

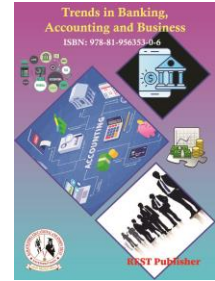


Trends in Banking, Accounting and Business

Vol: 3(1), 2024

REST Publisher; ISBN: 978-81-956353-0-6

Website: <https://restpublisher.com/book-series/tbab/>



A Study on Capital Budgeting and Initial Cash Outlay Uncertainty at Indian oil Corporation Ltd Chennai

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Abstract: Indian Oil Corporation Limited (IOCL) is India's largest commercial enterprise and a leading player in the energy sector, founded in 1959, IOCL operates across the entire hydrocarbon value chain, including refining, pipeline transportation, and marketing of petroleum products, exploration and production of crude oil and gas, and marketing of natural gas and petrochemicals. The company plays a crucial role in meeting India's energy demands, with a significant presence in refining, pipeline transportation, and fuel marketing. IOCL also has a strong international presence, with subsidiaries in various countries. The company is committed to sustainable development and has been investing in renewable energy and innovative technologies to reduce its carbon footprint. IOCL is a state-owned enterprise that has significantly contributed to India's economic growth and energy security. With its headquarters in New Delhi, IOCL is the country's largest oil refining and fuel retailing company. It operates 11 of India's 23 refineries with a combined refining capacity of 80.7 million metric tons per annum. The company's extensive network includes over 50,000 customer touchpoints, covering urban and rural areas, making it one of the most widely recognized brands in India.

Keywords: IOCL, marketing, refining, petroleum

1. INTRODUCTION

Indian Oil Corporation Limited (IOCL) is one of the largest oil and gas companies in India, with its headquarters in New Delhi. IOCL is a major public sector undertaking (PSU) in India engaged in refining, marketing, and distribution of petroleum products. It was established in 1959 as Indian Oil Company Ltd. and was later renamed Indian Oil Corporation Ltd. in 1964. IOCL operates a network of refineries, pipelines, and marketing infrastructure across the country. It refines crude oil, produces petroleum products like petrol, diesel, LPG, aviation fuel, lubricants, and petrochemicals. The company operates in various segments including refining, marketing, pipelines, petrochemicals, and natural gas. IOCL has a vast retail network of petrol and diesel stations under the brand name "Indian Oil" across India, making it one of the largest fuel retailers in the country. Besides its operations in India, IOCL has also ventured into international markets with refineries and marketing subsidiaries in countries like Sri Lanka, Mauritius, and the UAE. IOCL is involved in various social and environmental initiatives, including promoting cleaner fuels, renewable energy, and community development programs. Indian Oil Corporation Limited (IOCL) is a leading public sector oil and gas company in India. It was established in 1959 and is headquartered in New Delhi, India. IOCL is one of the largest oil refining and marketing companies in India and is ranked 151st on the Fortune Global 500 list of the world's biggest corporations as of 2021. IOCL's core business includes refining, pipeline transportation, and marketing of petroleum products. It owns and operates 11 out of 23 refineries in India, with a combined refining capacity of over 80 million metric tonnes per annum. The company's refineries produce a wide range of products including gasoline, diesel, liquefied petroleum gas (LPG), jet fuel, and petrochemicals. IOCL also has an extensive pipeline network for transporting crude oil, petroleum products, and natural gas across the country. Additionally, it has a strong presence in marketing petroleum products through its vast network of retail outlets, LPG distributorships, and aviation fuel stations. Apart from its core operations, IOCL is actively involved in various social responsibility initiatives, including

healthcare, education, sanitation, and environmental conservation. It is committed to sustainable development and has undertaken several projects focusing on renewable energy, biofuels, and energy efficiency. Indian Oil Corporation Limited (IOCL) is a major Indian state-owned oil and gas company headquartered in New Delhi, India. It is the largest commercial oil company in the country and ranks 117th on the Fortune Global 500 list of the world's biggest corporations as of 2021. IOCL operates a vast network of refineries, pipelines, and marketing infrastructure throughout India. It is involved in refining, distribution, and marketing of petroleum products such as gasoline, diesel, lubricants, and petrochemicals. IOCL also has interest in renewable energy, natural gas, and alternative fuels.

