

Open Access

Impact of Working Capital Management on Small and Medium Enterprises' Performance in Nigeria

Raji Sadiq*

Department of Accounting and Finance, Fountain University, Osun State, Nigeria

Abstract

Working capital management is very important in measuring and balancing between risk and efficiency of firm's performance. Firms has experienced various trend in ensuring the survival of the business in short and long term. This study measures the impact of working capital management on small and medium enterprises' performance in Nigeria, Osun State as a focus area for the period 2010-2014 by using firm by firm statement of financial position and income statement. This is done by calculating return on assets as a tool to measure firms' performance in Nigeria. Data were analysed using ordinary least square method to test the hypothesis formulated. Our findings indicate a mixed effect of WCM on performance. It was concluded that account payables period, cash conversion cycle and net trading cycle has positive effect on performance. Account receivables period and inventories turnover in days has negative relationship with performance.

Keywords: Working Capital; Performance; SMEs

Introduction

Organizational survival is not certain despite companies' earning profit unless they meet their short-term obligation. The main focus of corporate finance are three decision processes: capital structure decisions, capital budgeting decisions, and working capital management (WCM) decisions. Working capital is considered a lifegiving force for any economic unit and the most important function of corporate management. Working capital does not only affect profit making organizations but also non-profit making organizations.

According to Mukhopadhyay [1], working capital is the most crucial factor for maintaining liquidity, survival, solvency and profitability of businesses across any country. There has been and there is still growing interest in the investigation of WCM and performance of firms [2-6].

If WCM is not given due consideration, firms are likely to fail and face bankruptcy [2,6]. The importance of WCM efficiency is inevitable because it is attached to liquidity, survival, solvency and profitability of firms [6,7]. Eljelly [8] states that WCM is the most important area for comparison of liquidity and profitability among firms.

SME's are viewed as essential elements of any healthy economy especially in developing countries like Nigeria. It is viewed to promote enterprise and culture which in turn leads to job creation within the economy. SME is gaining widespread recognition in Nigeria due to diversification of the economy from crude oil to other sectors. Storey (1994) argued that SME constitute majority of enterprises in all the economies in the world. Likewise, the large member of failed businesses (SME) have been as a result of inadequate plan and control by the financial manager towards the current assets (CA) and current liability (CL) [6,9]. Different scholars have carried out various research on SME among which, found that SME often lack adequate resources to efficiently manage their WCM. Padachi [10] argued that efficient management of working capital is most important to survival, growth and profitability of SME firms.

SME's firms and large firms are different from one another due to the effects of WCM. Consequently, it might affect the performance of one firm compared to the other. This paper's focus is on determining the effort of WCM on SME performance in Nigeria.

Various authors have carried out research in the United Kingdom,

Spain, Pakistan, Kenya. In Africa, especially in Nigeria, most studies have limited their research to a specific area. Due to insufficient evidence on WCM and SME's performance in Nigeria, provides a strong motivation for evaluating WCM and SME's performance in details.

This study focus on evaluating the impact of WCM on the SME's performance in Nigeria, based on profitability and shareholder value.

Literature Review

Definition

Working capital is the difference between current assets and current liabilities Adeniji [11]. In other to ensure working capital is sustainable successful operation of any organization, working capital management need to be improved.

Working capital management has been define by various author. According to Eljelly [8], management of working capital is essential because it eliminate the risk of inability to meet short term obligations and avoid excessive investment in the assets. Filbesck and Krueger [7] states that success of any business depends on the effectively management of inventories, receivables and payables. Afza and Nazir [12], continuous management of working capital can assist firms to balance between risk and efficiency. WCM simply means management of current assets (receivables, Inventories) and current liabilities (Payables).

Firms most especially, small and medium firms, faces difficulties in the management of working capital Kargar and blumenthal [2].

*Corresponding author: Raji S, Fountain University, Osun State, Nigeria, Tel: 2348058977296; E-mail: asdera223@yahoo.com

Received November 29, 2016; Accepted January 24, 2017; Published February 04, 2017

Citation: Sadiq R (2017) Impact of Working Capital Management on Small and Medium Enterprises' Performance in Nigeria. Arabian J Bus Manag Review 7: 285. doi: 10.4172/2223-5833.1000285

Copyright: © 2017 Sadiq R. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Citation: Sadiq R (2017) Impact of Working Capital Management on Small and Medium Enterprises' Performance in Nigeria. Arabian J Bus Manag Review 7: 285. doi: 10.4172/2223-5833.1000285

Empirical studies

Deloof [4] used a sample of 1,009 large Belgian non-financial firms for a period of 1992-1996. He discovered that there is significant negative relationship between gross operating income and the number of days' accounts receivable, inventories and accounts payable of Belgian firms. He suggests that managers can increase corporate profitability by reducing the number of day's accounts receivable and inventories.

