



INFLUENCE OF LIQUIDITY MANAGEMENT ON FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED IN NAIROBI SECURITIES

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ABSTRACT

The objective of this study was to determine the influence of liquidity management on the financial performance of agricultural firms listed on Nairobi Securities Exchange. A descriptive survey research design was applied. A Census of all the 6 companies listed at Nairobi Securities Exchange as at July 2014 to July 2019 constituted the study population. The study employed secondary data extracted from audited financial statements and individual companies annual report for the five year period covering July 2014 to July 2019. Record survey sheet was used when collecting data for independent and dependent variables. Data collected was analyzed by using descriptive and inferential statistics. Under descriptive statistics the study considered; Mean, Minimum, Maximum and Standard deviation. For inferential statistics the study considered correlation and multiple regression. Statistical Package of Social Science (SPSS) software program was applied in the analysis of the study with respect to the objectives of the study. The study found out that liquidity management has a positive significant effect on financial performance. The liquidity management has positive relationship with the Return on Investment (ROA) of the firms under study. The study recommended that agricultural firms listed on NSE should adopt prudent liquidity management as it influence financial performance.

Key Words: *Liquidity Management, Financial Performance*

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INTRODUCTION

The success of any organization depends on sound financial management. Financial managers execute financial management practices that determine the success of an organization. Chung and Chuang, (2010) have classified financial management practice into liquidity management, investment management, financing, earnings management, capital budgeting and accounting information system. Inefficient financial management, combined with the uncertainty of the business environment often leads Business Enterprises to serious problems (Dawson, 2013). Patra (2009) argued that financial management helps to improve the profitability position of business organizations with the help of strong financial control devices such as budgetary control and ratio analysis. Therefore the close relationship of agricultural firms performance must grow increasingly for it to prompt economic growth (Nyoro *et al*, 2012)

Lamberg and Valming, (2009) examined the effect of liquidity management on productivity during financial crises with an example of organizations recorded on Stockholm stock exchanges little and mid-industrialist with certain restrictions. Adopting a quantitative methodology and regression analysis, they discovered that the adjustment of liquidity systems don't significantly affect benefit estimated by ROA. In any case, that expanded utilization of liquidity estimating and momentary financing during the money related emergency positively affected ROA. Majid (2014) also stressed prudence practice of liquidity management where in their research on risk management, regulation and supervision of Islamic banks in Jakarta-Indonesia .They alluded that failure to address liquidity management has led to banking collapse and to extension instability in financial systems. As opposed to the finding of positive connection among liquidity and financial execution of budgetary foundation, a few specialists have

discovered negative connection among liquidity and execution. In the examination on liquidity – benefit compromise in developing markets, Eljelly (2015) estimated liquidity utilizing current proportions and money change cycle.

Odalo, Samuel Kanga, (2016) in his examination on Factors that Influence Financial execution of Agricultural Firms Listed in the Nairobi Securities Exchange he set up that liquidity affects (ROA). What's more, the discoveries uncovered that liquidity affects return on value (ROE). In light of ownership structure on Financial execution of Companies, results revealed that ownership structure had negative effect on (ROA) of the seven recorded cultivating associations in the NSE. The results exhibited that association size effects (ROA). The examination similarly revealed that association size has a positive and basic relationship with ROE and EPS. The specific inferential measurement was relapse and connection examination. Board information technique was utilized utilizing a multivariate relapse model to test the speculations and connection the factors. Njeri (2013), in her study of effect of liquidity on financial performance of micro-financial institutions. The analysis indicated that financial performances of MFIs in Kenya highly depend on the institutional liquidity level.

Statement of the Problem

According to Kenya National Bureau of Statistics (2016), agricultural sector in Kenya is one of the core sectors backing the Kenyan economic growth. According to the statistics report, it shows that the performance of agricultural firms at Nairobi Securities Exchange keeps on reporting a decline hence raises a major concern to the future of the Kenyan economy. That is, the performance of quoted agricultural based companies in terms of financial metrics has become an issue of common concern of the stakeholders including the shareholder, the creditor, the company's staff and the government administration. According

to NSE investors handbook (2017-2018), financial review report showed that out of all the seven listed agricultural firms, four of them indicated poor performance within the period 2014 to 2018. Eaagads Ltd, Limuru Tea Company, Sasini and Rea Vipingo where some experienced decline in profits others experienced losses and some were placed under receivership.

