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A Study on the Liquidity and Profitability Performance of Bharat Petroleum Corporation Limited (BPCL)

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Abstract

This study focuses on the liquidity and profitability performance of Bharat Petroleum Corporation Limited (BPCL) over the period from 2018 to 2023. The analysis encompasses various financial ratios, such as the current ratio, liquid ratio, absolute liquid ratio, gross profit ratio, operating ratio, operating profit ratio, and net profit ratio, to evaluate BPCL's financial health and efficiency. In the study, we have tried our best to show BPCL's resilience in managing its gross profits, liquidity position, and profitability. We have tried to suggest the need for improved financial strategies. Enhancing operational efficiency and better cost management are critical for achieving sustainable economic performance.

Keywords: Liquidity, Profitability, BPCL, Financial Health, Operational Efficiency.

Introduction

A company's sound financial performance is necessary for its long-term viability and success. In particular, liquidity and profitability are key indicators that provide insights into a company's operational efficiency and financial health. Liquidity refers to the ability of a firm to meet its short-term obligations. In contrast, profitability measures the company's capacity to generate earnings relative to its expenses. The interplay between these two metrics is often complex, as efforts to maximize liquidity may adversely impact profitability and vice versa (Smith, 2020; Johnson & Lee, 2019). Bharat Petroleum Corporation Limited (BPCL), one of India's leading public sector undertakings in the oil and gas industry, plays a crucial role in the nation's energy sector. Given the volatile nature of the global oil market and the significant economic challenges posed by fluctuations in crude oil prices, it is imperative to evaluate BPCL's liquidity and profitability to ensure its sustainable growth and competitiveness (Rao, 2021; Sharma & Gupta, 2020). This study aims to analyze the liquidity and profitability performance of BPCL over a specific period, examining the relationship between these two financial indicators. The research employs financial ratio analysis, including the current ratio, quick ratio, return on assets (ROA), and return on equity (ROE), to provide a comprehensive understanding of BPCL's financial stability and performance (Pandey, 2019; Khan, 2020). This analysis offers valuable insights for stakeholders, including investors, financial analysts, and policymakers, to make informed decisions regarding BPCL's financial strategies. Furthermore, the findings of this research will contribute to the broader literature on corporate finance by highlighting the unique challenges faced by companies in the oil and gas sector, particularly in emerging markets like India (Mishra & Das, 2020; Singh & Kumar, 2021).

Literature Review

The tradeoff between liquidity and profitability has been widely studied. Firms that maintain high liquidity may be less profitable due to lower returns on liquid assets, while firms that prioritize profitability might face liquidity risks. According to Keynesian economics, firms should hold enough liquidity to cover unexpected cash outflows and maintain smooth operations (Keynes, 1936). However, the opportunity cost of holding excess liquidity could reduce profitability (Smith, 1980). The oil and gas sector, including companies like Bharat Petroleum Corporation Limited (BPCL), operates

in a highly capital-intensive environment. These companies require substantial investments in fixed assets, which often limits liquidity.

Additionally, the volatility of oil prices impacts profitability. Studies in this domain highlight that firms must balance liquidity and profitability to manage operational risks effectively (Jones & Kaul, 1996). BPCL is one of India's leading public sector enterprises in the oil and gas industry. Over the years, BPCL has demonstrated strong financial performance, marked by steady revenue growth and profitability. However, the company also faces liquidity challenges due to its extensive capital expenditure requirements and the cyclical nature of the oil and gas industry (BPCL Annual Report, 2023). Several empirical studies have examined the relationship between liquidity and profitability in various sectors. For instance, Deloof (2003) found that firms with shorter cash conversion cycles are more profitable, indicating that effective working capital management positively impacts profitability.

On the other hand, García-Teruel and Martínez-Solano (2007) emphasized that firms with excessive liquidity often experience reduced profitability due to lower returns on assets. In the context of BPCL, recent studies suggest that fluctuations have influenced the company's liquidity position in global oil prices, currency exchange rates, and regulatory changes. The company's robust profitability is also subject to these external factors (Singh & Gupta, 2022).

The oil and gas industry is capital-intensive, with significant investments in infrastructure, exploration, and production. Companies like Bharat Petroleum Corporation Limited (BPCL) face unique challenges in managing their working capital due to the volatile nature of oil prices, high capital expenditures, and the need to maintain extensive inventories of crude oil and refined products (Mohan, 2011). For BPCL, managing the CCC effectively is crucial due to the large volume of transactions and the need to efficiently manage receivables, payables, and inventory (Padachi, 2006).

Numerous empirical studies have examined the relationship between working capital management and firm profitability. For instance, a study by Gill, Biger, and Mathur (2010) found a significant relationship between the CCC and profitability in the manufacturing sector. Similarly, a survey by Garcia-Teruel and Martinez-Solano (2007) demonstrated that efficient working capital management positively impacts the profitability of small and medium-sized enterprises (SMEs).In the context of BPCL, research has shown that the company's working capital management practices have evolved to address the challenges posed by the dynamic oil market. A study by Kumar and Sharma (2011) revealed that BPCL's working capital management strategies have effectively maintained liquidity while minimizing costs. However, the study also pointed out areas for improvement, particularly in managing receivables and inventory turnover. Case studies on BPCL and other oil companies have highlighted the importance of industry-specific factors in working capital management. A comparative analysis by Mohapatra (2013) showed that BPCL's working capital management practices were relatively better than its peers due to its focus on inventory management and cost control. However, the study also suggested that BPCL could benefit from adopting more advanced technologies and data analytics to optimize its working capital further. The oil and gas sector, including BPCL, faces several challenges in managing working capital, such as fluctuating oil prices, geopolitical risks, and regulatory changes. Future research could explore the impact of digital transformation and automation on working capital management in the oil industry.

