

Working Capital Management and Corporate Internal Growth Performance: Evidence of Listed Non-Financial Companies in Pakistan

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ABSTRACT

Purpose:

The main objective of this research is to determine the impact of working capital management (WCM) on the growth of manufacturing firms in Pakistan.

Methodology:

The dependent variable of Internal Growth Rate (IGR), is affected by independent variables of Days Sales Outstanding (DSO), Inventory Turnover (ITO), and Payables Deferral Period (PDP). Based on 5 years of (2016-2020) data of 174 non-financial listed companies taken from the Pakistan Stock Exchange (PSX), regression, descriptive and analytical analysis ascertained that the Working Capital Management (WCM) of a firm is comprehensively measured by the tool of Cash Conversion Cycle (CCC).

Findings:

The results showed that WCM played an important role in the value creation of overall business as long as DSO and ITO have a negative impact on the IGR performance of the firm and for the better performance of IGR, firms needed to keep the DSO and ITO at a minimum level.

Research limitations/implications:

Due to the type of research that has been conducted, other sectors of the industry such as the service, finance, and food have been left out, and focus has only been made on the manufacturing side. The findings of this study may not be completely applicable to all listed manufacturing firms due to the difference in the size and environment that could also affect firms' growth.

Originality/value:

This research provides a clear understanding and comprehension of the contribution of working capital management to profitability, internal, and sustainable growth.

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1. Introduction

Working capital (WC) refers to that part of an organization's capital that is required for funding short-term business expenditures and in organizations are generally referred to as Current Assets (CAs). CAs are largely made up of cash, marketable securities, prepaid, stocks, and receivables. Finance invested in CAs must revolve and swing quickly, and the CAs must be regularly converted into cash, which is then traded for more CAs. However, circulating capital is often referred to as revolving capital or short-term capital. An effective WCM is a crucial part of financial management policy since it requires the ability to monitor the company's current assets and liabilities to meet short-term liabilities while avoiding unnecessary investment in short-term assets (Sensini, 2020).

Most scholars in the corporate finance literature, researched long-term financial decisions, specifically capital structure, dividend policy, company valuation, and investment decisions. Current liabilities (CLs) and capital assets (CAs) are actual realizations of significant amounts of investment and funding by businesses. Furthermore, they are the representatives of the organization's cash-flow positions, which have been determined and ascertained by the structuring and composition of the aforementioned current accounts. According to a study by Gitman and Maxwell 1985, financial managers and administrators spend over 60% of their time on short-term activities. The importance of an effective and efficient Corporate Governance system in corporate culture can be attributed to the fact that stakeholders require information to make sound decisions that result in higher profits (Shahid, 2020).

WC is an important tool for businesses in terms of profitability, risk, and growth (Smith, 1980). The management of short-term liabilities and assets necessitates a thorough examination because WC has a substantial impact on the risk and profitability of company operations, as well as the organization's values (Ribeiro de Almeida and Eid, 2014). The performance impact of WC differs between large and small firms because the latter is more sensitive to underinvestment in WC components. Small businesses are more reliant on internally generated cash, and they may not be concerned about working capital management (WCM) (Vivien Lefebvre, 2020; Hussain, 2021).

The significance of WC management is not a novel concept in finance literature. In general, a large number of academic studies have focused on different aspects of WC management, such as securities and cash flow management (Faulkender & Wang, 2006) and trade credit management (Rajan and Peterson, 1997). Kim and Chung (1990), on the other hand, have emphasized the importance of the combined effects of all these aspects related to WC management. As a consequence of their mutual influence, all of these aspects should be studied concurrently. As a result, all aspects and features of WC management have had an impact on each other as well as the organization's value.

For the period 2005 to 2014, Akbar (2020) studied the influence of WCM procedures on the investment and financing patterns of 354 public listed non-financial firms in Pakistan. To make sure the strength of the results, the GMM regression technique was used. The findings revealed that excessive funds locked up in working capital harm the firm's investment portfolio. Moreover, various empirical investigations have established the existence of factual evidence regarding the correlation or relationship between financial growth performance and the WC management's efficiency (i.e., an

organization's growth is inversely related to its cash conversion cycle (CCC). The studies of Shin and Sonen (1998) and Deloof (2003) validate this.

