Financial Management and Financial Performance of Firms Listed under Manufacturing and Allied Sector at the Nairobi Securities Exchange, Kenya

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Abstract:
The success of any organization depends on sound financial management, some of the major financial management practices that determines the success or failure of an organization are include: the level of working capital investment, Investment decisions, and the financing decisions. However, the effect of these variables on financial performance of manufacturing firms listed at the Kenyan stock market was largely unclear hence the basis of this study. This study sought to achieve the following specific objectives: To determine the effects of working capital investment, capital structure and capital investment on financial performance of firms listed under the manufacturing and allied sector at the Nairobi Securities Exchange, Kenya. Data was analyzed using descriptive analysis and panel regression analysis. The target population of interest in this study constituted all companies listed under manufacturing and allied at the NSE for the period of five years from 2011 to 2016. The study used both primary and secondary data. The study found that working capital, capital structure and capital investment singly have a positive and significant effect on the financial performance of the firms studied. The study concluded that working capital is important to the financial performance of manufacturing and allied sector at NSE because the current assets of a typical manufacturing firm accounts for over half of its total assets. In view of capital structure, the study concluded that a well-balanced capital structure provides an organized way for the firms in the manufacturing and allied sector to raise capital and also provides flexibility in raising funds. The study concluded that through capital investment, firms in the manufacturing and allied sector at NSE invest to acquire capital assets in order to generate benefits over a series of years in future and should pursue product diversification investment strategies in order to broaden their revenue base.

Keywords: working capital, capital structure and capital investment

1. Introduction and Background
The ultimate goal of financial management is to maximize the financial wealth of the business owner(s) (Myers, 2010). Financial managers execute/perform financial management practices that determine the success or disappointment of an organization. Chung and Chuang (2010) has classified financial management practice into Capital structure management, working capital management, financial reporting and analysis, investments decision making and accounting information system. Working capital investment is considered to be crucial issue in financial management decisions, it’s essential to a firm fundamental financial health. A good finance manager should have the ability to utilise working capital management to balance between growth, liquidity and profitability. An optimal working capital management definitely contributes in creating firm value (Bagchi & Khamrui, 2012).

Capital investment according to Trigeorgis (2013) is one of the main financial management decisions that affect the performance of manufacturing firms. Corporate finance also faces the choice of new investments and decisions about how to finance those investments. Each of these decisions has been studied extensively, but usually in isolation from the other. However, it may be inappropriate to study financing and investment decisions separately. New investments must be financed, and the financing decision may itself affect firm value by changing investors’ expectations. The connections between capital structure and investment decisions should be most apparent when a firm undertakes a large investment.

The manufacturing sector in Kenya is one of the major contributors to the economic development of the country. According to Livingstone (2011), formal employment rose by 2.9 per cent to 287,456 persons in 2014. In addition, the Kenyan vision 2030 blue print, one of the key pillars of the attainment of the objectives of the strategy is the need for the manufacturing sector to grow at the rate of 8 per cent over a period of 20 years. This can only be achieved if there is growth in the profits of the sector and this will depend upon identifying all the variables that can influence profit of a firm including the...
management of working capital and investment decisions. Currently there are a total of ten (10) firms listed under manufacturing and allied sector in the Nairobi Securities Exchange. These firms play vital role in the country’s economic growth and their proper financial management is of keen interest to all the stakeholders. The study assesses the relationship between financial management and performance of these firms.

2. Research Problem
   According to NSE (2010) report, all public and private firms that have been put under statutory management recently had liquidity problems and were incapable to meet their short term financial obligations as and when they feel due (NSE, 2010). Efforts to stabilize and revive the liquidation problems faced by companies have focused on financial rearrangement. According to the Economic Survey of 2015, KNBS stated that manufacturing sector's contribution to Gross Domestic Product has remained at an average of 10 per cent for more than ten years. However, the Vision 2030 stipulates that the sector should account for 20 per cent of the GDP. Many manufacturing companies in Kenya have been faced with major financial risks in recent years. According to Okoth (2015), Eveready East Africa Limited had to close its manufacturing plant in Nakuru Kenya in year 2015 due to increase in financing costs and insecurity. Financing costs had increased due to a weaker Kenya shilling against other currencies especially the US dollar hence posing exchange rate risk to the company. Kang’aru (2010) indicates that Pan African Paper Mills Limited was shut down due to unpaid bills and other debts that amounted to Sh9 billion.

   Previous Studies done on the relationship between various financial management practices and performance have produced mixed results. Wanyugu (2011) studied financial management practices of micro and small enterprises in Kenya a case of Kibera and found out that the management of the financial practices is an important factor in the performance of SMEs. Nyongesa (2011) studied the relationship between financial performance and financial management practices of insurance companies in Kenya. The study found that there was a constant, significant positive association between financial management practices and financial performance. However, the study did not establish if financial management has a significant effect on financial performance. Hence, this study will seek to assess financial management and its effect on financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya.

