IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925.Volume 9, Issue 6 Ver. I (Nov. – Dec.2018), PP 54-61
www.iosrjournals.org

Effects of Liquidity Management on Profitability of quoted Manufacturing Firms in Kenya

Felix Asete[1]& James N. Kung'u[2]

1. *MBA Student in the Department of Commerce, School of Business, Laikipia University*
2. *Lecturer, Department of Commerce in the School of Business, Laikipia University*

Corresponding Author: Felix Asete

Abstract: *In corporate finance literature, liquidity and profitability tops in the most pertinent issues. The main objective for any firm is to maximize profitability. Too much attention to profits by corporate managers may dilute a firm's liquidity level and thereafter severe financial hardship. Insolvency or bankruptcy in firms may come as a result of little or no attention to both liquidity and profitability. A decade ago, the firms in manufacturing sector have been struggling to growand companies like Eveready East Africa and Cadbury Kenya have wound up operations. This may be as a result of poor liquidity management. The firms may be attaining very high profits but undergoingliquidity levels problems. The quandaryin liquidity management is to balance the desired liquidity level and increase profitability. The study investigated effects of liquidity management on profitability of the12 quoted manufacturing companies in Kenya. Both descriptive and inferential data tools to analyze the data were used. In descriptive data analysis, mean, standard deviation, minimum and maximum values were computed. In inferential data analysis, correlation, regression and ANOVA were used. Correlation and regression analysis were used to examine the effect of the independent variables on the dependent variables. The ROA was used as measure for companies' profitability and the companies' liquidity was measured using the current ratio, quick ratio, and cash ratio and cash conversion cycle. Effect of current ratio, quick ratio, cash ratio, cash conversion cycle on profit was found to be statistically insignificant. The findings of the analysis revealed that all the independent variables had a significant combined effect R-square of 0.094 on profitability of manufacturing firms in Kenya. The study rejected three and accepted two null hypotheses. Null hypotheses that current ratio, quick ratio and cash ratio do not have statistically effect on profitability of manufacturing firms in Kenya were rejected because they were found to have a significant effect. Cash conversion cycle and the combined joint independent variables were found not to have a significant effect on profitability of manufacturing companies of quoted companies in the Nairobi securities exchange. Therefore, the two hypotheses were rejected. The study recommends that the manufacturing firms should increase their cash flow through reduction of supplier repayment period, engaging experts in management of their receivables. The government should regulate the manufacturing sector to prevent some companies from falling into liquidity difficulty.*

Key Words: *(Cash Conversion Cycle, Cash Ratio, Current Ratio, Liquidity Management, Quick Ratio)*

Date of Submission: 30-10-2018 Date of acceptance: 15-11-2018

I. .Background Information

Manufacturing sector in an economic system stays one of the most effective engines for monetary boom. It facilitates to convert the economic shape of countries from simple, sluggish developing and coffee cost activities to extra colorful and effective economies. With rapid technological change, sweeping liberalization and the elevated internationalization of manufacturing, production has end up the primary approach for growing international locations to benefit from globalization and be able to bridge the earnings hole with the industrialized world (Amakom, 2012). Manufacturing sector has a pull effect on the alternative sectors of the economy by stimulating the call for extra and higher service. Manufacturing region can be checked out from a worldwide, regional and neighborhood attitude.

Manufacturing remains significantlyimportantly globally. Inside the developing world, it continues to offer a pathway from subsistence agriculture to rising incomes and residing requirements. In the advanced international scene, it remains an important source of innovation and competitiveness, making outsized contributions to studious inquiries and development, exports and productivity growth. The way it contributes to the financial system shifts as countries mature. In today's advanced economies, manufacturing promotes innovation, productivity, and trade more than economic boom and employment (Amakom,2012). Manufacturing industries nowadays contribute substantially to the world's economy and it is likely evolve over coming decade (Karel, Alan,& Martin, 2013). The manner manufacturing region contributes to the economies shifts as nations

mature. Production zones inside the economies have all started to eat extra services and to depend extra closely on those services to operate (Karel et al., 2013). They argue that production area globally maintains to develop. It now attributes to approximately 16 percent of world GDP and 14 percent of employment. However the manufacturing sector's relative length in an economic system varies with its level of improvement. They found that once economies industrialize, manufacturing, employment and output each rise rapidly.

