



**ANALYSIS OF IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY
OF SELECTED SUGAR COMPANIES IN INDIA**

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ABSTRACT:

PURPOSE OF THE STUDY: Purpose of the study: purpose for conducting this research is to know the financial position of selected sugar companies through working capital analysis and profitability analysis. In this study the various ratio relating Profitability Ratio and working capital are analyze by the research to know the financial situation of selected companies. The various ratio like Current Ratio, Quick Ratio, Inventory Turnover Ratio, Trade Receivable Turnover Ratio, Current Assets to Total Assets Ratio, Net Profit Ratio and Return on Assets Ratio of selected sample companies for the study period of 5 years from 2018-19 to 2022-23.

RESEARCH METHODOLOGY: In this study period is of 5 years from 2018-19 to 2022-23. In this research paper researcher has used three sample such as Triveni Engineering Industry Ltd, Sakthi Sugars Ltd, Balrampur Chini mills Ltd, Dalmia Bharat Ltd and EID party limited companies in the base of net profit. The tools and techniques has been used ratio analysis, statistical technique like mean, analysis of variance-ANOVA test, Karl Pearson's Simple Correlation and Simple linear regression by the researcher in this study.

FINDINGS/CONCLUSION OF THE STUDY: Findings based on analysis of variance, correlation and regression. In analysis of variance F-calculated value is higher than F-tabulated value so null hypothesis has been rejected and alternate hypothesis has to be fail to rejected/ accepted in all the selected ratios in the period of the study at 0.05 level of significant.

Key Word: PROFITABILITY, SUGAR COMPANIES, RATIOS, WORKING CAPITAL, MANAGEMENT, IMPACT, INDIA.

Introduction

Sugar is one of the oldest commodities in the world and traces its origin in 4th century AD in India and China. In those days sugar was manufactured only from sugarcane. But both countries lost their initiatives to the European, American and Oceanic countries, as the eighteenth century witnessed the development of new technology to manufacture sugar from sugar beet. However, India is presently a dominant player in the global sugar industry along with Brazil in terms of production.

Sugar industry, India is all set continue its domination at the global level. Indian sugar industry is highly fragmented with organized and unorganized players. The unorganized players mainly produce Gur and Khandari, the less refined forms of sugar. The government had a controlling grip over the industry, which has slowly yet steadily given way to liberalization.

The production sugarcane is cyclical in nature. Hence the sugar production lies also cyclical as it depends on the sugarcane production in the country. As the industry is a fragmented one, even leading



players do not control more than four percent market in India. However, the situation is changing and players off late are striving to increase their market share either by acquiring smaller mills or by going for green field capacity additions.

Sugar industry is an important agro-based industry that impacts rural livelihood of about fifty million sugarcane farmers and around five lakh workers directly employed in sugar mills. Employment is also generated in various ancillary activities relating to transport, trade servicing of machinery and supply of agriculture inputs. India is the second largest producer of sugar in the world after Brazil and is also the largest consumer. Today Indian sugar industry's annual output is worth approximately Rs.80,000 crores.

Meaning of Sugar

Sugar, any of numerous sweet, colorless, water-soluble compounds present in the sap of seed plants and the milk of mammals and making up the simplest group of carbohydrates. The most common sugar is sucrose, a crystalline tabletop and industrial sweetener used in foods and beverages.

Meaning of Sugar Industry

Sugar industry is an important agro-based industry that impacts rural livelihood of about fifty million sugarcane farmers and around five lakh workers directly employed in sugar mills.

Meaning of Working Capital

Capital required for a business can be classified under two main categories via,

1) Fixed Capital and 2) Working Capital

1) Fixed Capital

Every business need funds for two purposes for its establishment and to carry out its day-to-day operations. Long terms funds are required to create production facilities through purchase of fixed assets such as plant and machinery, land, building, furniture, etc. Investments in these assets represent that part of firm's capital which is blocked on permanent or fixed basis and is called fixed capital.

2) Working Capital

A company invests its funds for long term purposes and short-term operations. In ordinary parlance, the capital available for meeting the day-to-day requirements of an enterprise is regarded as working capital'. Normally, after investment in fixed assets (e.g. land and buildings, plant and machinery, furniture and fittings), a part of the capital is kept in the business for supporting the day-to-day normal operations. That portion of a company's capital, which is required for minimum stock of raw material to maintain continuity in production, minimum stock of finished goods to fulfill future demand, payment of wages and salaries of laborers and employees is called Working Capital.

