In long term capital and liability management, usually the concern for the manager involves;

* Foreign direct investment.
* Multinational capital budgeting.
* International acquisitions.
* Country risk analysis.
* Multinational cost of capital and capital structure.
* Long term financing.

**MULTINATIONAL CAPITAL BUDGETING.**

Multinational corporations (MNCs) evaluate international projects by using multinational capital budgeting, which compares the benefits and costs of these projects. Given that many MNCs spend millions per year on international projects, multinational capital budgeting is a critical function. Many international projects are irreversible and cannot be easily sold to other corporations at a reasonable price. Proper use of multinational capital budgeting can identify the international projects worthy of implementation. The most popular method of capital budgeting involves determining the project’s net present value by estimating the present value of the project’s future cash flows and subtracting the initial outlay required for the project. Multinational capital budgeting typically uses a similar process. However, special circumstances of international projects that affect the future cash flows or the discount rate used to discount cash flows make multinational capital budgeting more complex. Financial managers must understand how to apply capital budgeting to international projects, so that they can maximize the value of the MNC.

Usually, the following issues arise in capital budgeting for MNCs.

1. Subsidiary versus Parent Perspective

Should capital budgeting for a multinational project be conducted from the viewpoint of the subsidiary that will administer the project or the parent that will most likely finance much of the project? Some would say the subsidiary’s perspective should be used because it will be responsible for administering the project. In addition, since the subsidiary is a subset of the MNC, what is good for the subsidiary would appear to be good for the MNC. This reasoning, however, is not necessarily correct. One could argue that if the parent is financing the project, then it should be evaluating the results from its point of view. The feasibility of the capital budgeting analysis can vary with the perspective because the net after-tax cash inflows to the subsidiary can differ substantially from those to the parent. Such differences can be due to several factors, some of which are discussed here.

1. Tax Differentials

If the earnings due to the project will someday be remitted to the parent, the MNC needs to consider how the parent’s government taxes these earnings. If the parent’s government imposes a high tax rate on the remitted funds, the project may be feasible from the subsidiary’s point of view, but not from the parent’s point of view. Under such a scenario, the parent should not consider implementing the project, even though it appears feasible from the subsidiary’s perspective.

1. Restricted Remittances

Consider a potential project to be implemented in a country where government restrictions require that a percentage of the subsidiary earnings remain in the country. Since the parent may never have access to these funds, the project is not attractive to the parent, although it may be attractive to the subsidiary. One possible solution is to let the subsidiary obtain partial financing for the project within the host country. In this case, the portion of funds not allowed to be sent to the parent can be used to cover the financing costs over time.

1. Excessive Remittances

Consider a parent that charges its subsidiary very high administrative fees because management is centralized at the headquarters. To the subsidiary, the fees represent an expense. To the parent, the fees represent revenue that may substantially exceed the actual cost of managing the subsidiary. In this case, the project’s earnings may appear low from the subsidiary’s perspective and high from the parent’s perspective. The feasibility of the project again depends on perspective. In most cases, neglecting the parent’s perspective will distort the true value of a foreign project.

1. Exchange Rate Movements

When earnings are remitted to the parent, they are normally converted from the subsidiary’s local currency to the parent’s currency. The amount received by the parent is therefore influenced by the existing exchange rate. If the subsidiary project is assessed from the subsidiary’s perspective, the cash flows forecasted for the subsidiary do not have to be converted to the parent’s currency.

Input for Multinational Capital Budgeting

Regardless of the long-term project to be considered, an MNC will normally require forecasts of the economic and financial characteristics related to the project. Each of these characteristics is briefly described here:

1. **Initial investment.** The parent’s initial investment in a project may constitute the major source of funds to support a particular project. Funds initially invested in a project may include not only whatever is necessary to start the project but also additional funds, such as working capital, to support the project over time. Such funds are needed to finance inventory, wages, and other expenses until the project begins to generate revenue. Because cash inflows will not always be sufficient to cover upcoming cash outflows, working capital is needed throughout a project’s lifetime.
2. **Price and consumer demand.** The price at which the product could be sold can be forecasted using competitive products in the markets as a comparison. A long term capital budgeting analysis requires projections for not only the upcoming period but the expected lifetime of the project as well. The future prices will most likely be responsive to the future inflation rate in the host country (where the project is to take place), but the future inflation rate is not known. Thus, future inflation rates must be forecasted in order to develop projections of the product price over time. When projecting a cash flow schedule, an accurate forecast of consumer demand for a product is quite valuable, but future demand is often difficult to forecast.

