

## **CHAPTER 5**

### **CAPITAL PLANNING AND BUDEGTING**

#### **CONCEPT OF PROJECT FINANCE**

No universally accepted definition of the term "Project financing".. different people use it in different senses. Project financing refers to a financing in which lenders to a project look primarily to the cash flow (revenues) and assets of that project as the source of payment of their loans. In other words, Project finance is the long term financing of infrastructure and industrial projects based upon the projected cash flows of the project rather than the balance sheets of the project sponsors. Usually, a project financing structure involves a number of equity investors, known as sponsors, as well as a syndicate of banks that provide loans to the operation. The loans are most commonly non-recourse loans, which are secured by the project assets and paid entirely from project cash flow, rather than from the general assets or creditworthiness of the project sponsors, a decision in part supported by financial modeling.

Project financing differs from conventional financing in the following aspects:

- In conventional financing, cash flow from different assets and business are co-mingled. A creditor makes an assessment of repayment of his loan by looking all the cash flows and resources of the borrower. In project financing, cash flow from the project related assets alone are considered for assessing the repaying capacity. Even if one has already established many projects, for financing a new project promoted by him, the cash flows from the proposed new project are alone taken into account for carrying out the viability study.
- In conventional financing, end use of the borrowed funds is not strictly monitored by the lenders. In project financing, the creditors ensure proper utilization of funds and creation of assets as envisaged in the project proposal. Funds are also released in stages as and when assets are credited.
- In conventional financing, the creditors are not interested in monitoring the performance of the enterprise and they are interested only in their money getting repaid in one way or the other. Project financiers are keen to watch the performance of the enterprise and suggest/take remedial measures as and when required to ensure that project repays the debt out of its cash generations.

#### **CAPITAL BUDGETING**

Capital budgeting decision is the investment decisions of a firm. It may be defined as the firms' decision to invest its current funds most efficiently in long term

activities in anticipation of an expected flow of future benefit over a series of years. The long term activities are those activities which affects firms' operations beyond the one year period.

### **Nature of investment decisions**

Investments are of two types investment in fixed assets and investment in current assets. Investments in the fixed assets, which have long terms implications for the firms in terms of expenditure and benefit is evaluated as capital budgeting decision. The capital budgeting excludes investment required for current assets.

Thus, generally, investment decision (or capital budgeting decisions). of a firm include followings types of investment:

- Addition, disposition (placing in order), modification, and replacement of assets in a long term basis.
- Introducing a new product
- Expanding the business

All the above types of investment decisions involve comparison between different alternatives or investment proposals. Each of these investment proposals should be evaluated on the basis of a criterion that is compatible with the objective of maximizing the market value of the firm. Any such criterion will involve the use of the concept of the minimum rate of return required by the investor. The market value of the firm will increase if the investment project yields a rate higher than the minimum expected by the investor

Followings are some of the important features of capital budgeting

- The exchange of current funds for future benefit (i,e funds are invested only for future benefit)
- Funds are invested in long terms activities
- The future benefits will occur to the firms over a series of years (i.e. funds are invested only if future benefits occur over a series of years)

### **Importance of Capital Budgeting**

Since capital budgeting decisions are among the most crucial and critical business decisions, special care should be taken in their treatment. The followings are the reasons for placing greater emphasis on the capital budgeting decisions,

#### **1. They have long term implications for the firm, and influence its risks complexion.**

First, the effect of capital budgeting decisions will have long term implications for the firm. Firms' decision to invest in long term assets has a decisive influence on

the rate and direction of its growth. A wrong decision can provide disasters for the long term survival of the firm. For example, unwanted expansion of assets will result in unnecessary heavy operating costs.

**2. They involve commitment of large amount of funds.**

Secondly, the capital budgeting decisions involve large amount of funds for long period. Such commitment may also change the risk complexions of the firm. If investment increase and the earning are fluctuating the firm will become more risky.

