
UNIT 14 DESIGNING GLOBAL CAPITAL STRUCTURE

Structure

- 14.0 Objectives
- 14.1 Introduction
- 14.2 National Financing Patterns
- 14.3 National Financial Markets
- 14.4 Sources of External Funds
 - 14.4.1 Foreign Bonds
 - 14.4.2 Foreign Bank Loans
 - 14.4.3 Foreign Equity
 - 14.4.4 Others
- 14.5 World-Wide Capital Structure
- 14.6 Foreign Subsidiary Capital Structure
- 14.7 Cost Minimisation Approach to Global Capital Structure
- 14.8 Innovative Financing Methods
- 14.9 Let Us Sum UP
- 14.10 Key Words
- 14.11 Terminal Questions

14.0 OBJECTIVES

After studying this unit you should be able to :

- explain different financing patterns or capital structure adopted by companies in different countries
- describe development of financial markets in different countries and their influence on capital structure of companies
- highlight different sources of long term external finance for multinationals
- discuss issues in designing world-wide corporate and foreign subsidiary capital structure
- explain minimisation of cost of capital approach to global capital structure
- examine impact of innovative financing methods, viz., derivatives on global capital structure.

14.1 INTRODUCTION

Financial theory states that for each firm there is a combination of different sources of finance encompassing debt, equity, and other forms (preferred stock, etc.) which maximises its value, while simultaneously minimising its cost of capital. The financial manager is thus in constant search for the optimal proportion of debt and equity that will help achieve these objectives. Such a combination can be theoretically determined by solving for the proportion of debt and equity which will maximise share prices in the market. The financial manager in practice, however, can at best only approximate it by choosing a capital structure that is located somewhere within the optimal (target) zone, avoiding excessive or inadequate leverage.

The theory of the optimal capital structure when applied to the multinational firm poses additional questions such as the following. Should the MNC aim at maintaining its capital structure which minimises cost of capital at home, or should it seek to minimise its consolidated worldwide cost of capital? Should it adjust the capital structure for its affiliates to suit the norms prevailing in the host countries? Should it adjust its world-wide capital structure to recognize the risks of operations attributable to foreign investments? We shall touch upon these and related questions in this unit. Lets begin by first looking at environment of capital structure decision by multinational companies.

14.2 NATIONAL FINANCING PATTERNS

It has come to be observed that debt ratio norms (debt/total assets) differ significantly among countries. While these hover around 50% for all manufacturing industries in the United States, it is about 75% in Japan, and in the range of 65 to 70% in Germany, France and Scandinavian countries. The substantially higher debt ratio in Japan, for example, is a reflection of the close association between the government and the business sector. The government-owned Bank of Japan guarantees debt provided by commercial banks to major industrial firms, particularly those producing primarily for export. Further, companies in different countries have different financial appetites.

Companies in Great Britain get an average of 60% to 70% of their funds from internal sources. German companies get about 40% to 50% of their funds from external suppliers. In Japan, when their profitability has been low, companies have relied heavily on external finance. Till about 1975, Japanese companies got almost 70% of their money from outside sources. The shortfall of funds reflected the Japanese strategy of making huge industrial investments and pursuing market-share at the expense of profit margins. In 1985, by contrast, almost 70% of Japanese corporate funds came from internal sources. The switch from external to internal financing since 1975 was one demonstration of the maturity of Japanese industry.

In Europe and the United States, there has been no comparable transformation. Internal finance has consistently supplied the lion's share of financial requirements. The percentage of external finance fluctuates more or less in line with the business cycle; when profits are high, firms are even less reliant on external finance. Moreover, the predominance of internal financing is not accidental. After all, companies could pay out internal cash flow as dividends, but then they had to issue additional securities to cover their investment needs.

Another empirical observation about financing behaviour relates to the composition of external finance. Regardless of the country studies, debt accounts for the overwhelming share of external funds. By contrast, new stock issues play a relatively small and declining role in financing investment.

The significant differences in debt ratio norms and financial appetites among different countries, as noted above, have important implications for designing global capital structure by MNCs. Should a MNC pattern capital structure of its affiliate(s) in line with the host country pattern or parent country? We shall examine this question a little later. Lets look at another important environmental consideration that would influences design of global capital structure by MNCs.

