SHORT-TERM FINANCING DECISIONS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

Management of short-term financing is integral to corporate manager's daily decisions. Proper balance between long term and short term financing is critical to a business financial prosperity. The study seeks to examine the effect of short-term financing on the financial performance of commercial banks in Kenya. To achieve the objective panel data from (2012-2018) was extracted from financial statements of commercial banks in Kenya. The proxies for short-term financing were customer deposits, liquidity ratio and Leverage while financial performance was measured through Return on asset (ROA). Multiple regression analysis were used to determine how short-term financing affects financial performance. The findings of the study indicate that customer deposits and liquidity have a significant effect on profitability while leverage has an insignificant effect on profitability of commercial banks in Kenya.

Key Words: *financial performance, short-term financing, return on assets*

INTRODUCTION

Banking industry plays a critical role in the macroeconomic environment of any country in the world. This would ultimately lead to growth and development of a country's economic environment. The financial manager is faced with tree basic financial decisions in financial management, thus; financing decisions, asset management decisions and investment decisions. Financing decisions plays the most critical role because at the onset a business has to source for start-up capital (Osuma et al, 2018).

The banking industry is constantly faced with the challenges of prudent financial performance. Corporate managers always have to ensure that the resources entrusted to them are allocated to proper use. The pressure to ensure a firm produces positive results emanates from stakeholders who have invested financial resources with a hope of obtaining good returns. Therefore profitability is a yardstick to measure a firm's operational efficiency (Umero and Udo, 2015).

Therefore effective and efficient working capital management practices majorly contribute to a company's prosperity as it forms part of a company's short-term financing strategy. More research has been carried on to examine factors that affect firms profitability and amongst the strong variables considered working capital has come out clearly playing a critical role Mandiefe (2016). Short-term financing is primarily concerned with the decisions of day to day running of a business. These decisions include the appropriate amount of cash, receivables, payables, inventories and as well as the level of mix of short-term financing. Yahaya and Bala contends that a reduction in a firms financial performance is more likely as a result of ineffective and inefficient management of short-term financing decisions. Makori (2018) argues that a firm which effectively manages its working capital has a high potential of improving its financial performance. Equally cash flows to a firm are boosted by efficient management of working capital and in turn increase the prospect of investors return. It is

against this background that this study seeks to establish the effect of short-term financing decisions on the financial performance of commercial banks in Kenya.

GENERAL OBJECTIVE

The general objective of the study is to examine the effect of short-term financing on financial performance of commercial banks in Kenya.

SPECIFIC OBJECTIVES

1. To determine the effect of customer deposits on financial performance of commercial banks in Kenya.
2. To ascertain the effect of liquidity ratio on financial performance of commercial banks in Kenya
3. To establish the effect of leverage on financial performance of commercial banks in Kenya

RESEARCH HYPOTHESES

H_{O1}: Customer deposits do not have a significant effect on financial performance of Commercial Banks in Kenya.

H_{O2}: Liquidity ratio does not have a significant effect on financial performance of Commercial Banks in Kenya.

H_{O3}: Leverage does not have significant effect on financial performance of Commercial Banks in Kenya.

THEORETICAL REVIEW

Liquidity Preference Theory

The concept was first coined by Keynes (1936) according to Keynes organisations hold cash for three main reasons; for transactions purposes as this will enable companies' meet its day to day transactions as they fall due, stakeholders have high demand for cash other than in other illiquid form in order to meet their daily obligations, in the context of banking institutions they will cover daily customer withdrawals. Second for precautionary purposes, this will help companies prepare for unforeseen emergencies and expenses as they come due this will require additional liquidity depending on the nature of the occurrence, and lastly for speculative purposes, this will enable firms to speculate higher interest rates in future and take advantage of them. When interest rates are low firms will prefer to hold cash until they rise in future. Firms with speculative motive will be reluctant to tying up investment capital with a motive of expectation of future better rewards. Mandiefe (2016) contends that the theory best explains the reasons why financial institutions hold money in liquid form given that they do not yield any interest at that moment in time. Further, demand for liquid money will be dictated by transactionary, precautionary and speculative motives. It is against this

background that the study based on this theory will seek to determine whether liquidity, credit risk and capital adequacy has any effect on financial performance of commercial banks in Kenya. The study will further seek to establish the nature of the effect if any.