**3. They are irreversible decisions.**

Thirdly, in most of the cases capital budgeting decisions are irreversible. The reason for irreversibility of the capital budgeting decision is that it is very difficult to find a market for such capital goods. The only alternative available is to scrap the asset, and incur heavy loss.

**4. They are among the most difficult decision to make.**

Finally, the capital budgeting decisions are also important because they are more difficult to make. These decisions require an assessment of future events which are uncertain. It is really a complex problem to estimate the future benefits and costs, mainly due to economic, political social and technological forces.

**Capital Budgeting Process**

Capital budgeting process involves the following steps:

- Project generation
- Project evaluation
- Project selection
- Project execution

These four steps are necessary, but more may be added to make the process more effective.

As the capital budgeting decision involve commitment of large amount of funds for longer period, often irreversible, such decisions need to be made by the highest level of management. This means substantial part of the process should be confined to the top management, and when some of its parts are delegated, a system of effective control by the top management must be evolved.

Following paragraphs elaborates steps of capital budgeting process.

- **Project generation**

Any project needs a written material - proposal to initiate dialogue on funding. So, project generation is development of proposal for investment decision. The investment proposal of any type can originate at any level - from top management level to the level of worker. The proposal may focus in adding new equipment for increasing the rate of production, or it may focus to reduce the cost of production. There may be several kind of proposal. Such proposal may originate systematically or haphazardly. In view of the fact that enough investment proposals should be generated to employ the firm's fund fully and efficiently, a systematic procedure for generating proposals must be involved. The healthy firm is one in which there is a continuous flow of profitable investment proposals.

- **Project evaluation**

While evaluating a project, following point should be considered

- (a) Estimate on cash flow, which is difficult, as future is uncertain,
- (b) Selection criteria to judge the project viability
- (c) Estimated benefit over cost

Project evolution is done by expert groups. It involves two steps (a) estimation of benefit and costs, the benefits and costs must be measure in terms of cash flow, and (b) selection of appropriate criterion to judge the viability of the project

While evaluating a project, the risk associated with it should also be properly handled, and should be taken into account in the decision process. All care must be taken in selecting criteria to judge the projects' viability. As far as possible, the criterion should be consistent with the firms' objective of maximizing its market value. To achieve this purpose, time value of money must be recognized.

### **Project selection**

No standard administrative procedure can be laid down for selecting the project and approving the investment proposal. The screening and selection procedure may vary from firm to firm. Since the capital budgeting decisions are of considerable significance for several reasons, the final approval of the project may generally rest on top management. However, projects are screened at multiple levels. Sometimes the top management may delegate authority to approve certain type of investment proposals.

### **Project execution**

After the final selection of the investment proposal, the funds are appropriated for capital expenditure. The formal plan for appropriation of funds is called capital

budget. Such plans are prepared or approved by the project execution committee or the top management.

The project execution committee or the top management must ensure that funds are spent in accordance with the appropriation made in the capital budget. Funds for the purpose of project execution must be spent only after seeking formal permission from the controller. For effective control, monthly budget reports are prepared to show clearly the amount appropriated, amount spent, and amount not spent.

Systematic procedure is needed to review the project during its ongoing process and also after completion. The follow-up comparison of actual performance with original estimates not only ensures better forecasting but also helps to sharpen the techniques for improving future forecasts.

### **Basis for planning capital structure**

Planning of capital structure should be done in such a way that long-term market price per share should be maximized and interest of different groups of people is to be met.

- Promoters/Investors (equity shareholders)
- Creditors
- Employees
- Society and government

### **Important features of a sound capital structure**

A sound or appropriate capital structure should have following features:

- **Profitability:** The capital structure of the company should be most advantageous. Within the constraints, maximum use of leverage (influence on ESP caused by debt or preference share capital, and equity share) at a minimum cost should be made
- **Solvency:** The use of excessive debt threatens the solvency of the company. Debt should be added only point up to a level which does not add substantial risk to the company.
- **Flexibility:** Flexibility means the firm's ability to decide on its capital structure to meet its dynamic need. So, the company's capital structure should be flexible enough to meet the dynamic need of the company. Further, the company should be able to adopt its capital structure without undue delay and cost.

