



**INFLUENCE OF FINANCIAL LEVERAGE AND LIQUIDITY ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

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**ABSTRACT**

*This study sought to investigate the influence of financial leverage and liquidity on financial performance of manufacturing firms listed at the Nairobi Securities Exchange. To accomplish this objective, the study adopted a descriptive research design and targeted 10 manufacturing firms listed at the Nairobi Securities Exchanges as at 31st December 2016 from where the study used a census method to randomly pick all the 95 respondents to participate in the study. The study used structured questionnaires to collect primary data; content validity was used to check validity while Cronbach alpha was used to check reliability of research instruments. Data analysis was computed by SPSS 24, where descriptive statistics (frequencies, percentages, means, standard deviations) and inferential statistics (correlations, linear and multiple regressions) were generated. A total of 87 out of 95 respondents returned completely filled questionnaires representing a response rate of 91.6% which is good for generalizability of study findings to a wider population. The study findings revealed that all predictor variables (financial leverage and liquidity) significantly influenced financial performance of manufacturing firms listed on NSE. The study concluded that one; financial leveraging positively influences financial performance of manufacturing firms, thus, manufacturing firms with effective financial leveraging mechanisms can realize an increase in their profitability and two; liquidity is a significant predictor of financial performance of manufacturing firms, thus, a manufacturing firm with efficient cash flow management can sustain profitability in subsequent years. The study recommended that one; financial managers of manufacturing firms should embrace feasible financial leveraging strategies that can boost firm profitability; and, there should be effective and timely monitoring of manufacturing firm's liquidity position to avoid insolvency risks. A longitudinal study can be done using time series data of manufacturing firm's profitability so as to compare results.*

**Key Words:** Financial Leverage, Liquidity, Financial Performance, NSE

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## INTRODUCTION

Financing choice is vital to every firm as the optimal capital structure between debt and equity impacts on the value of the firm as well as its stock prices in the securities market (Raza, 2013). There are various stakeholders involved in making decisions concerning financing either through debt or equity. It also has various macroeconomic effects as it impacts on the rates of interest, economic growth, securities market development as well as the pricing levels. The microeconomic factors are influenced by the internal factors of the firm pertains to the management of the firm (Nawazish, Rahat & Reddy, 2016). The above statements reveal the significance of the financing options which can determine the going concern of a firm as it can lead to collapse of a firm as well as determining the firm's valuation in the securities market (Swain & Patnaik, 2013). Leverage is a term commonly used to refer to the ability of a firm to use available resources to make maximum profits for the stakeholders (Ojo, 2012p)

Capital power has pulled in consideration over the past because of its job in financial development of an organization. The pecking request hypothesis for instance affirms that substantial firms with colossal turnover should use their organizations to such an extent that the company's value partition is higher than its obligations as they can fund a large portion of their anticipated ventures (Rayan, 2010). Trade-off hypothesis, then again states that for organizations with numerous benefits should back their activities utilizing obligation to stay away from the issue of illiquidity, which can have critical effect on everyday running of the firm (Rayan, 2010). The organization hypothesis then again bolsters that a more elevated amount of obligation expands investors' esteem on account of its disciplinary impact on chief conduct. The office hypothesis further contends that clarifies firm should utilize their capital monetary with the pointed coordinated towards lessening the office costs (Mwangi, Makau and Kosimbei, 2014).

Causes of liquidity problems include lack of policy on liquidity management, noncompliance to liquidity policy, lack of cash flow planning. The consequences of illiquidity include inability of listed firms to meet share and savings withdrawals, external borrowing repayments, operating expenses, membership withdrawals, low income generation as disbursements are low, intermittent provision of services (Puneet & Parmil (2012).

Financial performance alludes to how viably a firm uses its restricted assets to create assets which yield greatest incomes and all inclusive, the intermediaries utilized in deciding the company's gainfulness are proportions, for example, Return on resources (ROA) and profit for value (ROE) (Nwaolisan and Chijindu, 2016). It additionally uncovers the degree to which the firm has understood its set mission vision just as the basic beliefs. These capacities which are non-budgetary are communicated in money related terms which is effectively comprehended by the partners effortlessly (Swain & Patnaik, 2013). This is a noteworthy deciding component in the speculators' choice on where to contribute their funds to yield greatest returns (Swain & Patnaik, 2013).

