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Analyzing the Working Capital Management on Company's Performance a Case Study of Chemical Sector Listed in KSE

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Abstract: The main objective of this paper such as the Karachi Stock Exchange market development working capital management (WCM) on firm performance is to determine the impact. In this paper the chemical industry for the period 2009-2014 to 6 years for a sample of 22 firms Karachi Stock Exchange (KSE) working capital management and firm performance of different variables used for analysis . Working Capital Management to measure the variables that were used in this study are the number of recovery days , days in inventory and size , leverage , inventory , equity , sales and gross domestic product (GDP) numbers are control variables. Firm performance measure used in this study for the dependent variable is the return on assets. Firm size is positively affected by the firm's profits. Firms whose profits are high, their working capital firms are not interested in management and firm performance. The result of the study and working capital is negative relationship between firm performance shows. Is a positive relationship between size and profitability? Firm size is increased or decreased profit increased or decreased respectively. Moreover, profits and principles that support the pecking order used by firms are negative relationship between debts.

Keywords: Working capital management; Equity; GDP; Chemical sector; KSE-100.

1. Introduction

It brought the current financial problems and refused to spread very fast in 2008. A lot of attention to the savings that the companies made in the interim and capital assets used in the return period to one year to indicate the main part of the things on the financial position of the company. He represents the importance of capital management temporary worker companies from all over the world and urged the researcher to focus on Practitioners and researchers from the same kind of supposed. A successful financial period between working capital management companies ([Lo, 2005](#)) is necessary and logical for companies to well the importance of working capital management on the progress of the competition and the profit situation and the development of stress can be arranged for the transaction to be WCM survive the impact of a high percentage of the company's total resources Because rather than short term and source performance of the company high level on the impact of the 1998 WCM and check the high use of the idea of the resources that there is monitoring management at a high level ([Garcia-Teruel and Martinez, 2007](#)). We are to reduce the threat of more efficient working capital or our performance improvement of the bankruptcy also more effectively manage and use. Performance by increasing the company should reduce the need for debt or reduce. The main features of the WCM are a cash conversion cycle (CCC) ([Deloof, 2003](#)). CCC knew as the time between the re- payment of sales and product of products on credit. This may mean an increase in the CCC it is our payment is further delayed as a result our capital many more in working capital. Time of large period from the CCC it is very harmful to than the more time the organization Result

CCC increase interest expenses and increased default risk and low profitability. So what's up CCC and management more efficient and low interest CCC is increasing the liquidity of the company as well as profitability. Liquidity and stability alike are demanding options for the performance of each company on the process. Liquidity requirements are to ensure that companies are able to fulfill their responsibilities and temporary continuous stream can be clear for a profitable project. The importance of cash as a sign of the ongoing economic well being should not be amazing to monitor the vital position in the field of business. It is a condition that must work perfectly together or run profitably. Determined that the stress of less credit limits and due to increased interest rates a rapid decline in conditions that profits on goods and Services Company happens and lead to an increase in the vertical equity and fixed up to these stocks. Therefore, the average period many companies are changing their attention on the increase in the success of the internal cash management. The difference in the assets and liabilities may be happening where companies can zoom profit in a short period but at risk for liquidation.

Moreover, it provides more attention to liquidity which will be the cost of profitability. Therefore, the unit's managers are in a dead end to achieve the preferred exchange in order to increase liquidity and profitability of the

