

The Impact of Working Capital Management on Financial Performance in Various Industries Tehran Stock Exchange

Hamid Saremi, Shaban Mohammadi, Behrad Moein nezhad

Abstract: This paper examines the impact of working capital management on the Tehran Stock Exchange's financial performance in the industry. to find out the relationship between working capital management and financial cumulative functional and regression correlation. among the companies listed on the Tehran Stock Exchange, members of industry, construction of car wash equipment in the specified time are selected. the research showed that the relationship between working capital management and financial performance of the companies in the machinery and equipment in the production of automobile parts and products is not significant. the positive relationship between working capital management and profitability there.

Keywords: Asset management, financial performance, Capital Management, profitability.

I. INTRODUCTION

In past research, as well as the overall corporate results showed a significant positive relationship the management of working capital and financial performance of the company. despite a significant and positive relationship between management capital and financial performance of the companies, this is not true for various industries entire industries can be expressed at levels that are effective working capital management on financial performance. one of the functions of financial management, the management of working capital. Working capital management in fact, the management of the assets and current liabilities. the current assets include cash, accounts receivable and inventories are. a large inventory and increase trade credit policy to the sale top. inventories increased demand also reduces the risk of coverage. trade credit may stimulate sales is because the company allows access to quality pre-paid, will If an entity to determine the amount of credit conditions is relatively strict. will be less investment in accounts receivable, less loss of accounts receivable bear no will most likely, it will be less revenue. the other working capital accounts is payable. delay in payment of accounts payable to suppliers, to allow the company to achieve the quality of purchased products and can supply cheap financing and be flexible. on the other hand, if a company is considered a discount for prompt payment delay off such debts can be costly.

Revised Version Manuscript Received on November 21, 2016.

Dr. Hamid Saremi, Department of Accounting, Quchan Branch, Islamic Azad University, Quchan, Iran.

Shaban Mohammadi, Hakim Nezami Institute of Higher Education, Quchan, Iran.

Behrad Moein nezhad, Hakim Nezami Institute of Higher Education, Quchan, Iran.

by the same token, do not collect accounts receivable can also lead to problems related to cash flow Input for the company. a special component of working capital management, cash conversion cycle is Interval between the expenses for the purchase of raw materials. the collection is completed sale is. a long cash conversion cycle may increase profitability because it leads to higher sales. if the costs of higher investment in working capital, inventory or increase faster than benefits credit transactions with customers is more profitable firms may reduce the cash conversion cycle finds. 2. expression of research question working capital management is an important component of management, finance companies because they are direct impact on the profitability of companies (7 Gill et al., 2010). the management of working capital the management of the assets and current liabilities. Mismanagement in the administration of current assets is likely to involve significant costs. Invest too much in current assets, financial resources are limited Profit profitable unit which can be used in cases allocated to the cause will bear the cost of lost opportunity. on the other hand, investment in current assets may be much less costly. the Get the relationships between these factors and corporate financial performance, there can be financial managers to help optimize them. many studies have been done to each side of the world to examine the relationship between working capital management and profitability of their companies. studies have also been conducted in the samples the extraction of total enterprise Tehran Stock Exchange has been obtained. but the question is whether all industries have the same characteristics and financial directors of all companies and industries should follow a pattern. are relationships previous studies have found significant at the level of the industry will be meaningful? previous studies have generally impact on the profitability of working capital management for the entire sample of companies Stock Exchange and that while it may be different in different industries, so this relationship in the we study the relationship between level 3 and the industry at all companies we compare the observed we will see if this relationship is the same industry or not? the main research question is whether the relationship components of working capital management and financial performance in the same industry or any industry due to there are features that are different.