Additionally, the role of environmental, social, and governance (ESG) factors in working capital management is an emerging area of interest (Bougheas et al., 2006). Thiago Alvarez, Luca Sensini, Maria Vazquez (2020), A fixed effects regression model was used to achieve the study's objectives. This model is reliable in explaining the effect of working capital management on profitability. The results showed a positive relationship between all components of working capital and profitability. Santiago Hernandez, Davide Migliaro, Pablo Suarez, and Arnaldo Arnaldi (2021), The findings showed that the relationship between the individual determinants of working capital and profitability is not linear because until the optimal size is reached, the relationship between working capital and profitability is positive. However, once the optimal size has been exceeded, the relationship turns negative due to increased costs and the risk of financial distress.

Objectives

- To study the Earning Position of Bharat Petroleum Corporation Limited (BPCL) using Ratio Analysis
- To understand the Liquidity position of Bharat Petroleum Corporation Limited (BPCL) using Ratio Analysis

Research Methodology

For this research, secondary data has been obtained through an extensive review of academic sources, the organization's financial statements, articles, journals, and online research papers.

Experimental Methods or Methodology

Ratio Analysis

Ratio analysis is the study or analysis of the line items in the company's financial statements. It can be used to check various business factors, such as profitability, liquidity, solvency, and efficiency of the company or the business. External analysts mainly perform ratio analysis as financial statements are the primary source of information for external analysts. The analysts rely on the current and past financial statements to obtain essential data to analyze the company's economic performance. The data or information thus obtained during the analysis helps determine whether a company's financial position is improving or deteriorating. The following ratios were used in this study.

- Current Ratio= Current Assets/ Current Liabilities
- Liquid ratio = Quick Assets/ Current Liabilities
- Liquid assets = Current assets - (stock + prepaid expenses)
- Absolute Liquid ratio = Absolute Liquid Assets/ Current Liabilities
- Gross Profit Ratio = (Gross profit/ Net Sales) *100
- Operating Ratio = (Operating Cost/ Net Sales) *100
- Operating Profit ratio = (Operating profit or EBIT/ Net Sales) *100 (or) Operating Profit ratio = 100 - Operating ratio
- Net profit ratio = (Net profit after tax/ Net sales) *100

Results and Discussion:

Liquidity Ratios:-

- **Current Ratio**

The ideal current ratio should be 2:1

Table 1 Current Ratio (Amount in Rs. Crores)

Year	Current Assets	Current Liabilities	Current Ratio
2018-2019	46637.25	47241.66	0.987
2019-2020	41063.23	59004.78	0.695
2020-2021	50,962.30	54,745.12	0.930
2021-2022	54,696.14	71,542.0	0.764
2022-2023	55,398.01	71,873.05	0.770
Average			**0.82**
SD			**0.12**
CV			**14.87**
CAGR			**-0.04**

Source: https://www.bpcl.com/annual

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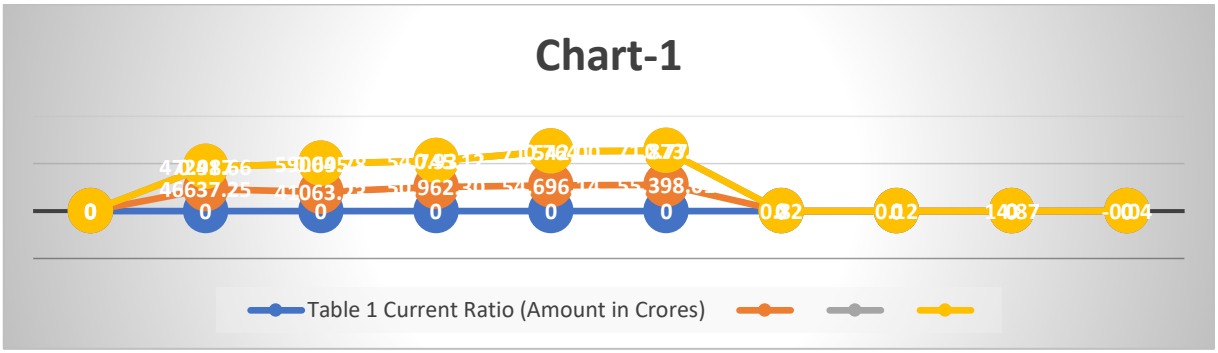


Key Observations:

❖ **Current Ratio Trend:**

- The current ratio for BPCL fluctuated over the five years, starting at 0.987 in the year 2018-2019, decreasing significantly to 0.695 in the year 2019-2020, and then showing a slight recovery in subsequent years, with the ratio being 0.930 in the year 2020-2021 and stabilizing around 0.764 and 0.770 in the year 2021-2022 and 2022-2023, respectively.
- The ratio consistently remained below 1.0, indicating that BPCL's current liabilities exceeded its current assets during this study period.

❖ **Average Current Ratio:**

- The average current ratio over the five years is 0.82, reflecting an overall tendency for the company to have fewer current assets than its current liabilities. This may indicate potential liquidity issues, as the company may face difficulties meeting its short-term obligations.

❖ **Standard Deviation (SD) and Coefficient of Variation (CV):**

- The standard deviation (SD) is 0.12, which indicates moderate variability in the current ratio over the years.
- The coefficient of variation (CV) is 14.87, which shows relative stability in the current ratio, considering that a lower CV represents less relative variability in the data.

❖ **Compound Annual Growth Rate (CAGR):**

- The CAGR of the current ratio is -0.04, indicating a slight decline in the current ratio over the period. This negative growth suggests that BPCL's liquidity position has weakened marginally.

