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Role of working capital management in corporate profitability: a case of manufacturing sector

Muhammad Usman¹, Muhammad Bilal Khan Lodhi¹, Asim Mirza¹ and Sadia Majeed² ¹Department of Management Sciences, COMSATS Institute of Information Technology, Sahiwal, Pakistan. ²Department of Management Sciences, The Islamic University of Bahawalpur.

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ABSTRACT

The main objective of the study is to empirically examine the impact of working capital management on Pakistani manufacturing corporate profitability. The study uses a sample of randomly selected companies from three manufacturing sectors i.e. consumer goods, chemical and construction & material for the period of five years ranging from 2006 to 2010. The correlation and panel data regression analysis were used to analyze the impact of working capital management on the corporate profitability. The results indicate that, the average collection period of account receivables, inventory conversion period and cash conversion cycle have strong negative relationship with corporate profitability while the current ratio has positive relationship with operating profit. The study also finds that the firm size and current assets to total assets ratio has significant positive relationship with corporate profitability. Findings indicate that finance manager can improve the firm profitability by focusing on each component of working capital. More specifically they can improve the firm profitability by reducing account receivable period, inventory conversion period and cash conversion cycle. We also find that average collection period is the most crucial component of working capital. So the manger can add value to the firm by fastening the account receivable conversion period.

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Introduction

Working capital management is the management of current assets like cash, cash equivalents, account receivables & stock in trade and current liabilities. It involves the decision how much to invest in current assets while keeping in mind principal of tradeoff between risk and return. It is similar to management of liquidity and theoretically it has negative relationship with corporate profitability. There are two dimensions to examine working capital management; static and dynamic view (Moss and Stine, 1993). Static view uses traditional liquidity ratios like current ratio as measure of corporate liquidity and it focuses on the corporate liquidity at certain given time. Dynamic view uses the cash conversion cycle to measures corporate liquidity which focuses at the corporate ongoing liquidity from its operations. It is the more popular yard stick of working capital.

Keown *et al.* (2003) describes cash conversion cycle as the sum of average collection period plus number of day's sales in inventory minus average payment period of accounts payable. It is negatively related to the corporate profitability. When the cash conversion cycle declines the corporate profitability increases because this is due to efficient utilization of working capital and vice versa. A shorter cash conversion cycle shows that firm is speeding its receivables and slowing down its payments and also managing its inventory efficiently. It can be reduced by shortening the inventory period through rapid manufacturing and selling of products or by reducing the collection or stretching the payments by slowing down payments.

Efficient working capital management is speeding the cash inflows (receivables), slowing down the payments (payables) and by expediting inventory turnover. The firm with optimal level of working capital leads toward profitability and maximize the share holder's value. On the other hand investment in finished goods inventory and relaxed trade credit terms leads towards higher sales. Investment in the inventory saves the firm from the risk of stock out. Increased trade credit period encourage sales by allowing customer to judge quality before payment (Deloof and Jegers, 1996). While stretching payment period (accounts payables) allows the firm to confirm the quality of the purchased products. Cash conversion cycle is commonly used measure of working capital management which was introduced by (Richardes and Laughlin, 1980).

Working capital management plays a significant role in profitability of the firms because it has direct effect on the corporate profitability and liquidity (Rehman and Nasr, 2007) and has indirect effect on the corporate value (Gentry *et al.*, 1990). For maximization of the share holders value the overall corporate strategy must include element of efficient working capital management (Ganesan, 2007). So that efficient working capital management could maximize the share holder's value by increasing the free cash flows (Afza and Nazir, 2007). Vijayakumar (2011) recommends that companies can gain the competitive advantage by efficient management of working capital. So every component of working capital like cash, account receivable and stocks plays pivotal role in profitability of any company.

Different researchers have analyzed the relationship between working capital management and corporate profitability. Some have found that companies can improve their profitability by reducing the cash conversion cycle (see Garcia Teruel and Martinez-Solano, 2007: Ebben and Johnson, 2011 and Gill *et al.*, 2010). In contrast, some of the researchers have found significant positive relationship between cash conversion cycle and corporate profitability (see Gill *et al*, 2010 and Bana, 2012). But Nobanee et al. (2011) found this relationship insignificant for consumer goods companies and services companies. Theses contradicting results recommend reinvestigation of this relationship. Most of the research work has been done with reference to developed economies but fewer studies have been done with reference to emerging economies like Pakistan. So this is the motivation behind this study. This work contributes to the working capital literature by analyzing the impact of working capital management on the corporate profitability of Pakistani manufacturing industry.

