Journal of Science & Technology Excellence

Journal of Science and Technology Excellence

ISSN: **3108-3102**| Volume 2 Issue 2 April-June 2026

www.jstejournal.com **DOI**: https://doi.org/10.5281/zenodo.20505344 **JSTE-17**

LIQUIDITY MANAGEMENT IN OIL COMPANIES AT INDIAN OIL CORPORATION LTD

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ABSTRACT: Liquidity management is specifically critical to the financial and operational performance of energy firms, particularly in a capital-intensive and unpredictable industry such as petroleum. This investigation pertains to Indian Oil Corporation Limited (IOCL), the largest public sector oil company in India, which is responsible for the distribution, sale, and refining of petroleum products. The analysis demonstrates how IOCL manages its short-term assets and obligations by identifying the optimal balance between profitability and solvency. In light of factors such as regulatory regulations, high working capital requirements, and volatile crude oil prices, the current ratio, fast ratio, and cash flow analysis are critical metrics for evaluating a company's ability to meet its immediate obligations.

Keywords: *Liquidity Management, Financial Stability, Operational Efficiency, Indian Oil Corporation Limited, Oil and Gas Industry, Current Ratio, Quick Ratio, Cash Flow Analysis,*

1. INTRODUCTION

Liquidity management is a critical component of ensuring that a company has the necessary cash on hand to pay its expenses when they are due. It is a critical metric for evaluating a company's financial viability due to its impact on working capital.

The term "working capital" denotes the asset-liability imbalance that exists within an organization. If a business has a greater number of assets than liabilities, its working capital is positive, indicating that it is financially stable. A negative working capital is indicative of a business's potential to default on its obligations when its liabilities exceed its assets.

The liquidity management strategy of a company is the determining factor in its capacity to meet its short-term financial obligations and operational requirements. This strategy entails the supervision of its cash flow and liquid assets. In order to regulate cash inflows and outflows, it is common to estimate and monitor cash flows, optimize working capital, maintain adequate cash reserves, and maximize funding sources.

For oil companies, liquidity management encompasses the prediction and management of cash flows, the optimization of working capital, and the maintenance of a sufficient cash reserve to accommodate both anticipated and unforeseen requirements. Performing scenario evaluations, enhancing the utilization of financial sources such as credit lines, and establishing exhaustive visibility into cash flow are critical strategies for managing market volatility.

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2. LITERATURE SURVEY

HS ur Rehman (2025): This investigation examines the profitability of oil and gas companies in relation to their liquidity management practices. The liquidity management strategies of a company have an impact on its capacity to satisfy its short-term obligations and optimize the returns on its assets. As stated in the paper, the capital-intensive and volatile oil and gas industry's operational stability is contingent upon the effective management of currency and liquid assets.

Nadir Hajiyev (2024): In this paper, the financial management strategies implemented by energy companies during periods of extreme market volatility, global price shocks, and geopolitical risks are examined. This paper explores the diverse financial strategies that oil companies implement to mitigate instability and guarantee sustainable development. It emphasizes liquidity management as an indispensable instrument for operational resilience. The paper establishes a scientific framework that encompasses an alternative choice matrix for the purpose of evaluating various financial stability strategies.

HS ur Rehman (2023): This paper explores the vital function of liquidity management in the oil and gas industry, as effective cash and short-term asset management can have a significant impact on profitability. The paper elucidates that energy firms encounter a variety of unique financial challenges, including volatile oil prices, high capital intensity, and unpredictable global markets. The paper evaluates a variety of liquidity management strategies and maintains an optimal balance between current assets and liabilities to demonstrate how firms can satisfy their short-term obligations without compromising their investment prospects.

Ismail Alhassan & Kamrul Islam (2022): This investigation examines the correlation between the liquidity and financial performance of oil and gas companies in Nigeria over a ten-year period (2011–2020). This paper employs a fixed-effects panel regression model to examine the correlation between key profitability metrics, such as PAT, ROA, and ROE, and liquidity indicators, such as current and fast ratios.

