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WORKING CAPITAL MANAGEMENT AND CORPORATE PERFORMANCE OF TEXTILE SECTOR IN PAKISTAN

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ABSTRACT

Textile sector is considered as the backbone of Pakistani economy. The profitability and sustainability of the textile sector is very important for the economic growth of Pakistan. Working capital has a major role in the performance of any business entity. In this article the authors have tried to find out the impact of working capital management on the performance of textile sector companies. For the above said purpose, the data of 30 textile sector companies listed at Karachi Stock Exchange having maximum market share were analyzed. All the manufacturing firms generally face problems with their collection and payments schedule. The results have indicated that sales growth, receivables turnover, payables turnover, inventory turnover, gross working capital turnover, current assets turnover, and financial debt ratio have a significant impact on the profitability of the textile companies of Pakistan. The study also concludes that firms in Pakistan are following conservative working capital management policy due to shortage of funds; thus, the firms need to concentrate on the collection policies. There is a great need for the efficient policies for the management of working capital. Furthermore, the efficient management and least cost financing can increase the profitability of textile companies.

INTRODUCTION

Textile sector is largest sector of Pakistan's economy. The share of textile sector in the exports and GDP has remained between the 50 percent to 60 percent in the last years. Considering the importance of the sector, in depth analysis at industrial level as well as firm level is required. In this article, working capital management of textile sector has been analyzed. Working capital management plays a very important role in the profitability, risk, creation of shareholder value, as well as value of the firm (Smith, 1980).

Working capital management is simply the management of firm's current assets and current liabilities to maintain the current assets and current liabilities at a most favorable level. Because higher level of working capital leads to underutilization of resources and lower level creates problems in the production and running processes, therefore, an optimal level is required. Major time of the financial managers is consumed in identification of optimal level of current assets and liabilities in accordance with operations (Lamberson, 1995, pp. 45-50). Fixed assets are used in production while current assets are utilized in production, thus, working capital is considered as lifeblood and life giving force for the business entity (Eljelly, 2004). A firm can reduce its investment in fixed assets by leasing or renting, but it cannot adopt the same policy in case of working capital (Filbeck & Krueger, 2005). The greater the relative proportion of liquid assets, lesser is the risk of running out of cash or stock (Shin & Soenen.L, 1998).

The main purpose of any firm is to maximize profit along with maintaining liquidity. Increasing profits at the cost of liquidity can create serious issues for the firm. Thus, there should be a balance between the two, liquidity and profitability. A firm cannot ignore profits for a longer period of time and likewise cannot ignore the issue of liquidity (Raheman & M.Nasr, 2007). The tradeoff between profitability and liquidity is very important because if a company do not pay proper attention towards its working capital management then the firm is likely to fail or to face bankruptcy (Kargar & Blumenthal, 1994). It requires continuous monitoring to maintain the optimal level between the components of working capital. Cash, marketable securities, accounts receivables, accounts payable, and inventory management are the major components of working capital management and play a very important role in the performance of a firm. The major challenge to manage working capital is to create and retain a balance between each component of working capital. Efficient working capital management is essential for value creation of firms. The success of a business heavily depends on the ability of the executives to efficiently manage receivables, inventory, and payables (Filbeck & Krueger, *An Analysis of Working Capital Management results across Industries.*, 2005).

Efficient working capital management is planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet the obligations and

also reduces excessive investment in the current assets that will hinder the profitability. Working capital management has become the most important issues where many executives are finding it difficult to identify the important drivers of working capital and the optimal level of working capital.

A firm may adopt an aggressive policy by reducing current assets in the total assets or by increasing current liabilities in total liabilities. Higher level of current assets may result in decline of profit; on the other hand lower level of current assets may result in liquidity issues and stock outs (Horne & Wachowicz, 2004).