3. Specific Objectives
   This study was guided by the following specific objectives:
   i. To determine the effect of working capital investment on financial performance of firms listed under the manufacturing and allied sector at the Nairobi Securities Exchange, Kenya.
   ii. To establish the effect of capital structure on financial performance of firms listed under the manufacturing and allied sector at the Nairobi Securities Exchange, Kenya.
   iii. To examine the effect of investment decisions on financial performance of firms listed under the manufacturing and allied sector at the Nairobi Securities Exchange, Kenya.

*Null hypotheses were formulated and subsequently tested in view of each of the respective specific objectives.

4. Significance of the Study
   This study would provide valuable data that can be used by the management of the firms under study and potential investors in the economic sector. The findings of the assessment of the specified financial management practices influence on the target population’s financial performance variables would equip the management additional knowledge. This knowledge may be applied in the effective management of the components working capital, making capital expenditure and financing decisions to enhance financial performance. In addition, Kenya Association of Manufacturers would use this study to improve on the framework for regulation of manufacturing companies in Kenya. Furthermore, this study would be of use to security analysts, financial analysts, stock brokers and other interested parties.

5. Literature Review

5.1. Theoretical Literature
   This section presents the theories that inform the study in view of the variables under study. These include: The cash conversion Cycle theory, equity theory and trade off- theory.

   The cash conversion cycle theory represents the interaction between the components of working capital and the flow of cash within a company, can be used to determine the amount of cash needed for any sales level. Gitman (1974) developed cash conversion cycle as part of operating cycle which is calculated by adding inventory period to accounts receivables period and then subtracting accounts payables from it. Its focus is on the length of time between the acquisition of raw materials and other inputs and the inflows of cash from the sale of finished goods, and represents the number of days of operation for which financing is needed. This theory is relevant to the study because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. Since every corporate organization is extremely concerned about how to sustain and improve profitability, hence they have to keep an eye on the factors affecting the profitability.

   In view of residual equity theory, changes in asset valuation, income and in retained earnings and changes in interest of other equity holders are all reflected in the residual equity of the common stockholders. The specific equities include the
claims of creditors and the equities of preferred stockholders. The balance sheet equation becomes as follows: ‘Assets minus specific equities are equal to Residual equity’. The equity of common stockholders in the balance sheet should be presented separately from the equities of preferred stockholders and other specific equity holders. According to Hendrickson (1982) the residual equity point of view is a concept somewhere between the proprietary theory and the entity theory. This theory is relevant to the study because its objective is to provide better financial reporting as a consequence of good financial management practices.

The trade-off theory introduced by Robichek and Myers (1966) states that there is an optimal capital structure that maximises the value of a firm. It is of the view that the management will set a target leverage ratio and then gradually move towards that. De Wet (2006) has demonstrated that firms select target leverage ratios based on a trade-off between the benefits and costs of increased leverage, he mentioned tax, financial distress costs and agency costs as three factors that influence the choice of this target leverage ratio. Managers will therefore choose the combination of debt and equity that achieves a balance between the benefits of debt through tax advantage and the various costs associated with debt.

5.2 Empirical Review

The study reviewed various empirical literatures relevant to the study variables. The Nurein (2014) study sought to determine the impact of working capital management on corporate performance and the influence of financial constraints on the relationship between corporate performance and working capital management of Malaysian listed firms in Bursa Malaysia. The data for this study was retrieved from the DataStream, consisting of 215 firms for the period 2008-2012. This study finds that firms’ financial constraint is significant and positively related to working capital management and corporate performance. Uwalomwa and Uadiale (2012) sought to investigate the relationship between capital structure and the financial performance of listed firms in Nigeria. The study considered a total sample of 31 listed firms on the floor of the Nigerian stock exchange. The annual reports for the period 2005-2009 were analysed using the Ordinary Least Squares (OLS) technique of model estimation to test the research propositions stated in this study. The study observed that two of the explanatory variables in the study, that is, short-term debt and shareholders’ funds have a significant positive impact on the financial performance of listed firms in Nigeria. In addition, the study observed that long-term debt has a significant negative impact on the financial performance of firms. The study concludes that employing high proportion of long-term debt in firms’ capital structure will invariably result in a low financial performance of a firm.

Cohen and Klepper (2012) sought to establish the cross-sectional nature of the investment decision functions and firm performance relationships. The empirical results were based on data from three consecutive Swedish innovation surveys. A common multi-step estimation approach which accounts for both simultaneity and selection biases was applied. As expected, the results showed evidence of a strong and highly significant relationship between aspects of investment like investment in research and development as well as increasing investment in productivity through innovation production, measured as share of sales associated with new product and processes at the firm level.

