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A STUDY ON “FINANCIAL ANALYSIS” WITH SPECIAL REFERENCE TO EXIDE INDUSTRIES PVT LTD, AT HOSUR.

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ABSTRACT :

This study aims to evaluate the financial performance of Exide Industries over a specific period by analyzing key financial indicators, including revenue trends, profit margins, return ratios, and debt-equity structure. Understanding these metrics will help determine the company's financial strengths and weaknesses, identify growth opportunities, and assess its long-term viability in the energy storage industry. Financial Management is the specific area of finance dealing with the financial decision corporations make, and the tools and analysis used to make the decisions. The discipline may be divided between long-term and short-term decisions and techniques. Both share the same goal of enhancing firm value by ensuring that return on capital exceeds cost of capital, without taking excessive financial risks.

Key words: Finance, Profit, Analysis, Opportunities, Margins, Identity, Capital.

INTRODUCTION

The company has over seven decades of experience in designing, manufacturing, marketing, and selling lead-acid storage batteries for both automotive and industrial applications. It operates in both the domestic and international markets and is renowned for its strong brand presence and vast distribution network. Exide's product portfolio includes automotive batteries, inverter batteries, solar batteries, industrial batteries, and lithium-ion batteries, catering to sectors such as automotive, power, telecom, infrastructure, IT, and railways. The company has multiple manufacturing facilities across India equipped with advanced technology and robust quality control systems. In addition to its core battery business, Exide has also ventured into new energy storage technologies, including lithium-ion batteries and energy management solutions, through collaborations and joint ventures. This strategic diversification positions the company to meet the growing demand for electric mobility and renewable energy storage systems.

RESEARCH BACKGROUND

Financial analysis plays a vital role in assessing the performance, stability, and growth prospects of a company. It enables stakeholders—including investors, management, and creditors—to evaluate a company's financial health using key financial statements and ratios. In the Indian manufacturing sector, Exide Industries Limited stands out as a prominent player, particularly in the energy storage segment. Established in 1947, Exide Industries has grown into one of India's largest producers of automotive and industrial batteries, with a significant presence in both domestic and international markets. The battery industry is capital-intensive and highly competitive, marked by rapid technological advancements and increasing demand for sustainable energy solutions. Exide Industries, being a market leader, must constantly adapt to these changes while maintaining profitability. A detailed financial analysis of Exide provides insights into its operational efficiency, profitability, liquidity, solvency, and overall financial strategy.

IDENTIFIED PROBLEM

Despite being a market leader in the Indian battery industry, Exide Industries Ltd. Faces multiple financial and strategic challenges that may impact its long-term sustainability and profitability. One of the primary concerns is fluctuating profitability due to rising raw material costs, especially lead, which forms a major part of its input cost structure. Additionally, the company's traditional dependence on lead-acid battery technology is being challenged by the growing demand for lithium-ion batteries and EV-compatible energy solutions. Another key issue is the intensifying competition from both domestic and global players, particularly in the electric mobility and renewable energy segments. This has forced Exide to increase investments in R&D and partnerships, which, while necessary, put pressure on its short-term financial performance.

OBJECTIVES OF THE STUDY

To analyze the financial performance of Exide industries Ltd. over a specified period using key financial ratios. To assess profitability by evaluating revenue growth, operating margins, and net profit margins. To examine the liquidity position of the company, including its ability to meet short-term obligations. To evaluate solvency and capital structure, including the debt-to-equity ratio and long-term financial stability. To identify trends in the company's financial efficiency, such as return on assets (ROA) and return on equity (ROE). To understand the impact of external factors, such as raw material costs and competition, on Exide's financial performance. To analyze the company's strategic investments in emerging sectors like electric vehicles (EVs) and renewable energy storage. To provide recommendations for improving financial strategies and enhancing long-term sustainability.

REVIEW OF LITERATURE

Ahmed S. & Khan T. (2023), "Export-Driven Revenue Growth in Engineered Quartz Manufacturing". This study analysed how export volumes influence top-line and bottom-line growth in 60 south Asian quartz firms. Using cross-sectional regression, ANOVA, and stepwise regression modelling, it found a consistent positive correlation between export activity and net sales growth. The highest financial rewards were seen in firms that invested in export-specific production lines and quality certifications.

Banerjee A., & Rao H. (2021), "Quartz Export: A Pathway to Financial Sustainability for Indian Manufacturers". This study focuses on sustainability in profitability through exports, Exporting firms sustained a 19% average net margin despite raw material cost inflation. Contracts in foreign currencies (especially USD) served as hedges against domestic economic instability. By the help of Panel regression Analysis.

