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INTERNATIONAL FINANCE

SEMESTER - 4

MASTER OF COMMERCE
(Finance Specialisation)

BLOCK - 2

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

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MASTER OF COMMERCE

INTERNATIONAL FINANCE
(Finance Specialisation)

Block 2

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COURSE INTRODUCTION

This is the third course of M.Com. Programme of fourth semester Finance and Accounts specialisation . This course "INTERNATIONAL FINANCE" of M. Com. 4th semester has been structured to give the learners a broad idea about the financial markets and services.The course is designed keeping in mind the present changes in the international financial system. This course will equips corporate treasurers and finance managers with the conceptual understanding of global financial markets, instruments and products. It enables them to analyze market opportunities and associated financial risks, and also familiarizes them with the available funding avenues.

The course has 15 units and is divided into two blocks: Block 1 and Block 2.

Block 1 consist of 7 units discussing the basics of international financial management, international monetary system, exchange rate, international financial institutions, balance of payment, foreign exchange market and theories of foreign exchange rate movement.

Block 2 concentrates on mamangement of foreign exchange risk, management of foreign exchange translation, management of foreign exchange transaction exposure, management of economic exposure, multilateral development banks, international financial instruments, international banking and EURO dolar market.

Each unit of these blocks includes some along-side boxes to help you know some of the difficult, unseen terms. You may find some boxes marked with: "LET US KNOW". These boxes will provide you with some additional interesting and relevant information. Again, you will get "CHECK YOUR PROGRESS" questions. These have been designed to self-check your progress of study. It will be helpful for you if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with "ANSWERS TO CHECK YOUR PROGRESS" given at the end of each unit. This will help you in making your learning more active and efficient. And, at the end of each section, you will get "CHECK YOUR PROGRESS" questions. These have been designed to self-check your understanding.

BLOCK INTRODUCTION:

This is the second block of the course of "INTERNATIONAL FINANCE" of M. Com. 4th semester Finance and Accounts specialisation. This Block is divided into 8 units and is primarily a learner oriented Self learning material, as it satisfies the requirements of the learners in the filed of International finance.

This block comprises of the following seven units:

Unit - 8 : Management of Exchange Rate Risk

Unit - 9 : Management of Foreign Exchange Translations

Unit -10 : Management of Foreign Exchange Translations Exposure

Unit - 11 : Management of Economic Exposure

Unit - 12 : Multilateral Development Banks

Unit -13 : International Financial Market Instruments

Unit -14 : Institutions in International Banking

Unit -15 : Euro Dollar Market

UNIT 8:MANAGEMENT OF EXCHANGE RATE RISK

UNIT STRUCTURE

8.1 Learning Objectives

8.2 Introduction

8.3 Exchange Rate Risk: An Introduction

8.4 Different Types of Exchange Rate Risk

- 8.4.1 Transaction Exposure
- 8.4.2 Translation Exposure
- 8.4.3 Economic Exposure

8.5 Exchange Rate Risk Management

- 8.5.1 Management of Transaction Exposure
- 8.5.2 Management of Translation Exposure
- 8.5.3 Management of Economic Exposure

8.6 Let Us Sum Up

8.7 Further Reading

8.8 Answers to Check your Progress

8.9 Model Questions

8.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- define the meaning of Exchange Risk or Exposure
- explain the different types of Exchange Exposures and
- describe the techniques of managing Exchange Exposures.

8.2 INTRODUCTION

In this unit we will discuss on the nature and measurement of exposure and risks. Exchange rate risk or exchange rate exposure results from fluctuations in the exchange rate. In this unit, we have used exchange rate risk and exposure interchangeably.

At the end of this unit we will discuss Different Types of Exchange

Rate Exposures like Transaction Exposure, Translation Exposure and Economic Exposure.Also we will also discuss Exchange Risk Management, Management of Transaction Exposure, Management of Translation Exposure and Management of Economic Exposure.

2.3 EXCHANGE RATE RISK: AN INTRODUCTION

Exchange-rate risk, also called currency risk, is the risk that changes in the relative value of certain currencies will reduce the value of investments denominated in a foreign currency. Currency rate fluctuations affect the value of revenues, costs, cash flows, assets and liabilities of a business organisation. Transactions of business firms with foreign entities could be in the form of exports, imports, borrowing, lending, portfolio investment and direct investment etc. So a firm with any one or more types of transactions is subject to exchange rate exposure.Exchange-rate risk is the risk of receiving less in domestic currency when investing in a bond that is in a different currency denomination than in the investor's home country.

Firms have to become more and more careful about currency rate exposure as the process of globalisation gains further momentum. Suppose US dollar depreciation against euro. This change in the exchange rate can have significant consequences both for American as well as European firms. For example, it can adversely affect the competitive position of European firms in the highly competitive US market. They will be forced to raise dollar prices of their products by more than their US competitors. The same change in exchange rate, however, will strengthen the competitive position of import-competing US firms. On the other hand, should the dollar appreciate against the euro, it would enhance the competitive position of European firms at the exposure of US firms.

Exchange rate fluctuations can affect not only firms that are directly engaged in international trade but also purely domestic firms. Consider, for example, an Indian leather goods manufacturer who sources only domestic materials and sells exclusively in the Indian market, with no foreign currency receivables or payables. This seemingly purely domestic Indian firm can be

subject to foreign exchange exposure if it competes against imports, say, from Chinese leather goods manufacturer. When Chinese yuan depreciates against Indian rupee, this is likely to lean to a lower rupee price of Chinese goods, increasing their sales in India, thus harming Indian manufacturer.

Exchange rate variations affect not only the operating cash flows of a firms but also home currency values of the firm's assets and liabilities. If an Indian firms has borrowed pound sterling, it can gain or loose as the pound sterling depreciates or appreciates against the rupee. Thus, it is clear that exchange rate fluctuations can affect the value of the firm by influencing its operation cash flows as well as the domestic currency values of its assets and liabilities.

For the sake of better comprehension, exchange rate risk is classified into three categories:

(a) Transaction Exposure

(b) Translation Exposure

(c) Economic Exposure

Sometimes, a common term, namely**, accounting exposure** is used both for transaction as well as translation exposure.



CHECK YOUR PROGRESS

Q 1: Define Exchange Rate Risk

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Q 2: What are the three categories of exchange rate risk?

.....

.....

8.4 DIFFERENT TYPES OF EXCHANGE RATE RISKS

As already mentioned, there are three types of Exchange rate Risks which are briefly described here.

8.4.1 Transaction Exposure

This exposure arises when a company has assets and liabilities the value of which is contractually fixed in foreign currency and these items are to be liquidated in the near future. For example, the value of assets in the form of foreign currency receivables or liabilities in the form of foreign currency payables will be sensitive to the exchange rate. Likewise, currency rate fluctuations would impact loans, interest, dividend and royalty etc. to be paid to the foreign entities or to be received from them.

To illustrate, let us consider that a company buys raw material from abroad the contractual price of which is $100. The payment will be settled after a credit period of six months within the current financial year. Till the date of settlement, this company has a transaction exposure of $100. If dollar appreciates during six months period, the company will have to pay more in rupees than what it would have paid on the date of contract. Conversely, depreciation of dollar will result in a smaller rupee outflow. Either way, the company remains under an uncertainty as to what rupee outflow will take place on the settlement date. This uncertainty of cash flows is what constitutes the exposure/risk. Like receivables or payables, repayment of principal and interest to foreign entities due during the current financial year also gives rise to transaction exposure.

From the above description, it becomes clear that transaction exposures affect operating cash flows during the current financial year and they have short time frame. As they arise from contractually fixed items, they are also called contractual exposures. Some examples of transaction exposure could be as follows:

i) a foreign currency receivable or payable arising out of sales or purchases of goods and services is to be liquidated in near future;

ii) a foreign currency loan or interest due thereon is to be paid or received shortly;

iii) payment of dividend or royalty etc. is to be made or received in foreign currency.

8.4.2 Translation Exposure

Translation exposure arises from the variability of the value of assets and liabilities as they appear in the balance sheet and are not to be liquidated in near future. Translation of the balance sheet items from their value in foreign currency to that in domestic currency is done to consolidate the accounts of various subsidiaries. Therefore, translation exposure is also known as Consolidation Exposure or balance sheet exposure.

For the purpose of illustration, let us take an Indian parent company having a subsidiary in the USA. In the beginning of the year, the US subsidiary has capital equipment, inventory and cash valued at $200 000, $100 000 and $20 000 respectively. The exchange rate is Rs 45 per dollar. Therefore the translated value of these assets is Rs 1,44,00,000. At the end of the year, the assets are $ 210 000 (capital equipment), $105000 (inventory) and $10000 (cash) respectively. At the exchange rate of Rs 46 per dollar, the translated value becomes Rs 1, 49,50,000. Thus, there is a translation “gain” of Rs 5,50,000 on asset side of the balance sheet. Likewise there must have been a translation “loss” on liabilities of the subsidiaries such as, debts . denominated in dollars.

Here; it must be noted that there is no movement of cash since these assets and liabilities are not being liquidated. Simply, their value is being worked out in the currency of the parent company. Thus, translation “gains” or “losses” are notional, assuming that there are no tax implications related thereto. As a matter of fact, the main difference between transaction exposure and translation exposure is that while the former has effect on cash flows, the latter does not.

A view about translation exposure is that it is only notional in character since the translation losses or gains will differ according to the accounting practices. However, this view is not accepted

unanimously. That is why an attempt is made to measure and manage it.

8.4.3 Economic Exposure

Economic exposure results from those items which have an affect on cash flows but the value of which is not contractually defined, as is the case of transaction exposure. Some examples of operating exposure are given below;

a) Tender submitted for a contract, remain as an item of operating exposure until the award of contract. Once the contract is awarded, it becomes transaction exposure.

b) A deal for buying or selling of goods is under negotiation. The price of goods being negotiated may be affected by fluctuations in the exchange rate.

c) If a part of raw material is imported, the cost of production will increase following a depreciation of the home currency.

d) Interest cost on working capital requirements may increase if money supply is tightened following a depreciation of the home currency.

e) Domestic inflation will increase input costs of the firm even if there is no change in the exchange rate. This will adversely affect its competitiveness vis-a-vis the firms of other countries.

Exchange rate will affect future revenues as well as costs and hence operating profits. Since these effects are of long-term nature and impact the competitiveness of firms, operating exposure is also called **Strategic Exposure**. It influences the long-term business decisions such as products, markets, sources of supply and location of production facilities etc.

For example, continued appreciation of dollar in early eighties rendered many American firms uncompetitive vis-a-vis their competitors because the value of revenue streams denominated in

foreign currencies diminished when converted into dollars. On the contrary, in later part of eighties, many Japanese and German companies were not able to keep their operating income at satisfactory level due to fall of dollar. Some of these companies shifted their manufacturing activities in USA:

Thus we see that the operating exposure may occur when firm has direct involvement in foreign transactions as well as when it does not have a direct involvement. Fluctuation in exchange rate has an effect on customers and suppliers as well as competitors. A firm selling only in domestic market with inputs denominated only in home currency is still exposed to competition from importing firms. An appreciation of home currency will put it at a disadvantage vis-a-vis another firm that sells imported product.



CHECK YOUR PROGRESS

Q 3: Define Transaction Exposure

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.....

Q 4: What is Translation Exposure

.....

.....

Q 5: What is Economic Exposure

.....

.....

8.5 EXCHANGE RATE RISK MANAGEMENT

The discussion so far has shown that the uncertainty of exchange rates in future gives rise to uncertainty about cash flows of a business firm. The uncertainty is nothing but exposure or risk. Consequently, firms try to minimize the uncertainty. The process to minimize or eliminate uncertainty is variously referred to as managing or covering or hedging the risk.

8.5.1 Management of Transaction Exposure

The techniques used for hedging purpose can be categorised in two classes: (a) Internal techniques and (b) External techniques. These are described hereunder in adequate detail.

A) Internal Techniques for Management of Transaction Exposure

The major techniques or methods included in this category are:

- Choice of a particular currency for invoicing receivables and payables
- Leads and lags
- Netting
- Back-to-back credit swap
- Sharing risk

It would be in order to say a word why these techniques are known as internal. It is because a firm does not have to take recourse to any external agency or market to apply these techniques. These are basically internal arrangements either between different subsidiaries of the same MNC or between two transacting but unrelated companies.

I) Choice of a particular currency for invoicing

A firm can negotiate with its counter party to receive or make payments in its own currency or another currency, which moves very closely with its own currency. For example, if an Indian company is able to invoice all its sales and purchases in rupees, then its revenues and costs will not be affected at all by currency fluctuations. Thus, its currency exposure will be totally eliminated.

On the face of it, this is the simplest techniques to hedge exchange exposure. However, it is easier said than done. A company should be in a very strong bargaining position in order to impose the currency of its choice on its counterparts. For example, companies selling essential products like petroleum may be able to impose currency of their choice. Otherwise, for a majority of transactions,

companies will have to negotiate hard to have such a choice.

In some cases, it may be possible to diversify exchange exposure by using currency basket units like SDR (special drawing rights). The SDR comprises five currencies, the US dollar, the Japanese yen, the British pound, the German mark and the French franc. The last two currencies have since ceased to be in use, after the introduction of euro. Since the SDR is a weighted portfolio of several currencies, its value is more stable than the value of any individual constituent currency.

II) Leads and Lags

A firm will accelerate or delay receiving from or paying to foreign counter parties, depending upon what is beneficial to it. In case, home currency is expected to depreciate, a firm would like to expedite (lead) payments of the payables due. On the other hand, an exporting firm will be better off by delaying (lagging) the receipts in foreign currency. It should be kept in mind that the action of leading or lagging will not be possible without a cost for the firms desiring to do so. For example, a firm has payables of $100 due in three months. Fearing depreciation of rupee, it may renegotiate to make payment in two months.

Conversely, importing firms will delay (lag) the payment if an appreciation of home currency is anticipated and exporting firms will advance (lead) the settlement in similar situation.

For example, a firm has payables of euro 100 000 due in one month. Anticipating appreciation of rupee it delays payment to 3 months. The rates after one month and three months turn out to be Rs 56 per euro and Rs 55.50 per euro respectively. As a result, the firm stands to save Rs 500 000 [100 000 (56.00 - 55.50)] by delaying payments. Of course, it will have to negotiate with its counter party and as a result, the savings will be less than Rs 500 000. Let us suppose that the counter party agrees to delay the settlement if it is paid euro 100 750 instead of euro 100 000. So the Indian firm will

effectively be paying Rs 5,591,625. Still the firm saves Rs 8.375 (100 000 x 56 - 100 750 x 55.50).

However, it must be kept in mind that home currency may further appreciate if such actions are generalized.

iii) Netting

Normally, different affiliates of a multinational company have dealings between themselves and with their parent. For example, a subsidiary supplies semi-finished product to its parent which, in turn, sells the final product to the subsidiary. If sales value of subsidiary to the parent is $100 while that of the parent to the subsidiary is $125. Now, the total exposure of the two (parent and subsidiary) combined is $ 225. But this exposure can be reduced to $25 if both of them resort to what is called netting of exposures. As the name implies, netting is a technique where transacting entities try to match the maturity dates and currencies of receivables and payables between themselves. As a result, net exposures are reduced to balance amounts. Netting can be either bilateral or multilateral. If it is done between two companies, it is called bilateral. It is called multilateral, if done between more than two transacting companies. Transacting companies may belong to the same MNC or they may be unrelated entities. However, it is easier to practise it between different companies belonging to the same MNC.

For example, Company A sells its products to company B for $100,000 and buys from B for $75 000. The movement of funds will appear as shown in the **Figure 2.1**

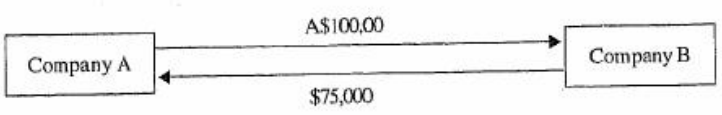


Figure 8.1: Movement of Funds without Netting

The combined exposure of the companies A and B is obviously $175,000. But, by netting, the net exposure is reduced to $25,000 as shown in the Figure 8.2.

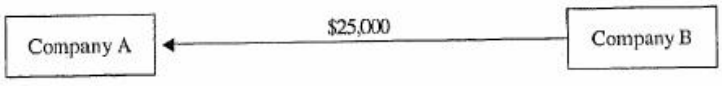


Figure 2.1: Movement of Funds with Netting

IV) Back-to-Back Credit Swap

Under this method, two companies, located in two different countries, agree to exchange loans in their respective currencies. Loans are given for a pre-decided fixed period at a pre-decided exchange rate. On maturity, the sums are again re-exchanged. This arrangement can work effectively between MNCs of two different countries, each having subsidiaries in the country of the other. For example, Mitsubishi (an MNC of Japan) has a subsidiary in USA while Microsoft (an MNC of USA) has a subsidiary in Japan. The subsidiary of Mitsubishi located in USA needs to raise a dollar loan whereas the subsidiary of Microsoft located in Japan needs yen loan. Each parent company can advance loans to the subsidiary of the other in the former's home currency. This arrangement is depicted in **Figure 2.2.**

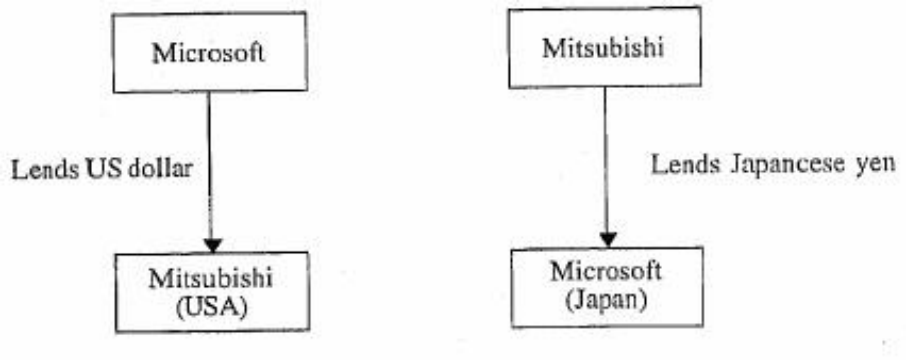


Figure 2.2: Back-toBack Credit Swap

The loan amount is equivalent in the two currencies. (US dollar and Japanese yen). After the period of loans is over, the sum will again be re -exchanged. Thus, the two companies have been able to manage their exchange risk internally.

V) Sharing Risk

Any two companies from two different countries can practise this technique. The basic principle underlying this technique is that neither the benefit of the favourable movement of the exchange rate should go to one party nor the entire loss due to the unfavourable movement of the exchange rate should be borne by the other party.

For example, Airbus Industries (a French company) has sold aircrafts to a UK company. One way is to invoice the whole sales price of •10 million in euros. In this case the French company has shifted the entire exchange risk to the UK Company. Or, alternatively the sales can be invoiced as £7 million. This means that the exchange risk is now totally shifted to the French company. The third possibility is that the sales be invoiced as •5 million plus £3.5 million. This arrangement enables both the parties to share the exchange risk.