2. OBJECTIVES OF THE STUDY

This company is to make well-informed decisions regarding the allocation of financial resources for the long-term investment opportunities

To find out the profitable capital expenditure

To know whether the replacement of any existing fixed assets gives more return than earlier

To decide whether a specified project is to be selected or not

To find out the quantum of financial required for the capital expenditure

To assess the various sources of finance for capital expenditure

To evaluate the merits of each proposal to decide which project is best.

Selecting profitable projects

Capital expenditure control

Finding the right sources for funds

3. SCOPE OF THE STUDY

1. Building commutative strength
2. Determining future destiny of the enterprise
3. Revenue yielding
4. Best possible utilization of resources
5. Generating current assets
6. To analyse the effects of capital budgeting techniques in the company
7. The planning or design of any of the above
8. To understand the practical usage of capital budgeting in the evaluating the project
9. To offer the conclusion derived from the study and give suitable suggestions for the efficient utilization of capital expenditure decisions
10. Constructing or acquisition of capital facilities, including land purchase, preparation and easements
11. Acquisition, construction, demolition or replacement of capital asset

4. LITERATURE REVIEW

Single, deterministic measures of cash flow are used rather than probabilities. Management preferences regarding timing of cash flows are not included. The result of decision taken is uncertain. This is so because it is difficult to say that present circumstances will exist in future also. Some factors affecting investment proposals are not measurable. It is difficult to estimate the period for which investment is to be made and income will generate. It is difficult to estimate the rate of return because future is uncertain. It is difficult to estimate the cost of capital. The techniques of capital budgeting require estimation of future cash inflows and outflows.

5. REVIEW OF LITERATURE

Anand Manoj (2002) investigated 81 big Indian companies, chosen based on market capitalization, to find out corporate finance practices such as capital budgeting decision, capital structure decision and dividend policy decision. Most respondents used NPV and IRR as their most frequently used evaluation tools. Eighty-five per cent of the respondents considered IRR as a very important/important project choice criterion. The level of popularity for NPV method was about 65 per cent only. The Payback Period method was also popular (67.5%). The most interesting

