

# 11

## Foreign Direct Investment (FDI), Foreign Institutional Investment (FIIs) and International Financial Management

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### Learning Objectives

After going through the chapter student shall be able to understand

- Foreign Direct Investment (FDI)
  - Costs Involved- By Host Country and Home Country
  - Benefits Derived- By Host Country and Home Country
- Foreign Institutional Investment
- International Financial Management - Including raising Of capital abroad (ADRs, GDRs, ECB)
- Instruments of International Finance
  - (1) Foreign Currency Convertible Bonds (FCCBs)
  - (2) Global Depository Receipts (GDRs)
  - (3) Euro-Convertible Bonds (ECBs)
  - (4) American Depository Receipts (ADRs)
  - (5) Other sources
- Euro-Issues- Eligibility, Advantages, Disadvantages, Structuring, Pricing and Methodology
- GDRs Vs. Euro-Bonds
- Cross-Border Leasing
- International Capital Budgeting
- International Working Capital Management

**Part – A**  
**Foreign Direct Investment (FDI), Foreign Institutional Investment (FIIS)**

## **1. Costs Involved**

**1.1 For Host Country:** Inflow of foreign investment improves balance of payments position while outflow due to imports, dividend payments, technical service fees, royalty reduces balance of payments position. Use of imported raw materials may be harmful to the interest of the domestic country whereas it may be useful to the interests of the foreign country. Supply of technology to the host country makes it dependent on the home country resulting in the payment of higher price for acquisition. The technology may not be suitable to the local environment causing substantial loss to the host country. MNCs are reluctant to hire and train local persons. Advanced technology being capital intensive does not ensure bigger job prospects. Foreign investors do not care to follow pollution standards; nor do they stick to the optimal use of natural resources nor have any concern about location of industries while opting for a manufacturing process. Such violation affects host nations interest. Domestic industries cannot withstand the financial power exercised by the foreign investors and thereby die a pre-mature death. Because of their oligopolistic position in the market, foreign companies charge higher prices for their products. Higher prices dampen the spirit of the buyers and at the same time lead to an inflationary pressure. Foreign culture is infused by these foreign companies in industrial units as well as to the society at large. Governmental decisions fall prey to such measures as they become a dominant force to reckon with.

**1.2 For Home Country:** Cost involvement for the home country is a paltry sum. Any foreign investment causes a transfer of capital, skilled personnel and managerial talent from the country resulting in the home country's interest being hampered. MNCs have the primary objective of maximising their overall profit while operating in different countries. The standards followed by them in most cases are not beneficial to the host nation. Such an action leads to deterioration in bilateral relations between the host and home country.

FDI is a mixed bag of bright features and dark spots. So it requires careful handling by both sides.

## **2. Benefits Derived**

### **2.1 For Host Country**

(a) Improves balance of payment position by crediting the inflow of investment to capital account. Also, current account improves as FDI aids import substitution/export promotion. Exports get a boost through the expertise of foreign investors possessing export market intelligence and their mechanism. Updated technology of producing world standard goods at low cost are available to the host country. Export credits from the cheapest source in the international market can be availed of quite easily.

(b) Foreign firms foster forward and backward economic linkages. Demand for various inputs give rise to the development of the supplying industries which through employment of labour force raise their income and increase the demand for domestic industrial production. The living

standard of the domestic consumers improves as quality products at competitive prices are available. Also a pool of trained personnel is created in this context.

(c) Foreign investors by investing in economic / social infrastructure, financial markets and marketing systems helps the host country to develop a support base essential for quick industrialisation. The presence of foreign investors creates a multiplier effect leading to the emergence of a sound support system.

(d) Foreign investors are a boon to government to revenue with regard to the generation of additional income tax. Also they pay tariff on their imports. Governmental expenditure requirements are greatly reduced through supplementing government's investment activities in a big way there by lessening the burden on national budget.

(e) FDI aids to maintain a proper balance amongst the factors of production by the supply of scarce resources thereby accelerating economic growth. Capital brought in by FDI supplements domestic capital as the savings rate at home is very low to augment heavy investment. Through the inflow of scarce foreign exchange, domestic savings get a boost to support the investment process. Foreign investors are bold enough to take risks not prevalent among local investors resulting in investment projects being implemented in a large way. FDI's bring in skilled labour force to perform jobs which the local workers are unable to carry out. There is also a fear of imposition of alien culture being imposed on the local labour force. Foreign investors make available key raw materials along with updated technology to the host country. Such a practice helps the host country to obtain access to continued updation of R&D work of the investing country.

**2.2 For Home Country :** The home country gets the benefit of the supply of raw materials if FDI helps in its exploitation. BOP improves due to the parent company getting dividend, royalty, technical service fees and also from its increased exports to the subsidiary. Also there is employment generation and the parent company enters into newer financial markets by its investment outside. The government of the home country increases its revenue income of the parent organization, imposition of tariff on imports of the parent company from its foreign subsidiary. FDI helps to develop closer political relationship between the home and the host country which is advantageous to both.

### **3. Foreign Institutional Investment**

Positive tidings about the Indian economy combined with a fast-growing market have made India an attractive destination for foreign institutional investors (FIIs). FIIs were allowed to make portfolio investments in the country's stock markets in the early 1990s.

A number of these investors are Japanese and European funds aiming to cash in on the rising equity markets in India. In addition, there was increased registration by non-traditional countries like Denmark, Italy, Belgium, Canada and Sweden. The Japanese have, in fact, been increasing their foothold in India. Mizuho Corporate Bank's decision to successfully expand base in the country has managed to convince almost 60-65 major Japanese corporates to set up manufacturing or marketing base in India. This list of corporates includes big names in auto sectors such as Honda, Toyota and Yamaha, as well as those in home appliances, pharmaceuticals, and communications.

**Part – B**  
**International Financial Management - Including Raising of Capital Abroad (ADRs, GDRs, ECB)**

### 1. Introduction

The essence of financial management is to raise and utilise the funds effectively. This also holds good for the procurement of funds in the international capital markets, for a multi-national organisation in any currency. There are various avenues for a multi-national organisation to raise funds either through internal or external sources. Internal funds comprise share capital, loans from parent company and retained earnings. Now a days external funds can be raised from a number of sources. The various sources of international finance are discussed in this chapter.

**1.1 External Commercial Borrowings:** External Commercial Borrowings (ECB) are defined to include

1. commercial bank loans,
2. buyer's credit,
3. supplier's credit,
4. securitised instruments such as floating rate notes, fixed rate bonds etc.,
5. credit from official export credit agencies,
6. commercial borrowings from the private sector window of multilateral financial institutions such as IFC, ADB, AFIC, CDC etc. and
7. Investment by Foreign Institutional Investors (FIIs) in dedicated debt funds

Applicants are free to raise ECB from any internationally recognised source like banks, export credit agencies, suppliers of equipment, foreign collaborations, foreign equity - holders, international capital markets etc. Offers from unrecognised sources will not be entertained.

ECB entitlement for new projects

All infrastructure and Greenfield projects	50% of the total project cost
Telecom Projects	upto 50% of the project cost (including license fees)

In the case of power projects, greater flexibility will be allowed, based on merits.

End - use

(a) ECBs are to be utilised for foreign exchange costs of capital goods and services (on FOB and CIF basis).

Proceeds should be utilized at the earliest and corporates should comply with RBI's guidelines on parking ECBs outside till actual imports. RBI would be monitoring ECB proceeds parked outside.

However, in the case of infrastructure projects in the power, telecommunications and railway sectors, ECB can be utilised for project - related rupee expenditure. License fee payments would be an approved use of ECB in the telecom sector.

(b) ECB proceeds may also be utilised for project - related rupee expenditure, as outlined above. Proceeds must be brought into the country immediately.

However, under no circumstances, ECB proceeds will be utilized for:

- (i) investment in the stock market
- (ii) speculation in real estate
- (c) ECB may be raised to acquire ships/vessels from Indian shipyards

Proceeds from Bonds & FRN

Corporates who have raised ECB through Bond/ FRN issues are permitted to use the proceeds from the issue for project related rupee expenditure till actual import of capital equipments takes place or up to one year, whichever is less. Sanction of additional ECB to the company would be considered only after the company has certified through its statutory auditor that it has fully utilised the amount for import of the capital equipment and services.

#### **Other terms and conditions**

Apart from the maturity and end - use requirements, the financial terms and conditions of each ECB proposal are required to be reasonable and market - related. The choice of the sourcing of ECB, currency of the loan, and the interest rate basis (i.e. floating or fixed), will be left to the borrowers.

- **Security:** The choice of security to be provided to the lenders/ suppliers will also be left to the borrowers. However, where the security is in the form of a guarantee from an Indian financial institution or from an Indian scheduled commercial bank, counter - guarantee or confirmation of the guarantee by a foreign bank/ foreign institution will not be permitted.
- **Exemption from withholding tax:** All interest payments and fees etc. related to external commercial borrowings would be eligible for withholding tax exemption under various Sections of the Income Tax Act, 1961.
- **Approval under Foreign exchange regulation:** After receiving the approval from the ECB Division, Department of Economic Affairs, Ministry of Finance, the applicant is required to obtain approval from the Reserve Bank of India and to submit an executed copy of the loan agreement to this department for taking the same on record, before obtaining clearance from the RBI for drawing the loan. Monitoring of end use of ECB will continue to be done by RBI.
- **Short - term loan from RBI:** While external commercial borrowing for minimum maturity of three years and above will be sanctioned by the Department of Economic Affairs, Ministry of Finance, approvals for short term foreign currency loans with a maturity of less than three years will be sanctioned by the RBI, according to the RBI guidelines.

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- **Validity of approval:** Approvals are valid for an initial period of three months, i.e. the executed copy of the loan agreement is required to be submitted within this period.

**1.2 International Capital Market:** It is well known today that modern organizations including multinationals largely depend upon sizable borrowings in rupees as well as in foreign currencies to finance their projects involving huge outlays. The taxation benefits available on borrowings as against the capital often influence this course as interest payment on borrowed funds is an allowable expenditure for tax purposes.

In order to cater to the financial needs of such organisations international capital markets or financial centres have sprung up wherever international trade centres have developed. Lending and borrowing in foreign currencies to finance the international trade and industry has led to the development of international capital market.

In domestic capital markets of various countries, international capital transactions also take place. For instance, USA, Japan, UK, Switzerland, West Germany have active domestic capital markets. Foreign borrowers raise money in these capital markets through issue of 'foreign bonds'. (Note: International bond and Euro bond are NOT the same and hence deleted). An International Bond issue is managed by a syndicate of international banks and placed with investors and lenders worldwide. The issue may be denominated in any of the currencies for which liquid market exist.

In international capital market, the availability of foreign currency is assured under the four main systems viz.

- (1) Euro - currency market;
- (2) Export Credit Facilities;
- (3) Bonds issues, and
- (4) Financial Institutions.

Euro-Currency market was originated with dollar dominated bank deposits and provide loans in Europe particularly, in London. Euro-dollar deposits form the main ingredient of Euro-currency market. Euro-dollar deposits are dollar denominated time deposits available at foreign branches of US banks and at some foreign banks. These deposits are acquired by these banks from foreign Governments and various firms and individuals who want to hold dollars outside USA. Banks based in Europe accept dollar denominated deposits and make dollar denominated loans to the customers. This forms the basis of Euro-currency market spread over various parts of the world. In Euro-currency market, funds are made available as loans through syndicated Euro-credit or instruments known as Floating Rate Notes FRNs/FRCs (certificates of deposits). London has remained as the main centre for Euro-currency credit.

The creditors however insist on bank guarantees. Several multinational banks of Japanese, American, British, German and French origin - operate all over the world, extending financial assistance for trade and projects. Several multinational banks like Citi Bank, Standard Chartered bank, American Express, Bank of America, etc. are aggressive players in India and they issue specific bank guarantees to facilitate the business transactions between various

parties, including government agencies. Commercial borrowings as well as Exim Bank finance, however, constitute major cost.