Pecking Order Theory

The tenets and foundations of the theory were first suggested by Donaldson (1961) and later modified by Myres and Majluf (1984). According to the theory firms prioritizes their sources of finance with the ease of obtaining it owing to the changing level of information asymmetry and agency costs. The managers will prefer internal sources to external sources in the following manner, first through retained earnings, debt and equity financing as a last resort. The theory posits that as the cost of finance increases and so do the risk. Therefore several factors must be put in play including the risk factor in order to choose the level of the finance.

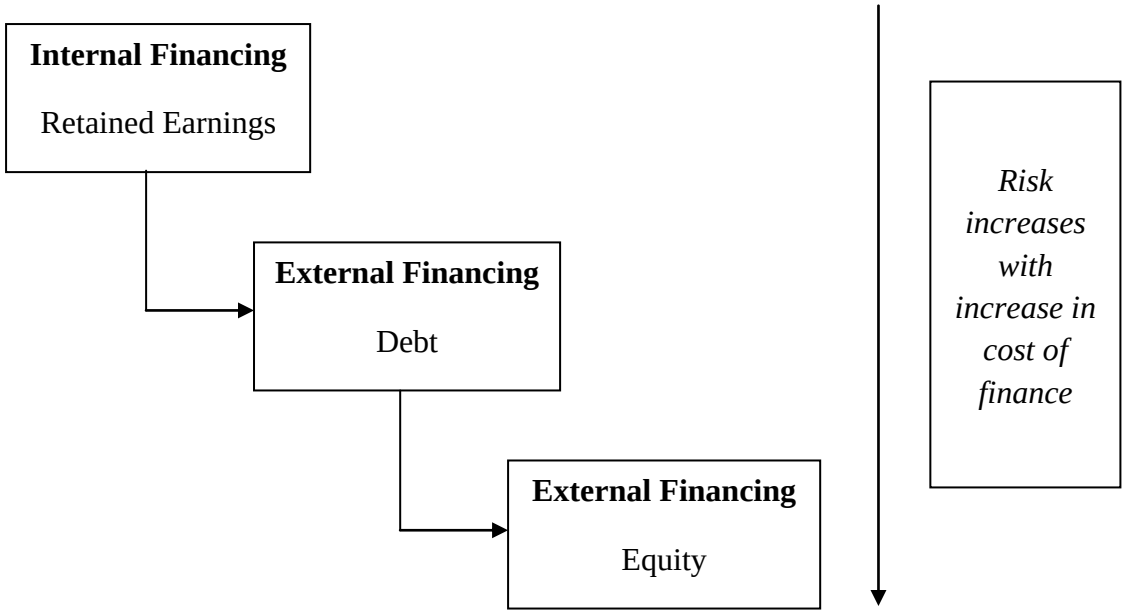

Figure 1: Hierarchy of pecking order theory

Almeida *et al*. (2014) further explains that short term financing can be a good replacement for cash in business while net working capital is a great influence of cash holdings. The study based on this theory will seek to determine whether short term financing has any effect on financial performance of commercial banks in Kenya. The study will further seek to establish the nature of the effect.

EMPIRICAL REVIEW

The relationship between working capital and financial performance has been of great interest to many scholars. Numerous studies have been conducted in these area majority of which are from developed nations and specifically study on non-financial firms. Country specific studies are few. Nevertheless majority of these studies are giving contradictory findings and conclusions.

