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IMPACT OF WORKING CAPITAL POLICIES ON CORPORATIONS' RETURNS IN THE MANUFACTURING SECTORS OF PAKISTAN

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Keywords: Working capital management, Aggressive working capital policy, Conservative working capital policy.

ABSTRACT
The present study examines the relationship between working capital policies and firm performance of fifty limited manufacturing companies listed at the Pakistan Stock Exchange from 2009 to 2018. Panel data methodology was used to evaluate the data. The study's finding shows significant relationships between their working capital policies and the firm's return. Moreover, there is a positive association between conservative operational capital policy and firms' return. The aggressive working capital has a negative effect on firm performance. There are two forms of working capital policies, the first form is the aggressive operational capital policy, and the second form is conservative working capital policy. Therefore, this study attempts to check out the impact of working capital policies on companies' financial performance. The study employed descriptive analysis and correlation analysis to assess the collected data. Panel data methodology was used to analyze the data. Management can increase the value of the firm by using effective working capital management policies. The study would give a better understanding of working capital management policies in the context of Pakistan

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1. INTRODUCTION

One of the main responsibilities of the business's management is decision making that links with all aspects of financial projects of a business. The decision making of corporate finance is generally divided into two main parts; one investing decisions that are related to the management of assets and second financing decisions that are related to the management of sources of funds like liabilities or equity in long and short run (Singh & Pandey, 2008). The management related to short term assets and liabilities is called working capital. Term working capital indicates the capability of a firm to meet its short term liabilities for the continue operations and working capital as surplus of current assets of the business over current liabilities of business (Guthmann, 1955).

(Van Horne & Wachowicz, 2008) had also stated the working capital management as that part of financial action that is related to "safeguarding and controlling of the firm's current assets and the planning for sufficient funds to pay current bills. So, Working capital management is a identical important section of corporate finance that deals with current assets and current liabilities of the organization.

Therefore, the financial managers have to sustain an appropriate level of working capital management to continue their operations and increasing the financial performance (Lamberson, 1995). The financial performance of a business is affected by the working capital management according to (Dong & Su, 2010). The financial position of firm is affected by working capital management: (Filbeck & Krueger, 2005) conclude that business success greatly depends on the ability of financial managers to effectively manage the business receivables, inventory, and payables.

The management decision making related to how much current assets and how they are invested in a business is referred as working capital policies. Working capital approaches are mixture of current assets and current liabilities. Policies associated to current assets are named as investing policies and others that are associated to current liabilities of a business are called financing policies (Hassani & Arezoo, 2014).

According to previous literature on working capital management, there are two types of working capital policies that are used by the financial managers to increase the firm value. These types include one conservative working capital policy and second are aggressive working capital policy.

In conservative working capital policy, the firms keep large amount of investment in current assets as compared to current liabilities, so, due to it their liquidity is very high and conservative working capital policy having low level risk of bankruptcy and insolvency.

On other hand, in aggressive working capital policy the firms maintain huge amount of current liabilities and less in current assets. The firms that are involve in the practices of aggressive working capital policy they have to face high level risk and there are may be liquidity problems for the firm (Weinraub & Visscher, 1998),(Tewodros, 2010).

The influence of working capital policies is greatly significance, though, no empirical study has been done with the title of working capital policies impact on financial performance of Pakistani manufacturing companies.

The objective of this study is to examine the impact of aggressive and conservative working capital policies on the firm’s returns of manufacturing sectors in Pakistan. In the past, there mostly studies are conducted on the relationship of working capital management and profitability like Shin and (Shin & Soenen, 1998), (Deloof, 2003).

2. LITERATURE REVIEW

Numerous researchers in literature have studied financial ratios as a part of working capital management; though, very little of them have specifically worked on the working capital policies.

(Weinraub & Visscher, 1998) argued that the subject of aggressive and conservative working capital practices by using the quarterly data and time period data was 1984 to 1993. They divided the data in ten different industries sets to check the comparative relationship between the industry and aggressive and conservative working capital practices. The main purpose was to detect the differences in working capital policies as well as the long-term constancy of working capital policies over the time periods.

They determined that the industries had distinguishing and specifically altered working capital management practices.

(Jose, Lancaster, & Stevens, 1996) explored the affiliation between aggressive working capital policy and profitability of US firms by using cash conversion cycle (CCC) as the working capital measures of firms. They argued that by using extra aggressive working capital is linked with higher level of profitability.

Very important study in the context of Pakistan, (Nazir & Afza, 2009) the study examines the association concerning the aggressive/conservative working capital practices for seventeen sets of industries of public limited companies listed at KSE Pakistan. This study showed that the different industries have different working capital management practices; the results of this study same as the study by (Weinraub & Visscher, 1998).

(Tewodros, 2010) tried to check the impact of working capital policies (investment and financing) on company's profitability. The data is collected from eleven manufacturing companies in Ethiopia for the period 5 years 2005- 2009. Financial statements of those companies were used as a source of data. The overall results of study showed that the financial managers of firms can enhance the profitability of firm by increasing the efficiency working capital management policies.