In other words, working capital is that part of the firm's capital which is required for financing short term or current assets such as debtors, inventories, marketable securities and cash. It is also known as the revolving or circulating capital. The word working capital comprises of two words working 'and capital'. In trade and industry, the word working 'with reference to capital means circulation of capital from one form to another during day-to-day operations of the business whereas the word capital 'refers to the monetary values of all the assets (tangible and intangible) of the business. Working Capital' is the



term used basically to indicate the financial condition of a firm or an organization in the short term. In other words, it can be called a scale to measure the overall efficiency of the business entity.

Definition of Working Capital

According to C.W. Gutenberg-"A Working capital is ordinarily defined as the excess of the current assets over current liabilities".

According to Lawrence. J. Gitmen-"The most common definition of working capital is the difference of the firm's current assets and current liabilities".

According to field and baker also define working capital is as the aggregate value of all current assets of business.

According to Lincoln is of the opinion that working capital equals the aggregate value of current assets minus aggregate value of current liabilities.

According to Hoagland "working capital is descriptive of that which is not fixed. But the more common use of Working capital is to consider it as the difference the book value of the current assets and current liabilities".

Meaning of Working Capital Management

Working capital management refers to managing a company's short-term financial assets and liabilities. In simpler terms, it's all about efficiently managing the day-to-day cash flow of a business to ensure smooth operations and maintain financial health. Working capital management includes managing inventory, accounts receivable, accounts payable, and other short-term financial obligations.

Meaning of Ratio

Ratio analysis is a very important tool of financial analysis. It is the process of establishing the significant relationship between the items of financial statement to provide a meaningful understanding of the performance and financial position of a firm. Ratio when calculated on the basis of accounting information are called-Accounting Ratio'.

Definition of Ratio

Kennedy and Mc Mulla. "The relationship of one to another, expressed in simple term of mathematical is known as ratio"

According to Accountant's Handbook by Wixon, Kell and Bedford, "A ratio is an expression of the quantitative relationship between two numbers"

Giri and Banerjee: "A ratio a: b is said to be the ratio of greater inequality if $a > b$ and of lesser inequality if $a < b$. If $a = b$, the ratio a: b is called the ratio of equality.

Om P. Chug: "A ratio is a comparative relationship of two similar quantities with regards to their magnitudes and expresses what multiple or part the first quantity is of the second."

According to Wixon, Kell and Bedford, "A Ratio is an expression of the quantitative relationship between two numbers"

According to Hingorani, Ramanathans and Crewal, "The relationship between the two figure expressed mathematically is called a ratio."

According to James C. Van Harne, "Ratio is a yardstick used to evaluate the financial condition and performance of a firm relating two pieces of financial data to each other."



Measurements of Profitability

Profitability is a tool to plan and monitor the profits your business earns. Your business can figure out a breakeven point, the number of products you must sell at a given price, profit margin, and sales volume with the help of profitability analysis.

On one hand, the profitability calculations help you to analyze realistic price levels, profit margin as well as sales revenue. On the other, the breakeven point provides the sales target for your business. Make sure that your basic financial statements including income statement and balance sheet are complete before you undertake the measurement of profitability of your business.

Review of literature

Nyamao, Patric and Simeyo (2012), However, they conducted a survey using a stratified random sampling technique. The questionnaire was distributed to 72 trading and 41 manufacturing enterprises. It was concluded that 63.4% of the variations in firm's performance could be explained by the changes in the efficiency of working capital components.

Vahid and Vurul (2012), demonstrated a negative correlation between WCM variables and firm's performance. Interestingly, not all studies used the same methodology; various methods, statistical techniques, along with a variety of variables were used for measuring the impact of WCM on firms' performance.

Taani k. (2012) in the year 2012, took a sample of 45 companies listed on Amman Stock Exchange to investigate the impact of WCM policy on firm's performance measured by net income, Return on Equity (ROE) and ROA. Results show that the WCM policy has a significant relation with net income and an insignificant relation with ROE and ROA.