14.3 NATIONAL FINANCIAL MARKETS

If we take a look at the development of financial markets in various countries, we may notice significant differences. For instance, if we look at Gulf countries like United Arab Emirates and others, the financial markets are still not so well developed. Banks and financial institutions or say financial intermediaries are the main source of corporate borrowing. As against this, US financial markets are for more developed. Bond markets there are as, if not more, important source of corporate borrowing as bank loans. This has important implications for designing global capital structure by MNCs as these two sources of funds differ in terms of costs particularly agency costs. Agency costs essentially means costs incurred by the principal to elicit desired behaviour from the agent. Within the financial management framework, agency relationships exist (1) between the shareholders and the managers, and (2) between creditors and shareholders. The former is known as "equity agency" and the latter is called "debt agency". As you can imagine, the debt agency relationship and related agency costs between the individual bondholders and shareholders, and institutional lenders like banks and shareholders would significantly differ. Thus, different degrees of development of financial markets in different countries have important implications for designing capital structure by multinational firms. A study observed that debt agency costs tend to be higher in North America than Germany and Japan. It is for the simple reason that while in Germany and Japan the bulk

of corporate debt consists of bank loans, in North America it consists of publicly issued bonds. Further, German and Japanese banks are closely linked to their debtor corporations. These banks often (a) hold major equity positions in their debtor corporations, (b) vote on shares held in trust, and (c) have bank officers sit on the board of directors of these companies. Given these close relationships, German and Japanese banks tend to be more accommodating in the situation of financial distress than individual bond holders of US companies. Implications of these country differences for capital structure decision by MNCs are pretty clear. German and Japanese companies would like to use more debt in their capital structure, compared to their counter parts in North America. Lets now briefly discuss different sources of funds that MNCs may access for financing their long term capital requirements.

14.4 SOURCES OF EXTERNAL FUNDS

Firms have three general sources of funds available: internally generated cash, short-term external funds, and long-term external funds. External finance can come from individual or institutional, investors or lenders. The main alternative to issuing public debt securities directly in the open market is to obtain a loan from a specialised financial intermediary. MNCs commonly access long term capital from following sources:

14.4.1 Foreign Bonds

The foreign bond market is an important part of the international financial markets. It is simply that portion of the domestic bond market that represents issues floated by foreign companies or governments. As such, foreign bonds are subject to local laws and must be denominated in the local currency. At times, these issues face additional restrictions as well. For example, foreign bonds floated in Switzerland, Germany, and the Netherlands are subject to a queuing system, where they must wait for their turn in line. The United States and Switzerland have the biggest foreign bond markets. Major foreign bond markets are also located in Japan and Luxembourg. The outstanding amount of international debt securities issued touched US \$5.4 trillion at the end of 1999. US dollar and Euro denominated securities constituted more than 80% of the total outstanding amount of international debt securities issued at the end of 1999. The margin of spread (LIBOR +) widely differed between US high yield bonds and emerging market bonds. This margin has significantly varied between different years also. The choice of currency and markets can thus have important implications for design of global capital structure by MNCs.

14.4.2 Foreign Bank Loans

The foreign bank market represents that portion of domestic bank loans supplied to foreigners for use abroad. As in the case of foreign bond issues, governments often regulate the amounts of bank funds destined for foreign purposes. As of December 1999, German banks had the largest exposure to emerging markets. The total claims of banks in BIS-reporting countries on selected emerging markets as of December 1999 reached US \$ 995 billion. Of this, claims of German, Japanese, French, UK and US banks comprised US \$ 184 billion, US \$ 143 billion, US \$ 108 billion, US \$ 106 billion and US \$ 104 billion, respectively. The total announced syndicated credit facilities touched US \$ 957.1 billion in 1999. The share of US borrowers and Industrial countries borrowers was 60% and 93% respectively.

14.4.3 Foreign Equity

The idea of placing stock in foreign markets has long attracted corporate finance managers. One attraction of the foreign equity market is the diversification of equity funding risk. A pool of funds from a diversified shareholder base insulates a company from the vagaries of a single national market. For large companies located in small countries, foreign sales may be a necessity. When KLM, the Dutch airline, issued 50 million shares in 1986 to raise \$ 304 million, it placed 7 million shares in Europe, 7 million in the United States, and 1 million in Japan. According to a spokesman for the company, "The domestic market is too small for such an operation". Selling stock overseas also increases the potential demand for the company's shares, and hence its price, by attracting new shareholders. For example, a study showed that foreign companies that

listed their shares in the United States experienced a decline in their expected return. This evidence is consistent with the theoretical work of Robert Merton, who shows that a company can lower its cost of equity capital and, thereby, increase its market value by expanding its investor base. In addition, for a firm that wants to project an international presence, an international stock offering can spread the firm's name in local markets.

