

A top-down view of a desk with a light-colored wooden surface. In the center is an open notebook with a white cover and lined pages. The left page is a 'MONTHLY BUDGET OVERVIEW' with a table for 'MONTHLY BUDGET' and 'MONTHLY EXPENSES'. The right page is a 'FINANCE TRACKER' with a grid for tracking expenses. A gold pen lies diagonally across the bottom of the notebook. To the left, a small wooden bowl holds several silver paper clips. A grey rectangular object is visible in the top left corner.

# Capital Budgeting

# Meaning of Capital budgeting

- Capital budgeting is a process that businesses use to evaluate potential major projects or investments.
- Building a new plant or taking a large stake in an outside venture are examples of initiatives that typically require capital budgeting before they are approved or rejected by management.

# Techniques of Capital Budgeting

- **Traditional Techniques:**
  - Payback Period Accounting
  - Rate of Return (ARR)
- **Discounted Cash Flow (DCF) Techniques:**
  - Net Present Value (NPV)
  - Internal Rate of Return (IRR)
  - Profitability Index (PI)

# Profitability Index Method

- Profitability Index Method is a Discounted Technique of Capital Budgeting
- It is a method of evaluating Investment Proposals
- PI is the Ratio between the PV of cash project Inflow and PV of cash outflow of the project ,that's why it is also Called Benefit Cost Ratio .
- It is measure the value of a project in term of Rs. 1 or in percentage.

# Selection of Project

- $PVCIF > PVCOF = + NPV$  i.e  $PI > 1$  Project Accepted
- $PVCIF < PVCOF = - NPV$  i.e  $PI < 1$  Project Rejected

Q. The initial Cash outlay of the project is R s. 1,00,000 and its generate cash inflow of R s. 20,000, R s. 40,000, R s. 60,000 & R s. 80,000 in 4 yrs. Assume 10% Rate of Discount calculate Profitability Index and also suggest whether to accept or reject a Project.

Year	Cash Inflows	PVF@10	PVCIF
1	20,000	0.909	18,180
2	40,000	0.826	33,040
3	60,000	0.751	45,060
4	80,000	0.683	27,320

$$\text{Profitability Index} = \frac{\text{PV of future cash flows}}{\text{Initial investment / cash outflows}}$$

- Total PVCIF = 1,23,600 & PVCOF i.e Cost of Inv. 1,00,000
- $1,23,600/1,00,000 = 1.236$
- As the PI is higher than 1, the Project should be accepted

- **Advantages of Profitability Index**

- Simple And Widely Used Method

- Considers Time Value Of Money

- Easy To Make Decisions

- Accurate Rate Of Return

- **Disadvantages**

- Difficult To Estimate Discount Rate

- Possibility Of Incorrect Decision

- Difficult To Make Comparison