In U.S. the manufacturing zone hired 12 million employees in 2013 which approximates 8.8 percent of total U.S. employment (Kuhner, 2012). Manufacturing sector employs a higher proportion of employees without a college degree than the economy common. On average, non-university-knowledgeable workers in manufacturing made 10.9 percent extra than similar employees inside the rest of the economic system in 2012–2013 (Kuhner, 2012). The US production quarter generated $2.1 trillion in GDP which approximated 12.5 % of total U.S. GDP in 2013 (Scott, 2014). Apart from manufacturing sector being essential for jobs and production, a critical manufacturing sector is likewise important to assembly country wide challenges, inclusive of rebuilding U.S. infrastructure, reducing greenhouse fuel emissions, and decreasing the country's reliance on fossil fuels. Renewable sorts of power, which includes wind and solar energy, depend on manufactured additives greatly especially extractable power inclusive of oil. A pulsating manufacturing region may be needed to deliver the new materials needed to rebuild the USA's infrastructure and to create a low-carbon economic system.

China has emerged as a manufacturing powerhouse. Apart from China overtaking the US in 2011 to come to be the arena's biggest manufacturer of synthetic items but extensively utilized its huge production engine to enhance living requirements via doubling the nation's GDP in line with capita during the last decade (Karel et al., 2013). What has made China's emergence probably disruptive is its exceedingly specialization in production. Over the length 2000 to 2005, manufacturing accounted for 32% of China's GDP and 89% of its merchandise exports, making it greater specialized inside the area than any other large developing economic system. In customer items and other exertions-in depth manufactures, China has grown to be a prime source of supply, pushing down world product prices (Karel et al., 2013). In line with Hanson and Robertson (2008) China is now one of the globe's maximum crucial manufacturing international locations. It is the finest worldwide exporter, and the largest manufacturer of steel, automobiles and televisions and a growing quantity of different products. Growth has been around 10% every year and manufacturing attributes to around 45% of GDP.

The manufacturing sector is widely taken into consideration to be the perfect industry to force Africa's improvement. That is because of the hard work-intensive, export-centered nature of the enterprise. Furthermore, the producing region is likewise greater sustainable and less at risk of external shocks than commodities for instance (KPMG, 2014). A robust manufacturing industry contributes to the improvement of the non-government sector, which increases an economic system's resilience to outside shocks. Moreover, home production improves outside bills by way of both decreasing imports and diversifying exports. Generating goods to deliver to the domestic market has a high quality impact on the shape of the exchange balance, and synthetic exports have a much wider scope and extra solid demand than commodity exports (KPMG, 2014).

In South Africa, manufacturing sector stays a crucial sector in the economy given its capacity to generate fine and sizeable spillover consequences on the economic system and the fact that the industry continuously appears among a few of the pinnacle-three sectors with the very best multiplier consequences in terms of output, employment, export earnings and monetary sales. The manufacturing quarter contributes 15% to GDP. The South African authorities are keenly centered on factories and heavy industry as an employment author regardless of operational and profitability challenges within the secondary zone (KPMG, 2014). That is primarily based on the found horizontal and vertical effects of those industries on growth and employment in other sectors. Pinnacle boom and employment multipliers in South Africa include the manufacturing of shoes, textiles and leather merchandise; automobile, equipment and related system; as well as food and furniture.

In Nigeria, the manufacturing sector is now the principal motive force of economic increase. In keeping with manufacturing association of Nigeria (2014), the manufacturing quarter is currently growing faster than the telecommunications, oil and gasoline and agricultural sectors. It well-known shows that there was a growth in manufacturing capacity usage from 46.3 percent recorded within the first half of 2013 to 52.7 percentin the second half of 2013. In 2010, the manufacturing area stood at a value of N3,578,641.72(6.55% of total GDP). It grew with the aid of N948,803.34 million(26.51%) in 2011 to attain N4,527,445.06 million (7.79% of actual GDP) and by using N1,061,376.64 million(23.44%) in 2012 to attain N5,588,821.69 million(7.79% of actual GDP). Increase changed into maximum in 2013, at N1,644,500.79 million (29.42%) which resulted to N7,233,322.48 (9.03% of real GDP),the very best value ever recorded in a long time (FRN, 2014).Manufacturers in Nigeria attributes the great growth recorded in ability utilization in the closing year to favorable authorities guidelines, particularly with admire to industry, trade and investment.