Risk sharing can take different forms. For example, the two transacting parties (business organisations located in different countries) establish a Base Exchange rate and a permissible band around this base rate, also called Neutral Zone at the time of contract. As long as the exchange rate at the time of settlement is within the permissible band/neutral zone around the base rate, settlement takes place applying the base exchange rate. However, in case, exchange rate at the time of settlement is beyond the neutral zone, then its effects on the parties are shared as per a pre-determined formula. Example 2.1 will illustrate this technique.



Example 2.1

An Indian enterprise has exported goods worth euro I million to a German company. The two companies have agreed that the base rate will be Rs 55/euro with a neutral zone of Rs 54- Rs 56 per euro. The risk resulting from fluctuations of Re/euro exchange rate will be shared between the two on 50:50 basis at the time of settlement. Find out how much will the Indian enterprise receive in rupees at the time of settlement if the spot rate happens to be.

(a) Rs 52/•, (b) Rs 54.501•, (c) Rs 55.75/• and (d) Rs 57.50/ •.

As has been agreed between the two parties, the Indian company will get Rs 55 million as long as the exchange rate at the time of settlement is between Rs 541• and Rs 56/• and the risk in terms of gains or losses will be shared between the two in case exchange rate is either below Rs 54/• or above Rs 56/•. Keeping this in view,

the amounts received by the Indian company are worked out as given below.

(a) Exchange rate: Rs 52 / euro :

Since this rate is below the neutral zone, the effective exchange rate applicable will be

Rs [55 - (54 - 52) x 0.5] per euro

or Rs 54 per euro

This means that the Indian enterprise will get Rs 54 million rather than Rs 55 million. The rate has moved against the Indian enterprise. If it were to be paid at the actual market rate, it would receive only Rs 52 million. However because of the risk sharing arrangement, it is able to get Rs 54 million.

The German company will pay euro 1.0384 (1 x 54/52) million rather than euro 1 million.

(b) Exchange rate: Rs 54.501 / euro:

As this rate falls within the neutral zone, the rate of Rs 551• will apply. Again, since the exchange rate has moved against the Indian enterprise, it has benefited because of the risk sharing agreement. At the market rate, it would have got only Rs 54.50 million but it has been able to get Rs 55million in this case.

The German company pays • 1.0091 (1 x 5.5/54.50) million.

(c) Exchange rate: Rs 55.75 / euro:

Again the exchange rate is within neutral zone. So the Indian company will get Rs 55 million. This time the rate has moved in its favour. But it is not allowed to reap the full benefit of the favourable exchange rate movement. At the market rate, it would have got Rs 55.75 million but actually would get only Rs 55 million.

The German company has to pay only •0.9865 (1 x 55/55.75) million which is less than • 1 million.

(d) Exchange rate: Rs 57.50 / euro:

In this case, exchange rate is beyond the neutral zone. Therefore, the effective exchange rate applicable will be

Rs [55+ (57.50 -56) x 0.5] per euro

or, Rs 55.75 per euro.

Here the rate has moved in favour of the Indian company. Yet it is not able to reap the full benefit of favourable movement. Instead of receiving Rs 57.50 million as per the market rate, it is getting only Rs 55.75 million.

The German company will have to pay •0.9695 (1 x 55.75/ 57.50) million instead of euro 1 million.

Thus, it is seen that in risk sharing, the effect of exchange rate fluctuations does not pass on entirely as a benefit to one enterprise or loss to another party. Instead the two enterprises, share it.

B) External Techniques for Management of Transaction Exposure

The major techniques in this category are:

i) Use of Currency Forward Market

ii) Use of Money Market

iii) Use of Currency Options Market

iv) Use of Currency Futures Market

These techniques are known as External Techniques simply because the various instruments that are used are external to a business organisation. In order to hedge through one or more of these instruments, a company has to enter into a contractual agreement with external agencies dealing in these instruments. For this reason, they are also called Contractual Techniques.

Here we will discuss these instruments one by one considering as if at a given point of time, data relating to only one instrument is available. But in reality, a company could use one or more of them simultaneously depending upon the company's policies and choice.

I) Use of Currency Forward Market:

Currency Forward Market is the most frequently used market for covering the exchange risk. An organisation having foreign currency receivables will sell them forward whereas the one having

foreign currency payables will buy forward. Examples 8.2 and 8.3 will illustrate this process.



Example 2.2

A French exporter has sold goods worth £ l million to a British company. The receivables resulting from this transaction are due in three months. Fearing a depreciation of pound sterling, the French exporter covers his receivables in the forward market. The rates are as follows:

Spot rate: • 1.4120/£

3-m forward rate: • 1.3930/£

The value of exports on the date of transaction is •1.41.20 million. But, naturally, the exporter is not going to receive this amount on the date of settlement as UK£ is showing tendency to depreciate. To avoid any uncertainty about the amount that the French exporter is going to get in his country's currency (i.e. euro), he sells £ 1 million forward. He waits for 3 months. On the settlement date, after three months, he receives £1 million from the British company which he surrenders to the dealer (usually a bank) with whom he had entered into the agreement for forward sale, and receives • 1.3930 million. Thus, by covering his receivables in the forward market, the exporter has ensured that his receipts in his own currency are •1.3930, neither less nor more.

Now, suppose he had not covered in the forward market and the spot rate on the settlement date had come down to • 1.38/£. In that case, he would have got only • 1.38 million. So he would have made a notional loss of •13000 (• 1.3930 million minus •1.3800 million).

However, there is a possibility that the UK£ appreciated instead of depreciating. Suppose the rate had become •1.4260/£. In this situation, it would look, in retrospect, that the French exporter would have been better off if he had not covered his receivables by selling them forward. His notional loss would work out to •46000 (-

1.4260 million minus •1.3800 million) if compared with forward rate. And, his notional loss would be • 14000 (•1.4260 million minus • 1.4120 million) if compared with the spot rate prevailing at the time of the export transaction.

However, it should be kept in mind that notional losses or gains are only the calculations that are done as a post-mortem exercise. The main aim of hedging or covering an exposure is not to reduce loss or increase gain. Instead it is to avoid uncertainty by selling receivables forward as the exporter knows that he would get a definite sum of • 1.68 million.



Example 2.3

An Indian importer has bought goods worth $500,000 from an American company. The payables are due in six months. The US dollar has a tendency to appreciate. The rates available are as follows:

Spot rate	:	Rs 44.00/$
6-m forward rate	:	Rs 45.50/$

The value of payables on the date of transaction between the Indian and the American company is Rs 22 million ($500,000 x Rs 44/$). But the importer will have to pay more than this amount, if US dollar appreciates during the six months that remain before settlement. By how much more? There is no answer to this question because nobody knows what spot rate will prevail at the time of settlement. To avoid this uncertainty, the importer covers his payables by buying US dollars in forward market. Once he does so, he knows the value of his payable becomes Rs 22.75 million ($500,000 x Rs 45.50/$).

After the import transaction, he waits for 6 months and then he pays Rs 22.75 million to the foreign exchange dealer to receive $500,000 which he pays to the American company. By covering in the forward market, he has ensured that he has to pay neither more

nor less than Rs 22.75 million.

Let us suppose the spot rate on the date of settlement turns out to be Rs 46.00/$. It is easy to see that by buying forward, the importer has made a notional gain of Re 0.50 (40.00 - 45.50) per dollar. In other words, his total notional gain is Rs 250,000 (500,000 x 0.50). -

It is quite possible that, instead of appreciation, dollar actually depreciated to Rs 43. 80/$ on the date of settlement. In that case, the importer made a notional loss of Re 0.20/$ (Rs 44 - Rs 43.80) if compared with the spot exchange rate as it was on the date of transaction and a much bigger loss of Rs 1.70/$ (Rs 45.50 - Rs 43.80) if compared with the forward rate.

But as explained in the previous example, notional gains or losses are only post-event exercises. The main purpose of hedging was to reduce uncertainty about the amount in rupees to be paid out for the imports. That amount is Rs 22.75 million, neither more nor less, with no uncertainty whatsoever.

II) Use of Money Market

We consider that only spot exchange rate and money market data (interest rates) are available. How does an organisation having foreign currency exposure make use of the money market data for the purpose of hedging? This is illustrated by the examples 8.4 and 8.5.

Example 2.4



We consider the same French exporter as in example 4.2 above. He has an exposure of £1 million in the form of receivables. The following money market data are given:

3 - m interest rate:

Euro: 5.5% p.a.

Pound Sterling: 8% p.a.

Spot exchange rate: •1 .4120/£

Hedging in the money market means that the exporter, by

making use of the money market, should be able to know what definite amount in his own currency (i.e. euro) he is going to receive after 3 months. For this purpose, he takes following steps:

Step I: Borrow a sum of pound sterling at 8% p.a. interest for three months such that this sum become £1 million along with the interest after 3 months. Say, the borrowed amount is B. Thus,

B (1 + 0.08 x 3/12) = £ 1 million

B = £1/1.02 = 0.98039 million

Step II: Sell this borrowed sum of pound sterling in the spot currency market at the rate of •1.4120/£ to get euros. The amount in euros is going to be £0.98039 x •1.4120/£ million.

= •1.3843 million

Step III: Place •1.3843 million for 3 months in the money market at the rate of 5.5% p.a. Thus, at the end of 3 months, the amount that the French exporter will have is •1.3843 x (1 + 0.055 x 3/12) million

= •1.4033 million

Step IV: Refund the loan and interest combined that works out to be £l million as soon as this amount is received from the British company. It is clear that irrespective of the movement of the exchange rate, the exporter will have a definite amount of •1.4033 million. There is no uncertainty about this amount. This has been possible due to a methodical use of money market, or in other words, through hedging in money market.



Example 2.5

Taking the case of Indian importer as in example 8.3, let us see how money market data can be made use of to hedge payables of $500 000. The data are as follows:

6 - m interest rate:

US $ 4.5% p.a.

Rupee: 7.5%p.a.

Spot exchange rate: Rs 44/$

The aim of the Indian importer is to know what definite amount

he is going to pay in his own currency (i.e. rupee) after six months when he settles the import bill. For this purpose, he will take the following steps:

Step I: Buy an A amount of dollars and place this amount in the money market for 6 months at the rate of 4.5% p.a. The bought amount should be such that it should become $500, 000 including interest after 6 months.

Thus,

A (1 + 0.045 x 6/12) = 500 000

A = $500,000/(1 + 0.0225) = $488997.56

In order to buy this amount of dollars in the spot market, the sum of rupees required is Rs 44 x 488997.56

= Rs 21 515892 or Rs 21.516 million.

This sum can be borrowed at the rate of 7.5% p.a. for 6 months.

Step II: The dollar amount bought from the spot exchange market is placed in the money market for 6 months. At the end of 6 months, it would become $500,000 including interest. This sum is paid to the American company on the due date of settlement.

Step III: Refund the rupee loan along with interest after six months. This works out to be

Rs 21.516 (l +0.075x6/12)

= Rs 22.323 million

Thus, the Indian company has been able to know that it would have to pay Rs 22.323 million to clear its payables. There is no uncertainty about this sum. This has been made possible due to the methodical use of money market data.

III) Use of Currency Options Market:

Here, we are going to see how; options can be used for hedging currency exposures. The distinguishing feature of options is that they protect against the unfavourable movement of the exchange rate but allow the benefit of favourable change. Examples 8.6 and 8.7 show how payables and receivables can be hedged by using call and put options respectively.



Example 2.6

A German company has payables of $10 million due to be paid in one month. The company wants to hedge this exposure by using a call option. The data are as follows:

Spot exchange rate : $1.20%•

Option strike price : $1.19/•

Maturity : One month

Option premium : 2.5

The German company will need $10 million in one month. In case, dollar appreciates against euro, the company will have to pay a greater amount in its own currency than its expectation. What is more, it does not know how much that sum is going to be on the date of settlement after one month. It knows that the dollar has tendency to appreciate in near future. So it buys call option for the underlying dollar amount of $10 million. For this, it pays the premium upfront, which works out to be

• 0.025 x 10/1.20 million

= •0.2083 million

Then, the company waits for one month. On the maturity date, different scenarios can be envisaged as follows:

Scenario I: Dollar does appreciate against euro and the spot rate on the settlement date is $1.175/•. So the company exercises its call option and buys required amount of dollars at the rate of $1.19/•. Thus the total sum paid by the company is

• 10/1.19 + Premium already paid

= •8.4033 + 0.2083 million

=• 08.6116 million

Scenario II: Dollar appreciates and the spot rate on the date of maturity is $1.19/•. Now whether the company exercises its option or abandons it, it will have to pay in any case at the rate of $1.19/• to get required amount of dollars. So the company is said to be

indifferent between exercising and abandoning its call option. In either situation, it will pay

•10/1.19 + Premium already paid

= •8.4033 + •0.2083 million

= •8.6166 million

Scenario III: Contrary to expectation, dollar depreciates or even if it appreciates, it does not go beyond $1.19/•. Let the actual spot rate on the settlement date be $1.21/ •. In this situation, the company abandons its call option and buys required amount of dollars directly from the exchange market. The total outgo in euro works out to be

•10/1.21 + Premium paid on call option

= •8.2644+ 00.2083 million

= •8.4727 million

Thus we see the company does not have to pay more than 08.6166 irrespective of the degree of appreciation of dollar. But it benefits from the favourable movement (depreciation) of dollar. A table can be prepared to show the amount of euros to be paid by the company for various exchange rates observed on the date of settlement. **See Table 2.1.**

Table 2.1: Net Sum paid in euros to buy $10 m in Example 8.6.

Sl. No.	Spot Rate on Maturity(S_T)($/•)	Call Option exercised/ abandoned	Premium already paid	Net sum paid in euros (P)
1.	1.15	Exercised	• 0.2083 m	• 8.6166 m
2.	1.16	Exercised	•0.2083m	08.6166m
3.	1.17	Exercised	• 0.2083 m	•8.6166m
4.	1.18	Exercised	• 0.2083 m	• 8.6166 m
5.	1.19	Either exercised or abandoned	• 0.2083 m	• 8.6166 m
6.	1.20	Abandoned	•0.2083m	•8.54L6m
7.	1.21	Abandoned	• 0.2083 m	• 8.4727 m
8.	1.22	Abandoned	• 0.2083 m	• 8.4050 m
9.	1.23	Abandoned	• 0.2083 m	• 8.3384 m

Profile of net payment can also be depicted graphically as in **Figure 2.3.**

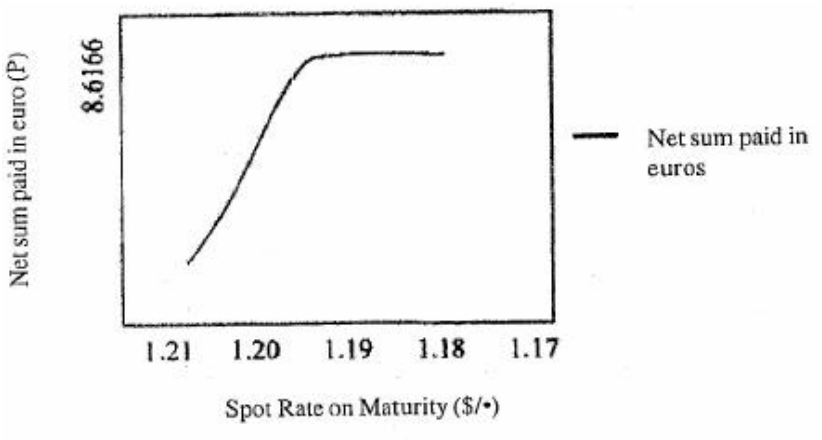


Figure 2.3: Net Sum to be paid with Call Option

Example 2.7

A British exporter has sold goods to a US company. The receivables of $2 million are clue in 2 months. The exporter would like to hedge this exposure by using a put option. He finds out the availability of put options and chooses to buy one with the following features:

Strike price : £0.5559 /$

Maturity : 2 months

Premium : 3 per cent

The current spot rate is £0.5600/$

The British exporter will be interested in ensuring that his receivables do not loose too much value due to expected depreciation of dollar. There is no certainty how much the final amount in pound-sterling is going to be when he receives the $2 million on the settlement date. So he buys put option and pays the premium amount right away. The sum paid as premium is equal to:

£2 x 0.03 x 0.5600 million

= £0.0336million

After this the exporter waits for two months. On the maturity date, following scenarios can be visualized.

Scenario I: US dollar depreciates (as anticipated) to £ 0.50. In this situation, the exporter will exercise his put option and sell his $2 million to the writer of the option. Thus, his total inflow in pound sterling will be

£2 x 0.5.559 - Premium already paid

= £ 1. I 1 l 8 - £0.0336 million = £1.0782million

Scenario II: US dollar depreciates to £ 0.5559/$ (a rare possibility) which is the same as strike price of the put option held by the hedger (exporter). In this scenario, he is indifferent between the use of his put option and its non-use. In either case, he will have the same cash inflow, that is,

£2 x 0.5559 - Premium already paid

= £ 1 .0782 million

Scenario III: US dollar appreciates as against the anticipation. Suppose the spot rate on the settlement day is £0.5660 /$. Now the exporter abandons his put option and sells $2 million directly in the market. The total inflow in this scenario works out to be

£2 x 0.5660 - Premium already paid

= £1.132 - £0.0336

= £1.0984 million

It is thus seen that the exporter never receives less than £1.0782 irrespective of actual spot rate on the date of settlement. His inflows are minimum at £1.0782 and he benefits from the favourable movement (appreciation) of dollar. For different possible spot rates, inflows in pound sterling are contained in Table 8.2.

Table 2.2: Net sum received by the exporter in Example 2.7

Sl. No.	Spot Rate on Maturity (S_T)	Put options exercised/abandoned	Premium already paid	Net sum paid in pond sterling (R)
1.	£0.5300/$	Exercised	£0.0336 million	$1.0782
2.	£0.5300/$	Exercised	£0.0336million	$1.0782
3.	£0.4400/$	Exercised	£0.0336 million	$1.0782
4.	£0.5500/$	Exercised	£0.0336 million	$1.0782
5.	£0.5559/$	Either exercised or	£0.0336 million	$1.0782

		abandoned		
6	£0.5600/$	Abandoned	£0.0336million	$1.0864
7.	£0.5700/$	Abandoned	£0.0336 million	$1.1064
8.	£0.5800/$	Abandoned	£0.0336million	$1.1264
9.	£0.5900/$	Abandoned	£0.0336 million	$1.1464

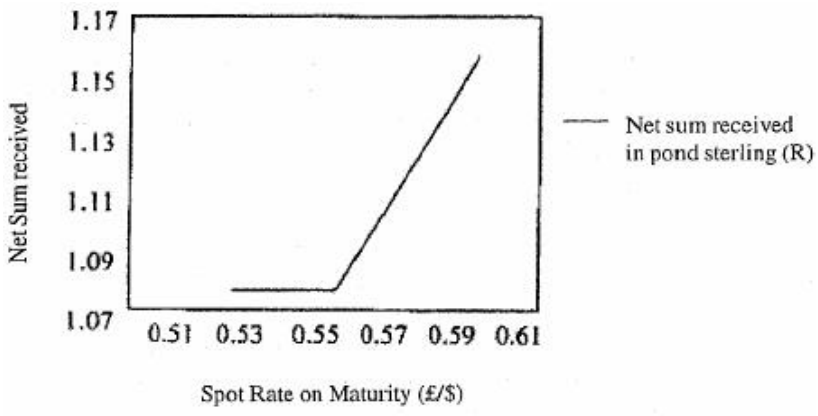


Figure 2.4: Net Sum received in Put Option

Profile of net receipt can be depicted graphically as in figure 2.4.