company's value (Padachi, 2006). Close rates between trivial companies to very high compared with big business. Previous revealed to learn that working capital management is weak for the management of financial funding is weak and inadequate especially in the long term is the main reason for the collapse of small businesses (Berryman, 1983; Dunn and Cheatham, 1993; Lazaridis and Tryfonidis, 2006). Determine the importance of investment as a result of working capital the company's threats strategies in a number of Companies operating strategy for the management options and the effects of practices can be significant for the Advancement of the market but not for profit accounting. Successful management of possession is to turn the profitability of a commercial scale. The market value and need to bring in additional investors to the market value, to determine the management of the results that can be calculated on the basis of the proposal in an ideal working capital management of this learning. Impact of capital management work to define a strategy in growth markets along with the accounting firm and the market offer. Working capital is the best statement of the change in cash. We had a hard time in order to determine the relationship between the accounting so as to make the market and provide the cash conversion cycle management. All the important aspects of the relationship consist of three working capital management. It is a sign of how much the company can bring near its functions or to describe the interruption period between payments for goods and a range of sales. It is expected that the best possible stage of a direct cause stocks to profitability while unloading their belongings working capital that the business cycle is to enlarge the inventory stages take the necessary measures to increase demand for petroleum products. In the same way all of the credits from suppliers and customers credit strategies recognize the time which affects the profitability.

In order to identify the working capital is organized considering the cash conversion cycle and the impact on the market value denominations companies and progress Accounting Statistically, we examine the link between the working capital of the company and management performance of companies that have been registered in the Karachi Stock Exchange for the 2005-2010 phase. The impact of the cash conversion cycle and number of days of receivables, the number of days in stock, equity, GDP, inventories and sales and influence and the number of outstanding days is to establish the overall operations. This is difficult to study the report, we have made progress the goals of our study this is to have the confidence and place in the important feature of money management attributes that are known as the management of working capital. Do not touch in Pakistan or very small study has been completed in this area. In this study, we were focused on the work the impact on the revenue model for capital management and Pakistan companies. Important aspect a number of management and performance of working capital to be expected to be communication between the management and profitability of working capital during the period of the listing to six years 22 Pakistani chemical company in Karachi Stock Exchange Elements and define the relationship between the two companies of Pakistani performance and liquidity. The size and performance of the relationship developed between the Pakistani companies. Pakistani chemical companies have established the relationship between debt sector and its performance.

2. Literature Review

As trade finance is the main part of the decision as well as the capital structure and governance Budget of the death penalty. Working capital management is the most important element in the trade finance. Through perfect working capital management is to direct the firm to respond promptly and properly to separate the unexpected components in the market so interest rates and prices of rare items earn rewards aggressive opponents (Appuhami, 2008). Staff used to predict the time on all the decisions through the capital on current assets which often turn into other advantages which are the types of short-term investments (Rao, 1989). Current liabilities in this case that the company is responsible for doing the duties provided for in short-term liabilities on a logical basis. Liquidity depends on the continuation of the company's work on the monetary changes that have been created from the assets of the company (Soenen, 1993). From the management of working capital by the company is very difficult to part in the area of monetary regulation (Joshi, 1995).

2.1. Return on Assets

Return on assets means the extent of the establishment of company it is a profit and effectively available resources. It also referred to as the return on investment (ROI). Not only the two countries Japan, Taiwan (Wang, 2002) Study on the operating performance and liquidity of the relationship in. Moreover, it is checked not only the value of the company, the relationship between liquidity. It is to get the results; we found that there is a direct relationship between the return on equity and return assets cash conversion cycle (CCC). He must be there, but it was pointed out a variation in the structure as well as cash Excellence Constitution of the two countries. However, if the high liquidity and better performance also be directly affected by the value of the company.

2.2. Sales

The terms of sales, which means to sell products and services to return the money or reward. Shin and Soenen (1998) claims of its efficient credit policy and organization of the adoption of the cash cycle maximum of good big cash cycle and the organization is also through to the you can increase the increase and sales increase profitability of the results . However, usually it will affect the long cash conversion cycle profit institutions.

H1: There is a significant relationship between sales and return on assets.

2.3. Size

Size means how much resources reserves. Companies size limit for their duties in Developing countries that are important for companies operating in emerging markets advancing. In growth markets and companies are usually low volumes of touch with incomplete to capital markets for longer. Those companies are likely to rely on additional serious owner and trade finance debt and debt financing for a short time monetary junk savings, Trade and inventory ([Chittenden et al., 1998; Saccarato, 1994](#)).

H2: There is a significant relationship between size and return on assets.

