# RELATIONSHIP AMONG DIFFERENT FACTORS AND FIRM PROFITABILITY

**Sher khan[1], Hayat khan[2], Amir Sohail[2] , Zia ul Islam[2]**
[1] Institute of Business and Management Sciences, the University of Agriculture, Peshawar-Pakistan
[2]Department of Management Sciences, National University of Modern Language Islamabad Pakistan
**Email.-** sherkhan4477@gmail.com

**Abstract:** This paper is to identify the relationship among different factors and Firm Profitability as well as investigates that how different factors such as current ratio, quick ratio, inventory turnover ratio and debtor's turnover are effecting working capital management. Correlation test indicates that all the variables are have no relationship with each other and so it does not violate the basic assumption that there is no issue of Multicollinearity and Correlation. Wald Test Results Indicated that all variables have no problems of homoscedasticity. The results of Fixed Effect Model revealed that R-Square showed that more changes in the Dependent variables are caused by the independent variables. Probability value of F-Statistic showed that the overall model is highly significant and have taken the accurate variables. The regression results show Current Ratio, Acid Test Ratio and Debtors Turnover ratio are not significant they do not have any significant impact on the Profitability of the firm, While the Variable of Inventory Turnover is significant and showed that it has a Significant impact on the Profitability.

**Key Words:** Impact of Working, Firms Profitability, Fixed Effect Model.

## 1. INTRODUCTION:

According to Muhammad et al. (2003) WCM (WCM) is an important element for a Profitable business and studies revealed that it has a positive association with the firm profitability. Many research studies show that there is a significant and positive association between Profitability and cash, account receivables and inventory turnover while there is a negative and insignificant association between Profitability and accounts payable. Increase in increase in the cash will lead to increase the firm Productivity. Napompech (2002) studied the association between WCM and Profitability. He used OLS regression type and Panel Data of 255 companies and discovered an adverse relationship in operating profits, inventory conversional and receivables collection. Ranjith (2008) concluded that the decision of working capital and Profitability has gain a lot of importance and significance in the current day corporate decisions. He added that if the firm has enough cash then they will have better position of liquidity and it can also have an impact on the Profitability position. Saghir, Hashmi and Hussain (2011) illustrated that management of day to day operations and management of the assets stays very significant element for the success of business. They used the data of 60 textiles firms for the period of 2001-2006.They established that there is a negative relationship between Profitability and WCM. Return on Assets and cash conversion cycle also has a negative association with the firm Profitability. They recommended that the managers can improve the profits by improving the cash, receivables collection and inventory management. Fayaz et al. (2011) established that proper management of the day to day business operations is vital for the firm. If it is not properly managed, it can lead to have a bad impact on the overall profitability of the firm. They applied OLS regression on the data of 46 companies and concluded that in the short run WCM will have an adverse effect on the Profitability of the firm.

Mahmood and Qayyum (2010) evaluated that a company needs Profitability and Liquidity for keeping their operations successful. They described that Profitability is needed for increasing the value of shareholder's wealth while Liquidity is needed for running the day to day operations. Therefore, the cash management should be handled carefully as it will show the efficiency of the company operations. Odi and Solomon (2010) established that decision of short run investments and decision of working capital is called WCM. Working Capital involve that how much should be invested in the current assets for day to day operations. They argued that determination of investments in current assets is an important decision for the Profitability of the firm. It should

be also make sure that the firm has enough cash for the operations. Rahman (2010) studied the impact of WCM and Profitability in the Textiles industry of Pakisatn. He collected the data from the annual reports of the textile firms and concluded that there is a positive and significant association between WCM and Firm Profitability, but the Textile industry is not using the assets effectively and efficiently. Saghir, Hashmi and Hussain (2011) illustrated that management of day to day operations and management of the assets is an important element for the success of business. They used the data of 60 textiles firms for the period of 2001-2006.They discovered an adverse association in Profitability and WCM. Return on Assets and cash conversion cycle also has a negative association with the firm Profitability. They recommended that the managers can improve the profits by improving the cash, receivables collection and inventory management. Lazaridis and Tryfonidis (2006) studied the data of 131 firms and applied different regression tools and methods. They acknowledged a negative relationship between Profitability and WCM.They suggested that creation of the profit can be made easy if the managers are handling the cash, account receivables and inventory properly.