To begin with, the Nairobi Securities Exchange Limited (NSE) is the sole authorized securities trade in Kenya. Its present center business is encouraging a business opportunity for raising capital and optional exchanging of values and securities just as selling market information (Mule & Mukras, 2015). The NSE is a standout amongst the most significant securities trades in Africa to a great extent because of its relative size in the landmass and its remarkable introduction toward the East African locale. The Nairobi Securities Exchange's values stage is included 61 recorded counters, crosswise over 11 areas: Agriculture, Automobile, Banking, Commercial and Service, Construction and Allied, Energy and Petroleum, Insurance, business, Manufacturing, Telecommunications and Tech and Growth Enterprise Market Segment (NSE, 2016).

### **Statement of the Problem**

Debt Obligation financing originates from speculators at an expense as they are relied upon to draw in intrigue, which is a risk to the firm (Nawazish, Rahat& Reddy, 2016). Nonetheless, it comes with its advantages as their interests are exempted from tax collection. The impediment of obligation is that its given the main need with regards to reimbursing it (Chandrapala & Knápková, 2013). Also, there has been determined hypothetical discussion on capital structure. The Miller and Modigliani hypothesis attests that when the economic situations are immaculate, the estimation of company's stocks isn't controlled by budgetary structure choices, the estimation of the firm was emphatically related with capital structure. The exchange off hypothesis supported the utilization of obligation that the firm would utilize obligation more as long as its advantages exceed its expenses (Abdu, 2016).

The Kenya's assembling area has been the primary conductor for the nation's reconciliation into provincial and world markets. Because of the capital-serious nature of the assembling area, firms are required to decide their ideal capital blend so as to acknowledge gains from their speculations. In this way, fabricating firms have an increasingly visit and higher need of raising capital, this is because of the way that the general credit to the assembling division expanded from Kshs 237,422 million out of 2014 to Kshs 290,069 million of every 2015 (Maina & Omwenga, 2017). In any case, the assembling segment in Kenya has been enlisting a relentless decrease in gainfulness. The benefits acknowledged from assembling area has been declining for quite a long while from 1980 to 2010. Benefits in the Kenyan assembling part have been declining after some time and this has been because of less capital accessible for venture (Orege,2016).

A progression of studies have been done to dissect certain issues which are in charge of overhauling the estimation of the associations. Moghadam and Jafari

(2015) examined the activity of cash related impact on the execution of recorded associations in stock exchange and found a close relationship interfacing the two variables. Raza (2013) finished an examination on the effect of cash related impact on firm execution of the material business in Pakistan and found that there is a negative association among execution and money related impact. Most examinations in any case on the connection between budgetary impact and cash related execution give battle results and industry based paying little heed to the manner in which that unmistakable divisions have differing impact necessities.

In Kenya, examines have been finished to choose the relationship among's impact and budgetary execution of gathering firms recorded at the NSE are small. A part of the examinations join Chesang and Ayuma (2016) finished an examination on the impact of capital structure on efficiency of country firms recorded at the NSE, which revealed the nearness of positive association between's the two variables. Oguna (2014) finished an examination on the impact of financing ventures utilizing obligation on land firms cited at NSE and closed the presence of a positive connection between's the two factors. The examination by Chesang and Ayuma (2016) concentrated on agrarian firms while Oguna (2014) concentrated on capital structure. Also, other accessible investigations on the recorded assembling firms center other money related idea, which has prompted a hole in writing. Consequently, this examination filled this hole by exploring the influence of financial leverage and liquidity on financial performance of manufacturing firms listed at the Nairobi Securities Exchange.

### **Objective of the Study**

The general objective of this study was to investigate determinants of financial performance of manufacturing firms listed at the Nairobi Securities Exchange. The specific objectives were:-

- To determine the influence of financial leverage

on financial performance of manufacturing firms listed on NSE Kenya

- To assess the influence of liquidity on financial performance of manufacturing firms listed on NSE Kenya

### **Research hypotheses**

- **H<sub>01</sub>**: There is no significant influence of financial leverage on financial performance of manufacturing firms listed on NSE Kenya
- **H<sub>02</sub>**: There is no significant influence of liquidity on financial performance of manufacturing firms listed on NSE Kenya

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Pecking Order Theory**

This hypothesis began from Myers and Majluf (1984) where it showed defective data as the chiefs have insider data relating to the future execution of the firm and work towards expanding the investors riches (Rayan, 2010). The firm has a decision to pick a portfolio which expands the arrival for investors. The hypothesis advises firms to be one-sided when financing their activities and utilize increasingly inward financing which is held income. It further uncovers that expansive firms have higher inclination for outside financing because of the simplicity with which it tends to be gotten to (Al-Tally, 2014).

