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Working Capital Management in Selected Indian Companies

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Abstract

Large cap firms are well-established businesses with a substantial market presence and a long history of industry leadership in areas such as payments to suppliers, debt management, and inventory management. Small cap firms are those with an equity market value of less than Rs 250 crores, which means they have a lower revenue and client base. They typically comprise start-ups or businesses in the early stages of development. Working capital is a typical metric for comparing an entity's current assets to its current obligations, and it indicates a company's capacity to cover current liabilities with current assets, such as revenue collection, supplier payments, debt management, and inventory management. The goal of this study is to evaluate how large and small companies manage their working capital and how that affects their profitability and capacity to run their businesses efficiently. To do so, secondary data Prowess will be used to gather information on major and small cap companies listed on the BSE. The research will be conducted using ratio analysis, namely working capital, collection, and inventory turnover ratios. The research will also look at how these businesses manage their working capital differently depending on their size, profitability, time horizon, and other factors.

Keywords*: Working capital, Management, Firm's Profitability*

1. Introduction

Working capital is money that needs to be put into a business for a short period of time, usually a year. It is a metric for determining a company's efficiency and short-term financial health. It demonstrates whether a company's short-term assets are sufficient to cover its short-term debt. It's needed to cover day-to-day operational costs, as well as keep raw materials, spare parts, consumables, work-in-progress and finished goods, and book debts in stock. Because of the existence of the operational cycle, it is necessary. Working capital is calculated as:

Current Assets - Current Liabilities = Working Capital

Working Capital is a measure of liquidity, and so it measures future credit-worthiness, which is why large corporations pay attention to it. Working cash is necessary for small businesses and start-ups to finance operations and keep the firm running smoothly.

Working capital is important to businesses because it measures their ability to pay off short-term expenses or debts. High working capital, on the other hand, indicates that few assets are not being invested for the long term, and hence are not being used efficiently. The working capital (WC) is merely one indicator of a company's operating liquidity. It isn't the only factor to consider, and it isn't a guarantee of a company's financial stability. A corporation may have a positive working capital yet insufficient cash to cover an expense tomorrow. Similarly, a company can have a negative working capital, but it might be able to convert part of its debt to long-term debt to reduce its current liabilities.

Large cap firms, according to the BSE market category, have a market capitalization of more than Rs 10,000 crores. These are often huge, well-established enterprises with a significant market presence that are generally seen as safe investments. These businesses have a lengthy history in the sector and have firmly established themselves as market leaders. Their equities are listed on the stock exchange and have a substantial market capitalization. Small cap enterprises have a market capitalization of less than Rs 500 crores. These businesses typically have smaller income and client bases, and they are typically start-ups or businesses in the early stages of development. These are modest business ventures. The working capital ratio is calculated by dividing current assets by current liabilities.

Working Capital Ratio = Current Assets/Current Liabilities

Current assets include cash and cash equivalents, short-term investments, account receivables, inventory, prepaid expenses etc. Current liabilities include accounts payable, short-term debt, current interest payments for long-term debt salaries taxes. This calculation gives understanding what percentage a firm's current assets are of its current liabilities.

2. Literature Review

Srinivas KT (N.D.): observed that it is very essential to have proper working capital management for a company to achieve its objectives and maintain financial soundness. The study found that company was financially sound because of increasing production which leaded to increase in Net Profit. The study analyse the working capital management of KPCL (Karnataka Power Corporation) and its financial performance through various ratios like current ratio, liquid ratio, working capital turnover ratio, debtors turnover ratio, cash turnover ratio etc. The paper concludes that though company is earning profits each year, but their funds were not utilized efficiently.

Mr. N. Suresh Babu & Prof. G. V. Chalam (2014): This study shows that working capital management has remarkable impact on firm’s profitability. To analyse the same, secondary data was collected from database named PROWSS and certain magazines, newspapers, working papers which covered period of 14 years i.e. 1997-98 to 2010.11. They used certain statistical techniques for the study like correlation analysis, multiple regression analysis, “t” test, “f” test, ANOVA and SSPS-20 software for analysis They have examined various empirical relationships of variables like between Inventory Conversion Period (ICP) and Profitability of the firm, Average Collection Period (ACP) and Profitability of the firm, Average Payment Period (APP) and Profitability of the firm and Cash Conversion Cycle (CCC) and Profitability of the firm. The paper concluded there is positive relationship between all research variables and profitability of firm and some had negative relationship too like APP and CCC with profitability. Also, for overall leather industry, efficient

working capital management is essential for Profitability. So, they should efficiently manage components like cash, inventory management, receivables etc. with profit.

