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# A Study on Profitability Analysis at Pondicherry Chemicals Puducherry

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## **ABSTRACT**

The study is an outcome of the Project Work titled "A Study on Profitability Analysis" and Pondicherry chemical" This study on Profitability analysis is a critical process that evaluates the analysing financial metrics such as gross profit margin, operating margin, and net profit margin, businesses can identify strengths and weaknesses in their financial performance. In this analysis, the focus is on improving profitability, enhancing operational efficiency, and identifying profitable products or services.

With the objective to find out impact of profit and to determine how change in balance sheet items using profitability analysis. The use of tools like profitability ratios, Altman's Z-score, and cash flow models can provide insights into financial stability and highlight areas for improvement.

The Z-score indicates potential financial distress, while increasing the return on assets can improve efficiency and profitability. Companies may focus on increasing production, reducing costs, and exploring new opportunities to optimize their operations and ensure sustainable growth.

# **KEY WORDS**

Profitability analysis, efficiency, revenue, investments, net profit, financial metrics, gross profit margin, operating margin, net profit margin, Profitability ratios, financial performance, financial stability, return on assets, balance sheet, Altman's Z-Score, Operating cash flow, cost reduction, financial distress, sustainable growth.

#### INTRODUCTION

Profitability analysis evaluates a company's ability to generate earnings in relation to its revenue, costs, and invested resources. It involves analysing financial metrics such as gross profit margin, operating margin, and net profit margin helps measure how effectively a company controls costs and generates profit from its revenue. This analysis helps identify the most and least profitable products, services, or business units, providing insights into pricing strategies, cost structure, and resource allocation. As a component of Enterprise Resource Planning (ERP), it aids in both short-term financial management and long-term strategic planning by providing quantitative and qualitative insights into

financial performance, helping businesses boost profitability, optimize operations, and achieve sustainable growth.

# **OBJECTIVES**

- ➤ To analyse the financial performance of the company. 

  ☐ To evaluate the profitability of Pondicherry chemical.
- To identify the key factor influencing the profitability.
- To analyse the company's z-score and cash flow.
- To provide valuable suggestions to enhance the profitability analysis.



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#### **SCOPE**

- To forecast the company's growth in future.
- This study will enable the company to effectively create and implement financial planning for its profitability.
- This study is based on the profitability study the company can take optimized financial decisions.

## REVIEW OF LITERATURE

Bhavana Raj (2020) The Objective of the study was to analyze Liquidity- Profitability performance and predict Bankruptcy of selected companies. The Methodology adopted was financial ratios are used to analyze Liquidity and Profitability performance of companies. The conclusion of the study was that Indian Telecom companies should improve their Liquidity and Profitability Performance so that the sector shows signs of stability.

Nirali J kantharia (2020) The objective of the study was to evaluate and analysis the growth of power sector with respect to selected company. The Methodology adopted was Net Profit Ratio, Operating Profit Ratio and Rate of Return. The conclusion was founded that the profitability and growth of power generating firm.

Siva Priya Sellathurai (2019) The Objective of the study were to analyse growth of company and compared profitability ratio of the company. The conclusion of the study was the growth of company depends on how effectively insurers are unable to come up with the product designs suit able to our context.

### RESEARCH METHODOLOGY

This study is based on secondary data, which refers to information collected by entities other than the researcher. Secondary data serves as a valuable reference point for comparing primary data results and can also assist in shaping the research design. Since such data typically carries a pre-established level of validity and reliability, it enhances the credibility of the analysis. Moreover, secondary data plays a crucial role in data enrichment, providing deeper context and insights. In this study, the balance sheet of Pondicherry

Chemicals is analyzed to assess profitability using financial ratios,

Altman's Z-score model, and operating cash flow.

#### **TOOLS USED**

#### PROFITABILITY RATIO

Profitability analysis evaluates a company's ability to generate earnings in relation to its revenue, costs, and invested resources. These ratios reflect the business's capacity to earn income and are typically calculated in relation to either sales revenue or investments, providing insight into overall financial performance.

# Gross profit ratio

It shows the effectiveness of a company in managing production and sales efficiency.

#### Net Profit Ratio

Net profit margin indicates the portion of profit kept from total revenue after all costs are accounted for ratio

# Return on Assets (ROA)

An increased ROA indicates more effective use of assets to generate earnings.

# Return on equity (ROE)

It emphasizes management's capability to produce returns for investors.

# Return on Investment (ROI)

ROI assesses the efficiency of an investment by measuring its returns against the initial cost. It similarly pertains to nonfinancial aspects, demonstrating the benefits obtained from time, effort, or resources utilized.

# MODELS OF PROFITABILITY

## 1. ALTMAN'S Z-SCORE

A financial analysis method called Altman's Z-Score is used to calculate the likelihood that a business would file for bankruptcy within two years. The model, which was created in 1968 by finance professor Edward Altman, evaluates a company's financial health by examining important information from its income statement and balance sheet. Altman developed a prediction algorithm for early identification of insolvency risk in reaction to the Great Depression's surge in company bankruptcies,



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which led to the creation of the Z-Score, a reliable technique for spotting possible financial difficulty.