## **2. Instruments of International Finance**

The various financial instruments dealt with in the international market are briefly described below :

- 1. Euro Bonds:** A *Eurobond* is an international bond that is denominated in a currency not native to the country where it is issued. Also called external bond e.g. A Yen floated in Germany; a yen bond issued in France.
- 2. Foreign Bonds:** These are debt instruments denominated in a currency which is foreign to the borrower and is denominated in a currency that is native to the country where it is issued. A British firm placing \$ denominated bonds in USA is said to be selling foreign bonds.
- 3. Fully Hedged Bonds:** In foreign bonds, the risk of currency fluctuations exist. Fully hedged bonds eliminate that risk by selling in forward markets the entire stream of interest and principal payments.
- 4. Floating Rate Notes:** These are debt instruments issued upto 7 years maturity. Interest rates are adjusted to reflect the prevailing exchange rates. They provide cheaper money than fixed rate debt instruments; however, they suffer from inherent interest rate volatility risk..
- 5. Euro Commercial Papers:** Euro Commercial Papers (ECPs) are short-term money market instruments. They are for maturities for less than a year. They are usually designated in US dollars.

## **3. Financial Sector Reforms in India**

The Government of India, as a part of liberalisation and de-regulation of industry and to augment the financial resources of Indian companies, has allowed the companies to directly tap foreign resources for their requirements. As a result of measures initiated by the Government, various foreign companies established their business and various companies are coming to do business in India. The Government has given the signals that foreign investment is now welcome and that non-priority industries are not prohibited. The reasons for the foreign investors' interest in India are the low returns prevalent in the USA and Europe. India's large middle class is even more than the population of some of the countries and provides good marketing potential. Beside this the availability of skilled and cheap labour, the wide-spread use of English language, are also some of the contributory factors for the globalisation of Indian business.

It is now possible in India that a foreign company may invest directly in a joint venture or in an Indian subsidiary. It may also route its investment through a third country by forming a subsidiary in that country, which in turn, invests in India. Most of foreign companies prefer to have joint venture with an Indian partner, who understands the local environment and is able to exploit the business opportunities. India is being used as a low cost manufacturing base for sourcing exports to third countries also, without paying much tax. A company wanting to start operations immediately can directly set up a venture undertaking.

## 4. International Financial Instruments and Indian Companies

Indian companies have been able to tap global markets to raise foreign currency funds by issuing various types of financial instruments which are discussed as follows :

**4.1 Foreign Currency Convertible Bonds (FCCBs):** A type of convertible bond issued in a currency different than the issuer's domestic currency. In other words, the money being raised by the issuing company is in the form of a foreign currency. A convertible bond is a mix between a debt and equity instrument. It acts like a bond by making regular coupon and principal payments, but these bonds also give the bondholder the option to convert the bond into stock.

These types of bonds are attractive to both investors and issuers. The investors receive the safety of guaranteed payments on the bond and are also able to take advantage of any large price appreciation in the company's stock. (Bondholders take advantage of this appreciation by means of warrants attached to the bonds, which are activated when the price of the stock reaches a certain point.) Due to the equity side of the bond, which adds value, the coupon payments on the bond are lower for the company, thereby reducing its debt-financing costs.

FCCBs is a bond issued in accordance with the guidelines, dated 12th November, 1993 as amended from time to time and subscribed for by non-residents in foreign Currency and Convertible into ordinary / equity shares of the issuer company in any manner whether in whole or in part or on the basis of any equity related warrants attached to debt instruments.

### Advantages of FCCBs

- (i) The convertible bond gives the investor the flexibility to convert the bond into equity at a price or redeem the bond at the end of a specified period, normally three years if the price of the share has not met his expectations.
- (ii) Companies prefer bonds as it leads to delayed dilution of equity and allows company to avoid any current dilution in earnings per share that a further issuance of equity would cause.
- (iii) FCCBs are easily marketable as investors enjoys option of conversion into equity if resulting to capital appreciation. Further investor is assured of a minimum fixed interest earnings.

### Disadvantages of FCCBs

- (i) Exchange risk is more in FCCBs as interest on bonds would be payable in foreign currency. Thus companies with low debt equity ratios, large forex earnings potential only opt for FCCBs.
- (ii) FCCBs mean creation of more debt and a forex outgo in terms of interest which is in foreign exchange.
- (iii) In the case of convertible bonds, the interest rate is low, say around 3–4% but there is

exchange risk on the interest payment as well as re-payment if the bonds are not converted into equity shares. The only major advantage would be that where the company has a high rate of growth in earnings and the conversion takes place subsequently, the price at which shares can be issued can be higher than the current market price.

Many Indian Companies had raised FCCBs during the bull run period of 2005-2008 (Prime Data Base: 201 companies raising about ₹ 72,000 crores). These FCCBs are due for conversion from 2011-12, when the current market prices are much below the conversion prices. Hence, it is expected that FCCB dream could turn out to be a nightmare for India Inc. As per reports emanating, Wockhardt, Cranes Software, Aftak, JCT, Marksans Pharma, Mascon Global, Gremach, Pyramid Saimira and Zenith Infotech have defaulted on either repayment of the FCCB or on the coupon payments. More companies are expected to join this list.

**4.2 Global Depository Receipts (GDRs):** A depository receipt is basically a negotiable certificate, denominated in a currency not native to the issuer, that represents the company's publicly - traded local currency equity shares. Most GDRs are denominated in USD, while a few are denominated in Euro and Pound Sterling. The Depository Receipts issued in the US are called American Depository Receipts (ADRs), which anyway are denominated in USD and outside of USA, these are called GDRs. In theory, though a depository receipt can also represent a debt instrument, in practice it rarely does. DRs (depository receipts) are created when the local currency shares of an Indian company are delivered to the depository's local custodian bank, against which the Depository bank (such as the Bank of New York) issues depository receipts in US dollar. These depository receipts may trade freely in the overseas markets like any other dollar-denominated security, either on a foreign stock exchange, or in the over-the-counter market, or among a restricted group such as Qualified Institutional Buyers (QIBs). Indian issues have taken the form of GDRs to reflect the fact that they are marketed globally, rather than in a specific country or market. Rule 144A of the Securities and Exchange Commission of U.S.A permits companies from outside USA to offer their GDRs to certain institutional buyers. These are known as Qualified Institutional Buyers (QIBs). There are institutions in USA which, in the aggregate, own and invest on a discretionary basis at least US \$ 100 million in eligible securities.

Through the issue of depository receipts, companies in India have been able to tap global equity market to raise foreign currency funds by way of equity. Quite apart from the specific needs that Indian companies may have for equity capital in preference to debt and the perceived advantages of raising equity over debt in general (no repayment of "principal" and generally lower servicing costs, etc.) the fact of the matter is quite simple, that no other form of term foreign exchange funding has been available. In addition, it has been perceived that a GDR issue has been able to fetch higher prices from international investors (even when Indian issues were being sold at a discount to the prevailing domestic share prices) than those that a domestic public issue would have been able to extract from Indian investors.

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- **Impact of GDRs on Indian Capital Market**

Since the inception of GDRs a remarkable change in Indian capital market has been observed as follows:

- (i) Indian stock market to some extent is shifting from Bombay to Luxemburg.
- (ii) There is arbitrage possibility in GDR issues.
- (iii) Indian stock market is no longer independent from the rest of the world. This puts additional strain on the investors as they now need to keep updated with world wide economic events.
- (iv) Indian retail investors are completely sidelined. GDRs/Foreign Institutional Investors' placements + free pricing implies that retail investors can no longer expect to make easy money on heavily discounted rights/public issues.

As a result of introduction of GDRs a considerable foreign investment has flown into India.

- **Markets of GDRs**

- (i) GDR's are sold primarily to institutional investors.
- (ii) Demand is likely to be dominated by emerging market funds.
- (iii) Switching by foreign institutional investors from ordinary shares into GDRs is likely.
- (iv) Major demand is also in UK, USA (Qualified Institutional Buyers), South East Asia (Hong kong, Singapore), and to some extent continental Europe (principally France and Switzerland).

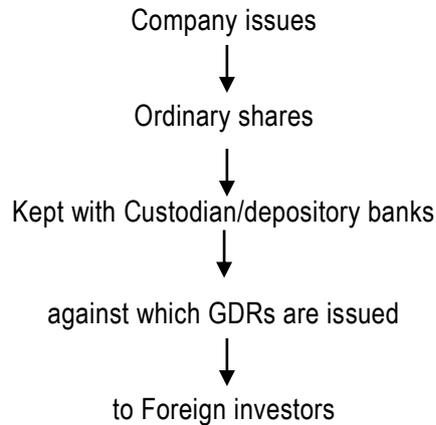
- **Profile of GDR investors**

The following parameters have been observed in regard to GDR investors.

- (i) Dedicated convertible investors
- (ii) Equity investors who wish to add holdings on reduced risk or who require income enhancement.
- (iii) Fixed income investors who wish to enhance returns.
- (iv) Retail investors: Retail investment money normally managed by continental European banks which on an aggregate basis provide a significant base for Euro-convertible issues.

**Global Depository Receipt with Warrant (GDR with warrant)** : These receipts were more attractive than plain GDRs in view of additional value of attached warrants. The Government of India has however, prohibited Indian companies to issue GDRs with warrants as per guidelines issued on 28.10.94.

The mechanics of a GDR issue may be described with the help of following diagram.



### Characteristics

- (i) Holders of GDRs participate in the economic benefits of being ordinary shareholders, though they do not have voting rights.
- (ii) GDRs are settled through CEDEL & Euro-clear international book entry systems.
- (iii) GDRs are listed on the Luxemburg stock exchange.
- (iv) Trading takes place between professional market makers on an OTC (over the counter) basis.
- (v) The instruments are freely traded.
- (vi) They are marketed globally without being confined to borders of any market or country as it can be traded in more than one currency.
- (vii) Investors earn fixed income by way of dividends which are paid in issuer currency converted into dollars by depository and paid to investors and hence exchange risk is with investor.
- (viii) As far as the case of liquidation of GDRs is concerned, an investor may get the GDR cancelled any time after a cooling off period of 45 days. A non-resident holder of GDRs may ask the overseas bank (depository) to redeem (cancel) the GDRs. In that case overseas depository bank shall request the domestic custodians bank to cancel the GDR and to get the corresponding underlying shares released in favour of non-resident investor. The price of the ordinary shares of the issuing company prevailing in the Bombay Stock Exchange or the National Stock Exchange on the date of advice of redemption shall be taken as the cost of acquisition of the underlying ordinary share.

### Illustration 1

*X Ltd. is interested in expanding its operation and planning to install manufacturing plant at US. For the proposed project it requires a fund of \$ 10 million (net of issue expenses/ floatation cost). The estimated floatation cost is 2%. To finance this project it proposes to issue GDRs.*

*You as financial consultant is required to compute the number of GDRs to be issued and cost of the GDR with the help of following additional information.*

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- (i) Expected market price of share at the time of issue of GDR is ₹ 250 (Face Value ₹ 100)
- (ii) 2 Shares shall underly each GDR and shall be priced at 10% discount to market price.
- (iii) Expected exchange rate ₹ 60/\$.
- (iv) Dividend expected to be paid is 20% with growth rate 12%.