Bana Abuzayed (2011): examines the effect of working capital management on firm's performance and profitability. The paper studies data of listed firms which covers period from 2000-2008 and have used one estimation technique, panel data analysis, fixed and random effects and generalized methods of moments. Cash conversion cycles and its components are used as measure of working capital management. Paper concluded that there is positive relation between profitability and cash conversion cycle.

Pedro Juan García-Teruel Pedro Martínez-Solano, (2007): The paper studies effects of working capital management on Spanish SME's firm. The research studied panel of 8872 SMEs effect of working capital management on its profitability through panel data methodology which covered period from 1996 to 2002. The results indicate value can be created by reducing inventories and the number of days for their outstanding accounts. Additionally, shortening the cash conversion cycle exceed the firm's profitability.

Abenet Yohannes Hailu and Professor P. Venkateswarlu (2015): explains that working capital influences performance of the firm. Secondary data is collected covering period from 2010-2014 of around 30 manufacturing companies. Panel data regression method is followed. Additionally, EViews version 7.0. was used to research dependent variable i.e. Return on Assets and independent variable i.e. Account Receivable, Cash Conversion Cycle and Account Payables. Also, Ratios like Current Ratio, Debt Ratio etc. were calculated. Research concludes that managers should efficiently manage each component of working capital to the optimum level.

Huynh Ngoc Trinch: examines influence of working capital for non- financial companies which include manufacturing and service sector of Dutch. The data of 62 companies was studied covering period from 2006-10. Pearson Co-relation Analysis. Fixed Effects model and ordinary least square methodology are used. The paper concludes that efficient management of working capital leads to decrease in borrowings and it has great impact on profitability and liquidity of the firm.

Hakim Lyngstadaas and Terje Berg: Provides effect of working capital management (WCM) on the profitability of SMEs Norwegian firms. The data contains 21,075 Norwegian SMEs and 84,300 observations were made for the period between 2010 and 2013. Panel data regressions with fixed effects and two-stage least squares analysis was used. The result shows that decrease in cash conversion cycle leads to increase in profitability.

Maria Amélia Pais, Paulo Miguel Gama (2015): studies how working capital management affects the profitability of small and medium-sized Portuguese firms. The paper covered 6,063 small and medium-sized Portuguese firms covering the period 2002-2009. Panel regressions and instrumental variable approach was used to study the paper. Paper concludes that profitability of firm depends upon various components like decrease in period of outstanding liabilities, collection amount pending from customers, less inventory holding etc. Also, the use of working capital management policies efficiently increases firms' profitability.

Salla Marttonen, Sari Monto, and Timo Kärri, (2013): study the impact of working capital on company's profitability. To carry out the study, analysis of financial statements was done and Analytical modeling methodology was used. The paper shows the importance of working capital and it presents model named Flexible Asset Management which shows there is negative correlation between return on investments and working capital.

Godfred Adjapong Afrifa, Kesseven Padachi, (2016): The purpose is to analyse relationship between working capital level and profitability of SMEs. The paper utilizes panel data regression analysis. The data of 160 listed SMEs was collected covering period from 2005 to 2010. The results show that the firms' profitability is maximised when working capital is optimal.

3. Objectives of the paper as follows:

The objective of this research is to compare working capital management of large and small cap companies and its effect on firm's profitability

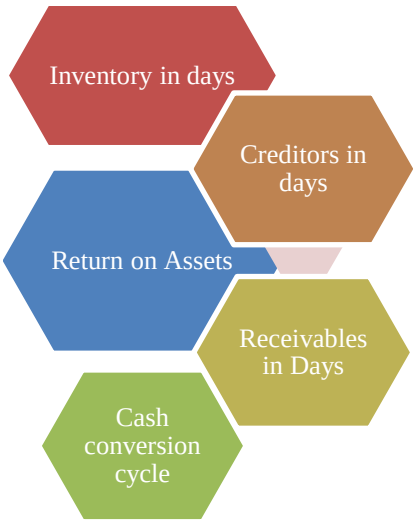
4. Data Methodology

The data used in this study obtained from PROWESSIQ database. The sample comprises of BSE Large index companies and BSE small index companies. The sample was taken for last 6 financial years from 1st April 2011- 31st March 2016. The total companies in the large index was 777 and in small index 72. Final data where working capital information is available for all the years are 580 companies in large index and 54 companies in small index.

