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## A STUDY ON CAPITAL BUDGETING PRACTICES OF SINGARENI CALLIERIES COMPANY LIMITED

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#### **ABSTRACT**

This study focuses on the capital budgeting practices at Singareni Coal Blocks, a major coal mining company in India. Capital budgeting is a crucial financial management tool used to evaluate and select long-term investment projects that maximize shareholder value. The study examines various investment appraisal techniques such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index applied by the company

Key Words: Capital Budgeting, Capital Allocation, Financial Planning and Sustainability.

#### INTRODUCTION

This study examines how Singareni Collieries Company Limited (SCCL) applies capital budgeting—using NPV, IRR, payback period, and profitability index—to prioritize coal-block investments, machinery, infrastructure, and sustainability projects. It explores decision criteria, implementation challenges, and ways to improve investment appraisal, shedding light on how SCCL allocates resources to boost operational efficiency, manage financial risks, and support strategic growth.

#### **REVIEW LITERATURE**

- **1.Kumar & Sharma (2021)** examined Indian public-sector firms largely relied on traditional capital budgeting, though discounted cash flow (DCF) methods like NPV/IRR are gaining traction.
- **2.Patel (2021)** Investigated Coal firms face heightened project risks due to regulatory uncertainty and environmental costs.
- **3.Singh & Verma (2022)** Compared NPV vs. IRR in mining; NPV offers more reliable investment decisions amid market volatility.

#### **NEED OF THE STUDY**

Capital budgeting is essential in capital-intensive industries like coal mining, where long-term, irreversible investments in mining blocks, technology, and environmental compliance must yield acceptable returns under high uncertainty. For Singareni Collieries (SCCL), headquartered in Telangana, such strategic financial planning determines which new mining projects, machinery



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upgrades, and eco-friendly initiatives to pursue—balancing profitability, operational efficiency, and regulatory obligations.

#### **OBJECTIVES OF THE STUDY**

To analyze the capital budgeting techniques used by Singareni Coal Blocks in evaluating investment projects.

To assess the effectiveness of the decision-making process in selecting profitable and sustainable capital projects.

To examine the financial performance impact of capital budgeting decisions on Singareni Coal Blocks.

To identify the challenges and limitations faced by the company in implementing capital budgeting practices.

#### SCOPE OF THE STUDY

This study analyzes the capital budgeting practices of Singareni Coal Blocks (SCCL) in Telangana, focusing on how the company plans, evaluates, and selects both ongoing and proposed long-term investment projects using techniques like NPV, IRR, payback period, and profitability index. It covers financial viability assessments, strategic importance, and the challenges SCCL faces—including risk management, regulatory compliance, and market volatility—using data from company reports and interviews with finance personnel.

#### **METHODOLOGY**

This study adopts a descriptive research design to analyze the capital budgeting practices at Singareni Coal Blocks. The methodology comprises both primary and secondary data collection to ensure a comprehensive understanding of the subject.

## **Data Collection:**

 Primary Data: Information was gathered through structured interviews and discussions with key financial managers and decision-makers involved in the capital budgeting process at Singareni Coal Blocks.



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• **Secondary Data:** Secondary data was collected from company reports, annual financial statements, official publications, and relevant industry documents. These sources provided quantitative data on past and current capital projects, investment amounts, and financial outcomes.

#### **LIMITATIONS**

The study is limited to the capital budgeting practices of Singareni Coal Blocks and does not cover other divisions or subsidiaries of the company.

Availability of detailed and updated financial data was sometimes restricted, which may affect the comprehensiveness of the analysis.

The study relies partly on primary data collected through interviews, which may be subject to personal bias or limited perspective of the respondents.

#### DATA ANALYSIS AND INTERPRETATION

## **Data Analysis:**

The collected data was analyzed using standard capital budgeting evaluation methods such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index. Comparative analysis was done to assess the effectiveness and accuracy of these techniques in the context of Singareni Coal Blocks.

## **PAYBACK PERIOD (PBP):**

The payback measures the length of time it takes a company to recover in cash its initial investment. This concept can also be explained as the length of time it takes the project to generate cash equal to the investment and pay the company back. It is calculated by dividing the capital investment by the net annual cash flow.