According Kenya economic report 2017, the manufacturing quarter in Kenya constitutes 70 per cent of the industrial zone contribution to GDP, with building, construction, mining and quarrying cumulatively

contributing the ultimate 30 percent (ROK, 2017). Kenya Vision 2030 identifies the manufacturing zone as one of the key drivers for understanding a sustained annual GDP growth of 10 percent (ROK, 2009). The manufacturing zone has excessive, but untapped ability to make a contribution to employment and GDP boom. Despite these, manufacturing sector remains one of the top five most vital sectors of the economic system which contributed together over 60% to GDP (ROK, 2017).

The Kenya's manufacturing zone's output in actual terms grew by means of 3.5 percent in 2016, a lower growth in comparison to the 3.6 percent increase recorded in 2015. The overall producer price index (PPI) rose marginally by 0.2 percent in 2016 as compared to a 4.6 percent increase in 2015. Total capital investment of Export Processing Zone firms grew by using Kshs 3.1 billion in 2016. The total cost of credit advanced to the manufacturing quarter reduced from Kshs 290.9 billion in 2015 to Kshs 277.4 billion in 2016 (ROK, 2017).

Manufacturing sector employs about 12 percent of overall workers inside the economy. The industry recorded 5.3 thousand new jobs which represented 9.2 percent of all new jobs created in 2016. Formal employment in manufacturing area accelerated by way of 1.8 per cent to 300.8 thousand persons in 2016.There was growth in the number of employees employed between 2010 and 2016 in manufacturing area (ROK, 2017).

Kenya's manufacturing sector is dominated by food merchandise processing. Meat and fruit canning, wheat flour and maize meal milling, and sugar refining are high-quality sub-sectors. The choice to study manufacturing sector is due to the fact the manufacturing sector is predicted to remain a throbbing and strong contributor to increase of the Kenyan economic system.

One aspect that requires investigation is the control of Liquidity in manufacturing firms. A business organization has to face quite often the hassle of capital funding decision, due to the fact funding in this task is quite heavy and ought to be made at once, however the returns might be available in the long run. For substitute growth diversification, studies and improvement funding choice are most vital, but the availability of short-term fund in most in liquid form is also very essential. The small, but very crucial quick-time period transactions need availability of enough liquid sources. Quick-term solvency a whole lot depends upon the provision of liquid sources as according to quick-term availability as short-term necessities. No businessman can aspire to hold surplus fund inside the enterprise but whilst developing these surplus fund he has to estimate its short-term requirements. Liquidity effects over short-term capacity to pay each day routine transaction (Jensen, 1986).

Liquidity refers to the functionality of a firm to meet brief term financial obligations (Mahavidyalaya, Niranjan&Suvaran, 2010). This indicates potential to pay current liabilities through changing the current assets into cash without suffering any loss. The liquidity of a company surely relies upon on the powerful control of the composition of contemporary assets and present day liabilities.

According to Mahavidyalaya et al. (2010) the ratios reflecting the liquidity function of anorganization includes the ; current ratio which is the ratio of current assets to current liabilities, quick ratio / Acid check ratio that's the ratio of quick assets to current liabilities, Absolute Liquid Ratio/ cash ratio referring to cash and near cash as the most liquid ratio. Absolute liquid ratio takes greater accurate look at liquidity than current ratio, quick ratio and cash conversion cycle (Bhunia, Khan, &Mukhuti, 2011). The cash conversion cycle is a complete tool of measuring running capital management. The cash conversion cycle is the number of days money owed by customers are receivable plus the variety of days inventory is converted to finished product for sales minus the number of days debts payable. The number of days bills receivable is calculated as money owed receivable accelerated by 365 then divided through sales. Number of days inventories outstanding is calculated by means of inventories multiplied 365 then divided by using cost of sales. Number of days accounts payable is calculated through accounts payable multiplied by 365 then divided by purchases.