II. THEORIES AND LITERATURE

Working capital management as "the management of current assets and current liabilities and financing of the Current assets "is defined. Working capital management is important in creating value for shareholders. (Gill et al., 20). Standard for the management of working capital is the cash

The Impact of Working Capital Management on Financial Performance in Various Industries Tehran Stock Exchange

conversion cycle. represents the time between the receipt of cash payment and collection of receivables and cash and to estimate the number of days maintenance of inventories to deduct the debt payment period is measured. from net trade cycle used as a measure of working capital management. net trade cycle is essentially equal to the cycle (NTC) cash conversion is where all three components of the cash conversion cycle expressed as a percentage of sales. as a result, a strong negative relationship between the net trade cycle they show that one of the ways to create value for shareholders decreased net trade cycle company. relationship between working capital management and profitability of the companies studied. For the Test this sample of 1,009 large non-financial companies in Belgium during 1992 Using correlation and regression testing her a negative relation between operating profit and gross collection period accounts receivable, accounts payable payment period inventories and the Belgian companies found. based on the results of the study showed that managers can reduce accounts receivable collection period and duration of use firms to increase their holdings. sample of 131 companies in the Athens Stock Exchange for the period (2001 to 2004) adopted and found a statistically significant relationship between the profit achieved by the gross operating profit and cash conversion cycle and its components (accounts receivable, accounts payable, and inventories) there. based on the analysis of the results of the annual data using correlation and regression analysis, they concluded that administrators can manage the cash conversion cycle and maintenance Each conversion cycle at the optimal level for companies to make a profit. Rahman and Nasr (2007) to study the effects of different variables on working capital management, which includes the average period collection, inventory turnover, average payment period, the cash conversion cycle and the current ratio, the net Pakistani companies began operating profitability. their sample of 94 Pakistani company registered in Stock Karachi securities for a period of six years from 1999 to 2004, was chosen to be a negative relationship between the management of working capital and profitability were achieved. they found that when the cycle turns cash is increased, leading to reduced profitability and company managers can have a positive value for Shareholders, by reducing the cash conversion cycle to the lowest level possible. and fallopian Ajylr (2009) sample of 50 non-financial companies in Nigeria for the period 1996 Out. In their study on a panel data regression, cumulative, which is a combination of time series observations aggregation is used. significant negative relationship between operating profit and average collection period, inventory turnover in days, the average payment period and cash conversion cycle for a sample of 50 companies listed on the Nigerian Stock Exchange Nigerian found. in addition, significant changes in working capital management effects found between small and large companies. impact on the components of working capital management using a sample of 30 firms in each of the companies listed on the Nairobi Stock Exchange for the period 1993 to 2008 tests (NSE) contract. he pearson and spearman correlation, aggregation least squares regression and fixed effects regression model the data used for the analysis. the key results of this study were: (1) negative

relationship very important and between when the company collects cash from customers (the collection of accounts) and Profitability, there are 2 very important and significant positive correlation between the conversion of inventories to sales (volume inventory turnover) and profitability is a significant positive relationship between the course that takes 3 to pay creditors do (average payment period) and is profitable. due to the above hypothesis can be stated as follows:

III. THE MAIN HYPOTHESES

1. the management of working capital has a positive impact on the financial performance of companies in different industries. 2. the management of working capital has a positive impact on financial performance of the entire company. Secondary hypotheses for the entire company and in the industry as follows:

1. there is an inverse relationship between the collection of receivables and financial performance.
2. there is an inverse relationship between the financial performance of the debt.
3. there is an inverse relationship between the financial cycle inventories.
4. between the cash conversion cycle and corporate financial performance, there is an inverse relationship. It is noteworthy that these assumptions at the corporate level and industry level 3 to be tested separately.
4. methods performance measures with respect to accounting and financial concepts divided into two categories. in accounting standards, corporate performance is assessed according to the criteria of accounting data economic performance of the company profits and investment power with respect to the potential and also the rate rate of return and capital costs are assessed. In this study, the dependent variable is the company's financial performance calculated as follows:

$$\text{profit} = \frac{\text{sales} - \text{cost of goods sold}}{\text{Total assets} - \text{financial assets}}$$

Total assets financial assets

Gross profit divided by the non-financial assets (total assets minus financial assets) Independent variables are expressed as follows:

The collection of receivables (AR): average accounts receivable divided by sales over the period, multiplied by term debt (AP): average accounts payable divided by cost of goods sold during the period multiplied by 365 cycle inventory (INV): average inventory divided by cost of goods sold during the period 365 times cash conversion cycle (CCC): the total collection period and inventory turnover period to deduct payment of debts the control variables of the study were as follows: : log sale: size control variable is the logarithm of sales : FD: how to finance the company's impact on its financial performance, we leverage variables are added to the model Is the sum of short-term and long-term loans divided by total assets FFA: financial fixed assets divided by total assets: SGR is the company's sales growth is sales minus sales last year, divided by: sales last year to find the relationship between working capital management and financial performance variables, the coefficient pearson correlation and multiple regression with panel data is used. the regression equations in the following form hypotheses to be estimated.to find the relationship between working

capital management and financial performance variables, the coefficient pearson correlation and multiple regression with panel data is used. the regression equations in the following form hypotheses to be estimated.

$$ROA = \alpha_0 + \alpha_1 AR + \alpha_2 \log S + \alpha_3 FD + \alpha_4 FFA + \alpha_5 SGR$$

$$ROA = \alpha_0 + \alpha_1 AP + \alpha_2 \log S + \alpha_3 FD + \alpha_4 FFA + \alpha_5 SGR$$

$$ROA = \alpha_0 + \alpha_1 INV + \alpha_2 \log S + \alpha_3 FD + \alpha_4 FFA + \alpha_5 SGR$$

$$ROA = \alpha_0 + \alpha_1 CCC + \alpha_2 \log S + \alpha_3 FD + \alpha_4 FFA + \alpha_5 SGR$$

IV. THE POPULATION AND SAMPLE

The population of Tehran Stock Exchange, which we all firms in the industry are companies that member 3 "machinery and equipment" and "pharma", "automobile

parts manufacturing" are selected Them. to increase the sample size, our study period is from 80 to 89 years. and a year observations Company reviewed the cumulative data used are a combination of series data time- Are cross-sectional and panel data to say.

V. DATA ANALYSIS

Descriptive statistics of the variables used, assumptions need to be reviewed. Table 6-1 summarizes the descriptive statistics of the variables listed. Table 2-6 Correlation matrix between variables research also shown.

Descriptive statistics - Table 1-6

Explanatory variable	Symbol	At least	The maximum	Average	Standard deviation
profitability	ROA	0.02	0.78	0.35	0.18
cash conversion cycle	CCC	15.28	314.47	103.4	55.45
Demands Collection Period	AR	11.34	223.06	66.67	27.32
Payment of debt	AP	13.17	244.8	48.57	40.38
Inventory turnover	INV	17.23	304.4	83.77	49.35
Company Size	LOG S	4.035	8.879	6.224	0.704
debt ratio	FD	0.014	0.862	0.34	0.28
Of financial assets	FFA	0.00	0.74	0.055	0.04
Company growth	SGR	1.65	7.01	1.518	0.661

as seen in Table 2-6 Coefficient of solidarity among the most significant variables. the observed correlation between the growth of the company with the company. because the test should be considered in the various industries of each

model are listed for each industry once the regression estimates do. to examine the assumptions of regression tests listed in part 4 of the industry is that it results in Tables 3 to 6 are listed.

Table 2.6 Correlation Matrix

variable	PROFIT	CCC	AR	AP	INV	FD	FFA	SGR	LOG
PROFIT	1								
CCC	0.116	1							
AR	0.093	0.077	1						
AP	-0.225	0.262	-0.130	1					
INV	0.084	-0.035	-0.145	0.093	1				
FD	-0.03	0.071	-0.088	-0.03	0.197	1			
FFA	0.121	0.552	0.124	-0.007	-0.033	-0.189	1		
SGR	0.160	-0.278	-0.085	-0.140	0.320	0.098	-0.045	1	
LOG S	-0.018	-0.615	-0.331		0.300	0.061	-0.410	0.775	1

Despite significant regression equations according to F-statistics can be mentioned. but the results of statistic T It shows a significant level of profitability of the industry and there is no significant relationship between the independent variables listed. in Table 4-6 the results of regressions estimated in the automotive industry and the manufacture of parts of speech is. the results are identical to the principles

expressed in this research is the relationship between profitability and Independent variables there. 6-5 regression results show that the drug industry is a significant relationship between profitability and the independent variables. the estimation results of Table 6-6 Industry has been inconsistent.

