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A study on Ratio Analysis Practices in Tea Industry

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ABSTRACT:

Financial ratios are an important technique of the financial analysis of a business organization. Effective financial management is the key to running a financially successful business. Ratio analysis is critical for helping you understand financial statements, for identifying trends over time, and for measuring the overall financial health of your business.

The main objective of the study is to analyze the profitability of the company. It is the process of identifying the financial strength and weakness firm properly establishing the relationship between the item of balance sheet & profit and loss account. The details regarding the history and finance details of the company were collected through the discussion with the company officers. And it's mainly analyzing the company profitability analysis (CPA) .The secondary data based on the annual reports of 2019-2023.The various tools used for the study are ratio analysis and trend analysis. Charts and table are used for better understanding. Analysis and interpretation of the financial statements help in determining the liquidity positions, long-term solvency, and financial profitability of a firm. Through, the ratio analysis the company could understand the profitability, liquidity, leverage, turnover position of the company. The company is following higher debt equity but, the lower debt to equity ratio is usually implies a more financially stable business. On the other hand, turnover also not sufficient to the healthy business. To evaluate the historical trends or pattern of profitability to forecast future profitability.

Keywords: Profitability, Equity ratio and long-term solvency etc.,

Introduction:

Ratio analysis stands as a cornerstone of financial analysis, offering a window into the performance, stability, and overall health of businesses across various industries. Rooted in the fundamental principles of accounting and finance, ratio analysis involves the systematic examination and interpretation of key financial metrics derived from a company's financial statements. Through the lens of ratios, stakeholders gain invaluable insights into the efficiency, profitability, liquidity, and solvency of businesses, enabling informed decision-making and strategic planning.

Meaning:

The essence of ratio analysis lies in comparing different ratios over time, against industry benchmarks, or against competitors to identify trends, strengths, weaknesses, and areas for improvement. By examining these relationships, stakeholders can better understand the underlying factors driving a company's financial performance and assess its ability to meet its financial obligations, generate profits, manage resources effectively, and create value for shareholders.
ratio analysis serves as a powerful tool for financial analysis and decision-making, providing a structured framework for interpreting financial data and gaining insights into the financial health and performance of a company.

Definition:

Ratio analysis serves as a critical tool for decision-making, allowing investors, creditors, managers, and other stakeholders to make informed judgments about a company's ability to meet its financial obligations, generate profits, manage resources effectively, and create value for shareholders. Overall, ratio analysis provides a structured framework for interpreting financial data and assessing the financial health and performance of a company. It entails calculating and interpreting ratios, which are numerical indicators derived from financial statement information, to assess different aspects of a company's performance, financial health, and operational efficiency.

According to Robert N. Anthony and Leslie K. Breitner, authors of "Essentials of Accounting," ratio analysis is defined as "the comparison of related amounts in the financial statements of a business to assess the operating and financial performance of the company. Ratios provide a way of expressing the relationship between one accounting measure and another, which is intended to provide useful information to the users of financial statements."

In "Financial Statement Analysis" **by Martin S. Fridson and Fernando Alvarez,** ratio analysis is described as "a technique used to evaluate the financial statements of a business in order to assess its operating and financial performance. It involves calculating various ratios based on the numbers provided in the financial statements, which are then compared to industry averages, historical trends, or benchmarks to determine the company's financial health and performance."

According **to Charles H. Gibson** in "Financial Reporting and Analysis: Using Financial Accounting Information," ratio analysis is defined as "the process of using the relationship between numbers in the financial statements to evaluate a company's financial performance and position. Ratios can be calculated from various financial statement items, such as the income statement, balance sheet, and statement of cash flows, and are used by investors, creditors, and analysts to assess a company's profitability, liquidity, solvency, and efficiency."

From "Financial Analysis and Modeling Using Excel and VBA" by Chandan Sengupta, ratio analysis is explained as "the examination of the relationships between financial statement items to provide insights into a company's financial performance and position. Ratios are calculated by dividing one financial statement item by another, and the resulting ratios are then compared to industry averages, historical trends, or benchmarks to assess the company's financial health and performance."

