The Impact of Working Capital Management Practices on the Profitability: A Comparative Study between Listed Capital Goods and Material Sector Companies in Sri Lanka

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Abstract

Introduction – The documented evidence indicate that Working Capital Management Practices (WCMP) have a significant impact on the firm's profitability. However, the WCMPs vary between industries. Accordingly, this study investigates whether the impact of WCMP on the profitability is different between CG sector and Material sector taking evidence from mid-cap and small cap the companies listed in the Colombo Stock Exchange.

Methodology – This study has selected 16 listed companies from CG Sector and Material Sector. The data are collected using annual reports from 2014 to 2019. The Regression includes ROA as the dependent variable and the Working Capital measures as independent variables. Further, the model controls for size, sales growth and debt. Moreover, sector wise ranking is used to identify the industry wise differences of WCMP.

Findings - The findings show that the WCMP has a statistically significant and a marginal impact on ROA. Further, the profitability of Material Sector is more negatively responsive to Debtors Conversion Period (DCP) and more positively responsive to Creditors Conversion Period (CCP). Furthermore, the Cash Conversion Cycle (CCC) is more negatively responsive to the profitability of CG Sector. According to sector wise ranking analysis, Material Sector manage the WCMP better overall due to the

Conclusion – Material Sector is more responsive to DCP and CCP. Therefore, the managers should provide more attention towards better management of debtors and creditors. The CG sector required to pay attention towards the overall working capital management. Therefore, the managers should ensure the better working capital management practices are in place.

Keywords: capital good sector, material sector, profitability, working capital management

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1. Introduction

There are four aspects to a company's financial management decision, including the investment decisions, financing decisions, dividend decisions and working capital decisions. Generally, working capital is the difference between current asset and current liabilities. Working capital often changes its form, sometimes referred to as circulating capital. Working capital can take many forms as Gross and net working capital, fixed working capital and variable working capital. Gross working capital is the investment in the company's current assets. Net working capital is the difference between current assets and current liabilities. These two concepts of working capital are equally important from a management perspective (Pandey, Gupta, & perera, 1997). WCM is the process of adequately managing short-term assets and liabilities to maintain the business for the foreseeable future without liquidity problems. WCM is important because it affects on the company's liquidity and profitability (Paul & Mitra, 2018).

1.1 Need for and Importance of the Study

Effective working capital management practices (WCMP) are decisive factors that determines the company's existence and its bankruptcy (Paul & Mitra, 2018). Effective WCMP helps maintain smooth operations, thereby increasing the company's earnings and profitability. Therefore, understanding the relationship between WCMP and profitability of the firm is important. Since, there is an undeniable importance of an efficient WCMP. Many management efforts are expanding to bring the current level of assets and liabilities to optimal levels.

This study investigates whether the WCMP impacts on the profitability of Material sector and CG sector firms. Further, this study compares the two sectors and identifies whether there are differences in the responsiveness of profitability to the WCMP. This study compares the CG sector and the Material sector while focusing on mid and small cap firms. The Material sector firms provide the inputs to the CG sector firms. However, the WCMP of large real estate or construction firms will not be comparable with the WCMP of the Material sector firms due to rigid and long-term focused business nature. On the other hand, the WCMP of Multinational Material sector firms will not be comparable with CG sector firms due to the differences in the business models and operations become much more salient. Therefore, by eliminating large firms from the both sectors, the two sectors become more comparable as the WCMP of mid and small cap Material and CG sector companies become more similar.

1.2 Research Question

- Is there any impact of working capital management practices on profitability in capital goods sector and material sector?
- Is there any significant industry differences in working capital practice in capital good sector and material sector?

1.3 Objectives of Research

- To identify whether there is any impact of working capital management practices on profitability in capital goods and material sector.
- To identify whether there are industry differences exist in working capital management practices in capital goods sector and material sector.
- To rank the industries base on the working capital management practices.

2. Literature Review

Findings from similar past researchers provide strong evidence for conducting new research on related area.

2.1 Theoretical review

If the company wants to achieve the optimum performance in day-to-day operations, it must always stay close to the optimal working capital finance and avoid possible deviation (Altaf & Ahmad, 2019). Banos-Caballero, Garcia-Teruel, & Martinez-Solano (2016) argued that when companies run out of their optimal working capital, profitability decreases. If the company has not enough working capital for day-to-day operation, it could lead to liquidity problems and shortages.

