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Capital expenditure decision: An overview

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Abstract
This paper is devoted to a discussion of the principles and techniques of capital expenditure decisions Capital expenditure decisions pertain to fixed/ long term assets which refer to assets which are in operation and yield a return, over a period of time, usually exceeding one year. The need and urgency of capital expenditure arises due to several factors like growth in the size and scale of the enterprise, promotion of new and improved products, expenditure on research and innovations, the need to fight cut-throat competition, cost reduction program, carrying out special campaigns, and requirement for safety etc. With the increase in mechanization and automation, capital expenditure decisions are often large and are more or less permanently blocked in the investment. They are, therefore, long term investment decisions or capital budgeting decision.
They are irreversible decisions and are taken by the top management. The long term capital expenditure budget become an instrument of the long term policy of the enterprise.

Keywords: capital expenditure techniques, payback period, cash outlays

Introduction
A business is primarily faced with the choice of two types of investment decisions i.e.

- Short term investment decisions which relate to investments in current assets, the decisions area is covered by working capital management and
- Long term investments in fixed assets and projects which benefit for long time to come always more than one accounting period. The decision area referred above is known as capital expenditure decisions. Capital budgeting is the technique for making long term planning decisions for investment and their financing. Decision of capital expenditure is most difficult, because the future is to be foreseen is distant and hard to perceive. It is true that unknowable factors are many. Still all known factors should be collected and properly measured before a decision is reached.

The capital budgeting decisions involves a current cash outlay or a series of cash outlays in return for an anticipated flow of future benefits. In other words, the system of capital budgeting is employed to evaluate long term expenditure decisions which involves current outlays but the benefits accrue in the future years.

For example
The deployment of finances of additional plant and equipment cannot be recovered in the short run. Such investment may affect revenues for the time period ranging from 2 to 20 years or more. Such investment decision involves a careful consideration of various factors viz., profitability, safety, liquidity, and solvency etc.

Significance
Capital budgeting decisions are of paramount importance in financial decision making. In the first place, such decisions affect the profitability of a firm. They also have a bearing on the competitive position of the enterprise mainly because of the fact that they relate to fixed assets. The fixed assets represent the true earning assets of the firm. They enable the firm to generate finished goods that can ultimately be sold for profit. Capital expenditure decisions determine the future density of the company. An opportune investment decision can yield spectacular returns. On the other hand, an ill advised and incorrect decision can endanger the very survival of the large firms. Secondly, a capital expenditure decision has its effects over a long time span and inevitably affects the company's future structure. Thirdly, capital investment decisions, once made are not easily reversible without much financial loss to the firm because there may be no market for second hand plant and equipment and their conversations to other uses may not be financially viable.
Finally capital investment involves cost and the majority of the firms have scare capital resources. The overall significance of capital expenditure planning can be viewed as below-

- Modern industrial organization is characterized by long scale production and intensive mechanization. The demand for capital equipment is ever increasing, calling for continuous investment in fixed assets.
- The need for research and innovations has been duly recognized. In a competitive economy, it is likely to lower costs and hence increase profitability. The advancements in science and technology have greatly facilitated the task of research.

Manual labor is being constantly replaced by machines due to greater efficiency, lower cost and large production. Standardization and rising wages rates have encouraged mechanization. A cautious approach is needed towards expenditure decisions.

- The decentralization of industry has called for the balanced development of capital outlays. This necessitates the proper control and planning of capital expenditure.

Process of capital expenditure decision

Capital budgeting is a complex process as it involves decisions relating to the investment of current funds for benefit to the achieved in future and the future is always uncertain. However, the following procedure may be adopted in the process of capital budgeting.

