Determinants of Working Capital Management in Select Manufacturing Companies in India

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Abstract

Generally, manufacturing companies are facing problems with their collection and payment policies. In all type of manufacturing concerns, investment is required for the conversion of raw material into ready to sell products for the company. That is why need of working capital management arises, especially in case of manufacturing sector. In spite of significant contribution to the national income, manufacturing sector is still in developing stage in India. Flow of capital is slow, thus, a real challenge for financial managers of these companies is the optimum utilization of existing capital. Hence, the present part of the study is being dealt with the analyzing the determinants of both the long term finances and working capital of select companies in Indian manufacturing sector.

Keywords: Manufacturing Companies, Long Term Finances, Working Capital Management.

Introduction

Working Capital is a measure of both a company's efficiency and its short- term financial health. Working Capital management is the extensively revisited area by academic world in order to assume firms' profitability. The working capital meets the short term financial needs of a business enterprise. It is the investment required for running regular business. It is the consequence of the time lag between the expenditure for the purchase of raw materials and the collection for the sales of finished products. The working capital requirements determine the liquidity and profitability of a firm and consequently have an effect on the financing and investing decisions. Profitability is the profit earning capacity which is key factor contributing to the survival of the firms. The perpetual existence of the firms depends on the profit-earning capacity of the firm, which is also considered to be the main factor in influencing the reputation of the firm. The management of working capital is often considered as a tool to maintaining competence of the business inside their operations. Working capital is frequently assessed by lenders to judge the financial short-term paying back capability in difficult financial phases.

Working capital is a crucial constituent in any organizational setting that requires rational attention; accurate planning and managerial action. Working capital has a critical role to play in the realization of profitability and overall performance of such an entity. The crash of working capital management on profitability is extremely important because firms required equilibrium between risk and efficiency to accomplish an optimal level of working capital. When there is an excess working capital, it may lead to needless purchasing and accumulation of inventories causing more chances of thievery, waste and losses. On the other hand for insufficient working capital, the firm cannot pay routine expenses of its operations and it makes inefficiencies, increases costs and reduces the profits of the business.

As both fixed capital and working capital is the life-blood of a business, lack of sufficient funds for these two capitals may lead the business to technical insolvency. Managing the sources of finance for these two capitals is the most important tasks for financial managers. Managing long-term funds required for fixed as well as for permanent working capital and short-term funds for temporary working capital is much important for a business organization. In the manufacturing industry, steel industry, automobile industry and capital goods sectors, and the capital for purchasing assets and for day-to-day operations are high. Therefore it is felt pertinent to study the long-term and working capital resources, which prevail presently in the manufacturing sector.

Statement of problem

In a manufacturing concern, corporate finance basically deals with three decisions: financing decisions, investment decisions and dividend decisions. It is very important for a business organization to understand the way to manage financial resources efficiently by identifying proper mix of finance which may be a combination of spontaneous, short-term and long-term sources. Working capital management is a very important component of corporate finance since it affects the profitability and liquidity of a company. It is necessary for every business organization to manage the working capital effectively as it is essential for short-run corporate solvency or for the survival of the organization. Further, the manufacturing companies by efficiently managing the funds required for working capital could react quickly and appropriately to unanticipated changes in market variables such as, interest rates, raw material prices. This helps to gain competitive advantages over its rivals. Thus, the present study is undertaken to address the determinants of working capital in the manufacturing sector in India.

Source of data

The present study is descriptive and analytical and is purely based on the secondary data. The required data have been collected from the depository of the Bombay Stock Exchange and the Centre for Monitoring Indian Economy (CMIE) Prowess and the published annual financial reports of the companies of the sample companies. The present study covers a period of 10 years from 2010 - 2011 to 2019 - 2020. Based on the purposive or judgment sampling the companies fulfilling the condition of having annual sales turnover of above Rs.500 crores and actively traded in the National Stock Exchanges are being selected for the study. Hence, a total of 25 companies that tops the list, having relevant data for the study, from NSE out of 84 companies.