Note: Here we have learnt the use of call or put option for covering payables and receivables respectively. However, more complex methods can be used by combining options in different ways. The resultant payment/receipt will also accordingly be different.

IV) Use of Currency Futures Market

Another important derivative instrument that can be used for hedging currency exposure is Futures. Currency futures have four maturities: March, June, September and October respectively. Since these are standardised in terms of contract value, exposures (if they are not exact multiples of contract size) are either over hedged or under hedged. For example, standard size of a futures in pound sterling is £62500.

The exposed amount happens to be £140,000. Now, using sterling futures, either £187 500 (£62500 x 3) can be hedged (a case of over hedging) or £1 250,000 (£62500 x 2) can be hedged (a case of under hedging) but not £140,000 as such because this amount is not an exact multiple of £62500. Normally hedged amount is more

close to an exact multiple of contract size. In other words, hedge ratio should be as close to 1 as possible.

In the data given above, there are two possibilities:

Possibility I: £187,500 is hedged. In that case,

Hedge ratio =1.87,500/ 140,000 = 1.339

Possibility II: £125 000 be hedged. In that case,

Hedge ratio = 125,000/140,000 = 0.893

It is clear that second possibility gives hedge ratio, which is more close to 1. Therefore, it would be preferred that exposure be under hedged. That is, for an exposure of £140 000, only £125 000 be hedged, leaving £15 000 unhedged as far as the use of futures is concerned.

Now, let us look at two examples 4.8 and 4.9 to illustrate hedging through futures.



Example 2.8

An American company expects to receive •6 million in December from its European client. It is likely that euro would depreciate against dollar between now and settlement date. The exchange data available now are as follows:

Spot rate : $1.200/•

December euro futures : $1.195/•

The American company decides to hedge its exposure in futures market. The standard size of euro futures is •125 000. The number of euro futures needed for hedging the exposure is:

•6 000 000/•l 25 000 = 48

The number of euro futures required being an exact number, it is clear that the hedge ratio is I and the full amount of •6 million can be hedged.

The American company sells 48 December euro futures by depositing guarantee margin and follows daily movement of futures. It pays variation margin whenever called upon to do so or withdraws

excess amount from its margin account.

On 15 December, it decides to close the futures contract by a reverse operation. The rates on 15 December are:

Spot rate : $1.1925/•

December futures : $1.1890/•

It is clear that the American company suffered a loss on spot market as the rate has come down from $1.20/• to $ 1.1925/•. But on the future market, it makes a gain as the futures which was sold at $1.195 is trading at a lower rate of $1.1890/•.

The loss on spot market = $6 million x (1.200 - 1.1925)

= $0.045 million

The gain on Futures = $6 million x (1.195 - 1.189)

= $0.036 million

Thus, a part of the loss suffered on spot market has been compensated by the gain on futures market. The hedge efficiency is 80 per cent (0.036/0.045).



Example 2.9

A German company has to pay SFr 200,00 in March next. Swiss franc is likely to appreciate against euro (the German currency). The current rates are as follows:

Spot rate : SFr] .690/•

March euro future : SFr1.675/•

The German company covers its payables with March euro futures. The amount of exposure is SFr200,000 which is equal to •1I 8343.19 (200 000/1.690) at the current exchange rate. The standard size of Euro-SFr futures is considered to be •125,000. So the number of euro futures needed for hedging purpose is 118343.19/125000 = 0.9467.

This number is very close to l and far above zero. Therefore, it is preferred to over hedge (hedging to the extent of • 125 000). So one euro futures maturing in March is sold.

On the date of settlement of payables in March, the March

futures is closed by a reverse operation. The market rates on that date are:

Spot rate : SFr1.68/•

March futures rate : SFr 1.668/•

Thus, the loss on spot rate is

• 200,000 (1/1.68 - 1/1.69)

= •119047.62- •1.18343.19

= •704.42

At the same time, there is a gain on futures contract. The gain works out to be

SFr 125000 (1.675 - 1.668)

= SFr 875

At the spot rate of SFr1.68/•, on the date of maturity the gain is • 875/1.68 = • 520.83

Thus, the loss on spot market has been partly compensated by gain on futures market. This compensation is to the extent of 73.93% (520.83/704.42). The compensation is not 1 00 per cent for two reasons:

i) There is over hedging of the exposed amount since hedging has been clone to the extent of 105.62 per cent (125 000/ 118343.19). Hedge ratio is more than 1.

ii) The difference between spot rate and futures rate did not remain same as the time elapsed. Initially this difference was SFr 0.015/• (SFr1.690/• - SFr1.675/•) while on the date of closure, it was SFrO.012/• (SFr1.680/• - SFr1.668/•).

8.5.2 Management of Translation Exposure

Before something is said about how or why to manage translation exposure, it would be appropriate to understand the four methods used for foreign currency translation. These are: (i) the current/noncurrent method, (ii) the monetary/nonmonetary method, (iii) the temporal method, and (iv) the current rate method. Each one of the than is described hereafter:

- **Current/Non-current Method:** The basic principle behind the current/ noncurrent method is that assets and liabilities are translated on the basis of their maturity. Current assets and liabilities are translated at the current exchange rate. Noncurrent (long-term) assets and liabilities are translated at the historical exchange rate which prevailed at the time when they were recorded for the first time in the balance sheet. It is obvious that under this method, there will be a translation gain (loss) if the foreign currency (the currency in which the subsidiary keeps its books) appreciates (depreciates) in case the subsidiary has net positive working capital. Reverse will happen in case of net negative working capital. The reader will recall that net working capital is defined as current assets minus current liabilities.

  As regards the income statement (or profit-loss account), the most items, under this method, are translated at the average exchange rate for the accounting period. Only the revenues and expenses associated with the noncurrent assets and liabilities, such as depreciation expense, are translated at the historical rate applicable to the corresponding balance sheet item.

- **Monetary/Nonmonetary Method:** As per this method, all monetary items of balance sheet of a foreign subsidiary are translated at the current exchange rate. These terms include cash, marketable securities, accounts receivables and accounts/notes payable etc. All the nonmonetary items in the balance sheet, including equity, are translated at the historical exchange rate. The main difference between this method and current/noncurrent method is with respect to items such as inventory, long-term debts and other long-term receivables. This method distinguishes items on the basis of similarly of attributes rather than similarity of maturity.

  The income statement items, under this method, are translated at the average exchange rate for the accounting period. The revenue and expense items associated with nonmonetary items such as cost of goods sold and

depreciation are translated at the historical rates applicable to the corresponding balance sheet item.

- **Temporal Method:** Under this method, monetary accounts such as cash, receivables and payables, irrespective of their maturity (whether short-term or long-term) are translated at the current rate. Other items are translated at the current rate if their value is written in the balance sheet at current rather than historical valuation. On the other hand, if these items are carried at historical costs, they are translated at the historical rate. For example, inventory and fixed assets will have the same translated value under temporal as well as monetary/ nonmonetary method if they are recorded in the balance sheet at historical value.

  Most income statement items, under this method are translated at the average exchange rate for the accounting period. Depreciation and cost of goods sold are translated at historical rates applicable to corresponding balance sheet items if they have been carried at historical costs.

- **Current Rate Method:** This is the simplest method to use. Under this method, all items of the balance sheet are translated at the current rate except equity, which is translated at the exchange rates which existed on the dates of issuance. In this method, a Cumulative Translation Adjustment (CTA) account is created to make the balance sheet balance since translation gains/losses do not go through the income statement unlike in other three methods.

  Income statement items, ender this method, are translated at the exchange rate on the dates the revenue/expense items were recognized. However, to avoid too many exchange rates, a more practical way is to use an appropriately weighted average exchange rate for the period of translation.

  Application of all the four methods is illustrated through Table 8.3. The example shows the translation of the balance sheet and the income statement of an European subsidiary of US MNC. Table 8.3(a) makes use of the appreciation of euro from •0.80/$ to $ 0.6/$ whereas Table 8.3(b) shows the translation when euro depreciates from •0.8/$ to •1/$.

Table 2.3(a): Effect of Translation Methods on Balance Sheet and Income Statement after Appreciation from .0.8/$ to •0.6/$. (Average rate is •0.7/$)

Item	Local Currency value of items	Value under current /non current	Value under monetary /non monetary method	Value under temporal current method	Value under rate method
Balance Sheet	•3300	$5500	$5500	$5500	$5500
• Cash					
• Inventory	·2200	$3667	$2750	$4500	$3667
• (Current value					
= ••2700)	•4500	$5625	$5625	$5625	$7500
Total assets	•10000	$] 4792	$13875	$15625	$16667
• Current liabilities	• 1800	$3000	$3000	$3000	$3000
• Long-term debt	•2700	$3375	$4500	$4500	$4500
• Common equity	•4000	$5000	$5000	$5000	$5000
• Retained	•]500	$34]7	$1375	$3125	$2143
• CTA	-	-	-	-	$2024
• Total liabilities	•l0000	$14792	$13875	$15625	$16667
and equity					
Income Statement	. 1 5000	$21429	$21429	$21429	$2l429
• Sales revenue					
• Cost of goods	• 11000	$]5714	$13750	$15714	$15714
• Depreciation	•1500	$1875	$1875	$1875	$2143
• Net operating	•2500	$3840	$5804	$3840	$3572
• Tax(40%)	•[000	$1536	$2322	$1536	$[429
• Profit after tax	•] 500	$2304	$3482	$2304	$2[43
• Foreign exchange	-	$1113	($2] 07)	$821	-
• gain (loss)	•1500	$3417	$1375	$3125	$2143
• Net income					
• Dividends	-	-	-	-	-
• Retained	•1500	$34]7	$1375	$3125	$2143
earnings					

As indicated in Table 2.3(a), historical exchange rate is •0.8/$. The next four columns show the translated values under all four methods after an appreciation of the euro to •0.6/ $. The average exchange rate for the accounting period is taken to be •0.7/$. It is seen that there has been an exchange gain of $1113 under current/noncurrent method whereas there is loss of $2107 under monetary/nonmonetary method. As is expected, the situation has reversed under the scenario of euro's depreciation. There is a gain of $1550 under monetary/ nonmonetary and a loss of $592 under current/ noncurrent method. Under the current rate method, there is a positive CTA of $2024 when euro appreciated and there is a negative CTA of $1167 under the scenario of depreciation,

Table 2.3(b): Effect of Translation Methods on Balance Sheet and Income Statement after Depreciation of euro f."om ·0.8/ $ to -1/$. (Average exchange rate is •0.9/$)

Item	Local Currency value of items current	Value under current /non method	Value under monetary /non monetary	Value under temporal method	Value under current rate method
Balance Sheet	•3300	$3300	$3300	$3300	$3300
• Cash					
• Inventory	•2200	$2200	$2750	$2700	$2200
• (Current value =	•4500	$5625	$5625	$5625	$4500
	2700)				
• Total assets	•10000	$11125	$1 1675	$1\625	$10000
• Current liabilities	•\800	$1800	$1800	$1800	$\800
• Long-term debt	•2700	$3375	$2700	$2700	$2700

• Common equity	•4000	$5000	$5000	$5000	$5000
• Retained earnings	E1500	$950	$2175	$2125	$\667
• CTA			-	—	($\ 167)
• Total liabilities and equity	E10000	$11125	$11675	$\\625	$10000
Income Statement	E15000	$16667	$16667	$16667	$16667
• Sales revenue					
• Cost of goods sold	Ell 000	$12222	$13750	$\2222	$\2222
• Depreciation	E1500	$1875	$1875	$1875	$\667
• Net operating income	E2500	$2570	$1042	$2570	$2778
• Tax (40%)	E1000	$1028	$417	$1028	llill
• Profit after tax	E1500	$1542	$625	$1542	$1667
• Foreign exchange	-				-
• (loss)		($592)	$1550	$583	$\667
• Net income	E1500	$950	$2175	$2125	
• Dividends	-	-	-	-	-
• Retained earnings	E1500	$950	$2175	$2\25	$1667

Having measured possible exchange gains/losses, resulting from different methods, now the question is how to manage translation exposure. Or, is it at all worth while to manage it? The translation process has no direct effect on cashflows of reporting currency (that is dollar in our above example). The realizable effect on net investment will be only upon the sale or liquidation of the assets.

It is possible to hedge losses using forward contract. For example, when euro is expected to depreciate, one can sell euro forward. Let us assume that the forward rate coinciding with the date of consolidation/translation is •0.98/$ and expected spot rate on the consolidation date is •1.00/$. If the exchange loss of $592 is to be eliminated, a forward sale of E euro will have to be done where E is given by

$$E\left(\frac{1}{forwardrat\ e}-\frac{1}{\exp ected\ \ spot\ \ rate}\right)=exchange\ \ loss$$

or $E\left(\frac{1}{0.98}-\frac{1}{1.00}\right)=592$

or $E\left(\frac{592\times0.98\times1.00}{0.02}\right)$

=.29008

The purchase of •29008 at the expected spot rate would cost $29008 whereas the forward sale of •29008 will fetch $29600, giving a net profit of $592. This eliminates totally the exchange translation loss.

However, it should be kept in mind that this hedge is based on expected spot rate and not on a definite rate. So the outcome may not be as certain as it seems. Basically, the forward position taken in euros is a speculative position. If the actual spot rate turns out to be less than •1.004, then there will be a loss from the forward position.

8.5.3 Management of Economic Exposure

With the increasing pace of globalization of economy, more and more firms are subject to international competition. Volatile exchange rates can affect the firms in domestic as well as foreign markets. The value of assets/liabilities and operating cashflows can change because of the exchange rate fluctuations. Unlike transaction exposure which relates to contractually determined assets and liabilities such as receivables and payables etc, the exposure of operating cashflows depends on the effect of exchange rate changes on the firm's competitive position. The problem is that competitive position is not readily measurable. It is quite possible that a firm's operating exposure may be much larger than contractual or transaction exposure. It is determined by the structure of the markets in which the firm sources its inputs, such as labor and material and sells its products.

Let us illustrate the importance of market structure by taking the example of an imaginary European Company, ETCL, which is a subsidiary of an Indian Company, Tata Motors. Say, ETCL imports cars from Tata Motors and sells them in European market. If the Indian currency, rupee, appreciates against the European currency, euro, the costs of ETCL go up in euro terms. Suppose, ETCL faces competitors from European can makers whose euro costs did not go up, it will not be in a position to raise the euro price of imported Tata cars lest it might lead to reduction in sales. Since the car market in Europe is highly price elastic, ETCL can not afford to let the exchange rate charge pass through the euro price. As a consequence, an appreciation of rupee will reduce the profit of ETCL. This means that the parent company, Tata Motors, is subjected to a high degree of operating exposure.

As opposed to this scenario, it is possible to consider the case where ETCL faces import competitors only from other Indian car makers such as Maruti and others and not from local manufacturers. Since euro costs of other importers will be affected by the rupee appreciation in the similar manner, the competitive strength of ETCL remains intact or is marginally affected. In this kind of market structure, rupee appreciation will be reflected in higher euro price of the cars imported from India. As this happens, Tata Motors will be able to maintain its rupee profits, with minimal operating exposure.

In practice, exchange rate change is almost never fully absorbed through price adjustments of goods. One alternative is to pass the cost shock fully to selling price (complete pass-through) and the other is to fully absorb the shock (zero pass-through). However, firms often do resort to partial pass-through.

But price adjustment can, at best, be a short-term measure to manage economic exposure. Since a firm is exposed to exchange risk mainly through the effect of exchange rate changes on its competitive strength, exposure management is to be seen in terms

of the firm's long-term strategic planning. Managing operating exposure can not be a short-term tactical issue. It is to be considered in a longer perspective. The measure could be such as (i) selecting low-cost production location, (ii) adopting flexible sourcing policy, (iii) diversifying the market, (iv) making R&D effort for product differentiation and (v) hedging through financial products. We discuss these one-by-one.

- **Selecting low-cost production location:** In case domestic currency is already strong or is expected to become stronger in near future, it will have an effect of reducing competitive position of the firm. In such a situation, it can choose to set up its production facilities in a foreign country where costs are lower. Lower cost can be due to lower price of factors of production such as land and/or labour or depreciating currency of that country. In our example of the hypothetical company, ETCL, a possible action by Tata Motors could be to shift the production facilities to an European location to avoid the negative impact of appreciating rupee on operating cashflows. The other possibility is that instead of locating the production at one single place, it can be done at several places in different countries. Such a decision will provide the firm a great deal of flexibility. It can choose to produce where it is most advantageous to do so, keeping the exchange rates in view. There are, however, disadvantages associated with the decision of multiple locations. The firm may have to forego the advantage of economies of scale. So, a trade-off between flexibility of shifting production and economies of scale has to be found.
- Examples of shifting production facilities are provided by some of the Japanese and German companies. In the recent past, Daimler Benz and BMW of Germany and, Nissan and Toyota of Japan decided to establish production facilities in USA after German and Japanese currencies appreciated against US dollar.

- **Adopting flexible sourcing policy:** Another way of reducing the economic exposure is to buy inputs from where they have lower cost. Sourcing from low cost countries is not limited to raw material or accessories but, also, the firms can hire low cost manpower from abroad. In the past, Japan Airlines did hire foreign employees to maintain their competitiveness in aviation industry. Likewise, many Japanese companies depended heavily on low cost countries like Thailand, Malaysia, Philippines and China etc to buy inputs such as spare parts and intermediate products.
- **Diversifying the markets:** Diversification of the market of the firm's product will reduce its economic exposure. Suppose Tata Motors sells its cars in Europe as well as in China. Also, suppose rupee appreciates against the European currency, euro, and depreciates against the Chinese currency yuan. The effect of these developments will be opposed to each other. While the sales of Tata cars will reduce in the European market, they are likely to increase in the Chinese market. So reduction in the European market is offset by the increase in the Chinese market. As a result, the cashflows of Tata Motors will be much more stable than they would be if it sold its cars only in one of the two markets. Of course, this strategy can not work if all the rates moved in the same direction. Normally, that does not happen. Hence, diversified market does help in reducing economic exposure.
- **Making R&D effort for product differentiation:** R&D activity aims at strengthening competitive position of a firm against the adverse effect of exchange rate changes. R&D can bring about gains in productivity, reduction in costs and, most importantly, differentiation in products that the firm offers. New or differentiated products have inelastic demand. That is, their demand is not or less sensitive to price variations. Price inelasticity would make the firm immune to economic

exposure.

