

Current Asset Management as the driver of financial efficiency in Textile Industry of Pakistan

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Abstract. The study aimed to explore the significance of the relationship between current asset management, and financial efficiency in the textile sector of Pakistan. Financial data were collected for 50 textile companies for the year 2001 to 2017. The researchers analyzed the study using panel-data estimation techniques like the fixed as well as the random-effect after applying the Hausman-test, and LM-test. Fisher type panel unit root test was also applied. The empirical results of the study indicate that current asset ratio as the measure of current asset management is a highly negatively significant driver of financial efficiency in the textile sector of Pakistan. Also, the controlling factors like leverage, and tangibility are significant factors of financial efficiency. The policymakers, and management of the companies in the textile sector of Pakistan should carefully consider current asset ratio for deciding on enhancing the financial efficiency of their firm as current asset ratio decreases financial efficiency in this sector. They should take careful decision in their current asset management practices.

Key words: Current Asset management, Financial Efficiency, Tobins Q Leverage, Textile sector, Pakistan

1 Introduction

1.1 Conceptualization of this Study

There are varieties of financing which can be required to run a business enterprise. First one is long-time period financing, and the second one is brief-term financing. Running capital is the part of a short-time period of financing. Operating capital consists of short-time period property, and quick-term liabilities which are called gross running capital. There's additionally networking capital which consists of deducting modern liabilities from the contemporary property. Working capital mainly performs a critical role within the increase of small-medium corporations. Operating capital does not closely describe the location of an inner company as nicely as it also shows the chance of lenders (Krishnan and Moyer, 1997). If we examine the

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previous economic crises then we will be capable of understanding that if you are the part of the growing country then you need to pay more attention to running capital control (Jokinen et al., 2008). Working capital control does not only effectively enable you to face monetary crises but also make contributions to competing for the marketplace in addition to growing profitability. In easy words, we can say that in case you attempt to find out the determinants, its manner that it's going to provide you good statistics for buying firm profitability (Akinlo and Asaolu, 2012).

Business cycle plays an essential role in running capital control. We will see that in a period of boom inventory requirement, and short-term liabilities increase in each type of region, and the length of low stock decreases because of the lower sale this is why purchasing on credit score additionally decreases. Seasonal changes in the sale have an effect on running capital management (Pandey, 2010). There are several reasons behind studies on working capital control, due to several past monetary crises, researchers conducted research on operating capital management as well as its additionally academic need. Functioning running control includes stock, money owed payable, and money owed receivable as an essential brief-term finance, and asset control (Ylä-Kujala et al., 2016). The elements of working capital control, and a pursuance between running capital administration and productivity has been considered by various analysts for instance Deloof (2003); Hill et al. (2010); Hsiao and Chiou (2012). Running capital control is basic as a result of its effect on firm productivity, and hazard notwithstanding its fee (Smith, 1980). Cash-conversion-cycle changed into a key segment of management of working capital (Gitman and Forrester Jr, 1977).

In actual feel we can say that the choices approximately, how a good deal we need to invest in inventory, and accounts receivable, how a whole lot to purchase on credit score related to Cash-conversion-cycle which indicates average quantity of days, begins from the date of raw material purchase from a supplier, generating sale then a collection of payments from customers (Ylä-Kujala et al., 2016). Previous researches mainly focuses on running capital control in larger corporations, however running capital management in the small-medium corporation is so crucial due to many companies comprise their belongings in form of modern asset, and their external supply of financing especially include present-day liabilities due to obtaining outside supply of financing lengthy-term possibility they have to face such a lot of hurdles within the capital markets (Petersen and Rajan, 1997). Danielson and Scott (2000); Vasta (2004) demonstrated that small-medium agency firms within America use supplier financing once they have run out of debt. It truly is why working capital management is imperative in small-medium establishments (Peel and Wilson, 1996).

1.2 Research Objective

The objective of the current study is to discover the significance of relationship between modern-day asset management elements (like cash-conversion-cycle, cash-conversion-cycle rectangular, modern-day asset ratio, and contemporary liability ratio), and financial performance (like Tobins Q, and Asset turnover ratio controlling other elements like growth, leverage, and tangibility of the belongings).