According to Wamalwa (2010), most firms in the agricultural sector have not lived to their expectations and have led to shareholder apathy thereby contributing to the decline of the rural economy due essentially to unstable and low dividend payout by most agricultural firms. Previous studies also conducted in Kenya have not addressed financial management practices exclusively. For instance, Nyamao, Ojera, Lumumba, Odondo, and Otieno,(2012) considered financial management practice in terms of efficiency of cash, inventory and receivables management, while Mathuva (2009) considered financial management practice in terms of the operating cycle, other researchers have only concentrated on working capital. It is against this background that this study was carried out.

Objectives of the Study

The objective of this study was to determine the influence of liquidity management on financial performance of agricultural firms listed in Nairobi Securities Exchange.

The study was guided by the following hypothesis

- **H₀:** There is no significant relationship between liquidity management and financial performance of agricultural firms listed on Nairobi Securities Exchange.

LITERATURE REVIEW

Trade-off Theory

This theory was presented by Robichek and Myers (1966). The theory expresses that there is an ideal capital structure that expands the estimation of a

firm. It is of the view that the administration will set an objective influence proportion and afterward progressively move towards that. Davis and Cosenza (2014) have shown that organizations select objective influence proportions dependent on a compromise between the advantages and expenses of expanded influence, he referenced duty, money related pain expenses and office costs as three factors that impact the decision of this objective influence proportion. Directors will in this way pick the blend of obligation and value that accomplishes a harmony between the advantages of obligation through duty advantage and the different expenses related with obligation.

The theory recommends that organizations focus on an ideal degree of liquidity to adjust the advantage and cost of holding money. The expense of holding money incorporates low pace of return of these advantages in light of liquidity premium and perhaps charge inconvenience. The advantages of holding money are in twofold: First, the organizations spare exchange expenses to raise reserves; don't have to sell resources for make installments. Second, the firm can utilize fluid advantages for account its exercises and speculation if different wellsprings of financing are not accessible or are amazingly costly. Falope and Ajilore, (2009) Presents office issue related with free-income. Jensen (1986), proposes that – free income issue can be some way or another constrained by expanding the stake of chiefs in the business or by expanding obligation in the capital structure, in this manner diminishing the measure of free money accessible to supervisors. As hypothesis, the utilization of compromise model can't be overlooked, as it clarifies that, organizations with high influence draws in significant expense of overhauling the obligation accordingly influencing its financial execution and it gets hard for them to raise assets through different sources. Holding money on that point isn't just kept up by the littler firm yet in addition bigger firms.

The cash flow period as a strong liquidity index is indirectly associated with value of the company because low cash flow period (high liquidity) versus high cash flow period (low liquidity) means that the company has received the cash from selling products sooner, but has done its current payments later. So,

current value net of the cash flow and consequently value of the company will increase (Emory, 2011). This theory instigates the first research hypotheses: Liquidity management has no significant effect on the financial performance of agricultural firms listed in the Nairobi Securities Exchange.

