International Journal of Research and Review
www.ijrrjournal.com E-ISSN: 2349-9788; P-ISSN: 2454-2237

Review Article

Liquidity and Profitability Study of Various Industries with Emphasis on Chemical and Allied Industries

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Received: 12/06/2016 *Revised: 21/07/2016* *Accepted: 21/07/2016*

ABSTRACT

Profitability can be measured by various profitability methods such as ROR (rate of return), NPV (net present worth), IRR (internal rate of return), capitalized cost, payback period etc. The fixed and working capital contributes to total capital investment. The high rate of return needs lower operational cost. This reduces the inventory and decreases liquidity. There has to be optimization of the various factors for healthy and long term viable operation of industry. The chemical, pharmaceutical, oil, paint and plastic industries across the world are facing different kind of economical problems. These problems are related to competition, environmental regulations, government licensing system and social and geographical issues as well as political constraints. This paper reviews the profitability and liquidity analysis carried out by various investigators.

Key words: Rate of return, capital, investment, liquidity, policy, leverage, finance, resources.

INTRODUCTION

Chemical industries are backbone of industrial growth. Chemical and allied industries include food, paint, oil, sugar, plastic, petroleum, pharmaceutical, polymer and other so many sectors which are lifeline of economy. Most of these sectors are facing tough competition. The sugar industries are facing drought problems along with inefficient technology. The pharmaceutical and food industry faces competition from generic products. Other industries face regional, geographical, local issues along with internal and technical issues. It is important from economical aspect that these industries run in profitable manner enabling more employment and expansion. The investigations are reported studies on various aspects of production of different chemicals for economical and efficient operation. [1-5] Considerable efforts are also reported for economical and effective treatment of effluent generated from these industries. [6-10] Adsorption, membrane separation and biological treatments are being made more and more effective by optimizing different parameters. [11-15] Profitability can be measured by various profitability methods such as ROR (rate of return), NPV (net present worth), IRR (internal rate of return), capitalized cost, payback period etc. The fixed and working capital contributes to total capital investment.

The high rate of return needs lower operational cost. This reduces the inventory and decreases liquidity. There has to be optimization of the various factors for healthy and long term viable operation of industry. These problems are related to competition, environmental regulations, government licensing system and social and geographical as well as political constraints. This paper reviews the profitability and

liquidity analysis carried out by various investigators.

LIQUIDITY AND PROFITABILITY STUDY OF INDUSTRIES

Babu and Chalam studied Working capital management efficiency in Indian leather industry. [16] They investigated the relationship between the components of working capital and profitability of firms in Indian leather industry. They treated the inventory conversion period (ICP), the average collection period (ACP), the average payment period (APP), and the cash conversion Cycle (CCC) as independent variables and profitability (ROA) as a dependent variable. They observed that profitability has insignificant positive relationship of inventory conversion period and significant positive relationship of average collection period. They concluded that working capital management has significant impact on profitability of the firms.

Burja studied factors influencing the companies' profitability. [17] According to him information about profitability is important for substantiating managerial decisions regarding potential changes in the economic resources that the company will be able to control in the future. In his analysis he emphasized the strong connection between the profitability of the analyzed company through return on assets and the management of available resources. Raaija et.al. discussed an approach to study customer profitability analysis CPA). [18] According to them, the major advantage of CPA is that it provides the uneven distribution of costs and revenues over customers. CPA manages cost management and profit improvement based on customer. It also provides decisions, bonus plans, and discounts to customers. Also it explores possibilities for segmentation and targeting strategies based on cost and profitability profiles. All these advantages were discussed by Raaija et.al. According to them the customer relationship should be given due importance while considering price strategy and decisions about the value of particular customer relationships. Goswami and Sarkar analyzed financial performance of Tata steel in their case study. [19] According to them no firm can survive without liquidity. Also excessive liquidity indicates accumulation of large idle fund. They stated that the capital required varies according to the nature of business, production, sales policies, turnover, credit period etc. They analyzed factors such as operating risk, financial risk, and total risk by way of computing the degree of operating leverage (DOL). They emphasized that if a company has a high operating leverage, the financial leverage should be kept at a low level.

Ambika and Sengottaiyan carried out studies on financial performance of selected fertilizer companies. [20] They carried out in detail study to evaluate the financial performance appraisal of fertilizer industry. In their work, they studied growth and development of fertilizer industry in India, analyzed the liquidity and profitability position of selected fertilizer companies in India, estimated the profitability with respect to financial variables of selected fertilizer companies, computed the financial health of selected fertilizer companies, explored possibilities in improvement in various aspects of financial position of fertilizer industry in India. They collected secondary data from fertilizer companies. The analysis tools used by them were the arithmetical mean, standard deviation, coefficient of variation, maximum, minimum, average and compound growth rates, correlation coefficient, coefficient of determination, liner regression equations and Altman's Z score discriminant model. This study emphasized importance of measurement tools for profitability performance for measuring the efficiency of business organization.