To provide the full insight of the topic this study uses both dynamic and static views as measure of working capital management. Purpose of this study is to investigate the effect of working capital management on the profitability in Karachi Stock Exchange (KSE) listed companies. The study covers a sample of 32 randomly selected companies for the period of five years covering 2006-2010. These companies have been chosen from three manufacturing sectors i.e. material & construction, chemical and consumer goods so as to maximize the generalizability of the study.

Rest of the paper is organized in this way. Section 2 represents the review of existing literature; Section 3 discusses the theoretical framework for the study; Section 4 describes the methodology used in the study; Section 5 represents the empirical results; and Section 6 concludes the study.

Literature review

Many studies have been conducted on the relationship between working capital management and corporate profitability. Different researchers have analyzed the impact working capital management on profitability in different backgrounds and found that efficient working capital management has direct impact on profitability of firm. Following are some of the relevant studies that have focused on measuring the same relationship.

Most of the researchers have empirically proved that cash conversion cycle has significant negative relationship with the corporate profitability (Shine and Soenen, 1998; Eljelly, 2004; Padachi, 2006; Rehman and Nasr, 2007; Vishnani and Shah, 2007; Garcia-Teruel and Martinez-Solano, 2007: Uyar, 2009; Talha et al., 2010and Raheman et al., 2010). But some researchers have also found positive impact of cash conversion cycle on firm profitability (see Gill et al., 2010 and Abuzayed, 2012). Abuzayed (2012) has analyzed the impact of working capital management on the corporate profitability of small emerging market namely Amman stock exchange. He found positive impact of cash conversion cycle on the firm profitability. Based on the results they concluded that more profitable firms are less motivated to manage their working capital.

Deloff (2003) uses correlation and regression analyses and conclude that there is significant negative relationship between the average receivable collection period, days of sales in inventory & average payment period and corporate profitability (operating income). The author recommends that manager of the firm can create value for company shareholders by speeding the receivable collection period and inventory days up to reasonable extent. Samiloglu and Demirgunes (2008) provide the empirical evidence about the working capital management impact on the profitability of firms in Turkey. Their results show the average collection period of accounts receivable, average conversion period of inventory and leverage affect the corporate profitability negatively but the sale growth has positive effect. They also conclude that cash conversion cycle, firm size and its total assets are statically insignificance. Mohamad and Saad (2010) analyze the impact of working capital management on the market valuation and firms' profitability. The correlation and multiple regression tests are used to analyze this impact. A sample of 172 firms for a period of 2003-2007 listed on Bursa Malaysia is used for the study and the results show there is negative relationship between working capital management (measured as cash conversion cycle, current assets to current liability ratio and current liabilities to total asset ratios) and profitability (measured as Tobin Q as a proxy for market value, return on total asset ROA and return on equity ROI). They also reported positive and significant relationship between current assets to total assets ratio and firms profitability.

Gill et al. (2010) examine the effect of working capital management on the profitability of the firms. This study uses a sample of 88 manufacturing firms listed on New York stock exchange for a period of 2005-2007. They find that the working capital management (as measured through cash conversion cycle) has significant positive impact on profitability of the firm. They further report that collection period of accounts receivables is most crucial component among other components of cash conversion cycle. They report no significant relationship between the number of days inventory and firms profitability. Based upon the empirical evidences they suggest that the managers can generate value for share holders by accelerating the collection period. Hayajneh and Yassin (2011) study the relationship between working capital management and the corporate profitability by using correlation and regression test and find that there is significant negative relationship between average collection period of account receivables, inventory conversion period & over all cash conversion cycle and corporate profitability. They report that there is positive relationship between sales size and growth of sales with corporate profitability. They suggest that the manager can manage the working capital efficiently by reducing number of day's accounts receivable through accelerating collection secondly by reducing the processing time of raw material conversion into finished product. So this will lead to reduction in cash conversion cycle.

Nobanee *et al.* (2011) examine the impact of cash conversion cycle on profitability of the firm. The study uses the generalized method of moment system estimation and a sample of 2123 Japanese non financial firms listed at Tokyo stock exchange for the time period of 1990-2004. The results show negative relationship between the cash conversion cycle and the firms return on equity except for consumer goods and service sector. Ebben and Johnson (2011) analyze the impact of cash conversion cycle on the liquidity, invested capital and corporate profitability using a sample of 833 small US retail firms. Empirical results show that cash conversion cycle has positive relationship with invested capital and it has negative relationship with corporate profitability and its liquidity.