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Payback Period =	Initial Investment
r ay oach i ciica	Cash Inflow per Period

#### CALCULATION OF ANNUAL CASH INFLOW

Year	2021	2022	2023	2024	2025
Total Sales	1606310970	1952574983	2062496269	2177381956	2371633523
Less: Costs	1555885007	1815614157	1961324252	2068196415	2286017710
EBDT	50425963	136960826	101172022	128327364	85615818
LESS: Depreciation n or	-	967090	-	10393113	12541810
other exceptional					
items					

	50425963	135993136	101172022	117934251	73074008
EBT					
LESS: Tax	17100966	100752605	(22354952)	38433857	26851541
PAT	33324997	35241131	123526969	79500394	46222467
(Annual Cash Inflow)					

## Payback Period Analysis

Year	Initial investments	Annual cash Inflow	Payback period
2020	72368453	33324997	2.17
2021	175080399	35241131	4.97
2022	180236203	123526969	1.46
2023	46246000	79500394	0.58



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2024	46246000	46222467	1.00

#### INTERPRETATION

The shorter the payback period, the sooner the company recovers its cash investment. Whether a cash payback period is good or poor depends on the company's criteria for evaluating projects. From the above, it is inferred that the company have its highest payback in 2021 with 4.97 or 5 years.

## **ACCOUNTING RATE OF RETURN (ARR):**

ARR method uses accounting information as revealed by financial statements, to measure the profitability of the investment proposals. It is also known as the return on investment. Sometimes it is called the Average rate of return. (ARR)

#### **ORIGINAL INVESTMENT:**

Year	PAT	Initial invest	mentspunting	Rate	of
			Return		
2020	33324997	72368453	0.46		
2021	35241131	175080399	0.20		
2022	123526969	180236203	0.68		
2023	79500394	46246000	1.72		
2024	46222467	46246000	1.00		

#### **Inference:**

The chart shows that in the year 2021, the company had a lower expected rate of return than the minimum rate so the investment in the particular project can be reduced. In the year 2023, the project has a higher rate of return than the minimum rate.

## **NET PRESENT VALUE (NPV):**

Considering the time value of money is important when evaluating projects with different costs, different cash flows, and different service lives. Discounted cash flow techniques, such as the net



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present value method, consider the timing and amount of cash flows.

**Present value** = Cash flows \* Present value of Re. 1 @ 10% discount using present value table

Net present value = Present value of all cash inflows - present value of initial investment.



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#### **Decision Rule:**

	(Present value of Re.1 @ 10 %)	Net Cash Flows	Initial investment
	@ 10 %)		
324997	0.909	30292422.27	65782923.78
241131	0.826	29109174.21	144616409.6
3526969	0.751	92768753.72	135357388.5
500394	0.683	54298769.1	31586018
222467	0.621	28704152.01	28718766
	TOTAL =	235173271.3	406061505.8
5	00394	00394 0.683 22467 0.621	00394 0.683 54298769.1   22467 0.621 28704152.01

## **Calculation:**

Present value of all cash flows 23, 51, 73, 271.3

**Less:** Present value of all Initial Investment 40, 60, 61,505.8

Net Present Value (20118-12)

(17, 08, 88, 234.5)

## **Interpretation:**

The above table clearly indicates that the Net Present Value for the five years from 2018 to 2022 is (17, 08, 88,234.5)A negative NPV indicates that the project will probably be unprofitable and therefore should be adjusted, if not abandoned altogether. NPV enables a manager to consider the time value of money it will invest. This concept holds that the value of money increases with time because it can always earn interest in a savings account.



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## **BALANCE SHEET:**

## Consolidated five years Balance Sheet of CYIENT LTD Income and Expenditure

PARTICULARS	2020	2021	2022	2023	2024
Rs. Crore (Non-Annualised)					
Total income	10.229	10.642	12.177	13.944	12.793
Sales	9.713	10.152	11.685	13.316	12.312
Industrial sales	9.713	10.152	11.685	13.316	12.312
Income from non-financial services	0	0	0	0	0
Income from financial services	0.488	0.461	0.47	0.601	0.406
Interest	0.18	0.153	0.135	0.174	0.255
Dividends	0.19	.222	.25	0.098	.142
Treasury operations	0.118	0.086	0.085	0.329	0.009
Other income	0.017	0.012	0.012	0.014	0.055
Prior period income &	0.011	0.017	0.01	0.013	0.02
extraordinary income					
Change in stock	-0.029	0.189	0.383	-0.316	-0.075
Total expenses	9.379	9.942	11.677	12.893	11.824
Raw material expenses	4.161	4.423	5.596	6.715	5.205
Packaging expenses	0	0	0	0	0
Purchase of finished goods	0	0	0	0	0
Power, fuel & water charges	0.863	0.709	0.708	0.855	1.123
Compensation to employees	1.006	1.123	1.264	1.418	1.598