Types of Ratio Analysis:

- Liquidity Ratios:
- Current Ratio: Measures the company's ability to pay its short-term liabilities with its short-term assets.
- Quick Ratio (Acid-Test Ratio): Assesses the company's ability to cover its short-term liabilities with its most liquid assets.
- Profitability Ratios:
- Gross Profit Margin: Indicates the percentage of revenue that exceeds the cost of goods sold.
- Net Profit Margin: Measures the percentage of revenue that remains after deducting all expenses.
- Return on Assets (ROA): Measures the company's ability to generate profit from its assets.
- Return on Equity (ROE): Indicates the return generated on shareholders' equity.

Current Ratio:

The current ratio is a liquidity ratio that measures a company's ability to pay its short-term liabilities with its short-term assets. It is calculated by dividing the total current assets by the total current liabilities. The current assets typically include cash, cash equivalents, accounts receivable, inventory, and other assets that are expected to be converted into cash within one year. Current liabilities are obligations that are due within one year, such as accounts payable, short-term loans, and accrued expenses.

Current Ratio= Current assets / Current liabilities

Current Assets = Cash + Marketable Securities + Accounting Receivables +Notes and bills Receivables+ Inventories
Current Liabilities= Accounts Payable + Notes and bills +Outstanding Expenses + Short Term Loans

Quick Ratio:

The quick ratio, also known as the acid-test ratio, is a liquidity ratio that assesses a company's ability to cover its short-term liabilities with its most liquid assets. It provides a more conservative measure of liquidity than the current ratio because it excludes inventory, which may not be easily convertible into cash in the short term. The quick assets typically include cash, cash equivalents, short-term investments, and accounts receivable. These are assets that can be quickly converted into cash within a short period.

$$Quick\ Ratio = \frac{\text{current assets}-\text{inventory}}{\text{current liabilities}}$$

Return on Assets Ratio:

The Return on Assets (ROA) ratio is a financial metric used to measure a company's profitability in relation to its total assets. It indicates how efficiently a company utilizes its assets to generate profit. The ROA ratio is expressed as a percentage. A higher ROA indicates that a company is generating more profit per unit of assets, which is favorable as it suggests efficient asset utilization. Conversely, a lower ROA may indicate less efficient asset utilization or lower profitability relative to the company's asset base.

Return on Assets Ratio = Net Income / Average Total Assets

Review of Literature

A literature review is a critical and in-depth evaluation of previous research. It is a summary and synopsis of a particular area of research, allowing anybody reading the paper to establish why the study is pursuing this particular research. A good literature review expands on the reasons behind selecting a particular research question. A literature review is likewise not a collection of quotes and paraphrasing from other sources. A good literature review should critically evaluate the quality and findings of the research.

Jo Nelgadde (2018), in this thesis, he briefly discusses about the asset management ratio. It divided into different types of categories. He states that about the used to analyze accounts receivable and other working capital figures to identify significant changes in the company's operations and financial accounts. He said that there are two categories about this ratio such as account receivable turnover and average age of account receive.

Al-Aameri and Alrikabi (2019) was focusing on one of the important techniques in financial analysis, namely, the financial ratios, for the purpose evaluating the performance of petroleum projects company, and to find out the main strength and weakness points, so as to suggest the remedial actions for treatment of negative points and enhance the positive one. The papers contains detail study for the data included in financial statements to explain the financial performance of the company, and that will help the management for planning the future according to the previous performance, and also contain the converting process of the data of financial statements to meaningful information through several techniques, the financial statement analysis among them.

Lucia Jenkins (2019), Understanding the use of various financial ratios and techniques can help in gaining a more complete picture of a company's financial outlook. He thinks the most important thing is fixed cost and variable cost. Fixed costs are those costs that are always present, regardless of how much or how little is sold. Some examples of fixed costs include rent, insurance and salaries. Variable costs are the costs that increase or decrease in ratios proportion to sales.

Medhat, (2019) used multiple regression analysis and correlations to test the financial performance of Omani Commercial banks. He used the ROA and the interest income as performance proxies (dependent variables), and the bank size, the asset management and the operational efficiency as independent variables. He found positive strong correlation between financial performance and operational efficiency and a moderate correlation between ROA and bank size.

M. Ganga (2020), on the evaluation of financial performance of Equites Micro Finance Private Limited in Chennai. According to them financial analysis is important to plan and control the firm's financial resources. They adopted various research techniques to find the evaluation of financial performance of the organization. They found that the managers must concentrate on gray area which would be useful for future growth of the company.

