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# **Investigation of Chennai's Financial Stability for Related Polymer Products**

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Abstract: The research entitled "A Study on Financial Stability of Associated Polymer Products" seeks to assess the comprehensive financial condition and performance of Associated Polymer Products, a partnership firm involved in the production of rubber and plastic molded components. This study is founded on a comprehensive examination of essential financial ratios over a four-year duration from 2021 to 2024. Ratios including liquidity (current, quick, and absolute liquid), solvency (debt-equity, equity, and debt ratios), profitability (gross profit, net profit, operating profit), and efficiency (return on assets, return on equity, capital turnover, and total asset turnover) have been analyzed to evaluate the firm's financial robustness, operational efficacy, and long-term viability. The results demonstrate consistent enhancements in profitability and returns, coupled with robust liquidity and minimal debt levels, signifying a stable and effectively managed financial framework. The analysis yields critical insights and recommendations to enhance financial planning and strategic decision-making for future growth. This research enhances the comprehension of financial dynamics within a medium-scale manufacturing business functioning under India's partnership model.

Keywords: Finance, Stability, Performance, Efficiency, Profitability, Polymer

### **I. INTRODUCTION**

In the dynamic landscape of corporate finance, the assessment of financial performance serves as a cornerstone for informed decision-making. Among the myriad of methodologies available for this purpose, ratio analysis emerges as a quintessential tool. By dissecting financial statements and quantifying key relationships between financial variables, ratio analysis provides a comprehensive understanding of a company's financial health. From liquidity to profitability, solvency, and efficiency, ratios offer valuable insights into various facets of an organization's operations. Despite its established utility, ratio analysis is not immune to challenges and evolving complexities within the business environment. As markets shift and financial dynamics evolve, there arises a continuous need to refine and adapt ratio analysis techniques. Therefore, this study seeks to address this imperative by delving deeper into the nuances of ratio analysis in the context of assessing financial performance. By scrutinizing its effectiveness, uncovering limitations, and exploring avenues for enhancement, this research aims to contribute to the ongoing discourse on financial analysis methodologies. Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account. It also helps in short-term and long-term forecasting, and growth can be identified with the help of financial performance analysis. The analysis of financial statements is a process of evaluating the relationship between the component parts of financial statements to obtain a better understanding of the firm's position and performance. This analysis can be undertaken by the management of the firm or by external parties, namely owners, creditors, and investors.

To maintain focus and rigor, this study will center its analysis on Associated Polymer Products Limited. By narrowing the scope, the study aims to facilitate a comparative analysis of financial performance, thereby enhancing the depth of insights derived. Furthermore, the analysis will predominantly leverage widely recognized and accepted financial ratios, spanning categories such as liquidity, profitability, solvency, and efficiency. These ratios will be computed based on publicly available financial statements, ensuring transparency and accessibility of data.

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### Importance of Ratio Analysis in Financial Performance Evaluation

Ratio analysis plays a crucial role in financial performance evaluation by allowing stakeholders to make data-driven decisions. Investors and creditors use financial ratios to assess a company's ability to generate profits, manage debts, and sustain operations. Additionally, management relies on ratio analysis to identify operational inefficiencies, optimize resource allocation, and develop strategies for sustainable growth. The systematic use of financial ratios aids in benchmarking a company's performance against industry standards, helping businesses maintain a competitive edge.

#### **Categories of Financial Ratios**

Financial ratios are broadly categorized into liquidity, profitability, solvency, and efficiency ratios. Liquidity ratios, such as the current ratio and quick ratio, measure a firm's ability to meet short-term obligations. Profitability ratios, including return on assets (ROA) and net profit margin, evaluate the company's ability to generate profits. Solvency ratios, such as the debt-to-equity ratio, determine financial stability and long-term sustainability. Efficiency ratios, like inventory turnover and asset turnover ratios, assess how effectively a company utilizes its assets. Each of these categories provides unique insights into the financial health of a business, helping stakeholders make informed financial decisions.

#### Limitations of Ratio Analysis

While ratio analysis is a valuable tool for assessing financial performance, it has certain limitations. Financial ratios are often influenced by accounting policies, industry-specific norms, and economic conditions, which may distort comparability across firms. Additionally, ratio analysis primarily relies on historical data, making it less effective in predicting future performance. Moreover, it does not account for qualitative factors such as management expertise, brand reputation, and market competition, which significantly impact a company's overall success. Hence, ratio analysis should be supplemented with other financial analysis techniques for a comprehensive evaluation.

#### Enhancing Ratio Analysis for Better Decision-Making

To enhance the effectiveness of ratio analysis, companies should integrate it with other financial assessment tools such as trend analysis, benchmarking, and financial forecasting. Conducting a multi-year trend analysis helps identify consistent patterns in financial performance. Benchmarking against industry peers provides a clearer perspective on where a company stands in comparison to competitors. Moreover, incorporating advanced financial modeling techniques and data analytics can improve the predictive accuracy of financial assessments. By leveraging these enhancements, organizations can make more informed and strategic financial decisions.

Financial performance analysis through ratio analysis remains a fundamental aspect of corporate finance. Despite its limitations, it provides critical insights that help businesses, investors, and creditors make informed financial decisions. By focusing on Associated Polymer Products Limited, this study aims to provide a detailed examination of financial performance using well-established financial ratios. Additionally, the research seeks to explore potential improvements in financial analysis methodologies to adapt to the evolving business landscape. Through a meticulous examination of financial statements and the application of ratio analysis, this study aspires to contribute to the broader understanding of financial performance evaluation.

### **II. FINANCIAL STABILITY**

Financial stability is a crucial aspect of both individual and collective economic health. It refers to the condition where financial institutions operate effectively, markets function smoothly, and the economy can withstand shocks without significant disruptions. This document explores the key components of financial stability, its importance, and the measures that can be taken to achieve and maintain it.