Eljelly [8] researched on the relationship between profitability and WCM using 27 Saudi companies from three non-financial sectors for the period 1996-2000. He found that WCM are significant and has negative relationship with profitability.

Falope and Ajilore [13] using a sample of 50 Nigerian quoted nonfinancial firms for the period 1996-2005, found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms.

From the research of Khan et al. [14] which is carried out to investigate the effect of working capital management on profitability. They used a sample of 92 Pakistani firms from textile sector for the period 2001 to 2008. The findings of the study show an existence of a moderate risk-return trade off in between profitability and liquidity. Also, working capital management has significant impact on profitability regarding to textile sector of Pakistan. This is not in line with the findings of Raheman and Nasr [5] which established a significant and negative relationship between profitability and all WCM components based on a study of ninety-four (94) listed firms in Pakistan.

Gakure et al. [15] examined the relationship between WCM and performance of manufacturing firms listed at the Nairobi Securities Exchange (NSE). From a sample of 18 companies at the NSE. They found out that there is a strong negative relationship between firm's performance and liquidity of the firm.

Javid [6], using 54 SMEs listed on karachi stock exchange for a period of five years (2006-2010) discovered that SMEs with shorter inventory holding period, shorter accounts receivable period and shorter accounts payable period are more profitable and create value. He later concluded that WCM has a perceptible effect on performance of firms.

Methodology

The purpose of this study is to investigate the impact of WCM and SME'S performances in Nigeria with the use secondary data.

The data used in this study was obtained from audited financial statement of respective firms for the period of 2010-2014. Twenty-eight SME firms will be use in total. In other to measure firm's performance, return on assets will be use.

Model specification

The model designed to determine the effect of WCM on SME's performance is stated below

$$ROE = F(WCM, CR, LOS, LTA, NPR, EFF, GE)$$
(1)

As discussed earlier, variables are classified into dependent, independent and control variable, the table below shows the summary of variable.

Research hypothesis

In order to examine the relationship between working capital management and SME's performance, the following null hypotheses are tested:

H₁: there is no relationship between working capital management and profitability

 $\rm H_2:$ there is no relationship between efficiency and firm's performance.

H₃: Profitability has no relationship with firm's performance.

In econometric model;

 $ROE_{rr} = \alpha + \beta_1 WCM_{rr} + \beta_2 CR_{rr} + \beta_3 LA_{rr} + \beta_4 DR_{rr} + \beta_5 GRTH_{rr} + \mu_{rr}$ (2)

where 'i' denotes the nth firm (i=1 to 28), and the subscript t denotes the tth year (t=1 to 5), μ is the error term. For model estimation, we need to determine the where there is correlation between the variables. Panel data test is one of fixed effect or random effect model. To determine which of the model (fixed effect model or random effect model) to choose from, Hausman test will use. If the null hypothesis is accepted, random effect will be use, if rejected, fixed effect will be use. We have used EVIEWS the above model.

Empirical Analysis

Pre-test analysis

From table 1, it shows the strength of relationships between

	ROA	ARP	APP	ITID	CCC	NTC	LOS	CR	LTA	NPR	EFF	GE
ROA	1											
ARP	0.209635	1										
APP	0.250069	-0.03031	1									
ITID	0.025157	0.031684	-0.006873	1								
CCC	0.313845	0.618972	0.668895	0.394249	1							
NTC	0.163738	0.115214	-0.02324	0.175185	0.122706	1						
LOS	0.433562	0.107889	0.1357	0.125881	0.209169	0.259185	1					
CR	-0.055006	-0.019543	0.1357	-0.093585	0.10857	-0.15069	-0.066659	1				
LTA	0.138722	-0.112403	0.081179	-0.037334	-0.028673	0.003467	0.718804	0.137794	1			
NPR	0.485913	-0.087548	0.090385	-0.052984	-0.012642	-0.055483	0.123828	0.05187	0.275932	1		
EFF	0.472606	0.409949	0.06736	0.20602	0.38202	0.443288	0.563654	-0.172126	-0.021355	-0.170979	1	
GE	0.516476	0.187331	0.040514	0.041953	0.161504	0.243338	0.715069	0.033159	0.509229	0.061004	0.610458	1

Table 1: Correlation coefficient.

variables. It indicates the direction of variables (either positive or negative values). A positive correlation is show between the independent variables and performance while a mix reaction was shown under the control variable (where only the current ratio has negative correlation on performance and others shows a positive correlation with performance). The purpose of correlation analysis is to show whether the variables are multi-co linearity. Form the correlation analysis, there is no evidence of multi-co linearity, which means the test do not rightly reflect a causal relationship.