2.1.1 Components of working capital

Two concepts of working capital are gross working capital and net working capital. Gross working capital is a combination of a company's current assets that can convert into cash within one year or less and net working capital calculated by subtracting current liabilities from a company's total current assets.

2.1.2 Types of Working Capital

There are two types of working capital, permanent and temporary types. Permanent working capital is the minimum working capital required to cover all existing liabilities for a business. The need for additional working capital arising from the seasonal demand of the product or any other special event is called temporary working capital. Baños-Caballero et al. (2016) argued firms with a lower percentage of working capital requirement financed with short-term debt are the most profitable for the company.

2.1.3 Factors determining working capital requirements

The general factors that influence a company's working capital decisions can be classified into two groups, internal factors and external factors. Internal factors include the nature of the business, the size of the business, the company's product policies, credit policy and the growth and expansion of the business. External factors include Business fluctuations, changes in technology, infrastructure, import policy and taxation policy.

2.1.4 Working capital management

WCM is the decision relating to short term financing and working capital. WCM tries to confirm the company has sufficient cash amount against to its short-term debt obligations and operating expenses. Charitou, Lois and Santoso, (2012) identified that there is a negative relationship between WCM and company profitability. Importance of WCM to profitability, measured by the cash conversion cycle (CCC), and its components (inventory, accounts receivable and accounts payable) of SMEs (Tauringana & Afrifa, 2013). If the company manage properly cash, account receivables and inventory, it can be increased the profitability of the company (Raheman & Nasr, 2007). Further, collecting debtor's money is called receivable management. Although the process of debt collection may seem simple, it must be managed well. Accounts receivable are collectible accounts. Research by Raheman and Nasr (2007) supports managers can create value for their shareholders by reducing the number of days accounts receivable within the company, therefore, it is best to manage accounts receivable. Inventory management is the process of ordering, storing and using raw materials, component and finishing products. There is a negative relationship between inventory days and profitability of the company, and which indicates that mismanagement of inventory with sudden drop in sales will lead to excess capital requirement far than profitable operations (Lazaridis & Tryfonidis, 2006). Research by Masadeh, Khasawneh and AL Salamat (2018) supports High inventory volumes are profitable to manufacturing and production industries. Low inventory volumes are profitable in retail industries. The process of collecting and managing cash flows is known as cash management. In the business, companies have many inflows and outflows. They must be carefully managed to meet payment obligations, plan for future payments, and maintain adequate business stability. Effectively managing liabilities in a business organization is an important business process. Accounts payable is the amount that the organization has to pay its suppliers or sellers on the goods and services received. Effective managing account payable is important for organization. There is a negative relationship between accounts payable and profitability, and less profitable companies have to wait longer to pay their bills (Deloof, 2003). But according to the research by Dong and Su (2010), more profitability firms wait longer to pay their bills. Cash conversion cycle is the time (measured in days) taken to convert a company's cash flow into investment sales for inventory and other resources. It is calculated as follows:

CCC = Average collection period + Inventory turnover in day-Average payment period (1)

2.2 Review of Empirical Study

Jayarathne (2014) conducted a study regarding impact of WCM on profitability by selecting 20 listed manufacturing companies in Sri Lanka. Data collected for five years period (2008- 2012). Independent variables; Number of days of Accounts receivable, inventory, accounts payable and cash conversion cycle. Dependent variable was ROA. Control variables; Firm size, sales growth and debt ratio. Analysis has been done through Pooled ordinary square regression analysis method. Findings of this research; positive relationship with profitability (ROA) by firm size (β

= 5.690), account payable days (β = 0.040, p < 0.05), sales growth (p < 0.01). Negative relationship with profitability (ROA) by account receivables (β = -0.093, p < 0.01), number of days inventories (β =-0.064, p<0.000), CCC (β =-0.048, p<0.001). On similar study, Paul and Mitra (2018) identified in India steel industry, positive relationship with profitability by borrower's days, quick ratio, debtor turnover ratio. Negative relationship between profitability and ICP. Multistage sampling technique was used to take the sample of 35 companies out of 576 steel companies and data collected period is 2000-2016. ROA was the dependent variable. Independent variable: Current ratio, Quick ratio, Debtors turnover ratio and finished goods turnover ratio. Prior to application of the panel data regression, the test of multi-collinearity and the unit root test was carried out. Nimalathasan (2010) examined the impact on WCM and profitability with randomly selecting 10 manufacturing companies in CSE. Time period is 2003-2007. The researcher found; CCC and ROA are negatively correlated (-0.127), ICP and ROA are negatively correlated.

