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WORKING CAPITAL MANAGEMENT IMPACT ON SMES PROFITABILITY

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ABSTRACT

The purpose of this is to find the effect of Working Capital Management on Small and Medium Enterprises (SMEs) Profitability.The study used primary data by an open-ended questionnaire from the 147 sample of SMEs located in Kurunegala District. Data were collected through research administrated questionnaires and analyzed using SPSS package. The independent variable was the Working Capital Management and Profitability was the dependent variable. Working capital management measured by the Inventory Conversion Period, Average Collection Period, Average Payment Period and Cash Conversion Cycle ;Profitability is measured by the Return on Assets.Study considered Current Ratio, Firm Leverage and Sales Growth as the control variables. The study found an insignificant negative relationship of the Inventory Conversion Period, Average Collection Period, Average Payment Period and the Cash Conversion Cycle with the SMEs profitability which measured by the Return on Assets. Further, the research result shows a negative relationship of Firm Leverage and Current Ratio with the SMEs profitability and Sales Growth shows a positive relationship with the return on assets. Finally, the study shows a negative relationship between working capital management and SMEs profitability.

Key Words: Working Capital,Small and Medium Enterprises,Cash Conversion Cycle

Introduction

The working capital management is very important component in corporate finance management because of its effect on the firm's profitability.(Sharma & Kumar , 2011). Working capital mainly link with liquidity therefore organization have to managetheir current assets and liabilities efficiency to operate organization function smoothly. Working capital relate to the key components of operating cycle such as accounts receivables, inventory, accounts payable, The main objective of the working capital management is keeping an optimized balance between these components. Working capital is significant for any organization setting that requires sound attention, appropriate planning & management because of scare resources of the organization.

Raheman and Nasr(2007)reflected working capital is essential for manufacturing organization rather than trading and Distribution Company. Therefore Manufacturing organizations have to maintain working capital over half of its total asset to operate smoothly. According to Nobanee, Abdullatif, & Al Hajjar(2011)working capital directly affect to profitability and liquidity position of firms. Inaccurate working capital management procedures may also lead to bankruptcy, even though their profitability may constantly be positive.(Samiloglu & Demirgunes, 2008), Managing working capital is basically essential for maintaining the liquidity in day-to-day operations to ensure smooth running and meeting its obligations. (Eljelly, 2004) Managing working capital is not easy taskmanagers have to consider about efficiency as well as profitable. If there are any mismatch between current asset and current liability which could be affect to the company growth and profitability of the business. Basically most of organization masure working capital management using cash conversion cycle. Shin and Soenen (1998) emphasized short cash conversion cycle was most important to create value for their shareholders by reducing the cycle lag. Most of researchers concluded aggressive working capital policies enhance a firm's profitability .(Jose et al. 1996, Shin and Soenen ,1998 Deloof 2003 and Wang 2002) Hence the study examined working capital management on SMEs profitability.

This paper contributies another evidence of impact of working management on SMEs profitability in Anuradapura area. The remainder of this paper is organized as follows: Section two presents a brief review of the literature presents the hypotheses for empirical testing. Sections three discuss data and models to be estimated. Empirical results presented in Sections four and Section five Conclusion.

Literature Review

Working capital maintains sufficient cash flows to meet its short-term operating costs and short-term debt obligations. According to the Mutenyo (2007) profitability is the difference between the cost of providing goods or services and the earnings occurring from the sale. Most of researches examined relationship between working capital management and profitability in many countries according to those studies result some were reflected working capital positively affect to organization profitability some were concluded negatively affected to the organization profitability.

Rehman (2006) examined the impact of working capital management on the profitability of 94 Pakistan Listed company for a period of 1999-2004.He studied Average payment period and cash conversion cycle impact on the Net Operating profit of firms. He concluded that there is a strong negative relationship between above working capital ratios and profitability of firms.

Naimulbari (2012) investigated the impact of working capital management on profitability of pharmaceuticals sector in Bangladesh. The study also concluded there is a negative relationship between cash conversion cycle and profitability. According to the study result researcher revealed cash conversion cycle should be short as much as possible without hurting the operations and longer the cash conversion cycle, the greater the need for external financing, and that financing has a cost. A research under the topic of the relationship between Working capital management and Profitability was conducted by Gill et al., (2010) using the evidence from The United States. They found statistically significant relationship between the cash conversion cycle and profitability, measured through gross operating profit. Which supported to conclude managers can create profits for their companies by handling correctly the cash conversion and by keeping accounts receivables at an optimal level.