results came from examining the responses conditional on firm size and growth characteristics. Large firms were significantly more likely to use NPV than small firms. Small firms were more likely to use payback period method than large firms. High growth firms were more likely to use IRR than the low growth firms, whereas low growth firms are more likely to use break-even analysis than high growth firms. Gupta Sanjeev et al. (2007) conducted a survey of Capital Budgeting Practices in Punjab based companies to examine influence of factors like size of capital budget, age and nature of the company, professional qualification of CEO. They observed that majority of sample companies were still using non-discounted cash flow technique mostly Payback Period criteria to evaluate new project. These findings are surprising that while corporate houses in developed countries are trying the latest sophisticated methods, the sample companies are still practicing traditional unscientific tools. Only a few companies were seen to use DCF and among them a very negligible number of companies were found to apply NPV. The companies used WACC for determining the discounting rate needed for discounting of future payoffs. Shah Kamini (2008) found that almost all the companies are using now multiple techniques for evaluating their capital budgeting proposals. The researcher also observed that the companies prefer 'IRR and NPV' to Payback period method. Interestingly she observed two different trends in choosing evaluation tools. She noted that for investing in new projects firms use IRR, PBP and NPV, while for expansion, replacement, modernization, etc., firms largely rely on Payback period method. She also found Sensitivity analysis as the most important technique for risk analysis and scenario analysis as the second most important technique for this purpose. Verma, Gupta and Batra (2009) made a survey of 30 India companies from manufacturing sector. The authors observed that globalization and exposure of Indian companies to global competition have compelled to be more judicious and rational in making capital budgeting decisions. These companies were seen to apply formal capital budgeting analysis including DCF to avoid any mistakes resulting in losses. The authors also observed that, instead of relying on one single technique of evaluation, the companies were seen to try multiple appraisal methods for evaluation of investments. They noted the emergence of a trend of increased adoption of sophisticated discounted capital budgeting tools like NPV and IRR as compared to the non-DCF capital budgeting techniques. However, majority of companies exhibited their preference for Payback Period Method as a supplementary method as well as primary method. Singh, Jain and Yadav (2012) studied the contemporary practices in capital budgeting in Indian companies. Result of the study is based on responses received from 31 nonfinancial companies listed in BSE 200 index. The study confirmed the ongoing trend towards use of advanced techniques of capital budgeting. All responding companies used Discounted Cash Flow (DCF) techniques along with non-DCF techniques. There was a strong preference for DCF, in which more than 78.57 percent preferred IRR instead of NPV. This is contrary to textbook prescription that NPV is better than IRR; survey results reveal that firms exhibited a preference for IRR compared to NPV. The authors found sizeable percentage of companies to follow non-DCF methods such as Payback period (64.28 percent) and Accounting Rate of Return (39.28 percent). They also noticed that sensitivity analysis was the most widely used tool for handling risk in capital budgeting decision-making. The study reports the emergence real option analysis such as re-investment options (50 percent) and abandonment options (17.64 percent). It further covered analysis of capital budgeting process too. It revealed that in 72 percent cases proposals for new investment emerged from head office. It reflects the prevalence of control of top management on such decisions. A big majority of the companies (86.24 percent) focused on capacity build-up by investing in the existing line of business followed by modernization. Technology up-gradation emerged as the second most important constituent for capital expenditure outlay (44.82 percent of the companies). Arora, Preethi (2012) made a study of Capital Budgeting practice of top 500 companies of India, enlisted in market index in terms of their size of market capitalization. She collected data through structured questionnaire from 125 companies covering 9 industries. She observed that the major goal of the firms was to maximize market share followed by maximizing the market value per share. In respect of methods her findings were different. She noted that 92% of the companies preferred Discounted Payback Period as the most important appraisal technique. The other popular methods were simple Payback Period, Internal Rate of Return and NPV. Noted levels of popularity of these methods were 82.4%, 70.4% and 66.4% respectively. The highest number of firms used sensitivity analysis followed by Payback Period to adjust for risk. Gupta Divya (2013) noticed existence of a positive relationship between frequency of using capital budgeting techniques and application of discounted cash flow techniques with the firm the size of the firm. According to her findings, large size firms exhibited reliance on DCF, while small firms exhibited preference for traditional payback period. Yadav Vinod Kumar (2013) finds that firms in small-scale industries mainly use traditional payback period and Accounting Rate of Return instead of scientific evaluation methods like IRR and NPV.

6. DATA ANALYSIS

Particulars	No. of months	12 2022	12 2023	%change
Cash flow from operating activities	Rs	257,467	296,437	15.1 %
Cash flow from investing activities	Rs	-212,936	-280,292	-
Cash flow from financing activities	Rs	-40,577	-17,944	-
Net cash flow	Rs	3,954	-1,802	-