Virkkala (2015) conducted their study on profitability and working capital between the periods of 1990 to 2013. Their study established a concave impact of cash conversion cycle on return on assets as a measure of profitability. This implies that there exists an optimal level of working capital resulting in a balance between risk and return thereby maximising profits. They found cash conversion cycle having a negative relationship on the return on equity and stock return. The study used a fixed effect of regression model to show the relationship.

Mandiefe (2016) conducted a study to assess the effect of working capital on the profitability of Afriland first bank Cameroon for the period ranging from 2002 to 2013. The study analysed data using correlation and ordinary least square regression to determine how working capital affects banks profitability. The study established that working capital management effectively influences the performance of Afriland Bank. The study shows that outstanding expenditure, return on asset, customer deposits and bank size are all significant and have a positive impact on banks profitability. However the study established that an increase in reserves leads to a reduction in profitability, while other considerations like leverage had a positive effect on profitability. The study however was conducted in Cameroon which has different social, economic and political aspects than Kenya

Thapa (2013) while establishing existence of relationship between working capital and profitability between the periods 2000 to 2009 on food and beverage industry found out a concave relationship between working capital and profitability. While analysing working capital efficiency the study utilised variables such as utilisation index, performance index rather than the commonly used variables by majority of scholars such as total asset ratio.

Qurashi (2017) in his study conducted between 2009 and 2015 established that working capital components have insignificant relationship with financial performance. The study went ahead to analyse individual variables and came up with the following findings; accounts payables and cash conversion cycles are insignificant to profitability implying that the two variables have no relationship with financial performance. Leverage and firm size have shown a positive relationship with profitability but insignificant for liquidity and growth. The study analysed the panel data using Pearson's correlation and fixed effects regression.

Charitou et al (2014) in their quest to establish a relationship between working capital management and profitability concluded that there exists a negative relationship between working capital management and profitability and also a negative relationship between firms risk and profitability. The study was conducted between 2008 and 2010. The researcher modelled multiple regression analysis to come up with the above conclusions.

Rehman and Anjum (2014) established that an association between working capital management and profitability is inverse and positively associated. To obtain the above conclusions the study used correlation and regression analysis. The study used a sample of 10 Pakistani cement companies within a period of 5years (2003 to 2008).

Using descriptive statistics (Nyabuti and Alala, 2014) found out the existence of a relationship between working capital management policy and financial performance. Population census of ten companies quoted at Nairobi stock exchange was used for a period of 5 years from 2008 to 2012. The study concluded that there exists a relationship between working capital management policy and profitability.

Masinde and Ochieng (2017) established that working capital management has influence on return on assets. The study also found an existing weak negative association between profitability and three variables namely accounts conversion period, inventory collection period and cash conversion cycle. Finally with regards to accounts collection period and inventory conversion period have no statistical significant to performance. The study was analysed using Pearson's correlation, regression and analysis of variance. The study period was 2007 to 2014.

Ghanian banks by (Yeboah and Yeboah, 2014) examined the effect of working capital management and profitability during the study period 2005 and 2010. The study adopted a panel regression model. The study investigated specifically selected commercial banks in Ghana and their effect on profitability. Empirical findings found an inverse relationship between banks profitability and cash conversion cycle, while the bank's leverage showed a positive statistically significant relationship with profitability. The study however concentrated on a few selected commercial banks in Ghana.

Ogodor and Mukolo (2015) assessed the effect of working capital on financial performance of banks. The study concentrated on two (2) major Nigerian banks employing multiple regression analysis as the estimate technique. The banks performance was measured through return on capital employed (ROCE). The study found out that working capital does not have significant impact on performance during the review period. The study however did not indicate the proxies used for working capital, consequently it made its findings and conclusions based on two Nigerian banks. The current study however will conduct a census survey of all commercial banks in Kenya.