The literature has shown number of variables that are responsible for the profitability of the firm. In this study, explanatory variables have been chosen on the basis of alternative theories of capital management and profitability. The accrual method of accounting has been criticized due to its discretionary nature of choosing alternative accounting techniques to manage profits which usually mislead the shareholders (Schipper, 1989).

There is a significant role of cost free capital sources. In liabilities the proportion of cost free capital sources, which usually have zero cost associated with them is significant. These sources help to support the utility's investment frequently. Cost free capital sources like customer supplies that contain deferred tax and tax credits which are without cost. Then advances from customers and miscellaneous current and accrued liabilities are also without any cost. Typically, the rate of return is based only upon certain specific capital sources like debt and equity. Thus, the benefits of cost free capital sources should be recognized while ratemaking. The best way is to determine the revenue requirements. Another very popular measure of working capital management is cash conversion cycle. Cash conversion cycle is the time span between the receivables turnover and the payables turnover. A long cash conversion cycle might increase profitability but it should not be at the cost of image of the firm.

The high level of current assets may reduce the liquidity risk associated with opportunity cost of funds that a normal amount may have invested in noncurrent assets. Thus, the impact of working capital on profitability is significant, but very few studies have been conducted to examine the relationship. The financial management of small textile companies

in the developing countries like Pakistan is an ignored area of research. There are very few studies that have been conducted on the impact of working capital management over the performance of firms. Lack of evidences and researches on the relationship between working capital management and the firm performance with reference to Pakistan provide a strong motivation for evaluating textile sector of Pakistan because it is one of the largest sector of the economy.

Objectives of the Study

The study objectives are to examine the working capital management of the textile sector companies, and in particular:

- To identify significant components of working capital that have significant impact on returns of shareholders; and
- To find the level of influence of each of components of working capital management on profitability.

LITERATURE REVIEW

Literature on corporate finance traditionally focused on long term financial decisions. Whereas, short term financial decisions are ignored which are also a very important component of corporate financial decisions? Management of working capital is vital for the smooth running of a business without risk and maximum profits, which requires a balance between the two approaches i.e. conservative and aggressive (Smith, 1980). Uyar (2009) examined the relationship between cash conversion cycle and profitability using ANOVA and correlation analysis. The results showed that retail and wholesale industry use shorter cash conversion cycle as compared to manufacturing industries. They also examined that there is a negative correlation that exists between cash conversion cycle and profitability. Most of the studies in the field support the traditional belief of working capital management which states that reducing the working capital increases the profitability. Efficient working capital management helps to maximize the value of firm and increases the returns of shareholders(Deloof, 2003;Wang, 2002). Contrary to the traditional belief, more investment

in working capital may also increase the returns because huge investment in current assets reduces the interruption of production process and helps the firms to enjoy the economies of large scale (Blinder & L.Macinni, 1991). However, the studies conducted in Pakistan concluded that the return of shareholders can be maximized by effectively managing the working capital (Afza & S.Nazir, 2008). Lack of evidence of working capital management and its impact on the firm performance in case of textile sector of Pakistan is the main reason behind this article. This is an attempt to fill the gap in the literature.

Current ratio, liquidity ratio, receivables turnover ratio, and working capital to total assets ratio had a significant impact over the profitability (Singh & Pandey, 2008). Profitability measured through gross operating profit and the cash conversion cycle is also correlated. The authors used a sample of 131 companies listed at Athens stock exchange and applied regression analysis. They argued that by proper handling the cash conversion cycle and other components of working capital managers can maximize the returns of shareholders. Rehman and Nasr (2007) have concluded that there exists a negative relation between receivables turnover, inventory turnover, and collection period and the profitability. They have selected a sample of 94 Pakistani companies.

Working capital management is vital for all the companies regardless of their size but the small firms should be more conscious about that (Kargar & Blumenthal, 1994). Usually businesses have huge proportion of working capital as compared to total assets, thus, this proportion should be handled efficiently and effectively. Small businesses are not good in managing their working capital. Small businesses usually suffer from under capitalization and they cannot afford to starve of cash (Wilson, & Howorth, 2000).