Tauringana and Afrifa (2013) explored the importance of WCM to the profitability of the business, targeting small and medium-sized businesses. Panel data used from 2005-2009 period with 19 questionnaire response based on a sample of 133 alternative investment market. The results of this study; accounts receivable and accounts payable management important for the company's profitability, inventory, CCC is not important for company profitability in SMEs. Singh, Kumar, & Colombage (2017) conducted a study of WCM and firm profitability by using metaanalysis with set of 46 direct research articles and proved that WCM negatively related to profitability, as well as conducted a detailed subgroup study and confirmed CCC and the profitability were negatively related. WCM primarily contributes to operating profit ability rather than to a firm's value. Tran, Abbott, & Yap (2017) has been able to study how Working Capital impacts profitability. They studied the impact of working capital on the profitability of small and medium-sized businesses in Vietnam. It was selected a sample of 200 Vietnamese manufacturing SMES listed on the HSE with financial statement available years from 2010-2012 and after integrating them into the global economy, the purpose of his study is to identify an analytical relationship between WCM and the Profitability of Vietnam enterprises. According to this study, efficient WCM is the key to achieving maximum profitability. Bhatia & Barwal (2015) studied "efficiency of working capital management practices and the effect on the profitability of the firm: A study of real estate sector of India". Six listed real estate firms have been taken to consideration and secondary data collected from 2009 to 2013. Independent variables; current ratio, liquid ratio. Current asset to total asset ratio, current liability to total assets ratio, inventory to current assets ratio, debtors' turnover ratio, collection period, debtors to current asset ratio and working capital turnover ratio. Dependent variables; return on asset and net profit margin. Ratio analysis was done individually to study working capital practices. Correlation and regression analysis were used. Profitability is significantly related to current and liquid ratios. The 79% variability in ROA can be explained by the difference in the current ratio and 92% variability can be explained by liquidity ratio. Net profit margin is negatively dependent on current liabilities to total asset ratio and 53% variability can only be explained by this ratio.

2.3 Identification of knowledge gap

In general, the literature review indicates that WCM has significantly effect on firm's profitability. But WCMP differs between industry to industry. The comparative study of WCMP on industry to industry is rare. Most of CG sectors' companies depends on material sectors' companies that is due to that required materials of CG sector are provide by the material sector. Therefore, Debtors and creditors will be created between these sectors. This study will fill the knowledge gap through comparison how WCMP effect on profitability between these two sectors.

3. Methodology

3.1 Variable choice

The study identified the independent variables; ICP, DCP, CCP and CCC used to measure WCMP and control variables; firm size, sales growth and debt ratio and dependent variable is ROA to measure the firm's profitability following Jayarathne (2014).

Table 3.1:	Measurement	of variable

Variables	Method of computation
ROA (profitability)	Profit Before Interest and Tax (PBIT)/Total
	Assets
DCP (debtor conversion period)	(Average of accounts receivable/Sales)
	*365
ICP (Inventory conversion	(Average Inventory/Cost of Goods Sold)
period)	*365
CCP (Creditor conversion	(Average of accounts payable / Cost of
period)	goods sold) *365
CCC (Cash Conversion period)	(DCP) + (ICP) - (CCP)
SIZE (Firm size)	Natural Logarithm of total assets.
SGR (Sales growth)	Current year sales - Previous year
	sales)/Previous year sales
DEBT (Debt ratio)	Total liabilities/Total assets

Source – Authors Compiled

3.2 Conceptual framework



Figure 1: Conceptual Framework

Source – Authors Compiled

3.3 Population, Sample & Study Period

The population of this study is listed thirty CG sector and twenty-three material sector companies in Sri Lanka. The sample of this study comprises eight mid-cap and small-cap companies each from both sectors in order to run the regression to achieve primary objective of this study and the same sample is used for the sector wise ratio analysis to achieve secondary objective of this study. The sample period is six years from 2014 to 2019.

3.4 Hypotheses

There are four hypotheses in this study. To test those hypotheses, there are four model but regress those four models for Material and CG sector separately. Hypothesis and corresponding model are illustrated bellow.