Ali (2018) studied the impact of working capital management on banks performance in UK. The study covered ten (10) United Kingdom banks for the period 2007 to 2017. The analysis of data employed panel ordinary least square method. The proxies for working capital were, borrowers' collection period (BCP), creditors' payment period (CPP) and banks cash conversion cycle (BCCC) while the profitability indicators were return on asset (ROA) and Net interest margin (NIM). The study correlation results obtained indicated a negative relationship between profitability and BCP and CPP while BCCC had a positive effect on profitability. The regression analysis indicated that only BCP was found to be statistically significant.

Study conducted from 2007-2011 by (Gamlath & Rathiranee, 2014) investigate the relationship between working capital and profitability of listed commercial banks in Sri Lanka. The sample size was seven (7) firms. The study uses both Pearson correlation to show

the relationship between working capital and profitability and regression analysis to show the effect working capital has on profitability. The working capital proxies were current ratio (CR), loan to deposit ratio (LDR) and cash ratio (CSR) and the profitability proxies were net profit margin (NPM), return on asset (ROA) and return on capital employed (ROCE). The study findings indicate that CSR has great impact on NPM and ROA than other variables. Generally working capital management has great impact on profitability of the Sri Lankan listed commercial banks.

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive research design. This method relies on observation and description of numerical data and behaviour of variables without influencing them. Dulock (1993) posits that descriptive research design is a systematic and an accurate explanation of an event, phenomenon, characteristics or individual, groups or communities.

Empirical Model

The multiple regression function used to analyse the independent and dependent variables for this study was computed as follows;

$$\pi = X_0 + X_1 CD + X_2 LQ + X_3 LEV + \varepsilon$$

Where: y - financial performance; X0 - intercept; X1,X2 and X3 - regression coefficients; CD - customer deposits; LQ - liquidity; LEV - leverage; ε - error term.

Target Population

A population is a total collection of elements from which an inference can be made. A portion of the population is referred to as a sample (Cooper & Schindler 2000). The target population for the study will consist of all the forty three commercial banks in Kenya.

Sample Design

A census survey method will be adopted for this study since the target population is small comprising of all the 43 commercial banks in Kenya. It is therefore more efficient and effective method rather than carrying out the study on sample basis. According to Cooper & Schindler (2000), a census is the complete enumeration of a population or groups at a point in time with respect to well-defined characteristics for example, population, production, traffic on particular roads.

Data Collection Procedures

The relevant secondary data will be collected from Kenya Bankers Association's comprehensive archive of the forty three commercial banks and from Central Bank of Kenya's during the period of study of seven years from 2012 to 2018. The data from Kenya Banker's Association will be on working capital and profitability, while data from the Central Bank of Kenya will be on financial risk and the macroeconomic variables from 2012 to 2018. The forty three commercial banks comprises of twenty six locally-private owned commercial banks, 14 commercial banks are foreign owned, and three local public owned commercial banks (CBK, 2017).

RESEARCH RESULTS

Table 1 below indicates a brief summary of the variables included in the regression model of the study. Descriptive statistics describes the general characteristics of the variables in the model. From the table below descriptive statistics of the minimum values, maximum values, mean and standard deviation can be interpreted.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	301	-13.60	10.80	3.65873754	2.9051643
Customer deposits	301	20.11	537.02	81.0353820	83.1659859
Liquidity	301	20.13	98.54	34.5195348	10.1125803
Leverage	301	.12	.72	.4483388	.1208631
Valid N (listwise)	301				

Return on asset records a minimum value of -13.60 and a maximum of 10.80, with an average mean value of 3.66 and a standard deviation of 2.9. Customer deposits records a minimum value of 20.11 and a maximum value of 537.02, with an average mean value of 81.04 and a standard deviation of 83.16. Liquidity records a minimum value of 20.13 and a maximum value of 98.58, with an average mean value of 34.52 and a standard deviation of 10.11. Leverage records a minimum value of 0.12 and a maximum value of 0.72, with an average mean value of 0.45 and a standard deviation of 0.12.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755[a]	.570	.217	2.729490

a. Predictors: (Constant), leverage, liquidity, customer deposits

The output, shown in table 2 includes information about the quantity of variance that is explained by the predictor variables (Leverage, Liquidity and Customer deposits). The first statistic, R, is the multiple correlation coefficient between all of the predictor variables and the dependent variable. In this model, the value is 0.755, which indicates that there is a great deal of variance shared by Leverage, Liquidity and Customer deposits and return on asset.