# 2. OPERATING CASH FLOW

The Cash Flow from Operations A profitability analysis model evaluates a

# DATA ANALYSIS AND INTERPRETATION

business's capacity to make money from its main business operations. With the exception of non-operating elements like investments or financing activities, it concentrates on the cash inflows and outflows that are directly tied to the company's core operations.

# PROFITABILITY RATIOS (2022-2024)

YEAR	GROSS PROFIT MARGIN	NET PROFIT MARGIN	RETURN ON ASSETS (ROA)	RETURN ON EQUITY (ROE)	RETURN ON INVESTMENT (ROI)
2022	17%	3.7%	3.43%	1.12%	8.15%
2023	14.30%	2.2%	6.69%	2.06%	4.58%
2024	17.80%	1.4%	8.71%	2.26%	9.80%

In 2024, the company shows strong asset efficiency (ROA) and investment returns (ROI), but declining net profit margin suggests rising overhead or financial costs. While ROE is improving, it remains low. The company should focus on controlling operating expenses to enhance overall profitability.

#### **Z-SCORE**

YEAR	Z-SCORE	INTERPRETATION
2022	10.3	Low risk of bankruptcy
2023	11	No bankruptcy risk
2024	7.8	Strong financial stability

The company maintained strong financial health from 2022 to 2024, with no risk of bankruptcy. However, the decline in the Z-score in 2024 suggests slightly reduced financial strength, which should be monitored.

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# **OPERATING CASH FLOW**

YEAR	CASH FLOW	INTERPRETATION
2023	90,35,408.03	Strong cash flow
2024	52,16,830.29	Drop in cash flow

The company generated strong cash flow in 2023; however, the sharp decline in 2024 may indicate decreased operational efficiency or increased expenses. It is important to investigate this drop to avoid potential liquidity challenges.

#### **FINDINDS**

- Gross profit margin dipped in 2022–2023 due to higher costs but improved in 2023–2024 with better cost control, despite lower revenue. Profitability remained efficient overall.
- This indicates rising costs or reduced efficiency, affecting overall profitability.
- Return on Assets (ROA) has steadily improved from 3.43% to 8.71%, showing the company is using its assets more effectively to generate higher net income over the years.
- Return on Equity (ROE) has improved from 1.12% to 2.26%, indicating the company is generating better returns for shareholders, though overall levels remain modest.
- ROI fluctuated over the years— dropping in 2022–2023 due to higher investment costs but rising sharply in 2023–2024, indicating more effective use of investments to generate profit.
- The Z-scores indicate generally strong financial health, though the recent decrease signals a need for careful monitoring.
- Operating cash flow fell in 2024 despite higher net income, signaling cash flow management issues.

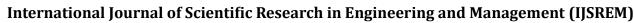
## **SUGGESTIONS**

- Continue focusing on cost control measures and optimize pricing strategies to maintain or improve gross margins, especially during revenue fluctuations.
- Identify and reduce overhead or non-operating expenses to improve net profitability. Streamline operations to enhance overall efficiency.

- Maintain or increase asset utilization by investing in productive assets and improving operational efficiency to sustain ROA growth.
- Explore ways to increase shareholder value through improved profitability or optimized capital structure, possibly by managing equity or using leverage wisely.
- Evaluate investment decisions carefully to ensure higher returns, focusing on projects with strong profitability and prudent capital allocation.
- Monitor financial stability closely, especially the slight decline, by managing debt levels and maintaining liquidity to avoid future risks.
- Improve cash flow management by optimizing working capital, controlling non-cash expenses, and ensuring timely collections and payments.

## **CONCLUSION**

The profitability analysis of Pondicherry Chemicals over the past three years highlights both strengths and areas needing improvement in the company's financial performance. While certain profitability metrics, such as gross profit margin, return on assets, and return on equity, show positive trends, other key indicators like net profit margin and return on investment have experienced declines. Additionally, the company's operating cash flow has significantly decreased, pointing to potential liquidity challenges. Despite profitability gains in some areas, signs of financial stress are evident, particularly in the declining Altman's Zscore, which signals weakening financial stability and a heightened risk of distress. The reduction in working capital growth and increasing



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operating expenses further underline the urgent need for strategic measures focused on cost control and operational efficiency. To improve profitability, the company should prioritize expanding revenue and optimizing pricing strategies to boost net profit margins. Efforts to reduce operating costs, enhance working capital management, and streamline the cost structure will be essential. Furthermore, improving liquidity and managing debt levels effectively will help mitigate financial risks and prevent potential insolvency. While Pondicherry Chemicals has made progress in certain financial aspects, addressing these challenges is vital for sustainable development. Implementing effective cost management, operational optimization, and strengthened financial stability will be key to maintaining profitability and securing the company's long-term viability. By adopting these strategic actions, Pondicherry Chemicals can enhance its financial health and solidify its position in the market.

# REFERENCE

- Wild, J.J., Subramanyam, K.R., & Halsey, R.F. (2014). Financial Statement Analysis (11th Edition). McGraw-Hill Education.
- Ohlson, J.A. (1980). "Financial Ratios and the Probabilistic Prediction of Bankruptcy." Journal of Accounting Research, 18(1), 109–131.
- Fraser, L.M., & Ormiston, A. (2016). Understanding Financial Statements (11th Edition). Pearson.