2 Literature Review

García-Teruel and Martínez-Solano (2007) portrayed the impact of working capital management on SME benefit which considers the consequences of running capital management on

small, and medium organization productivity. Investigators used panel records method for the reason for measuring running capital control outcomes on small-medium company profitability. Effects show that company price may be expanded by using reduced inventory as well as the wide variety of days first-rate. Small-medium business enterprises productivity and profitability additionally will be elevated through decreasing the cash-conversion-cycle. [Wasiuzzaman \(2015\)](#) defined the firm value, and working capital in an uplift market. A researcher used normal least regression for the motive of locating effects. Findings display that if we can control efficaciously running capital by way of reducing funding in operating capital then its result may be a better company price. According to literature, absolute confidence company fee could be increased if we manipulate effectively running capital but it has to face a few restrictions additionally, and its results may not be huge on unconstraint corporations.

[Pais and Gama \(2015\)](#) looked at operating capital control, and small-medium companies profitability evidence of Portugal. Panel regression, and instrumental variables have been used on the sample of 6063 small-medium businesses of Portugal. Findings of studies suggest that reducing in Cash-conversion-cycle might be in the result of better profitability of small-medium enterprises in Portugal. [Yazdanfar and Öhman \(2014\)](#) dignified the effect of cash-conversion-cycle on firm profitability. This is experiential research-grounded research which is based totally on Swedish facts. A researcher used an unrelated regression model on pass-section panel information. Outcomes show that the cash-conversion-cycle significantly effects on company profitability, also to manipulate variable age, firm size additionally impact on company profitability. [Nobanee \(2017\)](#) exalted modern belongings management of small-medium corporations.

Studies found out the connection between internet exchange cycle, and liquidity, and used generalize approach of second Dynamic Panel-information machine estimation with the robust widespread blunders for measuring this. Outcomes displayed that there may be negative but extensive dating between internet change cycle, and running capital management, and liquidity of small companies. [Martone \(2014\)](#) described profitable working capital control for industrial renovation companies. Analytical modelling utilized by researcher, and information obtained from financial statements of corporations. Employing using FAM version authors discover that there may be a terrible correlation among cycle time of working capital, and return on funding. The author additionally suggests that there may be so much important working capital control in upkeep carrier quarter purpose is that there are the gentle constant asset, and higher profitability. [Akinlo and Asaolu \(2012\)](#) keep in mind the determinants of working capital prerequisites in chose cited corporation in Nigeria. Panel information technique used, and pattern size consisting of 66 Nigerian companies. Effects indicate that sales boom, firms working cycle, economic interest, size, and everlasting working capital undoubtedly derive running capital policy. Authors additionally advocate that traditional valuation method for working capital can be suspicious as improved in working running capital can be in the result of growing enterprise uncertainties.

[Abuzayed \(2012\)](#) planned the results of operating capital control on SME profitability. The purpose of this research was to indicate that efficient running capital control can enhance company profitability, in addition to firm cost or no longer. Authors, used cash-conversion-cycle, and its components used for measuring operating capital management competencies. There are two overall performance measures utilized in this study, first one is accounting degree, and the second one is marketplace measure. For the sake of finding results sturdy evaluation estimation method was used, and outcomes display that company profitability undoubtedly was stricken by cash-conversion-cycle. [Wijewardana and Dedunu \(2017\)](#) described the effect of working capital on small, and medium businesses productivity, and profitability. The open-

ended questionnaire used for data collection which gathered from district Kurunegala. Working capital management calculated by having the inventory Conversion duration, common collection period, average charge length, and cash-conversion-cycle; Profitability is signified utilizing the return on the property. The look at meditated the modern Ratio, company Leverage, and income growth as the control variables. Findings show a non-significant relationship of the conversion period of inventory, the common-collection-period, the common-payment-duration, and the Cash-conversion-cycle with the SMEs profitability which measured through the go back on belongings. Besides, the research result indicates a negative relationship between company Leverage, and modern-day Ratio with the SMEs profitability, and income growth indicates a superb relationship with the go back on assets. Sooner or later, they have a look at indicates a negative relationship between working capital control, and SMEs profitability. [Enow and Brijlal \(2014\)](#) measured the effect of running capital control on profitability small-medium companies in South Africa. Researchers used regression evaluation for findings, and conclusion. Findings show that there is the positive relationship among some of the days account receivable, variety of days stock, and negative association between some of the days payable, and coins convection. Authors suggest that with the aid of decreasing operating capital, and coins conversion cycle profitability of the company as well as a firm fee will enhance.

3 Methodology of Research

3.1 Nature, and the Source

The current study uses the financial data for the selected 50 textile companies listed in PSX. The data for this purpose was taken from the financial statement of these companies from their respective websites for the year 2001 to 2017. The final dataset was in panel shape showing the number of observations as 850 (50 17) firm years.

3.2 Variables

The present study of current asset management as the driver of financial efficiency for the textile sector of Pakistan uses financial data of various variables which are explained in detail under their respective headings.