According to Owolabi&Alayemi (2009), investigated the effects on liquidity profitability of working capital management as a financial strategy and used Nestle Nigeria PLC for a period of five years from 2004-2009 for the study. They used the effect of different variables of working capital management including current ratio and collection days on Gross profit movement co-efficient for the analysis. They found that there is a negative relationship between current ratio and profitability and negative relationship between collection days and profitability of a firm. The study measured the relative importance of working capital management and its components to SMEs profitability has conducted by Tauringana&Afrifa

(2013).Working capital measured by the cash conversion cycle and its components (inventory, accounts receivable, and accounts payable).According to the result accounts payable management was more important than the accounts receivables management for SMEs profitability.

The effect of working capital management on SME's performance has investigated by Javid& Dalian (2014)in Pakistan firms. This study followed a sample of 54 SMEs listed on Karachi Stock Exchange. According to the result shorter inventory holding period, accounts receivables period and accounts payable period are more profitable and create value for the SMEs. But they not found that cash conversion cycle and net trading cycle has any effect on profitability of SME. Under the control variable financial leverage has strong significant positive impact on performance and liquidity has insignificant positive impact on the performance of SME.

Rahman&Uddin(2015) examined relationship between working capital management and profitability. They used 10 samples of listed companies in Chittagong Stock Exchange of Bangladesh. This study used both primary and secondary data and primary data collected from the structured questionnaire. The findings of this study revealed that the company operating profit was positively correlated with efficient working capital management.

An investigation about the effect of working capital management on firm profitability - empirical evidence from India conducted by Sharma & Kumar(2011). By using the OLS multiple regression model they analyzed the data of a sample of 263 non-financial BSE 500 listed at the Bombay Stock from 2000-2008. The findings of their study significantly depart from other studies conducted in different markets. They found that there was a positive relationship between working capital management and profitability of the Indian firms. Further, they found that inventory of number of days and numbers of days accounts payable are negatively correlated with a firm's profitability. According to the above empirical analysis previous studies were supported to conclude negative relationship as same as positive relationship between working capital and profitability.

Methodology

The study examined relationship between working capital and SMEs profitability in Kurunegala District, which is qualitative type research. According to the developed conceptual framework, working capital related ratios are considered as independent variables and profitability related ratio is taken as dependent variable. The average collection period,

cash conversion cycle, Average payment period and inventory conversion period are used as working capital related ratio and return on assets is used as the measurement of profitability.

In order to have an appropriate analysis of the effect of working capital management on the SMEs profitability different studies have incorporated the use of other variables that also affect firm's profitability. The study takes into consideration control variables such as Firm leverage,Sales growth and current ratio.

H1: There is a significant relationship between Average Collection Period (ACP) and SMEs profitability.

H2: There is a significant relationship between Inventory Conversion Period (ICP) and SMEs profitability.

H3: There is a significant relationship between Average Payment Period (APP) and SMEs profitability.

H4: There is a significant relationship between Cash Conversion Cycle (CCC) and SMEs profitability.

The population of the study was all SMEs in Kurunegala district in which 147response were selected as sample based on simple random sampling method as many previous studies done. Data was collected through researched administered close ended questionnaires. The first part of the questionnaire was used to collect data about demographic information and second part was used to collect data about independent and dependent variables. The questionnaire consists multiple questions, dichotomous questions and Likert Scale‟ questions. Likert scale questions included one to five points. One represents lowest level and five represents highest level. The questionnaires were analyzed through SPSS software and employed descriptive, correlations and regression analysis to derive accurate findings.

Result Discussion and Analysis

Researcher distributed 200 questionnaires among micro finance beneficiaries however only 147 completed questionnaires could be collected for the analysis. The response rate was 73.5% in the present study face and content validity were checked at the beginning through the literature and confirmatory factor analysis was used to meet the construct validity of the study. The estimate values of the items were greater than 0.7,Itindicated that an item explains

more than 70% variation of its respective dimension. KMO values of all dimensions were greater than 0.5. Accordingly, both estimate and KMO values were above the standard level (Estimate 0.7 and KMO 0.5) of convergent validity of the test (Hair, 1998). According to reliability test, the Cronbach's Alpha value of each item to variables was greater than 0.7. That indicates all respective items are internally consistent to the respective variable.