2.4. Numbers of Day's Receivable (NDR)

It is called on credit sales and the recovery of these payments in the period a number of sales Due today (NDR). Business Achievements depends largely lying on the ability of financial managers to control the cash conversion cycle ([Filbeck and Krueger, 2005](#)). It can be organized to reduce the company's debt and the cost of raising capital for projects that can be obtained by reducing the amount of resources in the short term. If a company has more assets than the current so it will directly affect the revenue. This is because of the negative relationship between the excess and profitability of assets in the short term. ([Gitman, 1974](#)) that showed the idea of the Cash Cycle Capital Management. An important component of the company's shares for a cash purchase of finished product sales to reach the point of view of the organization of the collection period ([Richards and Laughlin, 1980](#)) and is considered the time interval between the final recovery of and revenue purchase net cash from the sale of products that reflect the cash cycle.

Positive way for the cash conversion cycle is the number of days means the stock in hand and sets a negative impact on a number of costs to suppliers. A combination of the old parts of learning between the cash conversion cycle. There are three forms. ([Sartoris et al., 1983](#)) combine profits, stock and the combination of the stock to be ([Haley and Higgins, 1973](#)) and the combination of Part of the working capital ([Damon and Schramm, 1972](#)). Link part of the working capital and means to take action is one part of the organization of the ([Sartoris et al., 1983](#)) will affect the other part for example the administrator of the securities is to take action at the stage of production of goods. It will contribute the capital collection and payment as a threat there must be a large amount of stock of work other part respond to a reduction in the amount of finished products to extract the edge of the profits. One of the results and inventory management sterile is the cause of the prosperity of the company through the scheming of payments and the risk of lack of access to goods. Unfortunately the relationship between researchers from the latter working capital management does not give positive results ([McInnes, 2000](#)).

H3: There is a significant relationship between No. of day's receivable and return on assets.

2.5. Numbers of Day's Inventory (NDI)

Economic evaluation of the performance of the company's financiers provides a source of inspiration for how long it is he gets a job rotates its shares in sales. Usually the number of days and fewer goods for the company. However, it is necessary Keep in mind that the average inventory for the company according to company and industry to industry by maintaining working capital, we also increased our liquidity.

Prior to this we increase our company's value also liquidity and increased. When we settle stock level more than we need, we must have a production department in turmoil. From this we have delivered an increase in costs ([Blinder and Macinni, 1991](#)). Number of outstanding today the number of days outstanding and the number of stock a full day of WCM as a measure that is used to form a trade credit policy, politics and inventory management. ([Deloof, 2003](#)) found a number of stocks today and a number of receivables today and the number of accounts payable today as significantly inversely proportional to the total operating income. Hence, it was suggested that by reducing the number of accounts today and the number of stock up today to a certain level of corporate managers can give value to shareholders.

H4: There is a significant relationship between No of day's inventories and return on assets.

2.6. Leverage

Means of influence of the parties to take the money abroad loves the banks and the capital Market and the money market and other financial institutions. If you take advantage of the business you can say that take a loan for the company to buy the assets. ([Raheman and Nasr, 2007](#)) on the Karachi Stock Exchange to make a search of 94 listed you can take the results to the WCM and profitability. He has determined that a direct relationship between profitability and WCM. In addition, they established this effect, but its liquidity is a direct relationship between the WCM, the size of the company there is a direct relationship and profitability. Thus WCM is a very important component of any type and size of company. I want to improve the performance of the company and we have those elements you need to make sure that it is affecting directly or indirectly to working capital. ([Wilner, 2000](#)) I show the majority that companies are used to briefly trade credit despite clear larger debt interest cost and trade usually goes beyond the 16 percent rate. In 1993 a comprehensive debt Pakistani companies to customers through investment. ([Deloof, 2003](#)) Created to analyze the data from the National Bank of Pakistan in 1997 accounts payable days were 16 percent of total assets and receivables have today and not a stock today is calculated at a rate of 21 percent. On the other hand ([Summers and Wilson, 2000](#)) Karachi Stock Exchange in the conflict in the chemical industry. That is more than 80 percent of the daily business interactions that depend on credit.