Pecking request hypothesis resources that each firm has a particular method for financing their undertakings and it's in plummeting request. The request pursues with utilizing held income before setting out on obligations or value strategy for financing. This is on the grounds that inside financing is the most secure method for financing as it draws in no intrigue, nor will it weaken the valuations of conventional offers. The main reason regarding why a firm can utilize obligation financing is whereby; the advantages exceed the expenses (Nwaolisa Chijindu, 2016). The use of outside financing sources are signs to data that a firm isn't productive, which can

diminish stock costs. At the point when outside financing sources are compulsory, firms pick obligations to value in light of lower data costs relate with obligation (Chesang & Ayuma, 2016).

#### **Trade off Theory**

The tradeoff hypothesis is credited to crafted by Kraus and Litzenberger (1973) who figured in the wastefulness made when theirs is no harmony between obligation financing and value financing. The hypothesis attests that for organizations with numerous benefits should back their activities utilizing obligation to stay away from the issue of illiquidity which can have critical effect on everyday running of the firm (Rayan, 2010). It further uncovers that before financing ventures utilizing obligation the firm needs to carryout money saving advantage examination. Obligations are related with high rates which can hamper the going worry of the firm just as the repercussions which they have to the firm when they are not reimbursed on schedule. The advantage they have is that of the tax collection as they don't pull in tax assessment (Al-Tally, 2014). Every one of these components must be considered before settling on utilizing obligation financing.

The term tradeoff originates from the open door cost choice that must be made between financing through obligations which has such huge numbers of negative impacts to the firm against the advantages related with it which incorporate the straightforwardness with which it tends to be gotten to (Nwaolisa & Chijindu, 2016). The hypothesis demands the costs which the firm needs to consider before leaving on utilizing obligation. Numerous researchers have stated that it's unthinkable for a firm to accomplish the wonder of ideal financing however it's hypothesis declares that it's in all respects prone to be accomplished (Al-Tally, 2014).

#### **Agency Cost Theory**

This hypothesis is credited to crafted by Jensen and Meckling (1976). The hypothesis attests that there

exists a connection connecting the entrepreneur (Principal) and those given the command to deal with the organizations to augment benefits for the proprietors (Agents). The issue exists where the specialists don't act in a manner to amplify the proprietor's benefits (Al-Tally, 2014). The issue exists since the chief's pay rates stay steady regardless of the benefits, they make for the firm however bear the full power for the misfortunes endured by the firm (Rayan, 2010).

The hypothesis declares that the firm should deal with the connection between the principals and operators. The two have contrasting incitement thus forced organization costs on the firm (Abdu, 2016). Thusly, organization investors, monitoring the conceivable narrow minded thought processes of the firm administrators, concoct confining measures and choices went for defending and expanding their riches. Such measures incorporate expanding influence, as opposed to outside value sources, that attempts to guarantee organization proprietorship is kept up just as keep directors concentrated on gainful interests so as to satisfy the installment commitments (Nwaolisa & Chijindu, 2016).

### **Review of study variables**

#### **Financial leverage**

Budgetary influence alludes to the degree to which firms utilize their cash, borrowings (obligations financing) to expand gainfulness and is estimated by absolute liabilities to value. Influence alludes to the extent of obligation to value in the capital structure of a firm. The financing or influence choice is a critical administrative choice since it impacts the investor's arrival and chance and the market estimation of the firm (Omondi & Muturi, 2013).

Influence is seen because of occasions that decides organizations' wellspring of financing to maintain the business (Alkhatib, 2012). Firms that acquire vast wholes of cash amid a business retreat are bound to default to satisfy their obligations as they develop;

they will finish up with high influence and are bound to finish up with a potential danger.