Descriptive Statistics of the Study

Table 1: General Descriptive Statistic

Variable	**Days**	**Variable**	**Percentage**	**Variable**	**Ratio**
Inventory conversion period**(ICP)**	143.13	Return on assets**(ROA)**	41.85%	Current ratio**(CR)**	1.7806
Average collection period**(ACP)**	47.61	Firm Leverage**(FL)**	22.13%		
Average Payment Period**(APP)**	61.06	Sales growth**(SG)**	9.71%		
Cash Conversion Cycle**(CCC)**	129.60				

According to the above analysis selected SMEs take averagely 143 days to sell their inventory, debtors settle their payment within 47 days and they have to wait 61 days to pay their bills. The businesses in the sample have average Cash Conversion Cycle of 129 days. According to the analysis SMEs take more time to convert their inventory to the cash and lower level collection period but they have to settle their payments to supplier within 61 days therefore SMEs have to manage their inventory conversion process to decrease inventory conversion period. The average return over the total assets for the whole sample was 41.85% which was not good signal hence SMEs have to use their asset at optimum level to increase SMEs earnings. The mean of the Financial Leverage represents 22.13% and Average Sales Growth was 9.71% and the mean value of Current Ratio shows 1.7806 which was good to the SMEs day to day operation.

Correlation Analysis

Table 2: Correlation Analysis

	ROA	ICP	ACP	APP	CCC	FL	SG
ROA	1						
ICP	-0.496**	1					
ACP	-0.614**	0.501**	1				
APP	-0.121	0.057	-0.014	1			
CCC	-0.486**	0.816**	0.688**	-0.447**	1		
FL	0.424**	-0.250	0.336**	0.103	0.332**	1	
SG	-0.086	0.070	0.027	-0.234	0.168	-0.155	1
CR	-0.353**	0.385**	0.474**	-0.328**	0.580**	-0.297	0.177

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

According to the table, the result shows negative relationship between ROAand ICP,ACP, APP, CCC, SG, CR but firm leverage had positive relationship with ROA. ICP negatively correlated with financial leverage as same as firm leverage negatively correlated with sales growth and current ratio. Cash Conversion Cycle,Average collection period had positive relationship with all controllable variables.Inventory conversion period positively correlated with all variables other than the financial leverage. However all relationship reflects were significant.

The study estimated the variance inflation factors (VIF) to check for multicollinearity, according to the analysis VIF ranged from 3.270 to 2.300, which is well below the critical value of 10, the value that indicates the possibility of a multicollinearity problem (Hair, 1998). Durbin Watson statistic as per the test was 2.26 and was very close to 2, indicating the absence of a heteroscadasticity problem in the data set.The explanatory power of the model (R^2) was 0.237 without controlling variable but R^2value increase by more than 100% when applying control variable to the model which is 0.499, Hence this model explains 49% of the variance in the ROA which is better than previous model.

Coefficient Analysis

Table 3: Regression Coefficient Analysis

Model		Regression Coefficients	T Statistics	Sig Value
1	(Constant)	.517	5.227	.000
	Firm Leverage	.322	2.924	.005
	Sales growth	.074	.257	.008
	Current ratio	-.099	-2.086	.004
2	(Constant)	.785	7.103	.000
	Firm Leverage	.205	2.138	.037
	Sales growth	-.104	-.405	.687
	Current ratio	-.030	-.617	.026
	Inventory conversion period	-.022	-.839	.048
	Average collection period	-.025	-.944	.034
	Average Payment Period	.020	.767	.464
	Cash Conversion Cycle	.021	.808	.042

According to the model 01regression coefficient of firm leverage was 0.517 and sig value 0.005. It indicates that firm leverage has statistically significant positive impact on SMEs profitabilitylikewise sales growth positively and current ratio negatively affect to SMEs profitability. Model 02 reflects control variable mix result such as firm leverage positively significant, Sales growth negatively in significant and current ratio negatively significant with SMEs profitability.The result reflects SMEs increase firm leverage by one percent it will lead to increase SMEs profitability also but sales growth and current ratio increment will lead to decrease SMEs profitability. Inventory conversion period negatively significantly affect to SMEs profitability. Accordingly study accepts the hypothesis one that emphasizes the significant impact of Inventory conversion period on SMEs profitability. Average collection period reflect negative significant relationship with SMEs profitability which support to accept hypothesis one and reflects when average collection period increase by one percent it will be decrease SMEs profitability. Average payment period and SMEs profitability has positive insignificant relationship as a result study do not accept hypothesis three. Cash conversion period reflects significant positive relationship with SMEs profitability. Resulting study accept hypothesis four:There is a significant relationship between Cash Conversion

Cycle and SMEs profitability. According to the above analysis independent variable as same as controllable variable also influence SMEs profitability therefore SMEs have to consider Inventory conversion period, Average collection period , Cash Conversion Cycle and controllable variable Firm Leverage and current ratio to increase SMEs profitability.