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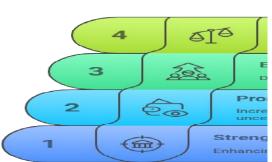


Key Components of Financial Stability

- 1. Sound Financial Institutions: Banks and other financial entities must be well-capitalized, solvent, and able to manage risks effectively. This includes having robust risk management frameworks and adhering to regulatory standards.
- 2. Efficient Financial Markets: Markets should facilitate the smooth transfer of funds, allowing for the efficient allocation of resources. This includes having transparent pricing mechanisms and adequate liquidity.
- 3. Macroeconomic Stability: A stable macroeconomic environment, characterized by low inflation, sustainable growth, and balanced fiscal policies, is essential for financial stability. Economic shocks can lead to instability if the underlying economy is not resilient.
- 4. Regulatory Framework: Effective regulation and supervision of financial institutions are vital to prevent excessive risk-taking and ensure compliance with laws. This includes stress testing and monitoring systemic risks.

Importance of Financial Stability

Financial stability is essential for fostering economic growth and development. It promotes confidence among investors and consumers, leading to increased spending and investment. Additionally, a stable financial system can help mitigate the impact of economic downturns, reducing the likelihood of crises that can lead to widespread unemployment and loss of wealth.



Achieving Fi

Measures to Achieve Financial Stability

- Strengthening Regulatory Oversight: Governments and regulatory bodies should enhance their oversight of 1. financial institutions to ensure they are resilient to shocks. This may involve implementing stricter capital requirements and conducting regular stress tests.
- 2. Promoting Transparency: Increasing transparency in financial markets can help build trust and reduce uncertainty. This includes requiring clear disclosures from financial institutions regarding their risk exposures and financial health.





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- 3. **Encouraging Diversification**: Both financial institutions and investors should be encouraged to diversify their portfolios to spread risk. This can help mitigate the impact of adverse events on the financial system.
- 4. **Implementing Macro prudential Policies**: These policies aim to address systemic risks and prevent the buildup of financial imbalances. This may include measures such as countercyclical capital buffers and limits on loan-to-value ratios.

### **III. INDUSTRY PROFILE**

The polymer industry serves as a fundamental component of modern manufacturing, offering versatile and durable materials essential for various sectors, including packaging, automotive, construction, healthcare, and electronics. This sector includes a wide range of polymer products and solutions designed to enhance performance, sustainability, and cost efficiency. Association Polymer Products Limited emerges as a prominent player in this dynamic landscape, delivering high-quality polymer solutions tailored to evolving industry needs. From traditional polymer applications to advanced, sustainable materials, the company remains committed to innovation and excellence. The industry continues to evolve in response to changing environmental regulations, technological advancements, and increasing demand for sustainable materials.

### **Company Overview**

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Association Polymer Products Limited is a leading provider of innovative polymer solutions, catering to a diverse range of industries. The company is dedicated to delivering high-quality polymer products that meet the evolving needs of businesses and consumers. Its portfolio includes a variety of polymer applications such as packaging materials, industrial components, construction-grade polymers, and specialized polymer solutions for the healthcare and automotive sectors.

Quality assurance and compliance are central to the company's operations, ensuring that all products adhere to industry standards and regulatory requirements. Association Polymer Products Limited implements stringent quality control measures throughout the manufacturing process, maintaining certifications that reflect its commitment to excellence, safety, and environmental responsibility.

The company follows a customer-centric approach, providing tailored solutions to meet specific client needs. From initial consultation to after-sales support, it emphasizes customer satisfaction, offering expert guidance and reliable service. The organization collaborates closely with clients to develop customized polymer solutions that deliver measurable benefits in terms of performance, efficiency, and sustainability.

Sustainability is a core pillar of Association Polymer Products Limited's business strategy. Recognizing the growing global demand for eco-friendly products, the company is committed to developing sustainable polymer solutions. It actively incorporates environmentally responsible practices, such as using renewable raw materials, optimizing production processes to reduce waste, and promoting the recyclability of its products. Through continuous innovation and responsible manufacturing, the company aims to contribute to a more sustainable industry and future.

### **Product Descriptions & Applications**

1. Capacitor O-Ring. 2. Plastic Bush. 3. Mold, Holder, and Assembly Molds, 4. Gear Bush

5. Bearing Bush. 6. Check nut 7. PU O-Ring A polyurethane

### IV. NEED FOR THE STUDY

- Understanding Financial Health: There is a need to understand the financial health of Associated Polymer Products to make informed decisions regarding investments and resource allocation.
- **Strategic Planning**: The study will aid management in strategic planning by providing insights into financial strengths and weaknesses.
- **Stakeholder Assurance**: Investors and stakeholders require assurance regarding the company's financial stability and growth potential.
- **Risk Management**: Identifying financial risks through balance sheet analysis will help in developing effective risk management strategies.

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### V. SCOPE OF THE STUDY

- Time Frame: The study will cover a period of three years, allowing for a comprehensive analysis of financial trends.
- Financial Metrics: Focus will be on key financial metrics derived from the balance sheet, including total assets, total liabilities, and shareholders' equity.
- Comparative Analysis: The study will include a comparative analysis with at least two industry competitors to contextualize the findings.
- Geographical Focus: The research will primarily focus on the operations of Associated Polymer Products within its primary market, while considering broader industry trends.

#### VI. OBJECTIVES OF THE STUDY

### **Primary Objective**

A study on financial stability of Associated Polymer Products.

#### **Secondary Objectives**

- 1. To Analyze Financial Stability: Evaluate the financial stability of Associated Polymer Products by comparing balance sheets over multiple periods.
- 2. To Identify Trends: Identify and analyze trends in key financial metrics such as assets, liabilities, and equity.
- 3. To Benchmark Performance: Compare the financial performance of Associated Polymer Products against industry standards and competitors.
- To Provide Recommendations: Offer actionable recommendations based on the findings to enhance financial 4. stability and operational efficiency.