Soenen and shin (1998) studied the association between WCM and Profitability. He used a large amount of data of American firms and concluded that there is a strong and adverse liaison of WCM and Productivity. They proposed that the Shareholders wealth can be increased by dipping the amount of cash conversion cycle. Sen & Oruc (2009) used the data of 49 Turkish firms for determining the liaison in WCM and Productivity. They revealed, an adverse liaison of WCM and Productivity. Hayajneh & Yassine (2011) investigated the affiliation of WCM and Productivity by using the annual statistics of 53 manufacturing firms of Jordan. They applied OLS regression and conclude that there is an adverse association between Profitability and WCM components like receivables, payable, inventory in number of days, WCM.They added that routine operations management should be effective, so that the origination goal can be achieve and profitability can also be increased. Nwaobia, Kajola and Adedeji (2012) studied the association between WCM and Profitability. They used the annual data of 7 years of Nigeria firms and discovered that there is an adverse association between WCM and Profitability. Moreover, return on assets and CCC has a negative relationship with each other. Jose, Lancaster and Stevens (1996) analyzed the connection of WCM and Productivity by using the annual statistics of United States firms. They discovered, an adverse affiliation between WCM and Productivity. Lazaridis and Tryfonidis (2006) used the data of 131 listed Greeks Firms and explored the association between Profitability and WCM. They discovered a substantial bond of WCM and Productivity. He described that account receivables have a positive liaison with the Profitability. Ganeson (2007) conducted a study in USA by using the annual data 349 firms and inspected the association between Productivity and CCC and its factors which includes receivables, payable and inventory in number of days. Their resulted disclosed a negative association between Profitability and CCC. Gill, Biger and Mathur (2010) used the data of 88 USA Firms for the period 2005-07 and scrutinized the affiliation between profitability and WCM. They concluded, a substantial affiliation in Productivity and WCM. Blinder and Maccini (1991) inspected the liaison of WCM and productivity and concluded that there is a positive and substantial connection between WCM and Productivity.

Schwartz (1974) and Deloop & Jegers (1996) argued that when the firm is having high profits then the firm can lend money to other firms and institutions while when the firm is having bad position in the Profitability they will not be having enough cash to support their day to day operations and collection of account receivables.

This study will attempt to analyze determinants of WCM and will provide practical and applicable guideline for researcher who wants to know more about the topic. This study will help the management in decision making while setting their WCM, as they will be able to know that up to what extent Current Ratio, Quick Ratio, Inventory Turnover Ratio and Debtor Turnover Ratio will influence Profitability.

## 2. LITERATURE REVIEW:

Asad and Qadeer (2014) studied the impact of different factors on the working capital of energy sector in Pakisatn. They concluded that Debt ratio, Current ratio and Company size have a significant and positive impact on the firm Profitability.

Nilsson (2010) studied that WCM is composed of many factors and these factors are current ratio, quick ratio, company size and debt ratio. He concluded that these variables have a Significant impact on the Profitability.

Holmstrm and Tiroli (2011) established that all the business's organizations should monitor the Working Capital and they should also know that what are their needs of cash for running the current operations. The firms should make sure that they have enough funds for the day to day operations.

Hina (2014) tested the impact of WCM on Profitability. She used the secondary data, which was collected from KSE for the period of 1996-2011. She suggested that the management can improve the operations of the firm by decreasing the inventory turnover ratio and should decline the receivables. Account receivables collection should be improved as higher account receivables will be causing the problem of decline in cash.

Pouraghajan and Emamgholipourarchi (2005) analyzed the impact of WCM on firm Profitability using the data of Tehran Stock Exchange. They established that there is positive association between Firm Profitability and WCM. They suggested that firms can expand the operations by minimizing the cash conversion cycle and by decreasing the debt ratio.

Napompech (2002) studied the association between WCM and Profitability. He used OLS regression type and Panel Data of 255 companies and discovered a negative relationship in operating profits, inventory conversional and receivables collection.