In the words of a London investment banker, "If you are a company with a brand name, it's a way of making your product known and your presence known in the financial markets, which can have a knock-off effect on your overall business. A marketing exercise is done; it's just like selling soap".

Organised stock exchanges exist in all industrial countries and in a large number of developing countries. Trading equities in well organised exchanges with relatively sufficient depth to permit participation by foreign investors may be found in US, Australia, Belgium, Canada, France, Germany, Netherlands, Hong Kong, Italy, Japan, Singapore, South Africa, Sweden, Switzerland, and the United Kingdom.

Trading in stock exchanges outside of these countries poses serious problems to foreign investors. These markets are still generally primitive in nature, and lack the regulatory framework and structural safeguards that characterise equity markets in the United States and most of the industrial countries listed earlier. Trading is often shallow and price movements are, consequently, too erratic, particularly for large trades. Most of these markets are clearly inefficient, and information on the securities traded is difficult to obtain and transaction costs are relatively high.

In a typical stock exchange in an LDC there are few meaningful listing requirements, only few stocks are traded, and information about the companies whose stocks are traded is scanty. These limitations together with the higher perceived risk of investing in foreign stocks help explain why the internationalisation of equity markets has lagged considerably behind the integration of the international money and capital markets, particularly for debt-securities and syndicated loans. It was not until 1983 that truly international equity issues were floated in three separate markets. These issues by two Canadian firms, Alcan Aluminium and Canada Enterprises, were underwritten by three separate syndications and launched simultaneously in Canada, the United States, and Europe. Such issues have significant implications for financial managers of multinational firms, since they considerably widen the options available for long-term financing.

In the recent years, internationalisation of equity markets have taken a big boost. Even equity markets of emerging economies are getting rapidly internationalised. The strongest force behind the globalisation of emerging equity markets is the growth of depository receipt markets, predominantly American Depository Receipts (ADRs), Global Depository Receipts (GDRs), and European Depository Receipts (EDRs). Depository receipts are certificates representing ownership of shares in a company domiciled in one country (e.g., an emerging market) that are held by a depository that issues a certificate that can be traded in another country (e.g., US) and that represents a claim on the underlying shares. The other factors responsible for rapid internationalisation of emerging markets include established emerging market companies issuing their initial public offerings (IPOs), by-passing their local markets, in mature markets, 'bundling' of emerging market companies with mature market companies, and 'unbundling' of mature market companies.

Gross private market financing to emerging markets, by region, financing type, and borrower type, during 1995-99 are shown in Table 14.1.

All Emerging Markets	160.3	226.1	297.2	157.4	178.5
Asia	88.1	123.4	130.6	41.1	66.6
Western Hemisphere	36.3	64.9	96.2	66.6	65.4
Middle East	9.2	10.3	16.3	9.6	15.5
Africa	9.4	5.7	15.2	3.9	4.7

Europe	17.4	21.9	38.9	36.2	26.3
Bonds	59.2 (36.9)	105.3	133.2	80.2	87.0 (48.7)
Equity	10.0 (6.2)	17.8	26.2	9.4	23.2 (13.0)
Loans	91.1 (56.9)	103.0	137.8	67.7	68.4 (38.3)
Sovereign	25.6	41.8	47.4	50.6	51.9
Public	49.0	54.7	74.5	33.5	25.6
Private	85.7	129.5	175.3	73.3	101.0

Note: Parentheses show percentages.

Source: International Monetary Fund, International Capital Markets, 2000, P 52

Table -14.1 above clearly shows rapid internationalisation of equity markets. Private market equity financing increased to 13% in 1999 from 6.2% in 1995. Table 14.2 below shows that major drivers in the equity markets have been technology, media and telecommunications. The share of technology, media and telecommunications reached 77% and 75%, in equity raised in emerging and mature markets, respectively, in the first half of 2000.

Table 14.2 : Share of Technology, Media and Telecommunications in Fundraising in International Markets, 1999-00		
(in per cent, excluding financing by central and local governments)		
	1999	2000 (first half)
Emerging Markets		
Bonds	16	18
Equity	57	77
Loans	15	39
Mature Markets		
Bonds	8	13
Equity	54	75
Loans	24	33

Source: International Monetary Fund, International Capital Markets, 2000, P 49

14.4.4 Others

In addition to foreign bonds, loans and equity, MNCs do raise funds from other sources also. These other sources include Euro-dollar markets, regional and international financial institutions like World Bank, Asian Development Bank, African Development Bank, and subsidies from host country governments.