Generally the literature shows that reducing cash conversion cycle leads to improved firms profitability (see Lancaster and Stevens, 1996; Shine and Soenen, 1998; Lazaridis and Tryfonidis, 2006; Garcia-Teruel and Martinez- Solano, 2007; Raheman and Nasr, 2007; Uyar, 2009; Mohamad and Saad, 2010; Gill *et al.*, 2010; Hayajneh and Yassin, 2011; Ebben and Johnson, 2011and Nobanee *et al.*, 2011). It also supports that working capital components like average collection period of accounts receivables, inventory conversion period and accounts payable payment period have negative relationship with corporate profitability (see Raheman and Nasr, 2007 and

Hayajneh and Yassin, 2011). So based on the literature following hypothesis are developed.

H1: Companies with lower cash conversion cycle tend to have improved firm profitability

H2: Companies with lower collection period tend to have improved firm profitability

H3: Companies with lower inventory conversion period tend to have improved firm profitability

H4: Companies with lower accounts payable payment period tend to have improved firm profitability

Theoretical framework

Working capital investment is one of the important areas of corporate finance because the decision of working capital investment has a significant impact on the profitability and liquidity of the companies (Shine and Soenen, 1998). The firm has to make the decision about working capital management strategies based on the principal of trade off. There are two strategies about the working capital management one is aggressive and other is conservative. If the firm decides to invest less in the working capital this leads to higher profitability and the firm also has to face the greater risk in case of shortage in the stock, reduction in sale due to trade credit terms and losing the opportunity of discount from suppliers on early payments (Wang, 2002) But on the other hand investing too much in working capital components leads to low profitability and high liquidity. But who supports conservative investment policy argue that high investment in inventory will save the firm from shortage and also from price fluctuations (Blinder and Maccini, 1991). Allowing the trade credit can increase the sale of corporate products at low demand period (Emery, 1987) through permitting the customers to ensure the quality and quantity of the products (Smith, 1987) that leads to long term relationship building with customers (Ng et al., 1999). According to traditional belief paying earlier to supplier the firm can take benefit from early payment discount and also build the credit worthiness. But all these advantage are offset by decease in corporate profitability due to larger investment in current assets. To check the efficiency of working capital management one of the popular measure is cash conversion cycle. Generally literature recommends the cash conversion cycle should be as low as possible. Because shorter cash conversion cycle indicates firm is managing its cash flows efficiently. The positive outcome of cash conversion cycle indicates the need for borrowing for that specific number of days and waits for cash receiving from its customers. The negative amount of cash conversion cycle indicates the total number of days a company receive cash from customers before it has to make payment to its suppliers. So the negative results of cash conversion cycle show that firm does not need external financing to pay its suppliers (Hutchison et al., 2007).

This study will analyze the relationship between working capital management and corporate profitability. Here working capital management is measured through cash conversion cycle, current assets to total assets ratio and current ratio while corporate profitability is manifested by operating profit and gross profit. The study also examines the impact of each component of working capital on the corporate profitability and its components are average collection period, average payment period and average conversion period of inventory. At the same time two control variables have been introduced i.e. financial leverage and firm size.

Methodology

Data and sample

To empirically examine the impact of working capital management on firm profitability the study uses a sample of 32 manufacturing firms listed at Karachi Stock Exchange (KSE). These firms are from three different sectors i.e. construction & material, chemical and consumer goods which are selected randomly from all manufacturing sectors of KSE. To analyze the impact this study uses five years data ranging from 2006-2010. Data is extracted from the publically available annual reports of the firms. These annual reports are accessed through corporate websites. Firms in Financial sector are excluded from the sample because of their different nature of business. **Variables**

The variables used in this study are supported by the literature and theory their explanation is given in the table 1.

Model Specification

First the study applies Pearson correlation analysis to check the association among all dependent, independent and control variables. Secondly multiple regression analysis is used to examine the impact of working capital management on corporate profitability. So following eight regression models are developed:

Where $(OP)_{i,t}$: operating profit of firm i in year t; $(GP)_{i,t}$: gross profit of firm i in year t; $(CCC)_{i,t}$: cash conversion cycle of firm i in year t; $(ACP)_{i,t}$: average collection period of firm i in year t; $(APP)_{i,t}$: average payment period of firm i in year t; $(ICP)_{i,t}$: inventory conversion period of firm i in year t; $(CR)_{i,t}$: current ratio of firm i in year t; $(CATAR)_{i,t}$: current assets to total assets ratio of firm i in year t; $(FL)_{i,t}$: financial leverage of firm i in year t and $(SIZE)_{i,t}$: log natural of assets of firm i in year t.