Muhammad et al. (2003) established that WCM is an important element for the profitably business and it has a positive association with the firm profitability. They concluded that there is a significant and positive association between profitability and cash, account receivables and invert while there is a negative and insignificant association between Profitability and accounts payable. They suggested that increase in the cash will lead to increase the firm Profitability.

Rahman (2010) studied the impact of WCM and Profitability in the Textiles industry of Pakisatn. He collected the data from the annual reports of the textile firms and concluded that there is a positive and significant association between WCM and Firm Profitability, but the Textile industry is not using the assets effectively and efficiently.

Rai (206) used the data of 311 Indian firms for the period of 1996-2010.After applying different tools and methods, he established that there is a positive affiliation between Firm Profitability and WCM.

Saghir, Hashmi and Hussain (2011) illustrated that management of day to day operations and management of the assets is an important element for the success of business. They used the data of 60 textiles firms for the period of 2001-2006.They discovered an adverse association in Profitability and WCM. Return on Assets and cash conversion cycle also has a negative association with the firm Profitability. They recommended that the managers can improve the profits by improving the cash, receivables collection and inventory management.

Deloof (2003) applied the correlation technique and regression and concluded that there is an adverse association between firm Profitability and WCM. He suggested that for improving the shareholder's wealth, the management should work on improving the account receivables collection.

Raheman and Nasr (2007) discovered that Pakistani companies have kept huge amount of cash as a WC. They described that the management of this cash will have a substantial influence on the Productivity of the firm. They used the cross sectional and time series data on the KSE listed firms and concluded that accounts payable and cash conversion cycle has an adverse association with the Profitability.

PJG and Solano (2007) established that whether the firm is small or large, WCM is an important element in the business. Majority of the firms have invested their cash in the current assets. They used correlation and descriptive statistics and concluded that WCM and Profitability has a relationship with each other.

Fayaz et al. (2011) established that proper management of the day to day business operation is compulsory for the industry. If it is not properly managed, it can lead to have a bad impact on the overall profitability of the firm. They applied OLS regression on the data of 46 companies and concluded that in the short run WCM will have a negative impact on the Profitability of the firm.

Schwartz (1974) and Deloop & Jegers (1996) argued that when the firm is having high profits then the firm can lend money to other firms and institutions while when the firm is having bad position in the Profitability they will not be having enough cash to support their day to day operations and collection of account receivables.

Mahmood and Qayyum (2010) analyzed that a company needs Profitability and Liquidity for keeping their operations successful. They described that Profitability is needed for increasing the value of shareholder wealth while Liquidity is needed for running the day to day operations. Therefore, the cash management should be handled carefully as it will show the efficiency of the company operations.

Vida, Seyed, and Rezvan (2011) established a connection in WCM and Productivity by using the data of Tehran Stock Exchange firms for the period of 2004-2008.They used the data of 101 firms for the analysis. Their results revealed that cash conversions cycle has a positive and significant relationship with the Profitability of the frim. They also disclosed that there is an adverse affiliation in debt and Productivity.

Abdul and Mohamed (2007) studied that how different variables are having an impact on the working capital of the Pakistani firms. For their analysis they used the annual data of 92 firms which were listed at KSE. They concluded, there is an adverse liaison in the different factors of WCM and Productivity and when CCC increases then it will decrease the Productivity. They disclosed, there is an adverse connection in debt and Productivity and also liquidity and Profitability has a negative association with each other.

Muhammad and Syed (2011) evaluated the association between WCM and Profitability at the KSE-30 Index. They used the annual data of 21 firms and applied Correlation and Regression techniques on the data. They concluded that WCM has a substantial effect on the Productivity Moreover, these determinants have a correlation with each other. They suggested that the financial managers can improve the operations of the firm by decreasing the inventory and accounts payable.

Okwo, Ugwunta and Agu (2012) applied different regression tools and techniques for determining the relationship between WCM and Productivity. They discovered that the accounts receivables, cost of goods sold and sales have a substantial and positive liaison with the Productivity of the firm.

Salman, Folajin and Oriowo (2014) studied the liaison in WCM and Productivity in the Stock exchange of Nigeria and used the annual data of 20 manufacturing firms. After applying Correlation and OLS regression, they concluded that working capital has an adverse and significant affiliation with the ROA and ROE. They suggested that size of the CCC should be decreased and accounts payable should be decreased as well.