In this context, even though working capital is undeniably an integral component of cash flow operations, and cash flow obtained by operations becomes a component of the estimation and calculation of free cash flows, it is easy to conclude that effective and efficient working capital management (WCM) is essentially the value that matters to any entity. As a result, it could be claimed that an organization's effective and efficient management of its working capital is a vital component of its overall strategy for generating shareholder value.

The impact of working capital management on the firm's growth is yet not clear because of varying obtained results in many relevant types of research and studies. Most of the earlier studies focus on only the impact of working capital on profitability (Deloof, 2003; Hien Tran et al., 2017; Raheman et al., 2010) although profitability itself affects sustainable growth (Hien Tran et al., 2017). Further, working capital management is also closely related to sustainable growth (Rădășanu, 2015). However, so far there are no studies that examine the impact of WCM on sustainable growth.

The main focus of this research has been on effective and efficient WC management and investment to test the relativity and applicability of the concept of WC management towards organizational growth in the Pakistani market. The overall goal of this study is to investigate the impact of WC management on the internal growth of manufacturing enterprises in Pakistan. As a result, the purpose of this study is to examine the impact of various components, such as the number of days in stock (ITO), the cash conversion cycle (CCC), the number of days in account payable (PDP), and the number of days in account receivable (DSO), on the WC and internal growth management. The study's second goal is to give business managers a greater grasp of the role of WCM in their company's internal growth.

2. Literature Review

The widely accepted and pioneering research has been conducted in different areas; for instance, investment decisions, the capital structure of the firm, and valuations of the business. However, the academic literature on working capital has neglected the CAs and liabilities management, which is an integral concept underlying WCM. There are certain reasons, why WCM attract some financial managers as their peripheral interest. Firstly, the decisions regarding WCM occur in the organization on the daily basis. Secondly, the funds invested by the manufacturing organizations in different countries were linked with short-term assets and the impact of decisions regarding WCM. Third, the short-term financial decisions are revocable over a certain period. Nevertheless, the new concepts and new publications in the area of WCM have increased the focus of financial managers as a direction to access liquidity.

Seth, H. (2020) empirically studied the relationship of WCM efficiency with exogenous variables in Indian manufacturing companies. On the sample of 563 companies panel regression was applied covering the time frame from 2008 to 2018. He found that the cash conversion cycle (CCC) affected all of the variables of leverage, profitability, asset growth, and total assets TO.

WCM is no longer observed as a discipline, where the fundamental objective is to maintain liquidity in the organization in the event of liquidation (Mathuva, 2015). The

conceptualization of WCM is focused on the management of short-term capital in the organization. According to Preve and Sarria-Allende (2010), the ultimate goal of WCM is to promote satisfying liquidity, value for shareholders, and profitability. Likewise, Gill, Biger and Mathur (2010, p.5) argued that the management of WC is the ability to control the CAs and liabilities of an organization efficiently and effectively than providing the firm with increased return on assets while minimizing the liabilities associated with the business.

A. Akgün (2021) investigated the relationship between WCM and business performance. The panel data analysis was used on a sample of EU-28 listed firms from 2003 to 2012. For code law countries, the analysis revealed a negative relationship between gross working capital and business performance. The findings also revealed that liquidity measures have a statistically significant impact on business performance as measured by ROA in all EU countries.

According to Bragg (2010, p.90), the management of WC in an efficient manner holds significant importance in the manufacturing and construction organization, where a major portion of assets is comprised of CAs. Furthermore, it has a direct impact on the firm's liquidity and profitability. Similarly, Raheman et al. (2010, p.156) stated that the trade-off related to profitability liquidity is critical because if working capital is not given due consideration, the firms are likely to face bankruptcy or fail. On the contrary, Gill, Biger and Mathur (2010, p. 9) argued that the importance of the WCM cannot be overlooked in an organization. Furthermore, the working capital is also considered the life-giving force for any economic unit, and because of its importance, the management of WC is considered as the main function of corporate management.