Ashok Kumar Panigrahi and Anita Sharma (2013), the study is designed to investigate the relationship between working capital management and firm's performance. Using a sample of five chosen Indian cement companies for the years 2001-2010, we can determine impact on profitability. The efficiency of working capital is expressed by the average receivable period, average payment period, inventory conversion period, average payment period, and cash conversion cycle. An attempt has been made to determine whether there is a relationship between working capital management and profitability.

Makau and Stephan (2014). Similarly has measured the performance through ROA and WCM by average collection period, and the findings demonstrated that there was a negative effect of average collection period on firm's performance of Kenyan firms.

Singh (2014), studied 263 firms of Pakistan for a time phase of six years i.e. 1998-2003. They stated that adopting inefficient working capital management policies could influence on the profitability, negatively. Afza and Nazir (2008) estimated the effect of different types of working capital management policies on financial performance of firms in different sectors. They found an inverse relationship between degree of aggressiveness of these policies and profitability.

Yadav and SB (2014), Consistent with these studies, used the same variables plus net trading cycle to measure WCM and its impact on ROA of 10 Indian steel manufacturing companies. Because of different business environment and firms' characteristics, working capital would be different in different



countries; this is the reason behind the conflicting results of previous studies. In fact, Indian companies are different from that in the world in terms of working capital efficiency, comparative technologies and regulatory practices.

Agrawal and Chaudhary (2015), measured WCM by inventory conversion period, average collection period, average payment period and cash conversion cycle. Firm's profitability was measured by ROA, gross operating profit, and net operating profit. The findings affirmed that components of working capital have a different association with firm's performance positively and negatively.

Few studies evaluated working capital in Indian pharmaceutical industry **Kavitha and Shanmugam (2015) And (Viswanathan, Palanisamy, and Mahesh (2016)**, A comparative study on working capital management of selected pharmaceutical companies in India, (2016) all these studies used different proxy variables for measuring working capital and its impact on Indian firms' performance. It is worth mentioning that these studies have some major limitations e.g., these studies were either case studies or confined to top 10 companies.

Vijayalakshmi; shividaya (2015), and Viswanathan; Palanisamy (2016) Further, they did not adopt a good methodology or implement robust statistical tests. Furthermore, lack of studies that cover a large sample motivated the researcher to take a large sample (82 companies with 820-year observations) which is enough for making generalization. Hence, the study tries to provide a rich context to interpret the results. Indeed, the paper has a potential contribution to research, especially in the Indian pharmaceutical industry.

Somvanshi (2016), furthermore, a deeper understanding of working capital's historical perspectives will make sense of its practices today and likely in future directions. These are some of the motivations that encourage the researchers to conduct this study in an emerging market; India. The body of this section is extensively focusing on the results, variables, and the statistical techniques which were used by previous researchers in the field of working capital in order to find what has been done and what is left to be done.

M. Kalimuthu, A.David (2018). Steel considered to be backbone for the development of modern economy and human civilization. The level of consumption of steel is considered as a vital index measure the socio-economic development and standard of life of people of the country. This product is the result of a vast, technologically advanced sector that has been poisoned terms material flows and robust revenues. The existence of a robust steel industry has a positive economic impact on various industries, and the steel industries have a significant influence on how these industries initially grow.

Rahmat Heru Setianto, Adinda Pratiwi (2019) the main of this study is to examine the existence of excess working capital in Indonesian firms and its effect on the firms' performance and risk. The outcome specify (i) the existence of an optimal level of working capital, (ii) higher excess working capital leads to lower performance and risk, (iii) additional investment in working capital reduces firms' performance for those with positive excess working capital. It is also renowned that (iv) additional investment in working capital reduces firms 'risk for those that have working capital deficiencies.



Ruby Mittal, Sanjay Kumar Sadana (2020), Working capital and Working Capital Management both are very crucial for every company. The researcher's goal in this paper was analyze TCS Company's working capital and determine how profitability and working capital are related to one another. For analyzing working capital efficiency, the researcher used a variety of accounting ratios, such as the liquidity ratio and profitability ratio.

