SHERSHAH COLLEGE, SASARAM

FINANCIAL MANAGEMENT

BBA PART II, PAPER VI

CAPITAL BUDGETING

(BY- MR. KUMAR MANGAL SINGH, SHERSHAH COLLEGE SASARAM)

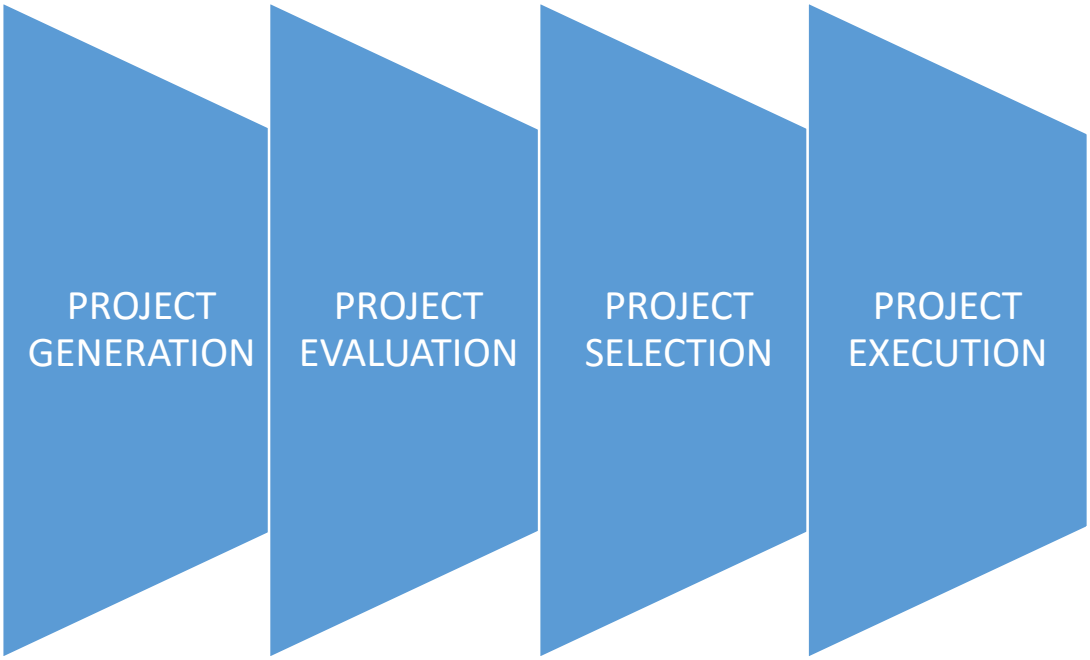
Capital Budgeting: Capital budgeting is the process of making investment decision in long-term assets. It refers to planning the deployment of available capital for the purpose of maximizing the long term profitability of the firm. Capital expenditure incurred today is expected to bring its benefits over a period of time. So, it is the firm's decision to invest its current funds most efficiently in long term activities in anticipation of flow of future benefits over a series of years.

Capital Budgeting involves:-

- Search for new and more profitable investment proposals.
- The making of an economic analysis to determine the profit potential of each investment proposal.

In simple, capital budgeting refers to the total process of generating, evaluating, selecting & following up on capital expenditure alternatives. It may be defined as the firm's formal process for acquisition & investment of capital. It involves firm's decision to invest its current funds for addition, disposition, modification & replacement of fixed assets. For eg. Introduction of new project, expansion of business etc.

Capital Budgeting process:-



Project generation:- The investment proposals may fall into one of the following categories –

I. Proposal to add new project to the product line.
II. Proposal to expand capacity in existing product lines.
III. Proposal to reduce the cost of the output of the existing products without altering the scale of operation.

The investment proposals of any type can originate at any level from top management level to the level of workers.

Project Evaluation :- Project evaluation involves two steps –

I. Estimation of benefits and costs. Benefits and costs must be measured in terms of cash flows.
II. Selection of an appropriate criterion to judge the desirability of the project.

Project selection :- Projects are screened at multiple levels and then the final approval of the project may generally rest on top mgt.

Project Execution :- The formal planning for the appropriation of fund is called the capital budget. The project execution committee or the top mgt

must ensure that the funds are spent accordance with appropriation made in the capital budget.

Techniques For Evaluating Projects:- The capital budgeting appraisal methods are techniques of evaluation of investment proposal which will help the company to decide upon the desirability of an investment proposal depending upon their relative income, generating capacity and rank them in order of their desirability. These methods provide the company a set of norms on the basis of which either it has to accept or reject the investment proposals.

It is absolutely necessary that the technique adopted for evaluating projects should be sound one. The most widely accepted techniques used in estimating the cost-returns of investment projects can be grouped under two categories.

1. Traditional methods
2. Discounted Cash flow methods

- ***Traditional Methods:-***

These methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. These will not take into account the concept of 'time value of money', which is a significant factor to determine the desirability of a project in terms of present value.

1. **Pay-back period method:-** It is the most popular and widely recognized traditional method of evaluating the investment proposals. It can be defined, as 'the number of years required to recover the original cash out lay invested in a project'.

According to Weston & Brigham, “The payback period is the number of years it takes the firm to recover its original investment by net returns before depreciation, but after taxes”.

According to James. C. Vanhorne, “The payback period is the number of years required to recover initial cash investment.

$$\textbf{Payback Period} = \frac{\textbf{Initial investment}}{\textbf{Annual cash inflow}}$$

Merits:-

I. It is one of the earliest methods of evaluating the investment projects.
II. It is simple to understand and to compute.
III. It does not involve any cost for computation of the payback period
IV. It is one of the widely used methods in small scale industry sector
V. It can be computed on the basis of accounting information available from the books.

Demerits:-

I. This method fails to take into account the cash flows received by the company after the payback period.
II. It doesn’t take into account the interest factor involved in an investment outlay.
III. It is not consistent with the objective of maximizing the market value of the company’s share.
IV. It fails to consider the pattern of cash inflows i. e., the magnitude and timing of cash inflows.

2. **Accounting (or) Average rate of return method (ARR):**- It is an accounting method, which uses the accounting information repeated by the financial statements to measure the probability of an investment proposal. It can be determined by dividing the average income after taxes by the average investment i.e., the average book value after depreciation.

According to ‘Soloman’, accounting rate of return on an investment can be calculated as the ratio of accounting net income to the initial investment, i.e.,

$$\boldsymbol{ARR = \frac{Average\ net\ income\ after\ taxes}{Average\ investment} \times 100}$$

$$\mathbf{Average\ income\ after\ taxes = \frac{Total\ income\ after\ taxes}{No.\ of\ years}}$$

$$\mathbf{Average\ investment = \frac{Total\ investment}{2}}$$

Note:- On the basis of this method, the company can select all those projects who’s ARR is higher than the minimum rate established by the company. It can reject the projects with an ARR lower than the expected rate of return. This method can also help the management to rank the proposal on the basis of ARR. A highest rank will be given to a project with highest ARR, where as a lowest rank to a project with lowest ARR.

Merits:-

I. It is very simple to understand and calculate.
II. It can be readily computed with the help of the available accounting data.
III. It uses the entire stream of earning to calculate the ARR.

Demerits:-

I. It is not based on cash flows generated by a project.
II. This method does not consider the objective of wealth maximization.
III. IT ignores the length of the projects useful life.
IV. It does not take into account the fact that the profits can be re-invested.