3.3 Dependent Variables

Financial efficiency (F.E) = The following variables indicating a financial efficiency which is used as a dependent variable

- **Tobins Q** = (Equity market value+ liability book value)/ Equity book value+ Liability book value) this technique used as a replacement of ROA for those firm who has more financial assets Gross operating income as a dependent variable.
- **Asset Turnover** = sale /total asset

3.4 Independent Variables

The following four independent variables were used as the measure of current asset management for the research study;

- **The Cash-conversion-cycle (CCC)** = $(\text{inventory} / \text{CGS}) \times 365 + (\text{AR} / \text{sales}) \times 365$ (AP/CGS) $\times 365$.
- **The Cash-conversion-cycle-square (CCC2)** = Cash-conversion-cycle multiply by cash-conversion-cycle.
- **Current assets ratio (CAR)** = Current asset ratio / Total asset ratio
- **Current liability ratio (CLR)** = Current liability / Total liability

3.5 Control Variables

In addition to the independent variables stated above, the following four control variables were used in the research study;

- **Size** = natural logarithm of asset
- **Growth** = Percentage change in sales revenue over the previous year $(\text{sale1} - \text{sale0} / \text{sale0})$
- **Leverage (DEBT)** = Total debt / total asset
- **Tangibility** = The proportion of Fixed-assets in total-assets.

3.6 Modelling of the Study

The contemporary research study uses the ratio of Tobin's Q as well as the ratio of assets-turnover as the outcome variables, while the Cash-conversion-cycle, cash-conversion-cycle-square, the current asset ratio, and the current-liability ratio are used as the independent-variables of this study. Also, the entity's size, entity's growth, leverage, and the tangibility-ratio are used as the control variables of this study. The economic, and econometric relationship between the dependent, and independent variables can be stated in their respective headings.

3.7 Economic Modeling

The following two economic models can be established based on previous research studies. To analyze the effect of current assets management's factors as well as control variables on Tobin's Q (financial efficiency), the following economic model can be established;

$$\text{Tobins Q} = f(\text{CCC}, \text{CCC2}, \text{CAR}, \text{CLR}, \text{Growth}, \text{LEV}, \text{Tang})$$

To analyze the effect of current asset managements factors as well as control variables on the Assets turnover ratio (Financial efficiency), the following economic model can be established;

$$\text{ATO} = f(\text{CCC}, \text{CCC2}, \text{CAR}, \text{CLR}, \text{Growth}, \text{LEV}, \text{Tang})$$

3.8 Econometric Modeling

For analyzing the econometric liaison concerning the outcome, and the input variables of this study along-with the control variables of this research, the following two econometric models can be established based on previous research studies;

$$\begin{aligned} (\text{Tobin's Q})_{it} = & \beta_0 + \beta_1 (\text{CCC})_{it} + \beta_2 (\text{CCC2})_{it} + \beta_3 (\text{CAR})_{it} + \\ & \beta_4 (\text{CLR})_{it} + \beta_5 (\text{Growth})_{it} + \beta_6 (\text{Leverage})_{it} + \beta_7 (\text{Tang})_{it} + \text{Uit} \end{aligned} \quad (1)$$

$$\begin{aligned} (\text{ATO})_{it} = & \beta_0 + \beta_1 (\text{CCC})_{it} + \beta_2 (\text{CCC2})_{it} + \beta_3 (\text{CAR})_{it} + \\ & \beta_4 (\text{CLR})_{it} + \beta_5 (\text{Growth})_{it} + \beta_6 (\text{Leverage})_{it} + \beta_7 (\text{Tang})_{it} + \text{Uit} \end{aligned} \quad (2)$$

3.9 A Hypothesis of the Study

Based on the previous research study, the hypothesis of the current research is established in the following way;

H_0 : *There is an insignificant relationship between current asset management, and financial efficiency.*

H_1 : *There is a significant relationship between current asset management, and financial efficiency.*

4 Data Analysis

4.1 Panel Descriptive Statics

The table I (Appendix) indicates that Tobin's Q on average contributes to the current study by 90% approximately, while the contribution of Asset turnover ratio in the current study is approximately 80%. The first independent variable which is cash-conversion-cycle contributes to 13% in this study while other independent variables like cash-conversion-cycle2, current asset ratio, and current liabilities ratio contribute to 4%, 49%, and 2% in respective manners. Controlled variables play a vital contribution in firm efficiency measure both via asset turnover ratio, and Tobin's Q. Growth as a first control variable contributes overall 30% in a current study while remaining factors such as leverage, and tangibility contribute 38%, and 19% in respective manners.