Mohammadi (2009) studied the association between WCM and Profitability by using the data of 92 and concluded that there is an adverse relationship between WCM and Productivity. They added that constituents of CCC have an adverse affiliation with the Productivity.

Mohammad and Saad (2010) identified the effect of WCM and Profitability in Malaysia Stock Exchange using the data of 2003-2009.They discovered that there is an adverse and significant association between WCM and Profitability components.

Jamiu and Ayokunle (2015) studied WCM and Productivity by using the annual data of 25 Nigerian firms. They applied different regression tools on this data and concluded an adverse affiliation in WCM and Profitability. Moreover, return on assets and CCC has a negative relationship with each other. They suggested that Management policies should be made aggressive for achieving higher level of Profitability.

Akinlo (2011) studied the relationship of WCM and Profitability for discovering the long run and short run relationship. He used the annual data of 66 Nigerian firms for the period of 1999-2007.He revealed that the variables are stationary at first difference and then he applied the Cointegration approach. He concluded that there is a long run association between WCM and Profitability.

Hayajneh & Yassine (2011) investigated the affiliation of WCM and Productivity by using the annual statistics of 53 manufacturing firms of Jordan. They applied OLS regression and conclude that there is an adverse association between Profitability and WCM components like receivables, payable, inventory in number of days, WCM. They added that routine operations management should be effective, so that the origination goal can be achieve and profitability can also be increased.

## 3. RESEARCH METHODOLOGY:

The sample consists of 10 companies from Chemical Sector, listed on PSE (Pakistan Stock Exchange) for the period 2005-2014.While selecting the sample, following criteria was observed. The firms which are present throughout the sample time period and to avoid biased results, firms with negative equities are also not included in the sample The data used in this research is secondary. It is a Panel data and taken for the period of 10 years from 2005-2014.Chemical Sector firms listed at Pakisatn Stock Exchange were used for this analysis. Balance Sheet Analysis 2005-2014, published by state bank of Pakistan is used along with the annual reports published by these companies are used. It includes the data of 10 companies.

## 4. ECONOMETRIC TECHNIQUES:

The study is performed to identify how different factors are effecting WCM in Chemical Sector of Pakistan by using the statistical software Eviews 8 and Eviews 9. It is a quantitative research. We took the secondary Panel data of the sample companies of Chemical Sector Firms listed at Pakistan Stock Exchange from 2005 to 2014. Our Sample size was 10 Companies out of 22 companies.

We calculated all the variables from KSE website and financial statements of the sample companies. Normality of the data was checked by Jarque-Bera probability value in descriptive statistics. Correlation was also checked. Unit Root of the panel data was checked by PP Fisher tests. There was no unit root test at level so it was now clear that we could run Fixed Effect Model or Random Effect Model.

Hausman test was conducted to select Fixed Effect Model or Random Effect Model. The test showed us that the Fixed Effect Model is appropriate. We also checked the autocorrelation of residuals by using Pesaran Scaled LM and Pesaran CD Tests.

## 5. MEASUREMENT OF VARIABLES:

### *5.1 Return on Assets ratio (ROA)*

An indicator of how profitable a company is relative to its total assets. Return on assets gives an idea as to how efficient management is at using its assets to generate profits. Calculated by dividing a company's annual incomes by its total assets, return on assets is shown as a percentage (Shim, 2000)

It can be calculated by using the following formula:

Return on Assets = (Net profit after taxes / total assets) *100

### *5.2 Debtor's turnover ratio (DTOR)*

It shows in how many days' company collects its account receivable. High ratio increases the liquidity of the company. It calculates by dividing net credit sales by average account receivable (Shim, 2000)

Debtor's turnover ratio = Net Credit Sales / Average Trade Receivables

### *5.3 Inventory turnover ratio (ITOR)*

Inventory turnover ratio may vary significantly from industry to industry. A high ratio means fast moving inventories and a low ratio means slow moving or obsolete inventories in hand. A low ratio can also be the result of maintaining excessive amount of inventory needlessly (Shim, 2000)