EL-Ansary (2021), investigated the effect of net working capital (NWC) on profitability in the Middle East and North Africa (MENA) listed companies. For the period 2013–2019, the generalized method of moments (GMM) was used to analyze data from 134 consumer-goods listed firms in 12 MENA countries. The results showed that NWC levels had a non-linear effect on profitability when ROA was used as a profitability proxy, but the results were insignificant when ROE was used as a profitability proxy.

According to Vural, Sökmen and Çetenak, (2012, p. 488), the management of WC is one of the most significant areas for the organization because liquidity and profitability are closely associated with this area. Moreover, it involves the decision and composition of the CAs and also discusses the financing of these assets. In addition, the components of WCM include; marketable securities, inventory management, and account receivables; therefore it has been suggested that the components play a vital part in enhancing the performance of the organization. According to Danuletiu (2010, p.364), the efficient management of WC also plays a significant role in assessing the overall corporate strategy to create shareholder value. The WC is also explained as the result of the lags amid the collection for the sales of finished goods and the expenditure conducted for the raw material purchases.

2.1. Earlier Studies on Working Capital Management

Various scholars around the world have already been studied to assess the performance of WCM on a firm's financial strength. To find out the research gap and objectives some of the empirical findings are discussed in the following paragraphs.

(Akinlo & Olufisayo, 2011) conducted a study to determine the impact of WCM on firm profit performance in Nigerian registered firms from 1999 to 2007. Dynamic panel and GMM techniques were used to analyze the data of 66 firms in Nigeria. Empirical results state that the dynamic working capital components and sales growth positively affect the firms' profit performance while leverage and accounts payable negatively affect the firm's profitability.

According to Waqar-ul-Hassan et al., (2017), the goal of expose the performance between WCM and profitability among 125 listed companies on the PSX between 2006 and 2011. ROA and gross operating profit were used as profit performance indicators. For data interpretation and execution, multiple regression models were used, and it was discovered that there is an inverse relationship between firm profitability and WCM.

Another study was conducted in Pakistan by (Raheman, Afza, Qayyum, & Bodla, 2010) to analyze the impact of WCM on firm performance between 1998 and 2007. 204 listed manufacturing companies' data was collected for the balanced panel data analysis. The results indicated that the inventory turnover, net trading cycle, and cash conversion cycles significantly affected the firm's performance. It was also found that most Pakistani firms are following conservative WCM policy and firms are needed to improve their collection and payment policies.

Khan et al., (2011) conducted a study on 92 Pakistani textile firms from 2001 to 2008. They hypothesized that WCM has an effect on profitability and there exists a trade-off between risk and return. They also highlight the impact of various working capital variables on net profit margin. According to their findings, there is a moderate-risk/return trade-off between profitability and liquidity about working capital.

Another research was conducted ("The Impact of Working Capital Management upon companies' Profitability : Evidence from European Companies by Joana Filipa Lourenço Garcia Master Dissertation in Finance and Taxation Supervised by : Professor Doutor Francisco Vitorino Martins Professor Do," 2011) to measure the impact of WCM on companies' profit performance on a sample of 2,974 European Stock Exchange-listed firms covering 12 years. Using OLS and GLS regression analysis, they discovered a significant negative relationship between the working capital cycle and profitability. Furthermore, companies should reduce the amount of time that working capital is locked up in the company to improve profitability.

Research made in the past regarding WCM and profitability was supporting the statement that reducing investment in working capital (aggressive policy) would positively affect the firm's performance towards profitability. In research ("Impact of Working Capital Management on Profitability of Textile Sector of Impact of Working Capital Management on Profitability of Textile Sector of Pakistan," 2015) a sample of 117 was selected from listed textile firms on Karachi Stock Exchange from 2005 to 2010 to measure the impact of working capital policies on firms profitability. They came to conclude that working capital policies have a negative impact o profitability. They also discovered a positive relationship between profitability, liquidity, and firm size, as well as a negative relationship between debt to equity ratios.