Working capital meets short term requirements of a business during the course of business working capital keeps on changing its shapes. The business need to maintain adequate working capital, it acts as blood in the life of a business. In case of weak management of the working capital the growth and smooth running of the business is affected. The success of a business is dependent on generating cash in excess of disbursements. A firm may be very profitable, but if that profit is not translated into cash the firm may face severe cash problems, keeping in view the dual objective of profitability and

liquidity must be synchronized and one should not intercept the other for a long period of time. Managers can enhance the earnings potential of a company by reducing the number of days of receivables turnover and inventories. This is highly significant for small growing companies who need finance (Deloof, 2003). The standard, measure for working capital management is cash cycle and there exists a strong relationship between working capital management and return (Shin & Soenen, 1998).

In short, the literature review in general indicated that a strong relationship exist between working capital management and profitability, but after having a condensed literature review an ambiguity arises that which variable or ratio of working capital management is more influential than the other. It varies from industry to industry. The current research investigates the relationship between a set of such variables and the profitability of a sample of Pakistani textile companies that are listed at Karachi Stock Exchange. This study will contribute to the literature by developing the relationship between working capital management and the returns of shareholders in two different ways. First, it focuses only on textile industry of Pakistan and highlights the variables that have a significant influence on the profitability of the textile companies of Pakistan. Secondly, this study will also try to correlate the findings of pre conducted studies on the working capital management in Pakistan and the profitability of firms. Thus, this study adds substance to the existing theories that have been developed by previous researchers.

THEORETICAL FRAMEWORK

Working capital management can be defined as management of current assets and current liabilities. Value creation of shareholders is not possible without proper management of working capital. In this research following variables have been taken on the basis of prior studies.

Net Operating Profitability

Net operating profitability ratio represents the net operating profit percentage out of total sales. Net operating profitability ratio represents the efficiency of management in growing profits and reducing costs. Net operating profits does not include the expenses of

interest and taxes, therefore, represent the true profit making capacity of the firm (Correia, Flynn, Uliana, & Wormald, 2007). Thus, net operating profit is a key metrics that is used in the evaluation of a company.

Receivables Turnover

Receivables turnover ratio is a measure that is used to quantify a firm's effectiveness in collecting its proceeds from sales. This ratio is also considered as a part of activity ratios. It can be calculated by dividing sales with average receivables. By extending the time of receivables turnover the firms are indirectly extending interest free loans to the clients. A high ration depicts that either the company is working on cash basis or it is very efficient in collection policy. On the other hand, a low ratio depicts that company should reassess its collection policy (Horne & Wachowicz, 2008).

Inventory Turnover

Inventory Turn Over shows the number of time the company converts its raw material into finished goods. Inventory is usually the largest component of the working capital. The management of inventory turnover is very important for the efficient performance as it is the largest item of the working capital. A low inventory turnover as compared to the industry shows that either the company is ineffective in inventory management or the company has obsolete inventory and the company is not writing off to avoid losses against its income. It is desired to have high inventory turnover ratio (Shim & Siegel, 2008).

Payables Turnover

Payables turn over shows that how often the company pays off its suppliers. This ratio is calculated by dividing total purchases with average accounts payables. This ratio also tells the paying capacity of the company and also depicts the efficient management of cash by the company. This ratio is opposite to receivables turnover ratio, the lower the ratio better for the company it is. The inverse situation is acceptable only when the inventory turnover ratio is high.

Gross Working Capital Turnover

This ratio shows the velocity of utilization of net working capital of the company. This ratio tells the efficiency of the company in using its working capital. High value of this ratio is considered good for the company. A low working capital ratio also shows lack of funds with the company. This ratio is calculated by dividing gross working capital with turnover of the company (Adair, 2011).

Current Assets to Total Assets

This ratio is helpful in finding the proportion of current assets out of total assets in the company. This ratio also indicates the portion of resources that are circulated again and again. This ratio is calculated by dividing current assets with total assets (Horne & Wachowicz, 2004).