Firms with a high influence are required to reveal more data than firms with low influence. The exposure of data can be utilized to bring down the checking expenses of leasers. Banks might want more data to be uncovered to control their own credit chance. Entrepreneurs look to expand their riches and the execution of their organizations. Njeri and Kagiri (2013) opine that influence builds the dimension of the obligation in the capital structure and the turnover of the business and thus its benefit, bringing about an expansion in comes back to the entrepreneurs. They likewise guarantee that an expansion in loan cost is relied upon to result in decreased getting, expanded intrigue costs and in this manner diminished comes back to entrepreneurs.

#### **Liquidity**

Liquidity is "the capacity of a firm to meet their present liabilities as they fall due. Over the top measures of current resources claimed by a firm" would maybe expand the odds of inside subsidizing bringing about a connection among influence and liquidity (Bhunja & Das 2012). Consequently, liquidity includes "arranging and controlling current resources and current liabilities in a way that takes out the danger of failure to meet" transient commitments on one hand and stay away from intemperate interest in these advantages then again. Moreover, adequate liquidity affects the budgetary quality of a firm.

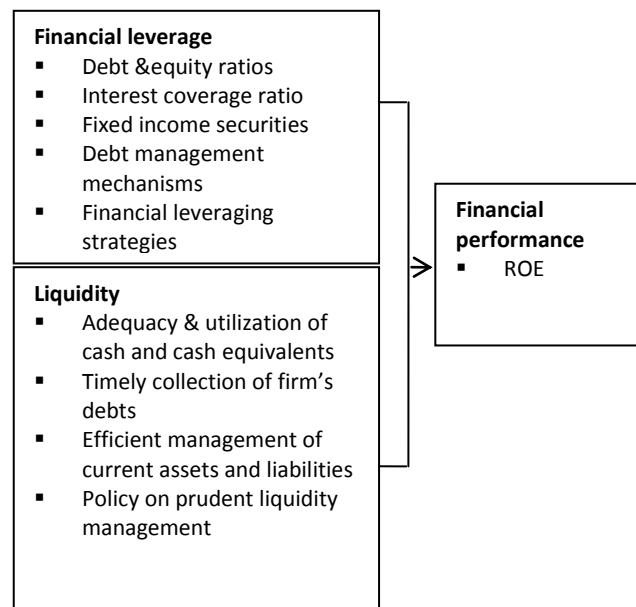
"According to Puneet and Parmil (2012), the inability of a financial entity to meet its financial obligation/liability is a premise on which crisis may result." In this regard, effective liquidity management is important for a manufacturing firm to be able to meet share and savings withdrawals, external borrowing repayments and operating expenses.

Causes of liquidity problems include lack of policy on liquidity management, noncompliance to liquidity policy, lack of cash flow planning. The consequences

of illiquidity include inability of listed firms to meet share and savings withdrawals, external borrowing repayments, operating expenses, membership withdrawals, low income generation as disbursements are low, intermittent provision of services (Puneet & Parmil (2012).

This study therefore assessed how liquidity related issues such as liquidity ratios, utilization of cash and cash equivalents, management of current assets and liabilities influence financial performance of manufacturing firms listed on NSE Kenya.

### Conceptual framework



**Independent Variables**                      **Dependent Variables**

**Figure 1: Conceptual Framework**

**Source: Author (2019)**

### Empirical review of related literature

#### Financial leverage and financial performance

Banafa, Muturi and Ngugi (2015) analyzed impacts of influence on profit for resources of MFIs in Kenya. It focused on 8 MFIs recorded going through 2010 and 2014. Utilizing the relapse show, the aftereffects of study uncovered that money related influence had a

negative and critical impact on impact corporate monetary execution. The setting of the investigation was microfinance establishments.