Pooled and a fixed effect regression model was used (Mathuva, 2010) to measure the impact of WCM components on firms' profitability on 30 listed Nairobi Stock Exchange (NSE) companies for the period of 1993 to 2008 and found a positive association

between profitability and DSO and the negative association was found among firm's profitability, ITO, and PDP.

According to (Blinder & Maccini, 1991) companies that adopted a conservative working capital policy mean that the more investment made in working capital the more will be the changes in the improvement of a firm's profitability. When a sufficient amount of inventory is maintained, it reduces the chances of interruptions in the production process and also reduces the supply costs, price fluctuation effects, and loss of business due to scarcity of products.

2.2. Internal Growth

In the words of McKelvie and Wiklund (2010, p.261), internal growth is explained as the benefit of an organization that is concerned with a high return on equity and further arises from retained earnings which are reinvested into the operations of an organization. Such reinvestment within an organization can lead to a higher rate of internal growth for the organization. Furthermore, the internal growth can be calculated by estimating the maximum growth rate an organization achieves deprived of resorting to external financing. It is also stated by Jones (2010), that the internal growth of the organization helps in supplying the earnings which can be reinvested in the assets.

Internal growth is also regarded as the highest level of growth that a business can achieve without obtaining external financing. Furthermore, a company's internal growth rate is determined by the level of business operations that can continue to fund the company's growth and development. As a result, internal organizational growth is an important metric for manufacturing firms and small businesses because it measures a company's power to improve profit and sales without issuing more debt or stock.

The review state that researcher in developed and under-developed countries take numerous indicators of a firm's profit performance like; GOI, Net profit, ROA, ROE, ROI, and EPS for the improvement of their result. The lack of empirical evidence on WCM and its performance in terms of growth in the manufacturing sector in Pakistan is the core motivational vigor behind this study. Therefore, the present study is an attempt to fill this gap and estimate the relationship between the firm's internal growth performance and working capital measures for a sample of 174 listed non-financial companies on Pakistan Stock Exchange during 2016 to 2020.

2.3. Theoretical Studies

The risk and return theory is considered to be one of the most significant theories in the field of working capital and portfolio management. The relationship between risk and return has received considerable attention from different scholars and practitioners in finance, business, and economics (Pandit, 1995).

The cash conversion cycle theory is explained by Grandell (2012) which it is stated the necessity to have a critical observation of the working capital management and its components which are explained in the previous discussion. It is also explained that the financial manager pays a substantial portion of their time on decision-making regarding short-term assets and liabilities (Brigham & Ehrhardt, 2013).

2.4. Research Hypothesis

Based on theories related to WCM, studies indicated that inventory turnover and payable deferral period are negatively reacts against the firm's performance in term of profit or

growth (Akinlo & Olufisayo, 2011; Waqar-ul-Hassan et al., 2017; Raheman et al., 2010; Mathuva, 2010) stated that efficient financial firms manage their working capital components i.e. DSO, ITO, PDP, and CCC for the maximization of their business values. In light of previous theories and research studies, the following hypotheses are proposed to reach empirical conclusions:

H₁: Internal growth rate and DSO have a negative relationship.

H₂: Internal growth rate and ITO have a negative relationship.

H₃: The internal growth rate and PDP have a negative relationship.

3. Methodology

The influence of WCM on a firm's internal growth performance in Pakistan is measured using panel data methods in this study. The data of 174 non-financial listed businesses on the Pakistan Stock Exchange (PSX) was chosen for examination over five years (2016-2020). Secondary data was gathered from financial information published by the State Bank of Pakistan in its Annual Financial Statement Analysis of Listed Companies for the years 2016-2020. Furthermore, to eliminate the impact of correlated errors, the Fixed and Random effect methods are utilized, and the Hausman test is used to pick between two of them. Less collinearity between variables, more useful data, heterogeneity, more variables, more efficiency, and more degree of freedom are all advantages of using the panel data approach over other methodologies. (Siddiqi, 2005; Baltagi, 2005)