### Solution

Net Issue Size = \$10 million

$$\text{Gross Issue} = \frac{\$10 \text{ million}}{0.98} = \$ 10.204 \text{ million}$$

Issue Price per GDR in ₹ (200 x 2 x 90%)	₹ 450
Issue Price per GDR in \$ (₹ 450/ ₹ 60)	\$ 7.50
Dividend Per GDR (D <sub>1</sub> ) (₹ 20 x 2)	₹ 40
Net Proceeds Per GDR (₹ 450 x 0.98)	₹ 441.00

- (a) Number of GDR to be issued

$$\frac{\$10.204 \text{ million}}{\$7.50} = 1.3605 \text{ million}$$

- (b) Cost of GDR to Odessa Ltd.

$$k_e = \frac{60.00}{441.00} + 0.12 = 21.07\%$$

**4.3 Euro-Convertible Bonds (ECBs):** A convertible bond is a debt instrument which gives the holders of the bond an option to convert the bond into a predetermined number of equity shares of the company. Usually, the price of the equity shares at the time of conversion will have a premium element. The bonds carry a fixed rate of interest. If the issuer company desires, the issue of such bonds may carry two options viz.

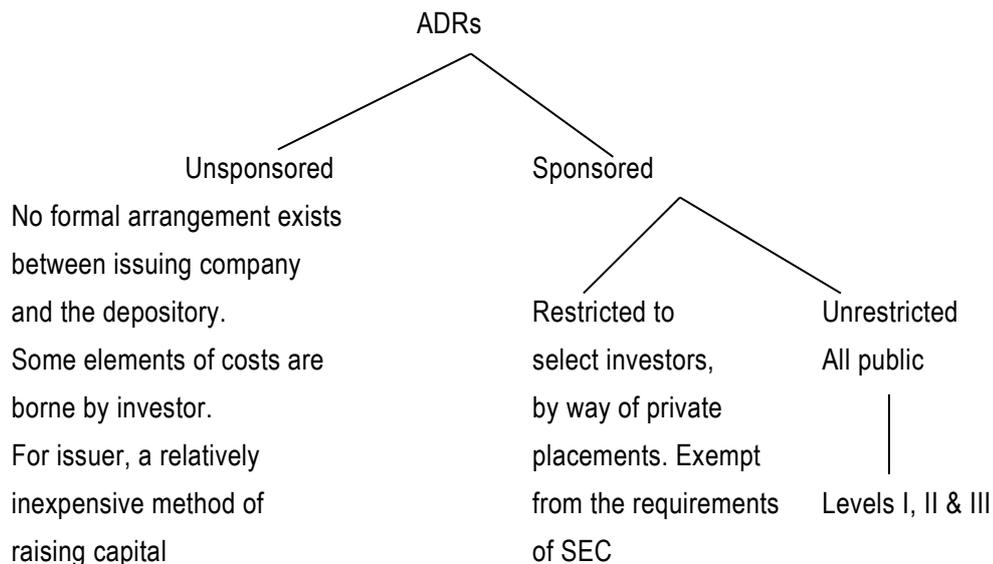
- (i) Call Options: (Issuer's option) - where the terms of issue of the bonds contain a provision for call option, the issuer company has the option of calling (buying) the bonds for redemption before the date of maturity of the bonds. Where the issuer's share price has appreciated substantially, i.e. far in excess of the redemption value of the bonds, the issuer company can exercise the option. This call option forces the investors to convert the bonds into equity. Usually, such a case arises when the share prices reach a stage near 130% to 150% of the conversion price.
- (ii) Put options - A provision of put option gives the holder of the bonds a right to put (sell) his bonds back to the issuer company at a pre-determined price and date. In case of Euro-convertible bonds, the payment of interest on and the redemption of the bonds will be made by the issuer company in US dollars.

**4.4 American Depository Receipts (ADRs):** Depository receipts issued by a company in the United States of America (USA) is known as American Depository Receipts (ADRs). Such receipts have to be issued in accordance with the provisions stipulated by the Securities and Exchange Commission of USA (SEC) which are very stringent.

An ADR is generally created by the deposit of the securities of a non-United States company with a custodian bank in the country of incorporation of the issuing company. The custodian bank informs the depository in the United States that the ADRs can be issued. ADRs are United States dollar denominated and are traded in the same way as are the securities of United States companies. The ADR holder is entitled to the same rights and advantages as owners of the underlying securities in the home country. Several variations on ADRs have developed over time to meet more specialised demands in different markets. One such variation is the GDR which are identical in structure to an ADR, the only difference being that they can be traded in more than one currency and within as well as outside the United States.

There are three types of ADRs:

ADRs are issued by entities incorporated in the USA in compliance with the conditions laid down by the Securities and Exchange Commission (SEC) of USA. ADRs are also denominated in US Dollars, and are traded in the same way as other listed securities are traded in the US stock markets. The holders of ADRs are entitled to rights and advantages comparable to the owners of underlying securities in the home country. Over time, a few variants of ADRs have emerged, features of which are summarized below:



**Un-sponsored ADRs** are issued without any formal agreement between the issuing company and the depository, although the issuing company must consent to the creation of the ADR facility. With un-sponsored ADRs, certain costs, including those associated with disbursement of dividends, are borne by the investor. For the issuing company, they provide a relatively inexpensive method of

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accessing the United States capital markets (especially because they are also exempt from most of reporting requirements of the Securities and Exchange Commission).

**Sponsored ADRs** are created by a single depository which is appointed by the issuing company under rules provided in a deposit agreement. There are two broad types of sponsored ADRs - those that are restricted with respect to the type of buyer which is allowed, and are therefore privately placed; and those that are unrestricted with respect to buyer and are publicly placed and traded. Restricted ADRs (RADRs) are allowed to be placed only among selected accredited investors and face restrictions on their resale. As these are not issued to the general public, they are exempt from reporting requirements of the Securities and Exchange Commission and are not even registered with it. Restricted ADR issues are sometimes issued by companies that seek to gain some visibility and perhaps experience in the United States capital markets before making an unrestricted issue.

**Unrestricted ADRs (URADRs)** are issued to and traded by the general investing public in United States capital markets. There are three classes of URADR, each increasingly demanding in terms of reporting requirements to the Securities and Exchange Commission, but also increasingly attractive in terms of degree of visibility provided. Level I URADRs are exempt from the requirements that the issuing company conform their financial statistics to United States Generally Accepted Accounting Principles (GAAP), as well as from full reporting requirements of the Securities and Exchange Commission. They are also therefore relatively low cost. Level II URADRs are generally issued by companies that wish to be listed on one of the United States national exchanges. The issuing company must meet the Securities and Exchange Commission's full disclosure requirements, their financial statements must conform to United States GAAP and the company must meet the listing requirements of the relevant exchange. They are therefore more costly for the issuing company, but the public listing allows much higher visibility and makes the facility more attractive to potential investors. Level III URADRs are issued by companies which seek to raise capital in the United States securities markets by making a public offering of their securities. They must also make full Securities and Exchange Commission disclosure, conform to United States GAAP and meet relevant exchange requirements, and provide the highest degree of visibility of any ADR.

Companies that apply for either listing or public issue of securities on the national exchanges of the United States must meet exchange requirements. These include specific minimum requirements with respect to the size of total assets, earnings and/or shareholders equity. These requirements, along with the reporting requirements, serve to make it difficult for small capitalization companies of emerging markets to issue either Level II or Level III URADRs. A large number of ADRs are therefore offered through private placement, especially under Rule 144A, where activity is reported to be strong. Rule 144A, passed by the Securities and Exchange Commission in 1990, eased restrictions on the resale by qualified institutional buyers of private ADR issues amongst themselves once these issues were made under this rule. Typical ADR issues appear to be relatively large. Emerging market ADR issuers tend to be large domestic companies with considerable financial resources and high international visibility. Relatively small ADR issues appear to measure in the range of between \$15 million and \$80 million, while many mid-sized issues fall within the range of \$100 million to \$300 million. Several exceptionally large issues have exceeded \$1 billion in size.

## **Foreign Direct Investment (FDI) and Foreign Institutional Investment (FIIs) 11.15**

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From the investor's point of view, ADRs lower the cost of trading non-United States companies' securities. Trades are settled in the United States within five working days (or less, given the increasingly heavy volume of trading in ADRs), whereas trades overseas can take a much longer time and raise significantly settlement risk. The depository provides both settlement and clearance services. As the facilities are traded in the United States, there is a much lower information search cost, and the problems of unfamiliarity with foreign markets and foreign laws, regulations and trading practices are overcome. The difficulties associated with locating a broker and/or custodian in the foreign market and the fees charged for these services are also avoided, and so are the obstacles that foreign languages may present. A major advantage of ADRs to the investor is that dividends are paid promptly and in United States dollars. Furthermore, the facilities are registered in the United States so that some assurance is provided to the investor with respect to the protection of ownership rights. These instruments also obviate the need to transport physically securities between markets. Communication services are also provided by the depository including provision of periodic reports on the issuing company (in English) in a format familiar to United States investors. Important information pertinent to the issuing company is transmitted to the investor by the depository. Together, these advantages provide an incentive for investors in the United States capital markets to invest in the equity of emerging markets via ADRs.

For the issuing company, the main costs of ADRs are the cost of meeting the partial or full reporting requirements of the Securities and Exchange Commission and the exchange fees (for relevant classes of ADRs). However, ADRs can be useful means for issuing companies of gaining access to United States capital markets. Thus, institutional investors that are precluded by their charter from holding foreign securities are able to invest in such securities via ADRs. They can also allow foreign investors to avoid constraints that may be placed on such investments in cases where emerging markets still maintain limits on direct investment by foreigners. In general, ADRs increase access to United States capital markets by lowering the costs of investing in the securities of non-United States companies and by providing the benefits of a convenient, familiar and well regulated trading environment. Issues of ADRs can increase the liquidity of an emerging market issuer's shares, and can potentially lower the future cost of raising equity capital by raising the company's visibility and international familiarity with the company's name, and by increasing the size of the potential investors base.

Emerging-market ADRs are in many instances issued by newly privatised companies. A small number of economies in transition (the Russian Federation in particular) have started to use depository receipts as a way of attracting foreign investment, despite lingering difficulties associated with aspects of their market infrastructure, such as transparency of financial statements, long settlement periods and potentially unreliable registration practices. The limited development, or lack of, domestic debt and equity markets in these countries makes access to foreign capital markets critical. In other cases, issues have been created by large and well known companies from emerging markets that are active in the ADR market (such as Mexico, Brazil and India), or countries with relatively good international credit ratings and a relatively long history of accessing foreign investment (such as the Republic of Korea and China). There have been noticeably few issues from companies in low-income countries (apart from India, and to lesser extent, China), and only a handful in least developed countries. The

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few issues made by the latter group of countries have been mainly by companies involved in the minerals, oil, banking and utilities industries that can be expected to be able to attract foreign financing. The growth in the number of issues from transition economies between 1992 and 1996, however, is quite noticeable (especially from Russia and Hungary).

One disadvantage of depository-receipt issues for the foreign markets in which the issuing company is incorporated is the disincentive to the development of a local capital market. Companies in emerging markets may issue ADRs because the underlying share issues may represent a relatively large volume of weekly or monthly trading activity and the domestic stock market may be considered too small to absorb the issues. While individual companies may be able to attract additional financing, at the macro economic level, an increasing trend towards emerging market issue of ADRs can retard the development of domestic capital markets by denying domestic markets additional instruments in which to invest.

In a bid to bypass the stringent disclosure norms mandated by the Securities Exchange Commission (SEC) of the US for equity issues, the Indian companies have, however, chosen the indirect route to tap the vast American financial market through private debt placement of GDRs listed in London and Luxemburg stock exchanges.

The Indian companies have preferred the GDRs to ADRs (American depository receipts) because the US market exposes them to a higher level of responsibility than a European listing in the areas of disclosure costs, liability and timing.

The companies have chosen the private placement route which allows them to mobilise vast amounts of debt vide Rule 144A of Securities Exchange Commission of USA. Some of the major power companies have drawn up plans to mobilise debts through this private placement route.

Even the merchant bankers of international repute have not recommended a SEC-registered ADR issue as an alternative option for an Indian issuer due to increased responsibilities required in conjunction with a US listing.

The Securities Exchange Commission's regulations set up to protect the retail investor base, are somewhat more stringent and onerous, even for companies already listed and held by retail investors in their home country. The most onerous aspect of a US listing for the companies is the necessity to provide full and half year account in accordance with, or at least reconciled to US GAAP.