Results and Discussion Descriptive Analysis

The descriptive analysis represents the minimum, maximum, average and standard deviation of the variables used in the study. The mean of the average collection period is 21.8 days with the standard deviation of 20.8 days. The minimum average payment period is 0.34 days and maximum average payment period are 1141.7 days. The mean value of average payment period is 38.3 days with standard deviation of 104.1 days. The average inventory conversion period of the firms is 69 days with 59 days of standard deviation. The cash conversion cycle used to check the efficiency of working capital management has minimum value of -764.4 days and maximum of 333.2 days. The average cash conversion cycle is 52.1 days with 98 days of standard deviation. It shows that on average firms need external financing for 52.1 days. The average of operating profit of the firms used as a sample is 1625.1 million with standard deviation of 2979.99 million rupees. It shows that value of operating profitability can deviate from average to both sides by 2979.99 million rupees.

Pearson's Correlation Coefficient analysis

The study uses Pearson's correlation analysis to check the association between working capital components and firms profitability. The table 2 shows the results of correlation coefficient between the variables.

The correlation coefficient between ACP & OP is -0.254 and ACP & GP is -0.246 at 1% level of significance. That shows the firms with higher collection period will tend to exhibit low profitability. The correlation coefficient between ICP & OP is -0.275 and -0.297 between ICP and GP at significance level of 1%. It indicates that the firms whose inventory conversion period is low will enjoy higher profitability. The CCC shows negative coefficient of -0.194 and -0.188 with OP and GP respectively at 5% level of significance. That indicates the firms can increase the profitability by reducing the cash conversion cycle. The correlation coefficient also shows that firm size has positive and significant relationship with firm profitability. The correlation coefficient reveals that SIZE has significant negative relationship with ICP, ACP and CCC. It indicates that larger firms are more efficient in working capital management as compared to smaller firms.

Regression analysis

Regression analysis has been applied to examine the impact of working capital management on corporate profitability. To draw conclusion using regression analysis its certain assumption must be true (Berry, 1993). Before running the regression models these assumptions were checked. Linearity assumption was checked through scatter diagram. Normality assumption was verified through normal probability plots of the residuals which show the data is normal. To diagnose the first order autocorrelation Durbin Watson (D-W) test was applied. Its value ranges from 1.63 to 1.95 which is closer to 2 in all regression models (see table 5). It shows regression model is appropriate. High correlation problem between the independent variables is verified through correlation matrix. The correlation coefficient between different independent variables remains below 0.8 which is below the harmful limit. The problem of multicollinearity is verified through variance inflationary factor (VIF) which remained below 2 in all models and tolerance which remained above 0.5. These results show there is no problem of multicollinearity between independent variables. So the regression analysis is suitable for this study and we don't need to go for weighted or generalized least square.

After checking the regression assumptions regression models are conducted on 160 corporate-years. The results of regression models are shown in table 6. The R^2 of regression models are (.476, .497, .450, .457, .463, .482, .466, and .482) which indicates that (47.6%, 49.7%, 45 %, 45.7%, 46.3%, 48.2%), 46.6%, and 48.2%) variation in dependent variable is explained by independent variables. The value of R^2 is much better than the study by the Rehman and Nasr (2007) who reported 32.8%, 33%, 32% and 30%.

The results of the regression models 1 and 2 show negative coefficient for ACP at 99% level of confidence. It shows that average collection period has negative impact on operating profit and gross profit. It implies that companies can improve their profitability by reducing their collection period. Based on the regression results H_2 is accepted. Our results are aligned with Deloof, 2003; Raheman and Nasr, 2007; Gill et al. 2010; and Hayajneh and Yassin, 2011 who also reported inverse relationship between firms profitability and average collection period. The coefficient of current ratio is positive but insignificant in model 1 but it is negative and significant at 95% level of confidence in model 2. It indicates that current ratio has negative relationship with gross profit. It implies that companies can improve their profitability by reducing their current ratio. These results of current study confirm the results of previous studies conducted by Shine and Soenen, 1998; Raheman and Nasr, 2007; Talha et al., 2010; and Mohamad and Saad, 2010. However, Sayuddzaman (2006) find positive relationship with firm profitability. The coefficient of CATAR is positive and highly significant at 99% level of confidence in both models 1