- **Conservation:** Conservatism deals with cash flow ability of the company. To some extent, the capital structure of a firm should also be conservative in the sense that the debt capacity of the company should not be exceeded. The debt capacity of a company depends on its ability to generate future cash flow.
- **Control:** The capital structure should involve minimum risk of loss of control of the company. In other word, capital structure should be planned in such a way that the company should always be able to keep control on it.

For example, in designing the capital structure, sometime the existing management does not want to loose its control over the company, especially from the perspective of both the governance and management. So, they may wish to have small and ordinary shareholders. Such share holders are widely scattered, and most of them are not interested in taking active part in the company's management. They do not have time and money to attend the meetings. They are simply interested in dividends and the price of the share. If they are not satisfied with, the management of the company they will sell their shares. Thus, the best way to ensure control and to have the confidence of the shareholders is to manage the company most efficiently. The risk of loss of control can be reduced by distributing shares widely and in small lots

These are the general features of a sound capital structure. Sometimes, depending on the characteristics of a company, we may need to consider some additional features for a sound capital structure. Further, emphasis give to above features may vary from company to company.

## **FIXED AND FLEXIBLE BUDGETS**

The budget can be understood as a quantitative plan that acts as an estimate of future operation. Based on the Capacity, there are two types of budgets prepared in cost accounting, namely, fixed budget and flexible budget. Fixed Budget is a budget that remains constant, irrespective of the levels of activity, i.e. the budget is created for a standard volume of production. On the contrary,

Flexible Budget can be understood as the budget created for different production levels or capacity utilization, i.e. it changes in accordance with the activity level. While fixed budget operates in only production level and under only one set of condition, flexible budget comprises of several budgets and works in different conditions.

When one is working on a budget, he/she should have a thorough knowledge of the differences between fixed budget and flexible budget, to give desired results.

### **Definition of Fixed Budget**

For understanding the term fixed budget, first, know the meaning of the two words fixed and budget. Fixed means firm or stable, and budget is an estimate of economic activities of the business. So in this way, Fixed Budget refers to an estimate of pre-determined incomes and expenditures, which once prepared, does not change with the variations in the activity levels achieved. It is also known as Static Budget.

Fixed Budget is best suited for the organizations where there are fewer chances of fluctuations in the prevailing conditions or if the organization is not influenced by the change in the external factors and the forecasting can be done easily to give close results. It also works as a yardstick to control costs.

Fixed Budget helps the management to set the revenues and expenses for the period, but it lacks accuracy because it is not always possible to correctly determine future needs and requirements. Further, it operates only on a single activity level under only one condition. While framing the fixed budget, it is assumed that the existing conditions are not going to be changed shortly, which proves untrue. So in this way, it difficult to measure the performance, efficiency or capacity.

### **Definition of Flexible Budget**

Flexible means easily adjustable, and Budget refers to an anticipated plan made for the financial activities of the entity. Therefore, the flexible budget is a financial plan created for different activity levels. It can be freely adjusted or re-casted on the basis of output produced. It is logical and practical because the cost can be easily determined at various activity levels.

While preparing a flexible budget, first of all, the costs are divided into three major segments, namely: fixed, variable and semi-variable where semi- variable costs are further classified into fixed and variable cost, and then the budget is designed accordingly. Some budgets are prepared for alternative output levels to show the amount of expense to be reached at each level of activity.

Flexible Budget is best suited for the organization where there is a high degree of variability in sales and productions, or the industries which can be easily affected

by the external factors or fluctuations in the market conditions are relatively high etc.