4.2 Pearson Correlation Matrix

Table II (Appendix) indicates that there is a negative association between the asset turnover ratio, and Tobins q with the value of the coefficient as -0.0094. This association is not significant at any level. The relationship of the cash-conversion-cycle with Tobin's Q, and Asset turnover ratio is negative with coefficient values of -0.0085, and -0.0178 in respective pattern, and relationship of cash-conversion-cycle with both variables are insignificant. Afterwards, study shows that relationship of CCC2 is negative with Tobins Q (-0.0126), and Asset turnover ratio (-0.0153)

with insignificance at all levels, and have significant (at 1% level), and positive relationship with CCC having a coefficient value of 0.5973. There is a negative relationship of current asset ratio with Tobins Q, cash-conversion-cycle, and CCC2 with coefficient values of -0.0141, -0.0549, and -0.0170 respectively having insignificant association at any level but on the other side current asset ratio have a positive (0.8242) relationship with a significance of 1% level.

Findings regarding current liabilities ratio indicate that this variable has a positive relationship with Tobin's Q (0.0288), CCC2 (0.0031), and current asset ratio (0.0223), and all are insignificant at all levels. There is the negative association of current liabilities ratio with asset turnover ratio having the coefficient value of -0.0058, and with cash-conversion-cycle having the value of the coefficient is -0.0664, and both variables are insignificant at levels. Findings of table II indicate that growth has a negative association with all variables such as Tobin's q, Assets turnover, cash-conversion-cycle, cash-conversion-cycle square, Current asset ratio, and current liabilities ratio having a coefficient value of -0.0041, -0.0166, -0.0094, -0.0158, -0.0257, and -0.0129 respectively. The relationship of growth with all the above-stated variables is not significant at all levels. The table shows that leverage has a positive relationship with asset turnover ratio (0.6305), and current asset ratio (0.7756) while all other factors such as Tobins Q, CCC, CCC2, CLR, and growth have a negative relationship with the coefficient values of -0.0118, -0.0118, -0.0134, -0.0175, and -0.0160 respectively. As far as significant is the concern all the above-mentioned factors are not significant at all level of statistical measurement. At the end of the discussion regarding correlation matrix, Tangibility have the positive correlation with asset turnover ratio (0.6305), and current asset ratio (0.7756), and all other remaining factors have negative association such as Tobins Q -0.0118), CCC (-0.0118), CCC2 (-0.0134), and growth (-0.0246). As far as significance is concerned, asset turnover, Current asset ratio, and leverage are significant at 1% level of significance, and other remaining factors are not significant at any level.

4.3 Panel Unit Root Testing

To check the stationery of the variables in the current study, the following panel unit root testing is applied to verify whether the variables of the study are stationary at the same level or not. Table III indicates the panel data stationary. All the variables are stationary at the level as well as at first difference. So there is no issue with the unit root in the data of the current study.

4.4 Panel Regression Analysis

Table IV indicates the number of observations as 850 ($n=50$, $T=17$). It also indicates that the model in both cases like fixed-effect, and the random-effect is statistically significant. The table further shows R-squares as the year to year variation in case of both fixed-effect, and random-effect estimation is approximately 86%, firm to firm variation approximately 81%, and overall variation as 85%. The Hausman test (1970) as stated by the above table is not significant at 5% level ($\text{Prob} > \chi^2 = 0.8113$) which indicates that fixed-effect model is not appropriate for the current study. Finally, the random-effect model is validated by Breusch, and Pagan LM test which is significant at 5% level ($\text{Prob} > \text{chibar}2 = 0.0000$).

4.5 Detailed Findings

4.5.1 Cash-Conversion-Cycle

The Table IV indicates that there is a positive, and insignificant relationship between cash-conversion-cycle, and asset turnover ratio (financial efficiency) in case of both types of estimation; fixed-effect as well as random-effect model. The value coefficient of CCC is, 0.0004497, and the probability value is 0.869 using fixed-effect, and value of a coefficient of CCC is .0005894, and its probability value is 0.824. A one-unit input in cash-conversion-cycle may lead to an increase in asset turnover ratio by 0.0004497 using fixed-effect, and 0.0005894 using random-effect model. The insignificant finding of cash-conversion-cycle failed to reject the null hypothesis showing the similar relationship between the variables. The positive finding of cash-conversion-cycle concerning asset turnover ratio is consistent with [Wasiuzzaman \(2015\)](#).