Interpretation:

- **Liquidity Concerns:** The current ratio, consistently below 1.0, suggests that BPCL may not have sufficient short-term assets to cover its liabilities. This could expose the company to liquidity risk, where it might struggle to meet its short-term obligations, especially during financial stress.
- **Fluctuations and Recovery:** The significant dip in the current ratio in 2019-2020 (0.695) reflects a period where BPCL's liquidity was fragile. However, there was a partial recovery in the following year (2020-2021), with the ratio improving to 0.930, but it was not sustained, as the ratio declined again in subsequent years.
- **Stability in the Later Years:** The current ratio stabilizing around 0.764 to 0.770 in the last two years suggests that BPCL has maintained a consistent liquidity level, albeit still below the ideal level (generally considered 1.0 or higher).
- **Risk and Strategic Focus:** The negative CAGR and overall trend indicate that BPCL needs to improve its liquidity position. This might involve better working capital management, reducing current liabilities, or increasing current assets to ensure better financial stability.
- **Industry Context:** While a current ratio below 1.0 is generally a cause for concern, it is also important to consider industry norms. Suppose other companies in the oil and gas sector exhibit similar liquidity profiles. In that case,

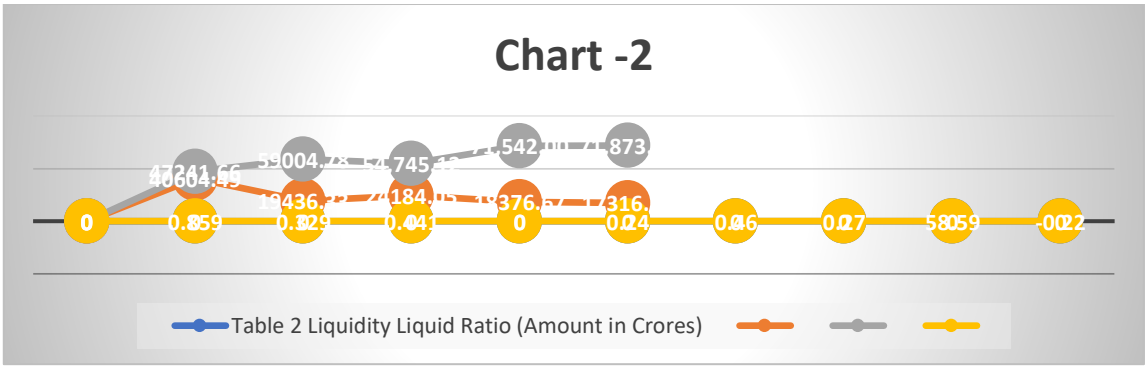
BPCL's position might be more in line with industry standards, though it still highlights an area of potential risk that needs addressing.

❖ **Liquid Ratio:-**

Table 2 Liquid Ratio (Amount in Rs. Crores)

Year	Liquid Assets	Current Liabilities	Liquid Ratio
2018-2019	40604.49	47241.66	0.859
2019-2020	19436.33	59004.78	0.329
2020-2021	24184.05	54,745.12	0.441
2021-2022	18376.67	71,542.0	0,256
2022-2023	17316.51	71,873.05	0.240
Average			**0.46**
SD			**0.27**
CV			**58.59**
CAGR			**-0.22**

Source: https://www.bpcl.com/annual



Key Observations:

❖ **Liquid Ratio Trend:**

- The liquid ratio for BPCL shows a downward trend over the five years. It started at 0.859 in 2018-2019, then dropped significantly to 0.329 in 2019-2020. After a slight increase to 0.441 in 2020-2021, the ratio declined further to 0.256 in 2021-2022 and 0.240 in 2022-2023.
- The liquid ratio remained well below 1.0 throughout the period, indicating that BPCL consistently had insufficient liquid assets to cover its current liabilities without relying on inventory sales.

❖ **Average Liquid Ratio:**

- The average liquid ratio over the five years is 0.46, which suggests that, on average, BPCL had less than half the liquid assets needed to cover its current liabilities. The points to a weak liquidity position, where the company might face challenges meeting its short-term obligations without liquidating inventory.

❖ **Standard Deviation (SD) and Coefficient of Variation (CV):**

- The standard deviation (SD) is 0.27, indicating considerable variability in the liquid ratio across the years.
- The coefficient of variation (CV) is 58.59, reflecting a high degree of relative variability. This suggests that BPCL's liquid ratio has been quite unstable during the analyzed period, with significant fluctuations in the company's ability to cover its current liabilities using liquid assets.

❖ **Compound Annual Growth Rate (CAGR):**

- The CAGR of the liquid ratio is -0.22, indicating a sharp decline in the liquid ratio over the period. This negative growth rate highlights a deterioration in BPCL's liquidity position, specifically regarding liquid assets available to cover short-term obligations.

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Interpretation:

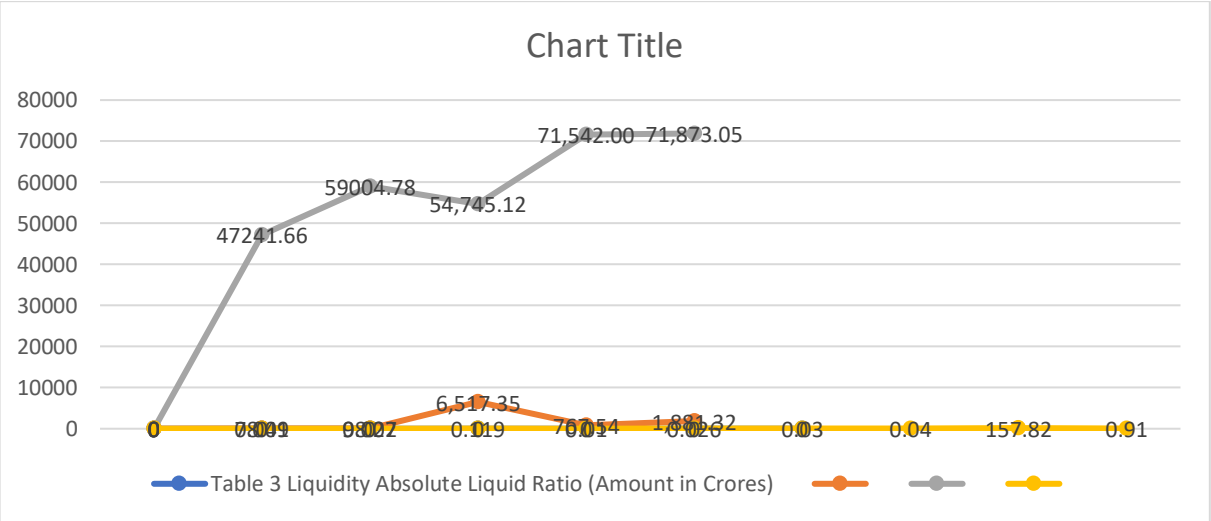
- **Deteriorating Liquidity Position:** The significant decline in the liquid ratio over the years suggests that BPCL's liquidity position has worsened. The company increasingly relies on non-liquid assets (such as inventory) or external funding to meet its short-term obligations. may expose it to liquidity risk, especially during financial stress or market downturns.
- **Year-on-Year Variability:** The high variability of the liquid ratio, particularly the sharp drop from 0.859 in 2018-2019 to 0.329 in 2019-2020, indicates that BPCL may have faced specific financial challenges. could be due to increased current liabilities, reduced liquid assets, or both. The slight recovery in 2020-2021 suggests a temporary improvement, but the subsequent decline in the following years points to ongoing liquidity challenges.
- **Long-Term Decline:** The negative CAGR of -0.22 is concerning, as BPCL's ability to maintain liquid assets relative to current liabilities has significantly declined. This trend suggests that the company's liquidity management strategies may not effectively address the reduction in liquid assets.
- **Risk of Liquidity Crisis:** A liquid ratio consistently below 1.0 and significantly below 0.5 is a red flag for potential liquidity crises. BPCL's liquid ratio of 0.240 in 2022-2023 implies that the company had only 24% of the liquid assets needed to cover its current liabilities, raising concerns about its ability to meet short-term financial obligations without external assistance.
- **Strategic Focus Needed:** Given the declining trend and low liquid ratio values, BPCL may need to reassess its liquidity management strategies. Improving the liquid ratio could involve reducing current liabilities, increasing liquid assets, or better managing cash flow to ensure sufficient liquidity.