Table 2 shows a pre-test analysis (descriptive statistic) of data obtained for the sample period 2010 to 2014 from small and medium firm. it shows the mean, median maximum and minimum for the variables; ROA, ARP, APP ITID, CCC, NTC, LOS, CR LTA, NPR, EFF AND GE. The kurtosis measure the peakedness of the variables. Almost all the variables show a high peak (higher than three) except LOS which shows low peak since it is less than three. Skewness determine the probability distribution of a random variable relative to the mean. It shows almost all the variables are positive except for LOS which has a negative value. Since a negative skewness indicates, in the tail, the right-hand side is shorter than the left-hand side while a positive skewness means that the left-hand side is shorter than the right-hand side. Jarque-Bera test for the goodness of fit in a data distribution for the purpose of ensuring that skewness and kurtosis are normally distributed. LOS is not normally distributed at 1%, 5% and 10% level of significance while other variables are normally distributed.

Regression analysis

As discussed above, the objective of this study is to identify the key variable relating to WCM that influence performance (measure by ROA) of SMEs' in Nigeria. The R-Square shows 56.67%, 54.85%, 41.93%, 64.32% and 40.38% variation in the dependent variable is explained by all independent variables in model 1,2,3,4 and 5 respectively (see Table 3). The F-Statistic and Probability shows that all the variables (independent and control variables) jointly has significant effect on performance. Under APP and CCC, will reject the null hypothesis since it has effect on performance at 10% level of significant. The control variables (LOS, LTA, NPR and GE) have an effect on performance at 10% and 5% level of significant. This means the null hypothesis will be reject and alternate hypothesis will be accepted. Since panel data is main about choosing between fixed effect and random effect, the pooled regression will not be analysis in full.

From Table 4, The R-Square shows 85.48%, 79.09%, 74.29%, 87.32% and 74.39% variation in the dependent variable is explained by all independent variables in model 1,2,3,4 and 5, respectively. Adjusted R-square indicates 78.10%, 66.92%, 62.47%, 78.87% and 63.23%

variation in dependent variable is explained by all independent variables in model (1 to 5). The means that the model is good for decision since more than half on the variables has been explained. Average receivable period has negative relationship with performance indicating that the sooner firms receives their money the better it improves performance which is also a similar result found in the research work [12,16,17]. Performance will also improve if CCC is minimize. It implies that companies can create value for the shareholder if cash conversion is maintaining to the minimum. This result is in line with finding of Gul et al. [16] and Karaduman et al. [18] and contradict the finding of Javid [6] which state CCC is positively correlated to Performance. ITID is negatively related to performance while NTC is positively related to performance of a firm. The result shows that the lower the days of debt resettlement (APP) the better for the firm's (SMEs') performance. This is in line with the of work of Javid (2014) and Pedro and Pedro (2007) and in contrary with the finding of Gul et al. [16] and Deloof [4] who find positive relationship between APP and Performance.

Form the regression table (fixed effect), it indicates that working capital measured by ARP, APP, ITID, CCC, NTC and CR has no significant effect on performance at 10% level of significance. Under efficiency, it has no significant effect on performance expect for model 2 which is significant at 10% level of significance. Profitability, Size and Growth are positively significant to firm's performance at 1%, 5% and 10% level of significance.

Durbin Watson test is used for testing presence of auto-correlation (if it falls with the upper and lower value) which has a value of 1.93, 2.53, 2.09, 2.06 and 1.99 for model 1,2,3,4 and 5, respectively. The DW tables shows the upper and lower value as 1.31 and 1.68. This means that there is no presence of auto-correlation since the DW calculated do not fall within the DW tabulated.