4.5.2 Cash-Conversion-Cycle2

The Table IV indicates that there is a negative, and insignificant relationship between CCC2, and financial efficiency (asset turnover ratio) in the case of both estimations like fixed-effect, and random-effect models. The value coefficient of CCC2 is -1.0309, and the probability value is 0.516 using fixed-effect, and the value of a coefficient of CCC2 is -1.0509, and its probability value is 0.499. If a one-unit input is given in CCC2, it may lead to a decrease in financial efficiency by 1.0309 using fixed-effect, and 1.0509 using random-effect estimation. The finding failed to reject the null hypothesis due to a similar insignificant relationship between both variables. The negative relationship between CCC2, and financial efficiency (asset turnover ratio) is consistent with [Reason \(2008\)](#) and [Wasiuzzaman \(2015\)](#).

4.5.3 Current Asset Ratio

The table shows that there is a negative, and significant association between current asset ratio, and financial efficiency measure as asset turnover ratio in both cases. The values of coefficients for asset turnover are -3.420731, and -3.52604 for fixed, and random-effect model respectively, while probabilities are the same for both models. If a one-unit input is given in asset turnover ratio, it will decrease in financial efficiency by 3.420731, and -3.52604 for both fixed, and random-effect model respectively. The finding rejects the null hypothesis due to a similarly significant relationship between both variables. The result shown in the table regarding both variables is consistent with [Moyer \(1995\)](#); [Pandey \(2010\)](#).

4.5.4 Current Liabilities Ratio

There is a negative, and insignificant relationship between firm efficiency (Asset turnover ratio), and current liabilities ratio for both fixed-effect, and random-effect modelling. Value of coefficient for current asset ratio is 29.05966, and 0.457 is probability value in case of fix effect model while the coefficient value is -30.42653, and probability value is 0.429 in case of random-effect model. The one-unit change in current liabilities ratio brings a negative change of 29.05966, and 30.42653 in case of fix effect, and random-effect respectively. The finding failed to reject the null hypothesis due to a similar insignificant relationship between both firm efficiency, and current liabilities ratio. The conclusion drawn from both variables is consistent with [Pandey \(2010\)](#).

4.5.5 Growth

Findings regarding the growth, and firm efficiency show that there is a positive but insignificant relationship between both variables. The coefficient value is 1.134175, and probability value is 0.4182 in case of fixed-effect model while on the other hand coefficient value is 1.067755, and probability value is 0.506 for growth. If we put a 1 unit change in growth, it may increase 1.134175, and 1.067755 in firm efficiency by using fixed-effect, and random-effect model respectively. The finding failed to reject the null hypothesis due to a similar insignificant relationship between both firm efficiency, and growth. The finding of an insignificant relationship between growth, and firm efficiency is consistent with [Moyer \(1995\)](#).

4.5.6 Leverage

Table IV indicates that there is a significant, and positive relationship between leverage, and asset turnover ratio measure through financial efficiency in the case of both fixed-effect as well as random-effect estimation. The value coefficient of leverage is, .1749351, and the probability value is 0.000 using fixed-effect, and value of a coefficient of CCC is .1823035, and its probability value is 0.00. A one-unit input in cash-conversion-cycle may lead to an increase in asset turnover ratio by .1749351 using fixed-effect, and .1823035 using random-effect models. The significant finding of leverage rejects null hypothesis showing the similar relationship between the variables. The positive finding of cash-conversion-cycle concerning the asset turnover ratio is consistent with [Lazaridis and Tryfonidis \(2006\)](#).

4.5.7 Tangibility

The table shows the positive, and significant association between financial efficiency, and tangibility both in fixed-effect, and random-effect estimation. The coefficient value of tangibility is 4.284602, and value of probability is 0.000 by using fixed-effect while in case of random-effect estimation value of coefficient, and probability are 4.284877, and 0.000 respectively. A one-unit change intangibility will increase the firm efficiency by 4.284602, and 4.284877 in case of fixed-effect, and random-effect respectively. These findings support the alternate hypothesis due to the significant relationship between tangibility, and firm efficiency. [Lazaridis and Tryfonidis \(2006\)](#) shows the consistency for the significant relationship between these two variables.

4.5.8 Interpretation of Table V

Table V indicates the number of observations as 850 (n=50, T=17). It also indicates that the model in both cases like fixed-effect, and the random-effect is statistically significant. The table further shows R-squares as the year to year variation in case of fixed-effect estimation is approximately 53%, firm to firm variation approximately 20%, and overall variation as 29%, and in case of random-effect estimation the values of R-square are 50%, 30%, and 35% are to exist in the same pattern. The Hausman test (1970) as shown by the above table is significant at 1% level (Prob >chi2 = 0.0072) which indicates that fixed-effect model is appropriate for the current study as a final decision for testing.