❖ **Absolute Liquid Ratio:-**

Table 3 Liquidity Absolute Liquid Ratio (Amount in Rs. Crores)

Year	Absolute Liquid Assets	Current Liabilities	Current Liabilities
2018-2019	78.49	47241.66	0.001
2019-2020	98.27	59004.78	0.002
2020-2021	6,517.35	54,745.12	0.119
2021-2022	767.54	71,542.0	0.010
2022-2023	1,881.32	71,873.05	0.026
Average			**0.03**
SD			**0.04**
CV			**157.82**
CAGR			**0.91**

Source: https://www.bpcl.com/annual



Key Observations:

❖ **Absolute Liquid Ratio Trend:**

- The absolute liquid ratio started very low at 0.001 in 2018-2019 and 0.002 in 2019-2020, indicating that BPCL had very minimal cash and equivalents relative to its current liabilities during these years.
- There was a significant increase in 2020-2021, where the ratio rose to 0.119, indicating an improvement in BPCL's cash position relative to its liabilities.
- However, the ratio declined again to 0.010 in 2021-2022, followed by a slight increase to 0.026 in 2022-2023.

❖ **Average Absolute Liquid Ratio:**

- The average absolute liquid ratio over the five years is **0.03**, indicating that, on average, BPCL had only 3% of its current liabilities covered by its absolute liquid assets (cash and cash equivalents). reflects a fragile liquidity position.

❖ **Standard Deviation (SD) and Coefficient of Variation (CV):**

- The standard deviation (SD) is 0.04, showing some variability in the absolute liquid ratio over the years.
- The coefficient of variation (CV) is 157.82, which is exceptionally high, indicating significant volatility in BPCL's absolute liquid ratio. suggests the company's ability to maintain cash and equivalents relative to its liabilities has been highly inconsistent.

❖ **Compound Annual Growth Rate (CAGR):**

- The CAGR of 0.91 reflects the growth of the absolute liquid ratio over the period, but this figure must be interpreted cautiously given the extremely low starting and ending values. The substantial rise in 2020-2021 skews this growth rate, and the subsequent decline shows that BPCL has struggled to maintain consistent improvements in its cash liquidity.

Interpretation:

- **Extremely Low Cash Liquidity:** The absolute liquid ratio remains very low, with values between 0.001 and 0.026 (except for the spike to 0.119 in 2020-2021). This indicates that BPCL had minimal cash or cash equivalents to meet its current liabilities. Such low levels suggest the company would likely rely on other liquid assets or external funding to meet its immediate financial obligations.
- **Significant Volatility:** The high coefficient of variation and fluctuating absolute liquid ratio indicate that BPCL's cash liquidity has been unpredictable. The substantial increase in 2020-2021, followed by a steep decline, suggests potential issues in cash management or external factors affecting cash flow (e.g., market conditions, operational expenses, or capital expenditures).
- **Potential Risk:** The consistently low ratio signals that BPCL faces a substantial risk in immediate liquidity. Suppose the company encounters unexpected expenses or reduced cash inflows. In that case, it may struggle to meet its short-term obligations, potentially leading to financial distress or the need for short-term borrowing.
- **Temporary Improvement and Decline:** The temporary improvement in 2020-2021 (ratio of **0.119**) might reflect a one-time event or strategy that improved BPCL's cash reserves. However, the inability to sustain this improvement in subsequent years suggests that the underlying liquidity issues remain unresolved.
- **Strategic Focus:** Given the low and fluctuating absolute liquid ratio, BPCL should improve its cash management practices. It could involve optimizing working capital, enhancing cash flow through operational efficiencies, or securing additional liquidity sources to ensure the company can meet its short-term obligations without financial strain.
- **Industry Comparison:** Although the absolute liquid ratio is generally expected to be low in capital-intensive industries like oil and gas, BPCL's ratio is meager, indicating a potential vulnerability even within industry norms.