and 2. It shows that companies having higher current assets to total assets ratio have higher profitability. So our results are consistent with the findings of Afza and Nazir, 2007; Raheman and Nasr, 2007; Nazir and Afza, 2009 and Mohamad and Saad, 2010. The regression results also show firm size has positive impact on corporate profitability measured through OP and GP. It means larger firms are more profitable as compared to smaller firms. The study by Garcia-Teruel and Martinez-Solano, (2007) and Raheman and Nasr, (2007) also reported positive relationship between corporate size and profitability. The coefficient of financial leverage is positive in model 1 and negative in model 2 but it is insignificant relationship with financial leverage.

In regression model 3 and 4 the average collection period is replaced by average payment period and other variables remained same. The coefficient of APP is positive but it is insignificant in both models. The study sample represents no significant association between firm profitability and average payment period so H_4 is rejected. The current study findings are consistent with the finding of Gill et al. (2011) who also reported positive and insignificant relationship between APP and corporate profitability. The other variables are also significant in these models as in model 1 and 2. The coefficients of CATAR and SIZE represent positive and significant impact on firm profitability as measured by GP and OP. The coefficient of CR represents negative and significant impact on GP at 90% level of confidence. But the coefficient of current ratio is positive and significant at 90% level of confidence in model 3. It shows increase in current ratio will lead to increase in firm profitability measured through operating profit. The study by Sayuddzaman, (2006) also reports positive relationship between firm profitability and current ratio. As in model 1 and 2 FL coefficient is insignificant in these models.

 $\begin{array}{l} Operating \ Profit = -\ 33090 \ -\ 6.67 \ (ICP) \ +\ 554.80 \ (CR) \ + \\ 5958 \ (CATAR) \ +\ 434 \ (FL) \ +\ 3285 \ (SIZE) \ +\ e_{i,t} \ (Model\ 5) \\ Gross \ Profit = -\ 41080 \ -\ 11.71 \ (ICP) \ -\ 632.10 \ (CR) \ +\ 10300 \\ (CATAR) \ -974.60 \ (FL) \ +\ 4271 \ (SIZE) \ +\ e_{i,t} \ (Model\ 6) \end{array}$

The coefficient of ICP is negative and significant at p value of 0.000 in model 5 and 6. It means inventory conversion period has negative and significant impact on GP and OP. which implies that companies can improve their profitability by shortening the inventory conversion period so H_3 is accepted. The study results confirm the findings of Garcia-Teruel and Martinez-Solano, 2007; Raheman and Nasr, 2007 and Hayajneh and Yassin, 2011. The other variables are also significant as they were in previous models. Firm size and current assets to total assets ratio are linked positively and significantly with corporate profitability. The current ratio has negative and significant impact on gross profit and has positive relationship with operating profit. The regression results of model 5 and 6 also indicate insignificant relationship of financial leverage with corporate profitability.

The coefficient of cash conversion cycle is negative and significant in both models. The CCC coefficient is significant at 95% level of confidence in model 7 and it is significant at 99%

level of confidence in model 8. So coefficient results shows that the cash conversion cycle has negative relationship with corporate profitability measured through gross profit and operating profit so H_1 is accepted. It implies that companies can improve their profitability through shortening the cash conversion cycle. The result of the study confirms the findings of (Lancaster and Stevens, 1996; Shine and Soenen, 1998; Lazaridis and Tryfonidis, 2006; Garcia-Teruel and Martinez-Solano, 2007; Raheman and Nasr, 2007; Uyar, 2009; Mohamad and Saad, 2010; Gill et al., 2010; Hayajneh and Yassin, 2011; Ebben and Johnson, 2011and Nobanee et al., 2011). Other variables show same results as in previous models. The CATAR and SIZE has positive and significant impact on corporate profitability. The coefficient of CR is negative and significant at

10% in model 8 but it is positive in model 7. It implies that firms with higher current ratio have to face low gross profit. These results are consistent with findings of (Shine and Soenen, 1998; Raheman and Nasr, 2007; Talha et al., 2010; and Mohamad and Saad, 2010) who also reported negative relationship between CR and corporate profitability. The results also show that current ratio has positive and significant relationship with corporate profitability measured through operating profit. So this finding is consistent with the Sayuddzaman, (2006) who also reported same relationship. The FL also remained insignificant in these models.