For example, if the project is a plant in Germany that produces automobiles, the MNC must forecast what percentage of the auto market in Germany it can pull from prevailing auto producers. Once a market share percentage is forecasted, projected demand can be computed. Demand forecasts can sometimes be aided by historical data on the market share other MNCs in the industry pulled when they entered this market, but historical data are not always an accurate indicator of the future. In addition, many projects reflect a first attempt, so there are no predecessors to review as an indicator of the future.

1. **Costs.** Like the price estimate, variable-cost forecasts can be developed from assessing prevailing comparative costs of the components (such as hourly labour costs and the cost of materials). Such costs should normally move in tandem with the future inflation rate of the host country. Even if the variable cost per unit can be accurately predicted, the projected total variable cost (variable cost per unit times quantity produced) may be wrong if the demand is inaccurately forecasted. On a periodic basis, the fixed cost may be easier to predict than the variable cost since it normally is not sensitive to changes in demand. It is, however, sensitive to any change in the host country’s inflation rate from the time the forecast is made until the time the fixed costs are incurred.

4.  **Tax laws.** The tax laws on earnings generated by a foreign subsidiary or remitted to the MNC’s parent vary among countries. Under some circumstances, the MNC receives tax deductions or credits for tax payments by a subsidiary to the host country. Withholding taxes must also be considered if they are imposed on remitted funds by the host government. Because after-tax cash flows are necessary for an adequate capital budgeting analysis, international tax effects must be determined on any proposed foreign projects.

5.  **Remitted funds.** In some cases, a host government will prevent a subsidiary from sending its earnings to the parent. This restriction may reflect an attempt to encourage additional local spending or to avoid excessive sales of the local currency in exchange for some other currency. Since the restrictions on fund transfers prevent cash from coming back to the parent, projected net cash flows from the parent’s perspective will be affected. If the parent is aware of these restrictions, it can incorporate them when projecting net cash flows. Sometimes, however, the host government adjusts its restrictions over time; in that case, the MNC can only forecast the future restrictions and incorporate these forecasts into the analysis.

6. **Exchange rates.** Any international project will be affected by exchange rate fluctuations during the life of the project, but these movements are often very difficult to forecast. There are methods of hedging against them, though most hedging techniques are used to cover short-term positions. While it is possible to hedge over longer periods (with long-term forward contracts or currency swap arrangements), the MNC has no way of knowing the amount of funds that it should hedge. This is because it is only guessing at its future costs and revenue due to the project. Thus, the MNC may decide not to hedge the projected foreign currency net cash flows.

7. **Salvage (liquidation) value.** The after-tax salvage value of most projects is difficult to forecast. It will depend on several factors, including the success of the project and the attitude of the host government toward the project. As an extreme possibility, the host government could take over the project without adequately compensating the MNC. Some projects have indefinite lifetimes that can be difficult to assess, while other projects have designated specific lifetimes, at the end of which they will be liquidated. This makes the capital budgeting analysis easier to apply. It should be recognized that the MNC does not always have complete control over the lifetime decision. In some cases, political events may force the firm to liquidate the project earlier than planned. The probability that such events will occur varies among countries.

8.  **Required rate of return.** Once the relevant cash flows of a proposed project are estimated, they can be discounted at the project’s required rate of return, which may differ from the MNC’s cost of capital because of that particular project’s risk. An MNC can estimate its cost of capital in order to decide what return it would require in order to approve proposed projects.

Multinational Capital Budgeting Example

Capital budgeting for the MNC is necessary for all long-term projects that deserve consideration. The projects may range from a small expansion of a subsidiary division to the creation of a new subsidiary. This section presents an example involving the possible development of a new subsidiary. It begins with assumptions that simplify the capital budgeting analysis. Then, additional considerations are introduced to emphasize the potential complexity of such an analysis. This example illustrates one of many possible methods available that would achieve the same result. Also, keep in mind that a real-world problem may involve more extenuating circumstances than those shown here.

Background

Spartan, Inc., is considering the development of a subsidiary in Singapore that would manufacture and sell tennis rackets locally. Spartan’s management has asked various departments to supply relevant information for a capital budgeting analysis. In addition, some Spartan executives have met with government officials in Singapore to discuss the proposed subsidiary. The project would end in 4 years. All relevant information follows.