3.1. Variables Measurement

3.1.1. Dependent Variable

The firm's performance is measured using the internal growth rate (IGR) as a dependent variable. IGR is defined as a company's highest level of growth that may be achieved without the use of external capital. Furthermore, a company's internal growth rate is established by the level of business operations that can continue to fund the company's growth and development. The following formula is used to calculate an organization's internal growth:

$$IGR = ROA \times b / 1 - (ROA \times b)$$

Where,

ROA = Return on Assets

b = Retention Ratio (1 – Dividend Pay-out Ratio)

3.1.2. Independent Variables

Days sales outstanding (DSO) uses to measure the average number of days a firm will take to collect their receivables from customers. It is calculated by dividing accounts receivable by sales and then multiplied by an annual number of days. The inventory turnover (ITO) ratio refers to the speed at which the final product, work in progress or raw materials are converted into cash forms (Sharma and Kumar, 2011); therefore, if the stock turnover ratio is high, the need of working capital is low in this scenario. It is calculated as inventory divided by the cost of goods sold, multiplied by an annual number of days. The payables deferral period (PDP) illustrates the ability of the management to delay payment to the vendor. It also elaborates the average payable period of a company which tells how long it takes to pay the invoices from creditors, vendors or suppliers. It is measured as accounts payable to the cost of goods sold, and multiplied by an annual number of days.

The average duration between cash outflow for stocks or resources and cash inflow from sales is measured by the cash conversion cycle (CCC), which is a WCM metric. DSO plus ITO minus DPO is the CCC formula. Control variables include firm size, revenue growth, and debt-to-equity ratio.

3.1.3. Regression Model

The impact of WCM on a firm's internal growth in Pakistan is measured with the help of a panel data regression model using the statistical software of STATA. The following regression equation have been considered to test the relationship between IGR and WCM.

$$IGR_{it} = \beta_0 + \beta_1 DSO_{it} + \beta_2 ITO_{it} + \beta_3 PDP_{it} + \beta_4 Size_{it} + \beta_5 ASGR_{it} + \beta_6 CATA_{it} + \beta_7 CLTA + \epsilon_{it}$$

IGR_{it} is Internal Growth Rate, DSO_{it} is Days Sales Outstanding, ITO_{it} is Inventory Turnover, PDP_{it} is Payable Deferral Period, $Size_{it}$ is taking the log of Sales, $CATA$ is Current assets to Total Assets, $CLTA$ is Current liabilities to Total Assets, $ASGR$ is Annual Sales Growth Rate.

In this study, descriptive statistics were used to investigate the temporal features of given data, Pearson correlation analysis was used to determine the amount of interaction between studied variables, and OLS regression analysis was used to gauge the strength of independent variables.

4. Results

Table.1. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
IGR	870	0.0578	0.0806	-0.1708	0.8073
DSO	870	57.2619	87.9309	0.0000	1605.0000
ITO	870	105.4097	70.9642	0.0000	765.0000
PDP	870	55.4138	71.3409	-34.6841	777.6087
ASGR	870	0.0700	0.3507	-0.9997	4.3541
Size	870	15.5425	1.4474	5.9216	19.0319
CATA	870	0.4711	0.1973	0.0352	1.0159
CLTA	870	0.3701	0.1886	0.0072	1.0351

Source: Author's own elaboration

Table.1 shows the descriptive statistics of dependent, independent, and control variables of 174 listed non-financial companies in Pakistan from 2016 to 2020. It shows that the average internal growth rate is 5.78% and the standard deviation is 8.06% whereas, the minimum IGR rate observed is -17.08% and the maximum value is 80.72%. The mean value of days sales outstanding (DSO) is 57.26 days and the standard deviation is 87.93 days which is quite high because of differences in the nature and sizes of the firms. Firms have 105.40 days of ITO cycle, and 55.41 days of PDP cycle. The firms have a 7.00% average annual sales growth rate carry 47.11% of assets in current form out of total assets, and 37% of assets are financed with current liabilities.

The observed firms have different in nature, characteristics, sizes, and policies therefore, the overall standard deviation for almost all variables is high.