### **Key Differences between Fixed Budget and Flexible Budget**

The following are the major differences between fixed budget and flexible budget:

1. The budget, which remains constant, regardless of the actual output levels is known as Fixed Budget. The flexible budget is a budget which can be easily adjusted according to the output levels.
2. Fixed Budget is static in nature while Flexible Budget is dynamic.
3. Fixed Budget operates in only one activity level, but Flexible Budget can be operated on multiple levels of output.
4. Fixed Budget is based on the assumption, whereas Flexible Budget is realistic.
5. Fixed Budget is inelastic, as it cannot be re-casted as per the actual output. Conversely, the Flexible budget is elastic because it can be easily adjusted according to the volume of the production.
6. Flexible Budget proves more accurate to evaluate the performance, capacity and efficiency of the activity level compared to Fixed Budget.

### **Conclusion**

Fixed Budget is mainly based on assumptions which are unrealistic and so this is not applicable to business concerns, but if we talk about Flexible Budget, it is more practicable. The former does not help to make a comparison if the actual and budgeted outputs differ, but the latter proves to be helpful to judge the performance by comparing actual output with the budgeted targets. Cost Ascertainment is also not possible in case of fixed budget if the actual and budgeted levels of activity vary and the same can be easily determined in the case of a flexible budget.

### **Introduction to budgetary Control**

Meaning:

Budgetary control is the process of determining various actual results with budgeted figures for the enterprise for the future period and standards set then comparing the budgeted figures with the actual performance for calculating variances, if any. First of all, budgets are prepared and then actual results are recorded.



The comparison of budgeted and actual figures will enable the management to find out discrepancies and take remedial measures at a proper time. The budgetary control is a continuous process which helps in planning and co-ordination. It provides a method of control too. A budget is a means and budgetary control is the end-result.

From the above given definitions it is clear that budgetary control involves the follows:

- (a) The objects are set by preparing budgets.
- (b) The business is divided into various responsibility centers for preparing various budgets.
- (c) The actual figures are recorded.
- (d) The budgeted and actual figures are compared for studying the performance of different cost centers.
- (e) If actual performance is less than the budgeted norms, a remedial action is taken immediately.

The main objectives of budgetary control are the follows:

1. To ensure planning for future by setting up various budgets, the requirements and expected performance of the enterprise are anticipated.
2. To operate various cost centers and departments with efficiency and economy.
3. Elimination of wastes and increase in profitability.
4. To anticipate capital expenditure for future.
5. To centralize the control system.
6. Correction of deviations from the established standards.
7. Fixation of responsibility of various individuals in the organization.

**Essentials of Budgetary Control:**

There are certain steps which are necessary for the successful implementation budgetary control system.

These are as follows:

1. Organization for Budgetary Control
2. Budget Centers
3. Budget Mammal
4. Budget Officer
5. Budget Committee
6. Budget Period
7. Determination of Key Factor.

#### 1. Organization for Budgetary Control:

The proper organization is essential for the successful preparation, maintenance and administration of budgets. A Budgetary Committee is formed, which comprises the departmental heads of various departments. All the functional heads are entrusted with the responsibility of ensuring proper implementation of their respective departmental budgets.

The Chief Executive is the overall in-charge of budgetary system. He constitutes a budget committee for preparing realistic budgets A budget officer is the convener of the budget committee who co-ordinates the budgets of different departments. The managers of different departments are made responsible for their departmental budgets.

#### 2. Budget Centers:

A budget centre is that part of the organization for which the budget is prepared. A budget centre may be a department, section of a department or any other part of the department. The establishment of budget centers is essential for covering all parts of the organization. The budget centers are also necessary for cost control purposes. The appraisal performance of different parts of the organization becomes easy when different centers are established.

### 3. Budget Manual:

A budget manual is a document which spells out the duties and also the responsibilities of various executives concerned with the budgets. It specifies the relations amongst various functionaries.