H5: There is a significant relationship between leverage and return on assets.

2.6. Inventory

Supplies, goods and finished goods and work in process that is ready for sale in the market the stock is part of the assets of the company. For he is the source of profit income and we have certain parts of the stock is very necessary to keep him. Decision on any of these elements can affect the other units of the performance of the remaining elements , cooperation between the elements of working capital management (WCM) company ([Sartoris et al., 1983](#)) Will make around a lot the value of inventory on the performance of companies resolution if the company takes a high level of inventory and will face the risk of inventory is used even in this case WCM elements of the credit for others and contribute to discount the risks and response to reduce the level of finished goods to increase profit. According to [McInnes \(2000\)](#) 94 per cent of firms never build a link between WCM elements of their own. One of the important measures for efficient inventory management is rotation. We calculate the value of trading by dividing the annual sales with an average stock. It identifies the efficiency of the cash we have invested in stocks that generate benefits for us ([Rose, 1979](#)). Labor force in inventory investment depends on the strength of the relationship with the rotation. Results largest more efficient sales. Therefore, by lowering the levels of inventory we were able to increase the turnover rate sometimes decrease in the level of inventory it can cause a lack of inventory to customers a timely manner ([Coyle et al., 1992](#)).

H6: There is a significant relationship between inventory and return on assets.

2.7. Equity

Equity is a leading interest in the company that remains after blocking rivals resources. He also called on shareholders equity making ([Devic and Krstic, 2001](#)) Search in Poland. Discover indirect relationship between profitability and leverage when the book value of the company is used to calculate the influence. This relationship is direct support for the pecking order theory.

H7: There is a significant relationship between equity and return on assets.

2.8. Gross Domestic Product (GDP)

Gross domestic product (GDP) is the total market value of goods and services produced in the country given year.

H8: There is a significant relationship between GDP and return on assets.

The risks incurred in working capital management to organize assets in the short term are related. It is impossible to reach the big stage of the capital. It is possible to become bankrupt and may be obligatory in liquidation ([Altman, 1968](#)). Multivariate on Pakistani companies made up of working capital is a mechanism to predict Qaeda base. Gather information from organizations Karachi Stock Exchange that are used made ([Taffler, 1982](#)) model four elements are not successfully expectations. Working capital consists of all four alternative components. If we want to increase the performance of the company we reduce inventory level and the collection and all the elements that affect the liquidity and working capital. We also focus on the repayment period started in late much as possible is good for the organization because if repayment period in late then the amount that we use for newly paying another investment opportunity that lead to increase the value of our company as well as performance.

Current assets are sufficient to meet its current obligations to ensure the safety logical edge. It has all the current assets to be organized perfectly to maintain liquidity while companies are not able to rise from the stage each and every one of them. Each temporary source of financing organized on an ongoing basis to make sure that you check and use the finest possible means. The main component alerted replaces working capital management between productivity and threats that are connected to the phases of the short term assets and liabilities. After that the actions of working capital management actions are not in the long term. Managers use different methods for action cash changes or liquidity, profitability and capital returns main ideas which cash flow is may be a little.

[Smith \(1980\)](#) gives the importance of exchanges between the management objectives of both working capital particularly between profitability and liquidity. It describes the procedures that are able to increase the likelihood of liquidity but not sufficient. On the other hand the decline in potential profitability of each company's focus on liquidity. Profitability and performance depends entirely on how the company's management that working capital management takes three aspects of WCM.