- **Hedging through financial products:** Though various ways outlined above will be necessary for effective management of economic exposure, financial products should be used as supplements as far as possible. The firm can use forward, futures or option contracts. These contracts can be rolled over several times, if the situation so demands. Also, the firm can borrow and/or lend foreign currencies on long-term basis.



8.6 LET US SUM UP

In this unit we have discussed the following aspects-

- Exchange rate risk or exposure results from the fluctuation in the exchange rate between pair of currencies.
- Exchange exposure is classified in three categories, namely, Transaction exposure, Translation exposure and Economic (or operating) exposure.
- Exchange rate risk management techniques can be divided in two categories, namely, Internal and External.
- Hedging exchange risk in forward market involves selling receivables forward and buying payables forward. Hedging exchange risk in the money market means using interest rates rationally so as to fix in advance the value of receivables and payables in home currency.
- Four methods of translation are in use: (i) current/noncurrent method, (ii) monetary/nonmonetary method, (iii) temporal method and (iv) current method. There is no definite view on whether translation exposure should be managed or not since it does not affect cashflows of the firm.
- Translation exposure can be managed by taking a position on forward market.
- Economic exposure can be managed by taking long- term

measures such as (i) selecting low-cost production location, (ii) adopting flexible sourcing policy, (iii) diversifying the market, and (iv) using R&D for product differentiation etc. These measures can be supplemented with financial hedging products, as far as possible.



8.7 FURTHER READING

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3) Jain, P. K., Josette Peyrard and Surendra S. Yadav (1998), *"International Financial Management"*, Macmillan India Ltd., New Delhi.
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5) Shapiro, Alan C. (1999), *"Multinational Financial Management"*, John Wiley & Sons, Inc, New York.
6) Yadav, Surendra S., P. K. Jain and Max Peyrard (2001), *Foreign Exchange Markets: Understanding Derivatives and Other Instruments*, Macmillan India Ltd., New Delhi.



8.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: Exchange-rate risk, also called currency risk, is the risk that changes in the relative value of certain currencies will reduce the value of investments denominated in a foreign currency.

Ans to Q2: Exchange rate risk is classified into three categories:

(a) Transaction Exposure

(b) Translation Exposure

(c) Economic Exposure

Ans to Q3: Transaction exposure arises when a company has assets and liabilities the value of which is contractually fixed in foreign currency and these items are to be liquidated in the near

future.

Ans to Q4: Translation exposure arises from the variability of the value of assets and liabilities as they appear in the balance sheet and are not to be liquidated in near future.

Ans to Q5: Economic exposure results from those items which have an affect on cash flows but the value of which is not contractually defined, as is the case of transaction exposure.



8.9 MODEL QUESTIONS

1) Describe different types of exchange exposures.
2) Explain with examples the techniques of netting.
3) Explain the technique of risk sharing.
4) An Indian company has receivables of Y100 million. The base rate is decided to be Re 0.37A with a neutral zone between Re. 0.36 and Re 0.38 per yen. Calculate the rupees amount that the Indian company will get if the rates are as follows at the time of settlement:
   (a) Re 0.34/Y, (b) Rs 0.365/¥ and (c) Re 0.40/v.
   The risk is shared on 50:50 basis between the two parties
5) Read the following data: Receivables due in 3 months: • l million
   Spot rate: Rs 55/•
   3-m forward rate: Rs 54.50/•
   What do you suggest and why as regards hedging of these receivables.
6) Describe the process of hedging with the following data:
   Payables clue in 6-months: $600,000
   Spot rate: Rs 44/$
   6-mn interest rates: Rupee: 7% p.a. Dollar: 5% p.a.
7) The standard size of euro futures is • 125,000. For payables of •900,000 due in March, discuss the process of hedging with futures. Other data are as follows:
   January
   Spot rate: $1.190/•

March euro futures rate: $1.120/•

March

Spot rate: $1.198/•

March euro futures rate: $1.1.25/•

8) An importer is to pay $2 million to a US company after 2 months. To hedge his exposure, he buys an option by paying 2 per cent premium. The spot rate is Rs 44/$ while the strike price of the option is Rs 45/$. Which option has the importer bought? How is he going to use this option? Explain.

9) Foreign Exchange 9) List and describe various methods of translating balance sheet and income statement items from the currency of the subsidiary to that of the parent.

10) Take an example of your choice to show the use of each of the translation methods.

11) Suggest some ways of managing economic exposure.

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UNIT 9 MANAGEMENT OF FOREIGN EXCHANGE TRANSLATIONS

UNIT STRUCTURE

9.1 Learning Objectives

9.2 Introduction

9.3 Translation Exposure

9.3.1 Is translation exposure a real exposure?

9.4 Functional Currency and Reporting Currency

9.4.1 Functional Currency

9.4.2 Reporting Currency

9.5 Translation Methods

9.6 Foreign currency translation and Accounting Standard 11

9.6.1 Recognition of exchange differences arising on translation

9.7 Let Us Sum Up

9.8 Further Readings

9.9 Answers to Check Your Progress

9.10 Model Questions

9.1 LEARNING OBJECTIVES

After going through this unit, you will be able to understand:

- The concept of translation exposure and its nature.
- Meaning of functional currency and reporting currency.
- Different foreign currency translation methods.
- Some provision under Accounting Standard 11 regarding accounting for foreign currency translation.

9.2 INTRODUCTION

Foreign exchange exposure and risk management is an important part of all major corporate decisions, especially for companies operating at a global level like international and multinational companies. Given the world economic scenario and constantly fluctuating global business environment,

one of the most important concerns for every international businesses is the constant fluctuations in exchange rates. Fluctuations in exchange rates expose businesses to mainly three types of risks, viz. transaction exposure, translation exposure, and economic exposure. All international business enterprises have to encounter these risks, though may be at lesser or higher degrees depending upon their degree of involvement in inter-national operations. In this unit we will be dealing with translation exposure only.

9.3 TRANSLATION EXPOSURE

As we have already learnt, translation exposure is associated with changes in the currency exchange rates. Also known as translation risk, translation exposure is the risk that the value of equity, assets, liabilities, and income of a company may change as a result of exchange rate changes. It is related to the changes in accounting income and the money value of positional statement items due to changes in exchange rates. When an MNC/Parent company translates the financial data of its subsidiary, located in a foreign country, to its home currency, translation/ accounting exposure comes into play. Due to changes in the exchange rates between the previous year reporting date and the current reporting date, the income, and assets and liabilities of the company may show high fluctuations when translating such foreign currency assets and liabilities to the home currency. Though this nominal change does not imply any real changes in cash flows and profits, and the variations arise only due to exchange rate differences, still companies are concerned about this due to its potential effects on the reported consolidated earnings.

When a business entity operates in more than one country, for operational efficiency and convenience, it will have to use different currencies for maintaining accounting records as well as in preparation of the financial statements. But at the end of the accounting period, to properly report its operating results and financial position, it has to consolidate its financial statements. However, using more than one currency in the consolidated statements is not permissible as it is inappropriate and would defeat the

very purpose of such reporting. In such case, the company will have to translate its foreign portion of income or losses and foreign currency denominated assets and liabilities into its home currency. Take for example an Indian company who has a subsidiary in Japan. The businesses and transactions of the subsidiary will be in terms of Japanese Yen (JPY), it will earn in yen and spend in yen; and thus records will also be maintained in that currency in the books of the subsidiary. Similarly, assets and liabilities of the subsidiary will also be denominated in JPY in the financial statements. But at the end of the financial period, when the parent company will prepare its financial statements it has to incorporate the financial information of the subsidiary too into its final accounts, or in other words it has to consolidate its financial statements. To accommodate this the items of income and expenditures, profits/ losses, assets and liabilities in subsidiary's financial statements will have to be expressed in home country currency i.e. Indian Rupees.

This translation is generally done in accordance with the exchange rate of the concerned currencies on the date of reporting. But as exchange rates are highly volatile and changes so frequently, the value of the items in the financial statements may change due to exchange rate changes between the last reporting date and the current reporting date. This uncertainty about the effect of exchange rate changes on the values of assets and liabilities is the Translation Risk; and since exchange rates can fluctuate dramatically in a short period of time- this uncertainness or risk creates Translation Exposure. Let us understand this with a simple example- from our previous example suppose the parent company in India incurs a net operating loss of Rs. 40,000, while its Japan based subsidiary made a profit of JPY 60,000. At that time, Rupee to Yen exchange rate was 1:1. As a whole, the company can report a net profit of Rs. 20,000. But before the parent company prepares its consolidated statements, exchange rate changes and Yen 1 becomes equal to Rs. 0.50. Thus, after conversion, profit earned by the subsidiary is only worth Rs. 30,000, and as a result the company as whole will have to report a loss of Rs. 10,000.

Translation exposure can affect any company who is engaged in activities involving foreign exchanges, has a part of its assets and liabilities denominated in a foreign currency or who has subsidiaries operating in other countries. It can also affect companies who produce goods or services to be sold in a foreign market even if they have not setup or do not operate any permanent facilities in that country. To put it in simple words, the more of foreign currency denominated assets, liabilities and operations a company has, the greater will be its exposure to translation risk.

9.3.1 Is Translation Exposure a Real Exposure?

Translation exposure may lead to financial gain or loss for a company. But this gain or loss is only apparent or superficial and not real; as it is only a result of changes in the current values of assets and liabilities and not due to an actual change in assets. For example, suppose an Indian company owns a facility located in the USA, which was acquired at a cost of $ 1 million. If at the time of acquisition rupee to dollar exchange rate was 1:1 the company, after translation, would show it in the consolidated statements at Rs. 10,00,000. But suppose on the reporting date in the next financial year exchange rate falls to 1:2, then after translation the asset would have to be reported at Rs. 50,000. This would appear as a loss of Rs. 50,000 although the company is in possession of the exact same asset with same production capacity, after accounting for normal depreciation.

In simple, translation exposure is only an accounting exposure and not a real exposure. That is why translation exposure is also known as Accounting Exposure/ Risk. Any gain or loss in translation is only an accounting gain or loss, and does not affect the real cash flows of the company. However, businesses are still concerned about translation exposure due to its potential adverse effect on reported earnings, which in turn can adversely affect the goodwill and market value of the company.



CHECK YOUR PROGRESS

Q 1: What is translation exposure and what is its nature?

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9.4 FUCTIONAL CURRENCY AND REPORTING CURRENCY

Foreign currency translation as an accounting method involves translating business's operating results, equities, assets and liabilities, denominate in one currency, into another currency. It is the process of translating the results of a parent company's foreign businesses or foreign subsidiary(s), denominated in functional currency, to its reporting currency. Let us understand the meaning of functional currency and reporting currency.

9.4.1 Functional Currency

International Accounting Standard 21 (IAS-21) "The Effects of Changes in Foreign Exchange Rates" defines functional currency as "the currency of the primary economic environment in which the entity operates." In simple terms, the currency which is widely used or transacted in by an enterprise in its daily normal businesses is its functional currency. It is the principal unit of transactions used by a business or group, which is normally the currency in which the entity primarily generates and expends cash. Generally, a company's functional currency is the currency of the country where it does most of its businesses, and the same may be different from the currency of the country where it is headquartered.

The concept of functional currency is most popular with multinational enterprises; as in case of a domestic business, confining its operations to only one country, the choice of functional currency is fairly simple. But for

multinationals, due to cross-country multi-currency nature of their operations, the choice of functional currency becomes a most relevant and important question. International businesses enter into transactions like purchases, sales, payments, etc. in multiple currencies. Various branches and subsidiaries record these transactions in their accounting books in the functional currency. For example, an Indian company with bulk of its operations in United States would consider US dollar as its functional currency, even if final reporting of the company is done in Indian rupee. Sometimes a business unit or group may have more than one functional currency depending upon their exposure to multiple economic environments and nature of their businesses.

With the involvement in international operations there comes the tough choice of selecting a functional currency, the choice of which depends on many factors. For the sake of proper measurement of the business performance, and adequate & precise reporting of true financial state, establishment of a functional currency is very much crucial. Generally, the functional currency of an enterprise is either the local currency or that of its parent company. It is the currency in which majority of the earnings and spending take place. And in most cases it is the currency of the country where substantial share of its business operations are located. But it may not necessarily be so in every situation. Take for instance, an US labour intensive company operating in India to exploit the benefit of cheap labour. Though production is located in India and labour charges are paid in Indian rupee, such subsidiary will make sales and also purchases of raw materials in USD. In such case, though the subsidiary and its operations are located in India, the suitable functional currency would be USD.

For determination of functional currency IAS 21 has listed certain indicators to consider. However, the final decision rests with the management and management must exercise best of its judgment in determining the functional currency. The following are some of the important factors which may guide in the selection of the functional currency:

- The currency which highly affects the selling prices of the goods and services offered by the company, or the currency of sale.
- Currency of the country of which laws, rules, regulations and policies, market conditions and competitive forces primarily affect the company's pricing policy.
- The currency in which the majority of the expenses are denominated and which influences the cost of sales of the company.
- The currency in which funds are usually generated.
- The currency in which the company retains cash received from the operating activities.

9.4.2 Reporting Currency :

In simple, reporting currency is the currency in which a company will prepare and present its financial statements. It is the currency in which an entity's financial statements and other financial documents are reported. International Accounting Standard 21(IAS 21) and its Indian Counterpart Indian Accounting Standard (Ind-AS 21) uses the term Presentation currency, in place of reporting currency, and defines it as "the currency in which financial statements are presented." Accounting Standard 11, which is based on IAS 21, issued by the ICAI defines reporting currency as "the currency used in presenting the financial statements". Generally, the reporting currency of a business entity is same as its functional currency, i.e. currency of the primary economic environment where the entity operates. However, many large companies now a day operate at a global level or have subsidiaries in different countries, which require them to deal in more than one currency. In such cases the currency of the company's home country or where the parent's office is located and where the consolidated financial reporting is done will be its reporting or presentation currency. Such subsidiaries or satellite business locations will have to convert their financial statements, denominated in their respective functional currencies, into their reporting currency so as to enable consolidation of the statements. This is

referred to as foreign currency translation, and in such process the risk which is inherent due to the fluctuations in currency exchange rates is what translation risk or exposure is all about.



CHECK YOUR PROGRESS

Q. 2. What is functional currency?

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Q. 3. Define reporting currency.

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9.5 TRANSLATION METHODS

It is common for international companies or business enterprises to have foreign currency denominated assets, liabilities, revenues and expenses. Often subsidiaries or subordinate offices or branches of such a company will use different currency in business transactions and also accounting for such transactions. But at the end of the financial year, when the parent company prepares its financial statements, to understand the overall financial position and operating results of the company, consolidated financial statements are prepared.

To consolidate the financial statements of a group, accountant must convert foreign currency denominated assets and liabilities and items of revenues and expenses into a single reporting currency, which is often the currency of the country where the parent company is located. Translation from functional currency to reporting currency involves the selection of the rate at which such conversion will be effected. Such foreign currency translations can be done based on either the Historical Rate or the Current Rate. The values of those assets and liabilities which are translated at historical exchange rate, i.e. the rate prevailing at the time of acquisition of such assets and liabilities or in other words pre exchange rate change, will not get affected by the changes in exchange rate, as they will maintain their

historic home currency value throughout their life. As such they are known as Not- Exposed items. However, assets and liabilities which are translated at the current or prevailing exchange rate, i.e. post change rate, may see increase or decrease in their value according to the movement of the concerned exchange rate. Such assets and liabilities are called Exposed items. Translation exposure is simply measured as the difference between the exposed assets and the exposed liabilities.

Depending upon the questions of which assets and liabilities are exposed and which are not, i.e. which are to be translated at the current rate and which are at the historical rate, there are different translation methods. An important point to note here is that whatever the method is, the gains or losses that arise in translation process is only of an accounting nature, i.e. with such gain or loss no corresponding cash slows are associated.

In this chapter we will discuss four most common methods of foreign currency translation; viz. Current/Non-current method, Monetary/Non-monetary method, Temporal method, and Current rate method.

1. **Current/Noncurrent Method:** As per this method, translation of assets and liabilities (positional statement items) are done on the basis of their maturity. Under this method, among all the assets and liabilities of the foreign subsidiary(s), all the current assets and current liabilities are translated at the current exchange rate, i.e. the exchange rate prevailing at the time of such translation. While all the non-current assets and liabilities are converted at the historical exchange rate, i.e. rate in effect at the time such asset was acquired or such liability was incurred and were first recorded in the books of accounts. Thus, a foreign subsidiary having a positive net working capital in functional/ local currency terms (current assets exceeds current liabilities) will see a translation gain if, at the time of translation, the functional currency appreciates in relation to the reporting currency, and a loss if the functional currency depreciates.

The opposite will be true if there is a negative net working capital in local currency terms in the books of the subsidiary.

Income statement items, i.e. revenue and expenses are translated at the average exchange rate for the period. However, for those items which can be directly assigned to noncurrent assets and liabilities, like depreciation, the rate of translation is decided to be the same as their corresponding positional statement item. Thus, under this method, similar income statement items with similar maturities may be translated at different rates depending upon their association or otherwise with noncurrent assets and liabilities.

2. **Monetary/Non-monetary Method:** This method considers all monetary assets/ liabilities as exposed items. Under this method all monetary items in the foreign subsidiary's balance sheet, like cash, trade receivables and payables, marketable securities, loans etc., are converted into the reporting currency at the current or prevailing exchange rate; while all non-monetary items like inventory, fixed assets, etc. are translated at the historical exchange rate.

   For translating income statement items average exchange rate for the period is used, except for revenue and expense items which are associated with non-monetary assets and liabilities. Such items, like cost of goods sold, depreciation, etc. are converted at the same rate as their corresponding balance sheet items.

3. **Temporal Method:** This method of foreign currency translation is a modified form of the monetary/ non-monetary method. Under this method, all monetary items in the foreign subsidiary's balance sheet are translated at current exchange rate. For the remaining assets and liabilities, it is seen whether they are carried on the balance sheet at their historical value of at current value. If a non-monetary asset or liability is carried in the balance sheet at its historical costs, such will be translated at the historical exchange rate; if such is carried at their current value it will be translated at the current exchange rate. Despite its similarities with monetary/non-monetary

method, the theoretical basis of these two methods is different. Where in monetary/ non-monetary method the selection of exchange rate is based upon the type of an asset/ liability, in temporal method it is based on the valuation approach of an asset/liability, viz. historic /book value vs. market/current value.

Items on the income statement are normally translated at the average exchange rate for the period. Like the other three methods, here also revenue and expenses directly related to some assets and liabilities are translated at same rate as the corresponding asset/liability. For example, amortization and depreciation related to some assets, which are if carried at their historic value, will be translated at the historical rate.