Another prohibitive aspect of an ADR issue is the cost involved. As per the estimates, the cost of preparing and filing US GAAP account only ranges from \$500,000 to \$1,000,000 with the ongoing cost of \$ 150,000 to \$ 200,000 per annum. Because of the additional work involved, legal fees are considerably higher for a US listing, which ranges between \$250,000 to \$ 350,000 for the underwriters, to be reimbursed by the issuer.

In addition, the initial Securities Exchange Commission registration fees which are based on a percentage of the issue size as well as 'blue sky' registration costs (permitting the securities to be offered in all States of the US) will have to be met.

It has further been observed that while implied legal responsibility lies on a company's directors for the information contained in the offering document as required by any stock exchange, the US is widely recognised as the 'most litigious market in the world'. Accordingly, the broader the target investor base in the US (such as retail investors), the higher the potential legal liability.

The increasing legal problem is evident from the larger number of actions being taken by investors against the directors of companies whose share offerings have not performed according to expectations. That is why Indian Companies have so far preferred the route of GDRs rather than ADRs.

**4.5 Indian Depository Receipts (IDRS):** Like ADRs and GDRs developments in financial arena have created enormous investment opportunities for Indian investors abroad and vice-versa. Indian companies are raising finance from abroad and are available on foreign exchanges to raise finance by way of American Depository Receipts (ADRs) and Global Depository Receipts (GDRs). Similarly, foreign companies can raise finance in India in the form of Indian Depository Receipts (IDRs), which are listed in India. This enables Indians to invest in foreign companies on Indian Stock Exchanges.

The companies would however be required to fulfill a number of guidelines for listing in India through an IDR issue. This opens up a new possibility for Indian investors where they can also diversify their portfolios. This kind of phenomena is common across the various markets throughout the world.

**4.6 Debt Route for Foreign Exchange Funds:** The following are some of the instruments used for borrowing of funds from the International Market.

- **Euro-Convertible Zero Bonds:** These bonds are structured as a convertible bond. No interest is payable on the bonds. But conversion of bonds takes place on maturity at a pre-determined price. Usually there is a 5 years maturity period and they are treated as a deferred equity issue.
- **Euro-bonds with Equity Warrants:** These bonds carry a coupon rate determined by the market rates. The warrants are detachable. Pure bonds are traded at a discount. Fixed income funds' managements may like to invest for the purposes of regular income.
- **Syndicated bank loans:** One of the earlier ways of raising funds in the form of large loans from banks with good credit rating, can be arranged in reasonably short time and with few formalities. The maturity of the loan can be for a duration of 5 to 10 years. The interest rate is generally set with reference to an index, say, LIBOR plus a spread which depends upon the credit rating of the borrower. Some covenants are laid down by the lending institution like maintenance of key financial ratios.
- **Euro-bonds:** These are basically debt instruments denominated in a currency issued outside the country of that currency for examples Yen bond floated in France. Primary attraction of these bonds is the refuge from tax and regulations and provide scope for arbitraging yields. These are usually bearer bonds and can take the form of
  - (i) Traditional fixed rate bonds.

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- (ii) Floating rate Notes.(FRNs)
- (iii) Convertible Bonds.
- **Foreign Bonds:** Foreign bonds are denominated in a currency which is foreign to the borrower and sold at the country of that currency. Such bonds are always subject to the restrictions and are placed by that country on the foreigners funds.
- **Euro Commercial Papers:** These are short term money market securities usually issued at a discount, for maturities less than one year.
- **External Commercial Borrowings:** ECB include bank loans, supplier credit, securitised instruments, credit from export credit agencies and borrowings from multilateral financial institutions. These securitised instruments may be FRNs, FRBs etc. Indian corporate sector is permitted to raise finance through ECBs within the framework of the policies and procedures prescribed by the Central Government. Multilateral financial institutions like IFC, ADB, AFIC, CDC are providing such facilities while the ECB policy provides flexibility in borrowing consistent with maintenance of prudential limits for total external borrowings, its guiding principles are to keep borrowing maturities long, costs low and encourage infrastructure/core and export sector financing which are crucial for overall growth of the economy. The government of India, from time to time changes the guidelines and limits for which the ECB alternative as a source of finance is pursued by the corporate sector. During past decade the government has streamlined the ECB policy and procedure to enable the Indian companies to have their better access to the international financial markets.

The government permits the ECB route for variety of purposes namely expansion of existing capacity as well as for fresh investment. But ECB can be raised through internationally recognized sources. There are caps and ceilings on ECBs so that macro economy goals are better achieved. Units in SEZ are permitted to use ECBs under a special window.

### 5. Euro-Issues

A Euro-issue does not mean the shares (directly or indirectly) get listed on a European Stock Exchange. For example, ADR is a Euro-Issue, as much as a GDR is. And ADRs are listed in the USA. However, subscription can come from any part of the world except India. Finance can be raised by Global Depository Receipts (GDRs), Foreign Currency Convertible Bonds (FCCB) and pure debt bonds. However, GDRs, and FCCBs are more popular instruments. These instruments have been described earlier:

**5.1 Eligibility of Companies for Euro-Issue:** The Government of India has formulated a scheme of allowing Indian companies to issue equity/convertible bonds in the international markets after Government approval. However, companies with the following profile are the ones that may embark on a Euro-issue.

- (i) Good financial track record at least for a period of three years.

- (ii) Market price stability
- (iii) Market capitalisation
- (iv) Good industry prospects
- (v) Good company growth including EPS
- (vi) Better quality management
- (vii) Sound investment policies

**5.2 Advantages of Euro-Issues:** The terms of Euro- issues are far more attractive than those available in the domestic primary market. The international capital markets have tremendous absorption power.

Moreover, management control may not be immediately affected due to restrictive voting rights provision in depository agreement or through issues of convertible bonds. Euro-issues also enhance potential for future offshore fund raising.

- **For Company:** The advantages of a Euro-issue for a company are many.
  - (i) First of all the attractive pricing of Euro-issues has drawn the attention of Indian companies and they have resorted to Euro-issues considerably during the recent years. Euro-issues are priced around the market price of share. In fact, in the case of Euro-convertibles, the shares eventually get issued at a premium to the ruling market price. This results in dramatic reduction in the cost of the capital to the company.

If we compare the cost of Euro issue which is generally 4.5% with the 17 to 20 per cent for working capital borrowings (this is a dangerous statement to make because the companies that can make Euro Issues have to be Blue Chips are next to Blue Chips and such companies will not be borrowing at 17 to 20% on bank borrowings for working capital), that has to be paid to the bankers, the former seem to be quite attractive and that is why business houses are increasingly resorting to the Euro-issues. This type of pricing is just not possible in the domestic primary market because the local investors have been so used to issues which have a small premium on the par value that they do not easily accept an issue at market prices.

- (ii) Secondly, the foreign exchange fluctuations are to the account of investor and not to the company. Since the investors in Euro-issues become shareholders, a depreciation in the value of the Indian rupee only affects investor profits and does not lead to any extra outflow for the company. Whereas, if a company took a foreign currency loan, the exchange fluctuations is to the account of the company. That is why, Indian business has learnt the hard way during the last decade that a seemingly low interest rate forex loan can be a dangerous proposition when the local currency (Indian rupee) tumbles.

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- (iii) Another advantage of Euro-issues, which was earlier available and has however now been frozen by the revised guidelines, arose out of the fact that earlier there was very little monitoring over the end-use of funds collected through such issues. Companies could raise money at cheap cost and make a profit either by investing in the stock market or lending in the inter-corporate market. If for example, a company raised ₹300 crores at 4 per cent cost and lent it at 20 per cent, it makes a profit of ₹ 48 crores. In some of the cases, this may be more than the profit it makes from its regular business. Further more, its balance sheet also looks healthier with burgeoning reserves and bonus possibilities.
- (iv) This enhances the image of the company's products, services or financial instruments in a market place outside their home country. This also provides a mechanism for raising capital or as a vehicle for an acquisition.
- **Benefits to the Investors:** Euro issues also provides a number of advantages to foreign investors. Increasingly, investors are aiming to diversify their portfolios internationally. Obstacles, however, such as undependable settlements, costly conversions, unreliable custody services, poor information flow, unfamiliar market practices, confusing tax conventions etc. may discourage institutions and private investors from venturing outside the local market. As a result, more and more investors are using GDRs route. The investors are, however, benefited since.
  - (i) GDRs are usually quoted in dollars, and interest and dividend payments are also in dollars.
  - (ii) GDRs overcome obstacles that mutual funds, pension funds and other institutions may have in purchasing and holding securities outside their domestic markets.
  - (iii) Global custodians/safe-keeping charges are eliminated, saving GDR investors 30 to 60 basis points annually.
  - (iv) GDRs are as liquid as the underlying securities because the two are interchangeable.
  - (v) GDRs are negotiable.
  - (vi) GDRs overcome foreign investment restrictions.

They, however, suffer from certain disadvantages also which may be described as follows.

### 5.3 Disadvantages of Euro-Issue

- (i) As straight equity, a GDR issue would be immediately earnings dilutive.
- (ii) Pricing of GDRs are expected to be at a discount to the local market price.
- (iii) It is sometimes necessary to use warrants with GDRs to disguise discount, which can increase dilution.
- (iv) GDR issues of Indian Companies have an uneven track record for international investors.

**5.4 Structuring of Euro-Issue:** The structuring of an Euro-issue is a tough task. The company has to decide whether it has to go for private placement with foreign institutional investors (FII's) or go for GDR or Euro-convertible bonds.

The dilution of promoters holding as a result of private placement or GDR issues or by way of conversion in Euro-Convertible Bonds (ECB) issue is a matter of paramount concern for the management.

Many companies avoid Euro Convertible issues with a convertible option to be exercised after lock-in-period at a price fixed at the time of closure of the issues. Some companies prefer ECB issues even at a higher coupon rate but without put option clause.

The companies with low equity base and high reserves built up over a long period would like to structure Euro-issues without much dilution of their equity holding strength.

Many permutations and combinations are worked out. Some companies toy with the idea of structuring ECB issues with conversion price ruling at the time of conversion with a discount of 20 per cent to 30 per cent.

Some companies may like to structure Euro-bond issue with warrants enabling investors to convert such warrants into limited equity shares without significantly diluting the existing holdings of the controlling interest. How overseas investors will react to such proposals is, however, yet to be seen.

**5.5 Pricing of the Issues:** Whether it is an issue of equity (GDR) or convertible Euro-bonds, the company has to carefully consider the pricing of the equity shares. A good company's shares command premium in the stock market. The price of equity shares offered through GDR or Euro bonds is usually determined with reference to the market prices which prevailed during the week and the day prior to the date of issue. If there is a demand for such securities abroad, the price may be at a premium over the market price. Finalisation of price of the Equity shares is done in consultation with the lead manager who knows the pulse of the European investment market.

**5.6 Methodology for Euro-Issue:** In a foreign currency issue of securities, the number of documents to be prepared by a issuing company is limited as compared to a domestic issue. Generally the issuing company prepares its accounts for the last 3-5 years (which are already audited) in a revised format to conform to the Generally Accepted Accounting Practices (GAAP) prevalent abroad, say in the United Kingdom (U.K.). This is usually, called 'Reformatted Non-Consolidated Financial Statements'. These statements are considered to be very vital which indicates the financial soundness of issuing company.