14.5 WORLD-WIDE CAPITAL STRUCTURE

Under general capital structure theory, designing capital structure would require (1) determining the cost of individual sources of funds employed (or planned to be employed), (2) determining the proportion in which different sources of funds are employed (or planned to be employed) and (3) computing the weighted average cost of capital of different sources of funds employed (or planned to be employed). A combination obtaining the least weighted average cost of capital is termed optimal capital structure. Alternatively, a combination obtaining maximum earnings per share (net profit after tax and preferred dividend / number of equity shares outstanding) will be the optimal capital structure. In the context of a MNC, however, while knowledge of the costs and

benefits of each individual source of funds is helpful, it is not sufficient to establish an optimal global financial plan. This plan requires consideration not only of the component costs of capital, but also of how the use of one source affects the cost and availability of other sources. A firm that uses too much debt might find the cost of equity (and new-debt) financing prohibitive. The capital structure problem for the multinational enterprise, therefore, is to determine the mix of debt and equity for the parent entity and for all consolidated subsidiaries that maximises shareholder wealth.

The focus is on the consolidated, world-wide capital structure because suppliers of capital to a multinational firm are assumed to associate the risk of default with the MNC's world-wide debt ratio. This association stems from the view that bankruptcy or other form of financial distress in an overseas subsidiary can seriously impair the parent company's ability to operate domestically. Any deviations from the MNC's target capital structure will cause adjustments in the mix of debt and equity used to finance future investments.

Another factor that may be relevant in establishing a world-wide debt ratio is the empirical evidence that earnings variability appears to be a decreasing function of foreign source earnings. Because the risk of bankruptcy for a firm is dependent on its total earnings variability, the earnings diversification provided by its foreign operations may enable the multinational firm to leverage itself more highly than can a purely domestic corporation, without increasing its default risk.

The Finance director of a global chemical company commented that when planning the financing of the group from the medium-and long term point of view, sophisticated models are not used. However, more complex models are used than simple gearing or leverage ratios. Each year the current situation is reviewed. What is the current balance sheet? Given the forecasts and budgets projected for the company's operating businesses, its territorial units around the world, how much controllable cash flow can the company expect to generate over next three years after taxes, interest payments and dividend pay-outs? Our own internal cash surpluses should support 75-80% of our anticipated capital expenditure. Our borrowing target is thus around 20%. If anticipated expenditure required more than 25% borrowing, we would rather prune anticipated expenditure.

With regard to borrowing most MNCs consider following questions:

What maturities are suitable?

- Future loan maturities should fit well with anticipated cash flow and repayment schedules already committed.

What currencies should be used for borrowing?

- The currencies of borrowing should preferably match with currency of assets. This means that a global company having its major assets in UK should preferably borrow in Sterling.

What type of interest rates to borrow at?

- Variable interest rate may be preferred over fixed rate, where the company considers it possible to increase prices of its products in line with rise in inflation.

Corporate and personal income tax regimes in different countries also influence choice of world-wide capital structure. While in most of the countries, interest is tax deductible, effective rates of tax can significantly differ. Dividend income, compared to interest income, is generally taxed leniently and many countries don't have capital gains tax. As capital gains are more likely to arise in the hands of equity investors than lenders, the expected return (that is cost of equity from the company point of view) can be significantly lower.

Bankruptcy costs mainly depend on the probability of bankruptcy which not only depends on business risk but also inclination of lenders to file for bankruptcy. The inclination to file for bankruptcy is generally seen higher among individual lenders than institutional lenders, particularly the one closely associated with borrowers like in Japan. Thus, bankruptcy costs also influence world-wide capital structure.

Financial mobility and flexibility are the other considerations which influence world-wide capital structure. It is generally argued that a group management and capital structure is needed to permit movement of funds around the group as quickly as possible. This requires the ability of being as mobile as possible, particularly within the 100 per cent owned part of the group.