Further, Thaddeus and Chigbu (2012) considered the impact of money related influence on bank execution utilizing six banks from Nigeria. The investigation utilized optional information from Nigerian Stock Exchange reality book and the fiscal summaries of the examined banks. Obligation value and inclusion proportions were utilized to gauge money related influence which was the autonomous variable, while procuring per share (EPS) spoke to execution as the reliant variable. Numerous relapse procedure was utilized to set up whether relationship exist between budgetary influence and execution of tested banks. The discoveries demonstrated blended outcomes. While a few banks detailed positive connection among influence and execution, others uncovered negative connection among influence and execution. Singh and Bansal (2016) also explored the effect of money related influence on company's budgetary execution and on the association's valuation. The investigation examined 60 Fast Moving Consumer Goods organizations recorded on National Stock Exchange and Bombay Stock Exchange for a time of 10 years from 2007 to 2016. The system of board information relapse was received, and the outcomes uncovered that influence had a noteworthy negative effect on company's execution indicator economic value added (EVA) and ROA and firm's valuation indicator Tobin's Q. the context of the study was fast moving good firms and not manufacturing firms.

Akbarian (2013) examined the relationship that exists between obligation financing danger and ROA of firms cited at Tehran stock trade. The exploration utilized an example of 95 firms recorded in Tehran Stock Exchange for the period between 2005to 2011. The investigation received a board information and various relapses to test the examination theory. The discoveries of this investigation set up the backwards connection that exists between the examination factors. The examination likewise found an

immediate connection between's market hazard and ROE. The focal point of the investigation was anyway on hazard related with obligation financing.

Altunbas, Kara and David (2009) likewise examined how monetary variables influence non-budgetary enterprises, covering the period 1993-2006 and inferred that expansive firms having progressively money related influence, broad benefits and more liquidation esteems for the most part incline toward credit financing. Firms utilizing all the more momentary obligation are having more development openings, in this way budgetary utilizing could influence firm benefit.

### **Liquidity and financial performance**

"Liquidity is the capacity of a firm to meet their present liabilities as they fall due. Over the top measures of current resources possessed by a firm would maybe expand" the odds of inside subsidizing bringing about a connection among influence and liquidity (Bhunja & Das 2012). In this way, liquidity includes arranging and controlling current resources and current liabilities in a way that kills the danger of powerlessness to meet transient commitments on one hand and maintain a strategic distance from over the top interest in these advantages then again. Moreover, adequate liquidity affects the monetary quality of a firm

Liquidity the board is for the most part assessed from the point of view of working capital administration, as the vast majority of the markers utilized for assessing liquidity, (for example, liquidity proportions and money change cycle) are gotten from the segments of working capital. In this way, it is conceivable to survey the writing with respect with the impact of liquidity on productivity from two viewpoints. While in certain investigations, liquidity proportions - thinking about money and close money (current) resources, and current liabilities as current, basic analysis (or fast) and money proportions are utilized to assess firms

uncover that liquidity as far as present proportion has measurably negative impact on benefit.

Phylaktis and Ravazzolo (2005) have indicated that such factors as accounting standards and liquidity may affect international portfolio diversification decisions in emerging markets. The literature on jumps has highlighted two facts that lead to deferential predictions for each volatility component on liquidity. These facts are directly linked to the theory of liquidity, which emphasizes the risks market makers face in determining liquidity (Garleanu et al., 2009).

### **METHODOLOGY**

The study used a descriptive research design. Descriptive studies are concerned with the how, where and what of a phenomenon thus placed to build a profile on that phenomenon. The study targeted 10 manufacturing firms listed at the Nairobi Securities Exchanges as at 31st December 2016. The study obtained data from the 10-listed manufacturing firms. That is, since the target population was less than 100, census method was adopted (Mugenda & Mugenda, 2003). Primary data was collected from the 95 targeted respondents comprising of finance officers, accountants, risk management officers, investment officers, internal auditors and marketing officers who were perceived to have valid information about firm financial performance. The study used structured (close ended) questionnaires to collect primary data from 95 respondents of the 10 targeted manufacturing firms listed on NSE. The analysis was carried out using the Statistical Package for Social Sciences version 24. The study used the multiple linear regressions as the analytical model. The multiple regression model was;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where;

Y = financial performance as measured by ROE

$\beta_0$  = Constant

$X_1$  = financial leverage



$X_2$  = liquidity  
 $\{\beta_0-\beta_2\}$  = Beta coefficients  
 $e$  = the error term

The perceptions were measured using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree; and the responses are summarized in table 1.