### 4. Budget Officer:

The Chief Executive, who is at the top of the organization, appoints some person as Budget Officer. The budget officer is empowered to scrutinize the budgets prepared by different functional heads and to make changes in them, if the situations so demand. The actual performance of different departments is communicated to the Budget Officer. He determines the deviations in the budgets and the actual performance and takes necessary steps to rectify the deficiencies, if any.

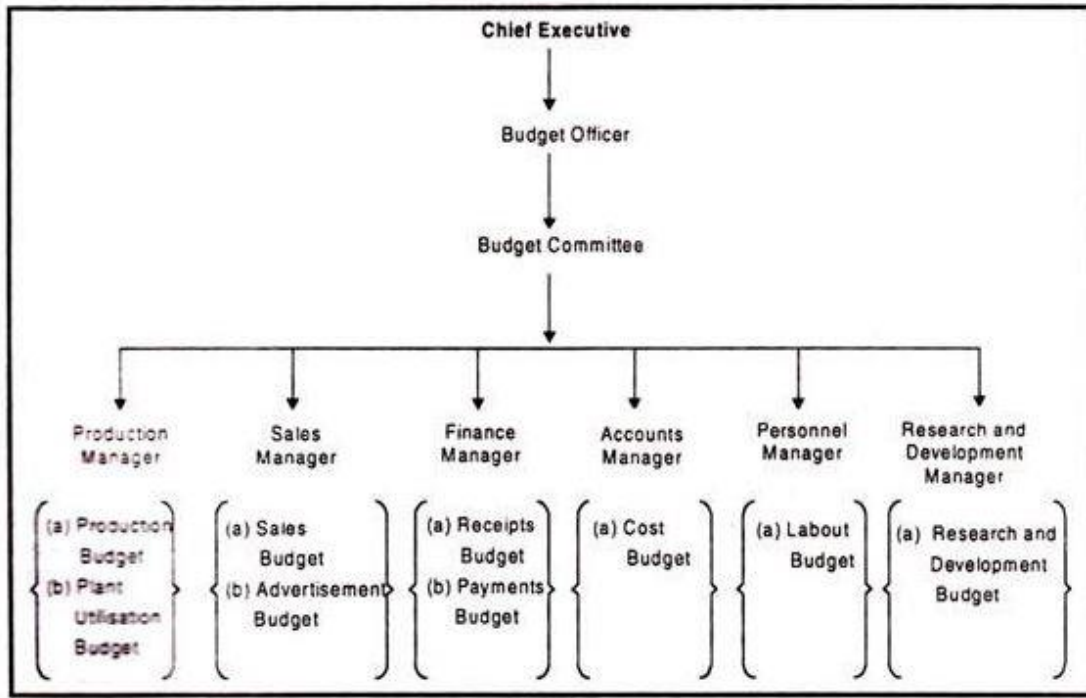
He works as a coordinator among different departments and monitors the relevant information. He also informs the top management about the performance of different departments. The budget officer will be able to carry out his work fully well only if he is conversant with the working of all the departments.

### 5. Budget Committee:

In small-scale concerns the accountant is made responsible for preparation and implementation of budgets. In large-scale concerns a committee known as Budget Committee is formed. The heads of all the important departments are made members of this committee. The Committee is responsible for preparation and execution of budgets. The members of this committee put up the case of their respective departments and help the committee to take collective decisions if necessary. The Budget Officer acts as convener of this committee.

### 6. Budget Period:

A budget period is the length of time for which a budget is prepared and employed. The budget period depends upon a number of factors. It may be different for different industries or even it may be different in the same industry or business.



### **Advantages of Budgetary Control:**

The budgetary control system help in fixing the goals for the organization as whole and concerted efforts are made for its achievements. It enables 'economies in the enterprise.