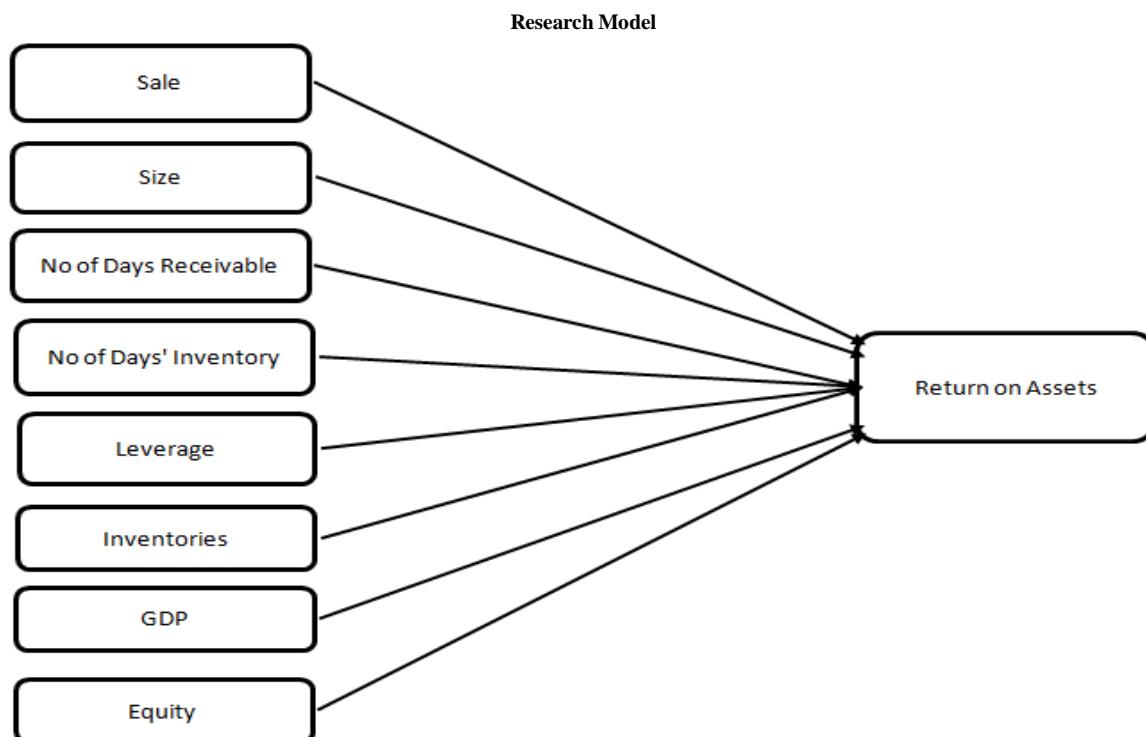
1. If the company has not been able to use WCM effective manner then not only because it affects the profitability but also a financial disaster.
2. If you are needs more working capital for the company after that and then we can say the company made its money is double.
3. However , if a company has less capital to work after that in itself creates difficulties for him because he happens then not only can affect our operation but also for our profits .

While most of the actions that can predict the financial changes in current ratio and liquidity ratio [Emery \(1984\)](#) and [Kamath \(1989\)](#) give the arguments that the continuation of the company's liquidity does not depend on insolvency value assets but works quietly monetary changes created by those assets. In the case affects the conclusion researcher working capital management affects the working capital management and discusses the workers. Factors that affect all businesses are global factors that exaggerated a few minutes' industries to these factors. There are a few global factors which companies are of Political Affairs ([Carey, 1949](#)) trade and financial conditions ([Moshe Ben-Horim and Levy, 1983](#)) and causes between industries ([Hawawini et al., 1986](#)) and legislation.

However, the management structure (Garcia-Teruel and Martinez, 2007) the Law for the management of (Krishna *et al.*, 1993), the rule of savings (Seidner, 1990) and the financial capacity management is the study of a unique initial writing the Shin s are (Rahman and Ali, 2006). In accordance with the diverse styles of the study show that the impact of scary minimum capital management the number of workers publicly discussed the impact on the company's business and it questioned the practical realization whether the sequence of small monetary change is having a better effect for the company recovered from the previous writing.