Nadir Hajiyev (2021): This paper examines the financial strategies employed by energy corporations to maintain stability in the face of the highly volatile market. The analysis suggests that companies that are experiencing oil price volatility, geopolitical tensions, and global economic uncertainty would benefit from the implementation of liquidity management strategies. The paper's analysis of case studies of prominent oil businesses has identified several effective financial practices, including the diversification of funding sources, the management of short-term debt, and the maintenance of sufficient cash reserves.

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3. CHALLENGES FOR LIQUIDITY MANAGEMENT

Firms' operational efficiency and financial stability may be compromised by liquidity management concerns. The following are among the numerous obstacles:

Inaccurate cash flow forecasting

Most firms are unable to forecast future financial flows due to seasonality, economic volatility, and changing market conditions.

Lack of visibility

Cash management and allocation become inefficient when various divisions, branches, or regions of a company lack a shared understanding of the cash situation and liquidity demands.

Excessive dependence on short-term funding

The firm may experience refinancing issues and elevated interest rates, particularly in the event of extreme market conditions, if it overly depends on credit lines or short-term loans to satisfy its cash flow requirements.

Inefficient working capital management

Ineffective management of accounts payable, receivable, and inventory results in liquidity restrictions, increased working capital requirements, and tiered capital.

Market uncertainty and credit risk

Exposure to credit risk and market volatility can influence the cost and availability of liquidity, even in highly liquid markets or when dealing with counterparties whose financial stability is uncertain.

Technological limitations

Inadequate technical infrastructure, as well as cash management, forecasting, and reporting systems, are the primary causes of the absence of real-time insight and decision-making capabilities in liquidity management.

4. LIQUIDITY MANAGEMENT STRATEGIES

Treasurers and financial specialists encounter numerous challenges when it comes to managing liquidity, including the difficulty of comprehending the complexities of foreign operations and currencies, the need to make precise forecasts, and the reduction of cash flow volatility.

Cash flow forecasting

Develop and maintain an exhaustive cash flow projection to anticipate monetary inflows and outflows. HighRadius's cash flow forecasting system can accurately predict even the most unpredictable categories, such as AR or AP.

Optimize inventory management

Just-in-time (JIT) solutions can be implemented to reduce inventory costs. Inventory levels should be regularly monitored and adjusted to accommodate anticipated demand and turnover rates.

Streamline accounts receivable

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Electronic invoicing, more stringent credit requirements, and discounts for early payments can all contribute to the acceleration of accounts receivable collection. In order to expedite the conversion of receivables into cash, it may be beneficial to investigate invoice discounting or factoring.

Extend accounts payable

In order to preserve liquidity for extended periods without jeopardizing relationships with suppliers, consider negotiating extended payment terms with them.

Optimize debt management

By restructuring existing debt, the maturities can be extended or the interest rates can be reduced. It is advisable to exercise caution when utilizing credit lines to meet your immediate financial requirements.

Manage capital expenditures

When allocating funds for capital expenditures, prioritize investments that are either essential to the operation of the business or yield rapid returns. Capital initiatives that are not absolutely necessary should be either postponed or eliminated.

Enhance revenue streams

Diversifying and expanding your sources of income is essential for ensuring that money continues to flow. Determine whether there are additional products or services that could generate additional revenue.

Implement cost control measures

It is crucial to conduct routine reviews and management of operating expenses. Identify and eliminate inefficient expenditures, enhance supplier negotiations, and optimize processes to achieve optimal efficiency.

Maintain a cash reserve

To protect against unexpected expenses or revenue deficits, establish and maintain a cash reserve through the use of cash flow management software. HighRadius's cash management solution enables you to monitor your cash balance in real time and remain vigilant for any surplus or deficit. Should liquidity become scarce, this reserve will offer much-needed alleviation.

Leverage financial technology

Financial management software, such as cash management tools and cash forecasts, enables the automation of financial duties, the enhancement of decision-making, and the acquisition of real-time insights into cash flows. Technology can also facilitate the early identification of trends and potential liquidity issues.