H₁1: There is significant relationship between ICP and ROA.

Model 01: ROA_{it} = β_0 + β_1 ICP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it}

H₁2: There is significant relationship between DCP and ROA.

Model 02: ROA_{it} = β_0 + β_1 DCP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it}

H₁3: There is significant relationship between CCP and ROA.

Model 03: ROA_{it} = β_0 + β_1 CCP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it}

H₁3: There is significant relationship between CCC and ROA.

Model 04: ROA_{it} = β_0 + β_1 CCC_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it}

3.5 Methodology

OLS Regression analysis used to analysis whether there is impact of WCMP on profitability in CG sector and material sector. The major assumptions in OLS model were tested through correlation analysis, variance inflation factor, Jarque - Bera test, Durbin Watson value. E-views 11 and StataMP 13 are the main statistical software were used to analysis the data. Sector wise ratio analysis used to identify industry differences exist in working capital management practice.

4. Findings and Discussion

At the initial stage, Redundant fixed effect likelihood ratio and Hausman test were performed to identify suitable model for regression. OLS regression assumption was tested through correlation matrix (multicollinearity), VIF (multicollinearity), Jarque-Bera test (Normality), Durbin Watson value (Autocorrelation). The second part of this section discusses sector wise ranking analysis for achieving the second objective of this study.

4.1 Impact of working capital management practices on profitability

4.1.1 Inventory Conversion Period on Return on Asset

Therefore, following same regression model was performed for sector for examining impact of ICP on ROA. Model 1.1 for Material. Model 1.2 for CG-sector.

Model 1.1: ROA_{it} =
$$\beta_0$$
 + β_1 ICP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it} (1)

Model 1.2: ROA_{it} =
$$\beta_0$$
 + β_1 ICP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + u_{it} (2)

Table 1: Regression Model 1.1 and 1.2

Independent Variable	Dependent Variable = ROA				
	Mod	el 1.1	Mode	el 1.2	
	Coefficient Prob.		Coefficient	Prob.	
С	-0.216832	0.8013	0.247803	0.1325	
ICP	-0.000637	0.0473	-0.000838	0.0104	
SIZE	0.059197	0.5269	0.004646	0.7499	
SALES_GROWTH	0.055392	0.4764	-0.004702	0.9007	
DEBT	-0.382858	0.0018	-0.233722	0.0129	
F-statistic	5.024137	0.000105	10.01842	0.0000	
R-squared	0.605547		0.753766		
Durbin-Watson stat	1.771521		1.879502		

Source – Authors Compiled

As per the redundant fixed effect-likelihood ratio result, cross-section F-Values are 4.7408 (P-value 0.0007) and 5.8798 (P-value 0.0001) respectively. Therefore, panel regression method is preferred over pool model in both sectors. As per the Hausman test result, corresponding p values of Chi-Square Statistic were 0.0155 and 0.0070. Therefore, the fixed

effect model suitable than random effect in both sectors. According to output from regression, there is negative relationship between ICP and ROA (β =-0.000637, p < 0.05) and (β = -0.000838, p < 0.05) in material and CG sector respectively. Therefore, it can be concluded that ICP has a greater significant negative impact on ROA in CG sector than material sector. In material sector R2 = 0.60 and in CG sector R2 = 0.75 were found. Models 1.1 and 1.2 were consistent with all assumption in OLS; no autocorrelation (DWV; 1.17715, 1.8795), normality (Jarque-Bera test; 0.66, 0.93), no multicollinearity (mean VIF; 1.6, 1.16).

4.1.2 Debtor Conversion Period on Return on Asset

Therefore, following same regression model was performed for sector for examining impact of DCP on ROA. Model 2.1 for material. Model 2.2 for CG sector.