A study of liquidity is of major importance to both the inner and outside analysts because of its near relationship with daily operations of commercial enterprises (Bhunia, 2010). A weak liquidity level poses a hazard to the solvency as well as profitability of a firm and makes it risky and unsound. A organization's liquidity level is essential since investors and creditors are interested by a company's all season capability to generate cash to pay off debt. Of extra challenge to debt-holders is the extent the company is capable of meeting debt responsibilities under detrimental conditions (Brealey& Myers, 1996). Both immoderate as well as insufficient liquidity positions are dangerous from the firm's point of view (Pandey, 2000). This is because excessive working capital implies idle funds which earn no profits for the firm (Brealey& Myers, 1996). Additionally reality is that paucity of working capital now not only impairs the firm's profitability but additionally effects in manufacturing interruptions and inefficiencies.Therefore, this study was guided by five hypotheses; H_{01}: There is no statistically significant effect of current ratio on profitability of quoted manufacturing firms in Kenya, H_{02}: There is no statistically significant effect of quick ratio on profitability of quoted manufacturing firms in Kenya, H_{03}: There is no statistically significant effect of cash ratio on profitability of quoted manufacturing Firms in Kenya, H_{04}: There is no statistically significant effect of cash conversion cycle on profitability of manufacturing firms in Kenya, H_{05}: There is no statistically significant combined effect of current ratio, quick ratio, cash ratio and cash conversion cycle on profitability of manufacturing firms in Kenya.

II. Literature Review

The trade-off theory shows that companies target a most effective level of liquidity to stabilize the gain and cost of retaining cash. The cost of keeping cash consists of rate of return of the total assets due to liquidity top class and probably tax downside. The advantages of holding cash are in twofold: First the corporations save transaction costs to raise finances and do no longer want to liquidate assets to make payments. Secondly the company can use liquid property to finance its activities and investment if other resources of investment are not to be had or are extremely steeply-priced. As theory, using trade off model cannot be overlooked, as it explains that, corporations with high leverage draws excessive price of servicing the debt thereby affecting its profitability and it will become difficult for them to source for funds through different resources (Jensen, 1986). The concept is able to explain why capital structures vary among industries, while it cannot give an explanation for why profitable corporations inside the enterprise have decrease in debt ratios.Trade-off theory predicts the alternative as worthwhile corporations have a bigger scope for tax shields and consequently sooner or later must have better debt degrees.

Kimondo (2014) tested the relationship between liquidity and profitability of nonfinancial firms listed in Nairobi securities exchange using a populace of 39 firms, found that the management of non-financial firms in Kenya can create value for their shareholders by way of preserving most fulfilling liquidity level. The management can create value for their shareholders through increasing their current assets to a reasonable degree. The outcomes indicated that each one the predictor variables specifically: current ratio , quick ratio and cash ratio had positive but vulnerable relationship with profitability as measured through return on asset. The study revealed that there exists a fine courting between the liquidity and financial overall performance at 1% level of significance. This study focused non-financial firms and these covered service organizations. This research assumed the operating environment of the distinct industries. The results have to be used with caution considering the fact that manufacturing firms perform under distinct surroundings with service corporations. There are different elements that affect profitability of corporations consequently liquidity must now not be utilized in isolation of those different factors. Further studies together with other elements affecting financial performance together with liquidity might be greater objective and beneficial to the management of nonfinancial firms in Kenya.