The next value, R Square, is simply the squared value of R. This is frequently used to describe the goodness-of-fit or the amount of variance explained by a given set of predictor variables. In this model, the value is 0.570, which indicates that 57% of the variance in the return on asset is explained leverage, liquidity and customer deposits.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	319.308	3	106.436	14.286	.000[b]
	Residual	2212.686	297	7.450		
	Total	2531.994	300			

a. Dependent Variable: ROA
b. Predictors: (Constant), leverage, liquidity, customer deposits

The analysis of variance in the table 3 informs whether the regression model is statistically significant. We tell whether it's statistically significant by looking at the p value.

In this model the table indicates that the regression model is statistically significant with a p-value of 0.000.

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.151	.748		8.218	.000
	Customer deposits	.008	.002	.231	4.100	.000
	Liquidity	-.079	.016	-.276	-5.008	.000
	Leverage	-.910	1.378	-.038	-.660	.510

a. Dependent Variable: ROA

From the table 4 the multiple regression equation obtained will be:

$$ROA = 6.151 + 0.008CD - 0.079LQ - 0.91\ LEV$$

The predictive power of the independent variables is indicated by the *B* coefficients as shown in the table above. This implies that a customer deposit has a positive effect on banks profitability thus;

Customer deposits: The model predicts that for an additional unit of customer deposit, banks profitability increases by 0.008 units holding liquidity and leverage constant. Customer deposits have a significant effect on banks profitability at 5%. Being significant we will reject the null hypothesis and conclude that customer deposits affect banks performance. The findings are consistent with the findings of mandiefe (2016).

Liquidity: The model predicts that for an additional unit of liquidity, banks profitability decreases by 0.079 units holding customer deposits and leverage constant. Liquidity has a

significant effect on banks profitability at 5%. Being significant we will reject the null hypothesis and conclude that liquidity affects banks performance. The findings are consistent with the liquidity preference theory which explains that money is the most liquid asset and is used for the day to day running of business

Leverage: The model predicts that for an additional unit of leverage, banks profitability decreases by 0.91 units holding customer deposits and liquidity constant. Leverage has an insignificant effect on banks profitability at 5%. Being insignificant we will fail to reject the null hypothesis and conclude that leverage has no effect on banks performance. The findings are consistent with the pecking order theory which explains that companies rely on internal funds first before going for external funds.

CONCLUSION

The study sought to examine the effect of short-term financing on the financial performance of commercial banks in Kenya. To achieve the objective panel data from (2012-2018) was extracted from financial statements of commercial banks in Kenya. It was established that customer deposits and liquidity have a significant effect on profitability while leverage has an insignificant effect on profitability of commercial banks in Kenya.

REFERENCES

Abushammala, S.N.M., & Sulaiman, J. (2014). Cash Holdings and Corporate Profitability: Some Evidences form Jordan. *International Journal of Innovation and Applied Studies, 8* (3), 898-907.

Alala, O.,& Nyabuti, W. (2014). The relationship Between Working Capital Management Policy and Financial Performance of CompaniesQuoted at Nairobi Securities Exchange, Kenya. *International Journal of Economics, Finance and Management Science.*

Ali, D. (2018) Impact of Working Capital Management on Banks' Performance: Evidence from UK

Alshatti, A.S. (2016). The effect of liquidity management on the profitability of Jordanian commercial banks. *Investment Management and Financial Innovations, Volume 13, Issue 1, 2016.*

Arnold, G. (2008). *Corporate financial management* (4th Ed.), London, England: Pearson Education Inc.