4. **Current Rate Method:** Also known as Closing Rate Method, it is the simplest of all the translation methods. Under this method all the items in foreign subsidiary's balance sheet are translated at the current exchange rate as against the historical rate. However, following this method involves a very high degree of translation risk as current exchange rates are highly volatile and all the assets and liabilities are converted at current rate, except stock-holders' equity. Stockholders' equity and additional- paid up capital if any are translated at the historical rate, i.e. the exchange rate which was prevailing when the shares were issued.



CHECK YOUR PROGRESS

Q. 4. How translation exposure is measured?

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Q. 5 Define exposed items in a foreign currency translation.

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9.6 FOREIGN CURRENCY TRANSLATION AND ACCOUNTING STANDARD 11

Accounting Standard 11 "The Effects of Changes in Foreign Exchange Rates", issued by the Accounting Standard Board (ASB) of Institute of Chartered Accountants of India (ICAI) deals with the principal issues in respect to accounting for foreign currency operations and translation of financial statements into reporting currency.

AS 11 recognizes that how a foreign operation is financed and operates in relation to its parent is a crucial factor in determining an appropriate method of translation. For this purpose, AS 11 has classified foreign operations into two categories, viz. Integral Foreign Operation, and Non-Integral Foreign Operations. Integral Foreign Operations are those which are carried on by the subsidiary as an extension of the parent's, i.e. the reporting entity, operations. For example, a subsidiary operating as a branch which sells the produces of the parent company and remits sales proceeds to the parent. Non-integral Foreign Operations are carried on with a significant level of autonomy from that of the reporting entity. When a foreign subsidiary, to a substantial extent, earns and accumulates monetary items, generates incomes and incurs expenses, or may even sometime borrows in the local (foreign) currency; foreign operations of such entity is regarded as a non-integral foreign operation of the reporting entity.

As per AS 11, for translating the financial statements of an integral foreign operation into the reporting currency following procedures are to be followed:

a) All the monetary items are to be reported at the closing rate. Closing rate is defined under the Standard as "the exchange rate at the balance sheet date". In simple, closing rate is the current exchange rate or the prevailing exchange rate.

   However, in case of those monetary items where there is a probability that the closing rate may not, to a reasonable extent, accu-

rately reflect the amount realizable from such assets or required to be disbursed in connection to such liabilities in terms of the reporting currency at the balance sheet date; such monetary items are required to be reported in reporting currency at the value which is estimated to be realized or to be disbursed.

b) Non-monetary assets and liabilities, carried in the balance sheet at their historical cost are required to be translated at the historical exchange rate, i.e. the exchange rate prevailing at the date of acquisition of such assets or incurring of such liabilities.

c) Non-monetary items which are carried at their fair value or following such similar valuation, conversion from the foreign currency to the reporting currency should be done at the exchange rate prevailing at the time when such values were determined.

For translating the financial statements of a non-integral foreign operation into the reporting currency, AS 11 prescribes the following procedures:

(a) All assets and liabilities, monetary and non-monetary, relating to such non- integral operation or non-integrally operating subsidiary should be translated at the closing (i.e. current) rate.

(b) The items of income and expense items of the non-integral foreign operation are required to be translated at exchange rates which prevailed at the dates of the respective transactions.

9.6.1 Recognition of Exchange Differences Arising on Translation

Under AS 11, while translating integral foreign operations, exchange difference may arise only in case of monetary items as they are converted at the current exchange rate. All non-monetary items are not exposed to translation exposure; as historic rate is considered for their translation.

Exchange differences in case of monetary items will arise as a result of changes in the exchange rates between the current reporting date and its previous reporting date. It may also arise on the settlement of such

monetary items. AS 11 requires such exchange differences on monetary items of integral operations to be recognized as income or expense of the period in which they arise.

In case of non-integral foreign operations, as all the balance sheet items whether monetary or non-monetary, are translated at the closing rate, they are all exposed items. Under AS 11 exchange differences arising from translation of non-integral operations are required to be accumulated in the form of a Foreign Currency Translation Reserve, until net investment in the non-integral operation is disposed off. On the disposal of the non-integral foreign operation by way of either sale or liquidation, repayment of share capital, or abandonment of the whole or part of such operation; the cumulated amount of exchange differences relating to such operation in the foreign currency translation reserve is required to be considered as income or as expenses.

However, AS 11 considers a parent's or reporting entity's net investment in a subsidiary as a non-integral operation. Thus in case of monetary items of both integral and non-integral operations, which forms part of such net investment (example- long term loans by the parent to the subsidiary), exchange differences are also to be accumulated in the form of a Foreign Currency Translation Reserve, until the disposal of such net investment.



CHECK YOUR PROGRESS

Q. 6: Give the meaning of Integral and Non-integral foreign operations.

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Q.7: Mention the procedure to be followed while translating financial statements of a non-integral foreign operation as given in AS 11.

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9.7 LET US SUM UP

In this unit we have discussed the following points-

- Fluctuations in exchange rates expose businesses to mainly three types of risks, viz. transaction exposure, translation exposure, and economic exposure.
- Translation exposure is the risk that the value of equity, assets, liabilities, and income of a company may change as a result of exchange rate changes.
- The more of foreign currency denominated assets, liabilities and operations a company has, the greater will be its exposure to translation risk.
- Translation exposure is only an accounting exposure and not a real exposure. Any gain or loss in translation is only an accounting gain or loss, and does not affect the real cash flows of the company.
- Foreign currency translation involves reporting the results of a parent company's foreign businesses or foreign subsidiary, denominated in functional currency, to its reporting currency.
- Functional currency is the currency of the primary economic environment and is the principal unit of transactions used by a business or group, which is normally the currency in which the entity primarily generates and expends cash.
- Reporting currency is the currency in which a company will prepare and present its financial statements. It is the currency in which an entity's financial statements and other financial documents are reported.
- Translation from functional currency to reporting currency involves the selection of the rate at which such conversion will be effected.

Such foreign currency translations can be done based on either the Historical Rate or the Current Rate.

- Items translated at the historical exchange rate are known as Not-Exposed items as they will maintain their historic home currency value throughout their life.
- Assets and liabilities which are translated at the current or prevailing exchange rate may see increase or decrease in their value according to the movement of the concerned exchange rate. Such assets and liabilities are called Exposed items.
- Translation exposure is simply measured as the difference between the exposed assets and the exposed liabilities.
- Under Current/Non-current method translation is done on the basis of the items maturity, where all the current assets and current liabilities are translated at the current exchange rate and all the non-current assets and liabilities are converted at the historical exchange rate.
- Under Monetary/Non-monetary Method all monetary items in the foreign subsidiary's balance sheet are converted at the current exchange rate; while all non-monetary items are translated at the historical exchange rate.
- Temporal Method is a modified form of the monetary/ non-monetary method which considers the valuation approach of an asset/liability, viz. historic /book value vs. market/current value and translation is done accordingly.
- Under Current Rate Method all the items in foreign subsidiary's balance sheet are translated at the current exchange rate.
- For determining the translation method AS 11 has classified a company's foreign operations into two categories, viz. Integral Foreign Operation, and Non-Integral Foreign operations.
- Integral Foreign Operations are those which are carried on by the subsidiary as an extension of the parent's and under the complete

control of the parent enterprise. For example, a subsidiary operating as a branch which sells the produces of the parent company and remits sales proceeds to the parent.

- Non-integral Foreign Operations are carried on with a significant level of autonomy from that of the reporting entity.



9.8 FURTHER READINGS

International Business -Text and Cases -Cherunilam, F. (2013). PHI Learning Pvt. Ltd.

Multinational Financial Management -Shapiro, A. C. (2003). Prentice Hall of India

International Finance -Vinod Gupta School of Management



9.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No. 1. Translation exposure is the risk that the value of equity, assets, liabilities, and income of a company may change as a result of exchange rate changes.

Translation exposure is only an accounting exposure and not a real exposure. Any gain or loss in translation is only an accounting gain or loss, and does not affect the real cash flows of the company.

Ans to Q No. 2. Functional currency is the currency of the primary economic environment in which a business entity operates. In simple terms the currency which is widely used or transacted in by an enterprise in its daily normal businesses is its functional currency.

Ans to Q No. 3. Reporting currency is the currency in which a company will prepare and present its financial statements. It is the currency in which an entity's financial statements and other financial documents are reported.

Ans to Q No. 4. Translation exposure is simply measured as the difference between the exposed assets and the exposed liabilities.

Ans to Q No. 5. In foreign currency translation, items which are translated at the historical exchange rate will maintain their historic home currency value throughout their life, and thus they are known as Not- Exposed items.

Ans to Q No. 6. Integral Foreign Operations are those which are carried on by the subsidiary as an extension of the parent's and under the complete control of the parent enterprise. For example, a subsidiary operating as a branch which sells the produces of the parent company and remits sales proceeds to the parent.

Non-integral Foreign Operations are carried on with a significant level of autonomy from that of the reporting entity. When a foreign subsidiary, to a substantial extent, earns and accumulates monetary items, generates incomes and incurs expenses, or may even sometime borrows in the local (foreign) currency; foreign operations of such entity is regarded as a non-integral foreign operation of the reporting entity.

Ans to Q No. 7. For translating the financial statements of a non-integral foreign operation into the reporting currency, AS 11 prescribes the following procedures:

(a) All assets and liabilities, monetary and non-monetary, relating to such non- integral operation or non-integrally operating subsidiary should be translated at the closing (i.e. current) rate.

(b) The items of income and expense items of the non-integral foreign operation are required to be translated at exchange rates which prevailed at the dates of the respective transactions.



9.10 MODEL QUESTIONS

1: Write a short note on translation risk in international business operations.

2: Explain the meaning of translation exposure with the help of an appropriate example.

3: “Translation exposure is only an accounting exposure and not a real exposure.” Explain.

4: What do you mean by functional currency? Mention some factors which are to be considered while determining a functional currency.

5: What is reporting currency? In what circumstances an enterprise’s reporting currency can be different from the functional currency?

6: What do you understand by Exposed items and Non-exposed items in foreign currency translation?

7: Discuss the various foreign currency translation methods.

8: Write a brief note on temporal method. How it differs from the monetary/ non-monetary method?

9: What do you understand by the term Integral foreign operations? Discuss the procedure of translating integral foreign operations given under the Accounting Standard 11.

10: Write a note on recognition of exchange differences arising on foreign currency translations under Accounting Standard 11.

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UNIT-10 MANAGEMENT OF FOREIGN EXCHANGE TRANSACTION EXPOSURE

UNIT STRUCTURE

10.1 Learning Objectives

10.2 Introduction

10.3 Meaning of Transaction Exposure

10.4 Techniques of Transaction Exposure Management

10.4.1 Financial hedging techniques

10.4.1.1 Forward hedge

10.4.1.2 Money market hedge

10.4.1.3 Option hedge

10.4.2 Operational hedging techniques

10.4.2.1 Risk shifting

10.4.2.2 Currency risk sharing

10.4.2.3 Leading and lagging

10.4.2.4 Re-invoicing center

10.4.2.5 Exposure netting

10.5 Let Us Sum Up

10.6 Answer to Check Your Progress.

10.7 Further Reading

10.8 Model Questions

10.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- Know the meaning of transaction exposure
- Critically examine the techniques of transaction exposure management

- Describe financial hedging techniques
- Describe operational hedging techniques

10.2 INTRODUCTION

Since fixed exchange rates are not supposed to change, by definition they have no volatility. A floating exchange rate may or may not be volatile depending on how much it changes over time. However, since floating exchange rates are free to change, they are usually expected to be more volatile. Volatile exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk. Exchange rate risk refers to the potential to lose money because of a change in the exchange rate. How does one avoid uncertainty of the future exchange rate or say manage exposure? This unit discusses the main techniques of transaction exposure management.

10.3 MEANING OF TRANSACTION EXPOSURE

All of us know that foreign exchange rates are highly volatile. In a free market, changes occur practically every second. The movement in foreign exchange rates occurs as a result of genuine trade transactions in the case of highly regulated markets like the Indian market where speculation is strictly prohibited. Thus, export and import transactions or borrowings and lending in foreign currency move foreign exchange rates in India.

The intra-day trends may be more predictable than slightly longer-term trends; but the uncertainty does exist. And where there is a substantial time gap between the date of the contract and its maturity, the uncertainty can be quite fearsome. The time gap will depend on the credit period permissible for such transactions. There arises a transaction exposure which needs to be measured and managed well in order to minimise its negative effect on corporate profitability or wealth. A company's transaction exposure is measured currency by currency and equals the difference between contractually fixed future cash inflows and outflows in each currency.

Liberlisation of financial markets has enhanced corporate risk significantly. Corporate treasurers have become increasingly concerned about exchange rate risk. It is primarily due to significant increase in international capital flows and exposure to different currencies. Foreign exchange exposure is a measure of the potential for firm's profitability, net cash flow and market value to change because of a change in exchange rates. An importance task of the financial manager is to measure foreign exchange exposure and to manage it so as to maximize the profitability, net cash flow and market value of the firm. With the liberalization of foreign exchange market, firms all over the world have aware of the fact that fluctuations in exchange rates expose their revenues, costs, operating cash flows and their market value to substantial fluctuations. Firms which have exports and imports of goods and services, foreign currencies borrowings and lendings, foreign investments are directly exposed to currencies fluctuations. Contractually fixed payments and receipts in foreign currency such as export receivables, imports payables, interest payables on foreign currency loans and so forth do not vary with exchange rate changes. Hence, these are called contractual exposures. On the other hand, an unanticipated change in the foreign exchange rate has an impact on the cash flows of day-today transactions.

The sensitivity of the home currency value of assets and liabilities which are denominated in foreign currencies to unanticipated changes in exchange rate is known as transaction exposures. The unanticipated changes in the exchange rate also have effect on the future sales volume, prices and costs. These types of exposures are known as operating exposure, economic exposure, or strategic exposure. It measures the change in the present value of the firm resulting from any change in future operating cash flows of the firm caused by an unanticipated change in exchange rates. Other kind of short-term exposure is known as Translation Exposure or Accounting Exposure. It is the potential for accounting derived changes in owner's equity to occur because of the need to "translate" foreign currency financial statements of foreign subsidiaries into a single reporting currency to prepare worldwide consolidated financial statements. The key difference between transaction and translation exposure is that the former

has impact on cash flows while the latter has no direct effect on cash flows. However, there is board agreement among finance theorists that translation losses and gain are only notional accounting losses and gains.

Transaction exposure measures gains or losses that arise from the settlement of existing financial obligations the term of which are stated in a foreign currency. Transaction exposure exists when short-term future cash transactions of a firm are affected by exchange rate fluctuations. Transaction exposure arises from:

- Purchasing or selling on credit goods and services when prices are stated in foreign currencies.
- Borrowing or lending funds when repayment is to be made in a foreign currency.
- Acquiring assets or incurring liabilities denominated in foreign currencies.

Foreign currencies denominated receivables or payables are common types of transaction exposures. A transaction exposure is actually created at the first moment the seller quotes a price in foreign currency term to a potential buyer. With the placing of the order, the potential exposure created at the time of the quotation is converted into actual exposure, called "backlog exposure" because the product has not yet been shipped or billed. Backlog exposure lasts until the goods are shipped and billed, at which time it becomes "billing exposure". Billing exposure remains until actual payment is received by the seller.



CHECK YOUR PROGRESS

1. What is meant by transaction exposures? 2. Mention one sources of transaction exposures.

10.4 TECHNIQUES OF TRANSACTION EXPOSURE MANAGEMENT

The techniques for hedging transaction exposure can be of two types-

a) Financial Techniques, and

b) Operational Techniques

Financial hedging techniques include:

• Forward hedge,

• Money market hedge, and

• Option hedge.

Operational hedging techniques include:

- Risk shifting
- Currency risk sharing
- Leading and lagging
- Re-invoicing center

10.4.1 Finance hedging Techniques

Hedging is a strategy that tries to limit risks in financial assets. Hedging techniques generally involve the use of financial instruments known as derivatives. Two of the most common derivatives are options and futures. With derivatives, one can develop trading strategies where a loss in one investment is offset by a gain in a derivative. There are a number of effective hedging strategies to reduce market risk, depending on the asset or portfolio of assets being hedged.

10.4.1.1 Forward Hedge

There is an inherent Exchange Risk in an international trade transaction denominated in a foreign currency, as an adverse movement in the exchange rate may reduce the realisation of home currency for an exporter or increase the cost for an importer. To reduce this exchange risk for a transaction to be concluded at future date Forward Contracts are booked. It is a mechanism through which the rate is fixed in advance for purchase or sale of foreign currency needed at that future date.

Foreign Exchange Dealer's Association of India (FEDAI) has defined Forward Contract as a contract deliverable at a future date, duration of the contract being computed from spot value date at the time of transaction. Forward Contract is an agreement to exchange one currency for another currency on a specific date in future, at a pre-determined exchange rate, set at the time the contract is made. The contract locks in an exchange rate and regardless of what the exchange rate may be on the future date, the transaction will be put through at the contracted rate. Under Forward Contract, the customer has not only the right to acquire or sell foreign currency on a future date at a pre-determined rate, but also has an obligation to meet the commitment. The Forward Contract is priced either at a premium or discount over the spot rate.

Forward market hedge is one such technique is one of the various techniques available to avoid uncertainty of the future foreign exchange rates. The term hedging refers to mean a transaction undertaken specifically to offset some exposure out of the firm's usual operations. A forward market hedge refers to a transaction specifically undertaken in the forward market. The transaction is normally a forward contract with an authorised dealer, i.e., one authorised to deal in foreign currency. Most commercial banks have been authorised to deal in foreign currency by the Reserve Bank of India. A firm which is expecting a receivable or a payable sometime in the near future can enter into a forward contract with an authorised commercial bank to fix the rupee rate vis-a-vis the foreign currency in which the receivable or the payable will materialise. This effectively avoid the uncertainty of the future exchange rate; for whatever the rate prevailing at that time, the firm has locked in a rate for itself.

10.4.1.2 Money Market Hedge

A money market hedge is a technique for hedging foreign exchange risk using the money market. As opposed to the forward market, one may use the money market for the purpose of hedging transaction exposures. But for that, one has to have access to international money markets for short-term borrowings as well as investments. Essentially, money market hedge

involves arbitrage between the Euro deposit market and the spot and forward foreign exchange market. As you would agree, an investor in choosing between assets denominated in different currencies looks for the highest possible return adjusted for exchange rate changes. And, since there is a great deal of uncertainty regarding exchange rates, arbitrageurs will arbitrage between various assets using forward contracts to take care of the exchange risk. This kind of arbitrage provides a link between foreign exchange markets and securities markets in different currencies and is called the covered interest arbitrage. Covered interest arbitrage links the forward premia and discounts directly with interest rate differentials between currencies. This will happen only in a free market where there is no exchange control or restrictions on the movement of funds. Let us assume, the following rates prevail in a free market:

US dollar interest rate: 5%

Rupee interest rate: 10%

In this market condition, anybody would like to borrow US dollars, convert into rupees and avail of the higher interest rate on rupees. The clear profit-making opportunity will surely increase demand for US dollars as more players enter the market for making a profit. As a result, the dollar will begin to be quoted at a premium to the rupee while interest rate on dollars will move up and on rupees will fall. Ultimately, equilibrium will settle at a premium which will be exactly equal to the interest rate differential between the dollar and the rupee. What this means is that it should not matter to an investor in which currency he invests as higher interest rate yielding currencies are bound to be quoted at a discount in a free market. Thus, in efficient markets, covered investment in any currency would give the same returns. There are no riskless arbitrage profits to be had. This is the famous covered interest parity theorem. However, departures from this theorem exist because of transaction costs, political risks, withholding taxes on interest, government restrictions, etc. Because of such restrictions, significant difference may occur between the forward premium / discounts and Euro market interest differentials between two currencies. Such an imperfection will present opportunities for cost savings.