Table 3-6 Estimated results of regressions to test hypotheses 1 to 4 (industrial machinery)

MODEL	1	1	2	2	3	3	4	4
Explanatory variable	Statistics T	Significant						
CONSTAN T	-0.796	0.384	-1.759	0.099	-1.778	0.097	-2.325	0.028
FFA	1.114	0.345	3.914	0.000	1.188	0.242	1.452	.0185
FD	-4.148	0.000	-4.232	0.000	-3.874	0.000	-4.000	0.000
LOG S	2.784	0.005	3.714	0.000	3.566	0.000	4.489	0.000
SGR	-1.685	0.077	-1.810	0.076	-1.731	0.068	-1.743	0.080
AR	-2.480	0.010						

The Impact of Working Capital Management on Financial Performance in Various Industries Tehran Stock Exchange

AP			-1.320	0.334				
INV					-0.390	0.872		
CCC							-0.651	0.563
Watson	2.082	2.085	2.055	2.048	2.044	2.049	2.046	2.046
Statistics f	11.878	0.000	10.683	0.000	12.305	0.000	11.470	0.000
Adjusted R2	%24.4	%24.4	%24.1	%24.1	%23.5	%23.5	%23.6	%23.6

According to the results of the research can be concluded that all companies in the area of asset management in turnover and profitability, there is a significant positive correlation with the original hypothesis verification completed, but in different industries have different results and in some industries there is a positive relationship between profitability and working capital management. so in the industry as a whole, this relationship does not work and hypotheses we do not approve second.

Table 4-6 estimated results of regressions to test hypotheses 1 to 4 (Automotive Industry)

MODEL	1	1	2	2	3	3	4	4
Explanatory variable	Statistics T	Significant						
CONSTANT	5.954	0.000	5.742	0.000	6.132	0.000	6.196	0.000
FFA	4.775	0.000	4.870	0.000	4.891	0.000	4.913	0.000
FD	-3.786	0.000	-4.111	0.000	-4.758	0.000	-4.618	0.000
LOG S	-2.231	0.027	-1.922	0.048	-2.360	0.019	-2.439	0.016
SGR	0.118	0.906	0.137	0.891	0.194	0.847	0.185	0.854
AR	-3.871	0.000						
AP			-3.441	0.001				
INV					-4.130	0.000		
CCC							-4.238	0.000
Watson	1.894	1.894	1.929	1.929	1.929	1.929	1.921	1.921
Statistics F	13.913	0.000	13.129	0.000	14.433	0.000	14.658	0.000
Adjusted R2	%23.9	%23.9	%22.7	%22.7	%24.6	%24.6	%24.9	%24.9

Table 5-6 Estimated results of regressions to test hypotheses 1 to 4 (Pharmaceutical industry)

MODEL	1	1	2	2	3	3	4	4
Explanatory variable	Statistics T	Significant						
CONSTANT	-0.692	0.555	-0.310	0.767	0.847	0.408	0.323	0.755
FFA	5.554	0.000	4.770	0.000	3.847	0.000	4.985	0.000
FD	-4.554	0.000	-4.682	0.000	-4.315	0.000	-4.244	0.000
LOG S	3.074	0.003	2.641	0.000	1.768	0.079	2.266	0.025
SGR	2.981	0.000	1.478	0.146	2.832	0.005	2.656	0.009
AR	-2.014	0.003						
Ap			-2.456	0.020				
INV					-2.759	0.006		
CCC							-2.540	0.012
Watson	2.245	2.245	2.271	2.181	2.079	2.079	2.200	2.200
Statistics F	21.867	0.000	2.886	20.786	21.418	21.418	21.047	0.000
Adjusted R2	%36.1	%36.1	%34.8	%34.8	%35.6	%35.6	%35.1	%35.1