Dr. M. Ravichandran (2020) the financial performance can be measured by using various financial tools such as profitability ratio, solvency ratio, comparative statement, etc. Based on the analysis, findings have been arrived that the company has got enough funds to meet its debts & liabilities, the income statement of the company shows sales of the company increased every year at good rate and profit also increased every year.

Research gap

The research gap identified in this study revolves around the current literature predominantly focuses on the application of traditional ratio metrics to assess a company's financial health. However, there is a scarcity of in-depth studies that delve into the effectiveness and limitations of ratio analysis in the context of emerging financial complexities, global economic shifts, and the dynamic business landscape within the company.

Many ratio analysis studies focus on general industries or sectors. There could be a research gap in conducting ratio analysis tailored to specific industries or niche markets, considering the unique dynamics and challenges they face.
Investigating the unique challenges and opportunities faced in ratio analysis, such as limited financial resources, access to credit, or reliance on non-traditional metrics, could help tailor ratio analysis frameworks to better suit their needs.

Scope of the Study

The scope of the study on ratio analysis encompasses a comprehensive exploration and evaluation of financial metrics to provide a nuanced understanding of an organization's financial performance. This study seeks to contribute to the existing body of knowledge by addressing these aspects and offering a more contemporary and holistic perspective on the concept of ratio analysis in financial analysis and decision-making. Further the study is based on last 5 years Annual Reports.

Need of the Study

The effective management of accounts is of prime importance to the manufacturing concern. It is a start for making plans and has to be done using any sophisticated forecasting and procedures. The essence of basic research is that it addressed itself to more fundamental questions and not to the immediate commercial potential. Analysis of data will be done by interpretation in various figures and tables. The study is conducted to know the changes in the various items of balance sheet and income statement and to analyze their impact on the profitability, liquidity and the overall financial position of the company

Hypothesis of the Study

A hypothesis is a proposed explanation or statement that can be tested through research and experimentation. In scientific research, hypotheses are formulated based on observations, existing knowledge, and theoretical frameworks. Hypotheses are used to make predictions about the outcome of experiments or investigations and are essential for the scientific method. A hypothesis serves as a testable statement or prediction that guides scientific inquiry and helps researchers draw conclusions about the relationships between variables.

Hypothesis used for the study:

HO- Null Hypothesis

- There is no significant relationship between liquidity ratios (e.g., current ratio, quick ratio) and a company's ability to meet short-term obligations.
- There is no significant relationship between market value ratios (e.g., price-to-earnings ratio, price-to-book ratio) and a company's market valuation.
- There is no significant difference in financial ratios between companies operating in different industries.

H1-Alternative Hypothesis

- Companies with higher liquidity ratios are more likely to meet short-term obligations and are less likely to experience financial distress.
- Companies with higher efficiency ratios are more effective at utilizing assets and resources to generate sales and profits.
- Market value ratios are positively correlated with market valuation, indicating that companies with higher ratios may be perceived as more valuable by investors.

Limitations of the Study

The following are the various limitations involved in the study.

- The project period of three months is insufficient as the company’s operations are numerous and complex and hence various areas could not be fully covered.
- The data will be tabulated using the last five years financial statements of the company and such data are only secondary in nature.
- Analysis of ratios can also be done with the help of alternative formulae.
- The scope of study analysis is only for five years.
- Most of the data is collected from secondary source and there may be chances for bias in case of result obtained.

Research Methodology & Design

The research will adopt a mixed-methods approach, combining quantitative surveys and qualitative interviews. Methodology refers to systematic procedure of collecting information in order to analyze and verify phenomena.

The collection of information is done with two principal sources:

Primary data:

Collection of primary data and the information which is not available in Annual Reports by way of observations, interviews and discussions with the officials.

Secondary data:

This study is generally based on the secondary data, which was obtained from the published source i.e. annual reports for a period of five years from 2019 to 2023.

The secondary data is collected from the following sources

- Annual financial reports
- Books of the company

SAMPLING DESIGN

Sampling unit: Financial Statements.

Sampling Size: Last five years financial statement.