Sandhar and Janglani(2013) had study on liquidity and profitability of selected Indian cement corporations. The populace of the study was all the firms listed in the National stock exchange of India Ltd. The statistics were analyzed through the regression analysis to find out the impact of liquidity on profitability; correlation evaluation was used to find out the connection between liquidity and profitability. The empirical research used of the partial correlation and regression evaluation and found out that liquidity ratios measured via current ratio , liquid ratio and cash turnover ratio, have a diminutive association with profitability measured through return on assets.It also revealed that current ratio and liquid ratio are negatively associated with return on assets. The regression result indicated that not one of the 3 liquidity ratios tested specifically;current ratio, liquid ratio and cash turnover ratio had a good sized effect on profitability measured via return on assets and return on investments at 99% or even 95% significance level.

Amalendu and Sri (2011) did studies on the significance of liquidity management on profitability in steel companies in India the using, return on capital employed as a measure of profitability and current ratio, quick ratio and cash conversion cycle as a measure of liquidity and concluded that there was positive association between current ratio, quick ratio and return on capital employed. This study additionally found out that current ratio and quick ratio are undoubtedly related to return on capital employed, at the same time as cash conversion cycle was negatively related to return on capital employed. This research noted a negative relationship between cash conversion cycle and profitability of the firms.

Eljelly (2004) empirically tested the relation among profitability and liquidity, as measured by means of current ratio and cash gap (cash conversion cycle) on a sample of 29 joint stock companies that constitute foremost economic sectors in Saudi Arabia with the exception of the electricity and banking industries over the length 1996 to 2000.Correlation and regression analysis were used, the study found significant negative association between the firm's profitability and its liquidity level, as measured by current ratio. The research observed that current ratio is the foremost important liquidity measure that affects profitability. The relationship was more glaring in corporations with excessive current ratios and longer cash conversion cycles. The study highlighted factors to the reduced profits and the useless costs that are borne by companies due to protecting excessive liquidity. The study suggests that those losses or costs can be reduced or removed with the aid of adopting energetic liquidity management strategies.

Ehiedu (2014) did examine the effect of liquidity on profitability of some selected corporations by the use of the financial statement analysis approach wherein the study used the non-probability sampling method of 4 chosen on firms. The study sought to determine the: The correlation between current ratio and profitability; as measured through return on assets, the correlation between quick ratio and profitability; as measured by way of return on assets, the correlation among return on capital employed and profitability; as measured via return on

assets. The populace consisted of publicly quoted organizations that made up the commercial /domestic merchandise enterprise. Simple correlation evaluation was used to check the hypothesis at 10% level of significance. The overall findings of this examination revealed that there was an enormous positive correlation among currentratio and profitability, there was no particular significant correlation between quick ratio and profitability; there was no tremendous positive significant correlation among return on capital employed and profitability. The study did not perform tests to determine the purpose of the connection between liquidity and profitability, in order to find out if there may be a causal courting between them or there's another factor inflicting the connection among them.

Qasim and Ramiz (2011) examined effects of liquidity ratios on profitability of oil and gas organizations in Pakistan. The tests were performed between the year's 2004 and 2009 and after accumulating statistics about the financial positions because of annual activities and the related ratios of 26 firms according to year traded at the Pakistan (Oil and gasoline companies), at Karachi stock exchange (KSE).The findings showed from linear regression analysis return on assets was extensively affected by cash ratio. Return on equity did not get affected by current ratio, quick ratio and cash ratio whereas return on investments became significantly stricken by all three liquid ratios; current ratio, quick ratio and cash ratio. In keeping with the first model analysis, the result revealed that return on assets was affected most by cash ratio because p-value turned into less than 5% of cash ratio. This study used a discounted form model and it did not test other elements that might purpose the relationship between the liquidity ratios and profitability.

The research by Majeed , Makki and Saleem (2013) investigated the association between cash conversion cycle and profitability of companies in Pakistani the using a sample of 32 companies decided on randomly from three manufacturing sectors; chemical, vehicles and construction and material for the duration of five years from 2006 to 2010. The correlation and regression analyses were used to examine the relationship of cash conversion cycle with overall performance of the companies: return on assets, return on equity and earnings before interest and taxes. The tests carried out revealed a negative significant relationship among the distinct variables of cash conversion cycle on companies' performance. The findings recommended that managers can create value for their shareholders by reducing the range of days for bills receivables. Further, the poor relationship cautioned that much less profitable firms will pursue a decrease of their debts receivables in a try to reduce their cash gap in the cash conversion cycle.

