Chapter VIII

INTERNATIONAL PROJECT APPRAISAL

The conventional Net Present Value (NPV) technique which is very commonly used in the appraisal of domestic projects suffers from certain disadvantages. The main difficulty with the NPV method is that it discounts all cash flows at the required rate of return or cost of capital. While appraising international projects, we need more flexibility to take into account the different degrees of risk associated with different types of cash flows. We need a method which can make suitable adjustments to cash flows and which can also allow the use of multiple discount rates. The method so developed is referred to as the Adjusted Present Value (APV) technique. It is far more flexible than the NPV method.

Cash Flows

The first point we need to keep in mind as far as the international investor is concerned is that it makes sense to view the poject from a home country perspective (Home country is the country to which the investor belongs. Host country is the country in which the project will be executed.) When we use NPV, no such distinction is made. Let us consider briefly some important factors which influence cash flows from the investor's perspective.

a) Blocked funds : If funds that are otherwise blocked can be used for a project, from the investor's perspective, there is a gain from the released funds. This gain is basically the difference between the face value of the funds and the present value of cash flows generated if the funds could be profitably used in some other project. This gain has to be deducted from the cost of the project. For instance, if there is no possibility of repatriation of blocked funds but the host country Government is prepared to release the total amount of funds for investment in the project, the fund is effectively available at zero cost. As such the full guantum of the blocked funds can be deducted from the project cost.

b) It often happens that a company first exports from its home base before developing the confidence to commit itself to investment in plant, equipment and other types of infrastructure in the host country. As soon as the investment is in place however and becomes operational, the earlier sales in all probability would be lost. The impact on contribution due to such lost sales must hence be considered while working out the cash flows. In other words, profits attributable to such lost sales must be deducted from the cash flows generated by the project.

c) Sometimes, there may be restrictions on repatriation of income generated by the investment. We need to keep in mind that for the parent company which has set up the foreign subsidiary, what matters is the quantum of repatriable cash flows, ie

profits which can be taken back to the home country. In case, there are restrictions on repatriation, the impact must be duly considered while evaluating the project.

d) Tax rates vary across countries. If a Double Taxation Avoidance agreement exists, however, what is relevant is the higher of the tax rates in the two countries. Suppose the tax rate in USA is 30%. An US MNC invests in Thailand where the tax rate is say 40%. Thus, the MNC will pay 40% tax on profits in thailand while none will be charged back home. On the other hand, if it invests in Luxembourg, where the tax rate is say 20%, it will get a tax credit for an equivalent amount but will have to pay 10% tax to the US revenue authorities. Thus, the effective rate of tax is 20 + 1-0 = 30% which is again the higher of the two tax rates.

e) The project, by generating profits can add to the parent company's borrowing capacity. Even if the company does not need to exhaust the additional borrowing capacity for the project in question, it can use the same elsewhere. Since interest on debt is deductible from profits before computation of tax, the tax shields generated must be computed and their present values added while appraising the project.

f) Countries often give concessional loans to attract foreign investment. If we compute the interest and principal payments associated with the loan and discount these outflows at the competitive market rate of interest in the host country, we get the effective present value of the loan. The difference between the face value and the effective present value is a gain which should be added while determining the viability of the project.

g) Depreciation is a tax deductible expense. Tax shield on depreciation can be claimed on the basis of the higher tax rate if the parent company can consolidate the financial statments of the subsidiary. On the other hand, if this is not the case as in India, depreciation tax shields may be calculated on the basis of the tax rate in the host country.

Discount rates

Unlike the NPV method which uses a single discount rate, the APV method is far more flexible. Different discount rates are used for different types of cash flows. Choice of discount rates depends on the certainty of cash flows. Typically, we choose the following discount rates.

1) Cash flows from operations : Rate of return expected by the company's equity investors can be taken as the discount rate.

2) Depreciation : The riskless rate of interest in the home country can be taken as the discount rate provided however that we are confident about the project's capability to generate sufficient profits. Tax shields can be absorbed only if adequate profits are generated.

3) Borrowing capacity : The same argument as in the case of depreciation tax shields is applicable.

4) Concessional loan : To, determine the effective present value of the concessional loan, we use the competitive market rate of interest in the host country for similar loans as the discount rate.

To sum up, the Adjusted Present Value, APV, in most cases can be defined by the following equation.

= - (Initial investment adjusted for blocked funds released by the project)

+

Present value of cash flows generated from the project's operations after adjusting for lost sale

+

Present value of tax shields available due to depreciation

+

Present value of tax shields due toincreased borrowing capacity

+

Present value of concessional loan.

In some specific cases, additional adjustments would have to be made to take into account the specific circumstances associated with the project.

The APV can first be worked out on the basis of the most conservative figures. If the APV is positive, the project can be accepted straight away. On the other hand, if it is negative, cash flows and discount rates can be adjusted to see if the APV becomes positive. In some cases, illegal means of increasing cash flows may be available and their impact can be included to see if we get a more favourable APV. The APV technique is thus more flexible and convenient to use than the NPV method in thus more flexible and convenient to use than the NPV method in the case of international projects where the appraisal process is far more complicated.