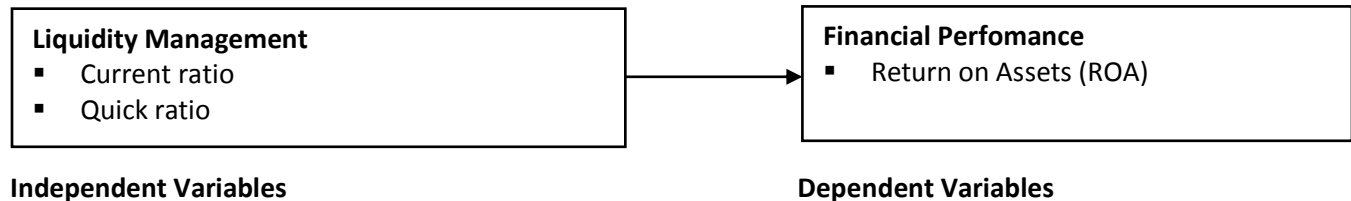


Figure 1: Conceptual Framework

Amidu and Abor (2012) summarized significant variables that assess financial success by companies as productivity, cash flow, growth in revenue and market-to - book valuation. Brealy, Myers (2014) describes income as revenue, minus all the sales related expenses. Weisbach, (2013) describes cash flow as the company's cash created and paid out to creditors and shareholders. This can be categorized as from sales, investment cash flow, and funding activities. Sale growth is a function of sales volume increased over a period of time.

As per Bagchi and Khamrui (2012) the book estimation of the companys value is equivalent to the aggregate sum that the organization has raised from its investors or held and reinvested for their sake. In the event that the organization has been fruitful in including esteem, the market estimation of value will be higher than the book esteem. The distinction between the market estimation of the organizations value and its book esteem is alluded to as the market esteem included. As per Bashir, Abbas, Manzoorand Akram (2013), there are eight variables influencing firms financial execution to be specific influence, leverage, size, growth, risk, tax, tangibility, liquidity and non-debt tax shield.

As per Jensen (1986) debt financing raises the pressure on managers to perform, in light of the fact

that it lessens the ethical peril conduct by decreasing free income at the disposal of managers. Consequently, the organizations with the higher leverage ought to be the most impelled to improve their exhibition. However, as indicated by Jensen and Meckling (2017) on the opposite side, a higher influence implies higher office costs due to the separating interests among investors and debt holders: this ethical risk issue proposes that influence might be adversely connected to execution. As indicated by Grossman and Hart (2012), the influence can function as disciplinary gadget that controls the administration from squandering their organizations assets.

William (2008) discovered that choice for high influence by the administration diminishes the conflict among the board and investors. The investigation directed by Krishnan and Moyer (2010) found a negative and huge connection among influence and firms execution while different components influencing firms execution decidedly incorporates size, development, duty and hazard. The discoveries of Zeitun and Tian (2017) demonstrated that influence has a huge and negative relationship with firms execution. They utilized influence, development, size, expense, hazard and substantial quality as autonomous variable to see their impact on

firms execution. They inferred that organizations size and assessment have positive and critical relationship with firms execution while hazard and substantial quality have negative and noteworthy relationship with firms execution.

Nosa and Ose (2010) found that effective funding required for the growth and development of the corporations in Nigeria. They suggested enhancing the regulatory framework for increasing the firms performance by focusing on risk management and corporate governance. Onalapo and Kajola (2010) found a significant and negative relationship between debt ratio and firms financial performance. The DuPont growth analysis is efficient examining financial performance of any company (Mishra *et al.*2012). To measure financial performance, Return on Assets (ROA), Net Income Margin (NIM) and Return on Earnings (ROE) is used.

According to Simpasa (2011), the value of financial performance is measured as Return on Assets (ROA), Return on Earnings (ROE) and Net Income Margin (NIM). The Return on Assets is one of the significant performance factors in forecasting business performance (Mirsha *et al.*, 2012).

Effective cash management has been overemphasized by some researchers. Bhunia and Khan (2011) studied liquidity management efficiency of Indian steel companies with a sample of 230 companies for 9 years period (2002-2010) and found a petite association between the indicators of liquidity and profitability. Bhunia, Khan and Mukhuti (2011) also found that working capital in terms of liquidity is accountable for poor capacity, underutilization and poor consumption and that there exist a high positive relationship between liquidity and profitability. More recent studies have also confirmed the existence of the tradeoff between liquidity and profitability trade off. Sambasivam and Biruk, (2013) investigated the relationship among Istanbul firms and found that growth in sales affects

firm profitability positively. This result invariably support the view that liquidity and profitability are directly associated since liquidity is enhanced by sales growth.