### VII. RESEARCH METHODOLOGY

Research methodology refers to the systematic approach used to solve a research problem. It is essentially the scientific study of how research is conducted in a structured manner. This study involves various steps undertaken to explore a research problem, with an emphasis on the reasoning behind each step.

### **Research Design**

A research design serves as a comprehensive blueprint that guides a study toward achieving its objectives. It ensures the efficient execution of research activities, making the process smoother and more effective. This study follows an analytical research design, which involves utilizing existing facts and information to conduct a critical evaluation of the subject matter.

### **Data Collection**

The study relies on secondary data, which has already been collected and processed by others. The data sources include company annual reports obtained from the official website of the respective organizations.

Sources of data: The study is based solely on secondary data derived from the company reports.

### Period of Study

This research examines financial data spanning five years, covering the financial periods from 2021-2022 to 2024-2025.

#### **Financial Tools for Analysis**

To interpret and analyze financial data, the study employs various statistical tools, including:

- **Ratio Analysis** • Liquidity Ratio/Solvency/Profitability ratio/Efficiency ration
- Common Size Balance Sheet
- **Comparative Balance Sheet**

### **VIII. REVIEW OF LITERATURE**

In 2024, Patel's article in the International Journal of Financial Studies examines the implications of regulatory changes on financial markets. His comprehensive analysis reveals that timely regulatory adjustments can stabilize

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markets and enhance investor confidence. By assessing various case studies, Patel provides valuable insights into how policymakers can effectively navigate the complexities of financial regulation to foster a resilient economic environment.

In 2023, Lee published a significant paper in the *Journal of Applied Finance*, focusing on the effects of behavioral finance on investment decisions. Through a series of experiments, he demonstrates how cognitive biases can lead to suboptimal investment choices. The study emphasizes the need for investors to be aware of these biases and suggests strategies to mitigate their impact, thereby enhancing decision-making processes in financial markets.

Gupta's 2022 study in the *International Journal of Business and Management* investigates the relationship between corporate governance and firm performance. Utilizing a mixed-methods approach, he finds that strong governance structures correlate with improved financial outcomes. The findings suggest that companies prioritizing transparency and accountability not only foster investor confidence but also achieve sustainable growth. This research contributes to the ongoing discourse on governance practices in the corporate sector.

### LIMITATIONS OF THE STUDY

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- The accuracy of the study is contingent upon the availability and reliability of financial data from Associated Polymer Products and its competitors.
- Economic conditions and market fluctuations during the study period may impact financial performance, which may not be fully accounted for in the analysis.
- : The interpretation of financial metrics may involve subjective judgment, which could influence the conclusions drawn from the study.
- The focus on balance sheet comparison may overlook other critical aspects of financial performance, such as cash flow and income statements.

### X. TOOLS FOR FINANCIAL ANALYSIS

### Common Size Balance sheet 2023 to 2024

Particulars	Figures as at the end of 2023	Figures as at the end of 2024	2023%	2024 %
I. Liabilities:				
Capital Account	2393000	1427084	86.83	85.45
Unsecured Loan	75000	55000	2.72	3.29
Trade Creditors	265230	165470	9.62	9.90
GST Payable	23079	23079	0.83	1.38
Total	2756309	1670633	100	100
II. Assets:				
Fixed Assets	585002	497720	21.23	29.78
Stock in Hand	285470	295410	10.36	17.68
Trade Debtors	1411360	642100	51.21	38.44
Cash at Bank	465937	231193	16.91	13.84
Cash in Hand	8540	4210	0.31	0.25
Total	2756309	1670633	100	100







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### Interpretation: 2023 vs 2024

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Partners' Capital Account: Decreased sharply from 23, 93,000 to 14, 27,084 (-40%), suggesting heavy drawings or losses. Unsecured Loan: Decreased slightly from 75,000 to 55,000 (-27%), showing repayment. Trade Creditors: Decreased from 2, 65,230 to 1, 65,470 (-38%), indicating payment to suppliers. GST Payable: No change (remains at 23,079). Fixed Assets: Decreased from 5, 85,002 to 4, 97,720 (-15%), indicating further depreciation or disposal. Stock in Hand: Slight increase from 2, 85,470 to 2, 95,410 (+3%), showing stable inventory levels. Trade Debtors: Reduced significantly from 14, 11,360 to 6, 42,100 (-55%), reflecting better collection of dues. Cash at Bank: Decreased from 4, 65,937 to 2, 31,193 (-50%), indicating lower bank balances. Cash in Hand: Decreased from 8,540 to 4,210 (-51%). Overall: There is a decrease across both liabilities and assets, heavy drawings or losses impact capital, and better debtor management is visible. Liquidity position has worsened.

Particulars	Amount 2023	Amount 2024	Absolute Change	Percentage Change (%)
I. Liabilities				
Capital A/c	23,93,000	14,27,084	-9,65,916	-40.37
Unsecured Loan	75,000	55,000	-20,000	-26.67
Trade Creditors	2,65,230	1,65,470	-99,760	-37.62
GST Payable	23,079	23,079	0	0.00
Total	27,56,309	16,70,633	-10,85,676	-39.38
II.Assets				
Fixed Assets	5,85,002	4,97,720	-87,282	-14.92
Stock in Hand	2,85,470	2,95,410	9,940	3.48
Trade Debtors	14,11,360	6,42,100	-7,69,260	-54.51
Cash at Bank	4,65,937	2,31,193	-2,34,744	-50.38
Cash in Hand	8,540	4,210	-4,330	-50.70
Total	27,56,309	16,70,633	-10,85,676	-39.38