4.6 Detailed Findings

4.6.1 Cash-Conversion-Cycle

Table v shows the negative, and insignificant association between financial efficiency (Tobins Q), and cash-conversion-cycle both in fixed-effect, and random-effect estimation. The coef-

efficient value of the cash-conversion-cycle is -0.0003758 , and value of probability is 0.654 by using fixed-effect while in case of random-effect estimation value of coefficient, and probability are -0.0003203 , and 0.678 respectively. A one-unit change in cash-conversion-cycle may decrease the firm efficiency by $.0003758$, and $.0003203$ in case of fixed-effect, and random-effect respectively. These finding fails to reject the null hypothesis due to the insignificant relationship between cash-conversion-cycle, and firm efficiency. [Wasiuzzaman \(2015\)](#) showed the consistency for the significant relationship between these two variables.

4.6.2 Cash-Conversion-Cycle2

The table V shows that there is a positive, and insignificant relationship between CCC2, and financial efficiency (Tobins Q) in case of fixed-effect estimation, and have a negative, and insignificant relationship between these two variables in case of random-effect modelling. The value coefficient of CCC2 is 7.9111 , and the probability value is 0.871 using fixed-effect, and the value of a coefficient of CCC2 is -7.3212 , and its probability value is 0.987 . If a one-unit input is given in CCC2, it may lead to an increase in financial efficiency by 7.9111 using fixed-effect, and decrease up to 7.3212 by using random-effect estimation. The finding failed to reject the null hypothesis due to a similar insignificant relationship between both variables. The negative relationship between CCC2, and financial efficiency (Tobins Q) is consistent with [Reason \(2008\)](#) and [Wasiuzzaman \(2015\)](#).

4.6.3 Current Asset Ratio

There is a negative, and significant relationship between firm efficiency (Tobin's Q), and current asset ratio for both fixed-effect, and random-effect modelling. Value of coefficient for current asset ratio is -0.8084077 , and 0.000 is the probability value in case of fix effect model while the coefficient value is -0.7534969 , and probability value is 0.000 in case of the random-effect model. The one-unit change in current asset ratio will bring negative changes of $.8084077$, and $.7534969$ in case of fix effect, and random-effect respectively. The finding rejects the null hypothesis due to a similarly significant relationship between both firm efficiency, and current asset ratio. The conclusion drawn from both variables is consistent [Moyer \(1995\)](#) and [Lazaridis and Tryfonidis \(2006\)](#).

4.6.4 Current Liabilities Ratio

The table shows that there is a positive, and insignificant association between current liabilities ratio, and financial efficiency measure as Tobin's Q in both cases. The values of coefficients for current liabilities ratio are 12.06634 , and 11.92195 for fixed, and random-effect model respectively, while probabilities are 0.314 , and 0.303 for both models respectively. If a one-unit input is given in current liabilities ratio, it may increase in financial efficiency by 12.06634 , and 11.92195 for both fixed, and random-effect model respectively. The finding fails to rejects the null hypothesis due to a similar insignificant relationship between both variables. The result shown in the above table regarding both variables is consistent [Pandey \(2010\)](#).

4.6.5 Growth

Table V indicates that there is an insignificant, and negative relationship between growth, and asset turnover ratio measure through Tobins Q in case of both fixed-effect as well as random-effect estimation. The value coefficient of leverage is, -0.0178991 , and the probability value is 0.971 using fixed-effect, and the value of a coefficient of growth is -0.048046 , and its probability value

is 0.922. A one-unit input in growth may lead to decrease an in in Tobins Q by .0178991 using fixed-effect, and .048046 using random-effect models. The insignificant finding of growth rejects null hypothesis showing the similar relationship between the variables. The negative finding of cash growth concerning Tobins Q is consistent with [Moyer \(1995\)](#).

4.6.6 Leverage

Findings regarding leverage, and firm efficiency show that there is a negative, and insignificant relationship between both variables. The coefficient value is -.0013832, and probability value is 0.849 in case of fixed-effect model while on the other h, and coefficient value is -.0066961, and probability value is 0.303 for leverage. If we put a 1 unit change in leverage, it may decrease .0013832, and .0066961 in firm efficiency by using fixed-effect, and random-effect model respectively. The finding failed to reject the null hypothesis due to a similar insignificant relationship between both firm efficiency, and leverage. The finding of an insignificant relationship between leverage, and firm efficiency is consistent with [Lazaridis and Tryfonidis \(2006\)](#).