Table 5, The R-Square shows 62.38%, 52.78%, 37.99%, 66.78% and 37.28% variation in the dependent variable is explained by all independent variables in model 1,2,3,4 and 5, respectively. Adjusted R-square indicates 59.38%, 48.79%, 33.99%, 63.36% and 33.09% variation in dependent variable is explained by all independent variables in model (1 to 5). The means that the model is good for decision since more than half on the variables has been explained. Average receivable period has negative relationship with performance indicating that the sooner firms receives their money the better it improves performance which is also a similar result found in the research work [12,16,17]. Performance will improve if CCC is increases. It implies that companies can create value for shareholder if cash conversion is maintaining to the maximum. This result is in line with finding of Javid (2014) and contradict the finding of Gul et al. [16]

	ROA	ARP	APP	ITID	CCC	NTC	LOS	CR	LTA	NPR	EFF	GE
Mean	20.04823	116.7823	64.33086	54.19924	235.3124	25.94668	7.50469	4.590514	7.184481	7.456027	3.663123	95242841
Median	11.84517	36.19881	9.749493	11.43058	69.37331	10.29177	7.627864	2.439994	7.177101	5.69489	1.885414	42513420
Maximum	137.2701	2010.188	2627.858	1401.781	2693.105	298.7221	9.025635	24.48096	8.433285	38.93332	22.18746	1.06E+09
Minimum	-58.4765	1.633467	0.942511	-0.44342	4.588643	-142.796	6.023343	0.203365	5.923112	-25.0403	0.149051	1055220
Std. Dev.	26.88857	281.5846	309.6769	170.0123	448.4614	62.00134	0.709945	5.143442	0.564286	10.67731	4.03208	1.59E+08
Skewness	1.521103	4.937302	7.722391	6.813851	3.605809	2.444865	-0.09728	2.116832	0.035991	0.49962	2.252291	3.725018
Kurtosis	8.026295	30.33826	63.67427	53.55969	17.22177	12.18972	1.989367	7.310982	2.841769	4.510884	9.40875	20.56002
Jarque-Bera	109.3091	2675.479	12413.04	8682.988	805.1766	343.1412	3.354237	115.6101	0.095692	10.39063	194.3172	1152.215
Probability	0	0	0	0	0	0	0.186912	0	0.953281	0.005542	0	0
Sum	1523.666	8875.458	4889.145	4119.142	17883.75	1971.948	570.3564	348.8791	546.0206	566.658	278.3973	7.24E+09
Sum Sq. dev.	54224.66	5946742	7192483	2167815	15083819	288312.5	37.80166	1984.125	23.88137	8550.375	1219.325	1.89E+18
Observations	76	76	76	76	76	76	76	76	76	76	76	76

Table 2: Descriptive Analysis.

Citation: Sadiq R (2017) Impact of Working Capital Management on Small and Medium Enterprises' Performance in Nigeria. Arabian J Bus Manag Review 7: 285. doi: 10.4172/2223-5833.1000285

Page 4 of 5

Variables	ROA	ROA	ROA	ROA	ROA
ARP	-0.2348 (0.8149)	-	-	-	-
APP	-	1.9775 (0.0513)	-	-	-
ITID	-	-	-0.7844 (0.4346)	-	-
CCC	-	-	-	1.886 (0.0632)	-
NTC	-	-	-	-	0.0476 (0.9622)
LOS	2.4646 (0.0157)	4.9400 (0.0000)	4.5996 (0.0000)	1.7055 (0.0927)	4.1942 (0.0001)
CR	1.4168 (0.1601)	-0.1429 (0.8867)	1.2509 (0.2139)	-0.2678 (0.7897)	1.0803 (0.2825)
LTA	-3.6979 (0.0004)	-4.5778 (0.0000)	-3.7766 (0.0003)	-2.6561 (0.0098)	-3.4881 (0.0007)
NPR	7.5592 (0.0000)	6.1997 (0.0000)	6.0666 (0.0000)	7.2519 (0.0000)	5.9104 (0.0000)
EFF	0.1682 (0.8668)	-2.3663 (0.0203)	-0.0655 (0.9479)	0.3125 (0.7557)	-0.0287 (0.97772)
GE	3.6979 (0.0019)	2.5246 (0.0135)	-0.1285 (0.8980)	3.4531 (0.0010)	-0.0177 (0.9859)
Constant	2.5978 (0.0110)	1.2851 (0.2023)	0.1393 (0.8895)	1.9126 (0.0600)	0.3347 (0.7385)
F.Statistics	16.4398	14.4062	10.2078	17.5105	10.1602
R-Square	0.5667	0.5485	0.4193	0.6432	0.4038
Adjusted R-Square	0.5322	0.5105	0.3737	0.6065	0.3641
DW	0.7969	1.6536	1.0929	0.9406	1.0411

Table 3: Pooled regression.