The study of Muneeb and Kasif (2012) on the most appropriate relationship of cash conversion cycle with firm size and profitability carried out on listed organizations in the Karachi stock exchange, discovered a significant negative correlation between the period of cash conversion cycle and the company size, in terms of total assets. So the findings indicated that large companies appear to control their cash conversion cycle turnover days effectively while their smaller counterparts occur to be suffering with their cash management issues. The research observed that cash conversion cycle in days and profitability in terms of return on equity were negatively correlated with the company's profitability. This revealed that the corporations with shorter cash conversion cycle turnover days have more profits than the companies with longer cash conversion cycle. The study fails to identify the diverse instances in which the companies should change their attitudes toward specific assets of working capital, in the distinct levels of growth cycle. A great amount of research work should also be undertaken with the objective of presenting an ideal mixture of working capital management strategies and the financial policies which might be distinctly conducive to the growth of the firms.

Nizigiyimana (2014) examined liquidity management of cement production businesses listed at the Nairobi securities change. This study confirmed that more than one correlation coefficient between the dependent variable; return on capital employed and the independent variables current ratio, quick ratio and cash conversion cycle had strong correlation. Findings of this study indicated that correlation and regression outputs were fairly positively associated to the profitability. The study used each correlation and regression analysis and found out that liquidity ratios measured by current ratio, quick ratio and cash conversion cycle have a strong association with profitability measured by return on capital employed. The study was based totally on three indexed companies of the Cement sector in Kenya. Consequently, the findings of this study ought to be used with caution and have to be generalized to the cement sector and not whole manufacturing industry. The study didn't include the working capital management components.

Izadinia and Taki (2010) investigated the effect of working capital management on profitability of capable firms quoted in Tehran stock exchange during the period 2001-2008. This study had the dependent variable, return on total assets considered as a criterion of degree for profit capability. The outcomes showed that there is a significant negative association between the cash conversion cycle with return on assets. Also, they expressed that excessive investment in inventory and debts receivable will result in decrease profitability of firms.

Karani (2014) studied the effect of liquidity management on profitability of business banks in Kenya. The population of the study was made up of all forty four financial banks in Kenya running within the years 2009 to 2013. The study used descriptive and regression evaluation to test the relationship among the study

variables. The research found out that there waspositive relationship among profitability and liquidity management of commercial banks in Kenya. The study covered a period of five years 2009 to 2013; this duration wouldn't had been sufficient to draw conclusions as major inflation fluctuations may have affected the economic performance of the commercial banks and therefore incorrect conclusions might also have been arrived all through this examination. This examination should have done cross border study to include other nations in an effort to decide the impact of various economic and running elements on the relationship between the two variables.

From the foregoing empirical evaluation it can be concluded that many researchers have tested the relationship or impact of liquidity management on profitability. However, the findings are mixed. Some tested the impact of cash conversion cycle, current ratio, quick ratio and cash ratio on profitability. Furthermore numerous studies have been done in advanced international markets or rising markets. As a result the robustness in their outcomes has not been sufficiently tested in growing nations like Kenya. There is a gap that exists considering none of them covers the effect of liquidity on profitability of the manufacturing firms indexed at NSE.

III. Methodology

This study used a descriptive research design and looked at all the twelve manufacturing firms quoted at Nairobi Security Exchange. The companies were listed between 2010 and 2015. Data collection tool was used to collect secondary data for a period of six years. Both descriptive and inferential data analyses were done. In descriptive data analysis, minimum, maximum, mean and standard deviations were calculated. Inferential analysis involved correlation, regression and ANOVA. Hypothesis testing was done and multiple regression model determined.