The success of a Euro-issue also depends upon proper planning and execution of strategic action. It is, therefore, essential to study in depth various areas involved in Euro-issue, such as the investor's market, awareness of the company amongst such investors and correct pricing of the issue. The merchant banker occupies a pivotal place in organising a Euro-issue. As a lead manager, he renders very valuable services to the company in a host of areas like:

- (i) Formulation of marketing strategy
- (ii) Designing issue structure

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- (iii) Arranging syndication
- (iv) Finalising underwriting arrangements
- (v) Looking after miscellaneous activities
- (vi) Helps in selecting a team of intermediaries such as overseas underwriters, depository and custodians, bankers etc. Each of these intermediaries has its own distinct role to play.
- (vii) Organising due diligence meetings in which the lead manager, senior executives of the company, the auditors and legal advisors review the draft offer document, agreements, consent and comfort letters.
- (viii) Organising team arranges interviews and road shows. After having finalised the offer document, the lead manager helps in arranging interviews of Senior Executives of issuing company with the fund managers and potential investors to provide opportunity of interaction between them. Such meetings help in convincing and sustaining a conducive environment for the success of issue. Wide-spread distribution of pamphlets, brochure and impressive reports about the issuing company's activities and its global issue facilitates negotiations with the potential investors. Such meetings with the investors in common parlance, are known as Road Shows.

### 6. GDRs vs. Euro-Bonds

Issue of GDR creates equity shares of the issuing company which are kept with a designated bank. GDRs are freely transferable outside India without any reference to the issuing company. The dividends in respect of the share represented by the GDRs are paid in Indian rupees only.

If a GDR holder wishes to exchange his GDR into shares of the company he can surrender his GDR with such request to the designated international depository. On receipt of the documents the depository will instruct the designated bank having the custody of the shares to release the relative shares. Depending on the nature of the request, the bank will arrange to sell the shares through the stock exchange and remit the sale proceeds to him or arrange to get his name entered as a member of the company. Thereafter, the said shares are subject to the usual condition applicable to the company's shares.

### 7. Cross-Border Leasing

In case of cross-border or international lease, the lessor and the lessee are situated in two different countries. Because the lease transaction takes place between parties of two or more countries, it is called cross-border lease. It involves relationships and tax implications more complex than the domestic lease. When the lease transactions take place between three parties manufacturer/vendor, lessor and lessee in three different countries, this type of cross border leasing is called foreign to foreign lease. The lease may be routed through a third nation known as "convenient country" for tax or equipment registration purposes. Fourth nation may be involved for debt in a particular currency required to give effect to the equipment purchase and lease

transaction. Thus more nations involved in cross border lease would mean more complications in terms of different legal, fiscal, credit and currency requirements and risk involved.

Cross border lease benefits are more or less the same as are available in domestic lease viz. 100% funding off-balance sheets. Financing, matching of expenditure with earnings from the assets, the usual tax benefits on leasing, etc. In addition to these benefits, the following are the more crucial aspects which are required to be looked into: (i) appropriate currency requirements can be met easily to match the specific cash flow needs of the lessee;(ii) funding for long period and at fixed rate which may not be available in the lessee home market may be obtained internationally;(iii) maximum tax benefits in one or more regions could be gained by structuring the lease in a convenient fashion;(iv) tax benefits can be shared by the lessee or lessor accordingly by pricing the lease in the most beneficial way to the parties;(v) choice of assets for cross border lease is different than domestic lease because those assets may find here attractive bargain which are internationally mobile , have adequate residual value and enjoy undisputed title.

**Note:** Students may also refer to Chapter – 3, Leasing Decisions for further discussion on Cross Border Leasing.

## **8. International Capital Budgeting**

**8.1 Complexities Involved:** Multinational Capital Budgeting has to take into consideration the different factors and variables which affect a foreign project and are complex in nature than domestic projects. The factors crucial in such a situation are:

- (a) Cash flows from foreign projects have to be converted into the currency of the parent organization.
- (b) Parent cash flows are quite different from project cash flows
- (c) Profits remitted to the parent firm are subject to tax in the home country as well as the host country
- (d) Effect of foreign exchange risk on the parent firm's cash flow
- (e) Changes in rates of inflation causing a shift in the competitive environment and thereby affecting cash flows over a specific time period
- (f) Restrictions imposed on cash flow distribution generated from foreign projects by the host country
- (g) Initial investment in the host country to benefit from the release of blocked funds
- (h) Political risk in the form of changed political events reduce the possibility of expected cash flows
- (i) Concessions/benefits provided by the host country ensures the upsurge in the profitability position of the foreign project
- (j) Estimation of the terminal value in multinational capital budgeting is difficult since the buyers in the parent company have divergent views on acquisition of the project.

**8.2 Problems Affecting Foreign Investment Analysis:** The various types of problems faced in International Capital Budgeting analysis are as follows:

(1) Multinational companies investing elsewhere are subjected to foreign exchange risk in the sense that currency appreciates/ depreciates over a span of time. To include foreign exchange risk in the cash flow estimates of any project, it is necessary to forecast the inflation rate in the host country during the lifetime of the project. Adjustments for inflation are made in the cash flows depicted in local currency. The cash flows are converted in parent country's currency at the spot exchange rate multiplied by the expected depreciation rate obtained from purchasing power parity.

(2) Due to restrictions imposed on transfer of profits, depreciation charges and technical differences exist between project cash flows and cash flows obtained by the parent organization. Such restriction can be diluted by the application of techniques viz internal transfer prices, overhead payments. Adjustment for blocked funds depends on its opportunity cost, a vital issue in capital budgeting process.

(3) In multinational capital budgeting, after tax cash flows need to be considered for project evaluation. The presence of two tax regimes along with other factors such as remittances to the parent firm in the form of royalties, dividends, management fees etc, tax provisions with held in the host country, presence of tax treaties, tax discrimination pursued by the host country between transfer of realized profits vis-à-vis local re-investment of such profits cause serious impediments to multinational capital budgeting process. MNCs are in a position to reduce overall tax burden through the system of transfer pricing.

For computation of actual after tax cash flows accruing to the parent firm, higher of home/ host country tax rate is used. If the project becomes feasible then it is acceptable under a more favourable tax regime. If infeasible, other tax saving aspects need to be incorporated in order to find out whether the project crosses the hurdle rate.

**8.3 Project vis-a-vis Parent Cash Flows:** There exists a big difference between the project and parent cash flows due to tax rules, exchange controls. Management and royalty payments are returns to the parent firm. The basis on which a project shall be evaluated depend on one's own cash flows, cash flows accruing to the parent firm or both.

Evaluation of a project on the basis of own cash flows entails that the project should compete favourably with domestic firms and earn a return higher than the local competitors. If not, the shareholders and management of the parent company shall invest in the equity/government bonds of domestic firms. A comparison can not be made since foreign projects replace imports and are not competitors with existing local firms. Project evaluation based on local cash flows avoid currency conversion and eliminates problems associated with fluctuating exchange rate changes.

For evaluation of foreign project from the parent firm's angle, both operating and financial cash flows actually remitted to it form the yardstick for the firm's performance and the basis for distribution of dividends to the shareholders and repayment of debt/interest to lenders. An investment has to be evaluated on basis of net after tax operating cash flows generated by the project. As both types of cash flows (operating and financial) are clubbed together, it is essential to see that financial cash flows are not mixed up with operating cash flows.

**8.4 Discount Rate and Adjusting Cash Flows:** An important aspect in multinational capital budgeting is to adjust cash flows or the discount rate for the additional risk arising from foreign location of the project. Earlier MNCs adjusted the discount rate upwards for riskier projects as they considered uncertainties in political environment and foreign exchange fluctuations. The MNCs considered adjusting the discount rate to be popular as the rate of return of a project should be in conformity with the degree of risk. It is not proper to combine all risks into a single discount rate. Political risk/uncertainties attached to a project relate to possible adverse effects which might occur in future but cannot be foreseen at present. So adjusting discount rates for political risk penalises early cash flows more than distant cash flows. Also adjusting discount rate to offset exchange risk only when adverse exchange rate movements are expected is not proper since a MNC can gain from favourable currency movements during the life of the project on many occasions. Instead of adjusting discount rate while considering risk it is worthwhile to adjust cash flows. The annual cash flows are discounted at a rate applicable to the project either at that of the host country or parent country. Probability with certainty equivalent method along with decision tree analysis are used for economic and financial forecasting. Cash flows generated by the project and remitted to the parent during each period are adjusted for political risk, exchange rate and other uncertainties by converting them into certainty equivalents.

**8.5 Approaches to Calculate NPV of International Project:** Broadly two approaches are used to calculate NPV of international project.

**8.5.1 Home Currency Approach:** This approach involves conversion of foreign currency cash flows in domestic currency flows using expected exchange rate and then discounting these cash flows at required rate of return. The rate to be used in the required converting Foreign Currency cash flow in domestic currency shall be based on Interest Rate Parity.

**8.5.2 Foreign Currency Approach:** This approach involves conversion of required rate of return or discounting rate for domestic cash flows into discounting rate for foreign currency denominated cash flows and then discount Foreign Currency cash flow by using this converted rate then convert NPV obtained using Spot Rate.

Note: Final answer by above two methods shall almost be equal.
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**Illustration 2**

*ABC Ltd. is considering a project in Germany, which will involve an initial investment of € 2,20,00,000. The project will have 5 years of life. Current spot exchange rate is ₹ 72 per €. The risk-free rate in Germany is 4% and the same in India is 6%. Cash inflow from the project is as follows:*

Year	Cash inflow
1	€ 40,00,000
2	€ 50,00,000
3	€ 60,00,000
4	€ 80,00,000
5	€ 100,00,000

*Calculate the NPV of the project using*

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- (a) Home Currency Approach  
 (b) Foreign Currency Approach.

Required rate of return on this project is 7%.

### Solution

#### (a) (i) Calculation of Forward Exchange Rates

End of Year	₹	₹/€
1	$₹72.00 \times \left(\frac{(1+0.06)}{(1+0.04)}\right)^1$	73.38
2	$₹72.00 \times \left(\frac{(1+0.06)}{(1+0.04)}\right)^2$	74.80
3	$₹72.00 \times \left(\frac{(1+0.06)}{(1+0.04)}\right)^3$	76.23
4	$₹72.00 \times \left(\frac{(1+0.06)}{(1+0.04)}\right)^4$	77.70
5	$₹72.00 \times \left(\frac{(1+0.06)}{(1+0.04)}\right)^5$	79.19

#### Calculation of NPV

Year	Cash Flow (Million) €	Expected Rate	Cash flow	PV Factor @ 7%	P.V.
1	4.00	73.38	293.52	0.935	274.44
2	5.00	74.80	374.00	0.873	326.50
3	6.00	76.23	457.38	0.816	373.22
4	8.00	77.70	621.60	0.763	474.28
5	10.00	79.19	791.90	0.713	564.62
Total PV of Cash Inflows					2013.06
Less: Investment	22.00	72.00			1584.00
NPV					429.06

Therefore, Rupee NPV of the project is = ₹ 429.06

and € NPV = ₹ 429.06 / ₹72.00 = € 5.96 Million

$$(b) (1 + 0.06) (1 + \text{Risk Premium}) = (1 + 0.07)$$

$$\text{Or, } 1 + \text{Risk Premium} = 1.07/1.06 = 1.00943$$

Therefore, Risk adjusted dollar rate is =  $1.00943 \times 1.04 = 1.0498 - 1 = 0.0498$

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Calculation of NPV

Year	Cash flow (Million) €	PV Factor at 4.98%	P. V.
1	4.00	0.953	3.812
2	5.00	0.907	4.535
3	6.00	0.864	5.184
4	8.00	0.823	6.584
5	10.00	0.784	<u>7.840</u>
			27.955
		Less: Investment	<u>22.000</u>
		NPV	<u>5.955</u>

Therefore, Rupee NPV of the project is = ₹ (72 x 5.955) Million  
= ₹428.76 Million

**8.6 Adjusted Present Value Approach (APV) Approach:** APV is used in evaluating foreign projects. The APV model is a value additive approach to capital budgeting process i.e. each cash flow is considered individually and discounted at a rate consistent with risk involved in the cash flow.

Different components of the project's cash flow have to be discounted separately.