❖ **Profitability Ratios**

Gross Profit Ratio

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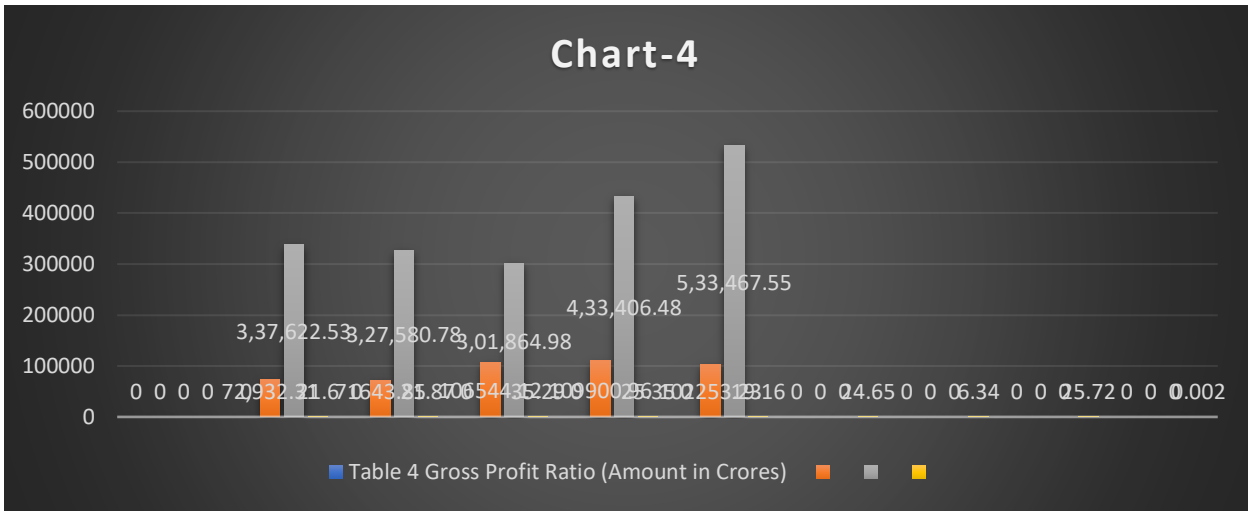
Table 4 Gross Profit Ratio (Amount in Rs. Crores)

Year	Gross Profit	Net Sales (Revenue from Operations)	Gross Profit Ratio
2018-2019	72,932.31	3,37,622.53	21.60
2019-2020	71643.85	3,27,580.78	21.87
2020-2021	106544.12	3,01,864.98	35.29
2021-2022	109900.96	4,33,406.48	25.35
2022-2023	102253.23	5,33,467.55	19.16
Average			**24.65**
SD			**6.34**
CV			**25.72**
CAGR			**0.002**

Source: https://www.bpcl.com/annual



Key Observations:

❖ **Gross Profit Ratio Trend:**

- The gross profit ratio started at 21.60% in 2018-2019 and slightly increased to 21.87% in 2019-2020, indicating stable profitability relative to sales during these years.
- In 2020-2021, there was a significant increase in the gross profit ratio to 35.29%, indicating improved efficiency or favourable conditions that led to a higher margin on sales.
- However, the ratio dropped to 25.35% in 2021-2022 and further decreased to 19.16% in 2022-2023, showing a decline in profitability over these years.

❖ **Average Gross Profit Ratio:**

- The average gross profit ratio over the five years is 24.65%, suggesting that BPCL, on average, retained 24.65% of its revenue after covering the cost of goods sold. It indicates a moderate level of profitability over the period.

❖ **Standard Deviation (SD) and Coefficient of Variation (CV):**

- The standard deviation (SD) of 6.34 indicates considerable variation in the gross profit ratio over the years, which is expected given the significant fluctuation observed.
- The coefficient of variation (CV) of 25.72 shows moderate variability, suggesting that while there is some fluctuation in profitability, it is not excessively unstable relative to the average.

❖ **Compound Annual Growth Rate (CAGR):**

- The CAGR is 0.002, indicating no significant growth in the gross profit ratio over the period. This implies that, despite fluctuations, the overall profitability margin has not improved on a compounded basis.

Interpretation:

❖ **Profitability Fluctuations:**

- The gross profit ratio fluctuated significantly, peaking in 2020-2021 at 35.29% and a low of 19.16% in 2022-2023. The peak in 2020-2021 could be due to favourable market conditions, cost efficiencies, or strategic pricing. However, the subsequent decline indicates potential challenges such as increased production costs, pricing pressures, or changes in market dynamics.

❖ **Recent Decline:**

- The decline in the gross profit ratio to 19.16% in 2022-2023 is concerning, as it reflects reduced profitability relative to sales. This may suggest that BPCL faced higher costs, competitive pressures, or lower pricing power in the most recent year. A declining gross profit margin can signal potential cost control issues or product mix changes.

❖ **Stable but Moderate Profitability:**

- The average gross profit ratio of 24.65% suggests that BPCL maintained a reasonable level of profitability over the five years. However, the recent downward trend indicates that sustaining this level of profitability may be challenging going forward.

❖ **Volatility and Risk:**

- The variability in the gross profit ratio, reflected in the standard deviation and coefficient of variation, indicates that BPCL's profitability has been subject to fluctuations. This could be due to external factors such as fluctuating oil prices, changes in demand, or internal factors such as cost management efficiency.

❖ **Strategic Implications:**

- The declining trend in gross profit ratio in recent years suggests that BPCL may need to focus on improving cost efficiencies, optimizing pricing strategies, or exploring new revenue streams to maintain profitability.
- Monitoring and managing costs, particularly in a volatile industry like oil and gas, will be crucial to reversing the downward trend in profitability.

❖ **Industry Context:**

- Comparing BPCL's gross profit ratio with industry benchmarks would provide further insight into whether these fluctuations are unique to BPCL or reflective of broader industry trends. Given the capital-intensive nature of the oil and gas industry, fluctuations in gross profit margins are common. Still, the recent decline below the average could indicate that BPCL faces specific challenges that must be addressed.