Current Liabilities to Total Assets

This ratio is helpful in finding that up to what extent the resources are financed through current liabilities. This ratio can be found by dividing current liabilities with total assets. This ratio shows that how much resources are financed through short term liabilities.

Financial Debt

Debt ratio is a very important ratio which shows that out of total assets how much assets are financed through debt. A debt ratio is also important for a bank to identify the risk in extending the debt to a company. It is a ratio of proportion of debt a company has as compared to its assets. It also gives general idea about the leverage of the company. This ratio is calculated by dividing total debt with total assets (Horne & Wachowicz, 2008).

Sales Growth

This ratio represents the growth in sales in terms of percentage. This ratio can be calculated by dividing the changes in sales with the last year's sales. Sales growth is helpful in identifying the growth of young companies that have fewer profits or no profits.

Current Ratio

Current ratio is the most common ratio to find the liquidity of the company. This ratio represents the financial performance of the company. If this ratio is more than one then it

shows that the current assets of the company exceed its current liabilities. This ratio can be calculated by dividing the current assets with current liabilities. Most of the times this ratio is calculated in conjunction with quick ratio which excludes inventories from the total current assets to find the actual capacity of the company to meet its current obligations (Shim & Siegel, 2008).

Hypotheses

The basic objective of this study is to identify the significant ratios that influence the performance of the textile sector companies in Pakistan. The operational hypothesis of the study is as follows:

- *H₀: Working capital management has no impact on performance of textile sector companies in Pakistan.*
- *H₁: Working capital management has a significant impact on performance of textile sector companies in Pakistan.*

Research Methodology

The purpose of the study is to evaluate the relationship between working capital management and earnings of textile sector of Pakistan. The aim of the study is to identify the significant factors that have major impact on the earnings per share or the earnings of the textile companies listed at Karachi stock exchange. In this study a comprehensive literature has been reviewed that was conducted on other sectors. The literature reviewed has helped in the identification of the significant variables that may have an impact on the earnings of the company.

The empirical evidences are based on the collection of financial statements of Pakistani textile companies. The reports were gathered from the stock market and websites of the companies. Earnings per share have been chosen as dependent variable and other ratios related to working capital management are taken as independent variables. The data of 30 textile companies of Pakistan has been gathered and ratios were calculated. The regression analysis has been run using SPSS 16. Regression analysis was chosen to find the impact of

independent variables over the dependent variable. The correlation values have also been calculated.

TABLE 1

Pearson Correlation coefficients between Variables of 30 Textile Companies

	EPS	Net operating profitability	Receivables turnover	Inventory turnover	Payables turnover	Working capital turnover	Current assets to total assets	Current liabilities to total assets	Financial Debt ratio	Sales growth	Current Ratio
Pearson Correlation	1.000										
EPS	1.000										
Net operating profitability	.251	1.000									
Receivables turnover	.459	.023	1.000								
Inventory turnover	.293	.072	.671	1.000							
Payables turnover	-.203	-.402	.462	.511	1.000						
Working capital turnover	.626	.314	-.657	-.647	-.746	1.000					
Current assets to total assets	-.474	-.161	.758	.283	.555	-.697	1.000				
Current liabilities to total assets	-.578	-.495	.749	.489	.770	-.759	.798	1.000			
Financial Debt ratio	.196	.300	-.595	-.583	-.562	.709	-.336	-.459	1.000		
Sales growth	.693	.648	-.561	-.270	-.416	.562	-.514	-.826	.394	1.000	
Current Ratio	.566	.752	-.253	-.387	-.536	.569	-.132	-.615	.487	.736	1.000

Correlation matrix of all variables included in the analysis is presented in the above mentioned table which is calculated based on data of 30 textile sector companies of Pakistan. The table shows that earnings per share are negatively associated with majority of the measures of working capital management. These results are consistent with the view that making payment to suppliers, collecting payments from customers earlier and keeping product or inventory in the stock for lesser time are associated with increase in profitability. It implies that if a firm is able to reduce the Net Trade Cycle period, it can enhance the profitability for the firm and will ultimately create value for the shareholders.