2.9. Pakistan Chemical Sector

Most of the chemicals that we import from different countries develop However, Pakistan developing countries. Pakistan went through under a number of reforms in the Karachi Stock Exchange (KSE). In 2000 it enters in Pakistan in a rising market when chemical industries intervention in the foreign trade of progress in the chemical sector such as FFC is the most famous company in Pakistan which takes the bulk of the Karachi Stock Exchange. There are limited resources in Pakistan and many of the economic crises. This is because there is political instability in Pakistan. In foreign countries a very powerful and effective performance base and the stock market but in Pakistan and the stock exchange are weak and the main event because of the economic and political crisis. In Pakistan there are two type of financing. Firstly, it is religion and the second is justice. In Pakistan religion is more useful then the ideal rate however, the ideal situation of debt to equity of 60% of the equity and 40% of the debt because the condition in different Pakistan and the debt to equity of 73% debt and 27 % of the shares used in Pakistan. Trading Karachi Stock Exchange in Pakistan is such market progress. Production of chemical sector capital basis in business for playing a vital role because of the financial crisis in Pakistan is short on time. Pakistan in the Karachi Stock Exchange as well as central bank issued annual reports of manufacturing companies that progress is concerned by the Audit Committee with some limited resources and funding in Pakistan. The availability of funding for financing in the short term and the largest of the capital factor is more efficient and effective to meet the requirements. Importance for the company's performance how much Investment management company for the contribution made.



3. Research Methodology

Choose Karachi Stock Exchange data collection in this study we choose for the chemicals sector in the Karachi Stock Exchange and 22Companies that are listed in the Karachi Stock Exchange. In the Karachi Stock Exchange, companies must be listed by their profits appear to attract investors are listed companies more incentives compared with companies not listed on the stock exchange listed companies because the progress of work and financial operations. Here we take data from the manufacturing companies and are working on chemical sectors. In this paper, we take a sample of 22 companies 6 years of data in the chemical sector of the Karachi Stock Exchange. Annual Report for the period 2009-2014 of 22 companies is listed on the Karachi Stock Exchange. We examine the annual reports in depth and another application test for the analysis of the application of standards for data filtering. In this paper, we take the balance sheets and income statements for the chemical industry 22 for the purpose of verification of the impact of the return on assets on the company's performance.

4. Data Analysis and Results

Descriptive statistics

	ROA	SALES	INVENT0RIE	GDP	EQUITY	NDR	NDI	SIZE	LEV
Mean	10.97	9139413	1005873.83	4.831	4495950	39.30	69.25	12.05	26.685
Median	10.18	3214462	309667	5.68	1419022	29	95	6.505	0.5372
Maximum	49.03	8815469	7837089	7.67	2705363	365	274	44.34	3401
Minimum	-	0	0	1.6	-	0	2	5.17	0.0294
Std. Dev.	14.31	1448990	1475125.67	1.972	6259754	51.58	78.68	64.70	298.24

It means return on assets is 10.97 % of the total fixed assets. He described that companies have an average return on assets is 10.97 percent. The standard deviation is 14.31 which show that there is deviation rise in the yield on the sidelines of assets between companies in our analysis of samples. Companies entitlements today in the chemical industry is 39.30 days, which indicates that the firm number of dues is the best. The standard deviation of a number of receivables for today is 51.58. The maximum and minimum value of NDR is respectively 365.0 and 0.00 days. The company is the number of days in inventory 69.25 shows that the company how long it takes stock in hand and the average size of the company is 12.05 even the maximum and minimum values of size are respectively is 44.34 and 5.17 which shows that the company is in the biggest market.

Working Capital Management and Firm Performance Measured by Return on assets

Variable	Coefficient	Prob.
C	-31.0469	0.0401
SALES	0.0000	0.0265
SIZE	6.7187	0.0061
NDR	-0.0693	0.0116
NDI	0.0145	0.0464
LEV	-0.0013	0.6835
INVENTRIES	0.0000	0.0119
GDP	0.1763	0.7299
EQUITY	0.0000	0.6258
R-squared	0.3662	
Adjusted R-squared	0.3225	
Durbin-Watson stat	1.1808	
Sum squared residual	14220.4471	
F-statistic	8.3775	0.0000