M. Kalimuthu, Miss. Preeti Jaiswal A (2020), Finance is need for day to day operation and it is considered as a life blood for business. Profitability is the ability to turn a profit, which is an important component in a company's ability to survive. This study aims at analyzing the overall financial profitability of the HPCL by using various financial tools. Further, to measure the effectiveness of the above mentioned company, ratio analysis techniques have been used as tool to provide suitable suggestions and recommendations for this study.

Luca Sensini and Maria Vazquez (2021) the main impartial of this study was to evaluate the influence of working capital management policies on Argentine agro industrial firms 'profitability.

Mohammad Rafi Rahim, A. Prabhakar (2022), the study focus on the working capital management of Bharat Heavy Electricals Limited (BHEL) leading company in the heavy electrical industry in India, which is located in Visakhapatnam. Working capital help business for smooth performance and productivity of capital turnover ratios over the last five years, and finally to make recommendations and suggestions for better working capital management in BHEL.

Research Gap- After go through of related literature review researcher has find that there are some scope to do research on sample companies of Sugar Industry in the study period from 2018-19 to 2022-23 on working capital analysis and profitability analysis. In this research paper researcher has been try to find out the current situation of selected Sugar companies in India though used both tools traditional and modern. Traditional tool are the various Ratios ratio like Current Ratio, Quick Ratio, Inventory Turnover Ratio, Trade Receivable Turnover Ratio, Current Assets to Total Assets Ratio, Net Profit Ratio and Return on Assets Ratio of profitability and working capital management of various companies.

Period of the Study:

The data for a period of 5 years from 2018-19 to 2022-23, has been taken into Consideration to assess the financial strength and weaknesses of the company.

Objectives of the Study

- To study the conceptual framework of sugar companies in India.
- To examine the financial position of selected sugar companies in India.
- To know about the profitability and working capital management situation of selected Sugar companies.
- To analyze the impact of working capital management on Profitability of selected sugar companies in India.



- To know about Sugar Industry present situation and to make suggestions to improve the financial performance of selected companies in India.

Hypothesis of the Study

Null Hypothesis (H₀)

- There is no significant difference among the Current Ratios of selected companies during the period of study
- There is no significant difference among the Quick Ratios of selected companies during the period of study
- There is no significant difference among the Inventory Turnover Ratios of selected companies during the period of study
- There is no significant difference among the Trade Receivable Turnover Ratios of selected companies during the period of study
- There is no significant difference among the Current Assets to Total Assets Ratios of selected companies during the period of study
- There is no significant difference among the Net Profit Ratios of selected companies during the period of study
- There is no significant difference among the Return on Assets Ratios of selected companies during the period of study
- There is no relationship among Working Capital Management and Return on Asset of selected companies during the period of study
- There is no relationship among Working Capital Management and Net Profit of selected companies during the period of study
- There is no impact of Working Capital Management on Net Profit of selected companies during the period of study
- There is no impact of Working Capital Management on Return on Asset of selected companies during the period of study.

Sample of the Study

The total number of sugar companies is the universe of the study. At this stage researcher has decided to take five units for the study the researcher top five companies according to net profit which are as follow:

1. Triveni Engineering Industry Ltd
2. Sakthi Sugars Ltd
3. Balrampur Chini mills Ltd
4. Dalmia Bharat Ltd
5. EID party Ltd



Data Collection:

This study is based on secondary data. The data is collected from published annual report of selected paint companies of India. Other information related to selected paint companies of India will be collected from official website and net sources, annual report, various books, different publication, journals and relating paint industry etc. Opinions expressed in business standard, newspaper, annual review accounting literature and different publications have been used in this study.

Tools and Techniques:

The data has been analyzed and hypothesis has been tested by the researcher at 5% level of significance, by employing following various tools and techniques by researcher.

•Accounting Too:

- Ratio Analysis

•Statistical Technique:

- Mean
- One-way ANOVA test
- Karl Pearson’s Simple Correlation
- Simple linear regression model

The Below Ratio Are Used By Research for the Present Study:

The various profitability and working capital ratio are used for the study like Current Ratio, Quick Ratio, Inventory Turnover Ratio, Trade Receivable Turnover Ratio, Current Assets to Total Assets Ratio, Net Profit Ratio, Return on Assets Ratio,

Scope of the Study

The scope of the study is very wide

Functional Scope: functional Scope of the study to evaluate the performance of sugar industries.