Bhatia S. & Kaur R. (2024), "Financial Impact of Export Strategy on Quartz Firms Profit Margins". This Research analyses the effect of various export strategies on profit margins of 50 quartz exporters. Using multivariate regression, profitability sensitivity analysis, and global market trend analysis, the research demonstrate that firms with targeted export strategies achieve a 20% higher margin compared to firms using general market strategies, by using the secondary data source, the research shows that firms benefit financially from entering global markets.

Chen Y., & Huang L. (2023), "Exporting for Financial Strength". A case-based analysis of how export expansion affected financial ratios of Chinese quartz firms. Exporters showed a 24% improvement in return on assets (ROA) and better inventory turnover due to stable overseas demand. Exchange rate incentives and buyer prepayments strengthened liquidity.

Deshmukh M., & Rao S. (2022), "Export Growth and Capital Expenditure Efficiency in India". This research studies the relationship between export-driven revenue growth and capex efficiency. Exporting firms achieved a 1.6x higher ratio of incremental sales to incremental capex compared to non-exporters, indicating superior capex utilization. Use of export subsidies for machinery upgrades lowered capital intensity and supported rapid scaling of production lines without eroding margins.

Franco P., & Martins D. (2022), "Export Performance and Profit Retention in the Portuguese Quartz Industry". This Research focuses on how exports help companies retain earnings. Quartz firms increased dividend pay-outs and equity reserves by over 40% after entering U.S. and German markets. Use of digital sales platforms and AI-based logistics planning lowered SG&A costs. Using the Multivariate regression & Monte Carlo simulation.

Gupta M. & Rajan R. (2021), "Link Between Export Intensity and Financial Success in Quartz Firms". The research analyse financial outcomes based on export intensity using a dataset of 85 quartz exporters in India. Applying ordinary least squares (OLS) regression, variance inflation factor (VIF) checks, and sensitivity analysis, the study identifies export intensity as a major determinant of improved ROA and ROE. Results showed that firms with greater than 50% export revenue demonstrated superior capital efficiency and investor returns.

Gupta P. & Rath A. (2024), "Exporting and Cost Structure Optimization in Quartz Firms". The study explores how exporting affects cost structures for quartz manufacturers in India. Using cost-structure analysis, profitability ratios, and elasticity analysis, the research found that exporters optimized their cost structures by achieving better economies of scale, which led to a 10% reduction in overall production costs.

Gupta P., & Iyer R. (2022), "Export-Led Cash Flow Efficiency in Indian Quartz Firms". This Research studies how exports improve cash flow and financial agility in mid-sized quartz firms. Exporters experienced shorter cash conversion cycles (CCC) and better liquidity positions. Use of irrevocable export LCs improved working capital predictability.

Harris M. & Lee G. (2024), "Impact of Export Demand Fluctuations on Financial Returns in Quartz Manufacturing". This study looks at how fluctuations in export demand affect financial returns for U.S. quartz producers. The research employed demand sensitivity analysis, time-series forecasting, and volatility modelling to demonstrate that firms with more diversified export portfolios experienced fewer financial losses during global market downturns.

Hassan F., & Yusuf R. (2021), "Financial Impact of Export-led Growth in Quartz Manufacturing". This study evaluates the link between export growth and financial performance in quartz factories across the UAE. Firms that exported more than 60% of their output saw a 22% increase in net cash from operations. Exporting encouraged investments in sustainable manufacturing, which in turn attracted ESG-focused investors and reduced long-term capital costs.

Kaur S., & Malik R. (2022), "Export Incentives and Financial Benefits in India's Quartz Sector". This study focus on a policy-oriented analysis of the financial benefits of export incentives. Companies claiming RoDTEP and EPCG benefits saw a 25–30% rise in retained profits. Schemes helped cover international certification, marketing, and freight costs. These savings directly enhanced profit margins and freed funds for new capacity expansion projects.

Kumar N., & Patel V. (2021), "Revenue Diversification through Exports in India's Engineered Quartz Sector". This research examines the strategic benefits of revenue diversification through exports. Export revenues contributed to a 2.5x increase in retained earnings over three years. Exporting allowed companies to offset fluctuations in domestic real estate cycles. Firms used export profits to build in-house design centers and upgrade quality testing labs, both of which strengthened brand positioning in premium markets.

