CHAPTER 5
PROJECT FINANCING

The allocation of financial resources to a project constitutes an obvious and basic prerequisite for investment decisions, for project formulation and pre-investment analysis, and for determining the cost of capital. In a feasibility study, the capital outlay of a project can be appropriately determined only after plant capacity and location have been decided, together with estimates of the costs of developed site, buildings and civil works, technology and equipment.

Defining the financial requirements of a project at the operational stage in terms of working capital is equally necessary. This can be determined once the estimates are made of production costs, on the one hand, and sales and income, on the other. These estimates should cover a period of time and be reflected in a cash flow analysis. Unless both estimates are available and available resources are sufficient to meet the fund requirements, both in terms of initial capital investment and working capital needs over a period of time, it would not be prudent to proceed to the financing decision and project implementation.

Sources of finance

A generally applied financing pattern for an industrial project is to cover the initial capital investment by equity and long-term loans to varying extents, and to meet working capital requirements by additional short-term and medium-term loans form national banking sources.

Equity can be raised by issuing two types of shares: ordinary shares [common shares]; and preference shares. Preference shares usually carry a dividend at least partly independent form profit, without, or with only limited voting rights. Preference shares can be convertible into common shares. Preference shares can be cumulative or non-cumulative, redeemable or non-redeemable. Dividend payment on ordinary shares with full voting rights, however, depends on the profitable operation of the company.

Loan financing

It is easy for a sound project to obtain loans. The loan capital can be classified in different forms: short-term, medium-term and long-term. For working capital purposes, short and medium-term can be borrowed from commercial banks or supplier credits of various forms; and long-term

borrowings can be availed form national or international development finance institutions.

Short-term loans are available against hypothecation or pledging of inventories. The limits to which inventories are financed vary between 50 and 80 percent. Bank borrowings for working capital can be arranged on a temporary basis. Working capital funds should even be partly met out of long-term funds [equity and long-term loans], since the largest portion of working capital is permanently tied in inventories.

Long-term loans

Loan financing is usually subject to certain regulations on the convertibility of shares and declaration of dividends. Further certain ratios in the capital structure of the company need to be maintained. Investment may also be financed partly by issues of bonds and debentures.

An important source of finance is also available at government –to-government level. This can take the form of general bilateral credit or tied credit, which may be related to the purchase of machinery and equipment from a particular country.

Internal cash generation is also a source of finance [accumulated reserves] At the operational stage.

Supplier credit

Imported machinery and spares can be availed on deferred-payment terms with payments spread over to 6 to 10 years and even longer. Deferred payment terms are available against bank guarantees.

Leasing

Leasing, as the borrowing of productive assets is called, requires usually a down payment and the payment of an annual rent, the leasing fee. These assets are, however, contained in the balance sheet of the lessor and not in the balance sheet of the borrowing firm, the lessee. Therefore, leasing essentially represents a form of off-balance sheet financing.

In the case of investment projects the problem is basically to decide which alternative should be preferred, leasing or purchasing of capital assets. For the evaluation of the two financing alternatives the discounted cash flow method should be applied. The initial down payment, the current leasing fees and any additional payments under the leasing agreements are then part of the cash outflows, replacing all initial investment costs computed for the purchasing alternative.

If the investor has a choice between loan and leasing financing, he would compare the discounted cash flow for both cash flows arrays to determine which alternative would bring the higher yield [IRR, NPV].

Funds to finance leases may be obtained from independent leasing companies, banks, insurance companies, pension funds, industrial development agencies and international financing institutions.

Example of investment outlay and structure of finance

Item	Funds [thousand national currency units]
A. Investment Outlay	
Fixed –Investment costs:	
Land	80
Buildings	2900
Equipment	4000
Other	730
Total initial fixed investment	**7710**
Working capital	400
Pre-production capital expenditures	610
Total initial investment costs	**8720**
B. Structure of Investment	
Source:	
Equity capital	3500
Supplier credit	**2600**
Commercial credit	3000
Total long-term capital	9100
Surplus [long-term capital] during construction	380
Start-up year:	
Short-term finance [bank O/D]	400
Cash deficit [start-up year]	[10]
Financing of net increase in assets [start-up year]	[600]
Finance available	170

Cost of capital

Capital for financing of investment may be obtained from private and institutional resources [banks, insurance companies, funds, etc.]. To obtain

finance, an investor must therefore pay a charge- the cost of capital or of finance- for the funds lent. This charge comprises an interest rate, as well as fixed charges [commitment fee, charge on capital not drawn, commission, etc.]. Interest is usually computed on the outstanding balance of the corresponding liabilities of a firm, for example, interest payable on bank loan, dividends payable on equity capital [such as preference shares] and interest payable on current account.

The cost of equity capital for the proje3ct or firm is basically determined by the minimum accumulated return expressed as the NPV of the future income of the shareholders, and the minimum annual rate of return, expressed as the rate of return on equity capital.

The debt service [interest and amortization] is fixed and legally binding for the firm, and has to be paid even when the generation of cash is insufficient in certain years.

The various forms and sources of financing have different implications in terms of impact on different projects and may even affect project formulation. Supplier credits and other forms of medium-term credit, thigh initially advantageous in terms of coverage of resource gaps at the initial stage, constitutes a heavy debt burden during early years of production. Their incidence on production costs should be determined and accounted for in the cash flow analysis. As such the national and international financial institutions insist that recognized consultants should prepare the feasibility study.

