



# CAPITAL BUDGETING

Types of  
Investment  
Projects



# TYPES OF INVESTMENT PROJECTS

Replacement or Modernization decisions

Growth or Expansion projects

Diversification projects

New project or New firm

Mandatory projects



# KINDS OF INVESTMENT DECISIONS

Independent projects (Accept /Reject Decisions)

Mutually Exclusive Projects

Contingent Decisions

Capital Rationing Decisions



# CAPITAL BUDGETING PROCESS

Project Generation

Preliminary Screening

Detailed project Evaluation

Project Selection and its Implementation

Control of Capital Expenditure



# CAPITAL BUDGETING : DECISION MAKING PROCEDURE

Estimation of Cost and Benefits of an investment  
Proposal

Estimation of minimum required rate of return

Application of suitable Capital Budgeting technique



# PRINCIPLES OF CASH FLOW ESTIMATIONS

Consider only relevant and incremental cash flows

Calculate cash flows on after tax basis

Ignore sunk cost

Include opportunity costs

Calculate operating cash flows and exclude interest payments

Incorporate changes in working capital investment



# PRINCIPLES OF CASH FLOW ESTIMATIONS

Include side effects of the project

Incorporate anticipated inflation

Add back depreciation and any other non cash item to after tax profit (PAT)



# ESTIMATION OF RELEVANT CASH FLOWS

ESTIMATION OF RELEVANT CASH FLOWS AS FOLLOWS:

*Estimation of Relevant Cash Flows*

**1. Estimation of Initial Cash Outflow:**

- Cost of new asset(s) .....
- + Installation charges .....
- + Any other capital expenditure .....
- + Increase/Decrease in net working capital .....

Total of Initial cash outflow .....

**2. Estimation of Annual Net Operating Cash Inflows**

- Cash flow/Profit before depreciation and tax (PBDT) .....
- Depreciation .....
- Profit before tax (PBT) .....
- Less tax .....
- Profit after tax (PAT or EAT) .....
- + Depreciation (non-cash expenditure) Add back .....
- + Interest payment  $(1 - t)$  .....
- (Only when PAT has been calculated after providing for interest charges) .....
- Any major repair or capital expenditure .....
- $\pm$  Decrease/Increase in net working capital .....

Annual net operating cash inflows .....



# ESTIMATION OF RELEVANT CASH FLOWS

## 3. Estimation of Terminal cash inflow

Annual net operating cash inflow

+ Release of investment in working capital

+ Scrap value of the asset

Terminal cash inflows

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# CONVENTIONAL AND NON CONVENTIONAL CASH FLOWS

**Conventional Cash flows:** initial investment is followed by a series of cash inflows over a period of time.

**Non conventional cash flows:** there are more than one cash flows which is followed by a series of cash inflows over a period of time.