WORKING CAPITAL MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED MANUFACTURING COMPANIES IN KENYA

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Abstract: The purpose of this study was to determine the relationship between the working capital management and the financial performance of the listed manufacturing firms in Kenya. The specific objectives of the study were to determine the effect of inventory turnover days, debtors’ collection period, creditors’ payment period and cash flow ratio on the financial performance of listed manufacturing companies in Kenya. In addition, the study sought to establish the moderating effect of annual GDP growth rate on the relationship between the working capital management and financial performance listed manufacturing companies in Kenya. The study was guided by agency, corporate risk management and Miller-Orr theories. Descriptive, correlational and quantitative research designs were used in the study. Secondary panel data was collected from annual financial reports and financial statements of listed companies in Nairobi Securities Exchange using data collection sheets. The study adopted census of the twenty listed manufacturing companies in the NSE from 2010 to 2017. The study established that debtor’s collection period has a negative effect on financial performance of manufacturing firms. The study reveals that creditor’s payment period positively affects the financial performance (EVA and ROA). Operating cashflow ratio had a statistically significant positive relationship with ROA, but an insignificant one with EVA. Inventory turnover days had a significant positive relationship with ROA but a negative insignificant relationship with EVA. Gross domestic product was found to moderate the relationship between working capital and financial performance. The study concludes that working capital management has a significant relationship with financial performance. The study recommends that manufacturing manage their working capital effectively taking consideration of the GDP in order to enhance the financial performance of manufacturing firms in Kenya. A similar study with a longer period and more variables was recommended.

Key words: Accounts Payable; Accounts Receivable; Cash Conversion; Economic Value Added; Financial Performance; Inventory Period; Working Capital; Management; Cashflow

Introduction

Working capital management (WCM) is an important component of finance management as it affects both profitability and liquidity of a firm. It deals with the management of current liabilities and current assets, for most manufacturing firms’ current assets forms more than a half of its total assets. When current assets are in excess, they can lead to lower level of return on investment (ROI) and on the other hand, a firm may experience difficulties in day to day operations if it has few current assets (Mwangi, 2013).

According to Abel (2008), WCM implicates the management of both the current assets and current liabilities. It forms the main part of companies’ short-term financial planning as it involves the management of inventories, cash and accounts receivables, the way these three components of working capital are managed determine some of a firm’s most important financial ratios that includes the
average collection period, inventory turnover, quick ratio among others (Abdul, Talat, Abdul, & Ahmed, 2010)

Manufacturing sector is one of the most important economic growth engines. It has become one of the main means developing countries are using to benefit from globalization as well as bridging the income gap with developed economies. (Kung’u, 2015). WCM efficiency is very important for manufacturing firms. As an important sector for economic growth, manufacturing sector need an in-depth analysis at Global, regional and local perspective.

Manufacturing industry is very vibrant in the East, China represent an average of 31.29%, Korea republic 30% and Japan 18% contribution to their respective GDP. In Swaziland it accounts to an average of 39.72%, Congo Republic 18.9%, Egypt 16.4% of the GDP. Nigeria whose manufacturing sector contribution to GDP is approximately 9.83 percent (Nigeria National Bureau of Statistics., 2014) Eastern African countries register low percentage contribution to GDP with Uganda accounting to an average of 8.9% and Tanzania 7.8% to GDP and Rwanda 5.16%. Kenya has registered a declining trend 13.4% in 2009 to 11.4% in 2015 an indication that Kenyan Manufacturing companies are experiencing challenges.

As a part of achieving vision 2030, Kenya is promoting development of SME parks, promotion of small and medium manufacturing firms, commercialization of research and development results, development of niche products, industrial clusters and development of special economic zones (SEZs). Natural products industry initiatives, development of mini and integrated iron and steel mills and extractive industry policy, legal and institutional reforms (Kenya Vision 2030, 2016).

The goal of the firm is to maximize shareholders value, thus financial performance is one of the most important objectives of the financial management. Performance is a key determinant of a business success or failure (Waweru & Ngugi, 2014). In the past a large number of business failures were attributed to the finance managers’ inability to plan and control the working capital properly (Osundina, 2014). Wire (2015) supported this assertion by claiming that about 60 percent of a typical financial manager’s time is devoted to WCM. It’s therefore true to say that poor business performance is attributed to inefficient finance managers. The main purpose of a business concern is profit maximization as well as maintaining firm’s liquidity. Increasing profits at the expense of liquidity might have serious negative consequences to the firm. The dilemma in WCM is to achieve trade-off between profitability and liquidity (Abdul, Talat, Abdul, & Ahmed, 2010).