Geographical Scope: In this study selected five (5) sugar companies which provides sugar product in India so, whole India is geographical criteria for this research study.

Findings Based on ANOVA

Working Capital Components	Calculated value	Table value	Accepted (H1)	Rejected (H0)
Current Ratio	12.4982	2.8661	Accepted	Rejected
Quick Ratio	5.0428	2.8661	Accepted	Rejected
Inventory Turnover Ratio	16.2896	2.8661	Accepted	Rejected
Trade Receivable Turnover Ratio	3.5450	2.8661	Accepted	Rejected
Current Assets to Total Assets Ratio	32.2916	2.8661	Accepted	Rejected



Profitability Ratio				
Net Profit Ratio	2.2408	2.8661	Rejected	Accepted
Return on Assets Ratio	1.78959	2.8661	Rejected	Accepted

Current Ratio

As per the findings of researcher, Current ratio of Dalmia sugar was highest on the year 2023 under the period of study. Performance of Dalmia sugar was excellent in comparison of other companies. Sakthi Sugars was the lowest among all.

As per the ANOVA test alternative Hypothesis of all the companies is accepted. So it concludes that there is a significant difference between the Current ratio of all the companies.

Quick Ratio

As per the findings of researcher, Quick Ratio of Dalmia sugar was highest on the year 2023 under the period of study. Performance of Dalmia sugar was excellent in comparison of other companies. Triveni Engineering was the lowest among all.

As per the ANOVA test Alternative Hypothesis of all the companies is accepted. So it concludes that there is a significant difference between the Quick Ratio of all the companies.

Inventory Turnover Ratio

As per the findings of researcher, Inventory Turnover Ratio of Sakthi Sugars was highest on the year 2020 under the period of study. Performance of Sakthi Sugars was excellent in comparison of other companies. Dalmia sugar was the lowest among all.

As per the ANOVA test Alternative Hypothesis of all the companies is accepted. So it concludes that there is a significant difference between the Inventory Turnover Ratio of all the companies.

Trade Receivable Turnover Ratio

As per the findings of researcher, Trade Receivable Turnover Ratio of Sakthi Sugars was highest on the year 2023 under the period of study. Performance of Sakthi Sugars was excellent in comparison of other companies. Sakthi Sugars was the lowest among all in the year 2019.

As per the ANOVA test Alternative Hypothesis of all the companies is accepted. So it concludes that there is a significant difference between the Trade Receivable Turnover Ratio of all the companies.

Current Assets to Total Assets Ratio

As per the findings of researcher, Current Assets to Total Assets Ratio of Triveni Engineering was highest on the year 2019 under the period of study. Performance of Triveni Engineering was excellent in comparison of other companies. Sakthi Sugars was the lowest among all in the year 2019.

As per the ANOVA test Alternative Hypothesis of all the companies is accepted. So it concludes that there is a significant difference between the Current assets to total asset ratio of all the companies.

Net Profit Ratio

As per the findings of researcher, Net Profit Ratio of EID Perry was highest on the year 2021 under the period of study. Performance of EID Perry was excellent in comparison to other companies. Sakthi Sugars was the lowest among all in the year 2019.



As per the ANOVA test Null Hypothesis of all companies is accepted. So it concludes that there is no significant difference between the Net Profit Ratio of all the companies.

Return on Asset Ratio

As per the findings of researcher, Return on Asset Ratio of Triveni Engineering was highest on the year 2023 under the period of study. Performance of Triveni Engineering was excellent in comparison to other companies. Sakthi Sugars was the lowest among all in the year 2021.

As per the ANOVA test Null Hypothesis of all companies is accepted. So it concludes that there is no significant difference between the Return on Asset Ratio of all the companies.