**FINDINGS**

**Financial leverage and financial performance**

**Table 1: Descriptive statistics; Financial Leverage**

Statement	Frequency and percentages (%)					mean	Std.dev
	5	4	3	2	1		
1.The firm has viable financial leverage strategies	12(13.8)	48(55.2)	6(6.9)	13(14.9)	8(9.2)	3.49	0.918
2.Debt & equity ratios influence firm performance	13(14.9)	51(58.8)	5(5.7)	11(12.6)	7(8.0)	3.60	0.914
3.Funds from equity affects firm performances	11(12.6)	49(56.4)	7(8.0)	14(16.1)	6(6.9)	3.52	0.812
4. The firm raises good capital from fixed-income securities	10(11.5)	50(57.5)	4(4.6)	17(19.5)	6(6.9)	3.47	0.877
5.The firm has effective debt management mechanisms	14(16.1)	52(59.9)	5(5.7)	9(10.3)	7(8.0)	3.66	0.815
6.Generally, financial leverage influence firm performance	15(17.2)	56(64.4)	4(4.6)	8(9.2)	4(4.6)	3.80	0.986
<b>Valid listwise 87</b>							
<b>Grand mean = 3.59</b>							

From table 1, most respondents agreed (55.2%) and strongly agreed (13.8%) that the firm had viable financial leverage strategies, implying that most respondents believed that their firms had rolled out workable financial leveraging mechanisms for financial survival. More so, most respondents agreed (58.8%) and strongly agreed (14.9%) that debt & equity ratios influence firm performance implying that most manufacturing firms understand the need for efficient balance of debt and equity ratios as an effective measure of financial leveraging. More so 56.4% and 12.6% of respondents agreed and strongly agreed respectively that funds from equity affected firm performances while 57.5% and 11.5% of respondents also agreed and strongly agreed respectively that firm raised good capital from fixed-income securities; implying that good capital or equity management was an effective financial leveraging measure.

Further, most respondents agreed (59.9%) and strongly agreed (16.1%) that the firm had effective debt management mechanisms, implying that most firms have good debt and equity ratios as a reflection of effective debt management mechanisms.

On overall, most respondents agreed (64.4%) and strongly agreed (17.2%) that generally, financial leverage influence firm performance. This correspondent to the grand mean of 3.59 rounded off to 4 which was agreed on the likert scale of measurement, meaning that most respondents agreed that financial leveraging affect firm performance. This was upheld by Alkhatib, (2012) attestation that influence is seen because of occasions that decides organizations' wellspring of financing to maintain the business, subsequently, firms that acquire extensive aggregates of cash amid a business retreat are bound to default to satisfy their obligations as they develop; therefore, they will finish up with high influence and are bound to finish up

with a potential danger of liquidation because of poor budgetary execution.

The perceptions were measured using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree; and the responses were summarized in table 2.

**Liquidity and financial performance**

**Table 2: Descriptive statistics; Liquidity**

Frequency and percentages (%)							
Statement	5	4	3	2	1	mean	Std.dev
1.The firm has adequate cash and cash equivalents to meet its obligations effectively	9(10.3)	51(58.7)	7(8.0)	12(13.8)	8(9.2)	3.48	0.819
2.The firm’s debts are dully collected in time	5(5.7)	49(56.3)	8(9.2)	19(21.9)	6(6.9)	3.33	0.975
3.There is efficient management of financial assets and liabilities	7(8.0)	48(55.2)	10(11.5)	18(20.7)	4(4.6)	3.41	0.852
4. The firm has efficient utilization of cash and cash equivalents	8(9.2)	50(57.6)	9(10.3)	13(14.9)	7(8.0)	3.45	0.908
5.The firm has a well-defined policy document on liquidity management	10(11.5)	49(56.3)	6(6.9)	17(19.6)	5(5.7)	3.48	0.891
6.Generally, liquidity influence firm performance	12(13.8)	57(65.5)	4(4.6)	8(9.2)	6(6.9)	3.70	0.947
<b>Valid listwise 87</b>							
<b>Grand mean =3.48</b>							

**Inferential statistics**

**Table 3: Correlations**

		Financial Leverage	Liquidity
Financial Leverage	Pearson Correlation		1
	Sig. (2-tailed)		
	N		87
Liquidity	Pearson Correlation	.646**	
	Sig. (2-tailed)	.000	
	N	87	87
ROE	Pearson Correlation	.789**	.842**
	Sig. (2-tailed)	.000	.000
	N	87	87

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

Finally, multicollinearity was checked using variables (financial leverage and liquidity). Most correlations between all pairs of independent researchers asserts that if correlation coefficient, (r) is

close to 1 or -1, then there is multicollinearity but if correlation coefficient (r) is not above 0.9 then there is no multicollinearity. In this study (table 3 on correlation analysis), the highest correlation

coefficient between all pairs of independent variables (financial leverage and liquidity) was 0.842 which was below the threshold of 0.9, thus multicollinearity assumption was checked and met.