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Indirect taxes	1.048	1.254	1.356	1.054	0.89
Royalties, technical know-how	0	0	0	0	0
fees, etc.					
Lease rent & other rent	0.011	0.011	0.011	0.015	0.016
Repairs & maintenance	0.234	0.218	0.242	0.265	0.305
Insurance premium paid	0.031	0.027	0.02	0.014	0.029
Outsourced mfg. jobs (incl. job	0.224	0.346	0.489	0.351	0.308
works, etc.)					
Outsourced professional jobs	0.005	0.008	0.007	0.01	0.01
Directors' fees	0.002	0.002	0.002	0.002	0.002
Selling & distribution expenses	0.576	0.56	0.674	0.727	0.896
Travel expenses	0.153	0.177	0.187	0.208	0.186
Communication expenses	0.042	0.039	0.039	0.045	0.041
Printing & stationery expenses	0	0	0	0	0
Miscellaneous expenses	0.314	0.306	0.335	0.444	0.404
Other operational exp. of indl	.0	0	0	0	0
Enterprises					
Other oper. exp. of non-fin. service	e0	0	0	0	0
enterprises					
Share of loss in subsidiaries/JVs,etc.	0	0	0	0	0
Lease equalisation adjustment	0	0	0	0	0
Loss on securitisation of assets/loans	0	0	0	0	0
Fee based financial service expenses	0.015	0.017	0.022	0.025	0.021
Treasury operations expenses	0	0	0	0	0.064
Total provisions	0	0	0.003	0.025	0



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Write-offs	0.006	0.007	0.011	0.004	0.001
Less: Expenses capitalized	0.026	0.03	0.074	0.072	0.029
Less: DRE & expenses charged to	0.024	0	0.03	0.047	0.036
others					



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0	0.005	0.011	0	0.003
0.015	0.012	0.023	0.045	0.052
0	0	0	0	0
g0	0	0	0	0
0.393	0.396	0.416	0.375	0.35
0	0	0	0	0
0.33	0.332	0.365	0.415	0.385
0.821	0.889	0.883	0.735	0.894
0.1559	0.1629	1.687	1.57	1.681
0.1544	0.1617	1.664	1.525	1.629
0.1151	0.1221	1.248	1.15	1.279
	0 0 0.393 0 0.33 0.821 0.1559 0.1544	0.015 0.012 0 0 0 0 0.393 0.396 0 0 0.33 0.332 0.821 0.889 0.1559 0.1629 0.1544 0.1617	0.015 0.012 0.023   0 0 0   g0 0 0   0.393 0.396 0.416   0 0 0   0.33 0.332 0.365   0.821 0.889 0.883   0.1559 0.1629 1.687   0.1544 0.1617 1.664	0.015 0.012 0.023 0.045   0 0 0 0   g0 0 0 0   0.393 0.396 0.416 0.375   0 0 0 0   0.33 0.332 0.365 0.415   0.821 0.889 0.883 0.735   0.1559 0.1629 1.687 1.57   0.1544 0.1617 1.664 1.525

#### **FINDINGS**

- 1. The current year (2024) PBP is found to be 1 year. This shows that the company recovers its investment in 1 year.
- 2.A negative NPV indicates that the project will probably be unprofitable and therefore should be adjusted, if not abandoned altogether.
- 3. The Accounting rate of return for the year 2024 is reduced to 1 year.

## **SUGGESTIONS**

- 1. The shorter the payback period, the sooner the company recovers its cash investment. Whether a cash payback period is good or poor depends on the company's criteria for evaluating projects.
- 2. A higher rate of return indicates that investment made in the particular year has a higher cash inflow in the future.



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3. A negative NPV indicates that the project will probably be unprofitable and therefore should be adjusted, if not abandoned altogether.

#### **CONCLUSION**

Capital budgeting (or investment appraisal) is the structured process an organization uses to decide whether long-term investments—such as new machinery, factories, product lines, or R&D—are worth pursuing. Using techniques such as Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period, management prioritizes projects that best enhance shareholder value by allocating scarce capital to the most profitable options.

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