Symbol	Variable Description						
Dependent variables							
OP	Operating Profit	Net profit + tax + finance cost					
GP	Gross Profit	Sales - cost of goods sold					
Independent variables							
ACP	Average Collection Period (Account receivable/sales)*36						
ICP	Inventory Conversion Period	(Inventory/cost of goods sold)*365					
APP	Average Payment Period	(Accounts payables/cost of goods sold)*365					
CCC	Cash Conversion Cycle	ACP+ICP-APP					
CR	Current Ratio	Current assets/current liabilities					
CATAR	Current Assets to Total Assets Ratio Current assets/total assets						
Control variables							
FL	Financial Leverage Total debt/total assets						
SIZE	Firm Size Natural logarithm of total assets						
Table 2. Regression Model							

Table 1: Description of the variables

No	Regression Model
1	$OP_{i,t} = \beta_0 + \beta_1 (ACP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
2	$GP_{i,t} = \beta_0 + \beta_1 (ACP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
3	$OP_{i,t} = \beta_0 + \beta_1 (APP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
4	$GP_{i,t} = \beta_0 + \beta_1 (APP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
5	$OP_{i,t} = \beta_0 + \beta_1 (ICP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
6	$GP_{i,t} = \beta_0 + \beta_1 (ICP)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
7	$OP_{i,t} = \beta_0 + \beta_1 (CCC)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$
8	$GP_{i,t} = \beta_0 + \beta_1 (CCC)_{i,t} + \beta_2 (CR)_{i,t} + \beta_3 (CATAR)_{i,t} + \beta_4 (FL)_{i,t} + \beta_5 (SIZE)_{i,t} + e_{i,t}$

Table 3. Descriptive statistics of 160 corporate years of 32 companies for 2006-2010

Variable	Minimum	Maximum	Mean	Std. Deviation
ACP	0	93.54	21.88	20.89
APP	0.34	1141.73	38.3	104.14
ICP	ICP 1.28		69	59.11
CCC	-764.49	333.28	52.17	98.02
CR	0.17	7.13	1.14	0.73
CATAR	0.06	0.80	0.36	0.18
OP	-651	17400	1625.1	2979.99
GP	-515	20600	2252.7	3725.15
FL	.05	.94	0.63	0.18
SIZE	8.2	10.87	9.77	0.61

Table: 4 Correlation Matrix

	ACP	APP	ICP	CCC	CR	CATAR	OP	GP	FL	SIZE
ACP	1									
APP	140	1								
ICP	.313**	.532**	1							
CCC	.552**	770***	.107	1						
CR	103	096	011	.073	1					
CATAR	.433**	198*	.396**	.542**	.340**	1				
OP	254**	025	275**	194*	.227**	.056	1			
GP	246**	041	297**	188*	.061	.088	.881**	1		
FL	.196*	.104	.147	.020	467**	144	064	069	1	
SIZE	350**	.048	434**	388**	024	441**	.565**	.555**	.053	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

Conclusion

The purpose of this study is to empirically examine the impact of working capital management on corporate profitability. The study uses both static and dynamic views of working capital. Based on the results it can be concluded that companies can improve their profitability by reducing collection period of accounts receivables, inventory conversion period and cash conversion cycle. The current ratio has positive relationship with operating profit and it has negative impact on gross profit. The firm size has positive relationship with firm profitability. That indicates bigger firm enjoys more profit as compared to smaller firm. The results also show the current assets to total assets ratio has positive and significant impact on firm profitability. It implies that firm profitability will increase with the increase in current assets to total assets ratio. The study does not find significant relationship between financial leverage and firm profitability. Overall the results are constant with findings of (Lancaster and Stevens, 1996; Shine and Soenen, 1998; Lazaridis and Tryfonidis, 2006; Garcia-Teruel and Martinez-Solano, 2007; Raheman and Nasr, 2007; Uyar, 2009; Mohamad and Saad, 2010; Gill et al, 2010; Hayajneh and Yassin, 2011; Ebben and Johnson, 2011 and Nobanee et al., 2011) and contradicts the findings of (Gill et al, 2010 and Bana, 2012).

Based on the results we suggest that the companies can distinguish themselves by managing the working capital efficiently. Results show the importance of working capital management because it has significant impact on corporate profitability. The study recommends that financial mangers of Pakistani manufacturing firms can improve the profitability of firms by reducing the collection period, fastening the inventory conversion period and decreasing the cash conversion cycle. So the mangers should efficiently manage the current assets and current liabilities.

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