Mushtaq et.al. discussed in detail, the concept of liquidity and profitability. [21] They carried out study with respect to five fields in Pakistan namely chemical, fuel & energy, paper-board & products, food

(sugar) sector & cement sectors. According to them sound liquidity results into profitability as company would be able to generate the spontaneous financing. According to them the results obtained in such analysis are company specific and cannot be generalized to larger extent. M. Ahmed and Z. Ahmed carried out studies on merger and acquisition of companies. [22] They used the data three years before and after merger. They observed that overall financial performance increased after merger rather insignificantly. They also found that efficiency of the acquiring firm's in non-financial sector insignificantly deteriorated. According to them, retrenchment and reorganizing should be considered as an alternative strategy along with merger. Devi and Maheswari carried out comparative analysis of Cipla ltd & Aurobindo Pharma ltd. [23] They studied performance of these companies based on short term solvency, long term solvency and profitability and consistency. They observed that in the study period, Cipla ltd had high liquidity position than the Aurobindo Pharma ltd. Also according to these studies debt-equity position of Aurobindo Pharma ltd was ideal than the Cipla ltd. Higher profitability and higher consistency was observed by the authors in Cipla ltd.

Bridgwater carried out operational cost analysis of chemical industries. [24] According to him economic justification was most important factor in project consideration. He discussed various components of capitalized cost. According to him, there is need for further work in improving the reliability and general applicability of correlations. Ghafoor and Rehman carried out an empirical analysis of profitability, leverage, liquidity and activity for sectors like textile, food and chemical. [25] They carried out ratio analysis to observe significant financial trends within three major sectors. Their analysis indicated that textile and food firms are significantly less profitable than chemical firms.

Sowndarya and Shanmugam conducted analysis of financial performance of non-banking financial companies. [26] They carried out empirically analysis of the performance of the NBFCs (Auto financing and Other Asset financing) in India across the period of 2007-2012. They highlighted salient issues like liquidity, profitability, interest margins. They observed significant difference in the profitability ratios, leverage ratios, liquidity ratios and risk indicator ratios of selected NBFCs. Price earnings ratio and current ratio were two factors with insignificant differences when all companies were taken together. Panigrahi studied the economical aspects of ACC ltd with respect to relation of working capital and liquidity, profitability and solvency. [27] According to him, one of the major objective of working capital management is to preserve liquidity. There is always tradeoff between liquidity and profitability. He found that the company was able to earn a good rate of return, despite negative working capital in most of the times. The reason according to them was aggressive working capital policy.

Baines discussed problems faced by pharmaceutical industries. [28] The issues like spate of partnerships, mergers and acquisitions, consolidation, diversification, licensing agreements and downsizing in both human and capital resources have contributed to the overall economic downturn and vice versa. The competition from generic medicines is also important factor. Panigrahi studied liquidity management in Indian cement companies. [29] He applied mean, standard deviation, coefficient of variation, ratio analysis, and Motaal's ultimate rank test for analysis of the data. He found that liquidity position of small companies is better as compared to big ones. He also observed that minimum investment was done on current capital to achieve high rate of returns.

Yuqian and Wenlin conducted empirical study on profitability of pharmaceutical industry. [30] They studied various factors affecting profitability in Chinese perspective. The factor such as research and development ability (R&D

ability), development capacity, solvency, operational capacity, marketing capabilities, cost management, capital structure, cash flow management and level of risk affect the profitability. Li et.al. carried out profitability evaluation of Chinese airline and airport companies. [31] They presented a new approach to evaluate the Chinese aviation industry.

Kumar studied the financial performance of select sugar companies in Tamilnadu. [32] Agricultural production which depend on the geographical and climate conditions is major factor in economical heath of sugar industry. He found that most of these industries were fighting for survival.

CONCLUSION

It is important from economical aspect that these industries run in profitable manner enabling more employment and expansion. No firm can survive without liquidity. Also excessive liquidity indicates accumulation of large idle fund. Economic justification is most important factor in project consideration. One of the major objectives of working capital management is to preserve liquidity. The factor such as research and development ability (R&D ability), development capacity, solvency, operational capacity, marketing capabilities, cost management, capital structure, cash flow management and level of risk affect the profitability. In pharmaceutical sector, the issues like spate of partnerships, mergers and acquisitions, consolidation, diversification, licensing agreements and downsizing in both human and capital resources have contributed to the overall economic downturn and vice versa.

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How to cite this article: Kulkarni SJ. Liquidity and profitability study of various industries with emphasis on chemical and allied industries. Int J Res Rev. 2016; 3(7):36-40.

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