It can be calculated by using the following formula:

Inventory turnover ratio = Cost of goods Sold/Average Inventory

### 5.4 Current Ratio (CR)

The current ratio is also called the working capital ratio, as working capital is the difference between current assets and current liabilities. This ratio measures the ability of a company to pay its current debts using current assets. The current ratio is calculated by dividing current assets by current liabilities (Shim, 2000)

Current Ratio= Current Assets/ Current Liabilities

### *5.5 Quick Ratio (QR)*

Quick Ratio is also known as Acid test ratio. It is used to determine how easily a frim can changes its assets into cash, if the company needs to pay current liabilities (Shim, 2000) It can be calculated by using the following formula:

Acid Test Ratio = (Cash + Bank Balance + Short Run Investments + Trade Debaters) / Current Liabilities.The following the Conceptual frame work of the study.

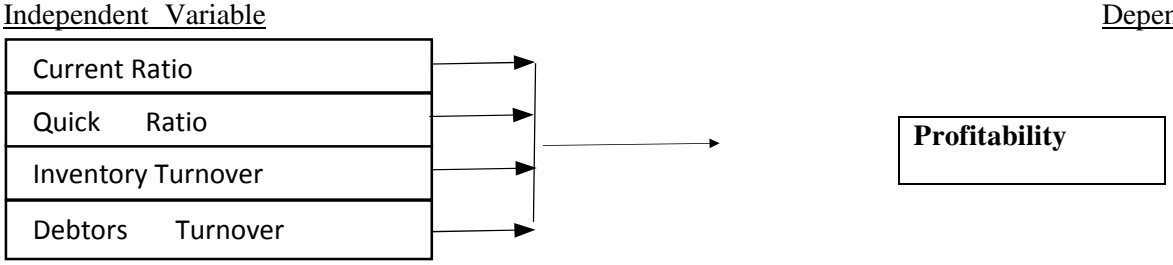


***Figure 1***: Conceptual Modeling of Dependent and Independent variables

## 6. ESTIMATED REGRESSION MODEL:

Dependent Variable: Profitability and Independent Variables: Current Ratio, Quick Ratio, Inventory Turnover Ratio and Debtor

Turnover Ratio

Profitability: $\beta_0 + \beta_1 CR + \beta_2 QR + \beta_3 ITO + \beta_4 DTO + \epsilon$

Where:

$\beta_0$: Constant Term
CR: Current Ratio
QR: Quick Ratio
ITO: Inventory Turnover Ratio DTO: Debt Turnover Ratio $\beta_1$: Coefficient of Current Ratio $\beta_2$: Coefficient of Quick Ratio $\beta_3$: Coefficient of Inventory Turnover Ratio $\beta_4$: Coefficient of Debt Turnover
€: Error Term

## 7. RESULTS AND ANALYSIS:

This study has used Hausman test to select between Random effect model and Fixed effect model. If the P-Value is more than 0.05 than we will select the Random effect model and when the P-Value is less than 0.05 we will select Fixed effect model.

$H_o$: Random effect model is appropriate than Fixed effect model.

: Fixed effect model appropriate than Random effect model.

**Table 1: Hausman Test**

| Correlated Random Effects - Hausmann Test | | | |
|---|---|---|---|
| Test Summary | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
| Cross-section random | 9.739293 | 4 | 0.0451 |

The Probability value is less than 5% which shows that Fixed Effect Model is appropriate while random effect model is not appropriate. Hence we reject the Null Hypothesis and accept the Alternative hypothesis.

Residuals Autocorrelation Test - Fixed Effect Model

**Table 2: Autocorrelation Test**

| TEST | STATISTIC | PROBABILITY |
|---|---|---|
| Breusch-Pagan LM | 51.98563 | 0.2204 |
| Pesaran scaled LM | -0.317743 | 0.7507 |
| Pesaran CD | -0.277875 | 0.7811 |

$H_0$: There is no autocorrelation in residuals.

$H_a$: There is autocorrelation in residuals.