#### **Comparative Balance sheet 2023 to 2024**

### Interpretation for 2023 vs 2024

The comparative balance sheet for the financial year ended 2024 shows further evolution in the firm's financial health. On the assets side, fixed assets rose by ₹2, 01,113 (34%), possibly due to new capital investments. Stock in hand saw an increase of ₹24,530 (9%), which could indicate a marginal rise in inventory holding. Cash at bank increased again by ₹1, 14,063 (24%), strengthening the firm's liquidity. Trade debtors, however, declined by ₹1, 11,360 (-8%), a positive sign that suggests better collection efficiency. On the liabilities side, partners' capital increased by ₹2, 56,000 (11%), reflecting continued growth in owner funds. Trade creditors also rose by ₹44,770 (17%), indicating higher purchases on credit. Notably, GST payable increased by ₹23,760 (103%), which may indicate higher tax liabilities due to increased turnover. Unsecured loans remained unchanged. In summary, the year 2024 reflects stable growth, improved asset investment, better debtor management, and a healthy increase in capital, with a slight uptick in short-term obligations **Ratio Analysis** 

#### Liquidity Ratio

Table 1-Current Ratio			
YEAR	CURRENT ASSET	CURRENT LIABILITY	CURRENT RATIO
2021	1511424	260830	5.79
2022	1257064	228907	5.49
2023	2171307	288309	7.53
2024	1172913	188549	6.22





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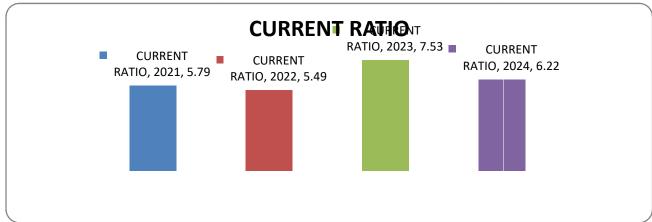


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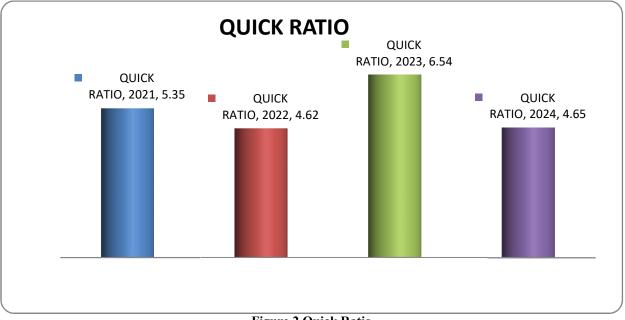


### Figure1-Current Ratio

#### Interpretation

The current ratio remained above 5, peaking at 7.53 in 2023. This indicates strong short-term liquidity and a high ability to cover current liabilities. However, extremely high values may signal underutilized assets. A moderate reduction in 2024 still reflects financial stability.

	Table 2 quick ratio			
YEAR	QUICK ASSETS	CURRENT LIABILITIES	QUICK RATIO	
2021	1396826	260830	5.35	
2022	1058517	228907	4.62	
2023	1885837	288309	6.54	
2024	877503	188549	4.65	



**Figure 2 Quick Ratio** 

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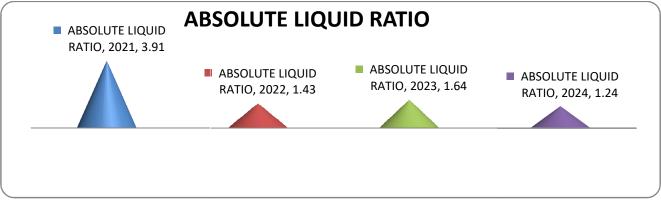


### Interpretation

The quick ratio consistently stayed strong, though it fell to 4.65 in 2024. It shows the company can meet its short-term liabilities without depending on inventory. A drop in 2024 suggests increased inventory levels or slower receivable turnover. Overall, liquidity remains comfortable.

Fable 3 Absolute	Liquid Ratio
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YEAR	CASH +BANK BALANCES	CURRENT LIABILITY	ABSOLUTELIQUIDRATIO
2021	1021406	260830	3.91
2022	329480	228907	1.43
2023	474477	288309	1.64
2024	235403	188549	1.24





### Interpretation

This ratio declined from 3.91 in 2021 to 1.24 in 2024, showing shrinking cash reserves. The downward trend raises concerns over immediate liquidity or cash flow tightening. It indicates increasing reliance on non-cash current assets. Monitoring cash and equivalents is advised.

### SOLVENCY RATIO

	Table 4 Debt Ratio		
YEAR	TOTAL LIABILITIES	TOTAL ASSETS	DEBT RATIO
2021	370830	2177297	0.17
2022	303907	2068213	0.14
2023	363309	2756307	0.13
2024	243549	1670633	0.14

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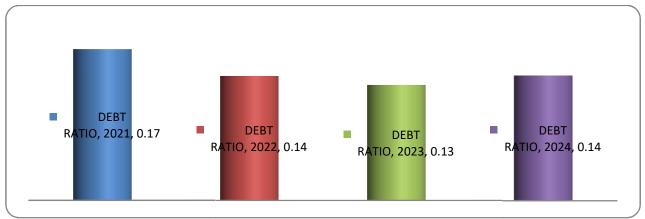




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### Figure 2.3.4 debt ratio

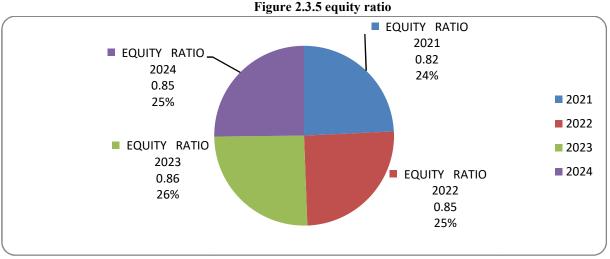
### Interpretation

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The debt ratio consistently stayed low around 0.13–0.17. This indicates the firm uses minimal debt to finance assets, reducing financial risk. A conservative debt policy improves creditworthiness. Stability in this ratio reflects careful capital structure management.