Model 2.1: $ROA_{it} = \beta_o + \beta_1 DCP_{it} + \beta_2 SIZE_{it} + \beta_2 DEBT_{it} + \beta_3 SGR_{it} + u_{it}$ (1)

Model 2.2: $ROA_{it} = \beta_0 + \beta_1 DCP_{it} + \beta_2 SIZE_{it} + \beta_2 DEBT_{it} + \beta_3 SGR_{it} + ROA_{i(t-1)} + u_{it}$ (2)

Independent Variable	Dependent Variable = ROA				
	Model	2.1	Model 2.2		
	Coefficient Prob.		Coefficient	Prob.	
С	0.144040	0.8795	2.592480	0.0009	
DCP	-0.001972	0.0395	-0.000656	0.0148	
SIZE	0.028737	0.7809	-0.234865	0.0032	
SALES_GROWTH	-0.050247	0.3420	0.040963	0.1603	
DEBT	-0.412925	0.0048	-0.294529	0.0069	
ROA (-1)			-0.222787	0.1508	
F-statistic	3.689234	0.001438	18.50194	0.000000	
R-squared	0.529913		0.891576		
Durbin-Watson stat	2.288731		2.104151		

Table 4.2: Regression Model 2.1 and 2.2

Source – Authors Compiled

As per the redundant fixed effect-likelihood ratio result, cross-section F-Values are 3.5000 (P-value 0.0058) and 7.2551 (P-value 0.0001) respectively. Therefore, panel regression method is preferred over pool model in both sectors. As per the Hausman test result, corresponding p values of Chi-Square Statistic were 0.0018 and 0.0000. Therefore, the fixed effect model suitable than random effect in both sectors. According to output from regression, there is negative relationship between DCP and ROA (β =-0.001972, p < 0.05) and (β = -0.000656, p < 0.05) in material and CG sector respectively. Therefore, it can be concluded that DCP has a greater significant negative impact on ROA in material sector than CG sector. In material sector R2 = 0.52 and in CG sector R2 = 0.89 were found.

Models 1.1 and 1.2 were consistent with all assumption in OLS; no autocorrelation (DWV; 2.2887, 2.104), normality (Jarque-Bera test; 0.56, 0.77), no multicollinearity (mean VIF; 1.43, 1.48).

4.1.3 Creditor Conversion Period on Return on Asset

Therefore, following same regression model was performed for sector for examining impact of CCP on ROA. Model

3.1 for material. Model 3.2 for CG sector.

Model 3.1: $ROA_{it} = \beta_o + \beta_1 CCP_{it} + \beta_2 SIZE_{it} + \beta_2 DEBT_{it} + \beta_3 SGR_{it} + u_{it}$ (1)

Model 3.2: ROA_{it} = β_0 + β_1 CCP_{it} + β_2 SIZE_{it} + β_2 DEBT_{it} + β_3 SGR_{it} + ROA_{i(t-1)} u_{it} (2)

Independent Variable	Dependent Variable = ROA			
	Model 3.1		Model 3.2	
	Coefficient	Prob.	Coefficient	Prob.
С	0.457317	0.6065	0.257082	0.0005
ССР	0.00600	0.0489	0.000988	0.0390
SIZE	-0.017761	0.8527	-0.009835	0.0209
SALES_GROWTH	-0.004168	0.2843	0.039480	0.1651
DEBT	-0.491501	0.0003	-0.207489	0.0203
ROA(-1)			-0.096181	0.4200
F-statistic	4.573013	0.000246	17.65209	0.0000
R-squared	0.582866		0.886947	
Durbin-Watson stat	2.291728		2.126148	

Table 4.3: Regression Model 3.1 and 3.2

Source – Authors Compiled

As per the redundant fixed effect-likelihood ratio result, cross-section F-Values are 6.2049 (P-value 0.0001) and 6.6352 (P-value 0.0001) respectively. Therefore, panel regression method is preferred over pool model in both sectors. As per the Hausman test result, corresponding p values of Chi-Square Statistic were 0.0000 and 0.0000. Therefore, the fixed effect model suitable than random effect in both sectors. According to output from regression, there is positive relationship between CCP and ROA (β =0.00600, p < 0.05) and (β = 0.000988, p < 0.05) in material and CG sector respectively. Therefore, it can be concluded that CCP has a greater significant positive impact on ROA in material sector than CG sector. In material sector R2 = 0.58 and in CG sector R2 = 0.88 were found. Models 3.1 and 3.2 were consistent with all assumption in OLS; no autocorrelation (DWV; 2.2917, 2.1261), normality (Jarque-Bera test; 0.52, 0.73), no multicollinearity (mean VIF; 1.25, 1.74).

4.1.4 Cash Conversion Period on Return on Asset

Therefore, following same regression model was performed for sector for examining impact of CCC on ROA. Model 4.1 for material. Model 4.2 for CG sector.