Lamberg and Valming, (2009) studied the impact of liquidity management on profitability during financial crises with a sample of companies listed on Stockholm stock exchanges small and mid-capitalist with some restrictions. Adopting a quantitative methodology and regression analysis, they found out that the adaptation of liquidity strategies do not have a significant impact on profitability measured by ROA. However, that increased use of liquidity forecasting and short-term financing during the financial crisis had a positive impact on ROA. In other word frequent monitoring and forecasting on liquidity levels and making more short-term investments can provide gains in profitability. Ashokkumar and Manohar (2010) studied Cement Industry in Tamilnadu and found significant negative relation between the firms profitability and its liquidity level. More recent studies have also confirmed the existence of the trade-off between liquidity and profitability trade off. For instance Bhunia and Brahma (2011) studied the importance of liquidity management on profitability and found a significant negative relationship between the profitability.

Abioro (2013) studied cash management on the performance of manufacturing companies in Nigeria. The objective of the study was accomplished by use of descriptive statistics and correlation coefficient techniques respectively. The study used analysis on the performance of Cadbury Nigeria Plc as the dependent variable and cash management as independent variable. The period of the study used was 2002 to 2011. In conclusion the study found out that although there may be no significant relationship between liquidity and performance, the concept of efficient cash management will lead to success of a business. In their study of liquidity management and corporate profit, Ogbada and Osuji (2013) found out

managers can increase profit by putting in place good credit policy, short cash conversion cycle and effective cash flow management procedures. The study through the use of descriptive analysis where data from 12 selected manufacturing companies quoted on the floor of Nigeria stock exchange. The conclusion of the study was that effective cash optimization is critical to all organization profit maximization. Further some studies have shown that there exists relation between liquidity and financial performance of banks.

Ogbada and Osuji (2013) researched also on the efficacy of liquidity management and banking performance in Nigeria. Survey design through structured questionnaires was used to collect data .The sample of the study was made up of twenty randomly selected banks in Nigeria where 300 bank employees derived by randomly distributed questionnaires to each. From their empirical analysis they found out that there is significant relationship between efficient liquidity management and banking performance. Majid (2014) also stressed prudence practice of liquidity management where in their research on risk management, regulation and supervision of Islamic banks in Jakarta-Indonesia .They alluded that failure to address liquidity management has led to banking collapse and to extension instability in financial systems. In opposition to the finding of positive connection among liquidity and financial execution of monetary establishment, a few analysts have discovered negative connection among liquidity and execution. In the examination on liquidity – gainfulness compromise in developing markets, Eljelly (2015) estimated liquidity utilizing current proportions and money transformation cycle. By the utilization of connection and relapse investigation, the examination discovered that their exists negative connection between the organizations benefit and its liquidity level as estimated by current proportions and longer money change cycle. The money change

cycle or the money hole was seen as more significant as a proportion of liquidity in industry level than current proportion. In Kenyan market, the relationship between liquidity and bank performance has been researched.

Tobias & Themba (2011) researched on effects of banking sectoral factors on the profitability of commercial banks in Kenya .The study used exploratory approach with panel research design. Out of 43 commercial banks in Kenya they used 38 to make inferential statistics with a period between 2002 and 2008. In the conclusion the research found out that there is positive correlation between profitability and liquidity of banks. Njeri (2013) performed research on the effect of liquidity on financial performance of deposit taking micro finance institutions. Descriptive research design was used to evaluate secondary data of 5 years from 2009-2013 using multiple regression model. From the evaluation it is evident that financial performance of the Micro Finance Institutions in Kenya is highly depended on the level of institutional liquidity. Hence MFIs should enhance their liquidity position to apprehend increased and justifiable financial performance. Weak financial stewardship, incongruous capital structure and indiscreet funds allocation has been cited as some of the factors impeding growth of SACCOs. These factors have endangered the productivity and sustainability of the growth of SACCOs.