❖ **Operating Ratio**

Table 5 Operating Ratio (Amount in Rs. Crores)

Year	Operating Expenses	Net Sales(Revenue from Operations)	Operating Ratio
2018-2019	3,30,166.51	3,37,622.53	97.79
2019-2020	3,26,910.22	3,27,580.78	99.79
2020-2021	2,90,040.76	3,01,864.98	96.08
2021-2022	4,23,828.40	4,33,406.48	97.79
2022-2023	5,32,074.88	5,33,467.55	99.73
Average			**98.23**
SD			**1.55**
CV			**1.58**
CAGR			**0.003**

Source: https://www.bpcl.com/annual

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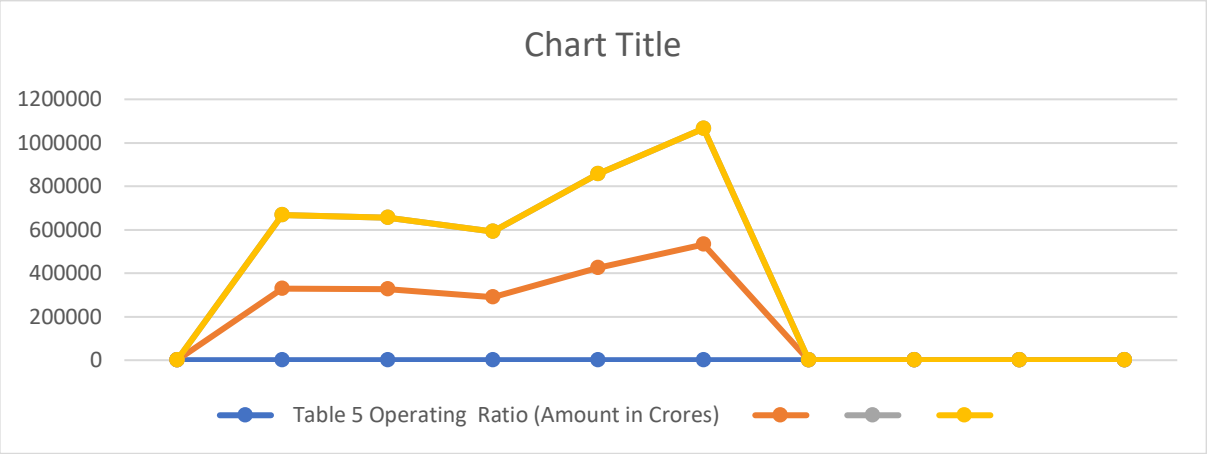

Interpretation:

❖ **Trend Observation:**

- From 2018-2019 to 2022-2023, the operating ratio fluctuated but generally stayed around the high 90s, indicating that the company has consistently high operating expenses relative to its revenue.
- The lowest ratio (96.08%) occurred in 2020-2021, suggesting that during this year, the company managed its expenses more efficiently than its revenue.
- The highest ratio (99.79%)and (99.73) in 2019-2020 and 2022-2023, respectively, indicates that almost all revenue was consumed by operating expenses, leaving very little room for profit from operations.

❖ **Average Operating Ratio:**

- The average operating ratio over the five years is 98.23%. This suggests that the company spends about 98.23% of its revenue on operating expenses, leaving a thin margin for profit from operations.

❖ **Consistency and Volatility:**

- The relatively minor fluctuations in the operating ratio (ranging between 96.08% and 99.79%) show that the company's operating efficiency has been relatively consistent over the years. However, it saw slight improvements in the years 2020-2021.

❖ **Comparative Efficiency:**

- If we compare this company's operating ratio with industry benchmarks, a consistently high 90s ratio could indicate that it may need to control its operating expenses more effectively to improve profitability.

❖ **Risk Assessment:**

- With operating ratios close to 100%, the company has a minimal buffer against external shocks (e.g., economic downturns, increased costs), as any decrease in sales or expenses could quickly push it into a loss-making situation.

❖ **Operating Profit Ratio**

Table 6 Operating Profit Ratio (Amount in Rs. Crores)

Year	Operating Profit	Net Sales (Revenue from Operations)	Operating Profit Ratio
2018-2019	10,439.62	3,37,622.53	3.09
2019-2020	3,751.87	3,27,580.78	1.14
2020-2021	16,168.67	3,01,864.98	5.35
2021-2022	11,990.50	4,33,406.48	2.76
2022-2023	3,576.66	5,33,467.55	0.67
Average			**2.60**
SD			**1.84**
CV			**71.08**
CAGR			**-0.26**

Source: https://www.bpcl.com/annual

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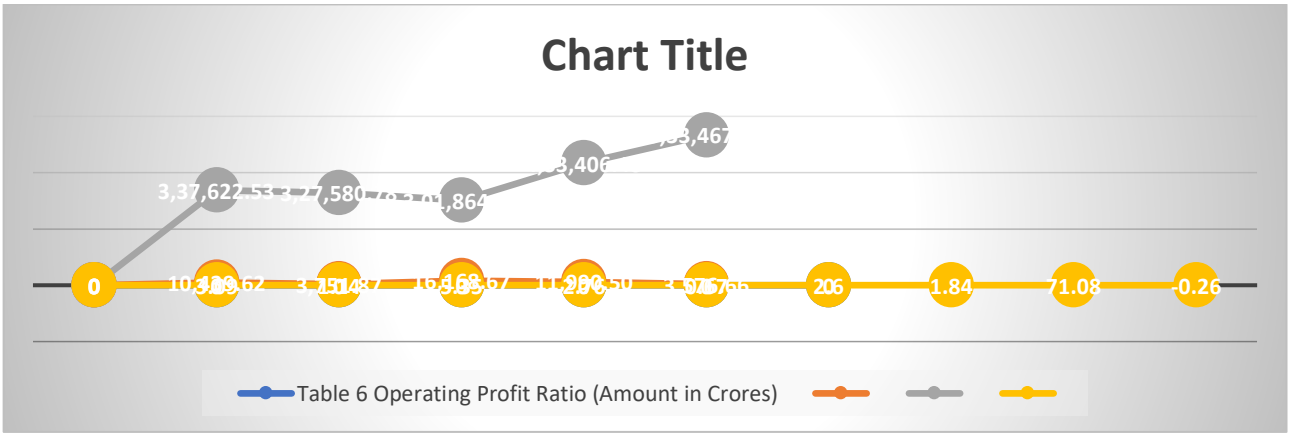