1) Identification of investment proposals:-The capital budgeting process begins with identification of investment proposals. The proposal or the idea about potential investment opportunities may originate from the top management or may come from the rank and file worker of any department or from any officer of the organization. The departmental head analyses the various proposals in the light of the corporate strategies and submits the suitable proposals to the capital expenditure planning committee.
2) Screening the proposals:-The expenditure planning committee screens the various proposals received from different departments. The committee views these proposals from various angles to ensure that these are in accordance with the corporate strategies and also do not lead to departmental imbalance.
3) Evaluation of various proposals:-The next step in the capital budgetin process is to evaluate the profitability of various proposals. There are many methods which may be used for this purpose such as pay back period method, rate of return method, net present value method, internal rate of return method etc.
4) Fixing Priorities:-After evaluating various proposals, the unprofitable or uneconomic proposals may be rejected straight way. But it may not be possible for the firm to invest immediately in all the acceptable proposals due to limitations of funds. Hence, it is very essential to rank the various proposals and to establish priorities after considering urgency risk and profitability involved therein.
5) Final approval and preparation of capital expenditure budget:-Proposals meeting the evaluation and other criteria are finally approved to be included in the capital expenditure budget. However, proposals involving smaller investment may be incurred on fixed assets during the budget period.
6) Implementing proposal:-Preparation of capital expenditure budgeting and incorporation of a particular proposal in the budget does itself authorize to go ahead with the implementation of the project. A request for authority to spend the amount should further be made to the capital expenditure committee which may like to review the profitability of the project in the charged circumstances.
7) Performance Review:-The last stage in the process of capital budgeting is the evaluation of the performance of the project. The evaluation is made through post completion audit by way of comparison of actual expenditure on the project with the budgeted one, and also by comparing the actual return from the variances, if any should be looked in to and the causes of the same be identified so that corrective action may be taken in future.

Kinds of capital expenditure decisions

The overall objective of capital budgeting is to maximize the profitability of a firm or the return on investment. This objective can be achieved either by increasing the revenues or by reducing costs. Thus, capital budgeting decisions can be broadly classified into two categories.

1) Those which increase revenue
2) Those which reduces costs.

The first categories of capital budgeting decisions are expected to increase revenue of the firm through expansion of the production capacity or size of operations by adding a new product line. The second category increases the earnings of the firm by reducing costs and includes decisions relating to replacement of obsolete, outmoded or worm out assets. Both categories of above decisions involve investment in fixed assets but the basic difference between the two decisions lies in the fact that increasing revenue investment decisions are subjected to more uncertainty as compared to cost reducing investment decisions.

Further, in view of the investment proposals under consideration, capital budgeting decisions may also be classified as:

1) Accept reject decisions
2) Mutually exclusive project decisions
3) Capital rationing decision

Accept reject decision

Accept reject decisions relate to independent projects which do not compete with one another. Such decisions are generally taken on the basis of minimum return on investment. All those proposals which yield a rate of return higher than the minimum required rate of return or the cost of capital are accepted and the rest are rejected. If the proposal is accepted the firm makes investment in it and if it is rejected the firm does not invest in the same.

Mutually exclusive project decision

Such decisions relate proposals which compete with one another in such way that acceptance of the other. Thus, one of the proposals is selected at the cost of the other.

Capital Rationing Decision

A firm may have several profitable investment proposals but only limited funds to invest. In such a case, these various investments proposals compete for limited funds and thus the firm has to ration them. The firm selects the combination of proposals that will yield the greatest profitability by ranking them in descending order of their profitability.

Factors influencing capital expenditure decisions

There are many factors, financial as well as non-financial which influence the capital expenditure decisions. The crucial factor that influences the capital expenditure decisions is the profitability of the proposal. Yet, there are many other factors which have to be taken into consideration while taking a capital expenditure. These are:

- **Urgency:** Sometimes an investment is to be made due to an urgency for the survival of firm or to avoid heavy losses. In such circumstances, the proper evaluation of the proposal cannot be made through profitability tests. The

examples of such an urgency are: breakdown of some plant and machinery, fire, accident etc.

- **Degree of certainty:** profitability is directly related to risk, higher the profits, greater is the risk or uncertainty. Sometimes, a project with some lower profitability may be selected due to constant flow of income as compared to another project with an irregular and uncertain flow of income.
- **Intangible factors:** Sometimes, a capital expenditure has to be made due to certain emotional and intangible factors such as safety and welfare of workers, prestigious project, social welfare, goodwill of the firm etc.
- **Legal factors:** An investment which is required by the provisions of law is solely influenced by this factor and although the project may not be profitable yet the investment has to be made.
- **Availability of funds:** As the capital expenditure generally requires large funds, the availability of funds is an important factor that influences the capital budgeting decisions. A project, however profitable, may not be taken for want of funds and a project with a lesser profitability may be sometimes preferred due to lesser payback period for want of liquidity.
- **Future earnings:** A project may not be profitable as compared to another today, but it may promise better future earnings. In such cases, it may preferred to increase earnings.
- **Obsolescence:** In case of projects with higher rate of payback period may be preferred than one which may have higher profitability but still longer payback period.
- **Research and development projects:** It is necessary for the business to invest in research and development projects though it may not look to be profitable investment.
- **Cost considerations:** Cost of the capital project, cost of capital etc. are other considerations involved in the capital budgeting decisions.