In Kenya, researchers have reviewed various studies that relate to working capital management. Mwangi (2013) examined the impact of WCM on profitability and found a significant negative relationship between accounts receivable days and return on equity to have existed. Mathuva (2010) also did a similar study and the study made a similar conclusion that negative significant relationship exists between accounts receivable days and firm’s profitability. These findings further contradicted with the studies done by Hayajneh and Yassine (2011) and Abdu et al (2014) who established existence of a negative relationship between accounts payable period and inventory turnover period with performance. Most of the available literatures have used profitability-based measures like ROA, ROI and ROE as the measures of firm’s performance; Kung’u (2015) used ROA as a measure of profitability. Wire (2015) used both ROE and ROA. Wambugu (2013) measured SMEs profitability using ROA. Literatures on the studies that have used EVA as the performance measure are very scanty. This study adopted both ROA and EVA as measures of performance. This study sought to establish the effect of working capital management on the financial performance of listed manufacturing firms in Kenya in order to fill this research and knowledge gap.
The study was guided by the following research hypotheses:

\[ H_{01} \]: Debtors’ collection period does not have a significant effect on the financial performance

\[ H_{02} \]: Creditors’ payment period does not have a significant effect on the financial performance

\[ H_{03} \]: Cash flow ratio does not have a significant effect on the financial performance

\[ H_{04} \]: Inventory days does not have a significant effect on the financial performance

\[ H_{05} \]: GDP growth rate does not have a significant effect on the relationship between WCM and financial performance.

**Literature review**

**Debtors Collection Period and Performance**

Hayajneh & Yassine (2011) carried out a study on listed manufacturing firms in Jordan between 2000-2006 using OLS and SLS regression techniques with an objective of determining the impact of WCM Efficiency on Profitability. The study found a strong negative correlation between Collection period, and the firms’ performance. Baum (2006), Argued that pooled OLS regression has error process such as serial correlation within panel units and heteroskedasticity across panel units. Mwangi (2013) investigated the relationship between WCM and the financial performance of the listed manufacturing firms in NSE. The study used a censor survey of the listed manufacturing firms and simple regression model for analysis. It was found that the net collection period has a negative correlation with the ROE.


Similarly, Mathuva (2010) examined the influence of working capital management components on corporate profitability, the results of the study indicated that there exist a negative relationship cash conversion cycle, accounts Collection Period and Profitability. Ojeka (2012), studied four Nigerian manufacturing companies in an attempt to determine the relationship between Credit Policy and Liquidity and found that if the firms’ credit policy is favourable, then liquidity will be desirable.

**Creditors Payment Period and performance**

Gamze et al (2012) studied the effects of working capital management on firm’s performance of the listed firms in Instanbul Stock Exchange Market Karl Pearson’s correction model was used to determine the relationship between WCM and firms’ performance. No relationship was found between days of accounts payable and firms’ profitability. Abdul (2014) investigated the impact of WCM on Profitability of cement sector for the listed firms in Karachi Stock exchange in Pakistan, they established that the average payment period had a very weak positive correlation with ROE. Hayajney and Yassine (2011) studied 53 listed manufacturing firms in Jordan using OLS and 2SLS regression techniques with an objective of determining the impact of WCM Efficiency on Profitability. The study found a strong negative correlation between creditors ‘payment period and the firms’ performance.

Kung’u (2015) studied the effects of Working Capital Management on Profitability of Manufacturing Firms in Kenya and found a positive significant relationship between creditors; payment period and the performance. Mathuva (2010) studied the Influence of WCM Components on Corporate Profitability for listed firms in Kenya and found that increasing the payable days by extra one day will result to improved profitability. Solomon and Owalalbi (2012) studied the influence of working capital management on firm’s profitability Karl Pearson’s correction model was used to determine the relationship between WCM and firms’ performance. No relationship was found between the two.
Inventory Turnover Period and Performance

Abdu et al (2014) investigated the impact of WCM on profitability of cement sector in Pakistan. The study adopted correlation coefficient to determine the relationship WCM and profitability. The study established that a negative relationship exists between inventory turnover days and the performance. Gamze et al (2012) studied the effects of WCM on Firm’s Performance for firms listed in Istanbul stock exchange in Turkey, the study did not find any relationship between the inventory turnover days and the value of the firm measured using TobinQ.