Public policy and regulations on financing

The hard core of the entrepreneurial decision in respect of financing is to choose between equity raised through the sale of shares and that raised through payments by the project sponsor. The extent of initial equity depends on the anticipated profitability and alternative sources of capital participation all under the prevailing regulations on financing and taxation norms.

When a developing country has a reasonably well-developed capital market, equity funds can be raised through public issues of shares. Banks and other institutions dealing in industrial finance usually underwrite such share issues. In some cases, specialized financial institutions also participate in the equity financing and the participation may be higher level or at lower level depending on the country’s regulations.

In considering foreign equity participation for the projects, it is necessary to get government approval. In some countries such approval is not granted particularly to non-priority sectors of investment. In some cases, in sectors involving large investments or in projects with a great employment potential, foreign participation is welcomed.

Financing Institutions.

Most developing countries have established development-financing institutions, usually called industrial finance corporations or industrial development banks. The institutions have been set up at national and at state levels. Some of the national institutions provide foreign currency loans, which are financed by international institutions, such as the World Bank and its affiliates.

Various international financial institutions and funding facilities exist and finance is available for the industries in developing countries. Some of these include World Bank, International Development Association, International Finance corporation, the special fund of the Organization of petroleum Exporting Countries, the Kuwait Fund for Arab Economic and Social Development, and the International Investment Bank of the Council for Mutual Economic Assistance, operate on a world-wide scale. Many of these funds are provided on soft terms for infrastructure, which are pre requisites of successful industrialization.

There are also institutions, which are operating on regional basis, such as the African Development Bank, the Asian Development Bank, the European Investment bank and the Inter-American Development Bank. Funds have been set up by the oil ex [porting countries, such as the Arab Fund for Economic and Social Development and the Islamic Development Bank. Bilateral institutions have been set up in most of the countries of the Organization for Economic Cooperation and Development and, in some oil-exporting countries, including Kuwait, the United Arab Emirates and Venezuela.

The roles of export financing and guaranteeing agencies are also pertinent in project financing. The primary task of such agencies is to provide financial support of exports from industrialized countries; only as a secondary task are they designed to help developing countries. Commercial banks, including those in the Eurocurrency market and the currency markets of the Association of South-East Asian Nations, are becoming increasingly active in

industrial development financing. However, they lend to only a few developing countries.

In many developing countries, the availability of industrial finance in the form of institutional finance and from other sources has grown substantially. As such the new entrepreneurs can start industrial ventures with a small share of equity as low as 10-25 of the total finance needed.

The various sources of finance, flow of financial resources and the utilization of these funds are presented in the following tables.

INVESTMENT PROMOTION AGENCIES

In most developing countries, development agencies have been established with the primary task of identifying investment projects, formulating them in project profiles or opportunities studies, and seeking prospective promoters in the country and abroad. They use market, industry and resources-based project studies. They also offer consultancy services for the preparation of pre-investment studies, covering technical, financial and economic aspects of project proposals. Many of these agencies have also started with the supervision of projects during the investment phase.

UNIDO in particular has actively cooperated in setting up such development agencies in Africa and Asian countries such as Congo, Ethiopia, Malaysia, Nepal, Saudi Arabia, Senegal, Sri Lanka and United Republic of Tanzania.

National Financing Agencies

The national development banks and commercial banks that take part in project financing also offer investment consultancy. Commercial banks investigate investment projects as a rule form the point of view of their bankability. The creditworthiness of the customer and examination by the bank of the collateral offered are in general more important to the bank. In recent years, commercial banks have therefore mainly financed working capital and to a lesser extent, fixed capital investment. Development banks on the other hand, not only evaluate the bankability of the projects, but also frequently prepare investment and profitability calculations for those of their customers who cannot perform such tasks.

National consulting firms

Building up efficient consulting firms is of great importance to developing countries. Good progress has been made in Latin America and Asia, where many competitive consulting firms have emerged that also works internationally. There are still great gaps in Africa. In some countries such as

Algeria, Ethiopia, Kenya, Nigeria and the United Republic of Tanzania, that are already a few state and private consulting firms that have for considerable time been able to make pre-investment studies of all kinds, and that participate actively in investment consultancy and rendering services in project management, engineering and construction supervision etc. In other countries, national consulting firms have also been set up but unable to provide internationally acceptable investment consultancy services.

International Organizations

Industrial investment consultancy has long been one of the traditional tasks of international organizations such as the United Nations, a number of its specialized agencies, including UNIDO, the Food and Agriculture Organization of the UN [FAO] and the International Labor Organization [ILO], as well as the World Bank. All of these organizations provide the consultancy services required, either themselves, through their own staff, or by using the services of national and international consulting firms and consultants.

International consulting firms and consultants

The use of international consulting firms and consultants in investment consultancy comprises the preparation of pre-feasibility and feasibility studies, the training of management staff in this field, assistance in building up and expanding national consulting firms and investment promotion agencies etc. the experience and the know-how gained in the context exercise a decisive influence on the competitiveness of consulting firms. Unfortunately, the quality of the studies delivered by consulting firms often leaves much to be desired, since the firms come from a wide variety of socio-economic systems and the focal points of the studies are often wrongly chosen. The UNIDO proposal to use standardized terms of reference is finding wider and wider acceptance in developing and developed countries.