Lee S & Kim J (2020), "The Role Of Exporting In Firm Financial Performance". This study focuses on the financial benefits of export in Asian firms, particularly looking at profitability and revenue growth in the context of regional trade agreements. It finds that firms entering international markets gain a substantial financial edge in terms of increased market share and revenue diversification.

Lee J., & Choi H. (2023). "Financial Performance of Korean Quartz Exporters Amid Global Supply Shocks". This study examines how Korean exporters navigated supply chain disruptions during 2021–2022. Export-oriented firms with diversified supplier bases maintained gross margins within 3% of pre-shock levels, compared to a 7% drop for domestic-only firms. Pre-negotiated FX hedging contracts and buyer financing deals shielded cash flows, leading to a 12% improvement in net profit margins year-over-year.

Liang T., & Feng Y. (2023), "Export and Financial Innovation in China's Quartz Clusters". This Research explore how exporting drives financial innovation. Firms built modular production units that reduced capex intensity and enabled flexible export fulfilment. Use of fintech tools for foreign currency invoicing minimized forex losses. Financial dashboards integrated with export order pipelines enhanced decision-making speed and reduced error rates in pricing.

Martin J. C & Hernandez M (2019), "Financial Rewards of Exporting Evidence from Small Firms in Emerging Economies". The study highlights that small firms in emerging economies see significant financial rewards from exporting, and the statistical tool of data regression implies to a particular in terms of higher profitability and reduced financial volatility due to diversified revenue sources.

Mehta D., & Shah A. (2022), "The Financial Logic of Quartz Export Growth". This research provides a financial rationale for the increase in quartz exports from India. Exporters gained pricing advantages and reduced cost per unit through batch shipping and consolidated logistics. Margins from exports were 1.8x higher than domestic projects. Using standard deviation analysis, and risk-adjusted return calculations.

Nair P., & Joseph D. (2021), "Export Financing and Profit Margins in India's Quartz Sector". This study explores the role of export finance schemes in margin enhancement. Utilization of pre-shipment and post-shipment credit schemes reduced interest expenses by up to 40 basis points. Firms using these facilities reported average net margin improvements of 2.2%, attributing gains to lower financing costs and more predictable cash flows.

Nakamura T., & Kimura S. (2024), "Export Diversification and Financial Stability in the Quartz Industry". This study assesses how regional diversification in export markets affects financial health of Japanese and Korean quartz producers. Firms exporting to more than five countries showed a 34% higher return on equity (ROE) Currency hedging strategies and flexible production lines contributed to reduced financial risk. Exporting also facilitated stable cash flows, enhancing creditworthiness and enabling larger CAPEX allocations.

Navarro C. & Lopez R. (2022), "Export Performance and Profit Margins in Engineered Quartz: A European Study". This research explores how export performance impacts profitability across quartz firms in Germany, Italy, and Portugal. Data from 90 companies was analyzed using Tobit regression, discriminant analysis, and factor loading. The findings showed a 15%–20% increase in operating profit margins among export-intensive firms. Export strategy, particularly targeting the luxury segment, was found to amplify financial returns.

Oliveira P., & Santos F. (2024), "Export Revenue and Debt Management in Portugal's Quartz SMEs". This study evaluates how export earnings impacted debt levels and financing costs for Portuguese small and medium-sized quartz producers. SMEs that secured export contracts worth over €1 million saw a 15% reduction in average borrowing costs, due to stronger balance sheets and export credit agency guarantees.

Patel D. & Yadav S. (2024), "Impact of Export Partnerships on Financial Growth in Quartz Firms". This study investigates the financial impact of forming export partnerships on quartz firms in India. Using partnership network analysis, regression modelling, and market share analysis, the study found that firms with strategic export partnerships enjoyed faster revenue growth and higher profitability due to shared resources and market access.

Rao K., & Nair V. (2022), "Export Expansion and Financial Return in Indian Quartz MSMEs". This study focused on how smaller quartz firms benefited financially from export exposure. MSMEs engaged in export activities achieved an average 2.3x increase in annual turnover. Access to trade finance instruments and buyer credit guarantees improved fund availability. Exporting also enabled process specialization, reducing rework and scrap costs, thereby raising net margins. Using time series Analysis & coefficient of variation analysis.