Azeem, M.M., & Marsap, A. (2015). Determinant factors and working capital requirement. *International Journal of Economics and Finance, 7* (2), 280–292. Retrieved from http://dx.doi.org/10.5539/ijef.v7n2p280

Bagh, T., Nazir, M.I., Khan, M.A., Razzaq, S. (2016). The impact of working capital management on firms financial performance: Evidence from Pakistan. *International Journal of Economics and Financial Issues, 6*(3), 1097–1105. Retrieved from http: www.econjournals.com.

Berk, J., DeMarzo, P. & Harford, J. (2009). *Fundamentals of corporate finance*. Pearson Education Inc.: Boston.

Brigham, E., & Daves., P. (2007). *Intermediate Financial Management* (9th ed.). Ohio. South Western, Thomson. USA.

Brigham, E. F., & Houston, J. F. (2012). *Fundamentals of Financial Management.* (7th ed.). South Western, USA.

Charitou, M. S., Elfani, M., & Lois, P. (2016). The Effect of Working Capital Management on Firm's Profitability: Empirical Evidence from an Emerging Market. *Journal of Business & Economics Research* (JBER), 14(3), 111-117.

Cooper, D.R. and Schindler, P.S. (2003) *Business Research Methods.* 8th Edition, McGraw-Hill Irwin, Boston.

Garcia, . J., & Martinez, P. (2007). Effects of working capital management on SMEs profitability. *International Journal of Managerial Finance*, III(12), 164- 167.

Jensen, M. (1986): Agency costs of free cash flow, corporate finance, and takeovers, *American Economic Review* 76, 323–329.

Kademi, T., Nasidi, M., & Yakasai, M. (2017). Working Capital Management And Firm Profitability During And After The Economic Crisis Among Malaysian Listed Companies; *European Journal of Accounting, Auditing and Finance Research* Vol.5, No.11, pp.10-20

Kasozi,J.(2017). The effect of working capital management on profitability: a case of listed manufacturing firms in South Africa". *Investment Management and FinancialInnovations*

Kimeli, M.(2014). Relationship between working capital components and financial performance of the commercial and service firms quoted at the nairobi securities exchange

Lamberson, M. (1995). Changes in Working Capital of Small Firms in Relation to Changes in Economic Activity. *American Journal of Business, 10*(2), 45-50

Lopez, C. (2017). The Asset Management Industry, Systemic Risk, and Macroprudential Policy. *Journal of Financial Transformation*, 2017, vol: 45 pp. 121-128.

Louw, E.,Hall, J & Brummer, L. (2016). Working Capital Management of South African Retail Firms*: Journal of Economic and Financial Sciences* Vol 9(2), pp. 545-560

Maina, M. (2012). *Qualitative and Quantitative Research Methods Simplified* Frajopa publishers ltd

Mandiefe, P.S. (2016). How working capital management affects the profitability of Afriland First Bank of Cameroon? A case study. *Online at https://mpra.ub.uni-muenchen.de/75356/ MPRA Paper No. 75356, posted 03 Dec 2016 13:19 UTC*

Masinde, S. & Ochieng, D.(2017). Effects of Working Capital Managementon Finanacial Performance of energy and PetroleumComponies Listed at Nairobi Securities *Exchange Vol1 No.1, 2017 PP 61-79*

Mugenda, A. (2008*) Social Science Research*; *Theory and Practice*. Nairobi: Laba Graphics Services

Mugenda, O. M. (2003). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: Laba Graphics Services.

Mustapha, M., & Adnan, A. (2015). A Case Study of Enterprise Risk Management Implementation in Malaysian Construction Companies*: International Journal of Economics and Financial Issues*, 2015, 5(Special Issue) 70-76.