Table 5 Equity Ratio			
YEAR	SHAREHOLDERS FUND	TOTAL ASSETS	EQUITY RATIO
2021	1806467	2177297	0.82
2022	1764306	2068213	0.85
2023	2393000	2756307	0.86
2024	1427084	1670633	0.85



### Interpretation

The debt ratio consistently stayed low around 0.13–0.17. This indicates the firm uses minimal debt to finance assets, reducing financial risk. A conservative debt policy improves creditworthiness. Stability in this ratio reflects careful capital structure management.

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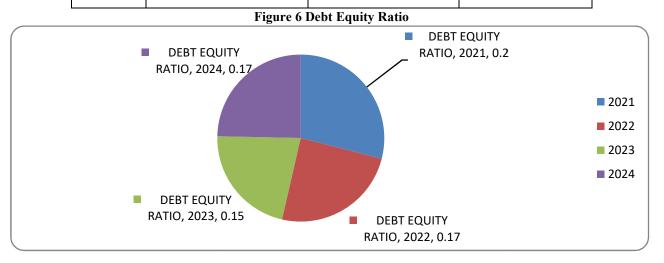
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Table 6 Debt Equity Ratio			
YEAR	TOTAL LIABILITY	SHAREHOLDERS	DEBT EQUITY
		FUND	RATIO
2021	370830	1806467	0.20
2022	303907	1764306	0.17
2023	363309	2393000	0.15
2024	243549	1427084	0.17



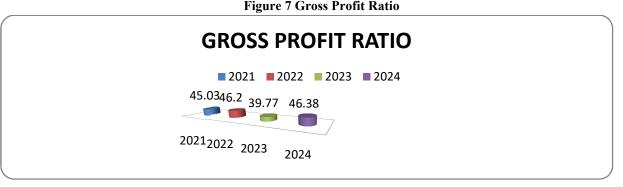
### Interpretation

This ratio steadily declined to 0.15 in 2023, with a slight rise in 2024. It shows efficient use of owner's capital compared to borrowed funds. Low levels indicate low financial risk and good solvency. Slight increase in 2024 could relate to new borrowings for expansion.

### **PROFITABILITY RATIO**

#### **Table 7 Gross Profit Ratio**

YEAR	<b>GROSS PROFIT</b>	SALES	<b>GROSS PROFIT RATIO</b>
2021	2043130	4536470	45.03
2022	2502115	5415231	46.20
2023	2514306	6321916	39.77
2024	2078342	4480212	46.38
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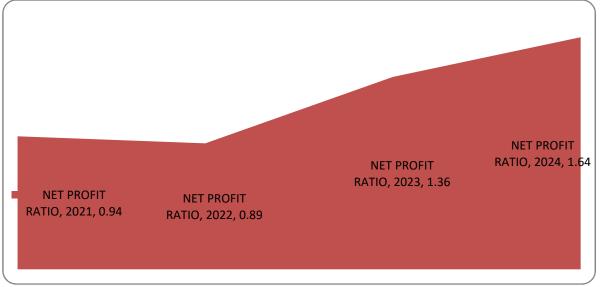


#### Interpretation

It fluctuated, dipping in 2023 to 39.77 before recovering in 2024 to 46.38. This indicates vulnerability to cost fluctuations or pricing changes. The recovery shows improved cost control or pricing strategies. High gross profit margins suggest product profitability.

Table 8 Net Profit Ratio			
YEAR	NET PROFIT	SALES	NET PROFIT RATIO
2021	43020	4536470	0.94
2022	48574	5415231	0.89
2023	86447	6321916	1.36
2024	73712	4480212	1.64
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#### Figure 2.3.8 net profit ratio



#### Interpretation

It steadily rose from 0.94 in 2021 to 1.64 in 2024. This reflects better management of operational and indirect costs. An increasing trend shows improved overall profitability. The company is managing its net income growth efficiently.

Table 9	Operating	<b>Profit Ratio</b>
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YEAR	<b>OPERATING PROFIT</b>	SALES	<b>OPERATING PROFIT RATIO</b>
2021	607923	4536470	13.40
2022	749054	5415231	13.83
2023	1135873	6321916	17.96
2024	1090409	4480212	24.30







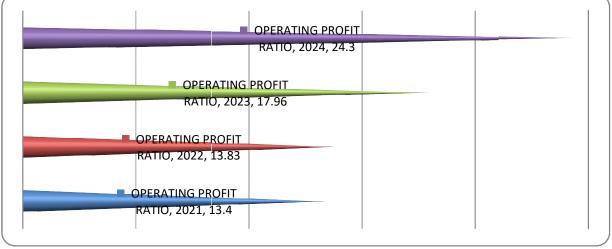
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### **Figure 9 Operating Profit Ratio**



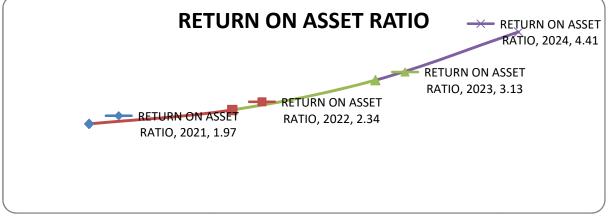
#### Interpretation

The operating margin grew from 13.40 to 24.30, a strong indicator. It shows improved core operational performance and cost control. Rising trend indicates efficient production and administration management. High operating profits reflect strength in core activities.

YEAR	NET PROFIT	TOTAL ASSET	RETURN ON ASSET RATIO
2021	43020	2177297	1.97
2022	48574	2068213	2.34
2023	86447	2756307	3.13
2024	73712	1670633	4.41

#### **Table 10 Return on Assets Ratio**

Figure 10 Return on Assets Ratio



### Interpretation

ROA improved from 1.97% to 4.41%, showing better asset utilization. The company is generating more profits from each unit of asset. This growth indicates enhanced productivity and operational success. Increasing ROA suggests stronger overall financial performance.