Rodriguez C., & Moreno S. (2021), "Export Operations and Financial Leverage in Quartz Exporters". This research explores how export success affects financial leverage in .Export-intensive quartz companies showed lower debt-to-equity ratios and stronger interest coverage ratios. Stable foreign receivables improved cash cycles, enabling quicker debt repayment. Long-term export contracts also served as collateral for securing trade credit, improving financial resilience and investment readiness.

Rodriguez F. & Silva M. (2023), "Export Activity and Financial Efficiency in Quartz Surface Firms". This study examines financial efficiency among Portuguese quartz exporters using Data Envelopment Analysis (DEA) and linear discriminant analysis. Exporting firms reported up to 12% higher net profit margins and consistently lower operational slack, especially in companies targeting Northern Europe and North America.

Sethi A., & Ramesh K. (2024), "Role of Export Strategies in Enhancing Profit Margins in Indian Quartz Industry". The study evaluates the role of proactive export strategies on profitability and sustainability. Export-intensive firms achieved a 3.1x improvement in EBITDA over five years. Exporters also had better working capital cycles, supported by advance orders and overseas warehousing.

Silva R., & Gomez T. (2022), "Exporting and Return on Investment in Brazil's Quartz Industry". The study analyses ROI among Brazilian quartz firms that expanded their export capacity. Return on Investment grew by 18% on average due to better asset utilization and longer production cycles. Export incentives helped mitigate logistics cost hikes during global supply chain disruptions.

RESEARCH GAP

The researcher as studied good number of literatures of the related to the present study, most of the studies are founded on capital budgeting. The combination of payback period, net present value, cash flow statement, fixed assets to current assets, return on net worth, return on capital employed etc. are selected for the study. The combination of the study of budgetary control system has not been studied by the authors in the recent past.

RESEARCH METHODOLOGY

This study adopts a quantitative research methodology to analyze the financial performance of Exide Industries Ltd., focusing on its profitability, liquidity, solvency, and overall financial health over a period of 3-5 years. The primary objective is to evaluate the company's financial position using various financial ratios and trend analyses. The research will be based on secondary data sourced from Exide's publicly available financial reports, annual statements, and quarterly filings, as well as data from industry sources and competitor analysis. By applying tools such as ratio analysis, trend analysis, and comparative analysis, the study aims to provide a comprehensive understanding of Exide's financial strategies and operational efficiency. Additionally, the methodology incorporates SWOT analysis to explore the company's strengths, weaknesses, opportunities, and threats in the context of a rapidly evolving battery manufacturing industry. The study also aims to provide actionable insights for investors, stakeholders, and policymakers to assess Exide's market position.

LIMITATION OF THE STUDY

Limited time frame: The study focuses on financial data from a specific period, which may not fully capture long-term trends or future projections. **Data availability:** Reliance on publicly available financial statements, which may not include all relevant internal data or real-time operational insights. **External factors:** External macroeconomic factors such as policy changes, global supply chain disruptions, and economic downturns may not be fully accounted for in the analysis. **Competition data:** Limited access to detailed and up-to-date competitor financial data, making it difficult to provide a comprehensive comparative analysis. **Market dynamics:** Rapid technological advancements in energy storage and shifts toward electric vehicles may lead to sudden market changes not captured within the study period. **Assumption of data accuracy:** The study assumes the accuracy of published financial data, without access to proprietary company insights or future forecasts.

DATA ANALYSIS AND INTERPRETATION

Table 1. CURRENT RATIO

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	RATIO
2017-18	3,251.97	1,813.64	1.793
2018-19	3,471.97	1,958.08	1.773
2019-20	5,409.95	3,251.55	1.663
2020-21	4,394.89	2,314.85	1.898
2021-22	4,722.55	2,398.23	1.969

SOURCES: EXIDE INDUSTRIES ANNUAL REPORT.