Findings Based on Correlation

Relation of All the Working Capital Components with Net Profit Ratio and Relation of All The working capital components with Return on Asset Ratio	
Company's Name	Ratio and Correlation
Triveni Engineering Ltd	CR with NP =0.94, QR with NP= 0.85, ITR with NP =-0.12, TRTR with NP =0.41, CATAR with NP=-0.62, CR with ROA=0.96, QR with ROA=0.88, ITR with ROA=-0.04, TRTR with ROA=0.46, CATAR with ROA=-0.62.
Sakthi Sugars Ltd	CR with NP=0.99, QR with NP=0.98, ITR with NP=0.18, TRTR with NP=0.93, CATAR with NP=0.06, CR with ROA=0.97, QR with ROA=0.93, ITR with ROA=0.06, TRTR with ROA=0.86, CATAR with ROA=-0.16.
Balrampur Chini Mills Ltd	CR with NP=0.24, QR with NP=0.68, ITR with NP=0.40, TRTR with NP=-0.88, CATAR with NP=0.85, CR with ROA=0.50, QR with ROA=0.53, ITR with ROA=0.37, TRTR with ROA=-0.84, CATAR with ROA=0.78.
Dalmia Bharat Sugar Ltd	CR with NP=-0.85, QR with NP=-0.90, ITR with NP=-0.72, TRTR with NP=-0.18, with NP=0.77, CR with ROA=0.23, QR with ROA=0.05, ITR with ROA=-0.29, TRTR with ROA=0.87, CATAR with ROA=-0.37.
EID Perry Ltd	CR with NP=0.06, QR with NP=0.60, ITR with NP=0.73, TRTR with NP=-0.25, CATAR with NP=0.30, CR with ROA=0.17, QR with ROA=0.66, ITR with ROA=0.66, TRTR with ROA=-0.15, CATAR with ROA=0.19.



Findings based on Regression

Name of Unit	Type of working capital component	P-value	5% Level	H0 (accepted/rejected)	Remarks
Triveni Engineering Ltd	CR, QR, TRTR	0.27897	0.05	Accepted	There is no significant impact of ratios on Net Profit
Sakthi Sugars Ltd	CR, ITR, TRTR	0.08266	0.05	Accepted	There is no significant impact of ratios on Net Profit
Balrampur Chini Mills Ltd	QR, ITR, CSTAR	0.19619	0.05	Accepted	There is no significant impact of ratios on Net Profit
Dalmia Bharat Sugar Ltd	CR, ITR, CATAR	0.18927	0.05	Accepted	There is no significant impact of ratios on Net Profit
EID Perry Ltd	CR, ITR, TRTR	0.49859	0.05	Accepted	There is no significant impact of ratios on Net Profit
Triveni Engineering Ltd	CR, ITR, TRTR	0.19945	0.05	Accepted	There is no significant impact of ratios on Return on Assets
Sakthi Sugars Ltd	QR, ITR, CSTAR	0.13388	0.05	Accepted	There is no significant impact of ratios on Return on Assets
Balrampur Chini Mills Ltd	CR, ITR, CATAR	0.26999	0.05	Accepted	There is no significant impact of ratios on Return on Assets
Dalmia Bharat Sugar Ltd	CR, ITR, TRTR	0.20023	0.05	Accepted	There is no significant impact of ratios on Return on Assets
EID Perry	CR, ITR, CATAR	0.50368	0.05	Accepted	There is no significant impact of ratios on Return on Assets

Suggestions

- Sakthi Sugars the average 0.44:1 Current Ratio, So it is advisable for the company maintain current assets to meet the current liabilities of future. All those companies whose current ratio doesn't match the standard ratio proportion, it is advisable for them to increase their Current Asset.
- The lowest Quick Ratio has shown in Balrampur Chini. Which is more or less similar to the current ratio. The company should maintain the funds and application of the funds in way that it helps smooth functioning.
- Dalmia sugar was the lowest inventory turnover ratio, it is advisable for the company to increase its sales. Sakthi Sugars was highest in terms of inventory turnover, it is advisable to the company to maintain the position and to maintain sales.
- Sakthi sugar was the highest Trade Receivable Turnover, it is advisable to the company to regular maintain this level of collecting its receivable. EID Perry was the lowest trade receivable turnover, it is advisable to the company collecting its receivable more quickly.