6. Research Methodology

Descriptive research was adopted for the purposes of the study. Both primary and secondary data was used. Primary data was collected using a semi-structured questionnaire. The Secondary data which included size of the firm, total debt, long-term debt was extracted from the income statement, statement of financial position, and notes to the accounts using a document review guide. The use of secondary data was justified on the basis that some of these sources have information that is very pivotal to this study and has been vetted and accepted. Data was analyzed using descriptive analysis, Panel regression analysis and Pearson’s simple correlation analysis. The following regression model was formulated for purposes of panel regression analysis.

\[
Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon
\]

Whereby:

- \(Y_{it}\) = Financial Performance for firm \(i\) at time \(t\)
- \(X_{1it}\) = Working Capital for firm \(i\) at time \(t\)
- \(X_{2it}\) = Capital Structure for firm \(i\) at time \(t\)
- \(X_{3it}\) = Capital Investment for firm \(i\) at time \(t\)
- \(\beta_1\) = Coefficient of Determination
- \(\varepsilon\) = Error term

7. Results, Findings and Discussion

7.1 Descriptive Analysis

The section presents the study output, interprets the results and makes findings in view of each specific objective. Descriptive statistics such as mean and standard deviations were used to present the quantitative data with the use of Statistical Package for Social Sciences (SPSS) version 17.0. These were presented as per the study objectives as summarized below.
In view of Table 1 above, the aggregate mean of 3.53 shows that working capital moderately influenced financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya which varied significantly as indicated by a standard deviation of 1.086.

Results in Table 2 above indicate an aggregate mean of 3.86 shows that capital structure highly influenced financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya which varied significantly as indicated by a standard deviation of 1.036.

In view of Table 3 above, the aggregate mean of 3.94 shows that capital investment highly influenced financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya which varied significantly as indicated by a standard deviation of 1.002.

7.2 Multiple Regression Analysis

Regression analysis was used to model, examine, and explore the relationships between financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya against the three independent variables (working capital, capital structure and capital investment) used for the study, this was important in measuring the extent to which changes in one or more variables jointly affected changes in another variable.
## Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.749a</td>
<td>0.562</td>
<td>0.546</td>
<td>0.610</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Capital Investment, Capital Structure, Working Capital*

**Table 4: Model Summary**

*Source: Research Data (2017)*

Results in Table 4 above indicate a fairly strong positive relationship between financial management and financial performance. In addition, an Adjusted R-square value of 0.546 is observed. This means that 54.6% on financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya is attributed to changes in working capital, capital structure and capital investment collectively at 95% confidence interval. Additionally, this means that factors not studied in this research contribute 45.4% of financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya and a further research should be conducted to investigate the other factors (45.4%) that affect financial performance of firms listed under manufacturing and allied sector at the Nairobi securities exchange, Kenya.

## ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>40.037</td>
<td>3</td>
<td>13.346</td>
<td>35.889</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>31.236</td>
<td>84</td>
<td>.372</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.273</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Capital Investment, Capital Structure, Working Capital*

**Table 5: Analysis of Variance (ANOVA)**

*Source: Research Data (2017)*

Table 5 above indicates significance since the p-value of 0.000 is less than a significance level of 0.05. Hence, the model overall is statistically significant. The F critical at 5% level of significance was found to be 13.718. Since F calculated is greater than the F critical (value = 35.889), this is an indication that financial management has a significant effect on financial performance of the firms studied.

## Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.522</td>
<td>.362</td>
<td>5.503</td>
</tr>
<tr>
<td></td>
<td>Working Capital</td>
<td>.295</td>
<td>.136</td>
<td>.337</td>
</tr>
<tr>
<td></td>
<td>Capital Structure</td>
<td>.415</td>
<td>.156</td>
<td>.411</td>
</tr>
<tr>
<td></td>
<td>Capital Investment</td>
<td>.268</td>
<td>.049</td>
<td>-.404</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Financial Performance*

**Table 6: Coefficients**

*Source: Research Data (2017)*

In view of Table 6 above, working capital, capital structure and capital investment were all found to have a positive and statistically significant effect on financial performance since their p-values were less than the significance level of 0.05. Hence, all the three null hypotheses were rejected. In view of the Unstandardized Beta Coefficients, a unit increase in working capital leads to change of 0.295 in financial performance all other factors held constant; a unit increase in capital structure causes a 0.415 change in financial performance all else held constant and a unit increase in capital investment leads to a 0.268 change in financial performance all other factors held constant.