1. Initial investment. An estimated 20 million Singapore dollars (S$), which includes funds to support working capital, would be needed for the project. Given the existing spot rate of $.50 per Singapore dollar, the U.S. dollar amount of the parent’s initial investment is $10 million.

2. Price and demand. The estimated price and demand schedules during each of the next 4 years are shown here:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 |
| Price per racket | S$ 350 | S$ 350 | S$ 360 | S$ 380 |
| Demand in Singapore | 60,000 units | 60,000 units | 100,000 units | 100,000 units |

3. The variable costs (for materials, labor, etc.) per unit have been estimated and consolidated as shown here:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 |
| Variable costs per racket | S$ 200 | S$ 200 | S$ 250 | S$ 260 |

The expense of leasing extra office space is S$1 million per year. Other annual overhead expenses are expected to be S$1 million per year.

4. Depreciation. The Singapore government will allow Spartan’s subsidiary to depreciate the cost of the plant and equipment at a maximum rate of S$2 million per year, which is the rate the subsidiary will use.

5. Taxes. The Singapore government will impose a 20 percent tax rate on income. In addition, it will impose a 10 percent withholding tax on any funds remitted by the subsidiary to the parent.

The U.S. government will allow a tax credit on taxes paid in Singapore; therefore, earnings remitted to the U.S. parent will not be taxed by the U.S. government.

6. Remitted funds. The Spartan subsidiary plans to send all net cash fl ows received back to the parent fi rm at the end of each year. The Singapore government promises no restrictions on the cash fl ows to be sent back to the parent firm but does impose a 10 percent withholding tax on any funds sent to the parent, as mentioned earlier.

7. Salvage value. The Singapore government will pay the parent S$12 million to assume ownership of the subsidiary at the end of 4 years. Assume that there is no capital gains tax on the sale of the subsidiary.

8. Exchange rates. The spot exchange rate of the Singapore dollar is $.50. Spartan uses the spot rate as its best forecast of the exchange rate that will exist in future periods. Thus, the forecasted exchange rate for all future periods is $.50.

9. Required rate of return. Spartan, Inc., requires a 15 percent return on this project.

**ANALYSIS**

The capital budgeting analysis will be conducted from the parent’s perspective, based on the assumption that the subsidiary is intended to generate cash flows that will ultimately be passed on to the parent. Thus, the net present value (NPV ) from the parent’s perspective is based on a comparison of the present value of the cash flows received by the parent to the initial outlay by the parent. An international project’s NPV is dependent on whether a parent or subsidiary perspective is used. Since the U.S. parent’s perspective is used, the cash flows of concern are the dollars ultimately received by the parent as a result of the project. The required rate of return is based on the cost of capital used by the parent to make its investment, with an adjustment for the risk of the project. For the establishment of the subsidiary to benefit Spartan’s parent, the present value of future cash flows (including the salvage value) ultimately received by the parent should exceed the parent’s initial outlay.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | YEAR 0 | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 |
| 1. Demand |  |  |  |  |  |
| 2. Price per unit |  |  |  |  |  |
| 3.Total Revenue |  |  |  |  |  |
| 4.Variable costs/ unit |  |  |  |  |  |
| 5.Total variable costs |  |  |  |  |  |
| 6.Annual lease expense |  |  |  |  |  |
| 7.Other fixed annual expenses |  |  |  |  |  |
| 8.Non- cash exp (Depp) |  |  |  |  |  |
| 9.Total expenses |  |  |  |  |  |
| 10.Before tax earnings (Sub) |  |  |  |  |  |
| 11.Host government tax |  |  |  |  |  |
| 12.After tax earnings (Sub) |  |  |  |  |  |
| 13.Net cash flow |  |  |  |  |  |
| 14.S$ remitted by sub. |  |  |  |  |  |
| 15.Withholding tax on remittances |  |  |  |  |  |
| 16.S$ remitted after withholding tax |  |  |  |  |  |
| 17.Salvage value |  |  |  |  |  |
| 18.Exchange rate S$ - S |  |  |  |  |  |
| 19.Cashflow to parent, $ |  |  |  |  |  |
| 20. PV of CF, 15% |  |  |  |  |  |
| 21. Initial Investment |  |  |  |  |  |
| 22. Cumulative NPV |  |  |  |  |  |
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