5. RESULTS

PROFITABILITY RATIOS

Profitability Ratios	Mar '25	Mar '24	Mar '23	Mar '22	Mar '21
Operating Profit Margin(%)	4.37	8.96	2.65	7.22	10.06
Profit Before Interest And Tax Margin(%)	2.34	7.04	1.22	5.35	7.38
Gross Profit Margin(%)	2.35	7.08	1.23	5.38	7.47

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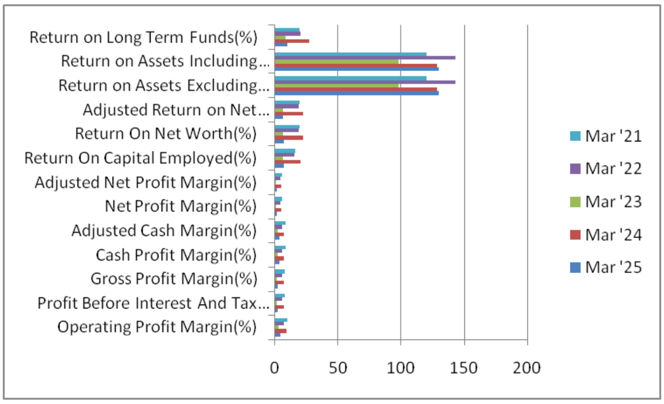
Cash Profit Margin(%)	3.47	6.94	2.37	5.84	8.26
Adjusted Cash Margin(%)	3.47	6.94	2.37	5.84	8.26
Net Profit Margin(%)	1.71	5.11	0.98	4.04	5.77
Adjusted Net Profit Margin(%)	1.7	5.08	0.97	4.01	5.7
Return On Capital Employed(%)	7.27	20.35	6.22	15.1	15.84
Return On Net Worth(%)	7.25	22.41	6.11	18.42	19.76
Adjusted Return on Net Worth(%)	6.22	22.41	6.11	18.42	19.76
Return on Assets Excluding Revaluations	129.74	128.32	97.85	143	120.36
Return on Assets Including Revaluations	129.74	128.32	97.85	143	120.36
Return on Long Term Funds(%)	9.89	27.36	8.61	20.1	19.77



INTERPRETATION: The company's inability to convert sales into profit has been evident in the declining profit margins that have been observed since March 25. A substantial decrease in net value and returns on capital employed in comparison to invested and shareholder funds indicates that profitability is lower. Nevertheless, asset returns persist at a high level, suggesting that assets are being utilized effectively. Profitability is notoriously challenging to predict due to its susceptibility to market fluctuations or internal processes in the long term.

LIQUIDITY AND SOLVENCY RATIOS

Liquidity And Solvency Ratios	Mar '25	Mar '24	Mar '23	Mar '22	Mar '21
Current Ratio	0.44	0.47	0.49	0.52	0.52
Quick Ratio	0.25	0.21	0.22	0.25	0.24
Debt Equity Ratio	0.75	0.66	0.98	0.84	0.87
Long Term Debt Equity Ratio	0.29	0.23	0.43	0.39	0.5

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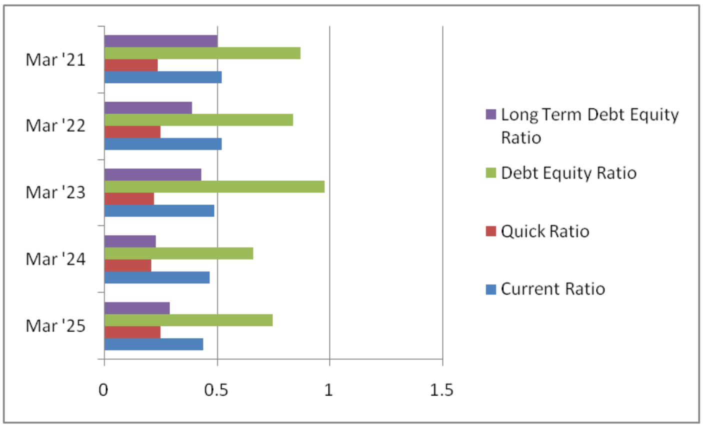
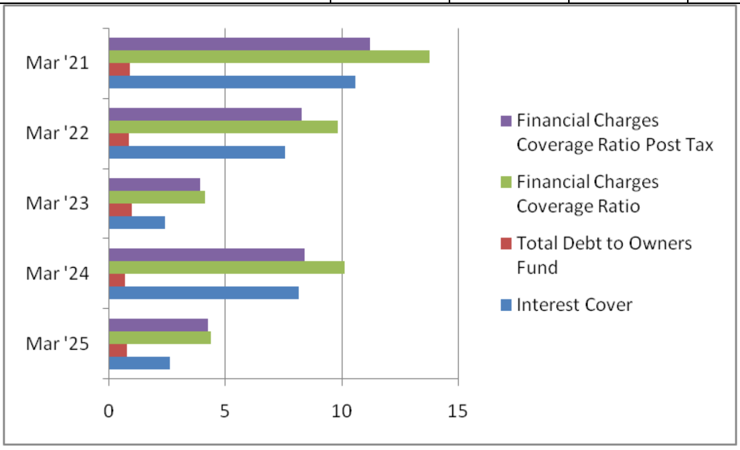