The APV method uses different discount rates for different segments of the total cash flows depending on the degree of certainty attached with each cash flow. The financial analyst tests the basic viability of the foreign project before accounting for all complexities. If the project is feasible no further evaluation based on accounting for other cash flows is done. If not feasible, an additional evaluation is done taking into consideration the other complexities.

The APV model is represented as follows.

$$-I_0 + \sum_{t=1}^n \frac{X_t}{(1+k^*)^t} + \sum_{t=1}^n \frac{T_t}{(1+i_d)^t} + \sum_{t=1}^n \frac{S_t}{(1+i_d)^t}$$

Where  $I_0$  → Present Value of Investment Outlay

$\frac{X_t}{(1+k^*)^t}$  → Present Value of Operating Cash Flow

$\frac{T_t}{(1+i_d)^t}$  → Present Value of Interest Tax Shields

$\frac{S_t}{(1+i_d)^t}$  → Present Value of Interest Subsidies

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$T_t$  → Tax Saving in year  $t$  due to financial mix adopted

$S_t$  → Before tax value of interests subsidies (on home currency) in year  $t$  due to project specific financing

$i_d$  → Before tax cost of dollar debt (home currency)

The initial investment will be net of any 'Blocked Funds' that can be made use of by the parent company for investment in the project. 'Blocked Funds' are balances held in foreign countries that cannot be remitted to the parent due to Exchange Control regulations. These are 'direct blocked funds' Apart from this, it is quite possible that significant costs in the form of local taxes or withholding taxes arise at the time of remittance of the funds to the parent country. Such 'blocked funds' are indirect. If a parent company can release such 'Blocked Funds' in one country for the investment in a overseas project, then such amounts will go to reduce the 'Cost of Investment Outlay'.

The last two terms are discounted at the before tax cost of debt to reflect the relative cash flows due to tax and interest savings.

**Scenarios:** Following three illustrations are based on three different scenarios:

### 8.6.1 A foreign company is investing in India

#### Illustration 3

*Perfect Inc., a U.S. based Pharmaceutical Company has received an offer from Aids cure Ltd., a company engaged in manufacturing of drugs to cure Dengue, to set up a manufacturing unit in Baddi (H.P.), India in a joint venture.*

*As per the Joint Venture agreement, Perfect Inc. will receive 55% share of revenues plus a royalty @ US \$0.01 per bottle. The initial investment will be ₹200 crores for machinery and factory. The scrap value of machinery and factory is estimated at the end of five (5) year to be ₹5 crores. The machinery is depreciable @ 20% on the value net of salvage value using Straight Line Method. An initial working capital to the tune of ₹50 crores shall be required and thereafter ₹5 crores each year.*

*As per GOI directions, it is estimated that the price per bottle will be ₹7.50 and production will be 24 crores bottles per year. The price in addition to inflation of respective years shall be increased by ₹1 each year. The production cost shall be 40% of the revenues.*

*The applicable tax rate in India is 30% and 35% in US and there is Double Taxation Avoidance Agreement between India and US. According to the agreement tax credit shall be given in US for the tax paid in India. In both the countries, taxes shall be paid in the following year in which profit have arisen.*

*The Spot rate of \$ is ₹57. The inflation in India is 6% (expected to decrease by 0.50% every year) and 5% in US.*

*As per the policy of GOI, only 50% of the share can be remitted in the year in which they are earned and remaining in the following year.*

*Though WACC of Perfect Inc. is 13% but due to risky nature of the project it expects a return of 15%.*

*Determine whether Perfect Inc. should invest in the project or not (from subsidiary point of view).*

## Foreign Direct Investment (FDI) and Foreign Institutional Investment (FIIs) 11.29

### Solution

#### Working Notes:

1. Estimated Exchange Rates (Using PPP Theory)

Year	0	1	2	3	4	5	6
Exchange rate	57	57.54	57.82	57.82	57.54	56.99	56.18

2. Share in sales

Year	1	2	3	4	5
Annual Units in crores	24	24	24	24	24
Price per bottle (₹)	7.50	8.50	9.50	10.50	11.50
Price fluctuating Inflation Rate	6.00%	5.50%	5.00%	4.50%	4.00%
Inflated Price (₹)	7.95	8.97	9.98	10.97	11.96
Inflated Sales Revenue (₹ Crore)	190.80	215.28	239.52	263.28	287.04
Sales share @55%	104.94	118.40	131.74	144.80	157.87

3. Royalty Payment

Year	1	2	3	4	5
Annual Units in crores	24	24	24	24	24
Royalty in \$	0.01	0.01	0.01	0.01	0.01
Total Royalty (\$ Crore)	0.24	0.24	0.24	0.24	0.24
Exchange Rate	57.54	57.82	57.82	57.54	56.99
Total Royalty (₹ Crore)	13.81	13.88	13.88	13.81	13.68

4. Tax Liability

(₹ Crore)

Year	1	2	3	4	5
Sales Share	104.94	118.40	131.74	144.80	157.87
Total Royalty	13.81	13.88	13.88	13.81	13.68
Total Income	118.75	132.28	145.61	158.61	171.55
Less: Expenses					
Production Cost	41.98	47.36	52.69	57.92	63.15
Depreciation	39.00	39.00	39.00	39.00	39.00
PBT	37.77	45.92	53.92	61.69	69.40
Tax on Profit @30%	11.33	13.78	16.18	18.51	20.82
Net Profit	26.44	32.14	37.74	43.18	48.58

### 11.30 Strategic Financial Management

#### 5. Free Cash Flow

(₹ Crore)

Year	0	1	2	3	4	5	6
Sales Share	0.00	104.94	118.40	131.74	144.80	157.87	0.00
Total Royalty	0.00	13.81	13.88	13.88	13.81	13.68	0.00
Production Cost	0.00	-41.98	-47.36	-52.69	-57.92	-63.15	0.00
Initial Outlay	-200.00	0.00	0.00	0.00	0.00	0.00	0.00
Working Capital	-50.00	-5.00	-5.00	-5.00	-5.00	70.00	0.00
Scrap Value	0.00	0.00	0.00	0.00	0.00	5.00	0.00
Tax on Profit	0.00	0.00	-11.33	-13.78	-16.18	-18.51	-20.82
<b>Free Cash Flow</b>	<b>-250.00</b>	<b>71.77</b>	<b>68.59</b>	<b>74.15</b>	<b>79.51</b>	<b>164.89</b>	<b>-20.82</b>

#### 6. Remittance of Cash Flows

(₹ Crore)

Year	0	1	2	3	4	5	6
Free Cash Flow	-250.00	71.77	68.59	74.15	79.51	164.89	-20.82
50% of Current Year Cash Flow	0.00	35.89	34.29	37.07	39.76	82.45	0.00
Previous year remaining cash flow	0.00	0.00	35.88	34.30	37.08	39.75	82.44
<b>Total Remittance</b>	<b>-250.00</b>	<b>35.88</b>	<b>70.17</b>	<b>71.37</b>	<b>76.84</b>	<b>122.20</b>	<b>61.62</b>

#### NPV of Project under Appraisal

Year	0	1	2	3	4	5	6
Total Remittance (₹ Crore)	-250.00	35.88	70.17	71.37	76.84	122.20	61.62
Exchange Rate	57.00	57.54	57.82	57.82	57.54	56.99	56.18
Remittance (\$mn)	-43.86	6.24	12.14	12.34	13.35	21.44	10.97
US Tax @35% (\$mn)	0.00	0.00	2.18	4.25	4.32	4.67	7.50
Indian Tax (\$mn)	0.00	0.00	1.96	2.38	2.82	3.25	3.71
Net Tax (\$mn)	0.00	0.00	0.22	1.87	1.51	1.42	3.79
Net Cash Flow (\$mn)	-43.86	6.24	11.92	10.47	11.84	20.02	7.18
PVF	1.000	0.870	0.756	0.658	0.572	0.497	0.432
Present Value (\$mn)	-43.86	5.43	9.01	6.89	6.77	9.95	3.10
<b>Net Present Value (\$mn)</b>	<b>= -2.71</b>						

Decision: Since NPV of the project is negative, Perfect inc. should not invest in the project.

**8.6.2** An Indian Company is investing in foreign country by raising fund in the same country.

**Illustration 4**

*Its Entertainment Ltd., an Indian Amusement Company is happy with the success of its Water Park in India. The company wants to repeat its success in Nepal also where it is planning to establish a Grand Water Park with world class amenities. The company is also encouraged by a marketing research report on which it has just spent ₹ 20,00,000 lacs.*

*The estimated cost of construction would be Nepali Rupee (NPR) 450 crores and it would be completed in one years time. Half of the construction cost will be paid in the beginning and rest at the end of year. In addition, working capital requirement would be NPR 65 crores from the year end one. The after tax realizable value of fixed assets after four years of operation is expected to be NPR 250 crores. Under the Foreign Capital Encouragement Policy of Nepal, company is allowed to claim 20% depreciation allowance per year on reducing balance basis subject to maximum capital limit of NPR 200 crore. The company can raise loan for theme park in Nepal @ 9%.*

*The water park will have a maximum capacity of 20,000 visitors per day. On an average, it is expected to achieve 70% capacity for first operational four years. The entry ticket is expected to be NPR 220 per person. In addition to entry tickets revenue, the company could earn revenue from sale of food and beverages and fancy gift items. The average sales expected to be NPR 150 per visitor for food and beverages and NPR 50 per visitor for fancy gift items. The sales margin on food and beverages and fancy gift items is 20% and 50% respectively. The park would open for 360 days a year.*

*The annual staffing cost would be NPR 65 crores per annum. The annual insurance cost would be NPR 5 crores. The other running and maintenance costs are expected to be NPR 25 crores in the first year of operation which is expected to increase NPR 4 crores every year. The company would apportion existing overheads to the tune of NPR 5 crores to the park.*

*All costs and receipts (excluding construction costs, assets realizable value and other running and maintenance costs) mentioned above are at current prices (i.e. 0 point of time) which are expected to increase by 5% per year.*

*The current spot rate is NPR 1.60 per ₹. The tax rate in India is 30% and in Nepal it is 20%.*

*The current WACC of the company is 12%. The average market return is 11% and interest rate on treasury bond is 8%. The company's current equity beta is 0.45. The company's funding ratio for the Water Park would be 55% equity and 45% debt.*

*Being a tourist Place, the amusement industry in Nepal is competitive and very different from its Indian counterpart. The company has gathered the relevant information about its nearest competitor in Nepal. The competitor's market value of the equity is NPR 1850 crores and the debt is NPR 510 crores and the equity beta is 1.35.*

*State whether Its Entertainment Ltd. should undertake Water Park project in Nepal or not.*

**Solution**

**Working Notes:**

1. Calculation of Cost of Funds/ Discount Rate

Competing Company's Information	
Equity Market Value	1850.00
Debt Market Value	510.00
Equity Beta	1.35

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Assuming debt to be risk free i.e. beta is zero, the beta of competitor is un-g geared as follows:

$$\text{Asset Beta} = \text{Equity Beta} \times \frac{E}{E+D(1-t)} = 1.35 \times \frac{1850}{1850+510(1-0.20)} = 1.106$$

Equity beta for Its Entertainment Ltd. in Nepal

Assets beta in Nepal	1.106
Ratio of funding in Nepal	
Equity	55.00%
Debt	45.00%

$$1.106 = \text{Equity Beta} \times \frac{55}{55 + 45(1 - 0.30)} = 1.74$$

Cost of Equity as per CAPM

Market Return 11.00%

Risk free return 8.00%

Cost of Equity = Risk free return +  $\beta$  (Market Return - Risk free return)

$$= 8.00\% + 1.74(11.00\% - 8.00\%) = 13.22\%$$

WACC = 13.22% x 0.55 + 9%(1 - 0.20) x 0.45 = 10.51%

2. Present Value Factors at the discount rate of 10.51%

Year	0	1	2	3	4	5
PVAF	1.000	0.905	0.819	0.741	0.670	0.607

3. Calculation of Capital Allowances

Year	1	2	3	4
Opening Balance (NPR Crore)	200.00	160.00	128.00	102.40
Less: Depreciation (NPR Crore)	40.00	32.00	25.60	20.48
Closing Balance (NPR Crore)	160.00	128.00	102.40	81.92