- The maximum average Current Assets to Total Assets Ratio is in Triveni Engineering. Which shows that the investment that has been made by triveni engineering was mostly in current assets. It shows that out of hundred percent, they are having 66% current assets out of it.
- For identification of net efficiency net profit ratio is used. EID Perry Indicates the highest net profit ratio throughout the year, so it is advisable for other companies to follow the operation policy of EID Perry. Sakthi sugar shows the phenomenon growth in net profit ratio. From negative net profit ratio to 42% of net profit ratio is remarkable progress. It is advisable for the company to maintain their position by maintaining the efficiency in operations.
- For Identification of how profitable a company is in relation to its total assets. Triveni Engineering indicate the highest return on assets ratio throughout the year, so it is advisable to the more efficient the company is at generating profits to the total assets and to continue to same level of options to generating profits. Sakthi Sugars shows the phenomenon growth in return on assets ratio. From negative return on assets ratio is remarkable progress. It is advisable for the company to maintain the efficiency in operations.

Significant of the Study

- To improve in the knowledge of working capital management and profitability
- Through this study know about how to do analysis and interpretation
- The study helps to find out impact of working capital management and profitability
- This study through know the relationship between Working Capital Management and profitability.
- With the help of this study we can get the knowledge about the profitability and working capital performance of the selected Sugar industry.
- The study will throw some light on the growth of the Sugar industry.
- Since the Sugar industry is crucial for the growth of the Indian economy, it is important to investigate profitability of selected Indian Sugar Companies.
- Existing and emerging investors can take benefit by having clear picture of industry and particular Companies.
- Potential entrepreneurs can scan the opportunities and threats prevailing in the industry.
- The study is useful to the Sugar Industry, government and the society at large.

Limitation of the Study

- There are many ratios for measuring the relation between working capital component and profitability from which only few will be studied.
- In this study, only selected ratio analysis of selected companies are used.
- The study is confined to five years data only (2018-19 to 2022-23). Detailed analysis covering a lengthy period, which may give slightly different results, has not been made.
- All the limitation of secondary data has been applied to this study.
- There are numbers pharmaceutical companies in India from which only 5 will be studied findings may not be applicable to the whole industry. The study relies on only 5 unite as compare to population, the sample size is small. Hence on the basis of study, generalization cannot be made.



- This study is based on secondary data like journal, magazines, internet etc. Sometimes results based on this data may not be reliable, and it is also possible that effectiveness of relation between ratios may not be measured
- This research can be considered as a personal opinion of researcher, and it may be different from others.
- The study restricted to selected samples i.e. Triveni Engineering Industry Ltd, Sakthi Sugars Ltd., Balrampur Chini mills Ltd, Dalmia Bharat Ltd, EID party Ltd. It's quite a small sample, which may not be representing all the common characteristics of the universe.
- Accounting ratios have its own limitations, which also applied to the study.
- The study done only for Sugar companies
- The present study is mainly based on the ratio analysis which has its own limitations, applicable here also.
- It may be personal view differs from one person to another.
- The study is only of the last five financial years so the analysis can only applied to those of years.
- This study is mainly based on secondary data derived from the annual reports published by companies. The reliability and the findings are contingent upon the published data in annual reports.

Further Scope:

- There are many other ways to check the financial position of sugar companies in India like researcher taken more years.
- For the further research researcher can study on more companies.
- Cooperative Sugar companies and private sugar companies play a very important role in generating employment in rural area, hence this field is open for more research.
- This study is purely based on limited secondary data. Researchers can be done with another more reliable source of secondary data & may be primary data also.
- Here the study is only based on, profitability and working capital can be done with the help of other tools.
- Here the study is based on one way ANOVA test, so it can be done with the help of other tool & techniques.
- There are numbers of Sugar companies in India from which only five will be studied so more companies can be studied for the further study.
- The same study can be done in future with more wide geographical scope with more than five Sugar company.

Conclusion

Researcher has tried to know the impact of working capital management on profitability of all these companies, for the purpose of analysis research has to use various working capital management and profitability ratios and statistical tools. For this research, researcher has to take last five years annual reports of selected sugar companies. The various ratio like Current Ratio, Quick Ratio, Inventory



Turnover Ratio, Trade Receivable Turnover Ratio, Current Assets to Total Assets Ratio, Net Profit Ratio and Return on Assets Ratio of selected sample companies for the study period of five years from 2018-19 to 2022-23.