Statement of the problem

Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency. The trend of these ratios over time is studied to check whether they are improving or deteriorating. Ratio analysis is widely used as a powerful tool of financial statement analysis to check the company's operations or financial performance is difficult task by some other tools for the company.

Ratio analysis serves as a valuable tool for evaluating the financial performance, operational efficiency, and risk management practices within the tea industry. By examining key financial ratios derived from the financial statements of tea companies, stakeholders can gain insights into various aspects of their financial health and strategic positioning.

Objectives of the study

- ✓ To analysis ratio the financial performance of the organization on the basis of these ratios.
- ✓ To understand the liquidity and efficiency positions of the company during the study period.
- ✓ To study the profitability and long-term capital position of the company.
- ✓ To analysis the various components in the balance sheet.
- ✓ To find the better practices for improving the efficiency at management

Data Analysis and Interpretation

Current Ratio

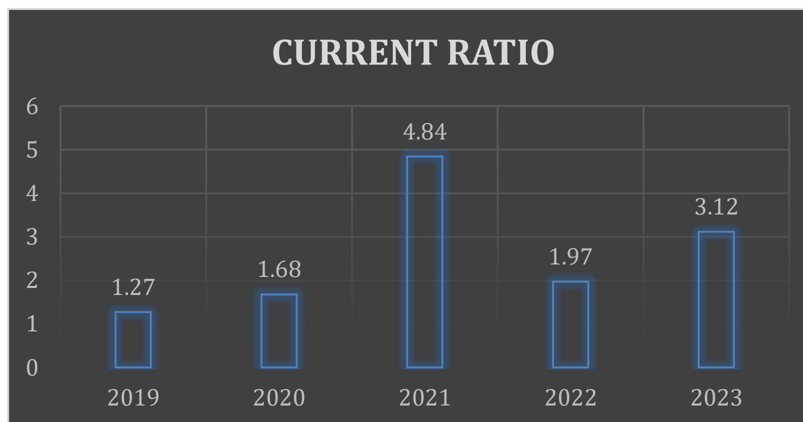
Current ratio represents the liquidity position and measures how far the society is able to pay to its obligation. This has been calculated by dividing current assets by current liabilities which indicates the availability of current assets in rupee for every one rupee of current liabilities. Generally, a current ratio of 2:1 is considered to represent a satisfactory current financial condition.

$$Current\ Ratio = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Table-1: Showing Current Ratio

YEARS	CURRENT ASSETS	CURRENT LIABILITIES	RATIO
2019	22.74	17.84	1.27
2020	37.79	22.54	1.68
2021	37.19	7.69	4.84
2022	96.04	48.63	1.97
2023	65.53	20.98	3.12

Fig-1: Showing Current Ratio



Inference:

The company's liquidity, represented by the current ratio, fluctuated over the years. In 2020, it was 1.68, indicating a healthy position. A substantial increase occurred in 2021, with the ratio soaring to 4.84, suggesting robust liquidity. However, by 2022, the ratio decreased to 1.97, showing a dip in liquidity. Despite fluctuations, the company maintained a satisfactory ability to cover short-term obligations, with the ratio rebounding to 3.12 in 2023.

Quick Ratio

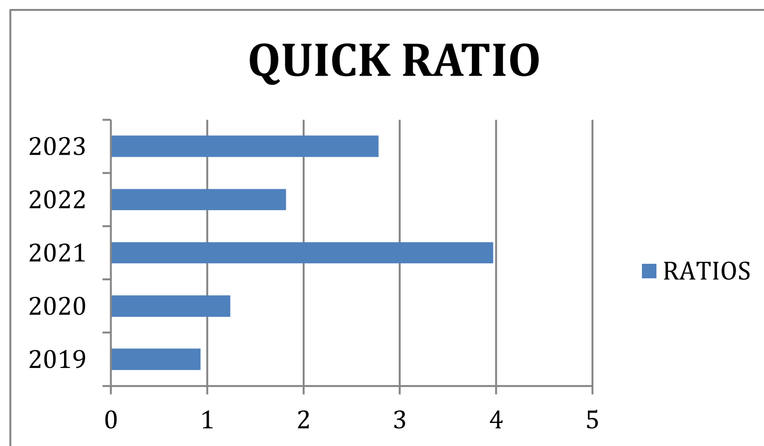
The quick ratio, also known as the acid-test ratio, is a financial metric used to evaluate a company's short-term liquidity and its ability to meet immediate liabilities without selling inventory. It's calculated by dividing the sum of a company's cash, cash equivalents, short-term investments, and accounts receivable by its current liabilities. A higher quick ratio indicates a stronger liquidity position, suggesting that a company is better equipped to cover its short-term debts.