IV. Results and Discussion

The study analyzed the data in two stages; descriptive and inferential data analysis. In descriptive data analysis, minimum, maximum, mean and standard deviation values were calculated as shown in table 1 below. Current ratio had a mean score of 1.81. This implies that the manufacturing firms are able to meet their short term debts on time. Current ratio for the manufacturing firms adhered to the global conventional rule of 2:1. The quick ratio had mean a score of 1.24. This ratio adhered to the global conventional rule of 1:1. This implies that the manufacturing firms are able to meet their current financial obligations with the available quick funds on hand. It can be noted that mean quick ratio is lower than the current ratio and it implies that the manufacturing firms are carrying high level of inventories.The mean score of cash ratio was 0.22. This implies that the manufacturing firms have more current liabilities than cash and cash equivalents. This implies that these manufacturing firms have insufficient cash on hand to pay off short term debts. This can also be an indication of the manufacturing firms operating with higher current liabilities and lower cash reserves. The mean score for cash conversion cycle was 63 days. This implies that the manufacturing firms turn over their stocks on an average of 6 times in a year. The mean score for return on assets was 12.37% implies that for every one Kenyan shilling of capital invested in assets, the manufacturing firms can get a return of Kenya shilling 0.12 in net profit after all deductions.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Current Ratio	72	0	10	1.81	1.614
Quick Ratio	72	0	10	1.24	1.622
Cash Ratio	72	0	1	.22	.364
Cash Conversion Cycle	72	-247	204	62.51	67.809
Return on Assets	72	-24.82	41.07	12.3734	13.26802
Valid N (Listwise)	72				

Correlation between current ratio, quick ratio, cash ratio, cash conversion cycle and profitability was computed. It was found to be 0.274, 0.261, 0.256 and -0.069 respectively. The findings on R square indicate 0.075 for current ratio, 0.068 for quick ratio, 0.066 for cash ratio and 0.005 for cash conversion cycle. All the independent variables explained individually less than 10% the variation of profitability of the manufacturing companies quoted in the Nairobi securities exchange. When all the independent variables were considered together, R was 0.094 that means that all the independent variables can only explain 9.4% of the variation in profitability of manufacturing companies quoted in the Nairobi securities exchange. This further indicates that the variables when combined together explain more to the variation in profitability of manufacturing firms quoted in the Nairobi securities exchange than the individual variables.

The F statistic for current ratio was 5.687 with a p-value of 0.020, quick ratio was 5.116 with a p-value of 0.027, cash ratio was 4.907 with a p-value of 0.030, cash conversion cycle was 0.334 with a p-value of 0.565 and for all the independent variables combined was 1.731 with a p-value of 0.153. Therefore, the results of the study indicated that current ratio, quick ratio and cash ratio have a significant effect on profitability of manufacturing firms quoted in the Nairobi securities exchange. This made this study to reject the null hypotheses that current ratio, quick ratio and cash ratio do not have a statistically significant effect on profitability of manufacturing firms quoted in the Nairobi securities exchange. However, for cash conversion cycle and for the joint effect, the study found that they do not have any effect on the profitability. Therefore, the two hypotheses; cash conversion cycle and combined joint effects on the independent variables that they do not have a statistically significant effect on profitability of manufacturing firms listed in the Nairobi security exchange were accepted.

V. Conclusions and Recommendations

This study concludes that manufacturing companies maintain liquidity levels at conventionally acceptable standards of current ratio of 2:1 and quick ratio of 1:1. This is an indication that manufacturing firms have no problem meeting the short term obligations. It further concludes that current ratio, quick ratio and cash ratio have a significant effect on profitability of manufacturing firms quoted in the Nairobi securities exchange. Cash conversion cycle has on significant effect as well as the combined joint independent variables (current ratio, quick ratio, cash ratio and cash conversion cycle) on profitability of manufacturing firms listed at Nairobi securities exchange.

The study recommends that the manufacturing firms should increase their cash flow through reduction of supplier repayment period, engaging experts in management of their receivables. The government should regulate the manufacturing sector to prevent some companies from falling into liquidity difficulty.