Enhance the performance of all companies is different to each other. The Findings are given as per ratios of the various selected sugar companies and the result of ANOVA test, Correlation and Regression. The suggestions are given to different companies on the basis of their performance. By analyzing the ratios and the result of ANOVA test, Correlation and Regression of the study is found that there is a significant difference between the profitability and working capital analysis and ratio. Thus, working capital of selected Sugar companies is significantly influencing the profitability during the study period. Some suggestions are given to companies so that it is helpful to increase the Profitability and helpful to manage the working capital of various companies Liquidity and Efficiency.

Reference

- Srivastava, R., & Misra, A. (n.d.). *Financial Management*. New Delhi: Oxford University Press.
- Bhatia, B. S., & Batra, G. S. (n.d.). *Accounting and Financial Management*. New Delhi: Deep & Deep Publications Pvt. Ltd.
- Chandra, P. (n.d.). *Managers' Guide to Finance and Accounting*. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Gopal, C. C. (2017). *Financial Management*. New Delhi: New Age International (P) Limited, Publishers.
- Gordon, E., Jeyaram, N., Sundram, N., & Jayachandran, R. (2010). *Management Accounting*. New Delhi: Himalaya Publishing House.
- Home, J. C., & John M. Wachowicz, J. (2009). *Fundamentals of Financial Management*. New Delhi: PHI Learning Private Limited.
- Horne, J. C., & John M. Wachowicz, J. (2007). *Fundamentals of Financial Management*. Delhi: Pearson Education.
- Chawala, D., & Sondhi, N. (2011). *Research Methodology Concepts and Cases*. Vikas Publication House Private Ltd.
- Padachi, K. (2006). Trends in Working Capital Management and its Impact on Firm's Performance: An Analysis of Mauritian Small Manufacturing Firms. *International Review of Business Research papers*.
- Ganesan, V. (2007). An Analysis of Working Capital Management Efficiency in Telecommunication Equipment Industry. *Rivier Academic Journal*.
- Ramachandran, A., & Janakiraman, M. (2009). The Relationship between Working Capital Management Efficiency and EBIT. *Managing Global Transitions*.
- Rahim, M. R., & Prabhakar, P. A. (2022). A study on Analysis of Working Capital Management with Special Reference to BHEL, Visakhapatnam. *International Journal of Law Management & Humanities*.



Publishing URL: <https://www.researchreviewonline.com/issues/volume-11-issue-143-december-2024/RRJ222223>

- Kalimuthu, D. M., & A, M. P. (2020). A study on Financial Performance Analysis of Hindustan Petroleum Corporation Limited. *EPRA International Journal of Research and Development*.
- Kalimuthu, D. M., & David, A. (2018). Financial Performance of Steel Industry in India. *RESEARCH REVIEW International Journal of Multidisciplinary*.
- Mittal, R., & Sadana, D. S. (2020). A study on Working Capital Management Efficiency of TCS. *Wesleyan Journal of Research*.
- Panigrahi, D. A., & Sharma, D. A. (2016). Working Capital Management and Firms' Performance: An Analysis of selected Indian Cement Companies. *Asian Journal of Research in Business Economics and Management*.
- ❖ <https://www.alphainvesco.com/blog/indian-sugar-industry/>
- ❖ <https://www.nsk.com/industries/sugar.html>
- ❖ <https://lotusarise.com/sugar-industry-in-india-upsc/>
- ❖ <https://www.geeksforgeeks.org/sugarcane-and-sugar-industry-in-india/>
- ❖ https://en.wikipedia.org/wiki/Sugar_industry_of_India
- ❖ <https://www.moneycontrol.com/financials/triveniengineeringindustries/ratiosVI/te10>
- ❖ <https://www.moneycontrol.com/financials/sakthisugars/ratiosVI/SS>
- ❖ <https://www.moneycontrol.com/financials/balrampurchinimills/ratiosVI/BCM>
- ❖ <https://www.moneycontrol.com/financials/dalmiabharatsugarindustries/ratiosVI/DCB>
- ❖ <https://www.moneycontrol.com/financials/eidparryindia/ratiosVI/EID>
- ❖ Annual Report: Triveni Engineering Limited (2019-2023)
- ❖ Annual Report: Sakthi Sugars Limited (2019- 2023)
- ❖ Annual Report: Balrampur Chini Mills Limited (2019-2023)
- ❖ Annual Report: Dalmia Bharat Sugar Limited (2019-2023)
- ❖ Annual Report: EID Perry Limited (2019- 2023)