$$Quick\ Ratio = \frac{Quick\ Assets}{\text{Current Liabilities}}$$

Table-2: Showing Quick Ratio

YEARS	QUICK ASSETS	CURRENT LIABILITIES	RATIOS
2019	16.58	17.84	0.93
2020	27.99	22.54	1.24
2021	30.56	7.69	3.97
2022	88.54	48.63	1.82
2023	58.3	20.98	2.78

Fig-2: Showing Quick Ratio



Inference:

The quick ratio, reflecting the company's ability to cover short-term liabilities with highly liquid assets, showed fluctuations. In 2019, it stood at 0.93, suggesting a limited ability to cover immediate obligations. A notable improvement was seen in 2021, with the ratio surging to 3.97, indicating a strong liquidity position. However, by 2022, the ratio decreased to 1.82, showing a dip in liquidity compared to the previous year. Despite fluctuations, the company generally demonstrated a satisfactory ability to meet short-term obligations, with the ratio remaining above 1 throughout the period.

Return on Assets Ratio

The return on assets (ROA) ratio is a financial metric used to evaluate a company's profitability relative to its total assets. It measures how efficiently a company utilizes its assets to generate profit.

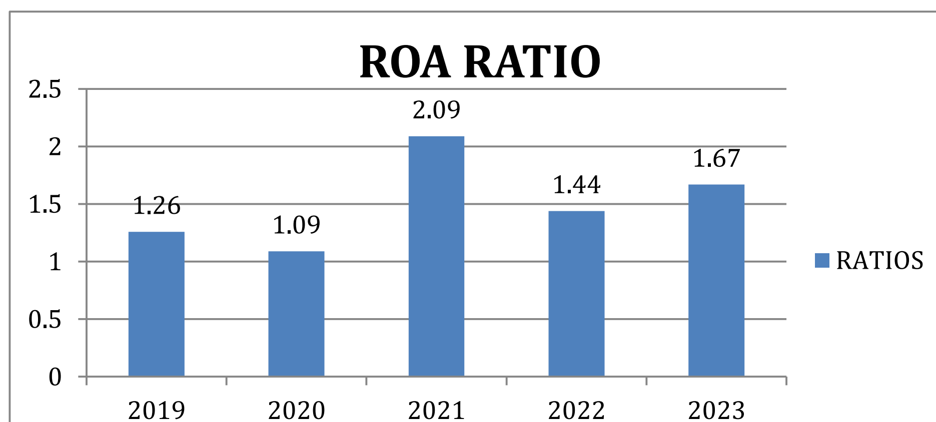
ROA= Net Income / Average Total Assets

A higher ROA indicates that a company is more efficient in generating profit with its assets, while a lower ROA suggests the opposite. It is commonly used by investors and analysts to assess a company's financial performance and profitability.

Table-3: Showing Return on Assets Ratio

YEARS	NET INCOME	AVERAGE TOTAL ASSETS	RATIO
2019	49.51	39.14	1.26
2020	39.77	36.6	1.09
2021	73.07	35.03	2.09
2022	48.32	33.51	1.44
2023	52.19	31.27	1.67

Fig-3: Showing ROA Ratio



Inference:

The Return on Assets (ROA) ratio fluctuated over the years, indicating changes in the company's efficiency in generating profit from its assets. In 2019, the ratio was 1.26, suggesting that for every dollar of assets, the company generated $1.26 in net income. It decreased to 1.09 in 2020 but significantly increased to 2.09 in 2021, indicating improved profitability relative to assets. However, by 2023, the ratio decreased to 1.67, showing a slight decline in profitability. Overall, the company demonstrated varying levels of efficiency in utilizing its assets to generate profit over the years.

Return on Equity Ratio

The return on equity (ROE) ratio is a financial metric used to evaluate a company's profitability relative to its shareholders' equity. It measures how much profit a company generates with the money shareholders have invested in it.