4.1. Inferential Statistics

Table.2. Correlation Analysis

	IGR	DSODays	ITODays	PDPDays	ASGR	Size	CATA	CLTA
IGR	1.0000							
DSO	-0.1401	1.0000						
ITO	-0.0645	0.3535	1.0000					
PDP	-0.1227	0.4435	0.3496	1.0000				
ASGR	0.1539	-0.0980	-0.0980	0.0283	1.0000			
Size	0.1529	-0.3574	-0.2918	-0.3749	0.1032	1.0000		
CATA	0.1376	0.1679	0.0345	-0.1166	-0.0359	0.0363	1.0000	
CLTA	-0.3064	0.1498	-0.0369	0.1429	-0.1083	0.0225	0.2694	1.0000

Source: Author's own elaboration

All the selected variables' correlation coefficient are presented in table 2. The correlation analysis is performed based on 174 companies' annual data with 870 observations. The analysis shows that IGR is negatively correlated with DSO, ITO, PDP, and CLTA. On the other hand, a positive correlation is found between IGR and the size of the firm and the CATA. The correlation coefficients of all the variables are significant. It means that if companies can collect their outstanding sales amount earlier, take less time to convert their stocks of goods into sales and paid their supplier of merchandise regularly can affect positively their internal growth rate. Another variable of IGR is CLTA which shows a significant negative correlation with an internal growth rate of firms. It implies that high use of current assets through current debt financing with not help to grow internally well as compared to using low current debt in the business.

The data imitate a high correlation between different measures of WCM. The correlation between DSO and ITO is 0.0.3535, and between DSO and PDP is 0.0.4435. To avoid the multi-collinearity problem in regression this data has been taken into account.

The size of the firm shows a positive correlation of 0.1529 with IGR which is considered by taking the log of annual net sales figures of each company. This means that with the increase in the size of the firm its internal growth performance also increases proportionately. In the same way, the annual sales growth rate also positively correlated 0.1539 with the internal growth rate; this reflects that a firm grows internally well if their sale grows positively.

CAs investment policy is generally measured through the ratio between CAs and total assets CATA. In the subject analysis, the correlation coefficient shows a positive correlation of 0.1376 between IGR and CAs investment policy. It reflects that the IGR will increase with the increase in the amount of CAs investment. On the other hand, CAs financing policy is measured through the ratio of CLs and total assets CLTA and shows a moderate negative correlation of -0.3065 with IGR. We can draw a conclusion based on this correlation that firms that depends more on debt to finance their CAs take more risk against their IGR.

4.2. Regression Analysis

To attain consistent and robust results, the model is analyzed by Pooled OLS and REM models. The tests of Pooled OLS and REM are further compared with the Breusch-Pagan LM test the best fit model for internal growth. The results of the Breusch-Pagan LM test state that the intercept term and slope terms are consistent and the probability value of this test is significant. Similarly, the Hausman test is run to select the best fit model between REM and FEM. The Hausman statistics is 10.47 at a 1 percent level of significance but it shows insignificant value. Therefore, REM is a better model than FEM for further estimation.

Table.3.Summarized Results

	(POLS)	(REM)	(FEM)	(REM) CI
VARIABLES	IGR	IGR	IGR	IGR
DSODays	-8.10e-05** (3.41e-05)	-8.71e-05** (3.89e-05)	-8.71e-05** (3.89e-05)	-8.71e-05* (4.95e-05)
ITODays	-3.21e-05 (3.91e-05)	-3.46e-05 (4.53e-05)	-3.46e-05 (4.53e-05)	-3.46e-05 (0.000137)
PDPDays	5.70e-05 (4.28e-05)	0.000108** (4.31e-05)	0.000108** (4.31e-05)	0.000108* (6.00e-05)
ASGR	0.0226*** (0.00722)	0.0156** (0.00636)	0.0156** (0.00636)	0.0156 (0.0127)
Size	0.00672*** (0.00193)	0.00817*** (0.00272)	0.00817*** (0.00272)	0.00817*** (0.00295)
CATA	0.105*** (0.0136)	0.118*** (0.0187)	0.118*** (0.0187)	0.118*** (0.0228)
CLTA	-0.155*** (0.0141)	-0.154*** (0.0178)	-0.154*** (0.0178)	-0.154*** (0.0192)
L_ 000006				
Constant	-0.0353 (0.0318)	-0.0662 (0.0444)	-0.0662 (0.0444)	-0.0662 (0.0525)
Breusch-Pagan LM Test	216.71 (0.0000)***			
Hausman Test	10.47 (0.1637)			
Multicollinearity (vif)	1.27			
Heteroscedasticity	20.61 (0.0000)***			
Serial Correlation	22.458 (0.0000)***			
Observations	870	870	870	870
R-squared	0.188			0.0818
Number of Code		174	174	174