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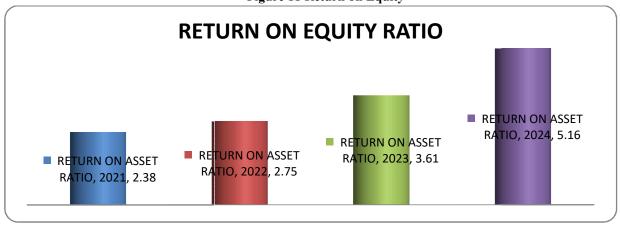
**Table 11 Return on Equity** 



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			-	•
YF	EAR	NET PROFIT	SHAREHOLDERS FUND	RETURN ON ASSET RATIO
20	021	43020	1806467	2.38
20	022	48574	1764306	2.75
20	023	86447	2393000	3.61
20	024	73712	1427084	5.16

# Figure 11 Return on Equity



#### Interpretation

ROE climbed from 2.38% to 5.16%, doubling over four years. This highlights increasing profitability for partners/investors. It shows efficient use of owner's capital to generate earnings. Consistent ROE growth reflects strong management and return potential.

### **EFFICIENCY RATIO**

Table	12	Capital	Turnover	Ratio
Lanc		Capital	IUINUVU	Itatio

YEAR	NET SALES	SHARE HOLDERS EQUITY	RATIO
2021	4536470	1806467	2.51
2022	5415231	1764306	3.06
2023	6321916	2393000	2.64
2024	4480212	1427084	3.13





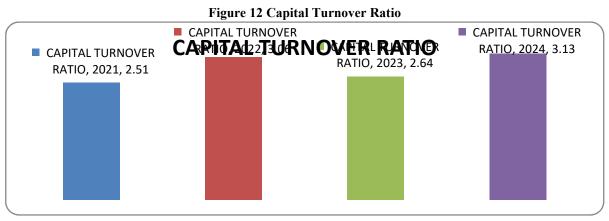


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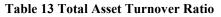


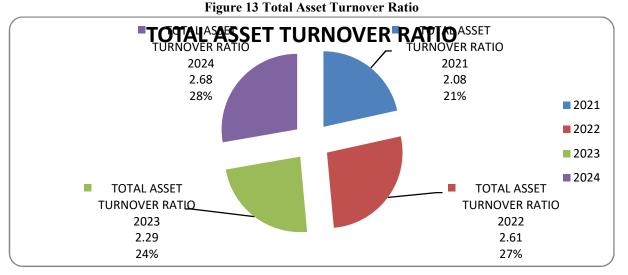


### Interpretation

It improved overall, with a dip in 2023 and rebound in 2024. This measures how effectively capital is used to generate revenue. Growth in 2024 implies better use of capital investments. Variations may relate to capital expenditure or sales fluctuations.

YEAR	NET SALES	TOTAL ASSETS	TOTAL ASSET TURNOVER RATIO
2021	4536470	2177297	2.08
2022	5415231	2068213	2.61
2023	6321916	2756307	2.29
2024	4480212	1670633	2.68





### Interpretation

The ratio rose from 2.08 to 2.68, indicating rising asset efficiency. The company is generating more revenue per rupee of assets. 2023 saw a dip, but recovery followed in 2024. Sustained improvement shows better asset management.

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### XI. FINDINGS

- The liquidity position of Associated Polymer Products has been consistently strong over the four-year period. The current ratio remained well above the standard benchmark of 2:1, ranging from 5.49 to 7.53. The peak was observed in 2023, suggesting that the company had ample current assets to cover its current liabilities. However, the slight drop to 6.22 in 2024 still indicates a healthy short-term financial position.
- Similarly, the quick ratio, which excludes inventory and reflects a more stringent liquidity measure, followed a similar pattern peaking at 6.54 in 2023 before declining to 4.65 in 2024. Although still strong, the declining trend should be closely monitored, especially since the absolute liquid ratio (focusing on cash and marketable securities) has dropped significantly from 3.91 in 2021 to 1.24 in 2024. This indicates a decline in the company's most immediately available liquid resources, which may be due to either increased investments or reduced cash reserves.
- The solvency position of the company appears very solid. The debt ratio remained low throughout the four years, ranging between 0.13 and 0.17. This reflects a low reliance on external debt and a high level of asset financing through equity.
- The equity ratio stayed high, maintaining levels above 0.82, with a slight increase in 2023. A strong equity ratio signifies financial stability and investor confidence. The debt-equity ratio further reinforces this trend, dropping from 0.20 in 2021 to a low of 0.15 in 2023, before rising slightly to 0.17 in 2024. These figures highlight that the company is not highly leveraged and has a low financial risk profile, which is ideal for long-term sustainability.
- A closer look at profitability ratios shows encouraging trends. The gross profit ratio showed some volatility, with a decline in 2023 to 39.77%, possibly due to increased production or procurement costs. However, it rebounded strongly in 2024 to 46.38%, suggesting effective cost control measures and stronger pricing strategies.
- The net profit ratio has shown a continuous improvement from 0.94% in 2021 to 1.64% in 2024. This indicates better control over both operating and non-operating expenses. Additionally, the operating profit ratio surged significantly from 13.40% in 2021 to 24.30% in 2024, reflecting increased efficiency in core business operations.
- These improvements in profitability are also reflected in return on assets (ROA) and return on equity (ROE). ROA increased from 1.97% to 4.41%, while ROE rose from 2.38% to 5.16%, suggesting that the company has improved its ability to generate returns from both its assets and shareholders' equity over time.
- The capital turnover ratio, which measures the efficiency of capital utilization, showed consistent performance — peaking at 3.13 in 2024, indicating improved use of capital in generating revenue. Similarly, the total asset turnover ratio increased from 2.08 in 2021 to 2.68 in 2024, which demonstrates enhanced asset utilization and management efficiency. These positive movements reflect that the company is generating higher sales for every unit of asset and capital employed, which is a strong indicator of operational effectiveness.
- Strong Short-Term Liquidity Management The current ratio consistently stayed above 5 across all four years, peaking at 7.53 in 2023, indicating a highly liquid position. The quick ratio also remained healthy, suggesting that the company holds enough readily convertible assets to cover liabilities without depending on inventory. However, the absolute liquid ratio shows a sharp decline from 3.91 in 2021 to 1.24 in 2024, hinting at a reduction in cash and cash equivalents, possibly due to cash being tied up in operations or capital investments.
- Conservative Leverage Position The debt ratio stayed low between 0.13 and 0.17, indicating limited reliance on external debt. The debt-equity ratio also decreased to 0.15 in 2023, showing prudent financial management and preference for internal financing. The equity ratio rose slightly, maintaining a high range around 0.85 to 0.86, emphasizing the firm's financial independence and low risk exposure.
- Improving Profitability Metrics The gross profit ratio dipped to 39.77 in 2023 but quickly rebounded to 46.38 in 2024, suggesting efficient cost control measures and strong pricing strategies. The net profit ratio steadily improved from 0.94 in 2021 to 1.64 in 2024, highlighting better control over indirect expenses and improved