Ajilore and Falope (2009) studied the effect of WCM on corporate profitability of non-financial firms in Nigeria. The study used panel data econometrics and a pooled regression, cross sectional observations and time series were estimated. They established that negative relationship exists between the net profitability and the Inventory turnover in days.

Hayajneh and Yassine (2011), studied listed manufacturing firms in Jordan between 2000-2006 using OLS and 2SLS regression techniques with an objective of determining the impact of WCM Efficiency on Profitability. The study found a strong negative correlation between inventory period and the firms’ performance. This study however, contradicted with the study done by Wanguu and Kipkirui (2015) which asserted that positive correlation exists. The current study will seek to test the effect of inventory turnover period on performance.

Operating Cash Flow Ratio and Performance

Amah et al (2016) evaluated the relationship between Cash flow ratios and the performance of the listed banks in the emerging economies. The study adopted correlation model to determine the relationship between the cash flow ratios and the performance. The results of this study revealed that there is a strong and significant positive relationship between operating cash flow and the banking sector performance in Nigeria.

Frank and James (2014) carried out a study to determine the relationship between the cash flow and the performance of food and beverage firms in Nigeria. The study used multiple regression models to determine the relationship. The results from this study found that operating cash flow had a positive and significant relationship with the food and beverage companies in Nigeria.

Firm size

Halil and Hasan (2012) examined the effect of firm size on profitability, with evidence from Turkish manufacturing companies. The data for the study were retrieved from web sites of Istanbul Stock Exchange (ISE) and Public Disclosure Platform covering the period of 2005 - 2011 for the manufacturing firms listed in the ISE. According to the results, both in terms of total assets and in terms of total sales, firm size has a positive impact on the financial performance of Turkish manufacturing companies.

Mocnik and Sirec (2015) shed light on the factors like firm size, leverage ratio and labour costs that determine the financial performance of a developing firm using a sample of 782 Slovenian fast-growing firms. The study covered a span of 2 years (2008 - 2009) and the data was analyzed using a combination of ordinary least square regression method and multiple least square dummy variable regression. The result from the findings showed a negative relationship between firm size and financial performance.

GDP growth rate

Visser, Gesthuizen and Scheepers (2014) analyzed the impact of macro-economic circumstances and social protection expenditure on economic deprivation in 25 European countries over the period 2007–2011. They used linear multilevel regression analyses so as to take care of the hierarchical structure of
the data from 148383 respondents. They found that GDP growth rate had a moderating effect on the relationship. Rao and Lakew (2012) explored the key determinants of profitability of commercial banks operating in Ethiopia using panel data set of banks over the period 1999/00-2008/09. The external factors were related to the industry and the macroeconomic scenarios within which the banks operate. Real GDP growth rate effect was found to moderate the relationship between determinants of profitability and the profitability of the banks.

Dietrich and Wanzenried (2009) analyzed the profitability of commercial banks in Switzerland over the time period from 1999 to 2006. Their sample included 1919 observations from 453 banks. Besides bank specific characteristics. Their results showed that the GDP growth rate affects bank profitability in Switzerland positively as a moderator. Fadare (2010) investigated the effects of firm characteristics and performance of banking sector in Nigeria over the period 1999-2009. Using the ordinary least squares regression technique, the study established that working capital, size of banking sector capital and cash reserve ratios accounted for a very high proportion of the variation in financial performance of banks in Nigeria. Ongore (2013) studied moderating effect of GDP growth rate on the effect of working capital structure on bank performance by use of linear multiple regression model and generalized least square on panel data of commercial banks in Kenya to estimate the parameters. The findings showed that GDP had an insignificant moderating effect on the relationship between working capital structure and ROA.

Theoretical framework

The study used agency theory, corporate risk management theory and miller-orr model as the theoretical basis. Mitnick (1975) in his article on the theory of agency, introduced the agency theory. Mitnick identified agent’s problem, principle problem and the policing mechanism and incentives as the agency problems. The relevance of agency theory to working capital management could be viewed from the perspective of financial manager, who in most cases is an agent of the owners (principals) of a firm, and who takes all the important decisions regarding all assets and liabilities.