Source: Author's own elaboration

The necessary diagnostic tests are also required in panel data to identify any potential problem in the data that might cause the results redundant. These tests include multicollinearity, heteroscedasticity, and serial correlation. The VIF test for multicollinearity shows a value of 1.27 and this value suggests that the data is not suffering from any problem of multicollinearity. On the other hand, the test of heteroscedasticity shows a value of 20.61 at a 1 percent level of significance. Similarly, the test of serial correlation has also been run and shows the value of 22.458 at a 1

percent level of significance. These diagnostics tests identify that the model is suffer from serial correlation and heteroscedastic problems. Therefore, to handle these problems, the cluster code command has been used with the final selected model, and the results of the final model are reported in the last column of Table 3.

Table 3 shows the results of the regression after adjustment of heteroscedasticity and serial correlation and focusing on R-squared, F-statistics, and Probability values. The average DSO has a significant negative relationship with the performance of IGR. This reflects that if the firms are able to decrease their receivables their IGR performance will increase. Similarly, ITO also shows a negative relationship with IGR but the results are not significant because the p-value is 0.801. it states that companies who can decrease their average age of inventory will achieve somehow a higher IGR compared to the companies whose average age of inventory is high. The regression results of PDP show a positive but weaker relationship with the performance of IGR because here the p-value is 0.073. The positive relationship intimate that the longer the time firm will take to pay their outstanding expenses the more cash funds are available for the support of current operations and the more change is expected to support growth internally.

Control variables, size of the firm, C and CATA ratio reflect a significant positive relationship with the performance of IGR whereas, CLTA shows a significant negative relationship with IGR. Value of R-square for random effect model shows the overall impact of all independent and control variables on the dependent variable that is IGR. These all variables together can affect to the dependent variable by a percentage of 8.18 percent.

5. Conclusion

The manufacturing sector is the second largest sector in Pakistan and contributes 13.5 percent of the overall Gross Domestic Product (GDP) and is considered to be the strongest pillar of Pakistan's economy. During the fiscal year 2017, it recorded an impressive growth of 5.3 percent against 3.7 percent during the fiscal year 2016. In this scenario, the main objective of this study is to highlight the importance of working capital management WCM in the internal growth performance of the industrial sector of Pakistan listed on Pakistan Stock Exchange (PSX).

The results of this study show that WCM plays a significant role in the IGR performance and plays an important role in the value creation of overall business as long as DSO and ITO have a negative impact on the IGR performance of the firm. For the better performance of IGR firms try to keep the DSO and ITO at a minimum level. The firm's current assets investment and financing policies also show a strong very significant role in the IGR performance of the industrial sector in Pakistan. According to the results, minimum use of current assets financing and high use of investment in current assets is supportive of the better performance of IGR.

Based on above findings several policy statements can be drawn which include that decisions about WCM required due consideration and are important for all manufacturing sector firms. The findings indicate that business managers can boost the performance of the company by maintaining the level of receivables, inventories, and payables.

This study helps determine the factors that affect the working capital and it contributes to the expansion and growth of manufacturing firms. This study also helps examine the

existing relationship between the management of working capital and the growth patterns of the manufacturing companies that are operating in Pakistan. This research plays a vital role in filling the gap of knowledge concerning the impact of working capital management on the growth rate of manufacturing firms. The results of this research can make an outstanding contribution to the existing literature related to the field of corporate finance. This study contributes by considering internal and sustainable growth in the analysis of the association between working capital management and firm growth performance.

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