(Hassani & Arezoo, 2014) they tried to check out the link between the aggressive/conservative working capital policies and firm's profitability risk of listed companies in Tehran. In the study they used the data of 274 companies over the seven years 2006 – 2012. The results of study indicated that the different industries used different working capital policies. The companies that want to reduce the profitability risk so those are involving in conservative working capital policy. More companies are using the aggressive working capital policy for the purpose of increasing the profitability risk.

Another latest study is conducted by Isaac and (Olatunji, 2013), in their study they empirically assessed the impact of working capital management policy and on financial position of Nigerian foods and beverages industry. This study was a case study on Nestle, the data was used 2008 to 2012. The findings of the study argued that there is a significant relationship existing between the working capital policies and financial performance; based on this study they recommended that such type of firms have to follow the aggressive working capital policies to enhance their financial performance.

The results of this study will help out for the financial mangers of firms to focusing on the capital management policies. There would be some guidelines for firms to how they can increase the firm performance by involving in different of working capital policies. For the Researchers, it will attract their attention on working capital policies in Pakistan in some future studies.

This study is expected to contribute to better understand these policies and their effect on firm's returns especially in the emerging markets like Pakistan.

3. RESEARCH METHODOLOGY

Population of study is the manufacturing listed firm on Pakistan Stock Exchange. The sample data is collected from different sectors in manufacturing, number of total sampled firms will be depending on the availability of data. The sample of 50 firms is used in this study and these firms relate with different sectors of manufacturing firms. This study used secondary data and sample firm's period range from 2006 to 2014. Panel data and collect from the financial statement of the firm and from the balance sheet analysis.

3.1 VARIABLES OF THE STUDY

These are the following variables will use in the study:

Independent variables

1. Aggressive working Capital policy
2. Conservative working capital policy

DEPENDENT VARIABLE

Firm's Return (ROE)

Size, Growth and Leverage are used in this study as control variables.

RESEARCH MODEL

Panel regression Analysis is used in this study.

Model 1 use to check the association of aggressive working capital and firm's Return.

Model 1: **ROE =** α_0**+** β_1 **TCA / TA +** β_2 **Size +** β_3**Growth +** β_4**leverage + e**

Model 2 use to check the association of conservative working capital and firm's Return.

Model 2: **ROE =** α_0**+** β_1 **TCL / TA +** β_2 **Size +** β_3**Growth +** β_4**leverage + e**

The Model was used in previous studies Weinraub & Visscher, 1998;(Tewodros, 2010)and (Nazir & Afza, 2009).

Details of Variables Measures

Variables	Measures	References
Independent aggressive working capital Policy	Total current Assets / total assets	(Weinraub & Visscher, 1998),(Tewodros, 2010)
Independent Conservative working capital Policy	Total current Liabilities / total assets	(Weinraub & Visscher, 1998),(Tewodros, 2010)
Control Variables Size Growth Leverage	Log of Total assets Sales Total liabilities / total assets	(Hassani & Arezoo, 2014); (Olatunji, 2013) and (Nazir & Afza, 2009)
Dependent Variable: Return on Equity	Net income divided by Stock holder's equity	(Weinraub & Visscher, 1998),(Tewodros, 2010), Hassani & Arezoo, 2014)

Aggressive Working capital = AGW

Conservative Working Capital = CNW

4. RESULTS

The results of descriptive statistics about the variables of the study has been shown in table 1. Absolute average of Return on equity is .0731and deviation is .6859. The averages of aggressive working capital and conservative capital are respectively 0.45250 and 0.519680. The deviations of aggressive working capital are 0.476745 and deviation of conservative working capital is 0.526453 from their averages. Aggressive working capital procedure in this sample has average of 45 %. It's concluded the 45 % of total assets are financed by the current liabilities. On other hand the average of conservative working capital policy is 52% it depicts that the current assets are 52 percent of the total assets of the sampled firms.

Table 1: Descriptive Statistics

Variables	Mean	Maximum	Minimum	Std.Dev.	Observations
Roe	0.531361	1.590359	-3.265621	0.685913	500
AGW	0.45250	0.703043	-3.290544	0.476745	500
CNW	0.519680	0.698529	-2.622813	0.526453	500
Sales	6.386526	8.750989	3.276921	0.942087	500
Leverage	-0.313969	-0.000808	-2.223996	0.292440	500
Size	15.10698	19.37991	9.326967	1.849813	500

In this study Pearson correlation coefficients is used to check co linearity between independent variables that is shown in the following table 2:

Table 2: Correlation Matrix

	AGW	CNW	ROE	Leverage	SIZE	SALES
AGW	1.000000					
CNW	0.638215	1.000000				
ROE	0.068763	0.072885	1.000000			
LEVERAGE	-0.197380	0.124669	0.177896	1.000000		
SIZE	-0.379102	-0.427080	-0.017915	0.258926	1.000000	
SALES	0.086452	-0.106766	0.137570	0.046177	0.481253	1.000000

It is observed there is no co linearity problems exist in the independent variables.

Panel data methodology is used to estimate impact of working capital management policies on the firm's performance of sampled firms.