14.6 FOREIGN SUBSIDIARY CAPITAL STRUCTURE

Once a decision has been made regarding the appropriate mix of debt and equity for the entire corporation, questions about capital structure of individual affiliates can be taken up. How should MNCs arrange the capital structures of their foreign affiliates? And what factors are relevant in making this decision? Specifically, the problem is whether foreign subsidiary capital structures should:

- a) Conform to the capital structure of the parent company
- b) Reflect the capitalization norms in each foreign country
- c) Vary to take advantage of opportunities to minimise the MNC's cost of capital

The general view is that the question of an optimal capital structure for a foreign affiliate, 100 per cent owned, is no distinct from the corporation's overall debt/equity ratio.

Any accounting rendition of a separate capital structure for the subsidiary is wholly illusory unless the parent is willing to allow its affiliate to default on its debt. As long as the rest of the MNC group has a legal or moral obligation or sound business reasons for preventing the affiliate from defaulting, the individual unit has no independent capital structure. Rather, its true debt/equity ratio is equal to that of the consolidated group.

The cost-minimising approach to determining foreign affiliate capital structures would be to allow subsidiaries with access to low-cost capital markets to exceed the parent company capitalization norm, while subsidiaries in higher-capital-cost nations would have lower target debt ratios. These costs must be figured on an after-tax basis, taking into account the company's worldwide tax position.

The basic hypothesis proposed in this section is that a subsidiary's capital structure is relevant only in-so-far as it affects the parent's consolidated world-wide debt ratio. Nonetheless, some companies have a general policy of "every tub on its own bottom". Foreign units are expected to be financially independent following the parent's initial investment. The rationale for this policy is to "avoid giving management a crutch". By forcing foreign affiliates to stand on their own feet, affiliate managers will presumably be working harder to improve local operations, thereby generating the internal cash flow that will help replace parent financing. Moreover, the local financial institutions will have a greater incentive to monitor the local subsidiary's performance because they can no longer look to the parent company to bail them out if their loans go sour. But companies that expect their subsidiaries to borrow locally had better be prepared to provide enough initial equity capital or subordinated loans. In addition, local suppliers and customers are likely to shy away from a new subsidiary operating on a shoestring if that subsidiary is not receiving financial backing from its parent. The foreign subsidiary may have to show its balance sheet to local trade creditors, distributors, and other stakeholders. Having a balance sheet that shows more equity demonstrates that the units has greater staying power.

A counter-argument is that a subsidiary's financial structure should conform to local norms. There are obvious advantages accruing from a localized capital structure. It permits the affiliate to be evaluated on the same basis as its local competitors, and makes foreign affiliates more acceptable by their host environments. They are viewed as abiding by the same rules of the game governing local business, rather than, for instance, operating with little equity and a high proportion of debt from local sources. Localizing the capital structure also allows the firm to reap the benefits of financial leverage, where debt ratios are substantially higher than that of the parent company. Most of the foreign affiliates have been observed to borrow locally for the following reasons:

- 1 Local debts represent automatic protection against losses from a devaluation of local currency
- 2 Subsidiary debts frequently do not appear on the consolidated financial statement issued by a parent as part of its annual report
- 3 Some host countries restrict the amount of funds that foreign affiliates can import from outside the host country
- 4 Foreign subsidiaries often borrow locally to maintain good relations with local banks.

14.7 COST MINIMISATION APPROACH TO GLOBAL CAPITAL STRUCTURE

From what has been discussed above, it follows that conforming to local financial structures may cause the affiliates to operate at a higher cost of capital, compared with the world-wide consolidated cost of capital of the parent. MNCs have access to international capital markets, which may enable them to raise funds at more favourable terms than in the local markets of the affiliates. They also enjoy the cost-reduction benefit of diversification. Why should they not pass these advantages to their affiliates, instead of conforming to local norms and patterns of financing? In theory, minimising the world-wide cost of capital would occur only if the overall consolidated capital structure conforms to the optimal structure.

Another argument against localizing capital structure is that it is purely cosmetic, even if it seemingly results in lowering the cost of capital for the affiliate. Potential lenders, particularly outside the host country, look for the firm's world-wide cash flow generation to service their loans, rather than the resources of the borrowing affiliate. Lenders realize that the parent stands behind the obligations of its affiliates, even if no direct guarantee of such loans has been given by the parent. According to this argument, an MNC has in fact an internationalised capital structure even if it departs from this norm in financing its affiliates.