Variables	POA	POA	POA	POA	POA
variables	NUA	NUA	NUA	NUA	NUA
ARP	-0.4338 (0.6659)	-	-	-	-
APP	-	-0.3135 (0.7550)	-	-	-
ITID	-	-	-0.8141 (0.4182)	-	-
CCC	-	-	-	-1.0716 (0.2896)	-
NTC	-	-	-	-	1.0851 (0.2812)
LOS	3.0915 (0.0030)	4.4479 (0.0000)	2.5133 (0.0141)	3.0562 (0.0038)	2.3456 (0.0215)
CR	1.4358 (0.1560)	0.4555 (0.6505)	0.6783 (0.4997)	1.1125 (0.2718)	0.7044 (0.4833)
LTA	-4.2424 (0.0001)	-4.0047 (0.0002)	-3.6280 (0.0005)	-2.4020 (0.0205)	-3.4473 (0.0009)
NPR	4.9416 (0.0000)	4.2060 (0.0001)	4.1655 (0.0001)	3.7607 (0.0005)	4.1950 (0.0001)
EFF	0.3853 (0.7013)	-2.4627 (0.0168)	0.5599 (0.5772)	0.8220 (0.4154)	0.8602 (0.3923)
GE	2.5718 (0.0125)	2.8204 (0.0066)	-0.2362 (0.8139)	2.3337 (0.0241)	-0.4371 (0.6633)
Constant	2.6824 (0.0093)	1.9499 (0.0561)	2.3891 (0.0194)	0.1791 (0.8587)	2.3251 (0.0227)
F.Statistics	11.5900	6.5342	6.2884	10.3305	6.6652
R-Square	0.8548	0.7909	0.7429	0.8732	0.7439
Adjusted R-Square	0.7810	0.6699	0.6247	0.7887	0.6323
DW	1.9252	2.5309	2.0907	2.0578	1.9891

Table 4: Fixed effect.

and Karaduman et al. [18] which state CCC is negatively correlated to Performance. ITID is negatively related to performance while NTC is positively related to performance of a firm from our finding. However,

Variables	ROA	ROA	ROA	ROA	ROA
ARP	-0.0962 (0.9236)	-	-	-	-
APP	-	1.2941 (0.1992)	-	-	-
ITID	-	-	-0.8407 (0.4025)	-	-
CCC	-	-	-	1.2349 (0.2211)	-
NTC	-	-	-	-	0.6860 (0.4942)
LOS	2.7772 (0.0067)	5.2966 (0.0000)	3.6746 (0.0004)	2.2443 (0.0281)	3.3610 (0.0011)
CR	1.9248 (0.0575)	0.4286 (0.6693)	0.9133 (0.3633)	0.8667 (0.3892)	0.8984 (0.3710)
LTA	-4.0174 (0.0001)	-4.8441 (0.0000)	-3.5101 (0.0007)	-3.0611 (0.0032)	-3.2993 (0.0013)
NPR	7.0454 (0.0000)	6.0248 (0.0000)	5.4448 (0.0000)	7.1759 (0.0000)	5.4492 (0.0000)
EFF	0.6687 (0.5055)	-2.3809 (0.0206)	0.3947 (0.6939)	0.8313 (0.4087)	0.5726 (0.5681)
GE	3.1478 (0.0022)	2.7152 (0.0081)	-0.1075 (0.9146)	3.4801 (0.0009)	-0.1580 (0.8747)
Constant	2.6888 (0.0086)	1.4594 (0.1482)	1.0721 (0.2862)	1.7188 (0.0902)	1.1465 (0.2542)
F.Statistics	20.8410	13.2522	8.8412	19.5307	8.9149
R-Square	0.6238	0.5278	0.3799	0.6678	0.3728
Adjusted R-Square	0.5938	0.4879	0.3369	0.6336	0.3309
DW	1.3532	2.0089	1.6255	1.2323	1,5727

Table 5: Random effect.

Correlated Random Effects - Hausman Test Equation: Untitled Test cross- section random effects		
Test Summary	Chi-Sq. statistic	Chi-Sq. df Prob.
Cross-section random	13.242449	6 0.0393

Table 6: Hausman test.

the result shows the higher the days of debt resettlement (APP) the better for the firm's (SMEs') performance. This is in line with the of work of Gul et al. [16] and Deloof [4] and in contrary with the finding of Javid [6] and Pedro and Pedro [17] that found positive relationship between APP and Performance.