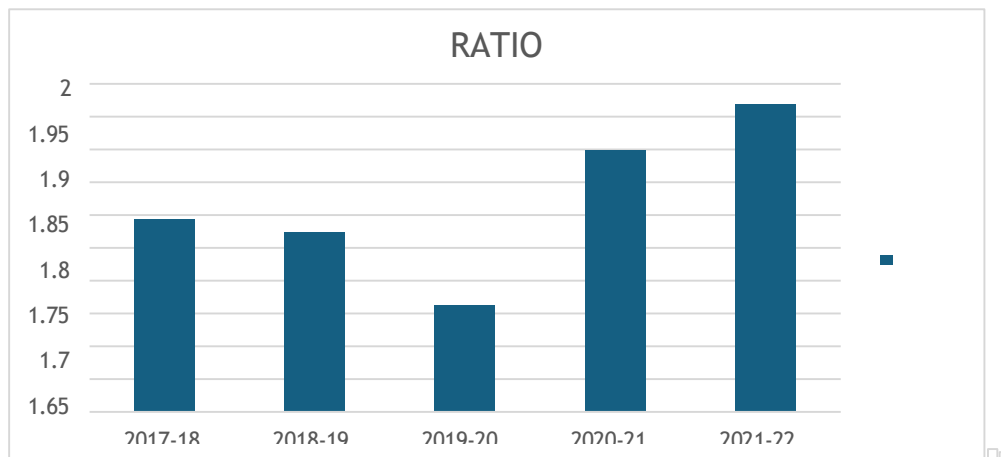


CHART.1 CURRENT RATIO

Interpretation

A higher current ratio is an indication that more current assets are available to meet current liabilities. This shows the current ratio of the company is quite satisfactory, healthy sign for the company and the company must utilize efficient funds.

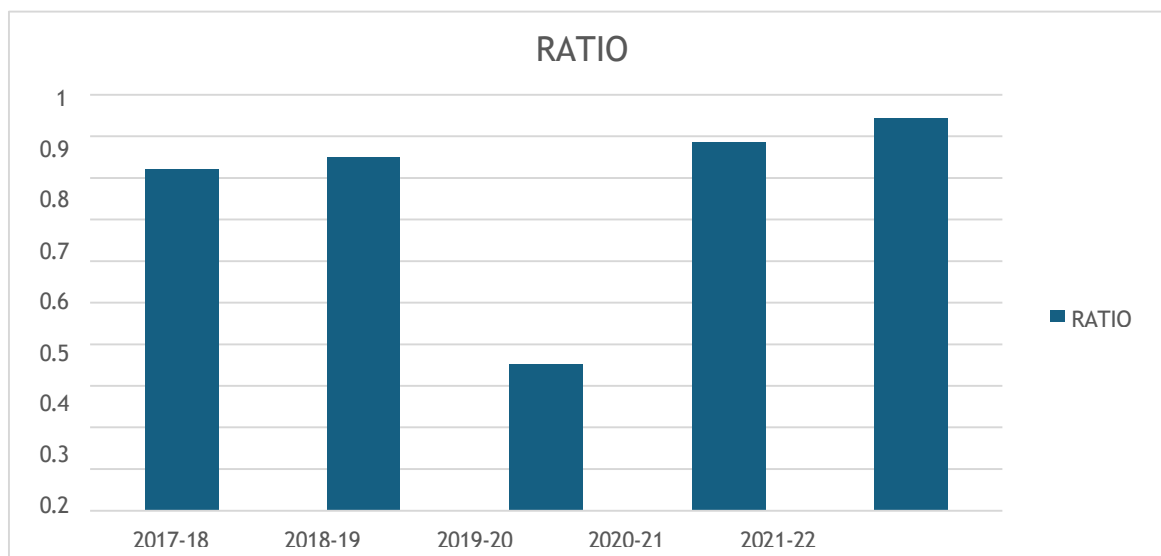
Chart 2. QUICK RATIO

YEAR	QUICK ASSET	CURRENT LIABILITIES	RATIO
2017-18	1,491.82	1,813.64	0.822
2018-19	1,668.00	1,958.08	0.851
2019-20	1,147.23	3,251.55	0.352

2020-21	2,048.7	2,314.85	0.885
2021-22	2,264.07	2,398.23	0.944

SOURCES: EXIDE INDUSTRIES ANNUAL REPORT.