Table 1: Sample Companies for the study

S. No.	Company	Business involved
1	Vedanta Limited	Mining company
2	Bharat Heavy Electricals Limited	Power generation equipment manufacturer
3	Sundram Fasteners	Powder metallurgy part manufacturing company
4	Cipla	Pharmaceutical company
5	Maruti Suzuki	Automobile manufacturer
6	Kajaria Ceramics	Ceramic wall and floor tile manufacturing company
7	Supreme Industries	Plastics pipe company
8	Coromandel International	Fertilizers, pesticides and specialty nutrients
9	Indian Oil Corporation	Petroleum refining company
10	Chambal Fertilisers & Chemicals Limited	Manufacturers of fertilisers and chemicals
11	Tata Motors	Automotive manufacturer
12	Whirlpool Corporation	Home appliance company
13	Bajaj Auto	Two-wheeler and three-wheeler manufacturing company
14	Hindalco Industries	Aluminium and copper manufacturing company
15	Polycab India Limited	Electrical products
16	Voltas	Home appliance company
17	Bharat Electronics	Aerospace and defense electronics company
18	Hindustan Aeronautics Limited	Aerospace and defense company,
19	Mahindra & Mahindra	Automotive manufacturer
20	Sun Pharmaceutical Industries Ltd.	Pharmaceutical company
21	Aarti Industries	Chemical manufacturing company
22	Madras Rubber Factory	Tyre company
23	Castrol India	Automotive and industrial lubricant manufacturing company
24	Ashok Leyland	Vehicle company
25	Biocon	Bio-pharmaceutical company

Result and discussion

This research is aimed at identifying the financial characteristics that might determine the working capital management efficiency of manufacturing companies. Corporate finance basically deals with three decisions: capital structure decisions, capital budgeting decisions, and working capital management decisions. Among these, corporate finance decisions and working capital management decisions arevery important components of corporate finance since it affects the profitability and liquidity of a company. Working capital management decisions involve the decisions about the amount and composition of current assets and the financing of these assets are mostly through short-term sources depending upon the nature of business. So, in this chapter an attempt is made to identify the factors that could play a vital role in determining the required working capital through available fund sources to boost the business.

Determinants of Working Capital Management

In this part, an attempt is made to identify the firm specific factors that could influence with working capital management of the select manufacturing companies basedon model specified. First one-to-one relationship among the variables in the model is ascertained using correlation analysis and the results of the correlation analysis areprovided in Table 5.14.

Table 2: **Correlation Analysis for Determinants of Working CapitalManagement**

Pearson Correlation	WCRTA	OC	SALGRW	PRFT	LEV	CAPEX	OPEX	FINEX
WCRTA	1							
OC	.771**	1						
SALGRW	-.789**	.917**	1					
PRFT	.745**	.916**	.752*	1				
LEV	.911**	-.984**	-.871**	.901**	1			
CAPEX	.828**	.942**	-.862**	.898**	.821**	1		
OPEX	.652	.265	-.253	.118	.287	-.211	1	
FINEX	.968	.987**	-.912**	.251**	.921**	.866**	-.120	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

An examination of the table shows that WCRTA (Net Working Capital to Total Assets) has a significant correlation with all selected independent variables except some namely; between WCRTA and SALGRW, OC and LEV, SALGRW and LEV, SALGRW and CAPEX, SALGRW and OPEX, SALGRW and FINEX and CAPEX and OPEX. Hence it is concluded that the dependent variables like OC, SALGRW, PRFT, LEV, CAPEX and OPEX are correlated with determinants of working capital management.

Table 3: Regression Analysis for Determinants of Working CapitalManagement

Dependent Variable: Working Capital to Total Assets (WCTA)

Variables	Regression					
	1		2		3	
	Coefficients	t	Coefficients	t	Coefficients	t
(Constant)	321.152	.451	-541.54	-3.652	290.121	3.144
OC	6.321	.254	-2.621	-.871		
SALGRW	2.632**	6.151			-4.178	-.556
PRFT	.121	.121	.451	2.140	.182	.447
LEV	-3.621	.481	10.23**	3.540		
CAPEX	3.652*	2.142	-2.317	-.650	-2.311	-.152
OPEX	11.250	-2.151			-11.171**	-6.147
FINEX	19.562**	2.171			6.141*	4.120
R	.864		.842		.805	
R^2	.792		.761		.741	
Adjusted R^2	.711		.711		.692	
F	6.970		19.142		48.144	

From Table 5.15, which provided the results of regression for WCTA of selected sample companies, it is evident that the first model with all selected independent variables explaining 84 per cent of the variation in the dependent variable is fitted significantly. But the second model in the absence of OPEX, FINEX with 80.5 percent of the variation is also fitted significantly. Hence it is concluded that use of long - term fund in working capital increases significantly in the presence of sales growth for selected sample construction companies.

Conclusion

India's manufacturing base, which is the fourth largest among emerging economies, is among the fastest growing and has seen more investments as a proportion of gross domestic product than any country except China. After the IT boom, a manufacturing revolution has been well underway in the Indian economy, spurred on by the increasing presence of multinationals, scaling up of operations by the domestic companies and expanding domestic market. Such is a kind of significance being held by manufacturing sector of India and thus a study in any aspect of manufacturing sector is inevitably important. There are many studies on working capital management efficiency in general and exclusively on identifying the factors that determine the working capital of an organization. In this research, the determinants of long term finance and working capital is analyzed. The regression results concluded that there is a significant increase in profitability with significant increase in size of business in terms of sales due to effective use of gross working capital.

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