Calculation of Present of Free Cash Flow

Year	0	1	2	3	4	5
Expected Annual visitors			5040000	5040000	5040000	5040000
Entry ticket price per visitor (NPR)			242.55	254.68	267.41	280.78
Profit from sale of Food and Beverages per visitor (NPR)			33.08	34.73	36.47	38.29

### Foreign Direct Investment (FDI) and Foreign Institutional Investment (FIIs) 11.33

Profit from sale of Fancy Gift Items per visitor (NPR)			27.56	28.94	30.39	31.91
Revenue per visitor (NPR)			303.19	318.35	334.26	350.98
Total Revenue (NPR crores)			152.81	160.45	168.47	176.89
Less:						
Annual Staffing Cost (NPR crores)			71.66	75.25	79.01	82.96
Annual Insurance Costs (NPR crores)			5.51	5.79	6.08	6.38
Other running and maintenance costs (NPR crores)			25.00	29.00	33.00	37.00
Depreciation Allowances (NPR crores)			40.00	32.00	25.60	20.48
Total Expenses (NPR crores)			142.18	142.03	143.69	146.82
PBT (NPR crores)			10.63	18.41	24.78	30.07
Tax on Profit (NPR crores)			2.13	3.68	4.96	6.01
Net Profit (NPR crores)			8.51	14.73	19.83	24.06
Add: Depreciation Allowances (NPR crores)			40	32	25.6	20.48
Park Construction Cost (NPR crores)	-225	-225				
After tax assets realisation value (NPR crores)						250
Working capital (NPR crores)		-65.00	-3.25	-3.41	-3.58	75.25
Net cash Flow (NPR crores)	-225.00	-290.00	45.26	43.32	41.84	369.78
PVF at discount rate	1.00	0.90	0.82	0.74	0.67	0.61
Present Values (NPR crores)	-225.00	-262.42	37.06	32.10	28.06	224.35

Net Present Value (NPR crores) -165.85

**8.6.3** An Indian Company is investing in foreign country by raising fund in different country through the mode of Global Depository Receipts (GDRs).

## 11.34 Strategic Financial Management

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### Illustration 5

Opus Technologies Ltd., an Indian IT company is planning to make an investment through a wholly owned subsidiary in a software project in China with a shelf life of two years. The inflation in China is estimated as 8 percent. Operating cash flows are received at the year end.

For the project an initial investment of Chinese Yuan (CN¥) 30,00,000 will be in land. The land will be sold after the completion of project at estimated value of CN¥ 35,00,000. The project also requires an office complex at cost of CN¥ 15,00,000 payable at the beginning of project. The complex will be depreciated on straight-line basis over two years to a zero salvage value. This complex is expected to fetch CN¥ 5,00,000 at the end of project.

The company is planning to raise the required funds through GDR issue in Mauritius. Each GDR will have 5 common equity shares of the company as underlying security which are currently trading at ₹200 per share (Face Value = ₹10) in the domestic market. The company has currently paid the dividend of 25% which is expected to grow at 10% p.a. The total issue cost is estimated to be 1 percent of issue size.

The annual sales is expected to be 10,000 units at the rate of CN¥ 500 per unit. The price of unit is expected to rise at the rate of inflation. Variable operating costs are 40 percent of sales. Fixed operating costs will be CN¥ 22,00,000 per year and expected to rise at the rate of inflation.

The tax rate applicable in China for income and capital gain is 25 percent and as per GOI Policy no further tax shall be payable in India. The current spot rate of CN¥ 1 is ₹9.50. The nominal interest rate in India and China is 12% and 10% respectively and the international parity conditions hold

You are required to

- (a) Identify expected future cash flows in China and determine NPV of the project in CN¥.
- (b) Determine whether Opus Technologies should go for the project or not assuming that there neither there is restriction on the transfer of funds from China to India nor any charges/taxes payable on the transfer of funds.

### Solution

#### Working Notes:

1. Calculation of Cost of Capital (GDR)

Current Dividend ( $D_0$ )	2.50
Expected Dividend ( $D_1$ )	2.75
Net Proceeds	198.00
Growth Rate	10.00%

$$k_e = \frac{2.75}{198} + 0.10 = 0.1139 \text{ i.e. } 11.39\%$$

## Foreign Direct Investment (FDI) and Foreign Institutional Investment (FIIs) 11.35

2. Calculation of Expected Exchange Rate as per Interest Rate Parity

YEAR	EXPECTED RATE
1	$= 9.50 \times \frac{(1 + 0.12)}{(1 + 0.10)} = 9.67$
2	$= 9.50 \times \frac{(1 + 0.12)^2}{(1 + 0.10)^2} = 9.85$

3. Realization on the disposal of Land net of Tax

	CN¥
Sale value at the end of project	3500000.00
Cost of Land	3000000.00
Capital Gain	500000.00
Tax paid	125000.00
Amount realized net of tax	3375000.00

4. Realization on the disposal of Office Complex

	(CN¥)
Sale value at the end of project	500000.00
WDV	0.00
Capital Gain	500000.00
Tax paid	125000.00
Amount realized net of tax (A)	375000.00

5. Computation of Annual Cash Inflows

Year	1	2
Annual Units in crores	10000	10000
Price per bottle (CN¥)	540.00	583.20
Annual Revenue (CN¥)	5400000.00	5832000.00
Less: Expenses		
Variable operating cost (CN¥)	2160000.00	2332800.00
Depreciation (CN¥)	750000.00	750000.00
Fixed Cost per annum (CN¥)	2376000.00	2566080.00
PBT (CN¥)	114000.00	183120.00
Tax on Profit (CN¥)	28500.00	45780.00
Net Profit (CN¥)	85500.00	137340.00
Add: Depreciation (CN¥)	750000.00	750000.00
Cash Flow	835500.00	887340.00

### 11.36 Strategic Financial Management

(a) Computation of NPV of the project in CN¥

(CN¥)

Year	0	1	2
Initial Investment	-4500000.00		
Annual Cash Inflows		835500.00	887340.00
Realization on the disposal of Land net of Tax			3375000.00
Realization on the disposal of Office Complex			375000.00
Total	-4500000.00	835500.00	4637340.00
PVF @11.39%	1.000	0.898	0.806
PV of Cash Flows	-4500000.00	750279.00	3737696.00
NPV			-12,025

(b) Evaluation of Project from Opus Point of View

(i) Assuming that inflow funds are transferred in the year in which same are generated i.e. first year and second year.

Year	0	1	2
Cash Flows (CN¥)	-4500000.00	835500.00	4637340.00
Exchange Rate (₹/ CN¥)	9.50	9.67	9.85
Cash Flows (₹)	-42750000.00	8079285.00	45677799.00
PVF	1.00	0.893	0.797
	-42750000.00	7214802.00	36405206.00
NPV			870008.00

(ii) Assuming that inflow funds are transferred at the end of the project i.e. second year.

Year	0	2
Cash Flows (CN¥)	-4500000.00	5472840.00
Exchange Rate (Rs./ CN¥)	9.50	9.85
Cash Flows (Rs.)	-42750000.00	53907474.00
PVF	1.00	0.797
	-42750000.00	42964257.00
NPV		214257.00

Though in terms of CN¥ the NPV of the project is negative but in Rs. it has positive NPV due to weakening of Rs. in comparison of CN¥. Thus Opus can accept the project.

## **9. International Working Capital Management**

The management of working capital in an international firm is much more complex as compared to a domestic one. The reasons for such complexity are:

- (1) A multinational firm has a wider option for financing its current assets. A MNC has funds flowing in from different parts of international financial markets. Therefore, it may choose to avail financing either locally or from global financial markets. Such an opportunity does not exist for pure domestic firms.
- (2) Interest and tax rates vary from one country to the other. A Treasurer associated with a multinational firm has to consider the interest/ tax rate differentials while financing current assets. This is not the case for domestic firms.
- (3) A multinational firm is confronted with foreign exchange risk due to the value of inflow/outflow of funds as well as the value of import/export are influenced by exchange rate variations. Restrictions imposed by the home or host country government towards movement of cash and inventory on account of political considerations affect the growth of MNCs. Domestic firm limit their operations within the country and does not face such problems.
- (4) With limited knowledge of the politico-economic conditions prevailing in different host countries, a Manager of a multinational firm often finds it difficult to manage working capital of different units of the firm operating in these countries. The pace of development taking place in the communication system has to some extent eased this problem.
- (5) In countries which operate on full capital convertibility, a MNC can move its funds from one location to another and thus mobilize and 'position' the funds in the most efficient way possible. Such freedom may not be available for MNCs operating in countries that have not subscribed to full capital convertibility (like India).

A study of International Working Capital Management requires knowledge of Multinational Cash Management, International Inventory Management and International Receivables Management.

**9.1 Multinational Cash Management:** MNCs are very much concerned with effective cash management. International money managers follow the traditional objectives of cash management viz.

- (1) effectively managing and controlling cash resources of the company as well as
- (2) achieving optimum utilization and conservation of funds.

The former objective can be attained by improving cash collections and disbursements and by making an accurate and timely forecast of cash flow pattern. The latter objective can be reached by making money available as and when needed, minimising the cash balance level and increasing the risk adjusted return on funds that is to be invested.

## 11.38 Strategic Financial Management

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International Cash Management requires Multinational firms to adhere to the extant rules and regulations in various countries that they operate in. Apart from these rules and regulations, they would be required to follow the relevant forex market practices and conventions which may not be practiced in their parent countries. A host of factors curtail the area of operations of an international money manager e.g. restrictions on FDI, repatriation of foreign sales proceeds to the home country within a specified time limit and the, problem of blocked funds. Such restrictions hinder the movement of funds across national borders and the manager has to plan beforehand the possibility of such situation arising on a country to country basis. Other complications in the form of multiple tax jurisdictions and currencies and absence of internationally integrated exchange facilities result in shifting of cash from one location to another to overcome these difficulties.

The main objectives of an effective system of international cash management are :

- (1) To minimise currency exposure risk.
- (2) To minimise overall cash requirements of the company as a whole without disturbing smooth operations of the subsidiary or its affiliate.
- (3) To minimise transaction costs.
- (4) To minimise country's political risk.
- (5) To take advantage of economies of scale as well as reap benefits of superior knowledge.

The objectives are conflicting in nature as minimising of transaction costs require cash balance to be kept in the currency in which they are received thereby contradicting both currency and political exposure requirements.

A centralized cash management group is required to monitor and manage parent subsidiary and inter-subsidary cash flows. Centralization needs centralization of information, reports and decision making process relating to cash mobilisation, movement and investment. This system benefits individual subsidiaries which require funds or are exposed to exchange rate risk.

A centralised cash system helps MNCs as follows:

- (a) To maintain minimum cash balance during the year.
- (b) To manage judiciously liquidity requirements of the centre.
- (c) To optimally use various hedging strategies so that MNC's foreign exchange exposure is minimised.
- (d) To aid the centre to generate maximum returns by investing all cash resources optimally.
- (e) To aid the centre to take advantage of multinational netting so that transaction costs and currency exposure are minimised.
- (f) To make maximum utilization of transfer pricing mechanism so that the firm enhances its profitability and growth.

- (g) To exploit currency movement correlations:
  - (i) Payables & receivables in different currencies having positive correlations
  - (ii) Payables of different currencies having negative correlations
  - (iii) Pooling of funds allows for reduced holding – the variance of the total cash flows for the entire group will be smaller than the sum of the individual variances

Consider an MNC with two subsidiaries in different countries. The two subsidiaries periodically send fees and dividends to the parent as well as send excess cash – all of them represent incoming cash to the parent while the cash outflows to the subsidiaries include loans and return on cash invested by them. As subsidiaries purchase supplies from each other they have cash flows between themselves.