So, what really happens in a money market hedge? A firm with planned receivables in a currency can hedge by borrowing in that currency that the outflows on account of interest and repayments can be set off against the receivables. Conversely, the firm could obtain a forward cover and if the covered interest theorem prevailed, the forward discount/premium would be exactly equal to the interest differential between the two currencies. But, due to the departures from the covered interest theorem, there may be a cost saving using the money market hedge.

Example: Consider a small Canadian company that has exported goods to a U.S. customer and expects to receive US$50,000 in one year. The Canadian CEO views the current exchange rate of US$1 = C$1.10 as favorable and would like to lock it in since they think that the Canadian dollar may appreciate over the year ahead (which would result in fewer Canadian dollars for the U.S. dollar export proceeds when received in a year's time). The Canadian company can borrow US$ at 1.75% for one year and can receive 2.5% per annum for Canadian-dollar deposits.

From the perspective of the Canadian company, the domestic currency is the Canadian dollar and the foreign currency is the US dollar. Here's how the money market hedge is set up.

1. The Canadian company borrows the present value of the U.S. dollar receivable (i.e. US$50,000 discounted at the US$ borrowing rate of 1.75%) = US$50,000 / (1.0175) = US$49,140.05. After one year, the loan amount including interest at 1.75% would be exactly US$50,000.
2. The amount of US$49,104.15 is converted into Canadian dollars at the spot rate of 1.10, to get C$54,054.05.
3. The Canadian dollar amount is placed on deposit at 2.5%, so that the maturity amount (after one year) = C$54,054.05 x (1.025) = C$55,405.41.

4. When the export payment is received, the Canadian company uses it to repay the U.S. dollar loan of US$50,000. Since it received C$55,405.41 for this U.S. dollar amount, it effectively locked in a one-year forward rate = C$55,405.41 / US$50,000 or US$1 = C$1.108108

Applications of Money Market Hedge

- For currencies where forward contracts are not readily available, such as exotic currencies or those that are not widely traded, the money market hedge can be used effectively.
- It is also suitable for a small business that does not have access to the currency forward market, as noted earlier.
- This technique is especially suitable for smaller amounts of capital where someone requires a currency hedge but is unwilling to use futures or currency options.

10.4.1.3 Optional Hedge

A foreign currency option is a contract that has an upfront fee, and offers the owner the right, but not an obligation, to trade currencies in a specified quantity, price, and time period.

An option gives the right to buy or sell a particular asset, such as a piece of property, or shares of stock or some other underlying security, such as, among others, a futures contract. In return for granting the option, the seller collects a payment (the premium) from the buyer.

Buying a call option provides the right to buy a specified quantity of a security at a set strike price at some time on or before expiration, while buying a put option provides the right to sell. Upon the option holder's choice to exercise the option, the party who sold, or wrote, the option must fulfil the terms of the contract.

Exchange-traded options form an important class of options which have standardized contract features and trade on public exchanges, facilitating trading among independent parties. Over-the-counter options are traded between private parties, often well-capitalized institutions that have negotiated separate trading and clearing arrangements with each other.

Hedging provides an investor with a unique opportunity to gain a high profit percentage. Trader purchase a 'Call option' if the currency is in

rise or 'Put option' if the value is fall down using this pricing model. If investor evaluate accurate trend of currency, then profit margin will be high.

A major limitation of forward contracts is their lack of flexibility. The contracted rate and period have to be adhered to; otherwise, a cancellation fee is payable besides compensation for any loss suffered by the authorised dealer. Currency options are designed to overcome this rigidity of forward contracts. A currency option provides an option to the buyer of the contract to move out of the contract, in case the currency in question moves to his disadvantage. You can well imagine the risk that the option seller exposes himself to. That is why, he has to be compensated by a front-end payment, i.e., payment in advance, which is called the 'option premium'. The option premium is payable by the buyer of the option. There are essentially two kinds of options that a firm can purchase - an option to purchase a currency and an option to sell a currency. The former is called a call option and the latter a put option. If you are the holder of the Call Option, then you have the right to buy the underlying asset on or before expiry. And if you holder of the Put Option, then you have the right to sell the underlying asset on or before the expiration of the contract. The price specified in the option contract at which the option buyer can purchase or sell the currency is called the strike price or the exercise price.

Example: In the simplest form, an Indian trader buys some goods from USA and after three months he pays $10,000 to USA trader. Mr. A think, In future $ price will be more than today price. So, he buys a call option for $10,000 at the strike price in Rs.54.80/$ and pay premium 0.05. He buys this contract for three months. After three months, if spot rate is Rs. 55.10/$ then Mr. A mature this contract because contract price is less than the spot price. It is profitable for A. If the spot price is Rs. 54.70/$ is less than the contract price then Mr. A will not mature that contract because he had a call option. If both price is same means spot price is equal to strike price plus premium then it's a break-even point i.e. no profit or no loss. Then Mr. A completes this contract.

Usefulness of Options for Currency Hedging

Options are particularly useful for hedging uncertain cash flows, i.e., cash flows that are contingent on other events. Typical situations are:

- **International Tenders:** Foreign exchange inflows will materialise only if the bid is successful. If execution of the contract also involves purchase of materials, equipment etc. from third countries, there are contingent foreign currency outflows too.
- Foreign currency receivables with substantial default risk or political risk, Management e.g., the host government of a foreign subsidiary might suddenly impose restrictions on dividend repatriation.
- **Risky Portfolio Investment:** A funds manager, say in UK, might hold a portfolio of foreign stocks/bonds currently worth say (German Deutsche Mark) DM 50 million which he is planning to liquidate in six months' time. If he sells-DM 50 million forward, and the portfolio declines in value because of a falling German stock market and rising interest rates, he will find himself to be over insured and short in DM. Currency options can also be used to hedge exposure to shifts in a competitor's currency. Companies competing with firms from other nations may find their products at a price disadvantage if a major competitor's currency weakens, allowing the competitor to reduce its prices. Thus, the company will be exposed to fluctuations in the competitor's currency even if it has no sales in that currency. For example, a Swiss engine manufacturer selling in Germany will be placed at a competitive disadvantage if dollar depreciation allows its principal competitor located in the United States, to sell at a lower price in Germany. The Swiss firm can purchase options on the dollar to reduce its disadvantage. Let us illustrate how:

10.4.2 Operational Hedging Techniques

Operational hedging is the course of action that hedges the firm's risk exposure by means of non-financial instruments, particularly through operational activities. To reduce risk, a company can hedge operation ex-

posure. A perfect hedge will reduce profits, but there are ways to balance insurance against profit.

10.4.2.1 Risk Shifting

Many firms can completely avoid transaction exposure. They can do so by pricing all foreign transactions in the domestic currency. In this way, firms shift the currency risk of foreign currency transactions to the foreign party.

10.4.2.2 Currency risk sharing

The two parties involved in the deal can have the understanding to share the transaction risk. An agreement between two parties where they share foreign exchange risk associated with a transaction. For example, a buyer in Britain and a seller in the United States may agree to split the difference between any gains or losses that may result from the sale of the good or service. Currency risk sharing reduces foreign exchange risk for both parties.

Currency risk sharing as an exposure management technique is directly related to the strategy of risk shifting which corporates follow by invoicing transactions in their home currency. Hence, if a German firm is exporting to Great Britain and is invoicing its goods in DM, it obviously does not face any currency risk. Currency risk has been shifted to the British firm which will have to convert Pounds into DM at the agreed date in order to pay for the goods it is importing. But there is one thing you must note. Although the German firm may be benefitting on the exchange rate front, it may be losing out on the price front. The British firm may have already planned for the maximum Pounds it is willing to pay for the goods it needs to purchase from the German firm. Depending on the DM/Pound forward rate, the British firm will quote a price which may not work to the benefit of the German firm. Hence, it is not possible to gain from risk-shifting if one is dealing with informed customers or suppliers.

10.4.2.3 Leading and lagging

Leading and lagging is another internal hedging technique for managing transaction exposures. Leading refers to advancing and lagging to

delaying receivables or payables as part of managing a firm's potential transaction exposure. This strategy is used particularly by multinational corporations.

The general rule is lead, i.e., advance payables and lag, i.e., postpone receivables in strong currencies and, conversely, lead receivables and lag payables in weak currencies. Firms can reduce transaction exposure by accelerating or decelerating the timing of payments that must be made in different currencies, that is, by leading or lagging the movement of funds. In leading and lagging, a decision is taken to make early payments in currencies that are expected to appreciate and to delay those payments that are expected to depreciate. Given that counter-parties would like to do the opposite, leading and lagging is usually done between the parent company and its subsidiaries or between two subsidiaries. Leading or lagging is also used to change the assets or liabilities in one firm, with the reverse effect on the other firm. Therefore, it changes balance sheet positions and so can be considered as a technique for achieving a hedged balance sheet position.

10.4.2.4 Re-invoicing Center

Re-invoicing requires a presence of intermediary between buyer and seller. The seller instead of supplying goods or services to the buyer directly first sells to the intermediary. The intermediary pays the seller in its home currency thus minimizing the impact of currency risk. The intermediary in turn sells these goods to buyer and collects foreign currency. The seller directly ships the goods to the buyer but the payment receipt is channelized through re-invoicing center.

The re-invoicing center deals with each buyer and seller in their home currency. The role of re-invoicing center increases substantially for an MNC, whose incomes and expenses are paid and received in many currencies. The re-invoicing center becomes the central financial subsidiary pf the MNC. As the different units of MNCs receive their income in their home currency, they do not have to spend money employing personnel to manage the forex risk. The re-invoicing center nets all foreign exchange and only hedges the amount which cannot be netted off. Also, the re-invoic-

ing center gets better forex quote as it places bigger transactions for hedging. Basically, the re-invoicing center gets benefit of economies of scale.

10.4.2.5 Exposure Netting

From forward market hedging and money market hedging, let us now go on to yet another method of transaction exposure management. Exposure netting, as the name implies, involves adding up two or more exposures to arrive at the net exposure. The net exposure may be smaller than any single exposure if some exposures automatically get cancelled out due to their opposite impacts. Exposure netting, thus, implies that each transaction need not be looked upon independently for the purpose of hedging; the whole corporate picture must be obtained before any hedging technique is applied. This is known as the portfolio approach to hedging - it recognises that the total variability or risk of a currency exposure portfolio should be less than the sum of the individual variabilities of each currency exposure considered in isolation.

Netting assumes importance in the context of cash management in a multinational corporation with a number of subsidiaries and extensive intra-company transactions. Netting not only reduces the amount of exposures to be covered company-wide but also minimises company payments. To be able to use netting effectively, the company must have continuously updated information on inter-subsidiary payments position as well as payables and receivables to outsiders.

Netting implies offsetting exposures in one currency with exposure in the same or another currency, where exchange rates are expected to move high in such a way that losses or gains on the first exposed position should be offset by gains or losses on the second currency exposure.



CHECK YOUR PROGRESS

Q.3. Mention two Financial hedging techniques for hedging transaction exposure.

Q.4. Mention two Operational hedging techniques for hedging transaction exposure.



10.5 LET US SUM UP

In this unit we have discussed the following points:

- Volatile exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk.
- To reduce this exchange risk for a transaction to be concluded at future date Forward Contracts are booked.
- Transaction exposure measures gains or losses that arise from the settlement of existing financial obligations the term of which are stated in a foreign currency.
- Techniques for hedging transaction exposure can be of two types- Financial Techniques, and Operational Techniques
- Financial hedging techniques include: Forward hedge, Money market hedge, and Option hedge.
- Operational hedging techniques include: Risk shifting, Currency risk sharing, Leading and lagging, Re-invoicing center.
- A money market hedge is a technique for hedging foreign exchange risk using the money market.



10.6 ANSWER TO CHECK YOUR PROGRESS

Answer to Q.No.1. The sensitivity of the home currency value of assets and liabilities which are denominated in foreign currencies to unanticipated changes in exchange rate is known as transaction exposures.

Answer to Q.No.2. Purchasing or selling on credit goods and services when prices are stated in foreign currencies.

Answer to Q.No.3. Financial hedging techniques include: Forward hedge, Money market hedge.

Answer to Q.No.4. Operational hedging techniques include: Risk shifting, Currency risk sharing.



10.7 FURTHER READING

- International Financial Management,5/e P.G. Apte, Tata McGraw-Hill Publication.
- International Finance, 2/e Thomas J.O'Brien, Oxford Publication.



10.8 MODEL QUESTIONS

1. State the meaning of transaction exposure.
2. Discuss the different techniques of transaction exposure management.
3. Describe the meaning and types of financial hedging techniques.
4. Describe the meaning and types of operational hedging techniques.

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UNIT 11: MANAGEMENT OF ECONOMIC EXPOSURE

UNIT STRUCTURE

11.1 Learning objectives

11.2 Introduction

11.3 Exposure and risk

11.4 Meaning of economic exposure

11.5 Relationship of economic exposure with Transaction exposure

11.6 Measuring economic exposure

11.7 Management of economic exposure

11.8 Marketing management of exchange risk

11.9 Production management of exchange risk

11.10 Corporate philosophy for exposure management

11.11 Let us sum up

11.12 Further readings

11.13 Answers to check your progress

11.14 Model questions

11.1 LEARNING OBJECTIVES

After the completion of this unit, you will be able to understand:

- The classification of foreign exchange exposure.
- To understand the meaning of economic exposure
- To assess the relationship of economic exposure with transaction exposure
- To know the management and measurement of economic exposure
- To understand the managerial functions associated with economic exposure.

11.2 INTRODUCTION

Fluctuations in exchange rate results into exposure and risks associated with those. Currency rate fluctuations affect the values of revenue, cost, cash flows, assets, liabilities of a business. A business house can have different transactions with foreign entities such as exports, imports, borrowings, lending, direct investments, etc. As a result, businesses are subject to exchange rate exposure. Therefore, firms have to be careful enough to address such issues linked with globalization.

An important point here is that the exchange rate fluctuations can affect not only those businesses which are directly engaged in international trade, but also purely domestic firms. A business firm which sources only domestic materials and sells exclusively within a country can also face foreign exchange exposure if it competes against imports or imported products. It is therefore necessary to understand the scope of the exposures irrespective of the place of operation of business.

11.3 EXPOSURE AND RISK

Due to globalization and blurred geographical boundaries of the nations, business houses and their operations are not restricted to a single nation. As a result of this, businesses involved in international business or transactions needs to deal in different foreign currencies of different nations.

The domestic currency values of assets, liabilities may get influenced by the changes in the foreign exchange currency rates. This can be understood as foreign exchange exposure. This implies the possible vulnerability in the domestic currency values, influenced by foreign exchange rate shifts. Foreign exchange risk implies the variability that is likely to be caused in the domestic currency values of a business house's assets, cash flows, etc. due to the fluctuations in the exchange rates of foreign currencies. All the business houses involved in cross border transaction with a specific country will have foreign exchange exposure as its domestic currency values of its resources and obligations are exposed to the foreign exchange rate with that specific country. The noteworthy point here is: existence of foreign

exchange exposure may lead to varied levels of foreign exchange risks associated with it.

11.4 ECONOMIC EXPOSURE

Economic exposure is the risk that the Net Present Value (NPV) of a company may change as a result of fluctuations in the future cash flows caused by fluctuations in foreign exchange rates. It measures how the value of a firm, measured in terms of the present value of all its expected future cash flows, will get affected by the fluctuations in the exchange rates. Thus, economic exposure, unlike translation exposure, is concerned with a long term consequence and has a substantial and real effect on a company's market value.

Economic exposure relates to cash flow risks. This exposure can be understood as the possible risk on the cash flow and operations of the business house associated with the fluctuations in the foreign currency rates. In other words, economic exposure affects the cash flow of those businesses which are engaged in cross border transactions.

Economic exposure is characterized by certain salient features. This risk or exposure implies the ability of businesses to compete on the basis of cost effectiveness and thereby earn a margin of profit. The threat that arises out of economic exposure is from the movement in real exchange rates and not the nominal exchange rates. Fluctuations in the real exchange rates of selling currencies tend to affect all the competitors, and are a part of the wide macroeconomic condition covering all the businesses of the nation. In a summarized manner, economic risk is primarily concerned with the threats or potential threats from changes in the real exchange rates to competitiveness of costs. The extent and possibility of shifting the costs between currencies, in simple, can be understood as economic risk. Thus, economic risk is an issue that needs to be addressed for the long run. The rise and fall in the real exchange rates can be analyzed for few years to come and the businesses need to earn profit during this time span either by switching costs to those currencies which are likely to become more competitive, or by resorting to strategies which alter sensitivity to cost differentials.



Check your progress:

Q1: What is meant by economic exposure?

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11.5 RELATIONSHIP OF ECONOMIC EXPOSURE WITH TRANSACTION EXPOSURE

The major differences existing between economic and transaction exposure can be understood in the following manner:

Basis of difference	**Economic exposure**	**Transaction exposure**
Contract	General	Specific
Duration	Project life	Period of contract
Difficulty in computing gains and losses	Difficult	Intermediate
Hedging	Difficult	Intermediate
Extent of exposure	Determined by product and market factors	Determined by nature of contract
Value	Market value of assets	Contract value of assets and liabilities
Management of exposure	By all departments	By treasury department
Identification	Difficult	Comparatively easier
Scope	Wider	Narrower
Risk associated	Impacts the core business value	Transaction and contract specific

Transaction exposure relates to contractually determined assets and liabilities such as receivables and payables etc., whereas, the exposure of operating cash flows or economic exposure depends on the effect of exchange rate changes on the firm's competitive position. Both transaction and economic exposures look into the future impact related to exchange rate fluctuations that has already occurred or is supposed to occur in the coming years. In certain aspects, transaction and economic exposure are

similar to each other but they vary in their degrees. Economic exposure depends upon future cash flows for an arbitrary time horizon, whereas transaction exposure depends upon outstanding obligations which existed before exchange rate changes but were settled after the fluctuations in exchange rates.

11.2 MEASURING ECONOMIC EXPOSURE

Measuring and managing economic exposure is considered to be a tough task as it involves ascertainment of future exchange rates. The intensity of risk associated with economic exposure necessitates the determination of the economic exposure of a business. But the task is not an easy one as it requires forecasting the exchange rate fluctuations relating them with future cash flows. For this purpose, however, use of historical data of the existing businesses or of comparable businesses can be a possible way out. Quantitative assessment of economic exposure depends upon certain underlying assumptions concerning future cash flows and sensitivity of fluctuations in exchange rates.