Managers of multinationals have indicated in a number of surveys that factors other than minimising the cost of capital may play a more important role in determining the optimal capital structure. Factors such as the coverage of fixed charges under variable business conditions, availability of capital, as well as management of the exchange and political risks have been mentioned. You may, however, note that these are not non-cost factors, and that taking such factors into account is not necessarily in conflict with the objective of minimising the cost of capital.

In sum, MNCs should thus aim to conform to the principles of minimisation of weighted average cost of capital theory and rationalize its capital structure on a worldwide basis. This rationalization process is not necessarily inconsistent with allowing for such variables as the exchange and political risks, the impact of diversification, and adjustment wherever possible to norms and conditions in host countries. Neither is it inconsistent with its obligation (to its own shareholders) to use its size and resources to raise funds world-wide at the lowest possible cost.

14.8 INNOVATIVE FINANCING METHODS

The last two decades have seen rapid rise of financially engineered products, namely, forwards, futures, swaps and options, popularly known as derivatives. Recall your study of these products in Block 2. They are high leveraged products. They have been used to hedge financial risks with important implications for the cost of capital by borrowers. A number of finance practitioners in large and global companies tend to argue that why worry too much when you are setting out to finance yourself this year, next year, or year after? Why worry so much about cost, maturity and currency in which you borrow? In affect they pose the following questions:

- a) Is there really any maturity problem with the development of six-monthly reset and roll-over techniques?
- b) Is there really a cost problem with the development of interest swaps?
- c) Is there really a currency problem with development of currency swaps?

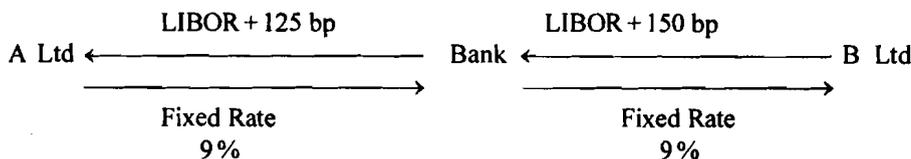
In other words, they say that if you find you have borrowed dollars and you no longer like the look of your dollar position, you can swap into Euro or Yen. A month later if you don't like that, you can swap back again or swap into something else.

Swaps are considered suitable not only for hedging interest rate risk but also reducing cost of borrowing, and thus in turn, cost of capital of the company. Lets briefly illustrate how do interest rate swaps work. Suppose, A Ltd and B Ltd are offered the following rates:

	A Ltd	B Ltd
Fixed Rate	10%	9%
Floating Rate	LIBOR+200 bp	LIBOR+175 bp

Here, A Ltd would go for LIBOR+ 200 bp and B Ltd would go for 9% fixed rate; and will then swap fixed for floating. The principle of comparative advantage guides them. A Ltd is better placed to go for LIBOR+ 200 bp as it is only 25 bp higher compared to 1% or 100 bp that it had to pay more compared to B Ltd, had it gone for fixed rate (10%) of interest. By using services of a swap bank, A Ltd would agree to pay fixed 9% to bank, to pay in turn to B Ltd ; and B Ltd would agree to pay variable LIBOR+ 150 bp to bank who in turn would pay LIBOR+ 125 bp to A Ltd. In effect, both A Ltd and B Ltd would be able to reduce their cost of borrowing by 25 bp each and the swap bank earning 25 bp. The working of this swap may be depicted as in Figure 14.3.

Figure 14.3: Fixed-Floating Interest Rate Swap



The Balance sheet position would be as follows:

A Ltd owe LIBOR + 200 bp (while fixed rate was available at 10%)

B Ltd owe Fixed Rate 9% (while LIBOR + 175 bp was available)

Net Cost/Savings

A Ltd Cost 9.75% fixed, Savings 25 bp; B Ltd Cost LIBOR+150 bp, Savings 25 bp;

Bank Margin = 25 bp

You would thus notice that the cost of borrowing of both A Ltd and B Ltd have come down by 25bp. It will thus have impact on the cost of capital of both the companies. In addition to interest rate swaps, in the financial markets are available other interest rate products, namely, interest futures, forward rate agreements (FRAs) and interest options. There are thus exchange traded and Over-the-counter contracts available.

According to International Capital Market Report (International Monetary Fund, 2000) the notional principal amount outstanding in respect of exchange-traded interest rate futures and interest rate options , as of December, 1999, was US \$ 7.9 trillion and US \$ 4.6 trillion, respectively. The notional principal amount outstanding in respect of exchange-traded currency futures and currency options was US \$ 31.7 billion and US \$ 49.2 billion. (Please note these statistics relate to single currency contracts only).