Empirical Studies

According to Kitonga (2013) in his study on the relationship between financial management practices and financial performance in the shipping industry in Kenya, he found out that without proper financial management practices, shipping Industry Companys financial performance would be non-satisfactory all other factors held constant. Muiruri N.W. and Wepukhulu, J.M. (2018) recommended in their study on effects of investment decisions on listed firms at Nairobi Securities Exchange that since investment decisions affect performance positively and

significantly there is need for listed firms to focus more investing in firm machinery, property, plants and equipment so as to boost their investment returns. Peter and Nelson(2020),in their study on effect of financial management practices on firm performance in Nigeria revealed that, earnings per share and working capital management signified by account receivables is found to have positive and statistically significant effect. The relation between earnings per share and account payables is established to be negative and statistically insignificant for the Nigerian companies under study.

METHODOLOGY

This study employed descriptive survey design. The target population for this study comprised of 6 agricultural companies that had been listed in NSE. These Companies were Eaagads Ltd, Kapchorua Tea, Kakuzi, Limuru Tea, Sasini Ltd and Williamson Tea. The sampling technique used in this study was census. The study adopted census because the size of target population in the area of study was small. This study used secondary sources to obtain data. Secondary data was obtained from audited financial statements of the selected agricultural firms and through published journals and NSE documentations. All the data collected were coded and entered into an SPSS sheet, organized and cleaned for any inconsistencies. The data then was processed using Statistical Packages for Social Sciences software (SPSS

23). Finally the data was analyzed using descriptive and inferential statistics. Statistical analysis was performed using Statistical package of Social Sciences (SPSS version 23.0).

RESULTS AND DISCUSSION

Inferential Statistics

Effect of liquidity management on financial performance of agricultural firms listed in Nairobi Securities Exchange

The objective of the study was to evaluate the influence of liquidity management on financial performance in agricultural firms listed at NSE. This objective sought to answer the hypothesis that postulated there is no significant relationship between liquidity management and Financial performance in agricultural firms listed at NSE This was achieved by conducting Pearson Correlation to establish the significance of the relationship using R coefficient and if significant, simple linear regression to find out the variation in Financial performance that was accounted for by Financial performance (R^2).

Correlation between Liquidity Management and Financial performance

The Pearson correlation analysis was used to investigate the relationship between liquidity management and financial performance. The results were as shown in Table 1.

Table 1: Correlation of Liquidity Management and Financial performance

		Liquidity management	Financial performance
Liquidity Management	Correlation Coefficient	1.000	
	Sig. (2-tailed)	.	
	N	317	
Financial performance	Correlation Coefficient	.628**	1.000
	Sig. (2-tailed)	.000	.
	N	317	317

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

* . Correlation is significant at the 0.01 level

In evaluating the effect of liquidity management on financial performance, the study established a coefficient of correlation (r) as 0.628**. The results indicated that the relationship between liquidity management and financial performance is positive and significant. This implied that the financial performance increase with increase in liquidity management of agricultural firms listed at NSE. The above results were inconsistent with Ashokkumar and Manohar (2010) who conducted a study in a Cement Industry in Tamilnadu and found significant negative relation between the firms profitability and its liquidity level. More recent studies have also confirmed the existence of the trade-off between liquidity and profitability trade off. For instance Bhunia and Brahma (2011) studied the importance of liquidity management on profitability and found a significant negative relationship between the

profitability. According to Lamberg and Valming, (2009) findings on their study on the impact of liquidity management on profitability during financial crises on companies listed on Stockholm stock exchange where they adopted quantitative methodology and regression analysis and discovered out that the use of liquidity strategies dont have significant impact on profitability when measured by ROA. However, that increase in the use of liquidity to forecast and short-term financing had a positive impact on ROA.

Regression Results of Liquidity Management and Financial performance

Regression analysis was conducted to find the proportion in the dependent variable (Financial performance) which can be predicted from the independent variable (liquidity management). Table 2 showed the analysis results.