In determining the economic exposure, precise estimation of the future cash flows and the exchange rates is necessary. It is easier to estimate economic exposure when currency exchange rates follow a trend and the future cash flows are known. We know that the value of a foreign asset fluctuates with the corresponding changes in the exchange rates of the concerned currencies. This relation can be established using a regression equation. And, as economic exposure measures the change in the value of a firm (P) due to the changes in its future cash flows as a result of exchange rate changes (S); the same can be measured with the help of a simple linear regression equation. This is shown as follows:

$P = a + (â \times S) + e$

Where,

P= Value of the foreign asset/firm in terms of home country currency;

a = Regression constant, which represents the intercept of the regression line;

â = Regression coefficient, which is the slope of the regression line;

S = Spot exchange Rate, expressed as units of home country currency per unit of the concerned foreign currency; and

e = Regression residual or the Standard Error.

This equation gives an estimate of the relationship between the price of the asset (firm) and the exchange rate. The regression coefficient (â) is known as the Forex Beta or the Exposure Coefficient; and it indicates the level of economic exposure i.e. sensitivity of the Asset value/price to the exchange rate.

The exposure coefficient (â) is measured as the ratio between the Covariance of the Assets Value (P) to the Exchange Rate (S) and the Variance of the Exchange Rate (S); and is given as:

$$\hat{a} = \frac{\text{Covariance (P.S)}}{\text{Variance (S)}}$$

Covariance estimates the fluctuation in the asset's value/ price in connection with the exchange rate and the Variance measures the variations in the exchange rate.



CHECK YOUR PROGRESS:

Q2: How economic and transaction exposures are different from each other?

Q3: Why is it difficult to measure economic exposure?

11.3 MANAGEMENT OF ECONOMIC EXPOSURE

As compared to transaction and translation exposure, economic exposure is comparatively difficult to manage due to the fact of its relation with competitiveness. Economic exposure which can be related to and understood as the risk and exposure associated with competitiveness, implies the adoption of all possible way out for making the unfavorable market condition a favorable one and turning un-competitiveness to competitiveness by resorting to different techniques. Adopting any hedging mechanism can be considered as successful only if the costs of such hedge do not add to the cost of competitiveness of the business and help reducing

its un-competitiveness in the global market. Moreover, a business can opt for improving its competitive position by making such arrangements to incur costs in currencies expected to be relatively competitive during critical period. All the decisions relating to the business and future trades should be taken in line with its competitiveness and real exchange rates. In order to manage the exposures opportunistically, one may opt for a swift shift to certain other currency which is comparatively and relatively stronger; or one may go for bringing differentiation with a diversified portfolio as a defensive strategy to make the business less price sensitive.

The implications of economic exposure and risk associated with it suggests for a strategy for such exchange risk management that focuses on protecting the home currency earning capacity of the business in both short as well as long run. The aspect of economic exposure which involves quantification of foreign exchange rates and corresponding currency flows is easier, compared to quantification of competitive environment exposures and these prevail for longer term. This, therefore, requires adjustments and modifications in operating structure of the businesses with a view to address the same.

The value of assets/liabilities and operating cash flows can change because of the exchange rate fluctuations. Unlike transaction exposure which relates to contractually determined assets and liabilities such as receivables and payables etc., the exposure of operating cash flows depends on the effect of exchange rate changes on the firm's competitive position. The problem is that competitive position is not readily measurable

11.4 MARKETING MANAGEMENT OF EXCHANGE RISK

Marketing management related to exchange rate can be understood as taking those strategic decisions involving planning, organizing and coordinating all the necessary functions of marketing. The possibility of price changes as a result of exchange rate changes, can impact the competitive advantage and position that the business had been enjoying so far. To tackle the negative outcome of it and to turn it into a favourable condition, the business may wish to adjust, modify and alter its marketing mix by resort-

ing to the following: market selection, market segmentation, product-pricing strategy, promotional strategy, etc. these forms of marketing initiatives can enable the business to accommodate new set of relative prices.

a. Segmentation and Selection of the Market:

"Where to sell" and "in which market to sell" have always been considered as a major strategic decision for one willing for foreign trade. This involves not only assessing a single parameter upon which the decision can be taken; rather it requires the analysis of relative support needed to be provided to each of the alternatives. A business which is concerned with its target group will be less influenced by the foreign currency devaluation as compared to a mass marketer. Market selection and segmentation provides business parameters within which it can design and alter its marketing mix. The businesses must choose certain tactical responses such as: adjustment of pricing and promotional policies depending upon whether it wills to go as a mass marketer or not. Further, if the change and fluctuations in the exchange rates continue to exist in the long run, the business needs to review and modify its marketing strategies.

b. Pricing:

Developing a pricing strategy while trading overseas involves analysis of whether to focus on profit margin or market share and the frequency in which prices are to be adjusted. Setting the price of a firm dealing in overseas should be such that it maximizes the profit in home currency. Following the appreciation in the home currency that is equivalent to foreign currency depreciation, the overseas business should try considering the opportunities of increasing foreign currency price of its products. In such a case, foreign currency prices can be somewhat raised and through this the exporting business firm can make up a lower profit margin on the foreign sales. In case of home currency depreciation, the exporter business firms have the option of increasing unit profitability by skimming and expanding the market using penetration pricing. However, the factors such as economies of scale, consumer price sensitivity etc. are needed to be looked into.

On the condition that if significant economies of scale exist, holding down price, lowering unit production costs, etc. can be permitted. In international trading environment, there are certain firms which constantly keep on adjusting their prices in response to the exchange rate fluctuations. Further, certain others perceive having a stable price leads to possession of a strong customer base. In this regard, price elasticity is a factor that needs in-depth attention and analysis.

c. Promotional Strategy:

Strategies designed or meant for promotional purposes should also take into account the anticipated exchange rate changes. In marketing, the size of promotional budget remains a key issue. In line with this, the strategies designed for different markets across the countries should make sure the proper and logical allocation of the entire budget meant for the said purpose. Businesses exporting their products after domestic currency devaluation may find that the return per Rupee expenditure on promotion is increased because of the product's improved price positioning. However, foreign currency devaluation is most likely to reduce such return, indicating change in the product and promotional policy.

d. Product Strategy:

In case of exchange rate risks and exposures, businesses tend to alter the product strategies in order to respond to the risk situations. Such strategies include new product inclusion in the product portfolio, changing the product line and so on. A noteworthy point here is taking decision during appropriate time and thereby implying proper timing for a proper decision. This implies, following home currency devaluation, competitive price advantage enables the businesses to expand their product lines to cover broadened base of consumers both within and outside the home country. This can be done through branches, franchises etc. Against this, appreciation of the home currency may mandate the businesses to focus on more quality conscious and less price sensitive customer base.

11.5 PRODUCTION MANAGEMENT OF EXCHANGE RISK

In order to manage and mitigate the further risks associated with economic exposure or competitive exposure, businesses need to adopt strategies beyond market initiatives. Linking production with exposure management implies managing functions relating to production and thereby dealing with the risk. This primarily involves shifting the manufacturing base of the business and other measures relating to production. In case of any disequilibrium situation, businesses with manufacturing facilities in different countries can change their production runs by either lengthening few or shortening few in line with the changing currency costs of production. Another strategy that can be followed is restructuring or substituting the input mix between domestic and imported inputs depending upon their relative prices and possibility of substitution. If the businesses are well diversified, they can make shifts in sourcing raw materials, components as well depending upon the fluctuations in respective currency exchange rates. Moreover, in order to aid productivity, the businesses can close their inefficient plants and improve production process.

a. Input Mix:

This implies decisions relating to designing and structuring the input used for production purpose so as to keep the risk at a manageable level. The decisions whether or not to purchase and procure from within or outside a particular country will find its place under this strategic decision. However, changing of input mix will have to be analyzed in line with the long term implication upon final product pricing, considering the fluctuations in exchange rates. The materials or goods involved in international trade or with high import content will exhibit more home currency price increases, than those materials or goods with lower import content or minimal involvement in international trade. In the long run decisions for mitigating different exposures, businesses should consider designing of production related facilities in such a manner that paves the way for substitution as and when necessary. However, such decisions should be based on cost benefit approach.

b. Shifting Production among Plants:

The MNCs equipped with worldwide production facilities can shift production among their plants based on the changing costs of production. This implies the comparative advantage enjoyed by those businesses which are backed by wider and stronger ability to adjust its marketing and production operations across the globe. However, there are issues and limitations which impact the decisions of the firms and such factors can include availability of skilled labour force, law and order, and future exchange rate fluctuation probability as well. Moreover, possession of multiple sources of production may also lead to difficulties in cost minimization. A strategy to shift and source production from alternative plants presupposes that the MNC has already created a portfolio of plants worldwide. Such availability of multiple sources allows the business to get the best out of economies of production. Despite the higher costs associated with maintenance, in the uncertain business world, production diversification can work as a significant strategy considering the risk of currency rate fluctuations.

c. Plant Location:

Deciding about plant locations, either at the home country or other host countries or even in third countries can be an alternative for managing economic exposure and risks associated with it. The point to be noted here is establishing a plant and selection of a plant for production purpose involves long term commitment in terms of capital and other resources. Hence, it is of immense importance for a business to involve into such matters and plan strategically only after assessing the time span for which the country plans to retain its cost and competitive advantage. Further, there are also factors related to maintenance of quality. Shifting production abroad may not be an optimal solution in case the business wills to maintain quality through closeness to suppliers and coordination of different functions.



CHECK YOUR PROGRESS

Q4: what are the marketing initiatives which can be used for managing economic exposure?

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Q5: what are the production initiatives that can be used for managing economic exposure?

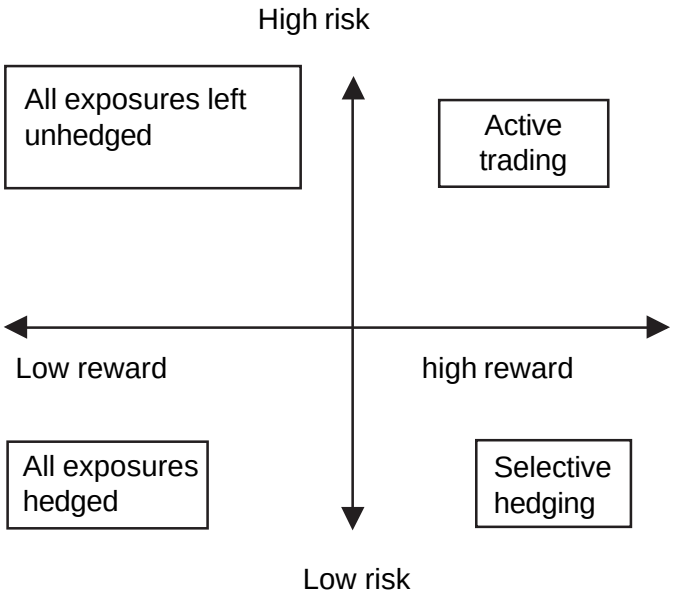
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11.10 CORPORATE PHILOSOPHY FOR EXPOSURE MANAGEMENT

The scope of economic exposure is broad because it can make changes in a business's competitive profile across markets and products. The strategic decisions relating to marketing and production aspects require the knowledge of fluctuations in exchange rates in the years to come. However, the factors which create or may create such fluctuations are not always predictable. In such a case, contingency plans can be devised. This involves development of several feasible scenarios relating to the currencies, analyzing their corresponding effects on the competitive position of the business and thereby moving ahead on the basis of them.

As for exposure management, a lot depends on the corporate philosophy of the business, specifically its attitude and behavior towards risk. The willingness of a business to take risk in order to achieve and get rewards, financial strengths play an important role. Therefore, the relationship among nature of business, vulnerability to exchange rate fluctuations and ability to take risks come into existence. To summarize, there cannot be a single strategy which can be applicable to all types and sizes of business during all times.



Low risk-low reward: This option involves automatic hedging of the exposures in the forward market as soon as they arise, irrespective of the attractiveness of the forward rate. This approach benefits the business as the rewards and costs associated with the transaction are known. In the floating rate era, currencies in terms of exchange rates have taken the form of commodities and the businesses which are dependent significantly on commodity prices, can hardly afford not to take views on the prices of the commodities. Hence, this approach is not always an optimum strategy.

Low risk-reasonable reward: This strategy requires selective hedging of the exposures whenever the forward rates are attractive and keeping exposures open whenever they are not. It further requires quantification of future and the success of the strategy will depend upon the accuracy of such quantification.

High risk-low reward: This implies leaving all the exposures unhedged which is beneficial as there is no managerial investment in terms of time and money. This strategy indicates high destabilization of cash flows.

High risk-high reward: This necessitates active trading in the currency market through continuous booking and cancellation of forward contracts. The trading function acts as a profit centre and this strategy requires full consciousness of the high risk associated, if this is to be adopted.

To summarize and conclude, economic exposure can be managed by combining marketing and production strategies or initiatives. But the major determinant here remains the corporate philosophy of the business or organization concerned. Hence, it becomes of immense importance to design and develop a corporate strategy to deal with economic exposure as without a clearly spelt strategy, the pursuit of any operation or function will bring difficulties.



CHECK YOUR PROGRESS

Q6: what do you understand by corporate philosophy for exposure management? What role does it play in international trade?

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11.11 LET US SUM UP

In this unit, we have covered the following:

- Business houses involved in cross border transaction with different countries will have foreign exchange exposure as its domestic currency values of its resources and obligations are exposed to the foreign exchange rate with those specific countries. The existence of foreign exchange exposure may lead to varied levels of foreign exchange risks associated with it.
- Economic exposure is one of the exposures associated with foreign exchange transactions. This exposure can be understood as the possible risk on the cash flow and operations of the business house associated with the fluctuations in the foreign currency rates.
- Economic exposure is also known as operating exposure, strategic exposure, cash flow exposure, competitive exposure, etc.
- Transaction and economic exposure, in certain aspects, are similar to each other but they vary in their degrees. Further,

Economic exposure is related to future cash flows for an arbitrary time horizon, whereas transaction exposure is related to outstanding obligations which existed before exchange rate changes but were settled after the fluctuations in exchange rates.

- Economic exposure has effect on operating cash flows. But it is difficult to measure unlike transaction exposure. Economic exposure can be managed by taking different long-term measures such as (i) selecting low-cost production location, (ii) adopting flexible sourcing policy, (iii) diversifying the market, and (iv)modification of input mix, (v)product differentiation etc.
- Managing and measuring economic exposure is comparatively a difficult task which is affected to a great extent by the corporate philosophy of the business concerned.



11.12 FURTHER READINGS

1) Collier, P. M., & Ampomah, S. A. (2006).
2) Fundamentals of International Financial Management - Kevin, S. (2009), PHI Learning Pvt. Ltd., New Delhi
3) International Financial Management - Madhuvij. (2006), Excel Books, India
4) Management Accounting: Risk and Control Strategy., CIMA Publishing.



11.13 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q. No.1. Economic exposure is also known as operating exposure, strategic exposure, competitiveness exposure, etc. This is a kind of exposure resulting out of foreign exchange transactions of a business. It is the exposure that results from the changes in the value of items whose foreign currency value is not contractually fixed but they have an effect on cash

flows. In other words, economic exposure affects the cash flow of those businesses which are engaged in cross border transactions.

Ans to Q. No. 2. Economic exposure and transaction exposure are same in kind, but they vary in their respective degrees. Economic exposure is essentially subjective because it depends upon estimated future cash flows for an arbitrary time horizon. Transaction exposure is essentially objective because it depends upon outstanding obligations which existed before changes in exchange rates but were settled after changes in exchange rates. Further, distinction also exists from the perspective of ability to measure and manage the exposure. The scope of economic exposure is large enough as it can change the competitive status and position of a business across many markets. This implies the difficulty in quantification and measurement of economic exposures. Further, the techniques which are used to eliminate transaction exposure are not feasible or applicable for hedging economic exposure.

Ans to Q. No. 3. Measuring and assessing economic exposure of a business is difficult due to the complexity of interactions of funds which flow into, out of and within the business. Further, if a business house operating in more than one country and also has subsidiaries in different nations, the nature of such complexity will be much more as all those subsidiaries will be dealing in different currencies implying multiple exchange rate fluctuations. Furthermore, economic exposure is something that is related to the competitiveness of a business and it is hardly possible to quantify competition.

Ans to Q. No. 4. Managing economic exposure and other exposure through marketing initiatives imply the adoption of different alternatives relating to the market and thereby trying to manage and mitigate the risk associated with it. For this purpose, some strategies include market development or segmentation, product differentiation, promotional strategies and pricing strategies.

Ans to Q. No. 5. Management of economic exposure through production activities means adjustment in production related functions and devising a measure to eliminate the economic risk. For this purpose, a business may go for improving its productivity, for closure of its inefficient plants, restructuring its input mix, changing plant location, etc.

Ans to Q. No. 6. Corporate philosophy for exposure management implies the attitude of the business towards foreign transactions and associated risks. This assesses the ability of the firm to absorb foreign exchange losses. In a broader perspective, corporate philosophy also seeks to analyze the competitor's assessment of foreign exchange transaction risks as well. The attitude of the firm towards overseas trading and risk, and whether there is a policy within the firm to arrange the positioning of the firm with a view to the fluctuating foreign exchange rates, whether foreign exchange rate risk has proper managerial attention: all are covered and conveyed through corporate philosophy towards exposure management. The significance of this can be understood from the very fact that it is the corporate philosophy of the organization towards foreign exchange dealings which helps in developing a culture of risk management within the organization at micro level as well as macro level.



11.14 MODEL QUESTIONS

1. Write a short note on economic exposure.
2. How can economic exposure be related to the competitiveness of a business firm?
3. Are transaction exposure and economic exposure the same? Mention five points of distinction between the two.
4. How can economic exposure be managed?
5. What are the prime areas which are needed to be managed in order to manage economic exposure?
6. Explain the relationship between marketing and exposure management. What sort of adjustments is needed to be made in marketing functions for managing exposures?
7. Explain the relationship between production and exposure management. What sort of adjustment is needed to be made in production activities for managing exposures?
8. Briefly present the importance of corporate philosophy for managing foreign exchange exposures.