The notional principal amount outstanding in respect of Over-the-counter interest rate swaps, forward rate agreements and interest rate options , as of December, 1999, was US \$ 43.9 billion, US \$ 6.8 billion and US \$ 9.4 billion, respectively. (Please note these statistics relate to single currency contracts only).

Table 14.4 shows some interesting aspects of over-the-counter interest rate derivatives. It shows the notional principal amount outstanding in respect of Over-the-counter interest rate contracts by counter party, remaining maturity and currency composition.

Table 14.4 : Notional Principal Amount Outstanding in respect of Over-the-counter interest rate contracts by Counter party, Remaining Maturity and Currency Composition

(as of December, 1999)

	US \$ billion	%
Notional Principal Amount Outstanding	60.1	100
By Counter-party		
a) With other reporting dealers	30.5	50.75
b) With other financial institutions	24.0	39.93
c) With non-financial customers	5.6	9.32
By Remaining Maturity		
a) Up to one year	24.9	41.43
b) Up to five years	23.2	38.60
c) Over five years	12.0	19.97
By Major Currency		
a) US Dollar	16.5	27.45
b) Euro	20.7	34.45
c) Yen	12.4	20.63
d) Pound sterling	4.6	7.65
e) Others	5.9	9.82

Based on: International Monetary Fund, International Capital Markets, 2000

Clearly, US dollar, Euro and Yen dominate this market. Derivative dealers are the main players and it is fairly deep market with maturities going well beyond five years.

A question that it throws open is, how to decide world-wide capital structure or foreign subsidiary capital structure in the presence of possibilities of such cost savings (or losses which may as well accrue).

Our view is that these are off-balance sheet transactions better left to corporate treasury for short term manoeuvres and must be done on a limited basis. And since these are recommended to be undertaken on limited basis, their possibility and impact may be ignored in deciding the world-wide capital structure or foreign subsidiary capital structure. Finance director of an MNC commented that derivatives are useful in reducing risk and costs but they should be used moderately, and principally to obtain access to markets on terms not otherwise available.

Check Your Progress A

- 1 Differentiate between (a) foreign bond and Euro bond (b) equity agency and debt agency.

.....

.....

.....

2 Name the three types of Depository Receipts.

.....

3 While borrowing what points an MNC should consider?

.....

14.9 LET US SUM UP

In this unit, we have explained different financing patterns or capital structure adopted by companies in different countries. We have noted that companies differ in terms of their preferences with respect to use of debt and equity, as much as borrowing from capital markets and banks. We have also discussed different financial appetites, meaning desire to use retained earnings as source of long term financing, found in companies in different countries.

We noted that one of the major environmental factors influencing the choice of capital structure is the degree of development of financial markets in different countries. We have highlighted that while Euro-dollars, international and regional financial institutions and host government subsidies can be sources of funds for multinationals, foreign equity, foreign bank loans, foreign bonds and retained earnings constitute main sources of long term funds for multinationals.

We have also briefly touched upon, in this unit, the general theory of capital structure and discussed diverse issues faced in designing world-wide corporate and foreign subsidiary capital structure. The minimisation of cost of capital approach to global capital structure is recommended. The unit closes with a discussion of innovative methods of financing, viz., interest rate futures, swaps, forwards rate agreements and interest options, and their implications for designing world-wide corporate and foreign subsidiary capital structure.

14.10 KEY WORDS

Foreign Bond Market : The portion of domestic bond market that represents issues floated by foreign companies or governments.

Foreign Equity Market : That portion of domestic equity market that represents issues floated by foreign companies.

Foreign Bank Market : It refers to the portion of domestic bank loans that are supplied to foreigner for use abroad.

Capital Structure : It refers to financial mix of a company i.e., the combination of different sources of long term finance.

14.11 TERMINAL QUESTIONS

- 1 Why do capital structures adopted by different companies in different countries differ? Discuss with examples.
- 2 "The degree of development of financial markets in any country does affect the capital structure pattern of domestic companies." Explain with suitable examples.
- 3 How do sources of long term external finance for multinationals differ from those of domestic companies?
- 4 What factors influence the design of world-wide corporate capital structure? Briefly describe.
- 5 Write short notes on :
 - a) Minimisation of cost of capital approach to designing global capital structure
 - b) Impact of derivatives on the design of global capital structure
 - c) Subsidiary company and world-wide corporate capital structure.