Dependent Variable: ROA

Method: Panel Least Squares

Sample: 2005 2010

In this table we measure different variables. Here is the return on assets and the NDR variables the number of day's accounts receivable and the National Democratic Institute the number of inventory days are the independent variables. There is a relationship between the return on assets and NDI the number of stocks today if stocks raised increase of return on assets and if NDI then fell return on assets declined. R box appears change in the dependent variables because of the change in the independent variables. Average Square R adjusts the model variables and show the importance of statistics F model km variables this model is important or not. There is a positive relationship between the sizes of the company with a return on assets. If the assets in the short term or long-term assets decreased size of the company and also fell. The influence of religion firm shows the proportion of assets in this study which is applied to a sample of the chemical sector companies of the Karachi Stock Exchange. There is a positive relationship between the sales of the company with a return on assets.

5. Conclusion and Recommendations

This is due to the current United States and stimulates the financial crisis of the mortgage companies to use resources in Literature efficiency. There is a huge literature available that give importance to finance long time and investment longer. Fixed investment in the short term that is important in these financial problems. In this paper we measure the performance of the company by return on assets. We ensure that companies are able to fulfill their responsibilities short period and flows that gave us credibility profitability. The importance of liquidity in this paper shows by capital Management Company and worker performance relationship and also view the firm in the current market position. Corporate managers want to achieve relationship to maximize the profitability and liquidity value of the company. In this paper we reach the data from many of the previous learning to determine the relationship that gives importance to the companies which are developed. Each sample companies of chemicals that are listed in the Karachi stock market sector. Some are large and some small and you should try working capital management. In

these companies to predict that relate to a very difficult financing. In this study we determine the relationship between working capital management which can be measured by different variables.

In this study we expect the relationship between the dependent and independent variables which have a positive or negative relationship with working capital and corporate performance. We also found a negative relationship of working capital management with receivables and positive with stock. Here we take a sample of 22 chemical companies from Karachi stock market for a period of 6 years from 2009 to 2014 and the different variables used for analysis. We ended Capital Management Group and the management for this is the current assets and current liabilities and the provision of financing current assets. All the above mentioned studies result, how to motivate managers and policy makers to attract investors. However, managers pay attention to improving working capital management and corporate performance.