Methods of capital expenditure decision

At each point of time a business firm has a number of proposals regarding various projects in which it can invest funds. But the funds available with the firm are always limited and it is not possible to invest funds in all the proposals at a time. Hence, It is very essential to select from amongst the various competing proposals, those which give the highest benefits. Yet the risk involved in the proposal cannot be ignored because profitability and risk are directly related, i.e. higher the profitability, the greater the risk and vice-versa.

These are many methods of evaluating profitability of capital investment proposals. The various commonly used methods are as follows:

Traditional methods

Time adjusted methods

Traditional methods

Average rate of return: The average rate of return (ARR) method of evaluating proposed capital expenditure is also known as accounting rate of return method. It is based upon accounting information rather than cash flow.

Payback method

The payback method is based on the assumption that the degree of risk associated with the fixed asset is the length of time required to recover the investment from the firm's cash flow. The payback period is defined as the length of time required for the stream of cash.

Time adjusted methods

Present value (PV): The present value or the discounted cash flow procedure recognizes that cash flow streams at different time periods differ in value and can be compared only when they are expressed in terms of a common denominator, that is present values. It thus, takes into account the time value of money. In this method, all cash flows are expressed in terms of their present values.

Net present value method: The first DCF/PV technique is the NPV. NPV may be defined as the summation of the present values of cash proceeds in each year minus the summation of present value of the net cash outflows in each year.

The decision rule for a project under NPV is to accept the project if the NPV is positive and reject if it is negative.

Symbolically

(i) NPV> zero accept

(ii) NPV<zero reject

Internal rate of return method

The second discounted cash flows or time adjusted method for appraising capital investment decisions is the internal rate of return. This technique is also known as yield on investment, marginal efficiency of capital. The IRR is based on facts which are internal to the proposal. The IRR depends entirely on the initial outlay and the cash proceeds of the project which is being evaluated for acceptance or rejection.

Conclusion

The analytical techniques are to some extent estimate even with all the knowledgeable factors collected and duly analyzed, there are many unknown factors which cannot be forseen, controlled or avoided.

Financial planning for liquidity and profitability is fraught with many of the same risks that apply to other phases of business activity. Preparation is essential for the same types of adjustments. The risk of faulty projection of financial requirements are particularly great in the planning of capital expenditure for long term fixed asset expansion.

It is necessary to look for some non-figure aspects of the projects under consideration. Managers should not fail to consider that one project may fit in better with a company's goal or that effect on employee morale would be profound if a new technique is introduced or a new technique is used.

Overall we observed that management' primary goal is to maximize the wealth of the firm's shareholders capital budgeting theory prescribes decision rules in keeping with this objective. Methods used to review investment decisions should be consistent with those used for selection. If DCF methods are theoretically correct for selection, methods which consider the time value of money should be used to monitor implemented projects and to evaluate managerial performance.

References

1. Aggarwal Aggarwal Jain. Management Accounting Ramesh Book Depot, 2005.
2. Dr. SN Maheshwari. Fundamentals of Financial Management Sultan Chand & Sons., New Delhi, 2005.
3. Dr. SP Gupta. Management Accounting Sahitya Bhawan, Agra, 1999.
4. IM Pandey. Financial Management Vikas Publishing House Pvt. Ltd. New Delhi, 2004.
5. Khan MY, PK Jain. Basic Financial Management Tata Mcgraw Hill Publishing Company Ltd. New Delhi, 2006.
6. NK Kulshrestha. Management Accounting Concept and Cases Tata McGraw - Hill Publishing Company Limited, New Delhi, 1996.
7. Prasanna Chandra. Financial Management: Theory and Practice Tata McGraw-Hill Publishing Company Limited, New Delhi, 2006.
8. Rk Sharma, Shashi K Gupta. Management Accounting: Principles and Practice. Kalyani Publishes, New Delhi, 2000.
9. RP Rustagi. Financial Management Galgotia Publishing Company New Delhi, 1999.
10. SN Maheshwari, SN Mittal. Management Accounting: Principles and Practice Shri Mahavir Book Depot, New Delhi, 2006.
11. VK Saxena, CD Vashist. Advanced Cost and Management Accounting Sultan Chand & Sons, New Delhi, 1994.