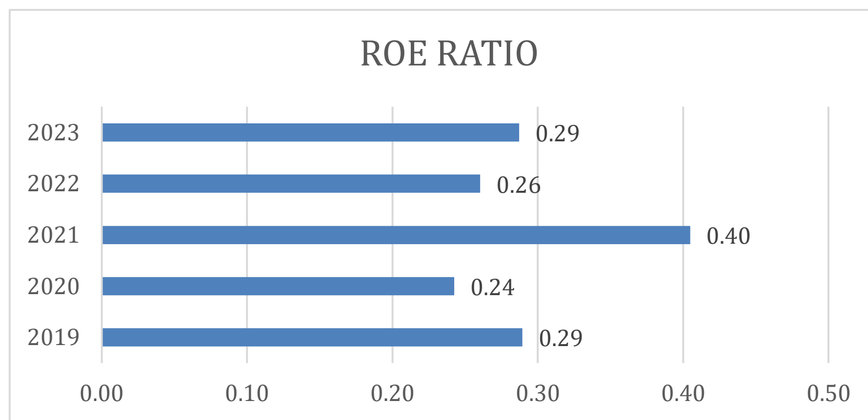
ROE= Net Income / Shareholders Equity

ROE provides insight into how effectively a company is utilizing shareholders' equity to generate profit. A higher ROE indicates that a company is generating more profit with each unit of shareholders' equity, which is generally favorable for shareholders. Conversely, a lower ROE suggests that the company is less efficient in utilizing shareholders' equity to generate profit. ROE is an important metric for investors and analysts to assess a company's financial performance and profitability.

Table-4: Showing Return on Equity Ratio

YEARS	NET INCOME	SHAREHOLDERS EQUITY	RATIO
2019	49.51	171.07	0.29
2020	39.77	164.04	0.24
2021	73.07	180.52	0.40
2022	48.32	185.55	0.26
2023	52.19	181.72	0.29

Fig-4: Showing ROE Ratio



Inference:

The Return on Equity (ROE) ratio reflects the company's profitability relative to shareholders' equity. In 2019, the ROE was 0.29, indicating that for every dollar of shareholders' equity, the company generated $0.29 in net income. It decreased to 0.24 in 2020 but significantly increased to 0.40 in 2021, suggesting improved profitability relative to shareholders' equity. However, by 2023, the ratio remained at 0.29, indicating a stabilization in profitability. Overall, the company demonstrated varying levels of efficiency in generating profit relative to shareholders' equity over the years, with notable improvements in 2021.

Findings

- The company demonstrated fluctuations in profitability relative to both assets and equity over the years.
- 2021 stood out as a year of significant improvement in both ROA and ROE, indicating enhanced efficiency in generating profit from both assets and equity.
- Despite fluctuations, the company generally maintained satisfactory levels of profitability relative to both assets and equity throughout the study period.
- The company experienced fluctuations in liquidity over the years, with notable improvements in 2021 and slight declines in other years.
- It's important for the company to monitor and manage its liquidity carefully to ensure it can meet its short-term obligations effectively.

Suggestions

- The company should concentrate to maintain the liquidity position on cash balance and try to mobilize funds from banks / financial institutions.

- The company is recommended to mobilize funds from various sources may be external or form internal.
- Cost control techniques are to be adopted on the company where ever possible.
- Company can utilize the reserves and surplus by either capitalizing or invest the money somewhere an investment to get benefit.
- The financial leverage should be maintained effectively.

Conclusion

The recommendations have been put forward to management for its consideration. Even though the recommendations are done based on the projections of the historical data available for the books of accounts, the Management has to take efforts to implement the necessary steps by looking into the financial performance of the previous year. Actually speaking, a successful financial executive is interested not in maintaining a good current ratio but in maintaining an adjustable account of current assets so that the business may operate smoothly. Thus, the working capital concepts are more important to the management in order to maintain the current assets and current liabilities. The company has favorable net assets value, sales and income of the company also is in increasing trend. The company has favorable Earnings before interests and taxes, cash flow. Earnings per share value are increasing every year. Price per sales ratio and Price per Earnings ratio are gradually decreasing. The lower the PSR value is the better

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