INTERPRETATION: The company may encounter difficulty in fulfilling its short-term obligations due to current and fast ratios that are less than one. The debt-to-equity ratio is characterized by moderate leverage and a relatively modest increase on March 25th, which suggests a dependence on loan financing. The steady improvement of the long-term debt-to-equity ratio is a sign of the increasing financial stability.

DEBT COVERAGE RATIOS

Debt Coverage Ratios	Mar '25	Mar '24	Mar '23	Mar '22	Mar '21
Interest Cover	2.61	8.14	2.4	7.57	10.6
Total Debt to Owners Fund	0.75	0.66	0.98	0.84	0.87
Financial Charges Coverage Ratio	4.36	10.12	4.11	9.85	13.77
Financial Charges Coverage Ratio Post Tax	4.23	8.39	3.9	8.29	11.23



INTERPRETATION: As of March 25, the capacity to pay interest from operating income was diminished as a result of a substantial decrease in interest coverage. The proprietors' fund's debt's overall level of leverage suggests that debt financing is still being employed. The ratio of financial charges to total assets has decreased, resulting in an increase in financial risk, both before and after taxes. The company's general decline in debt serviceability has prompted concerns regarding its short- and long-term solvency.

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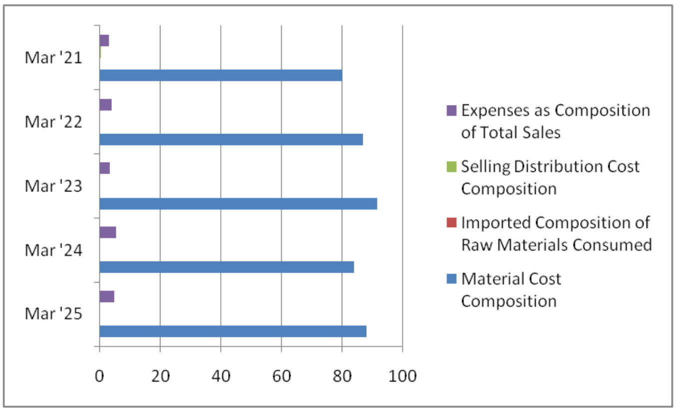
PROFIT & LOSS ACCOUNT RATIOS

Profit & Loss Account Ratios	Mar '25	Mar '24	Mar '23	Mar '22	Mar '21
Material Cost Composition	88	83.76	91.48	86.63	80
Imported Composition of Raw Materials Consumed	0	0	0	0	0
Selling Distribution Cost Composition	0	0	0	0	0.01
Expenses as Composition of Total Sales	4.77	5.23	3.19	3.69	2.87



INTERPRETATION: The material cost composition indicates that basic materials constitute over 80% of the total expenditures. Domestic suppliers assume responsibility when foreign sources of basic materials are exhausted. Logistics and marketing expenditures for distribution and sale are minimal.

CASH FLOW INDICATOR RATIOS

Cash Flow Indicator Ratios	Mar '25	Mar '24	Mar '23	Mar '22	Mar '21
Dividend Payout Ratio Net Profit	74.37	27.8	40.1	39.86	44.14
Dividend Payout Ratio Cash Profit	34.13	20.35	16.44	27.39	30.46
Earning Retention Ratio	13.34	72.2	59.9	60.14	55.86
Cash Earning Retention Ratio	63.5	79.65	83.56	72.61	69.54
AdjustedCash Flow Times	5.09	2.15	6.59	3.15	3.05