CONSOLIDATED FINANCIAL STATEMENTS

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2021

Particulars	(₹ in Crore)	
	2020-2021	2019-2020
A Cash Flow from Operating Activities		
1 Profit / (Loss) Before Tax	30,750.73	(7,177.01)
2 Adjustments for :		
Share of Profit of Joint Ventures and Associates	(1,196.73)	(1,366.09)
Depreciation, Amortisation and Impairment	10,941.45	10,273.39
Loss/(Profit) on sale of Assets (net)	136.50	106.25
Loss/(Profit) on sale of Investments (net)	(4.12)	-
Amortisation of Capital Grants	(171.46)	(134.77)
Provision for Probable Contingencies (net)	(227.65)	(1,353.49)
MTM Loss/(gain) arising on financial assets/liabilities as at fair value through profit and loss	27.64	26.18
Unclaimed / Unspent liabilities written back	(371.90)	(175.57)
Bad Debts, Advances & Claims written off	25.05	15.14
Provision for Doubtful Advances, Claims and Obsolescence of Stores (net)	563.95	2,120.35
Impairment Loss on Financial Assets (Net)	1,111.98	(613.94)
MTM Loss/(Gain) on Derivatives	(140.87)	170.58
Foreign Currency Monetary Item Translation Difference Account	-	28.92
Remeasurement of Defined Benefit Plans thru OCI	15.08	(217.69)
Interest Income	(1,833.65)	(2,012.86)
Dividend Income	(260.87)	(709.96)
Finance costs	4,392.58	5,067.70
Amortisation and Remeasurement of PMUY Assets	1,056.60	291.07
	14,063.58	11,515.21
3 Operating Profit before Working Capital Changes (1+2)	44,814.31	4,338.20
4 Change in Working Capital (excluding Cash & Cash Equivalents):		
Trade Receivables & Other Assets	8,794.70	8,861.66
Inventories	(16,420.99)	10,096.53
Trade Payables & Other Liabilities	16,741.70	(13,999.63)
Change in Working Capital	9,115.41	4,958.56
5 Cash Generated From Operations (3+4)	53,929.72	9,296.76
6 Less : Taxes paid	4,067.99	2,150.51
7 Net Cash Flow from Operating Activities (5-6)	49,861.73	7,146.25
B Cash Flow from Investing Activities:		
Proceeds from sale of Property, plant and equipment / Transfer of Assets	792.85	754.25
Purchase of Property, Plant & Equipment and Intangible Assets	(6,566.16)	(12,337.43)
Expenditure on Construction Work in Progress	(17,267.02)	(19,840.00)

CONSOLIDATED FINANCIAL STATEMENTS**STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2021**

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CONSOLIDATED FINANCIAL STATEMENTS**STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2021**

Particulars	₹ in Crore)	
	2020-2021	2019-2020
Proceeds from sale of financial instruments (other than working capital)	115.28	-
Purchase of Other Investments	(3,988.34)	(535.08)
Receipt of government grants (Capital Grant)	583.98	21.51
Interest Income received	1,823.65	2,126.03
Dividend Income on Investments	260.87	709.96
Net Cash Generated/(Used) in Investing Activities:	(24,244.89)	(29,100.76)
C Net Cash Flow From Financing Activities:		
Proceeds from Long-Term Borrowings (Including Lease Obligations)	14,682.65	20,071.51
Repayments of Long-Term Borrowings (Including Lease Obligations)	(5,745.94)	(3,756.60)
Proceeds from/(Repayments of) Short-Term Borrowings	(22,317.43)	16,338.15
Interest paid	(4,506.30)	(4,393.85)
Dividend/Dividend Tax paid	(8,383.19)	(5,803.18)
Net Cash Generated/(Used) from Financing Activities:	(26,270.21)	22,456.03
D Net Change in Cash & Cash Equivalents (A+B+C)	(653.37)	501.52
E1 Cash & Cash Equivalents as at end of the year	781.24	1,434.61
Less:		
E2 Cash & Cash Equivalents as at the beginning of year	1,434.61	933.09
NET CHANGE IN CASH & CASH EQUIVALENTS (E1 - E2)	(653.37)	501.52

7. FINDINGS

1. IOCL has issued less shares capital to the shareholders, constantly from 2021 -2023. IOCL does not fulfil the authorized share capital which is mention in memorandum of association
2. IOCL, preferences share, and debenture do not exist.
3. The return-on-investment ratio of IOCL is the lowest among its competitors which imply that the degree of efficiency of IOCL is utilizing the funds entrusted by shareholders and long-term creditors is lower than its competitors.
4. IOCL has maximum numbers of total debts in 2022, if I compared with previous years
5. In 2022, IOCL has maintained the secured loan amount. Which is mostly remain same with previous year
6. IOCL has Degree of operating leverage (DOL) almost same with last five years.
7. IOCL having a good position in future period.
8. The overall efficiency of IOCL is higher than those of its competitors in previous years of comparison.

7. CONCLUSION

Indian Oil Corporation Limited (IOCL) is India's largest commercial enterprise, primarily engaged in refining, transporting, marketing petroleum products. The company also has a significant presence in petrochemicals, natural gas, and alternative energy resources. IOCL plays a critical role in ensuring energy security for India, contributing significantly to the nation's economic growth. With a strong focus on innovation, sustainability, and expanding its global footprint, IOCL continues to evolve to meet the changing energy demands and environmental challenges.

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