Interpretation Analysis of Each Year:

- 2018-2019, the company earned Rs.3.09 operating profit for every ₹100 sales. This indicates a modest profit margin, reflecting a relatively healthy operational efficiency.
- From 2019 to 2020, the profit margin decreased significantly, with the company earning only Rs 1.14 in operating profit for every Rs 100 sale. This indicates a decline in operational efficiency and profitability.
- In the 2020-2021The profit margin improved considerably, with the company earning Rs 5.35 in operating profit for every Rs 100 sales. This year reflects the highest operational efficiency, indicating strong profitability from core operations.
- In 2021- 2022, the profit margin decreased compared to the previous year, but it was still better than in the earlier years. The company earned Rs 2.76 in operating profit for every Rs 100 sales, showing moderate operational efficiency.
- 2022-2023, The profit margin dropped to its lowest point, earning only Rs 0.67 in operating profit for every Rs 100 of sales. This indicates inferior operational efficiency and profitability for the year.

❖ **Overall Interpretation:**

- The average operating profit ratio over the five years is 2.60%**,** which suggests the company's profit margin from operations has been relatively low. The ratios fluctuate significantly, with the highest being 5.35% in 2020-2021 and the lowest 0.67% in 2022-2023.

❖ **High Variability:** The large swings in the operating profit ratio indicate that the company has experienced inconsistent operating profitability. The significant drop in 2019-2020 and 2022-2023 highlights the company's struggles to maintain profitability in specific years.

❖ **Challenges in Recent Years:** The sharp decline in the operating profit ratio in 2022-2023 (0.67%) suggests that the company faced substantial challenges in generating profits from its operations, possibly due to rising costs, lower revenue, or other operational inefficiencies.

❖ **Comparison with Operating Ratio (Table 5):**

- The high operating ratios (from Table 5) align with the low operating profit ratios in most years, confirming that the company's high operating expenses have squeezed its profit margins.
- The inconsistency in both ratios indicates challenges in managing costs relative to revenue, impacting the company's ability to generate solid and stable operating profits.

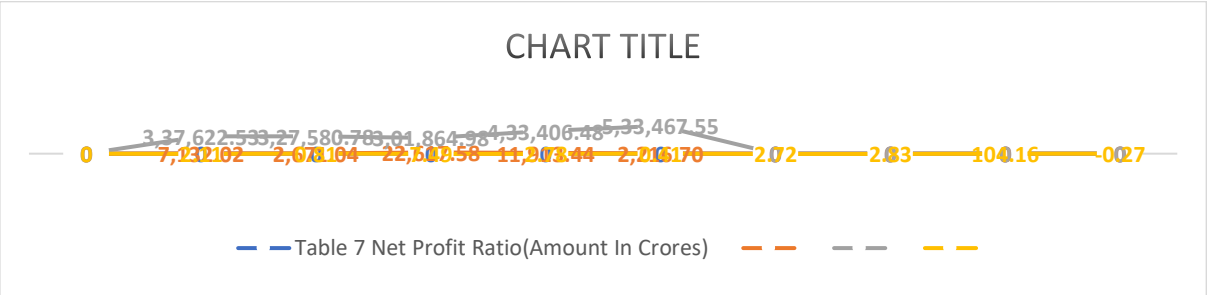
❖ **Net Profit Ratio**

Table 7 Net Profit Ratio (Amount in Rs. Crores)

Year	Net Profit	Net Sales	Net Profit Ratio
2018-2019	7,132.02	3,37,622.53	2.11

2019-2020	2,671.04	3,27,580.78	0.81
2020-2021	22,617.58	3,01,864.98	7.49
2021-2022	11,913.44	4,33,406.48	2.78
2022-2023	2,216.70	5,33,467.55	0.41
Average			**2.72**
SD			**2.83**
CV			**104.16**
CAGR			**-0.27**

Source: https://www.bpcl.com/annual



Interpretation Analysis of Each Year:

- From 2018 to 2019, the company earned Rs. 2.11 in net profit for every Rs.100 sale. It indicates a modest overall profitability after all expenses have been accounted for.
- From 2019 to 2020, the net profit ratio dropped significantly, with the company earning only Rs. 0.81 in net profit for every Rs. 100 sale. It reflects a sharp decline in overall profitability, possibly due to increased costs or lower revenue.
- In 2020- 2021, the net profit ratio increased substantially, indicating that the company earned Rs. 7.49 in net profit for every Rs. 100 sales. This year represents the highest profitability period, suggesting strong financial performance.
- 2021-2022, The net profit ratio decreased from the previous year but remained better than in 2018-2019. The company earned Rs. 2.78 in net profit for every Rs.100 sales, showing moderate overall profitability.
- 2022- 2023, the net profit ratio fell to its lowest point, earning only Rs. 0.41 in net profit for every Rs.100 of sales. It indicates very poor overall profitability, reflecting significant financial challenges.

❖ **Overall Interpretation:**

- The average net profit ratio over the five years is 2.72%, which indicates that the company's overall profitability has been relatively low, with significant fluctuations.

❖ **High Variability:** The net profit ratio fluctuates wildly, with the highest being 7.49% in 2020-2021 and the lowest being 0.41% in 2022-2023. it indicates inconsistent financial performance, with the company facing challenges in maintaining stable profitability.

❖ **Challenges in Recent Years:** The significant decline in the net profit ratio in 2022-2023 (0.41%) suggests that the company struggled to convert sales into profit, possibly due to increased costs, lower revenue, or other financial pressures.

❖ The sharp increase in profitability in 2020-2021 (7.49%) stands out as a period of exceptional financial performance. However, this was not sustained in the following years.