Form the regression table (random effect), it indicates that working capital measured by ARP, APP, ITID, CCC and NTC has no significant effect on performance at 10% level of significance. Under current ratio, it is significant in model 1 at 10%, efficiency has significant effect on performance only in model 2 at 10% level of significance. Profitability, Size and Growth are positively significant to firm's performance at 1%, 5% and 10% level of significance.

Durbin Watson test is used for testing presence of auto-correlation (if it falls with the upper and lower value) which has a value of 1.35, 2.00, 1.62, 1.23 and 1.57 for model 1, 2, 3, 4 and 5, respectively. The DW tables shows the upper and lower value as 1.31 and 1.68. This means that there is no presence of auto-correlation since it DW calculated did not fall with the lower and upper value of DW tabulated.

Hausman test

In carrying determining whether fixed effect or random effect is to be accepted, the test is carried out. From the Test (see Table 6), the fixed effect result is to be accepted at 5% level of significance.

Conclusion and Recommendation

Conclusion

The main purpose of working capital management in any organization is to manage short term funds in other to ensure day to day business running of a firm. The study investigates the impact of WCM on SME's performance in Nigeria. The sample period used is from 2010 to 2014 for 28 SMEs in Osun State. In this research, WCM measures by Account receivable period, account payable period, cash conversion circle, net trade cycle and inventory turnover in days on the performance. Current ratio, growth, efficiency, gross earnings and profitability have been used as control variables. The result from the panel data regression indicate that ARP and ITID has a negative effect on performance while positive relationship is found in APP, CCC and NTC to performance. Under the control variables we discovered that, firm sizes, growth in sales, Profitability and earning all affect performance of SME firms. Efficiency and Current ratio have substantial effect on performance.

Recommendation

The following recommendation are made from the finds of this research work;

Management small and medium enterprises should ensure delay in payment of goods or services or to the creditors because it tends to improve the performance of the firm.

Receiving of payment from debtor should be focus on to ensure adequate and fast payment since delay in payment have negative effect on the performance of SMEs'.

• Also, Policy maker should consider differences in firm's size, growth in sale and earning before implementing any rules and regulations so, as to ensure made rules and regulations suit SME firms.

References

1. Mukhopadhyay D (2004), Working Capital Management in Heavy Engineering Firms-A Case Study. The institute of accountants of India Kolkata, India.

- Kargar J, Blumenthal RA (1994) Leverage Impact of Working Capital in Small Businesses. TMA Journal 14: 46-53.
- Wang Y (2002) Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan. Journal of Multinational Financial Management 12: 159-169.
- Deloof M (2003) Does Working Capital Management Affects profitability of Belgian Firms? JBFA 30: 573-588.
- Raheman A, Nasr (2007) Working Capital Management and Profitability- Case of Pakistani Firms. IRBRP 3: 275- 296.
- Snober J (2014) Effect Of Working Capital Management On SME'S Performance In Pakistan. EJBM 6: 206-220.
- Filbeck G, Krueger TM (2005) An Analysis of Working Capital Management results across Industries. AJBM 20: 11-18
- Eljelly AMA (2004) Liquidity-profitability trade off: An empirical investigation in an emerging market. IJCOMA 14: 48-61.
- 9. Smith K (1973) State of the art of working capital management. FM 2: 50-55
- Padachi K (2006) Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms, IRBRP 2: 45-58
- Adeniji AA (2008) Management Accounting (4th ed.), El-Toda Venture Limited, Lagos, Nigeria.
- Raheman A, Afza T, Qayyum A, Ahmed M (2010) Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan In: International Research Journal of Finance and Economics. 47: 151-163.
- Falope OI, Ajilore TM (2005) Working Capital Managment and Corporate Profitability: Evidence from panel data analysis of selected quoted companies in Nigeria. Res. J Bus Manage 3:73-84.
- 14. Khan (2012) Working Capital Management and Firm's Profitability in Pakistan: A Disaggregated Analysis. AJBM 6: 3253-3261.
- Gakure R, Cheluget KJ, Onyango JA, Keraro V (2012) Working capital management and profitability of manufacturing firms listed at the Nairobi stock exchange. BAM 2: 680-686.
- 16. Sajid G (2013) Working Capital Management and Performance Of SME Sector. EJBM 5: 60-68.
- Pedro JG, Pedro M (2007) Effects of working capital management on SME Profitability, IJMF 3: 164-177
- Karaduman H (2011) The Relationship between Working Capital Management and Profitability: Evidence from an Emerging Market. IRJFE, ISSN 1450-2887.