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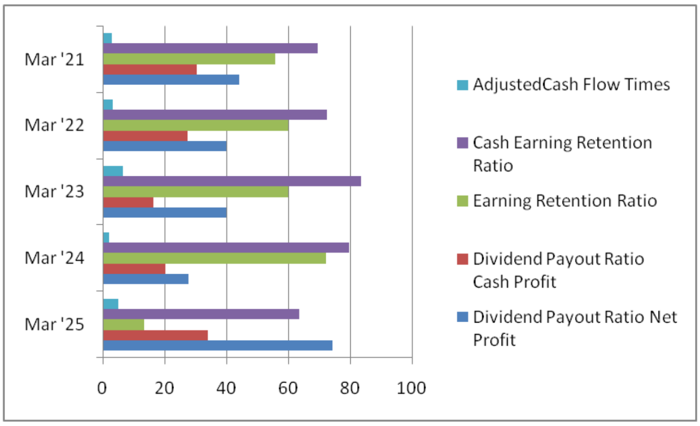
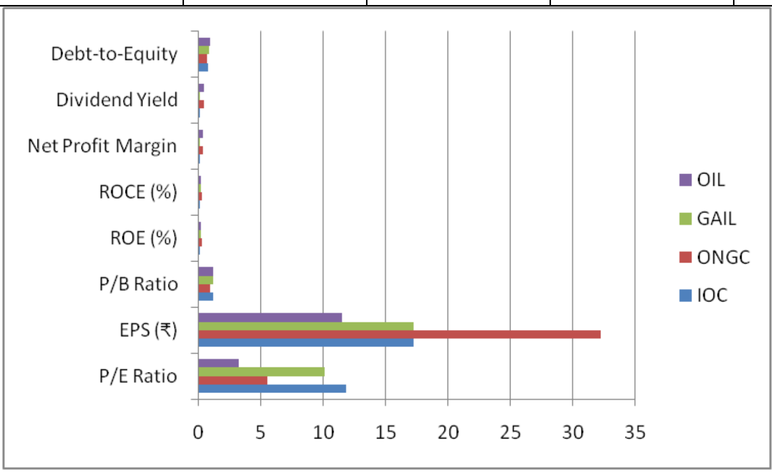


INTERPRETATION: On March 25, shareholders received a greater proportion of the company's earnings due to a significant increase in the dividend payout ratio, which is determined by net profit. Sufficient liquidity for internal dividends is indicated by the minimal distribution of dividends from cash on hand. A lesser income retention percentage implies that a smaller amount of money is being reinvested. The company's robust adjusted cash flow times serve as evidence of its capacity to repay its debts on an ongoing basis.

PEER COMPARISON: FINANCIAL RATIOS (FY 2024–25)

Metric	IOC	ONGC	GAIL	OIL
P/E Ratio	11.8	5.5	10.1	3.2
EPS (₹)	17.2	32.21	17.2	11.5
P/B Ratio	1.11	0.91	1.11	1.13
ROE (%)	7.25%	22.41%	16.03%	19.76%
ROCE (%)	8.73%	24.21%	17.65%	17.90%
Net Profit Margin	8.24%	32.21%	8.24%	31.21%
Dividend Yield	10.13%	40.20%	10%	40.20%
Debt-to-Equity	0.75	0.66	0.84	0.87



INTERPRETATION: Despite a reasonable valuation (P/E of 11.8 and P/B of 1.11) and a respectable level of profitability (ROCE of 8.73% and ROE of 7.25%), Indian Oil Corporation (IOC) is behind its competitors. Inefficient money production and return to shareholders are also indicated by a lower net profit margin and dividend yield. The debt level is moderately leveraged and is consistent with that of its competitors.

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6. CONCLUSION

In summary, the financial analyses of significant oil firms such as IOC, ONGC, GAIL, and OIL demonstrate that effective liquidity management is essential for the preservation of financial health and operational stability. A review of critical ratios, such as the current ratio, quick ratio, debt-equity ratio, and profitability measures, demonstrates that certain companies are financially stable and have only modest short-term liabilities, while others are experiencing difficulty in paying their bills on time or managing increasing operating costs. A company's liquidity can be improved by maintaining an adequate cash reserve, accurately projecting cash flows, and effectively managing working capital.

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