Table 2: Regression Results of Liquidity management of agricultural firms listed in Nairobi Securities Exchange and Financial performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.628 ^a	.394	.392	.4691833		
a. Predictors: (Constant), Liquidity management						
ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	45.135	1	45.135	205.034	.000 ^b
	Residual	69.342	315	.220		
	Total	114.477	316			
a. Dependent Variable: Financial performance						
b. Predictors: (Constant), Liquidity management						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.835	.108		17.007	.000
	Liquidity management	.441	.031	.628	14.319	.000
a. Dependent Variable: Financial performance						

From the table 2, the value of R square was 0.394 this showed that liquidity management explained 39.4%

of variance in Financial performance in agricultural firms listed at NSE. From the ANOVA table

significance of the model had a value $F(1,316) = 205.034$, $P < 0.01$ this showed that its significant at 99% confidence level hence the model was significant. This implied that liquidity management of listed agricultural firms was a useful predictor of agricultural firms listed at NSE. The unstandardized regression coefficient value of liquidity on listed agricultural firms was 0.441 and significance level of $p < .001$. This indicated that a unit change in liquidity management would result to significant change in financial performance by 0.441.

Hypotheses testing

Given the P values as shown in regression tables above, hypotheses testing was concluded as below.

H₀: There is no significant relationship between Liquidity management and financial performance of agricultural firms listed in the NSE.

The regression results shown in table 2 indicated that total current liabilities to total assets ratio (Liquidity management) is significant at 5 percent level. The coefficient of Liquidity (total current liabilities to total assets ratio) since the $p < 0.01$, $r = .628$ and $B = (.441)$. The results indicated that there was a significant positive relationship between total current liabilities to total current assets and financial performance of agricultural firms listed in the NSE as measured by ROA. The positive coefficient indicated that as more current liabilities were utilized aggressiveness increased and subsequently performance as measured by ROA improved. The results above led to the rejection of the null hypothesis hence concluding that there is a significant relationship between liquidity management and financial performance. This was consistent with the study carried out by Sanghani (2014) who concluded that liquidity positively affected performance of agricultural firms listed at the Nairobi securities exchange. Also corresponds with findings from a study by Lamberg and Valming, (2009) who studied the impact of liquidity management on profitability on a sample of

companies listed on Stockholm stock exchanges small and mid-capitalist; he adopted quantitative methodology and regression analysis and found out that liquidity strategies do not have a significant impact on profitability measured by ROA. However, when there is increased use of liquidity forecasting and short-term financing during the financial crisis, there shall be a positive impact on ROA. Kanga, Achoki and Njuguna (2016) in their study on influence of liquidity on the financial performance of agricultural firms listed at NSE revealed that there existed a positive and statistical significant effect of liquidity on financial performance of agricultural firms listed in NSE since two attributes had a p value of less than 0.05, ROA had a p value of .0001.

CONCLUSION AND RECOMMENDATIONS

The objective of the study was to determine the influence of liquidity management on financial performance of agricultural firms listed in Nairobi Securities Exchange. From the results, liquidity management significantly affected on financial performance of agricultural firms listed at the NSE since the probability was less than the required confidence level; liquidity also is positively correlated to financial performance of the listed agricultural firms hence have a significant impact. This was derived after conducting Pearson correlation to establish the significance of the relationship using R coefficient. This implied that the financial performance increases with increase in liquidity management thus the study fails to accept the null hypothesis.

The results from the regression analysis indicated that liquidity management had an elevated significant positive consequence on financial performance as measured using ROA. One unit change in liquidity management would lead to a unit change in financial performance.

Relying on the findings of this particular study, the study put forth that the management team of

agricultural firms listed at the NSE should put more emphasis on liquidity management so as to improve the financial performance of agricultural firms listed on NSE. Performance reviews on the senior management should also focus on Liquidity management for improved financial performance.

Suggestions for further study

From the findings the researcher recommended the following areas for further study; a study to be carried out to establish the effects of non-financial

practices on financial performance of the same firms under the recent period.

Effects of investment management on the relationship between financial management practices and financial performance should also be further investigated to clear any conflicts between theory and Empirical findings by various researchers.

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