For analysis purpose, the study is using descriptive statistics to compare the working capital of small and large companies. Correlation and multiple regression analysis for studying the effect of working capital on the profitability of the small companies and large companies. The empirical results are presented by using Advance excel.

4.1 Key research variables:

Figure 1 Variables



To analyze the effect of working capital management on the firm's profitability, Return on assets is the dependent variable and inventory days, debtor's days, creditors and CCC are the independent variables.

Return on assets= Earnings after tax/ Total assets

Inventory days= 365* (Average inventories/ Cost of goods sold)

Debtor's days= 365* (Average debtors/ Sales)

Creditors days= 365* (Average creditors/ Purchases)

Cash conversion cycle= Inventory days+ Debtor's days- Creditors days

5. Analysis

BSE large cap index

Table 1 Descriptive Statistics

	2011	2012	2013	2014	2015	2016
	Mean					
ROA	5.946003	4.804775	4.083374	4.498322	4.532031	4.864542
Inventory days	345.3186	433.7927	725.3047	545.9641	806.8467	1120.527
Debtor days	83.66926	293.4077	79.70804	80.36352	83.66644	85.08782
Creditor days	676.2814	121.1024	98.32592	115.4012	108.6884	113.7623
CCC days	-247.293	600.1189	443.1399	686.9291	1011.31	216.3686

The mean value of ROA is maximum in year 2011 that is 5.94 %. The mean value of inventory days is 1120.527 in the year 2016. Debtor's days has the mean value of 293 days in year 2012. Creditors mean value is maximum in year 2011 and the overall cash conversion cycle is 1011 in year 2015.

Table 2 Correlation Analysis

	2011	2012	2013	2014	2015	2016
	ROA					
ROA	1	1	1	1	1	1
Inventory days	-0.02152	0.005179	-0.0565	-0.07147	-0.05425	-0.02621
Debtor days	-0.1756	-0.06495	-0.23322	-0.22141	-0.24141	-0.19487
Creditor days	-0.03112	-0.10446	-0.14954	-0.13932	-0.20804	-0.13335
CCC days	0.021889	-0.08102	-0.02126	-0.07003	-0.05168	-0.03153

There are negative correlations between dependent variable and other independent variables. In 2011, negative correlation between ROA and Inventory days. In 2011 and 2012 there is negative correlation between debtor's days and ROA. In case of creditor's days and ROA it is negative in 2011 and 2012. CCC and ROA is having negative in 2012.

BSE small cap index

Table 3 Descriptive Statistics

	2011	2012	2013	2014	2015	2016
	Mean					
ROA	13.37327	12.67885	12.16308	11.38096	11.24115	12.44154
Inventory days	85222.94	85274.8	57934.3	38908.48	74159.83	5352.776
Debtor days	39.18308	40.95846	45.37192	46.58135	49.58846	54.20269
Creditor days	184.0994	120.9644	91.72673	88.08404	94.95558	105.2956
CCC days	85078.03	57801.18	38805.37	74060.5	5245.379	4469.083

The mean value of ROA is maximum in year 2011 that is 13.37 %. Debtor's days has the mean value of 54 days in year 2016. Creditors mean value is maximum in year 2011 and the overall cash conversion cycle is 184 in year 2011.

Table 4 Correlation Analysis

	2011	2012	2013	2014	2015	2016
	ROA					
ROA	1	1	1	1	1	1
Inventory days	-0.17798	-0.15933	-0.14879	-0.08983	-0.09994	-0.103
Debtor days	-0.17495	-0.12753	-0.21853	-0.08772	-0.1559	-0.24014
Creditor days	-0.17997	-0.10651	-0.03358	0.056733	-0.03496	-0.13489
CCC days	-0.17786	-0.15926	-0.14883	-0.08982	-0.09922	-0.02186

There are negative correlations between dependent variable and other independent variables. In all the selected years there is negative correlation between ROA and Inventory days and debtor days and ROA. In 2014 there is positive correlation between creditor's days and ROA. In overall cash conversion cycle also, in all the years there is negative correlation between the two variables.

It means there is significant negative correlation between ROA and Inventory days, debtor's days, creditor's days and cash conversion cycle

6. Conclusion:

By examining the association between the two categories of businesses, large and small. The small cap index has a stronger negative link between ROA and other variables such as creditors', debtors', inventory period, and cash conversion cycle. Debtor periods are longer in large index firms than in small index companies, implying that large corporations sell credit more liberally than small companies.

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