CHART-2



Interpretation

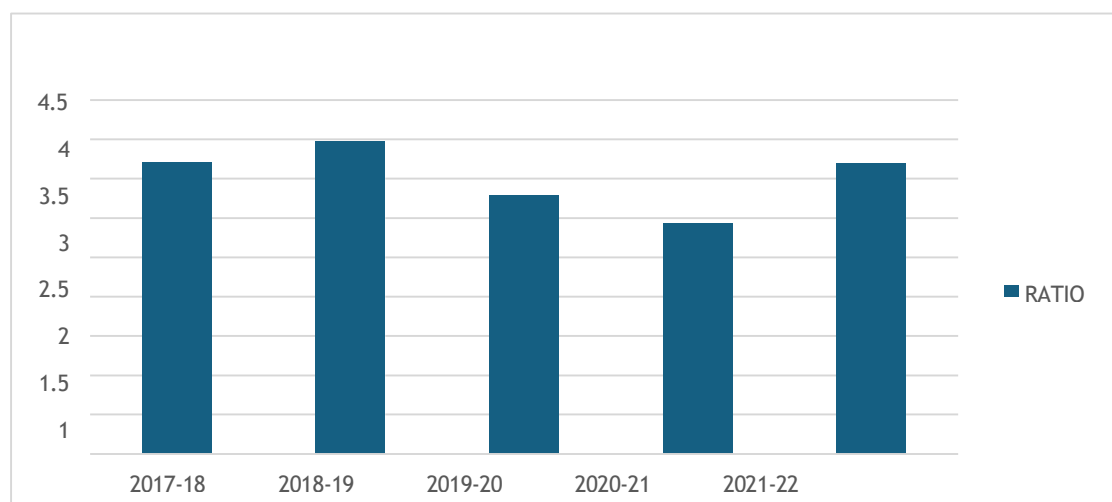
From the above analysis the quick ratio of the company is not satisfactory and shows company is investing properly in quick assets which indicate inefficiency in its management policy. The standard quick ratio is 1:1 is the investment in quick assets and liabilities. The company is facing short term financial crises.

TABLE. 3INVENTORY TURNOVER RATIO

YEAR	COST OF GOODS SOLD	INVENTORY	RATIO
2017-18	6,084.94	1,643.76	3.701
2018-19	7,076.22	1,782.06	3.970
2019-20	6,567.39	1,998.12	3.286
2020-21	6,645.50	2,269.23	2.928
2021-22	8,882.49	2,402.33	3.697

SOURCES: EXIDE INDUSTRIES ANNUAL REPORT.

CHART-3.



Interpretation

The inventory turnover ratio is increased from first year and second year, it has not decreased in the years which shows in efficiency of management to convert its stock into finished product, increasing ratio indicates there must be decreasing in cost of storing and handling inventory.

SUMMARY OF FINDINGS

A higher current ratio is an indication that more current assets are available to meet current liabilities. The standard quick ratio is 1:1 is the investment in quick assets and liabilities. The company is facing short term financial crises. The performance of the result was at the maximum of 4.779 during the year 2018- 19, more

sales turnover and more investment in fixed assets. Current assets are increased due to the increase in the sundry debtors and the net fixed assets of the firm also increased due to the charge of depreciation and there is no major increment in the fixed assets. This is the ratio between net profit and total assets. The ratio indicates the return on total assets in the form of profits. Income from services is increased due to the extra invoice and the working capital is also increased due to the increase from services because the huge increase in current assets. The income from services is raised and the current assets are also raised together resulted in the decrease of the ratio of 2022 compared with 2018.

SUGGESTION

The company should reduce employee turnover. The company can invest more in current assets to meet the available current liabilities. The company should try to improve the liquid ratio to the standard ratio 2:1 by

reducing the current liabilities. The company can increase their net profit by reducing the operating and other expenses. Management of inventory can be improved further by increasing sales. There would be more efficient utilization of current assets by management. Increase in sales should correspond to increase in current assets. The company should try to increase the net profit to give better returns to the shareholders. The company should maintain the present proprietary ratio, so that the solvency position of the company is maintained.

CONCLUSION

The study is done on the ratio analysis at Exide industries limited. Exide industry is a largest battery manufacturer. Exide is a super brand, and it has wide distribution network. The company is having good control over the current liabilities as its current ratio is almost equal to the standard ratio 2:1. The liquid ratio is not up to the standard indicating the limited liquid assets available to meet the current liabilities. The company able to have turnover of stock almost equal to 5 times which is satisfactory. Overall ratio analysis of the company is satisfactory as they are maintaining current assets and current liabilities in the proper position. To conclude, would like to maintain the face value that ratio analysis here is good but still improve if the company follow suggestion given by the researcher

DIRECTIONS FOR FUTURE RESEARCH

In this research we focus on only US & Euro currency dealing in the export, in the future can have analysis in the various currency fluctuations apart from the US & Euro. The research can have a comparison of the Natural and Engineered quartz and their financial rewards of export. The research can have both financial rewards and the financial risk in the engineered quartz export. The research can implement the cost incurred in the utilizations of the schemes and their documentations and the process cost can be analysed. The research can be implemented various countries export and the import rewards and the best country for export and import of engineered quartz can be identified based on the financial aspects.

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