Corporate risk management theory was first published by Jensen and Meckling (1976), their study suggested that shareholders will engage in hedging due to risk shifting incentives. According to Geczy et al (2006) risk management practices affects firms’ value and performance. The theory suggests that cash flow volatility, earnings volatility and market value volatility are very costly. The study further suggests that if the firm maintains a smooth cash flow then the shareholders are better off, as the smooth cash flow reduce reliance on external finances. Geczy et al (2006) suggested that managers should undertake cash flow and earnings volatility; this will reduce the probability of defaults as well as reducing the cost of borrowing. During periods when cash realization is low, the firm will hold cash as the external funding is expensive then internal. This in turn influences the financial performance of a firm.

Merton Miller and Daniel Orr (1966) developed a cash balance model to deal with uncertainty. In Miller-Orr both inflows and outflows are incorporated. Miller-Orr Model is a probabilistic model which makes the more realistic assumption of uncertainty in cash flows. Merton Miller and Daniel Orr assumed that the distribution of daily net cash flows is normal. Strathmore University (2006) suggests that the Miller-Orr Model sets lower (L) and higher (H) control units, L and H respectively, and a target cash balance, Z. When the cash balance reaches H then H-Z shillings will be transferred from cash to marketable securities. Similarly, when the cash balance hits L then Z-L shillings will be transferred from marketable securities to cash. The management usually set the lower limit. Too much or inadequate cash balance means that the cash is not well utilized. Therefore, the cash should only be maintained at ideal level. An Organization can use this model to determine the optimal levels to replenish cash.
Conceptual Framework

Independent Variable | Dependent Variable

**Working Capital Management**
- Debtors Collection Period: Accounts receivable, Net Sales
- Creditors Payment Period: Accounts payable, Cost of Sales
- Operating Cash flow Ratio: Cashflow from Operations, Current Liability
- Inventory Turnover in Days: Inventory, Cost of sales

**Financial Performance**
- Economic Value Added (EVA)
- Return on Asset (ROA)

**Control Variable**
- Firm Size: Total Assets

**Moderating Variable**
- GDP, Annual GDP Growth Rate

Source: Kinuthia (2019)

**Methodology**

The study adopted positivism research philosophy. The philosophy asserts that only authentic knowledge is scientific, the knowledge comes from positive affirmation of theories through scientific techniques of investigating a phenomenon. The philosophy guided in testing hypothesis and making statistics generalization. This study adopted both descriptive research design and correlational research design. Descriptive research design will be used to give information about the population characteristics or the phenomenon. Correllational research design was used to explore the variable relationships and attempt to make predictions.

Twenty (20) listed manufacturing firms in NSE between 2011 and 2017 were targeted. The study used census survey with 20 manufacturing firms involved. Data from all the 20 listed manufacturing companies in NSE was collected from companies’ websites, NSE, CMA, World bank and Kenya national bureau of statistics websites. Record survey sheets were used to collect both the dependent and independent variables.

Descriptive analysis was the first step in the analysis. Descriptive analysis showed the mean and the percentage of different items under study. Quantitative analysis followed the descriptive. The quantitative approach was adopted to arrive to the findings of the study. Panel data analysis, and ANOVA was used to determine the extent and the nature of the relationship and find the WCM variables and the financial performance measures. The study adopted the following panel analysis models:

\[ \text{ROA}_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \epsilon_{it} \quad \ldots \ldots \ldots \quad (3.1) \]
EVA_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \epsilon_{it} ......... (3.2)

In testing for the moderating effect of GDP Growth rate on the relationship, the study adopted the Moderated Multiple Regression (MMR) analysis. MMR technique consisted of two steps. In the first step, the main effects of the predictor (X) and the hypothesized moderator (Z) are estimated using regression:

ROA_{it} = a + B_1 X_{it} + B_2 Z_{it} + e ............................................... (3.3)

EVA_{it} = a + B_1 X_{it} + B_2 Z_{it} + e............................................... (3.4)

The second step consists of adding the interaction term to the equation (1) as:

ROA_{it} = a + B_1 X + B_2 Z + B_3 X*Z + e ............................................... (3.5)

EVA_{it} = a + B_1 X + B_2 Z + B_3 X*Z + e ............................................... (3.6)