❖ **Comparison with Operating and Operating Profit Ratios:**

- Compared to operating profit ratios (Table 6), the lower net profit ratios reflect the impact of additional costs, such as interest and taxes, on the company's overall profitability.
- Similar to the operating profit ratio, the inconsistency in net profit ratios highlights the company's challenges in managing costs and generating stable profits over the yea

Findings:

✓ The Current Ratio remained below 1.0 for all years, with an average of 0.82. it indicates that the company's current liabilities exceeded its current assets, reflecting potential liquidity issues.
✓ The lowest ratio was 0.695 in 2019-2020, indicating a particularly challenging year in terms of liquidity.
✓ The Liquid Ratio averaged 0.46, with a declining trend over the years. The lowest ratio was 0.240 in the year 2022-2023.
✓ It indicates that the company has insufficient liquid assets to cover its current liabilities, raising concerns about its ability to meet immediate obligations.
✓ The Absolute Liquid Ratio averaged 0.03, indicating that the company has minimal absolute liquid assets compared to its current liabilities.
✓ The ratio improved slightly in 2020-2021 but remained very low overall, suggesting that the company could face challenges covering liabilities in the short term.
✓ The Gross Profit Ratio averaged 24.65%, with fluctuations across the years. The highest ratio was 35.29% in 2020-2021, indicating strong profitability from core operations.
✓ However, the ratio declined to 19.16% in 2022-2023, reflecting a decrease in profitability.
✓ The Operating Ratio averaged 98.23%**,** indicating that the company's operating expenses were very close to its revenue, leaving little room for profit.
✓ The ratio remained consistently high, with the lowest being 96.08% in 2020-2021.
✓ The Operating Profit Ratio averaged 2.60%**,** with significant fluctuations. The highest ratio was 5.35% in 2020-2021, while the lowest was 0.67% in 2022-2023.
✓ It indicates the company had inconsistent profitability from its core operations, struggling to generate sufficient profit in specific years.
✓ The Net Profit Ratio averaged 2.72%**,** with significant fluctuations. The highest ratio was 7.49% in 2020-2021, while the lowest was 0.41% in 2022-2023. It indicates inconsistent overall profitability, with the company struggling to maintain stable net profit margins.

Suggestions:

✓ **Improve Liquidity:** The company should focus on increasing its current assets or reducing its liabilities. It could involve improving cash flow management, reducing short-term debt, or increasing inventory turnover.
✓ **Enhance Working Capital Management:** Implement better working capital management practices to ensure the company meets its short-term obligations.

✓ **Increase Liquid Assets:** The company should focus on increasing its cash reserves or other liquid assets to ensure better liquidity.
✓ **Reduce Reliance on Credit:** Reducing reliance on short-term credit and managing accounts receivable more efficiently could help improve the liquid ratio.
✓ **Strengthen Cash Reserves:** Focus on building cash reserves to ensure the company can meet its short-term obligations without relying on other assets.
✓ **Improve Cash Flow:** Enhancing cash flow through better payment terms, faster invoicing, and collection processes could help increase the absolute liquid ratio.
✓ **Cost Management:** Focus on controlling direct costs to improve gross profit margins. It could involve negotiating better terms with suppliers or optimizing production processes.

✓ **Revenue Growth:** Explore opportunities to increase revenue without proportionally growing costs, such as product differentiation or pricing strategies.
✓ **Reduce Operating Expenses:** The company should identify areas where it can reduce operating expenses to improve profitability. It could involve cutting unnecessary costs, automating processes, or optimizing resource allocation.
✓ **Increase Revenue:** Focus on strategies to increase revenue, such as expanding the customer base or introducing new products/services, to improve the operating ratio.
✓ **Boost Operational Efficiency:** The company should focus on improving efficiency in its core operations to increase profitability. It could involve investing in technology, improving supply chain management, or optimizing production processes.
✓ **Enhance Pricing Strategy:** Reviewing and adjusting pricing strategies could help the company capture more value from its products or services.
✓ **Optimize Cost Structure:** The company should optimize its cost structure to improve net profitability. It could involve reducing overhead costs, improving tax planning, or refinancing debt at better rates.
✓ **Diversify Revenue Streams:** Exploring new revenue streams could help the company achieve more consistent profitability,

Recommendations:

✓ **Improve Liquidity:** Strengthen the company's liquidity by improving cash management, reducing short-term liabilities, and increasing current assets.
✓ **Cost Management:** Focus on reducing operating expenses to improve the operating ratio and profit margins.
✓ **Revenue Enhancement:** Explore opportunities to boost revenue, such as expanding market reach, optimizing pricing strategies, and enhancing product offerings.
✓ **Financial Stability:** Develop a more consistent financial strategy to avoid the fluctuations observed in profitability and ensure long-term economic health.

Conclusion:

The company's liquidity position is weak, with an average current ratio of 0.82, consistently below the ideal benchmark of 1 it indicates that the company may struggle to meet its short-term liabilities using its current assets, highlighting a potential liquidity risk. The liquid ratio has averaged 0.46, showing further liquidity concerns. The company's liquid assets are insufficient to cover its current liabilities, indicating a need for better cash and liquid asset management. The average absolute liquid ratio is 0.03, which is extremely low, emphasising that the company has minimal absolute liquid assets (such as cash) to cover its immediate liabilities. It reinforces the liquidity risks observed in the previous ratios. The gross profit ratio has been relatively stable, averaging 24.65%**.** It suggests that the company maintained a decent margin on its sales before operating expenses. Still, there is room for improvement, especially in recent years, where the ratio has declined. The operating ratio is high, averaging 98.23%**,** indicating that operating expenses consume much of the company's revenue. It leaves little room for profitability, pointing to inefficiencies in cost management and operations. The operating profit ratio has fluctuated, with an average of 2.60%**.** It indicates that the company has struggled to consistently generate profit from its operations, with significant drops reflecting operational challenges and inefficiencies in some years. The net profit ratio has also been inconsistent, with an average of 2.72%**.** The company's profitability has been volatile, with significant declines in specific years, highlighting issues beyond operating costs, such as high financial expenses or taxes. The company faces considerable challenges in both liquidity and profitability. The high operating expenses relative to revenue and inconsistent profit margins suggest that the company needs to focus on cost control and operational efficiency. Additionally, the low liquidity ratios indicate that the company may face difficulties meeting its short-term obligations, which could impact its financial stability.

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