial performance. When cost of capital stated hypotheses was tested in the regression model it was found to have a significant but weak relationship between itself and manufacturing firm financial performance. The findings of the study established that cost of capital resulted to decreased financial performance.

The researcher recommended the adoption of determinants of financial performance in order to improve financial performance of manufacturing firms. The study findings support the view that determinants of financial performance have a significant effect on firm performance. However, the influence of each determinant varies from one firm to another. To achieve maximum performance, managers must select the determinant that suits their firm. Recommendations were based on the findings of the study and as per the specific objectives.

Empirical literature indicate that cost of capital depends on market factors like inflation, interest levels, tax levels, investment policy, dividend policy, capital structure policy and security market conditions. Therefore, it is recommended that measures be taken by market regulators particularly the Central bank of Kenya to manage inflation and interest rate levels within low manageable levels. If these efforts are supplemented by managerial actions for use of low cost of capital strategies, then cost of capital could drastically be reduced to appropriate levels.

The study further recommends that the cost of capital should be used as a benchmark by the firm when undertaking investment decisions such that an investment will be said to add value to the firm when it generates income that is greater than its cost of capital. In so doing, firms are able to predict the viability of future projects and therefore select those that add the greatest value to the firm.

Areas of further research

The results of the study found out that determinant of financial performance improved manufacturing firm performance. However the study did not come up with any optimum point at which the firms should employ them. The study also did not come up with a way of combining the various forms of determinants of financial performance. It is on the above basis that this study recommends further studies to establish the best combination of determinants of financial performance. The researcher studied the determinants of financial performance in Kenya. Further studies could be carried out to identify the determinants of financial performance in East Africa. Therefore further research is therefore recommended on the influence of other determinants of financial performance that have not been addressed in this study. A weak manufacturing sector may affect the investors, consumers and government negatively through poor performance. Additionally, further studies could be carried out to identify the determinants of financial performance of manufacturing firms but include a moderating variable or control variable.

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