Results and Discussions

From table 1, the mean score of return on assets (ROA) is 9.525 with a standard deviation of 11.9799 indicating low variability in ROA over time. The mean value of Economic Value Added (EVA) is 14.336 with a standard deviation of 2.225 indicating small variability in EVA over time. The average time taken to collect trade debts (DCC) is 88.75 days (approximately 3 months) with a standard deviation of 77.6 days. The shortest time taken to collect cash from debtors was 4.8 days with a longest time being of 433 days (approximately 1 year and 2 months). The average of cash flow ratio was 0.457. The maximum cash flow ratio was 6.471 with the minimum being -1.166. Manufacturing firms in Kenya take up to 35 days (approximately 1 month 5 days) to turn their inventories into sales. The table shows that on average each firm had a size of 15.8 with a standard deviation of 2.7. The minimum and maximum values of log of total asset were 4.85190 and 21.00583 respectively.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Value Added</td>
<td>152</td>
<td>9.335</td>
<td>21.92</td>
<td>14.335</td>
<td>2.225</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>152</td>
<td>-29.965</td>
<td>44.518</td>
<td>9.525</td>
<td>11.979</td>
</tr>
<tr>
<td>Debtor Collection Period</td>
<td>152</td>
<td>4.8519</td>
<td>433.974</td>
<td>88.758</td>
<td>77.631</td>
</tr>
<tr>
<td>Creditor Collection Period</td>
<td>152</td>
<td>0.22129</td>
<td>211.643</td>
<td>32.815</td>
<td>26.797</td>
</tr>
<tr>
<td>Cash Flow Ratio</td>
<td>152</td>
<td>-116.581</td>
<td>647.190</td>
<td>45.711</td>
<td>89.854</td>
</tr>
<tr>
<td>Inventory Turnover days</td>
<td>152</td>
<td>2.002</td>
<td>309.027</td>
<td>34.935</td>
<td>46.779</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>152</td>
<td>4.600</td>
<td>8.40000</td>
<td>5.863</td>
<td>1.079</td>
</tr>
</tbody>
</table>

Source: Kinuthia (2019)

The results in Table 2 reveal that Wald Chi square highly significant (P=0.019<0.05), suggesting that jointly all the independent variables determine return on assets of manufacturing firms in Kenya. Debtor’s collection period has a significant negative effect (-0.03232) on return on assets. The findings differ with those of Kung’u (2015) who found that there a positive linear relationship between accounts receivables days and ROA. Creditor payment period, cash flow ratio, inventory turnover days and firm size showed a positive relationship with ROA. The findings concur with those of Amah et al (2016); Wanguu and Kipkirui (2015); and Halil and Hasan (2012) who found a positive significant relationship between the variables. Firm size showed an insignificant effect on ROA with the other variables showing a significant effect.
Table 2: Regression Analysis on Return on Assets

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>Z</th>
<th>P&gt;z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtor Collection Period</td>
<td>-.03232</td>
<td>.00911</td>
<td>-3.54555</td>
<td>.001</td>
</tr>
<tr>
<td>Creditor Payment Period</td>
<td>.02962</td>
<td>.01282</td>
<td>2.31042</td>
<td>.013</td>
</tr>
<tr>
<td>Cash Flow Ratio</td>
<td>.04280</td>
<td>.01710</td>
<td>2.50269</td>
<td>.001</td>
</tr>
<tr>
<td>Inventory Turnover days</td>
<td>.06265</td>
<td>.02935</td>
<td>2.13421</td>
<td>.029</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.19836</td>
<td>.15917</td>
<td>1.24621</td>
<td>.196</td>
</tr>
<tr>
<td>_cons</td>
<td>.53820</td>
<td>.09744</td>
<td>5.52334</td>
<td>.000</td>
</tr>
</tbody>
</table>

Wald chi² (5) = 13.52
Prob> chi² = .0190

Source: Kinuthia (2019)

The results in Table 3 reveal that Wald Chi square was highly significant (P=0.000<0.05), suggesting that jointly all the independent variables determine economic value added. Table 3 reveal that debtor’s collection period displayed a statistically significant negative effect (-0.00679) on EVA. The findings concur with those of Hayajneh and Yassine (2011) who found a negative relationship but differed with Wanguu and Kipkurui (2015) and Kung’u (2015). Creditor payment period displayed a positive effect. The findings differ with Gamze et al (2012) but agree with Mathuva (2010). Operating cash flow ratio displayed a statistically insignificant negative effect on EVA. Differed with findings of Frank and James (2014). Inventory turnover period displayed a statistically insignificant negative effect on EVA. findings differ with those of Ajilore and Falope (2009) who found a negative relationship. Firm size displayed a statistically insignificant positive effect on EVA which concur with Halil and Hasan (2012) but differ with Mocnik and Sirec (2015).