International Cash Management has two basic objectives:

1. Optimising Cash Flow movements.
2. Investing excess cash.

As no single strategy of international cash management can help in achieving both these objectives together, its task on such aspects becomes very challenging.

**9.1.1 Optimising Cash Flow movements:** There are numerous ways of optimising cash inflows:

- (i) Accelerating cash inflows.
- (ii) Managing blocked funds.
- (iii) Minimising tax on cash flow through international transfer pricing.
- (iv) Leading and Lagging strategy.
- (v) Using netting to reduce overall transaction costs by eliminating number of unnecessary conversions and transfer of currencies.

**(i) Accelerating Cash Inflows:** Faster recovery of cash inflows helps the firm to use them whenever required or to invest them for better returns. Customers all over the world are instructed to send their payments to lockboxes set up at various locations, thereby reducing the time and transaction costs involved in collecting payments. Also, through pre-authorized payment, an organization may be allowed to charge the customer's bank account up to some limit.

**(ii) Managing Blocked Funds:** The host country may block funds of the subsidiary to be sent to the parent or make sure that earnings generated by the subsidiary be reinvested locally before being remitted to the parent so that jobs are created and unemployment reduced. The subsidiary may be instructed to obtain bank finance locally for the parent firm so that blocked funds may be utilised to pay off bank loans.

The parent company has to assess the potential of future funds blockage in a foreign country. MNCs have to be aware of political risks cropping up due to unexpected blockage of funds

## 11.40 Strategic Financial Management

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and devise ways to benefit their shareholders by using different methods for moving blocked funds through transfer pricing strategies, direct negotiations, leading and lagging and so on.

**(iii) Minimising Tax on Cash Flows through Transfer Pricing Mechanism:** Large entities having many divisions require goods and services to be transferred frequently from one division to another. The profits of different divisions are determined by the price to be charged by the transferor division to the transferee division. The higher the transfer price, the larger will be the gross profit of the transferor division with respect to the transferee division. The position gets complicated for MNCs due to exchange restrictions, inflation differentials, import duties, tax rate differentials between two nations, quotas imposed by host country, etc.

**(iv) Leading and Lagging:** This technique is used by subsidiaries for optimizing cash flow movements by adjusting the timing of payments to determine expectations about future currency movements. MNCs accelerate (lead) or delay (lag) the timing of foreign currency payments through adjustment of the credit terms extended by one unit to another. The technique helps to reduce foreign exchange exposure or to increase available working capital. Firms accelerate payments of hard currency payables and delay payments of soft currency payables in order to reduce foreign exchange exposure. A MNC in the USA has subsidiaries all over the world. A subsidiary in India purchases its supplies from another subsidiary in Japan. If the Indian subsidiary expects the rupee to fall against the yen, then it shall be the objective of that firm to accelerate the timing of its payment before the rupee depreciates. Such a strategy is called Leading. On the other hand, if the Indian subsidiary expects the rupee to rise against the yen then it shall be the objective of that firm to delay the timing of its payment before the rupee appreciates. Such a strategy is called Lagging. MNCs should be aware of the government restrictions in such countries before availing of such strategies.

Leading and Lagging involve the movement of cash inflows and outflows, forward and backward in time so as to allow netting and achieve various goals. Regulations governing Leading and Lagging are subject to frequent changes and vary from country to country. So, the global finance manager has to keep himself abreast with such changed regulations before he can successfully employ this technique. The advantages associated with Leading and Lagging are:

1. No formal recognition of indebtedness is required and the credit terms can be altered by increase / decrease of the terms on the accounts.
2. It helps in minimizing foreign exchange exposure and helps in transferring liquidity among affiliates by changing credit terms and is dependent on the opportunity cost of funds to both paying and receiving units.
3. It is an aggressive technique aimed at taking advantage of expected revaluations and devaluations of currency movements.

**(v) Netting:** It is a technique of optimising cash flow movements with the combined efforts of the subsidiaries thereby reducing administrative and transaction costs resulting from currency conversion. There is a co-ordinated international interchange of materials, finished

## Foreign Direct Investment (FDI) and Foreign Institutional Investment (FIIs) 11.41

products and parts among the different units of MNC with many subsidiaries buying /selling from/to each other. Netting helps in minimising the total volume of inter-company fund flow.

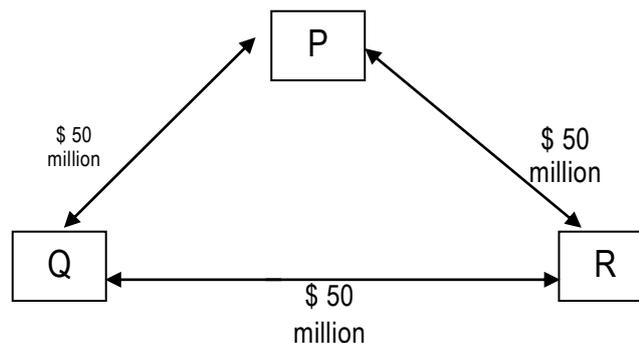
*Advantages derived from netting system includes:*

- 1) Reduces the number of cross-border transactions between subsidiaries thereby decreasing the overall administrative costs of such cash transfers
- 2) Reduces the need for foreign exchange conversion and hence decreases transaction costs associated with foreign exchange conversion.
- 3) Improves cash flow forecasting since net cash transfers are made at the end of each period
- 4) Gives an accurate report and settles accounts through co-ordinated efforts among all subsidiaries

There are two types of Netting:

- 1) *Bilateral Netting System* – It involves transactions between the parent and a subsidiary or between two subsidiaries. If subsidiary X purchases \$ 20 million worth of goods from subsidiary Y and subsidiary Y in turn buy \$ 30 million worth of goods from subsidiary X, then the combined flows add up to \$ 50 million. But in a bilateral netting system subsidiary X would pay subsidiary Y only \$10 million. Thus bilateral netting reduces the number of foreign exchange transactions and also the costs associated with foreign exchange conversion. A more complex situation arises among the parent firm and several subsidiaries paving the way to multinational netting system.
- 2) *Multilateral Netting System* – Each affiliate nets all its inter affiliate receipts against all its disbursements. It transfers or receives the balance on the position of it being a net receiver or a payer thereby resulting in savings in transfer / exchange costs. For an effective multilateral netting system, these should be a centralised communication system along with disciplined subsidiaries. This type of system calls for the consolidation of information and net cash flow positions for each pair of subsidiaries.

Subsidiary P sells \$ 50 million worth of goods to Subsidiary Q, Subsidiary Q sells \$ 50 million worth of goods to Subsidiary R and Subsidiary R sells \$ 50 million worth of goods to Subsidiary P. Through multilateral netting inter affiliate fund transfers are completely eliminated.



## 11.42 Strategic Financial Management

The netting system uses a matrix of receivables and payables to determine the net receipt / net payment position of each affiliate at the date of clearing. A US parent company has subsidiaries in France, Germany, UK and Italy. The amounts due to and from the affiliates is converted into a common currency viz. US dollar and entered in the following matrix.

### Inter Subsidiary Payments Matrix (US \$ Thousands)

		Paying affiliate				
		France	Germany	UK	Italy	Total
Receiving affiliate	France	---	40	60	100	200
	Germany	60	---	40	80	180
	UK	80	60	---	70	210
	Italy	100	30	60	---	190
	Total	240	130	160	250	<b>780</b>

Without netting, the total payments are \$ 780 Thousands. Through multinational netting these transfers will be reduced to \$ 100 Thousands, a net reduction of 87%. Also currency conversion costs are significantly reduced. The transformed matrix after consolidation and net payments in both directions convert all figures to US dollar equivalents to the below form:

### Netting Schedule (US \$ Thousands)

	Receipt	Payment	Net Receipt	Net Payments
France	200	240	---	40
Germany	180	130	50	---
UK	210	160	50	---
Italy	190	250	---	60
			<b>100</b>	<b>100</b>

**9.1.2 Investing Excess Cash:** Euro Currency market accommodates excess cash in international money market. Euro Dollar deposits offer MNCs higher yield than bank deposits in US. The MNCs use the Euro Currency market for temporary use of funds, purchase of foreign treasury bills / commercial paper. Through better telecommunication system and integration of various money markets in different countries, access to the securities in foreign markets has become easier.

Through a centralised cash management strategy, MNCs pool together excess funds from subsidiaries enabling them to earn higher returns due to the larger deposits lying with them. Sometimes a separate investment account is maintained for all subsidiaries so that short term financing needs of one can be met by the other subsidiary without incurring transaction costs charged by banks for exchanging currencies. Such an approach leads to an excessive transaction costs. The centralised system helps to convert the excess funds pooled together

into a single currency for investments thereby involving considerable transaction cost and a cost benefit analysis should be made to find out whether the benefits reaped are not offset by the transaction costs incurred. A question may arise as to how MNCs will utilise their excess funds once they have used them to meet short term financing needs. This is vital since some currencies may provide a higher interest rate or may appreciate considerably. So deposits made in such currencies will be attractive. Again MNCs may go in for foreign currency deposit which may give an effective yield higher than domestic deposit so as to overcome exchange rate risk. Forecasting of exchange rate fluctuations need to be calculated in this respect so that a comparative study can be effectively made. Lastly an MNC can go for a diversification of its portfolio in different countries having different currencies because of the exchange rate fluctuations taking place and at the same time avoid the possibility of incurring substantial losses that may arise due to sudden currency depreciation.

**9.2 International Inventory Management:** An international firm possesses normally a bigger stock than EOQ and this process is known as stock piling. The different units of a firm get a large part of their inventory from sister units in different countries. This is possible in a vertical set up. For political disturbance there will be bottlenecks in import. If the currency of the importing country depreciates, imports will be costlier thereby giving rise to stock piling. To take a decision against stock piling the firm has to weigh the cumulative carrying cost vis-à-vis expected increase in the price of input due to changes in exchange rate. If the probability of interruption in supply is very high, the firm may opt for stock piling even if it is not justified on account of higher cost.

Also in case of global firms, lead time is larger on various units as they are located far off in different parts of the globe. Even if they reach the port in time, a lot of customs formalities have to be carried out. Due to these factors, re-order point for international firm's lies much earlier. The final decision depends on the quantity of goods to be imported and how much of them are locally available. Relying on imports varies from unit to unit but it is very much large for a vertical set up.

**9.3 International Receivables Management:** Credit Sales lead to the emergence of account receivables. There are two types of such sales viz. Inter firm Sales and Intra firm Sales in the global aspect.

In case of Inter firm Sales, the currency in which the transaction should be denominated and the terms of payment need proper attention. With regard to currency denomination, the exporter is interested to denominate the transaction in a strong currency while the importer wants to get it denominated in weak currency. The exporter may be willing to invoice the transaction in the weak currency even for a long period if it has debt in that currency. This is due to sale proceeds being used to retire debts without loss on account of exchange rate changes. With regard to terms of payment, the exporter does not provide a longer period of credit and ventures to get the export proceeds quickly in order to invoice the transaction in a weak currency. If the credit term is liberal the exporter is able to borrow currency from the bank on the basis of bills receivables. Also credit terms may be liberal in cases where

#### **11.44 Strategic Financial Management**

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competition in the market is keen compelling the exporter to finance a part of the importer's inventory. Such an action from the exporter helps to expand sales in a big way.

In case of Intra firm sales, the focus is on global allocation of firm's resources. Different parts of the same product are produced in different units established in different countries and exported to the assembly units leading to a large size of receivables. The question of quick or delayed payment does not affect the firm as both the seller and the buyer are from the same firm though the one having cash surplus will make early payments while the other with cash crunch will make late payments. This is a case of intra firm allocation of resources where leads and lags explained earlier will be taken recourse to.