**Table 4: Direct influence of financial leverage on financial performance**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.789 <sup>a</sup>	.623	.618	.68899	.623	140.196	1	85	.000
ANOVA <sup>b</sup>									
Model	Sum of Squares		Df	Mean Square	F	Sig.			
1	Regression		66.552	1	66.552	140.196	.000 <sup>a</sup>		
	Residual		40.350	85	.475				
	Total		106.902	86					
Coefficients <sup>a</sup>									
Model	Unstandardized Coefficients			Standardized Coefficients			t	Sig.	
	B	Std. Error	Beta						
1	(Constant)	.640	.244			2.623	.010		
	Financial Leverage	.793	.067	.789		11.840	.000		

a. Dependent Variable: ROE

The model summary in table 4 showed  $R^2 = 0.623$ , which implied that 62.3% variations in financial performance of manufacturing firms listed Nairobi Securities Exchange was explained by the firm's financial leverage while other factors not in the conceptualized study model accounts for 37.7% variation in financial performance of manufacturing firms listed Nairobi Securities Exchange. Further, coefficient analysis showed that there existed a significant influence of financial leverage on financial performance ( $\beta = 0.793$  (0.067);  $at p < .01$ ). This meant that a single increase in effective financial leveraging

in manufacturing firms listed on NSE will yield 0.793 unit increase in financial performance of manufacturing firms listed Nairobi Securities Exchange. The linear regression equation model is;

$$(i) y = 0.640 + 0.793X_1$$

Where;

y = financial performance

$X_1$  = financial leverage

**Direct influence of liquidity on financial performance**

This tested the linear influence of liquidity on financial performance of manufacturing firms listed on NSE. The results were shown in table 5.

**Table 5: Direct influence of liquidity on financial performance**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1									

1	.842 <sup>a</sup>	.709	.705	.60512	.709	206.950	1	85	.000
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**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.778	1	75.778	206.950	.000 <sup>a</sup>
	Residual	31.124	85	.366		
	Total	106.902	86			

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.508	.211		2.410	.018
	Liquidity	.862	.060	.842	14.386	.000

a. Dependent Variable: ROE

The model summary in table 5 showed  $R^2 = 0.709$ , which implied that 70.9% variations in financial performance of manufacturing firms listed Nairobi Securities Exchange was explained by the firm's liquidity while other factors not in the conceptualized study model accounted for 29.1% variation in financial performance of manufacturing firms listed Nairobi Securities Exchange. Further, coefficient analysis showed that there exists a significant influence of a firm's liquidity on financial

performance ( $\beta = 0.862$  (0.060); at  $p < .01$ ). This meant that a single increase in effective liquidity management measures in manufacturing firms listed on NSE would yield 0.862 unit increase in financial performance of manufacturing firms listed Nairobi Securities Exchange. The linear regression equation model is;

$$y = 0.508 + 0.862X_2$$

Where; y = financial performance  
 $X_2$  = liquidity

**Table 6: Multiple regression**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.919 <sup>a</sup>	.845	.838	.44906	.845	112.032	4	82	.000

ANOVA <sup>b</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	90.367	4	22.592	112.032	.000 <sup>a</sup>
	Residual	16.536	82	.202		
	Total	106.902	86			

a. Predictors: (Constant), Liquidity, Financial Leverage

b. Dependent Variable: ROE

Further, from the values of unstandardized regression coefficients with standard errors in parenthesis, all the independent variables (financial leverage;  $\beta =$