Table 6-6 Estimated results of regressions to test hypotheses 1 to 4 (Of all companies)

MODEL	1	1	2	2	3	3	4	4
Explanatory variable	Statistics T	Significant						
CONSTAN	3.835	0.000	3.209	0.001	3.877	0.000	3.851	0.000

FFA	7.313	0.000	6.748	0.000	6.549	0.000	6.877	0.000
FD	9.906	0.000	-9.933	0.000	-10.064	0.000	10289	0.000
LOG S	0.773	0.440	1.206	0.228	0.630	0.529	0.770	0.441
SGR	7.066	0.000	7.507	0.000	7.425	0.000	7.123	0.000
AR	-5.157	0.000						
Ap			-2.099	0.036				
INV					-2.836	0.005		
CCC							-3.937	0.000
Watson	1.965	1.965	1.959	1.959	1.956	1.956	1.956	1.956
Statistics F	59.089	59.089	52.965	0.000	53.969	53.969	56.027	0.000
Adjusted R2	%29.7	%29.7	%27.4	%27.4	%27.8	%27.8	%28.6	%28.6

VI. CONCLUSION

According to the results obtained in the previous section can be concluded that the overall level of corporate changes directly affect the profitability of working capital management. but not at the level of each industry the obtained results generalize. overall, the results of this research can be concluded: 1. working capital management is one of the essential elements for companies to increase profitability the company will face. 2. similar to the results obtained in previous studies it can be concluded that the increase in the collection, the debt-cycle inventory and cash conversion cycle by reducing the profitability of the industry's most Tehran Stock Exchange will. 3. type in the industry and helps companies manage working capital that results in various industries the theory is expressed differently. so it can be stated that every industry has its own working capital management considering the volume of transactions in the wholesale or retail industry and management of the exchange impact on profitability will be different and in some circumstances may have no impact on profitability.

REFERENCES

1. P hilip Bromiley(2010) Deans professor of Strategic Management Merage School of Business, University of California, September .
2. Susan J Hart(2010),School of Management and Languages, Strategic Management Accounting:, Heriot-Watt University, September.
3. Robin Roslender(2010), School of Management and Languages, Strategic Management Accounting:, Heriot-Watt University, September
4. Danuletiu, A. (2010). "working capital management and profitability: A case Ofalba County companies".Annales Universitatis Apulensis Series Oeconomica, Vol. 12, No. 2, pp. 364-374.
5. Deloof, M. (2003). "Does working capital management affect profitability of Belgain firms?". Journal of Business Finance and Accounting, Vol. 30, pp. 573-588.
6. Falope, OI, Ajilore, OT. (2009). "Working capital management and corporate profitability: evidence frompanel data analysis of selected quoted companies in Nigeria". Research Journal of Business Management, Vol. 3, pp. 73-84.
7. Gill, A, Biger, N, Mathur, N. (2010). "The Relation Between Working Capital Management And Profitability: Evidence From The United States". Business and Economics Journal, Volume 2010: BEJ-10.
8. Lazaridis, I, Tryfonidis, D. (2006). "Relationship between working capital management and profitability of companies listed in the Athens Stock Exchange". Journal of Financial Management and Analysis, Vol. 19,No. 1, pp. 26-35.
9. Mathuva, D. (2009). "The influence of working capital management components on corporate profitability :a survey on Kenyan listed firms". Research Journal of Business Management, Vol. 3, pp. 1-11.
10. Raheman, A, Nasr, M. (2007). "Working capital management and profitability – case of Pakistani firms" .International Review of Business Research Papers, Vol. 3, pp. 279-300.
11. Shin, H, Soenen, L. (1998). "Efficiency of working capital management and profitability". Financial Practice and Education, Vol. 8, pp. 37-45.