In the first regression model evaluate the relationship between aggressive working capital policy and return on equity. In analysis to specify which method (fixed or random effects method) is appropriate, in this study used the Hausman Test. In model 1 regression the fixed method is used because the results of Hausaman Test P value less than .05.

According to the results that showed in table 3, P-Value of aggressive working capital policy variable is less than 0.05, there is significant relationship between the aggressive working capital policy and firm's performance.

Table 3 Regression Results of Model 1 (Aggressive Working capital Policy impact on ROE)

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.485095	0.277114	-1.750526	0.0806
AGW	-0.211817	0.071048	-2.981308	0.0030
LEVERAGE	0.473916	0.105141	4.507421	0.0000
SALES	0.191048	0.037883	5.043125	0.0000
SIZE	-0.093563	0.021168	-4.419924	0.0000
R-squared	0.86687			
Adjusted R-squared	0.079307			
Prob(F-statistic)	0.000000			

According to negative β coefficient of Aggressive working capital policy variable (-0.211817), there is inverse relationship between the aggressive working capital policy and return on equity. Its means is that when the firm increase its current liabilities to financing its assets then there increase in default risk that decrease the firm value.

To run the second panel regression again Hausman Test run to check which method is best random or fixed, the Hausman Test results shows the P value 0.0839 and therefore cannot reject the null hypothesis (Random effects Model Appropriate).

In table 4 the second regression model (Random effects Model) shows that there is significant relationship between Conservative working capital policy and return on equity.

According to positive β coefficient of Conservative working capital policy variable (0.010444), there is positive association between conservative working capital policy and return on equity. Its means that the firms value increase when the current assets have more portion in the total assets as compared to current liabilities.

Table 4: Regression Results of Model 2 (Conservative Working capital Policy impact on ROE)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.562553	0.295352	-1.904686	0.0574
CNW	0.010444	0.065645	0.159091	0.0437
SALES	0.155295	0.036599	4.243174	0.0000
LEVERAGE	0.505698	0.110240	4.587245	0.0000
SIZE	-0.066675	0.021822	-3.055354	0.0024

R-squared	0.070335
Adjusted R-squared	0.062823
Prob(F-statistic)	0.000000

The finding s of this study supports the already researches like Weinraub and Visscher, 1998, Abera Baley, 2010 and Afza and Nazir 2007.

5. CONCLUSION

This study investigates the relative relationship between the aggressive/conservative working capital policies for fifty manufacturing limited companies listed at Karachi Stock Exchange for a period of 2009 – 2018.

The study explored that there is a significant relationship among the working capital policies and firm performance. Moreover, the conservative working capital policy has positive impact on firm performance but the aggressive working capital policy has negative impact.

The results of this study are guidelines for the firms to focus on working capital policies and these policy differences is also will be beneficial for the firms.

The limitation of the study was that there was less number of sample firms and in future further study will be done on sector wise comparison in context of working capital management policies.

References

1. Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? Journal of business finance & Accounting, 30(3-4), 573-588.
2. Dong, H., & Su, J.-t. (2010). The relationship between working capital management and profitability: a Vietnam case.
3. Filbeck, G., & Krueger, T. M. (2005). An analysis of working capital management results across industries. American Journal of Business, 20(2), 11-20.
4. Guthmann, H. G. (1955). Corporate financial policy.
5. Hassani, M., & Arezoo, R. (2014). To Survey the Effect of Working Capital Policies (Investing and Financing) on Profitability Risk (Evidence from Tehran Stock Exchange). Journal of Investment and Management, 3(1), 30-36.

6. Jose, M. L., Lancaster, C., & Stevens, J. L. (1996). Corporate returns and cash conversion cycles. Journal of Economics and finance, 20(1), 33-46.

7. Lamberson, M. (1995). Changes in working capital of small firms in relation to changes in economic activity. American Journal of Business, 10(2), 45-50.

8. Lazaridis, I., & Tryfonidis, D. (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange.

9. Nazir, M. S., & Afza, T. (2009). Impact of aggressive working capital management policy on firms' profitability. IUP Journal of Applied Finance, 15(8), 19.

10. Olatunji, T. (2013). The impact of accounting system on the performance of small and medium scale enterprises in Nigeria–a survey of SMEs in Oyo State–Nigeria. International Journal of Business and Management Invention, 2(9), 13-17.

11. Shin, H.-H., & Soenen, L. (1998). Efficiency of working capital management and corporate profitability. Financial practice and education, 8, 37-45.

12. Singh, J., & Pandey, S. (2008). Impact of working capital management in the profitability of Hindalco Industries Limited. The IUP Journal of Financial Economics, 6(4), 62-72.

13. Tewodros, A. B. (2010). The Effect of Management of Working Capital Policies on Firm's profitability: Evidence from Manufacturing Private Limited Companies in Tigray Region, Ethiopia. Mekelle University.

14. Van Horne, J. C., & Wachowicz, J. M. (2008). Fundamentals of financial management: Pearson Education.

15. Weinraub, H. J., & Visscher, S. (1998). Industry practice relating to aggressive conservative working capital policies. Journal of Financial and Strategic Decision, 11(2), 11-18.