References

- Altman, E. (1968). Financial Ratios discriminant analysis and the prediction of corporate bankruptcy. *Journal of Finance*, 23(4): 589-609.
- Appuhami, B. (2008). The impact of firms capital expenditure on working capital management an empirical study across industries in Thailand. *International Management Review*, 4(1): 8-21.
- Berryman, J. (1983). Small business failure and bankruptcy: A survey of the literature. *European Small Business Journal*, 1(4): 47-59.
- Blinder, A. S. and Macinni, L. (1991). Taking stock: A critical assessment of recent research on inventories. *Journal of economic Perspectives*, 5(1): 73-96.
- Carey, J. L. (1949). Corporation working capital increases. *Journal of Accountancy*, 87: 459-60.
- Chittenden, F., Poutziouris, P. and Michaelas, N. (1998). *Financial management and working capital practices in UK SMEs*. Manchester Business School: Manchester.
- Coyle, J. J., Bardi, E. J. and Langley, J. C. J. (1992). *The management of business logistics*. 5th edn: West Publishing Company: St Paul, MN.
- Damon, W. and Schramm, R. (1972). A simultaneous decision model for production. *Management Science*, 19(2): 161-72.
- Deloof, M. (2003). Does working capital management affects profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3): 573-87.
- Devic, A. and Krstic, B. (2001). Comparable analysis of the capital structure determinants in polish and hungarian enterprises. *Empirical Study Economies and Organization*, 1(9): 85-100.
- Dunn, P. and Cheatham, L. (1993). Fundamentals of small business financial management for start-up, survival, growth, and changing economic circumstances. *Managerial Finance*, 19(8): 1-13.
- Emery, G. (1984). A pure financial explanation for trade credit. *Journal of Financial and Quantitative Analysis*, 9(3): 271 -85.
- Filbeck, G. and Krueger, T. M. (2005). An Analysis of Working Capital Management results across industries. *Mid-American Journal of Business*, 20(2): 10-17.
- Garcia-Teruel, P. and Martinez, S., P. (2007). Effects of working capital management on SME profitability. *International Journal of Managerial Finance*, 3(2): 164-77.
- Gitman, L. (1974). Estimating corporate liquidity requirements: a simplified approach. *The Financial Review*, 9(3): 79-88.
- Haley, C. and Higgins, R. (1973). Inventory policy and trade credit financing. *Management Science*, 20(4): 464-71.
- Hawawini, G., Viallet, C. and Vora, A. (1986). Industry influence on corporate working capital decisions. *Sloan Management Review*, 27(4): 15-25.
- Joshi, P. (1995). *Working capital management under inflation*. Anmol Publishers: London. 20-93.
- Kamath, R. (1989). How useful are common liquidity measures? *Journal of Cash Management*, 9(1): 24-8.
- Krishna, K., Dmitri, G. and Victor, P. (1993). Earnings, cash flows and executive compensation: an exploratory analysis. *Managerial Finance*, 19(2): 55-75.
- Lazaridis, I. and Tryfonidis, D. (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange. *Journal of Financial Management and Analysis*, 19(1): 26-35.
- Lo, N. (2005). Go with the flow. Available at: www.cfoasia.com/archives/200503-02.htm
- McInnes, A. (2000). Working capital management: theory and evidence from New Zealand listed limited liability companies. *unpublished thesis, Lincoln University, Lincoln*:
- Moshe Ben-Horim and Levy, H. (1983). *Business statistics fundamentals and applications*. 1st edn: Random House: New York. <http://trove.nla.gov.au/version/182015486>
- Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. *International Review of Business Research Papers*, 2(2): 45-58.
- Raheman, A. and Nasr, M. (2007). Working capital management and profitability – Case of Pakistani firms. *International Review of Business Research Papers*, 3(1): 279-300.
- Rahman, A. and Ali, M. (2006). Board, audit committee, culture, and earnings management. *Malaysian evidence Managerial Auditing Journal*, 21(7): 783-804.
- Rao, R. (1989). *Fundamentals of financial management*. 3rd edn: Macmillan Publishers: 550-644.
- Richards, V. and Laughlin, E. (1980). A cash conversion cycle approach to liquidity analysis. *Financial Management*, 9(1): 32-8.

- Rose, W. (1979). *Logistics management, systems and components*. Wm. C. Brown Co. Publishers: Dubuque, IA. 151.
- Saccarato, F. (1994). The study of working capital. *Business Credit*, 96(2): 36 –7.
- Sartoris, W., Hill, N. and Kallberg, J. (1983). A generalized cash flow approach to short-term financial decisions/discussion. *The Journal of Finance*, 38(83): 349-60.
- Seidner, A. (1990). Investing excess working capital. *Management Accounting*, 71(1): 24-7.
- Shin, H. H. and Soenen, L. (1998). Efficiency of working capital management and corporate profitability. *Financial Practice and Education*, 8(2): 37-45.
- Smith, K. (1980). *Profitability versus liquidity tradeoffs in working capital management. Readings on the management of working capital*. West Publishing Company: New York, St. Paul.
- Soenen, L. A. (1993). Cash conversion cycle and corporate profitability. *Journal of Cash Management*, 13(4): 53-8.
- Summers, B. and Wilson, N. (2000). Trade credit management and the decision to use factoring: an empirical study. *Journal of Business Finance & Accounting*, 27(1): 37-68.
- Taffler, R. (1982). Forecasting company failure in the UK using discriminant analysis and financial ratio data. *Journal of Royal Statistical Society*, 145(3): 342-58.
- Wang, Y. J. (2002). Liquidity management, operating performance, and corporate value: Evidence from Japan and Taiwan. *Journal of Multinational Financial Management*, 12(2): 159-69.
- Wilner, B. (2000). The exploitation of relationships in financial distress: the case of trade credit. *Journal of Finance*, 55(1): 153-78.