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bottom-line performance. The operating profit ratio saw consistent growth, rising to 24.30 in 2024, which reflects enhanced production efficiency and better management of overhead costs.

- Increasing Returns for Stakeholders the return on assets (ROA) grew steadily from 1.97% in 2021 to 4.41% in 2024, indicating improved utilization of assets to generate income. Return on equity (ROE) nearly doubled from 2.38% to 5.16%, pointing to effective use of shareholders' capital and increased value generation for the partners.
- Enhanced Operational and Capital Efficiency The capital turnover ratio improved in 2024 to 3.13, reflecting better revenue generation from the capital employed. The total asset turnover ratio increased from 2.08 in 2021 to 2.68 in 2024, showing enhanced use of total assets in generating sales.
- Short-Term Risk Indicators to Watch Despite strong liquidity ratios, the downward trend in the absolute liquid ratio may imply tightening cash flows or higher working capital requirements. The volatility in the gross profit ratio in 2023 might reflect potential vulnerability to raw material price fluctuations or changes in product mix.
- Sustainable Financial Growth The consistent improvement in profitability, returns, and turnover ratios over four years demonstrates that the firm is not only financially stable but also progressing toward long-term sustainable growth. The cautious use of debt combined with improving operational efficiency reflects a balanced financial strategy that supports expansion without compromising solvency.

### XII. SUGGESTIONS

- Based on the ratio analysis of Associated Polymer Products for the period 2021 to 2024, the company shows commendable financial health, but several strategic suggestions can enhance its long-term performance and risk management: Strengthen Absolute Liquidity
- While the current and quick ratios indicate strong liquidity, the continuous decline in the absolute liquid ratio (from 3.91 in 2021 to 1.24 in 2024) is a concern. This may suggest reduced cash reserves or over-reliance on receivables and inventory. The company should:
- Reassess its short-term investment policies to maintain a buffer of liquid assets. Improve cash conversion cycles to ensure that receivables are promptly collected. Consider optimizing inventory levels without affecting production flow.
- Maintain Control over Operating Costs the gross profit ratio dipped in 2023, possibly due to increased raw material or operational costs. Though it recovered in 2024, this fluctuation calls for: Continued focus on supplier negotiations and procurement strategies. Investing in process automation or energy-efficient technology to control operational costs. Regular review of product pricing to ensure margin protection.
- Utilize Excess Liquidity Effectively High liquidity, if not strategically used, can lead to inefficient capital allocation. Given the consistently high current and quick ratios, the company could: Reinvest excess funds in expanding production capacity or product lines. Explore short-term investment opportunities or new market entries. Increase dividend payouts or buy back shares to enhance shareholder value.
- Sustain Low Leverage Policy the Company's low debt ratio and debt-equity ratio highlight its conservative leverage policy. While this ensures financial safety, it may also suggest under-utilization of available debt financing. The company could: Consider low-interest loans to finance expansion, particularly if internal funds are insufficient. Leverage debt for projects with high return potential, ensuring that the cost of debt is less than the return on investment.
- Monitor and Maintain Operational Efficiency the upward trends in capital turnover and asset turnover ratios are positive signs. To sustain and improve this efficiency: Implement robust performance monitoring tools like KPIs for departments. Train employees regularly in lean operations and time management. Explore digital transformation to improve process efficiency and reduce wastage.
- Diversify Customer Base and Revenue Streams: Reduce dependency on major clients by entering new markets (e.g., automotive, electronics, FMCG) Develop innovative polymer products like biodegradable or medical-grade components. Explore export opportunities through global trade platforms and exhibitions.

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- Strengthen Digital and Financial Reporting Systems: Implement ERP software for better inventory and financial management. Automate ratio analysis and reporting for faster decision-making. Utilize financial forecasting tools to improve planning and budgeting accuracy.
- Adopt Sustainable Manufacturing Practices: Minimize polymer waste and recycle scrap materials. Invest in eco-friendly materials and cleaner technologies. Obtain environmental certifications (e.g., ISO 14001) to enhance market credibility.
- Build a Skilled Workforce and Leadership Pipeline Provide training on quality control, lean manufacturing, and finance. Identify and groom potential leaders for future managerial roles. Encourage documentation and sharing of technical knowledge.
- Conduct Periodic Financial Benchmarking: Compare key financial ratios with industry standards annually. Set performance targets for ratios like ROE, net margin, and asset turnover. Adjust strategic plans based on benchmarking outcomes.
- Develop Risk Management and Business Continuity Plans: Maintain a risk register covering financial, operational, and market threats. Establish emergency reserves and alternate supply chain options. Diversify supplier networks to reduce dependency on specific vendors.