References

[1]. Amakom, U. (2012)."Manufactured exports in Sub-Saharan African economies: econometric tests for the learning by exporting hypothesis" American International Journal of Contemporary Research, 2(4), 195-206.
[2]. Amalendu, B.I.& Sri, B.B. (2011).Importance of liquidity management on profitability. Asian Journal ofBusiness Management, 3 (2), 108-117.
[3]. Bhunia, A., Khan, I. &Mukhuti, S. (2011). A study of managing liquidity. Journal of Management Research, 3(2), 1-22
[4]. Bhunia, A. (2010). A trend analysis of liquidity management efficiency in selected private sector Indian steel industry, International Journal of Research in Commerce and Management, 1 (5), 9-21.
[5]. Brealey, R.A.& Myers, S.C. (1996). Principles of Corporate Finance. New York, USA: The McGraw-Hill Companies, Inc.
[6]. Ehiedu, V.C. (2014). The impact of liquidity on profitability of some selected companies: the financial statement analysis (FSA) approach. Research Journal of Finance and Accounting, 5(5), 2222-2847.
[7]. Eljelly, A. (2004). Liquidity-Profitability Tradeoff: An empirical investigation in an emerging Market. International Journal of Commerce & Management, 14 (2),48-61.
[8]. F. R. N. (2014).Nigerian Manufacturing Sector. Lagos, Nigeria: Nigeria National Bureau of Statistics
[9]. Izadinia, N. &Taki, A. (2010). Investigation of the impact of working capital management on the profitability of potential of the companies listed in Tehran Stock Exchange. Journal of Science Research Financial Accounting, 120-139.
[10]. Jensen M. (1986). Agency cost of free cash flows, corporate finance and takeovers. Journal of American Economic Review, 76, 323-329.
[11]. Karani, R.M.(2014).The Effect of Liquidity Management on Profitability of Commercial Banks inKenya.(Unpublished MSC Research Project),University of Nairobi, Kenya.
[12]. Karel E., Alan H., & Martin L. (2013).A New Era for Manufacturing in China- McKinsey Global Institute.
[13]. Kimondo, C.N.(2014).The relationship between liquidity and profitability of non-financial companies listed in Nairobi securities exchange(Unpublished MBA Research project),University of Nairobi,Kenya.
[14]. KPMG(2014).Manufacturing in Africa: Sector report 2014.
[15]. Mahavidyalaya D.S., Niranjan, M. &Suvaran G. B. (2010). Impact of working capital management on liquidity, profitability and non-insurable risk and uncertainty bearing.
[16]. Majeed S., Makki M. A. M., Saleem S. & Aziz T. (2013). The relationship of cash conversion cycle and profitability of firms: an empirical investigation of Pakistan firms. Journal of Emerging Issues in Economics, Finance and Banking,1 (1), 35-51
[17]. MAN(2014). Manufacturing to boostNigeria. Lagos, Nigeria: Manufacturing Association of Nigeria
[18]. Nizigiyimana, A. (2014).Liquidity management of cement manufacturing companies listed on the Nairobi securities exchange.(Unpublished MBA Research Project),United States International University.
[19]. Pandey I. M. (2000). Financial Management (8th Edition). New Delhi, India: Vikas Publishing House PVT Limited.
[20]. R.O.K (2017). Economic survey. Nairobi, Kenya:Kenya National Bureau of Statistics
[21]. Sandhar S.K. &Janglani S. (2013). A Study on liquidity and profitability of selected Indian cement companies: A regression modeling approach. International Journal of Economics, Commerce and Management United Kingdom, 1 (1), 1-24.

The First Author has the following Affiliations:

[1]. MBA Candidate in the Department of Commerce, School of Business, Laikipia University
[2]. Internal Auditor, Kenya Forest Services, Headquarters,Nairobi Kenya

The Second Author has the following Affiliations:

[1]. A Member of the Institute of Certified Public Accountants of Kenya (ICPAK)
[2]. A Member of the Institute of Certified Secretaries of Kenya (ICSK)
[3]. Associate Member of the Kenya Institute of Management (AMKIM)

[4]. Lecturer in Accounting and Finance, Laikipia University, Kenya
[5]. Chairman, Audit Committee, Nyandarua County Assembly

Felix Asete "Effects Of Liquidity Management On Profitability Ofquoted Manufacturing Firms In Kenya "IOSR Journal of Economics and Finance (IOSR-JEF) , vol. 9, no. 6, 2018, pp. 54-61