### **Some of the advantages of budgetary control are:**

#### **1. Maximization of Profits:**

The budgetary control aims at the maximization of profits of the enterprise. To achieve this aim, a proper planning and co ordination of different functions is undertaken. There is a proper control over various capital and revenue expenditures. The resources are put to the best possible use.

#### **2. Co-ordination:**

The working of different departments and sectors is properly coordinated. The budgets of different departments have a bearing on one another. The co-ordination of various executives and subordinates is necessary for achieving budgeted targets.

### 3. Specific Aims:

The plans, policies and goals are decided by the top management. All efforts are put together to reach the common goal, of the organization. Every department is given a target to be achieved. The efforts are directed towards achieving some specific aims. If there is no definite aim then the efforts will be wasted in pursuing different aims.

### 4. Tool for Measuring Performance:

By providing targets to various departments, budgetary control provides a tool for measuring managerial performance. The budgeted targets are compared to actual results and deviations are determined. The performance of each department is reported to the top management. This system enables the introduction of management by exception.

### 5. Economy:

The planning of expenditure will be systematic and there will be economy in spending. The finances will be put to optimum use. The benefits derived for the concern will ultimately extend to industry and then to national economy. The national resources will be used economically and wastage will be eliminated.

### 6. Determining Weaknesses:

The deviations in budgeted and actual performance will enable the determination of weak spots. Efforts are concentrated on those aspects where performance is less than the stipulated.

### 7. Corrective Action:

The management will be able to take corrective measures whenever there is a discrepancy in performance. The deviations will be regularly reported so that necessary action is taken at the earliest. In the absence of a budgetary control system the deviations can be determined only at the end of the financial period.

### 8. Consciousness:

It creates budget consciousness among the employees. By fixing targets for the employees, they are made conscious of their responsibility. Everybody knows what he is expected to do and he continues with his work uninterrupted.

## 9. Reduces Costs:

In the present day competitive world budgetary control has a significant role to play. Every businessman tries to reduce the cost of production for increasing sales. He tries to have those combinations of products where profitability is more.

## 10. Introduction of Incentive Schemes:

Budgetary control system also enables the introduction of incentive schemes of remuneration. The comparison of budgeted and actual performance will enable the use of such schemes.

### **Limitations of Budgetary Control:**

Despite of many good points of budgetary control there are some limitations of this system.

#### **Some of the limitations are discussed as follows:**

##### 1. Uncertain Future:

The budgets are prepared for the future period. Despite best estimates made for the future, the predictions may not always come true. The future is always uncertain and the situation which is presumed to prevail in future may change. The change in future conditions upsets the budgets which have to be prepared on the basis of certain assumptions. The future uncertainties reduce the utility of budgetary control system.

##### 2. Budgetary Revision Required:

Budgets are prepared on the assumptions that certain conditions will prevail. Because of future uncertainties, assumed conditions may not prevail necessitating the revision of budgetary targets. The frequent revision of targets will reduce the value of budgets and revisions involve huge expenditures too.

##### 3. Discourage Efficient Persons:

Under budgetary control system the targets are given to every person in the organization. The common tendency of people is to achieve the targets only. There may be some efficient persons who can exceed the targets but they will also feel

contented by reaching the targets. So budgets may serve as constraints on managerial initiatives.

#### 4. Problem of Co-ordination:

The success of budgetary control depends upon the co-ordination among different departments. The performance of one department affects the results of other departments. To overcome the problem of coordination a Budgetary Officer is needed. Every concern cannot afford to appoint a Budgetary Officer. The lack of co-ordination among different departments results in poor performance.

#### 5. Conflict among Different Departments:

Budgetary control may lead to conflicts among functional departments. Every departmental head worries for his department goals without thinking of business goal. Every department tries to get maximum allocation of funds and this raises a conflict among different departments.

#### 6. Depends Upon Support of Top Management:

Budgetary control system depends upon the support of top management. The management should be enthusiastic for the success of this system and should give full support for it. If at any time there is a lack of support from top management then this system will collapse.