### XIII. CONCLUSIONS

The ratio analysis of Associated Polymer Products for the financial years 2021 to 2024 paints a picture of a financially stable and steadily growing company. Liquidity has been consistently strong, indicating that the company is well-positioned to meet its short-term obligations. Its conservative capital structure, with minimal reliance on debt, reduces financial risk and enhances stability. Profitability and efficiency have shown remarkable improvement, especially in the latest year, pointing to better operational control and resource management. Despite these strengths, the company must pay attention to its declining absolute liquid assets and be mindful of cost structures, especially in times of rising input prices. With strategic reinvestment of surplus funds, exploration of low-risk debt opportunities, and sustained focus on operational excellence, Associated Polymer Products can move toward greater financial performance and industry leadership. Overall, the company is on a sound financial footing and poised for sustainable growth with thoughtful planning and continuous monitoring.

### REFERENCES

- [1]. Financial Stability: A New Framework for Analysis, Mark Carney, 2017, Bank of England **DOI**: [10.2139/ssrn.3051234](https://doi.org/10.2139/ssrn.3051234)
- [2]. Financial Stability and Economic Growth in Emerging Markets, AshliDemirgüç-Kunt, EnricaDetragiache, 2018, World Bank Publications
  - **DOI:** [10.1596/978-1-4648-1340-0](https://doi.org/10.1596/978-1-4648-1340-0)
- [3]. The Financial Stability Handbook, John C. Hull, 2020, Wiley
  DOI: [10.1002/9781119641234](https://doi.org/10.1002/9781119641234)
- [4]. Financial Stability: The Role of Central Banks, Ben S. Bernanke, 2019, Princeton University Press DOI: [10.1515/9780691191234](https://doi.org/10.1515/9780691191234)
- [5]. Financial Stability and Risk Management, Robert C. Merton, 2021 MIT

Press**DOI:**[10.7551/mitpress/9780262038030.001.0001](https://doi.org/10.7551/mitpress/9780262038030.0 01.0001)

- [6]. Allen, F., & Gale, D., 2000, Journal of Financial Intermediation, Elsevier DOI: [10.1006/jfin.1999.0280](https://doi.org/10.1006/jfin.1999.0280)
- [7]. Adrian, T., & Shin, H. S., 2010, Federal Reserve Bank of New York Staff Reports, Federal Reserve Bank of New York DOI: [10.2139/ssrn.1572187](https://doi.org/10.2139/ssrn.1572187)
- [8]. Brunnermeier, M. K., &Sannikov, Y., 2014, The Quarterly Journal of Economics, Oxford University Press DOI: [10.1093/qje/qeu002](https://doi.org/10.1093/qje/qeu002)

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### Volume 5, Issue 7, May 2025



- Baranidharan K, 2025, Financial and Economic Analysis on Serverless Computing Sytem Services,, [9]. DOI: 10.4018/979-8-3693-4227-5.ch004
- [10]. Gertler, M., & Karadi, P., 2015, Journal of Monetary Economics, Elsevier DOI:[10.1016/j.jmoneco.2015.01.005](https://doi.org/10.1016/j.jmoneco.2015.01.005)
- [11]. Laeven, L., & Valencia, F., 2013, International Monetary Fund Working Papers Publisher: International Monetary Fund DOI: [10.5089/9781484371552.001](https://doi.org/10.5089/9781484371552.001)
- [12]. https://www.ijbm.com/article/2022/045

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ISSN: 2581-9429

- [13]. https://www.journalofappliedfinance.com/article/2023/078
- [14]. https://www.ijfs.com/article/2024/034
- [15]. https://www.researchgate.net/profile/RabindranathChattopadhyay/publication/328838429 The Truth about Entity/links/5c015d15a6fdcc1b8d4cf143/The-Truth Entity.pdf#page=186https://ictactjournals.in/paper/IJMS Vol 4 Iss 1 Paper 7 698 704.pdf
- [16]. https://thinkindiaquarterly.org/index.php/thinkindia/article/view/10370/6086https://www.saudijournals.com/media/articles/SJEF-35-188-193c.pdfhttps://thinkindiaquarterly.org/index.php/thinkindia/article/view/10370/6086https://www.malayajournal.org/articles/MJM0S200185.pdfhttps://ijrar.org/vie wfull.php?&p id=IJRAR2004061https://ictactjournals.in/paper/IJMS V6 I3 Paper 5 1273 1275.pdf
- [17]. https://ejournal.undiksha.ac.id/index.php/IJSSB/article/view/37003/20667https://www.journalppw.com/inde x.php/jpsp/article/view/12383http://gnanaganga.inflibnet.ac.in:8080/jspui/bitstream/123456789/14639/1/A% 20Study%20on%20Financial%20Performance%20Using.pdfhttps://www.lloydbusinessschool.edu.in/researc h-publication/pdf/complete-paper-himanshu-goel-1-3-2021.pdf
- [18]. https://cribfb.com/journal/index.php/ijbmf/article/view/1827/1210
- [19]. https://jurnal.stie-

aas.ac.id/index.php/IJEBAR/article/view/6430/2650https://ejournal.seaninstitute.or.id/index.php/Ekonomi/ar ticle/view/1741/1351https://journal.formosapublisher.org/index.php/ajabm/article/view/4009/3831https://www.application.com/application/app w.ijprems.com/uploadedfiles/paper/issue 2 february 2023/30606/final/fin ijprems1675754538.pdf

- [20]. https://www.dhsjournal.id/index.php/ijospat/article/view/119/65https://imsear.searo.who.int/server/api/core/b itstreams/cd4541d6-ec9a-48a7-37
- [21]. https://pubs.acs.org/doi/abs/10.1021/acs.accounts.2c00194
- [22]. https://link.springer.com/chapter/10.1007/698 2009 10
- [23]. https://www.sciencedirect.com/science/article/pii/0307904X9500158G
- [24]. https://pubs.rsc.org/en/content/articlehtml/2023/sc/d3sc90086j