Table 3: Regression Analysis on Economic Value Added

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>Z</th>
<th>P&gt;z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtor Collection Period</td>
<td>-.006792</td>
<td>.002478</td>
<td>-2.74096</td>
<td>.007</td>
</tr>
<tr>
<td>Creditor Payment Period</td>
<td>.000596</td>
<td>.000291</td>
<td>2.049141</td>
<td>.011</td>
</tr>
<tr>
<td>Cash Flow Ratio</td>
<td>-.00094</td>
<td>.001325</td>
<td>-.70943</td>
<td>.543</td>
</tr>
<tr>
<td>Inventory Turnover days</td>
<td>-.00373</td>
<td>.003629</td>
<td>-1.02728</td>
<td>.229</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.184763</td>
<td>.107343</td>
<td>1.721241</td>
<td>.079</td>
</tr>
<tr>
<td>_cons</td>
<td>10.60008</td>
<td>3.019183</td>
<td>3.51091</td>
<td>.000</td>
</tr>
</tbody>
</table>

Wald chi² (5) = 13.52
Prob> chi² = .000

Source: Kinuthia (2019)

The results on the moderated regression analysis, are shown by table 4 and 5 below. The results in Table 4 reveal that GDP growth rate has a significant moderating effect on the relationship between working capital management and financial performance (ROA and EVA) of listed manufacturing firms. This is because the interaction of the moderator and independent variable is significant together with the moderating variable (GDP growth rate) for both ROA and EVA.
Table 4: Regression Moderation Coefficients on return on assets

|       | Coef.  | Std. Err. | z      | P>|z| |
|-------|--------|-----------|--------|-----|
| ROA   |        |           |        |     |
| Independent | -.69384 | .32903    | -2.11  | .035 |
| Interaction | .70749  | .29864    | 2.37   | .018 |
| GDP     | .61529  | .26980    | 2.28   | .023 |

Wald chi2  = 12.79
Prob > chi2 = 0.0465

Source: Kinuthia (2019)

Table 4.1: Regression Moderation Coefficients on Economic value added

|       | Coef.  | Std. Err. | z      | P>|z| |
|-------|--------|-----------|--------|-----|
| EVA   |        |           |        |     |
| Independent | .37806  | .08971    | 4.214  | .000 |
| Interaction | -.27633 | .08965   | -3.08  | .002 |
| GDP    | -.37271 | .17618    | -2.12  | .034 |
| _cons  | 15.6065 | 4.74191   | 3.291  | .001 |

Wald chi2  = 10.82
Prob > chi2 = .0045

Source: Kinuthia (2019)

Conclusions

From the findings the study concludes that:

i. Debtor’s collection period has a negative effect on financial performance of listed manufacturing firms in Kenya;

ii. Creditors payment period positively affects the financial performance of listed manufacturing firms in Kenya;

iii. operating cashflow ratio has a statistically significant positive relationship with return on assets of listed manufacturing firms in Kenya;

iv. operating cashflow ratio has a statistically significant negative relationship with economic value added of listed manufacturing firms in Kenya;

v. inventory turnover days has a significant positive relationship with ROA but a negative insignificant relationship with EVA of listed manufacturing firms in Kenya;

vi. gross domestic product moderates the relationship between working capital management and financial performance of listed manufacturing firms in Kenya.

Recommendations

From the findings the study recommends that manufacturing firms:

i. reduce debtor’s collection days to a reasonable minimum period to create economic value for the shareholders;
ii. go for creditors giving a longer payment period;
iii. manage their cashflows efficiently in order to enhance financial performance
iv. increase the inventory turnover days to an optimal level in order to avoid stock out costs
v. consider the gross domestic product before making key financial decisions relating to working capital management

The researcher recommends a study on working capital and financial performance of manufacturing companies with more financial variables on a longer period.

References