Model 4.1:
$$ROA_{it} = \beta_o + \beta_1 CCC_{it} + \beta_2 SIZE_{it} + \beta_2 DEBT_{it} + \beta_3 SGR_{it} + u_{it}$$
 (1)

Model 4.2:
$$ROA_{it} = \beta_o + \beta_1 CCC_{it} + \beta_2 SIZE_{it} + \beta_2 DEBT_{it} + \beta_3 SGR_{it} + u_{it}$$
 (2)

Independent Variable	Dependent Variable = ROA				
	Mode	el 4.1	Model 4.2		
	Coefficient	Prob.	Coefficient	Prob.	
С	-0.044380	0.9623	0.218960	0.4034	
CCC	-0.000508	0.0163	-0.001121	0.0046	
SIZE	0.044981	0.6591	0.000926	0.9687	
SALES_GROWTH	-0.004919	0.2298	-0.070875	0.1900	
DEBT	-0.482955	0.0006	0.075639	0.6067	
F-statistic	4.488871	0.000289	5.840001	0.000024	
R-squared	0.578344		0.640862		
Durbin-Watson stat	2.332508		2.032548		

Table 4.4: Regression Model 4.1 and 4.2

Source – Authors Compiled

As per the redundant fixed effect-likelihood ratio result, cross-section F-Values are 5.9658 (P-value 0.0001) and 6.6422 (P-value 0.0000) respectively. Therefore, panel regression method is preferred over pool model in both sectors. As per the Hausman test result, corresponding p values of Chi-Square Statistic were 0.0003 and 0.0023. Therefore, the fixed effect model suitable than random effect in both sectors. According to output from regression, there is negative relationship between CCC and ROA (β =-0.000508, p < 0.05) and (β = -0.001121, p < 0.05) in material and CG sector respectively. Therefore, it can be concluded that CCC has a greater significant negative

impact on ROA in CG sector than material sector. In material sector R2 = 0.57 and in CG sector R2 = 0.64 were found. Models 4.1 and 4.2 were consistent with all assumption in OLS; no autocorrelation (DWV; 2.3325, 2.0325), normality (Jarque-Bera test; 0.56, 0.59), no multicollinearity (mean VIF; 1.23, 1.39).

4.3 Sector wise working capital practices ratio analysis

	ICP		DCP		ССР		CCC	
	Material Sector	CG Sector	Materia l Sector	CG Sector	Materia l Sector	CG Sector	Material Sector	CG Sector
Industr y Average	106	124	63	80	54	30	122	170
Rank	1	2	2	1	1	2	1	2

Table 4.5: WCMP Ranking Position

Source – Authors Compiled

According to above table, industry average has been taken mean value of component of working capital; ICP, DCP, CCP and CCC throughout 2014-2019. Finally, based on ICP, CCP and CCC, it is found that material sector is the better sector than CG sector and based on DCP, CG sector is the better sector than material sector.

5. Conclusion

This study attempted to assess the effect of WCMP on profitability through regression analysis using a six-year (2014-2019) dataset on eight material companies and eight capital good companies listed in CSE. The findings show that the WCMP has a statistically significant and a marginal impact on ROA. As per the regression analysis, ICP has higher significant negative relationship with ROA in both industries. This relationship is consistent with (Paul & Mitra, 2018), (Nimalathasan, 2010). Besides, Further, the profitability of Material Sector is more negatively sensitive to Debtors Conversion Period (DCP) and more positively sensitive to Creditors Conversion Period (CCP). Furthermore, the Cash Conversion Cycle (CCC) is more negatively sensitive to the profitability of CG Sector. According to sector wise ranking analysis, Material Sector manage the WCMP better overall.

Further, the Material Sector is more sensitive to DCP and CCP. Therefore, should provide more attention towards better management of debtors and creditors. The CG sector required to pay attention towards the overall working capital management. Therefore, the managers should ensure the better working capital management practices are in place.

Future study can be done on comparison for the impact of WCMP on profitability selecting companies from other various sectors as per GICS with different WCM ratio can be used to measure WCMP. Various kind of ratio calculation can be used to measure the WCM in companies such as current ratio, liquid ratio, current asset to total

asset ratio, current liability to total assets ratio, inventory to current assets ratio, working capital turnover ratio est. The future research can use those ratios to measure the WCM practice.

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