TABLE 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.961 ^a	.923	.888	2.235615352	1.973

a. Predictors: (Constant), Current Ratio, Current assets to total assets ratio, Inventory turnover, Financial Debt ratio, Payables turnover, Net operating profitability, Sales growth, Gross working capital turnover ratio, Receivables turnover

b. Dependent Variable: EPS

The model mentioned above shows that the relation between the independent and dependent variables is 96 % and independent variables are 92% explaining the variation in dependent variables. It means that 92% of the change in dependent variable is because of independent variables.

TABLE 3

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1193.739	15	132.638	26.538	.000 ^a
	Residual	99.960	15	4.998		
	Total	1293.698	15			

a. Predictors: (Constant), Current Ratio, Current assets to total assets ratio, Inventory turnover, Financial Debt ratio, Payables turnover, Net operating profitability, Sales growth, Gross working capital turnover ratio, Receivables turnover

b. Dependent Variable: EPS

The above mentioned ANOVA table is calculated to find the F value which is 26.53 which shows that the overall fitness of the model is good. The significance level is also 0.000 which is very good.

TABLE 4
Regression Results

Model	Un-standardized Coefficients			Sig.
	B	Std. Error	t	
1 (Constant)	-30.533	5.713	-5.344	.000
Net operating profitability	12.540	43.174	2.902	.042
Receivables turnover	82.777	52.965	3.563	.013
Inventory turnover	40.568	18.874	2.149	.044
Payables turnover	24.179	10.397	2.325	.031
Gross working capital turnover ratio	6.986	2.508	2.786	.011
Current assets to total assets ratio	50.440	37.163	1.357	.190
Financial Debt ratio	-79.019	33.299	-2.373	.028
Sales growth	2.780	16.940	2.164	.001
Current Ratio	6.556	8.052	3.566	.050

a. Dependent Variable: EPS

Research Equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 - \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8$$

- Y = Earnings per share
- X₁ = Net operating profitability
- X₂ = Receivables turnover
- X₃ = Inventory turnover
- X₄ = Payables turnover
- X₅ = Working Capital Turnover
- X₆ = Financial debt ratio
- X₇ = Sales growth
- X₈ = Current ratio

The model has been drawn using regression analysis. All variables were regressed to the level of significance to find their influence on the earnings per share. It was found that out of nine variables eight variables that are net operating profitability, receivables turnover, inventory turnover, payables turnover, working capital turnover, financial debt ratio, sales growth, and current ratio have a significant impact over the earnings per share on the textile companies of Pakistan. Among all of these statistically significant variables only one has negative affect over the earnings per share.

CONCLUSIONS

The main aim of the study was to identify the major components of working capital that affect the earnings per share of the company. The study empirically analyzed the impact of working capital over the performance of textile companies of Pakistan.

The results shows that for textile sector, the earnings per share are dependent on net operating profitability, receivables turnover, inventory turnover, payables turnover, working capital turnover, financial debt, sales growth and current ratio. For value creation the management of textile companies must try to keep receivables turnover maximum and payable turnover at minimum. The inventory turnover should also be maximized. The positive association between receivables turnover and profitability has been validated. Likewise, the payables turnover has shown a negative association with profitability. Gross working capital turnover and current assets to total assets ratio has also shown a very positive relation with profitability of the company. The negative relation of current liabilities to total assets shows higher degree of aggressiveness in working capital financing policy. The research also shows that leverage is negatively associated with profitability. Sales growth has shown a positive relationship.

Several policy implications can be drawn from the above mentioned findings of the study. The companies should stress on delaying payables without losing their credibility. The companies should encourage the aggressive collection policy without losing their market share due to squeezing the time period of receivables.

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