From the above two tests (Pesaran scaled LM & Pesaran CD), the P-vale is greater than 5% so we will accept the null hypothesis and will reject the alternative hypothesis. So there is no autocorrelation in residuals of the model.
Fixed Effect Model Results

**Table 3: Fixed Effect Model**

| Variable | Coefficient | Std. Error | T-Statistic | Prob. |
|---|---|---|---|---|
| C | 15.56218 | 2.907237 | 5.352909 | 0.0000 |
| Current Ratio | -0.709941 | 1.239158 | -0.572922 | 0.5684 |
| Acid Test Ratio | 3.095706 | 1.927281 | 1.606256 | 0.1124 |
| Inventory Turnover Ratio | -0.164437 | 0.059156 | -2.779706 | 0.0069 |
| Debtors Turnover Ratio | -0.044196 | 0.157242 | -0.281072 | 0.7794 |
| AR (1) | 0.294305 | 0.118861 | 2.476049 | 0.0155 |
| R-squared | 0.790356 | Mean dependent var | | 13.61678 |
| Adjusted R-squared | 0.751222 | S.D. dependent var | | 15.89145 |
| S.E. of regression | 7.926280 | Akaike info criterion | | 7.129257 |
| Sum squared resid | 4711.944 | Schwarz criterion | | 7.545891 |
| Log likelihood | -305.8165 | Hannan-Quinn criter. | | 7.297268 |
| F-statistic | 20.19634 | Durbin-Watson stat | | 2.044548 |
| Prob (F-statistic) | 0.000000 | | | |

## 8. INTERPRETATION OF THE RESULTS AND FINDING:

### R-Squared

In table 3, The Coefficient of determination R-Squared shows that how much changes and variations in the dependent variable is caused by the independent variables. Here we are getting the value of R squared 79.03% it means that the variables we have taken to find out the relation are highly effective the remaining 20.96 % constitutes those variables or factors that we have not taken.

### *F-Statistic*

In the given table 3, the overall significance of the model can be interpreted by the value of probability of F-statistic. Here a rule applies that if the probability value of F-Statistic is less than 0.05 or 5%, the model will be significant, otherwise not. The probability value of F-Statistic in this model is 0.000000 which is less than 0.05. It implies that the overall model is significant.

### *Individual Significance of Variables*

The variables are now checked for individual significance. The significance of variables can be checked by their probability values.

Probability value of current Ratio is 0.5684 which is greater than 0.05. It implies that the variable is insignificant. It also shows that current Ratio has an insignificant impact over Profitability. Hence $H_o$ is accepted and $H_a$ is rejected. Probability value of Acid Test Ratio is 0.1124 which is greater than 0.05. It implies that the variable is insignificant. It also shows that Acid Test Ratio has an insignificant impact over Profitability. Hence $H_o$ is

accepted and $H_a$ is rejected. Probability value of Inventory turnover is 0.0069 which is less than 0.05. It implies that the variable is significant. It also shows that Inventory turnover has a significant impact over Profitability. Hence $H_o$ is rejected and $H_a$ is accepted. Probability value of Debtors Turnover Ratio is 0.7794 which is greater than 0.05. It implies that the variable is insignificant. It also shows that Debtors Turnover has an insignificant impact over Profitability. Hence $H_o$ is accepted and $H_a$ is rejected.

***Coefficient Analysis of Variables***

In tables 3, The coefficient of Current Ratio is -0.709941. The negative sign shows that Current Ratio has a negative impact over Profitability. It reveals that a 1-unit change in Current Ratio rate will decrease the Profitability by 70-units. The coefficient of Acid Test Ratio is 3.095706. The positive sign shows that Acid Test Ratio has a positive impact over Profitability. It reveals that a 1-unit change in Quick Ratio rate will increase the Profitability by 3.09-units. The coefficient of Inventory turnover is -0.164437. The negative sign shows that Inventory turnover has a negative impact over Profitability. It reveals that a 1-unit change in Inventory turnover rate will decrease the Profitability by 16-units. The coefficient of Debtors Turnover is -0.044196. The negative sign shows that Debtors Turnover has a negative impact over Profitability. It reveals that a 1-unit change in Debtors Turnover will decrease the Profitability by 4-units.