From Table 6 above, the regression function was extracted as follows:

\[
Y = 0.522 + 0.295X_1 + 0.415X_2 + 0.268X_3
\]

Where \(Y = \text{Financial Performance}; X_1 = \text{Working Capital}; X_2 = \text{Capital Structure}; X_3 = \text{Capital Investment}\)

- \(H_{01}\): Working capital does not have a significant effect on financial performance
- \(H_{02}\): Capital structure does not have a significant effect on financial performance
- \(H_{03}\): Capital investment does not have a significant effect on financial performance

The null hypothesis that working capital does not have a significant effect on financial performance was rejected since the p-value of 0.003 is less than 0.05.

The null hypothesis that capital structure does not have a significant effect on financial performance was subsequently rejected based on the p-value of 0.001 which is less than 0.05.

The null hypothesis that capital structure does not have a significant effect on financial performance was subsequently rejected based on the p-value of 0.001 which is less than 0.05.
The null hypothesis that capital investment does not have a significant effect on financial performance was rejected considering the p-value of 0.023 which is less than 0.05.

7.3. Discussion
An empirical investigation in Malaysia by Mohd et al. (2010) acknowledged financial management practice components as financial planning and control, financial accounting, financial analysis, management accounting, capital budgeting and working capital management. The financial success of organizations depends much on how financial managers successfully manage the components of working capital (Filbeck & Krueger, 2005). Investment decision, capital structure and dividend payout policy embraced have an influence on the financial performance of any firm. The importance of financing decisions cannot be over emphasised since many of the issues that contribute to business failure can be addressed using strategies and financial choices that drive growth and the success of organizational goals (Salazar, Soto & Mosqueda, 2012).

8. Conclusion and Recommendation

8.1. Conclusion
The study makes some conclusions based on the findings of the study. The study concluded that working capital is important to the financial performance of manufacturing and allied sector at NSE because the current assets of a typical manufacturing firm accounts for over half of its total assets. For a distribution company, they account for even more. Excessive levels of current assets easily result in a firm’s realizing a substandard return on investment. Working capital is necessary for the manufacturing company to function on a daily basis, as the organization requires a certain amount of cash on hand to cover unexpected costs, make regular payments and buy raw materials used in production. In addition, the study concluded that capital structure on financial performance of manufacturing and allied sector at NSE describes the amount of debt the organization uses as opposed to equity, and it is often measured with the ratio of debt to equity. The more debt a company has, the more it has to pay creditors for the use of those funds. However, the more debt a company takes on, the more cash it has to generate sales. Capital structure provides an organized way to raise capital. Both debt and equity have their advantages and disadvantages. Capital structure also provides flexibility in raising funds. The challenge manufacturing companies get is finding the right equilibrium between debt and equity for an optimal capital structure, which can then be leveraged to grow the business. In view of capital investment, the study concludes that firms in the manufacturing and allied sector at NSE invest funds for the purpose of furthering its business objectives. Manufacturing firms acquire capital and other fixed assets such as manufacturing plants and machinery that is expected to be productive over many years. Sources of capital investment include equity investors, banks, financial institutions, venture capital etc.

8.2. Recommendations
The study recommended that manufacturing and allied sector listed at NSE should increase their average collection period, inventory turnover periods and cash conversion period in order to improve their financial performance. In order to improve their financial performance there is need to increase the leverage ratios currently present. Higher leverages will lead to higher financial performance. This can be improved by increasing the debt levels. This debt can be used to make more purchases and therefore more sales volumes which will translate to higher financial performance through more incomes. In addition, the study recommended that manufacturing and allied sector listed at NSE should use shareholders’ funds as much as possible before they undertake to borrow, so that they minimize the risks related to borrowing, which include interest on the debt exceeding the return on the assets they are financing. Firms must therefore be encouraged or assisted to obtain equity by listing on the exchanges. This can be done by educating and sensitization of business owners of the benefits of listing, as well as granting of special fiscal measures to encourage them to list. The study also recommended that manufacturing and allied sector listed at NSE should pursue product diversification investment strategies in order to broaden their revenue base. Since investment decisions directly affects financial performance of manufacturing firms. Government of Kenya should consider subsidizing manufacturing products as a policy consideration through the annual budget proclamations.

9. Contribution to Knowledge
The research greatly contributes to the available knowledge in the manufacturing sector. Kenya Association of Manufacturers, security analysts, financial analysts, stock brokers and other parties whose knowledge of the relationship between financial management and the financial performance are important input into investment analysis and portfolio construction will find this paper useful. The findings and recommendations of how working capital investment, capital structure choices and capital investment decisions influence financial performance of those manufacturing firms listed at NSE, Kenya contributes to the available knowledge in the sector and these findings will also be a basis for further research on the research problem under study.

10. References