4.6.7 Tangibility

Table V indicates that there is a positive, and significant relationship between tangibility, and Tobin's Q (financial efficiency) in case of both types of estimation; fixed-effect as well as the random-effect model. The value coefficient of tangibility is, .2573369, and the probability value is 0.000 using fixed-effect, and the value of a coefficient of tangibility is .2293437, and its probability value is 0.000. One-unit input intangibility will lead to an increase in Tobins Q by .2573369 using fixed-effect, and .2293437 using random-effect models. The significant finding of tangibility rejects null hypothesis showing the similar relationship between the variables. The positive finding of tangibility concerning Tobins Q is consistent with [Lazaridis and Tryfonidis \(2006\)](#).

5 Conclusion

The study aimed to explore the significance of the relationship between current asset management factors (like cash-conversion-cycle, cash-conversion-cycle square, current asset ratio, and current liability ratio) , and financial efficiency (like Tobins Q , and Asset turnover ratio controlling other factors like Growth, leverage , and tangibility of the assets. The current study used the financial data for the selected 50 textile companies of Pakistan listed in Pakistan stock exchange. The data for this purpose was taken from the financial statement of these companies from their respective websites for the year 2001 to 2017. The final dataset was in panel shape showing the number of observations as 850 (50 17) firm years. The data analysis techniques applied on the current study were panel descriptive statistics, Pearson correlation, panel unit root testing, panel regression like fixed-effect, and random-effect as well as Hausman specification test , and LM test, etc.

5.1 Summarized Findings

The researcher concluded that current asset ratio is the highly significant factor of financial efficiency (asset turnover, and Tobin's Q) in the textile sector of Pakistan. The controlling factors like leverage, and tangibility are highly significant in case of Asset turnover ratio while in case of Tobin's Q; tangibility is the only highly significant factor in the textile sector of Pakistan.

5.2 Recommendation, and Implications

It is recommended to the policymakers, and management of the companies in the textile sector of Pakistan to carefully consider current asset ratio for deciding on enhancing the financial efficiency of their firm as current asset ratio decreases financial efficiency in this sector. They should take careful decision in their current asset management practices.

5.3 Limitation, and Suggestion for Future Research

The current study uses a limited number of independent variables like cash-conversion-cycle, cash-conversion-cycle square, current asset ratio, and current liability ratio. The current study does not include macro factors like inflation rate, GDP, etc. The finding of the current study is applicable only in the textile sector of Pakistan, and do not apply to other sectors.

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6 Appendix

Table 6.1: Panel Descriptive Statistic for the study

Variable		Mean	Std. Dev.	Min	Max
Tobins Q	Overall	89.8	40.1	-2.211477	70745.2
	Between		10.5	0.8308605	5501.2
	Within		16.5	-5110.786	66945.5
Asset Turnover	Overall	80	47.7	-5088.636	477466.3
	Between		91	0.0360655	92880.8
	Within		30.8	-84490.75	388865.5
Cash-conversion-cycle	Overall	13.1	8.9	-1328720	2557236
	Between		3.1	-320085	599023.7
	Within		2.1	-994940.5	1971906
Cash-conversion-cycle2	Overall	3.71	3.17	0.0000221	6.5412
	Between		1.59	58.17782	1.0812
	Within		2.74	-1.0512	5.4912
Current Asset Ratio	Overall	49.2	23.3	-1.909091	27711.1
	Between		14.6	0.0256768	6171.2
	Within		22.3	-5681.826	22806.7
Current Liabilities Ratio	Overall	1.7	0.86	0	198.8
	Between		0.69	0.052442	23.9
	Within		0.15	-21.94804	176.6
Growth	Overall	30.2	25.4	-0.9999995	4668.5
	Between		17.2	-0.0706536	275
	Within		20.5	-245.7664	4423.7
Leverage	Overall	37.8	24.9	-9.636364	414788.6
	Between		29.8	0.2310175	119707.9
	Within		38.9	-115964.9	298823.6
Tangibility	Overall	18.7	2.7	-1.521739	110271.3
	Between		4.8	0.0227612	21458.5
	Within		8.5	-19090.25	90231.6
Observations = 850 (n =50, T =17)					