***Durbin-Watson***

Here DW Statistic shows that value of 2.044548 which falls in the most desired place i.e. between 1.7 and 2.40. This can be interpreted as there has been not any problem of auto correlation. There would have been auto correlation problem if the value of DW stat falls outside the desired area.

**Table 4: Multicollinearity and Autocorrelation Test**

| | Return on Assets | Current Ratio | Quick Ratio | Trade Debt | Inventory Turnover |
|---|---|---|---|---|---|
| Return on Assets | 1 | 0.21 | 0.20 | -0.45 | -0.28 |
| Current Ratio | 0.21 | 1 | 0.38 | 0.08 | -0.25 |
| Quick Ratio | 0.20 | 0.38 | 1 | -0.03 | -0.043 |
| Trade Debt Ratio | -0.45 | 0.08 | -0.031 | 1 | -0.33 |
| Inventory Turnover | -0.28 | -0.25 | -0.043 | -0.33 | 1 |

Correlation test was conducted to know if the variables are correlated or not. In the given table 4, the test results established that there is no issue of multicollinearity and all the variables were having coefficient value less than 0.80 shows no correlation among the variables.

**Table 5: Heteroskedasticity Test: Wald Test**

| Test Statistic | Value | Value df | Probability |
|---|---|---|---|
| F-statistic | 4.886734 | (4, 75) | 0.0015 |
| Chi-square | 19.54694 | 4 | 0.0006 |

The above table 5 shows us the results for test of Heteroskedasticity. Here the null-hypothesis is:

$H_o$: Residuals are Homoscedastic.

$H_a$: Residuals are Homoscedastic.

The probability value of F-Statistic is checked. Here this value is 0.0015 which is less than 0.05. So we accept the null-hypothesis and interpret that the residual does not have the problem of Heteroskedasticity and are homoscedastic.

## 9. CONCLUSION AND RECOMMENDATIONS:

This paper investigated This paper has examined the association between different factors of working Capital management and profitability & how their relationship with Profitability is affected. This research used 10 years Panel data of 10 firms listed at Pakisatn Stock Exchange were used for the data analysis and interpretation. We have used the annual data of 10 firms listed at Pakistan Stock Exchange in chemical sector. The balance sheet analysis published by State Bank of Pakistan for the years 2005-2014 was also used for obtaining the Panel Data of 10 years. The sample consists of 10 companies from Chemical Sector, listed on Pakistan Stock Exchange, for the period 2005-2014. Those firms which are present throughout the sample time period are selected. The statistical software EViews 9 was used for analyzing the variables and for the interpretation of the results. The Panel data is not having the issue of Unit Root which was tested by using the unit root test. The Hausman Test was conducted to select an appropriate model. The test suggested that the Fixed effect model is appropriate while random effect model cannot be used. Residual Autocorrelation test was tested using the Breusch-Pagan LM, Pesaran scaled LM and Pesaran CD and it showed that there is no issue of Autocorrelation in the Model.

In the results of Fixed Effect Model, it is also found that R-Square has a value of 79.03% which shows that 79.03% changes in the Dependent variables are caused by the independent variables that we have used. Probability value of F-Statistic is 0.0000 which is less than 0.05 and shows that the overall model is highly significant and have taken the accurate variables in this dissertation. The regression results show Current Ratio, Acid Test Ratio and Debtors Turnover ratio are not significant they do not have any significant impact on the Profitability of the firm. While the Variable of Inventory Turnover is significant and shows that it has a Significant impact on the Profitability. Correlation test shows that all the variables are not having any relationship with each other and hence there is no issue of Multicollinearity and Correlation. Wald Test results shows that the variables are homoscedastic and they do not have the issue of Heteroskedastic. We recommend the potential investors can use this study for their guidance before investment decision is taken. The Shareholders can use this study as a reference and can advise the Management of these firms for improving the Current Ratio and Acid Test Ratio. This research has the following limitations attached to it: There are 22 firms listed at Pakistan Stock Exchange, Chemical sector. We have taken only 10 firms for this dissertation as the remaining firms financial records and data is not available and majority of the data is missing in the financial statements. Due to time limitation a lot of space for future studies has been lifted for further enrichment on this topic. Economic constraints make it difficult for us to complete gathering of primary data for this research.

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