Ncube, M.(2013).Impact of working capital on the profitability of South African Firms Listed on the JohannesburgStock Exchange*:*

Nyabuti, W., & Alala, O. (2014). The Relationship between Working Capital Management Policy and Financial Performance of Companies Quoted at Nairobi Securities Exchange, Kenya. *International Journal of Economics, Finance and Management Sciences.* Vol. 2, No. 3, 2014, pp. 212-219.

Ongore, V., & Kusa, G. (2013). Determinants of Financial Performance of Commercial Banks in Kenya*: International Journal of Economics and Financial Issues* Vol. 3, No. 1, 2013, pp.237-252

Osuma G., Ikpefan A., Romanus O., Ndigwe C,. & Nkwodimmah P. (2018). Working capital management and bank performance: empirical research of ten deposit money banks in Nigeria. *Banks and Bank Systems,* 13(2), 49-61. doi:10.21511/bbs.13(2).2018.05

Pitt, J.(2014). Working Capital Efficiency and Firm Profitability:Nigeria and Kenya.*International Journal of Economics and Management.* Vol:8, No:6, 2014

Pandey, I. M. (2010). *Financial Management* (10th ed.). New Delhi. Vikas Publishing House

Pandian, M., & Narendran. (2015).Impact of Financial Performance Indicators (FPIs) on Profitability: *International Journal of Current Research Vol. 7, Issue, 01, pp.12141-12149, January, 2015*

Punch,K. (1998) *Introduction to social sciences*: *Qualitative and Quantitative*.

Qurashi, M. (2017). Effect of Working Capital on the Firm's Profitability: An Analysis of UK Pharmaceuticals and Biotechnology FTSE All Share Index Firms

Rehman, M., Anjum N.(2013). Determination of the impact of working capital management on profitability: an empirical study from the cement sector in pakistan. *Asian Economic and Financial Review Journal* pg 319-332

Saunders, M., Lewis, P. & Thornhill, A. (2012) *"Research Methods for Business Students"* 6th edition, Pearson Education Limited

Scott, W. (2002). *Institutional Theory: Contributing to a Theoretical Research Program*. Oxford UK: Oxford University Press.

Sekaran, U. (2006). *Research Methods for Business: A Skill Building A pproach.* New Delhi: John Wiley & Sons.

Singhanis, M., & Mehta, P. (2017). Working capital management and firms' profitability: evidence from emerging Asian countries*; South Asian Journal of Business Studies* Vol. 6 Issue: 1, pp.80-97

Sunday, E. (2017). Impact of working Capital on the Profitability of Manufacturing Firms in Nigeria; *Research Journal of Accounting* Vol. 5 No. 2

Tauringana, V., & Afrifa, G. (2013).The relative importance of working capital management and its components to SMEs' profitability

Tchankova, L. (2002). Risk Identification – basic stage in risk management, Environmental Management and Health, 13, (3), 290-297.

Thapa, P.(2013). How Does the Profitability Get Affected by Working Capital Management in Food and Beverage Industry? *Journal of Advanced Research in Management*, pp. 79-88.

Todaro, Michael, P., Stephen, C., & Smith. (2005). *Economic Development*. 9th ed. Boston: Addison-Wesley

Umeron, A & Udo, E.(2015). Working Capital Management and the performance of selected deposit money banks in Nigeria. *British Journal of Advanced Economics, Management and trade*. 7(1): 23-31, 2015, Article no.BJEMT.2015.068.

Virkkala, V. (2015). The Effect of Working Capital on Profitability in Computer and Electrical Equipment Industry

Wembe, M.(2013). Effects of Working Capital Managementon the Performance of Firms in Kenya: A Case of Knya Ports Authority. *International journal of science and research*

Yeboah, B., & Yeboah, M. (2014).The Effect of Working Capital Management of Ghana Banks on Profitability:Panel Approach. *International Journal of Business and Social Science*. Vol. 5, No. 10;