Table 6.2: Pearson Correlation Matrix for the Study

	TQ	ATO	CCC	CCC2	CAR	CLR	GR	LEV	TNG
TQ	1								
ATO	-0.0094 0.7847	1							
CCC	-0.0085 0.804	-0.0178 0.6038	1						
CCC2	-0.0126 0.7148	-0.0153 0.6551	0.5973 0	1					
CAR	-0.0141 0.6804	0.8242 0	-0.0549 0.1099	-0.017 0.6211	1				
CLR	0.0288 0.4022	-0.0058 0.8648	-0.0664 0.053	0.0031 0.9292	0.0223 0.5161	1			
GR	-0.0041 0.9043	-0.0166 0.6282	-0.0094 0.7839	-0.0158 0.6448	-0.0257 0.4549	-0.0129 0.7063	1		
LEV	-0.0118 0.7313	0.6305 0	-0.0118 0.7312	-0.0134 0.6972	0.7756 0	-0.0175 0.6111	-0.016 0.6411	1	
TNG	0.0592 0.0845	0.9139 0	-0.0314 0.3608	-0.0094 0.7832	0.2391 0	0.0166 0.6296	-0.0246 0.4739	0.6196 0	1

Table 6.3: Fisher-type unit-root test - Based on augmented Dickey-Fuller tests (Statistics values)

H_0 : All Panels contain the unit root

H_1 : At least one panel is stationary

Variables	At Lag (0) difference		At Lag (1) difference	
	Inverse chi-squared (46) P	Modified inv. chi-squared Pm	Inverse chi-squared (46) P	Modified inv. chi-squared Pm
Tobins Q	489.4285***	27.5368***	272.0826***	12.1681***
Asset Turnover	244.1622***	10.1938 ***	242.1564***	10.0520***
Cash-conversion-cycle	599.1855***	35.2977***	299.9308***	14.1372***
Cash-conversion-cycle2	852.1684***	53.1863 ***	509.1263***	28.9296***
Current Asset Ratio	232.2055***	9.3483***	138.8354***	2.7461***
Current Liabilities Ratio	513.4204***	29.2332***	395.2358***	20.8763***
Growth	1008.6381***	64.2504***	415.4048***	22.3025***
Leverage	320.9179***	15.6213***	295.5296***	13.8260***
Tangibility	223.6402***	8.7427***	128.5170**	2.0165**

*** 1%, **5%, *10%

Number of Panels = 50

Number of Periods = 17

Source: Researchers self-analysis using STATA 13

Table 6.4: Fixed, and Random-Effect

Independent Variables	Dependent Variable: Asset Turnover			
	Fixed-effect Model		Random-effect Model	
	Coefficients	P-values	Coefficients	P-values
Cash-conversion-cycle	0.0004497	0.869	0.0005894	0.824
Cash-conversion-cycle2	-1.0309	0.516	-1.0509	0.499
Current Asset Ratio	-3.420731	0	-3.52604	0
Current Liabilities Ratio	-29.05966	0.457	-30.42653	0.429
Growth	1.134175	0.482	1.067755	0.506
Leverage	0.1749351	0	0.1823035	0
Tangibility	4.284602	0	4.284877	0
Constant	-732.8896	0.052	-706.221	0.448
Number of Obs	850		850	
Number of Groups	50		50	
Model Significance	F(7,793) =719.02, Prob> F = .0000 Wald chi2(7)= 5247.35, Prob > chi2=.0000			
R-Square (within)	0.8639		0.8639	
R-Square (Between)	0.8124		0.8134	
R-Square (overall)	0.852		0.8522	
Rho	0.27056236		0.25352015	
Hausman Test	Prob>chi2 = 0.8113			
Breusch , and Pagan Lagrangian multiplier test for random-effects	chibar2(01) = 350.58 Prob > chibar2 = 0.0000			

Source: Researcher self-analysis using Stata 13

Table 6.5: Fixed, and Random-Effect

Dependent variable: Tobins Q				
Independent Variables	Fixed-effect Model		Random-effect Model	
	Coefficients	P-values	Coefficients	P-values
Cash-conversion-cycle	-0.0003758	0.654	-0.0003203	0.678
Cash-conversion-cycle2	7.9111	0.871	-7.3212	0.987
Current Asset Ratio	-0.8084077	0	-0.7534969	0
Current Liabilities Ratio	12.06634	0.314	11.92195	0.303
Growth	-0.0178991	0.971	-0.048046	0.922
Leverage	-0.0013832	0.849	-0.0066961	0.303
Tangibility	0.2573369	0	0.2293437	0
Constant	407.549	0	393.764	0.013
Number of Obs	850		850	
Number of Groups	50		50	
Model Significance	F(7,793) =6.36, Prob> F = .0000		Wald chi2(7)= 36.16, Prob > chi2=.0000	
R-Square (within)	0.0531		0.0501	
R-Square (Between)	0.02		0.03	
R-Square (overall)	0.0298		0.0351	
Rho	0.12999657		0.05367803	
Hausman Test	Prob>chi2 = 0.0072			

Source: Researcher self-analysis using Stata 13