Conclusion

Working capital management is the important part in the financial decision-making.The ability of the company's long-term operations are related with working capitalmanagement. The optimal working capital management is also be achieved theprofitability of the organizations. Most of the companies have large amount of cashinvested in working capital. If working capital manage proper way, there is asignificant effect on profitability.

This study found a relationship between working capital management and profitabilityon a 147 sample of SMEs located in Kurunegala District. This research was conducted with descriptivestatistics, correlation analysis and regression analysis. It found a negativerelationship between the working capital management including inventory conversionperiod, average collection period, average payment period and cash conversion cycleand the profitability which measured by the return on assets.This means that enterprises can increase their profitability by reducing the inventoryconversion period. When increase the inventory the return on assets go down andprofitability also go down. The business can increase their return on assets byreducing the credit period granted to their customers and by reducing averagepayment period the business can improve the profitability through return on assets.According to the research result the profitability can increase by reducing cashconversion cycle.The study used three controllable variables to identify impact on SMEs profitability. The firm leverage shows thepositive relationship with return on assets. Research resultfound a negative relationship between the sales growth and return on assets, whenthere is a sales growth, law profitability. Current ratio also shows the negativerelationship with profitability.According to these findings, researcher can conclude there wasan effect of working capital management and profitability of the SMEs. The study findings are similar with few past studies such as Rehman (2006), Naimulbari (2012),Owolabi&Alayemi (2009),Sharma& Kumar (2011)

The optimal working capital management can be achieved by recruiting the specialized persons in the field of the finance and by advising the enterprises. This research result shows that cash conversion cycle is important factor that affect the profitability, therefore the study recommended that the managers of SMEs should continuously monitor their inventory levels,

account payables and accounts receivables. Inventory levels can be reduced by reducing the number of days inventory are held in the store before the sell. SMEs can implement those studies to increase profitability of the organization.

Reference

- Sharma , A., & Kumar, S. (2011). Effect of Working Capital Management on Firm Profitability: Empirical Evidence from India. *Global Business Review* (pp. 159-173). Washington: SAGE Publications.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? . *Journal of Business Finance & Accounting, 30(3&4),*, 573–587.
- Eljelly, A. (2004). Liquidity-Profitability tradeoff: An empirical investigation in an emerging market. *International Journal of Commerce & Management, 14(2),*, 48–61.
- Gill, A., Biger, N., & Mathur, N. (2010). The Relationship between WorkingCapitalManagement and Profitability: Evidence from United States. *Business & EconmicsJourna*, 1-9.
- Hair, J. (1998). Multivariate Data Analysis. Upper Saddle River, NJ. Prentice Hall.
- Javid, S. &. (2014). Effect of Working Capital Management on SMEs Performance in Pakistan. *European Journal of Business & Management* .
- Jose, , M., Lancaster, C., & Stevens, J. (1996). Corporate return and cash conversion cycle. *Journal of Economics and Finance, 20(1),* ., 33–46.
- Mutenyo. (2007). Introduction to micro economics (1st edition).The New vision.
- Nobanee , & AlHajjar. (2011). *Working capital management and Firm's Profitability: An optimal Cash Conversion Cycle"*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm
- Owolabi, S. A. (2009). The Study of Working CapitalManagement as a Financial Strategy.
- Raheman, A., & Nasr, M. (2007). Working capital management and profitability-case of Pakistani firms. *International Review of Business Research Papers, 3(1),* 279–300.

- Rahman, M. M. (2015). Measuring the Relationship betweenWorking Capital Management and Profitability: Empirical evidence fromBangaladesh. . *Journal of Accounting & Finance* .

- Rehman, A. (2006). Working capital management and profitability : Case of Pakistani firms (Unpublished Dissertation) Pakistan: . *COMSATS Institute of Information Technology, Islamabad.*

- Samiloglu, F., & Demirgunes, K. (2008). The effect of working capital management on firm profitability: Evidence from Turkey. *The International Journal of Applied Economics and Finance, 2(1),*, 44–50.

- Shin, H., & Soenen, L. (1998). Efficiency of working capital management and corporate profitability. Financial Practice and Education, 8(2),. *Financial Practice and Education, 8(2),*, 37–45.

- Tauringana, V. &. (2013). The relative importance of Working CapitalManagement and its Components to SMEs Profitability. , . *Journal of Small Business and Enterpris Development* , 453-469.

- Wang, Y. (2002). Liquidity management, operating performance, and corporate value: Evidence from Japan and Taiwan. *Journal of Multinational Financial Management, 12(2),* , 159–691.