0.319 (0.122) at  $p < 0.05$ ; and liquidity;  $\beta = 0.551$  (0.080) at  $p < 0.01$  significantly predicted financial performance (dependent variable). The final multiple

regression equation was;

$$(v) Y = 0.568 + 0.319X_1 + 0.551X_2$$

Where;

y= financial performance

X<sub>1</sub>= financial leverage

X<sub>2</sub>= liquidity

**Table 7: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.568	.127		4.473	.000
Financial Leverage	.319	.122	.317	2.610	.011
Liquidity	.551	.080	.538	6.867	.000

a. Dependent Variable: ROE

### Hypothesis testing

Study **hypothesis one** stated that there is no significant influence of financial leverage on financial performance of manufacturing firms listed on NSE Kenya. The results indicate that there exists a positive and significant influence of financial leverage on financial performance ( $\beta = 0.319$  (0.122) at  $p < 0.05$ ).

**Hypothesis one is therefore rejected.** The results indicated that a single increase in effective financial leveraging in manufacturing firms listed on NSE will yield 0.319 unit increase in financial performance of manufacturing firms listed Nairobi Securities Exchange. The results are supported by Banafa, Muturi and Ngugi (2015) who examined effects of leverage on return on assets of MFIs in Kenya. It targeted 8 MFIs listed running through 2010 and 2014. Using the regression model, the results of study revealed that financial leverage had a negative and significant effect on effect corporate financial performance.

Akbarian (2013) also investigated the correlation that exists between debt financing risk and ROA of firms quoted at Tehran stock exchange. The research used a sample of 95 firms listed in Tehran Stock Exchange for the period; 2005-2011. The study adopted a panel data and multiple regressions to test the research hypothesis. The study found a direct correlation between market risk and ROE.

Lastly study **hypothesis two** stated that there is no significant influence of liquidity on financial performance of manufacturing firms listed on NSE Kenya. The results indicate that there exists a positive and significant influence of firm's liquidity on financial performance ( $\beta = 0.551$  (0.080) at  $p < 0.01$ ).

**Hypothesis two is therefore rejected.** The results indicated that a single increase in effective firm's liquidity management measures in manufacturing firms listed on NSE will yield 0.551 unit increase in financial performance of manufacturing firms listed Nairobi Securities Exchange. The results are support the theory of Jensen (1986) that free cash flow has positive and significant influence on financial performance; that is if a company has excess free cash flow, then the company is likely to have a better performance than a company that has a lower free cash flow.

Further Mun and Jang, (2015) asserts that there are varied measurements of liquidity because some researchers focus on liquidity ratios -considering cash and near-cash (current) assets, and current liabilities in the form of current, acid-test (or quick) and cash ratios- are used to evaluate the effect of liquidity on profitability; the others focus on cash conversion cycle as the main indicator of liquidity. Liquidity ratios capture financial aspects of a firm covering current assets and current debts. However, cash conversion cycle reflects only the operational side of the firm concentrating on accounts receivables, accounts

payables and inventories. The current ratio is the most wide-spread liquidity indicator by deriving the proportion of current assets available to cover current liabilities (Mun & Jang, 2015).

However, empirical findings by Sur et al. (2001) on Indian aluminum manufacturing industry; Bardia (2004) on Indian steel manufacturing industry, Eljelly (2004) on a sample of joint stock firms in Saudi Arabia, Lyroudi et al. (1999) on London Stock Exchange listed manufacturing firms, Narware (2004) on the fertilizer industry of India, and Saldanli (2012) on Turkish manufacturing firms revealed that liquidity in terms of current ratio had statistically negative effect on firm profitability.

## CONCLUSIONS

First the study concluded that financial leveraging positively influences financial performance of manufacturing firms, thus, manufacturing firms with effective financial leveraging mechanisms can realize an increase in their profitability.

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Secondly, the study concluded that liquidity is a significant predictor of financial performance of manufacturing firms, thus, a manufacturing firm with efficient cash flow management can sustain profitability in subsequent years.

## RECOMMENDATIONS

First, the study recommended that financial managers of manufacturing firms should embrace feasible financial leveraging strategies that can boost firm profitability.

Secondly, there should be effective and timely monitoring of manufacturing firm's liquidity position to avoid insolvency risks.

## Areas for further studies

First, a longitudinal study can be done using time series data of manufacturing firm's profitability so as to compare results.

Secondly, a similar study can be replicated using objective measures of financial performance like secondary data on return on assets or return on investment so as to compare results.

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