UNIT 12 MULTILATERAL DEVELOPMENT BANKS

UNIT STRUCTURE

12.1 Learning objective

12.2 Introduction

12.3 Meaning of Multilateral Development Banks

12.4 International bank for reconstruction and development

12.5 Asian Development Bank

12.5.1 Functions of the Asian development bank

12.5.2 Objectives of the Asian Development Bank

12.6 The New Development Bank

12.6.1 Background of the establishment of NDB

12.6.2 Capital structure and subscription

12.6.3 Key areas of operation

12.6.4 Mission and values of NDB

12.6.5 Member countries of NDB

12.7 International Financial Corporation

12.7.1 Objectives of IFC

12.8 International Development Association

12.8.1 Management of IDA

12.8.2 Objectives and functions of IDA

12.9 World Trade Organization

12.9.1 Objectives of WTO

12.9.2 Functions of WTO

12.9.3 Structure of WTO secretariat

12.9.4 Role of the secretariat

12.9.5 Membership of WTO

12.9.6 Principles of the trading system of WTO

12.10 Let's sum up

12.11 Answers to check your progress

12.12 Further Reading

12.13 Model questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- Meaning of Multilateral Development Banks
- Describe the objective and functions of Asian Development Bank
- Know the background of the establishment of the New Development Bank and its member countries
- State the meaning, objectives and functions International Financial Corporation
- Enumerate the meaning, objective, management and functions of International Development Association
- describe the meaning, objective, management and functions of World Trade Organization

12.2 INTRODUCTION

Like other International Financial Institutions (IFIs), Multilateral Development Banks (MDBs) also created to fulfill some specific objectives. While commercial banks seek to make profits on loans and other financial services, the goal of MDBs is to issue grants and low-cost loans to improve the economic conditions of impoverished or developing nations. This unit discusses about some major Multilateral Development Finance Institutions.

12.3 MEANING OF MULTILATERAL DEVELOPMENT BANKS

A Multilateral Development Bank (MDB) is an international financial institution chartered by two or more countries for the purpose of encouraging

economic development in poorer nations. MDBs were originated as the outcome of World War II to reconstruct war-ravaged nations and stabilize the global financial system and they are subject to international laws. Unlike commercial banks, MDBs do not seek to maximize profits for their shareholders. Instead, they prioritize development goals, such as ending extreme poverty and reducing economic inequality. They often lend at low or no interest or provide grants to fund projects in infrastructure, energy, education, environmental sustainability, and other areas that promote development. Multilateral development banks provide financial assistance to developing countries in order to promote economic and social development.

There are two main forms of multilateral development banks. The first, which includes the largest and best-known institutions, makes loans and grants. These banks often distinguish between poorer, borrowing members and wealthier, non-borrowing members. Examples include the World Bank. The second type of multilateral development bank is formed by governments of low-income countries that can then borrow collectively via the MDB in order to secure more favorable rates, example Asian Development Bank.

12.4 INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (IBRD)

The International Bank for Reconstruction and Development (IBRD), frequently called the 'World Bank' is a global development cooperative owned by 189 member countries. The IBRD was conceived in July 1944 at the United Nations Monetary and Financial Conference in Bretton Woods, United States. As the largest development bank in the world, it supports the World Bank Group's mission by providing loans, guarantees, risk management products, and advisory services to middle-income and creditworthy low-income countries, as well as by coordinating responses to regional and global challenges. The World Bank Group is headquartered in Washington, D.C. It has more than 10,000 employees in more than 120 offices worldwide. The IBRD is the main lending organization of the World Bank

Group and, like its sister institution, the International Monetary Fund (IMF), was born of the Allies' realization during World War II.

Today the Bank Group's work touches nearly every sector that is important to fighting poverty, supporting economic growth, and ensuring sustainable gains in the quality of people's lives in developing countries. On critical issues like climate change, pandemics, and forced migration, the Bank Group plays a leading role because it is able to convene discussion among its country members and a wide array of partners. It can help address crises while building the foundations for longer-term, sustainable development. As demand for its services has increased over time, the Bank Group has risen to meet them. For perspective, the World Bank made four loans totaling $497 million in 1947, as compared to 302 commitments totaling $60 billion in 2015.

(Unit 4 in the Block I has discussed broadly about World Bank)

12.5 ASIAN DEVELOPMENT BANK

The Asian Development Bank (ADB) was founded on 19 December, 1966 with 31 members that came together to serve a predominantly agricultural region. Takeshi Watanabe was ADB's first President. The main objective of the establishment of ADB was to help its developing member countries reduce poverty and improve the quality of life of its people. Its headquarters are in Manila, Philippines. The Asian Development Bank's primary mission is to foster growth and cooperation among countries in the Asia-Pacific Region. The ADB is owned and financed by its 68 member countries of which 49 are from the region and 19 are from other parts of the world. ADB's main partners are governments, the private sector, non-government organizations, development agencies, community-based organizations and foundations.

12.5.1 Functions of the Asian Development Bank

1. Economic and Social Advancement : This bank has a membership program under which there are various benefits available for the members' countries. These benefits include providing loan and in-

vestment at a concessional rate. One of the functions of the ADB is to provide loans and equity investments for the economic and social upgrade of developing member countries.

2. Technical Assistance: Most of the countries require a lot of services like advisory services. One of the functions of the Asian Development Bank is to provide technical assistance for the preparation and implementation of development projects and advisory services.
3. Investment Promotion: Asian Development Bank provides a lot of services to the member countries in the form of investments. At the same time, they also provide some specific sort of investment facilities for development purposes.
4. Support in Policies and Plans: Plans and policies play an important role in any country. One of the main functions of the ADB is to provide help to the member countries in framing policies and plans at the international level.

12.5.2 Objetives of the Asian Development Bank

1. To help the member countries in countering poverty. Hence, it helps them in poverty reduction and country development.
2. To help the countries to go towards economic growth.
3. To support human development.
4. They believe in preserving and protecting the environment.
5. To work and wish to continue working towards empowering women and improving their status in society.

12.6 THE NEW DEVELOPMENT BANK (NDB)

The New Development Bank (NDB) is a Multilateral Development Bank (MDB) established by Brazil, Russia, India, China and South Africa (BRICS). It was formerly referred to as the BRICS Development Bank as it

was established by the BRICS states. The NDB was established with the objective of financing infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries. NDB's work also complements the efforts of multilateral and regional financial institutions, toward global growth and development.

12.6.1 Background of the establishment of NDB

The idea for setting up the bank was proposed by India at the fourth BRICS Summit in New Delhi in 2012. The leaders of Brazil, Russia, India, China and South Africa considered the possibility of setting up a new Development Bank to mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies, as well as in developing countries. They directed Finance Ministers to examine the feasibility and viability of this initiative, to set up a joint working group for further study, and to report back by the next Summit. Following the report from the Finance Ministers at the fifth BRICS summit in Durban, South Africa on 27 March 2013, the leaders agreed on the feasibility of establishing the New Development Bank and made the decision to do so. It was also agreed that the initial contribution to the Bank should be substantial and sufficient for it to be effective in financing infrastructure.

On 15 July 2014, the first day of the 6th BRICS Summit held in Fortaleza, Brazil, the BRICS states signed the Agreement on the New Development Bank, which makes provisions for the legal basis of the bank. In a separate agreement, a Reserve Currency Pool worth $100 billion was set up by BRICS nations. On 11 May 2015, K. V. Kamath was appointed as the President of the bank. The 7th BRICS Summit in July 2015 marked the entry into force of the Agreement on the New Development Bank. On 27 February 2016, the NDB signed the Headquarters Agreement with the Government of the P.R.C. and the Memorandum of Understanding with Shanghai Municipal People's Government concerning the arrangements in relation to the Headquarters of the bank in Shanghai.

In the Fortaleza Declaration, the leaders stressed that the NDB will strengthen cooperation among BRICS and will supplement the efforts of multilateral and regional financial institutions for global development, thus contributing to collective commitments for achieving the goal of strong, sustainable and balanced growth. According to the Fortaleza declaration, the Bank shall have an initial authorized capital of US$ 100 billion, equally shared among founding members. The first chair of the Board of Governors shall be from Russia. The first chair of the Board of Directors shall be from Brazil. The first President of the Bank shall be from India. The headquarters of the Bank shall be located in Shanghai. The New Development Bank Africa Regional Centre shall be established in South Africa concurrently with the headquarters. The first regional office of the NDB is in Johannesburg, South Africa. The second regional office was established in 2019 in São Paulo, Brazil, followed by Moscow, Russia. According to the Agreement on the NDB, the Bank shall support public or private projects through loans, guarantees, equity participation and other financial instruments. Moreover, the NDB shall cooperate with international organizations and other financial entities, and provide technical assistance for projects to be supported by the Bank. The initial authorized capital of the bank is $100 billion divided into 1 million shares having a par value of $100,000 each. The initial subscribed capital of the NDB is $50 billion divided into paid-in shares ($10 billion) and callable shares ($40 billion). The initial subscribed capital of the bank was equally distributed among the founding members. The Agreement on the NDB specifies that every member will have one vote no one would have any veto powers.

At the signing of the Headquarters Agreement with the government of the People's Republic of China and the Memorandum of Understanding with the Shanghai Municipal People's Government on 27 February 2016, the NDB became fully operational. The NDB is building a robust and diversified portfolio of sustainable infrastructure projects, in order to fulfill its mandate and achieve strategic objectives.

12.6.2 Capital Structure and Subscription

The New Development Bank has an authorized capital of USD 100 billion, which is divided into one million shares that have a par value of one hundred thousand dollars each. NDB's founding members made an initial subscription of five hundred thousand shares totaling USD 50 billion, which include one hundred thousand shares corresponding to a paid-in capital of USD 10 billion and four hundred thousand shares corresponding to a callable capital of USD 40 billion. The initial subscribed capital was equally distributed amongst the founding members.

12.6.3 Key Areas of Operation

The work of the NDB is centered around maximizing the impact of development in a fast, exible and ecient manner. To catalyze the kind of development it envisages, it is always keen to listen, learn and collaborate with other MDBs, governments, nancial institutions and social organizations. To fulfill its purpose, the Bank supports public or private projects through loans, guarantees, equity participation and other financial instruments. The NDB funded projects are located within the following Key Areas of Operation:

i) The Bank provides technical assistance for projects and engages in information, cultural and personnel exchanges with the purpose of contributing to the achievement of environmental and social sustainability.

ii) As a young and dynamic MDB, the NDB is well-placed to trigger a new kind of development – one that is based on holistic and sustainable growth for our planet.

iii) The activities of the New Development Bank as an international institution for promoting sustainable development are consistent with the purposes and principles of the United Nations in the socio-economic field. In 2018, the New Development Bank received observer status in the UN General Assembly, establishing a firm basis for active and fruitful cooperation with the United Nations.

12.6.4 Mission and Values of NDB

The New Development Bank was formed to support infrastructure and sustainable development efforts in BRICS and other underserved, emerging economies for faster development through innovation and cutting-edge technology. The bank partners with nations through capital and knowledge, achieving development goals with transparency and empathy and creating an equal opportunity for the development of all countries. The Bank is a partner in development that goes beyond the conventional codes of multilateral banks. It represents, operates and is recognized for its values that fulfill the founding vision.

i) Open & Approachable: NDB believes that mutual respect and a spirit of collaboration drive effective results. The Bank is committed to having an open mind regarding the needs of developing countries today and establishing meaningful partnerships.

ii) Transformative: Its mission is to bridge the gaps between need and funding and to be a partner in bringing about truly holistic development. We take pride in partnering with developing countries to drive structural transformation by providing financial assistance for infrastructure and sustainability-driven projects.

iii) Sustainable: The 21st century has brought with it tremendous development. However, this progress has been skewed, insufficient and often harmful to its environment. The Bank collaborates with initiatives that drive growth and employment while ensuring environmental protection.

iv) Bold and Path-breaking: Innovative initiatives are required to change the face of development finance and make the value chain efficient and fast. This requires bold decisions and groundbreaking process innovation. The Bank uses technology for the larger goal of global development.

v) Flexible & Adaptive: By virtue of the Bank's roots in developing economies, it possesses a keen understanding of their financing needs. It comes with a commitment to be flexible in its processes and approach in order to

accommodate interests of its public and private partners. NDB has quickened the pace of loan disbursements by adapting its systems.

vi) Egalitarian: The Bank is founded on the principles of equality and democracy. It believes in democratic decision-making and inclusivity of all stakeholders. The Bank understands that the true meaning of development is, at the core, the vision of a great leveler -a vision that is inclusive, not selective.

vii) Transparent: The Bank believes in transparency and complete disclosure. It is committed to ensure that its proceedings are transparent and all its policies, procedures and documents are publicly accessible.

12.6.5 Member Countries

Established in 2015 by BRICS countries, the New Development Bank's membership is open to members of the United Nations. NDB commenced the admission of its first new member countries in the second half of 2021.

Table

Member Countries of NDB with their Subscriptions

COUNTRY	MEMBERSHIP DATE	SHARES (NUMBER)	SUBSCRIBED CAPITAL
BRAZIL	July 3, 2015	Shares subscribed: 100,000 Exercisable votes: 98,637	Amount (million USD): 10,000.0 Percent of total:19.42%
RUSSIA	July 3, 2015	Shares subscribed: 100,000 Exercisable votes: 100,000	Amount (million USD): 10,000.0 Percent of total: 19.42%
INDIA	July 3, 2015	Shares subscribed: 100,000 Exercisable votes: 100,000	Amount (million USD): 10,000.0 Percent of total: 19.42%
CHINA	July 3, 2015	Shares subscribed: 100,000 Exercisable votes: 100,000	Amount (million USD): 10,000.0Percent of total: 19.42%

SOUTH AFRICA	July 3, 2015	Shares subscribed: 100,000 Exercisable votes: 99,090	Amount (million USD): 10,000.0 Percent of total: 19.42%
BANGLADESH	September 16, 2021	Shares subscribed: 9,420 Exercisable votes: 9,420	Amount (million USD) : 942.0 Percent of total: 1.83%
UNITED ARAB EMIRATES	October 4, 2021	Shares subscribed: 5,560 Exercisable votes: 5,560	Amount (million USD): 556.0 Percent of total: 1.08%
EGYPT	Prospective member*	-	-
URUGUAY	Prospective member*	-	-
Total		Shares subscribed: 514,980 Exercisable votes: 512,708	Amount (million USD): 51,498.0 Percent of total: 100.00%

Source: https://www.ndb.int

Notes

* Prospective members listed herein have been admitted by NDB's Board of Governors and will officially become a member country once they deposit their instrument of accession.

* Exercisable votes reflect status of paid-in capital received as of January 4, 2022.

* The total percent of subscribed capital may not be accurate to 100% due to rounding.



CHECK YOUR PROGRESS

1. Answer as directed:

a) Write the full form of IBRD

b) The Asian Development Bank was founded on 19 December, 1946. (True or False)

c) Write the full form of BRICS.

d) Headquarters of the NDB is in Shanghai. (True or False)

12.7 INTERNATIONAL FINANCIAL CORPORATION (IFC)

International Financial Corporation (IFC) is a sister organization of the World Bank and member of the World Bank Group. The IFC was established in July 1956, with the specific subject of providing finance to the private sector. It is the largest global development institution focused on the private sector in developing countries. It leverages its products and services as well as products and services of other institutions across the World Bank Group to create markets that address the biggest development challenges. It applies its financial resources, technical expertise, global experience, and innovative thinking to help its clients and partners overcome financial, operational, and other challenges. IFC is also a leading mobilizer of third-party resources for projects. Its willingness to engage in difficult environments and our leadership in crowd-in private finance enable it to extend its footprint and have a development impact well beyond its direct resources. The Bank Group has set two goals for the world to achieve by 2030: end extreme poverty and promote shared prosperity in every country.

12.7.1 Objective of IFC

IFC's objective is to assist economic development by encouraging the growth of productive private enterprise in its member nations, particularly in the underdeveloped areas. Thus, it laid down the following objectives:

- To invest in productive private enterprises, in association with private investors, and without government guarantee of repayment, in cases where sufficient private capital is not available on reasonable terms.
- To serve as a clearing house to bring together investment opportunities, private capital (both foreign and domestic) and experienced management.
- To help in stimulating the productive investment of private capital, both domestic and foreign.

12.8 INTERNATIONAL DEVELOPMENT ASSOCIATION (IDA)

With an initial funding of $912.7 million, the International Development Association (IDA) was established on September 24, 1960 with 15 signatory countries. It is the part of the World Bank that helps the world's poorest countries. Within its first eight months of launch, IDA had 51 members and allocated credits worth $101 million to four countries. With 173 member countries, IDA aims to reduce poverty by providing loans (called 'credits') and grants for programs that boost economic growth, reduce inequalities, and improve people's living conditions.

12.8.1 Management of IDA

The IDA is governed by the World Bank's Board of Governors which meets annually and consists of one governor per member country (most often the country's finance minister or treasury secretary). The Board of Governors delegates most of its authority over daily matters such as lending and operations to the Board of Directors. The Board of Directors consists of 25 executive directors and is chaired by the President of the World Bank Group. The executive directors collectively represent all 187 member states of the World Bank, although decisions regarding IDA matters concern only the IDA's 173 member countries. The president oversees the IDA's overall direction and daily operations.

12.8.2 Objective and Functions of IDA

IDA complements the World Bank's original lending arm, i.e. the International Bank for Reconstruction and Development (IBRD). IBRD was established to function as a self-sustaining business and provides loans and advice to middle-income and credit-worthy poor countries. IBRD and IDA share the same staff and headquarters and evaluate projects with the same rigorous standards.

The IDA is one of the largest sources of assistance for the world's 74 poorest countries and is the single largest source of donor funds for

basic social services in these countries. IDA lends money on concessional terms. This means that IDA credits have a zero or very low interest charge and repayments are stretched over 30 to 38 years, including a 5- to 10-year grace period. IDA also provides grants to countries at risk of debt distress. In addition to concessional loans and grants, IDA provides significant levels of debt relief through the Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI).

IDA is a multi-issue institution, supporting a range of development activities that pave the way toward equality, economic growth, job creation, higher incomes, and better living conditions. IDA's work covers primary education, basic health services, clean water and sanitation, agriculture, business climate improvements, infrastructure, and institutional reforms.

IDA has become the leading source of concessional lending to 74 of the world's poorest countries. Overall, 46 countries have graduated from IDA and some have 'reverse-graduated' or re-entered IDA. In the fiscal year ending June 30, 2020, IDA commitments totaled $30.48 billion, of which 26 percent was provided on grant terms. Total commitments in FY20 comprised 305 new operations. IDA started its operations on November 8, 1960. Since then IDA has provided $422 billion for investments in 114 countries. Annual commitments have increased steadily and averaged about $25 billion over the last three years (FY18-FY20).

12.9 WORLD TRADE ORGANIZATION (WTO)

The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. Its primary purpose is to open trade for the benefit of all and to ensure that trade flows as smoothly, predictably and freely as possible. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to ensure that trade flows as smoothly, predictably and freely as possible.

Establishment of the WTO on 1stJanuary 1995 marked as the biggest reform of international trade since the end of the Second World War. Whereas the GATT mainly dealt with trade in goods, the WTO and its agreements also

cover trade in services and intellectual property. The establishment of the WTO also created new procedures for the settlement of disputes.

The WTO provides a forum for negotiating agreements aimed at reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development. The WTO also provides a legal and institutional framework for the implementation and monitoring of these agreements, as well as for settling disputes arising from their interpretation and application. The current body of trade agreements comprising the WTO consists of 16 different multilateral agreements (to which all WTO members are parties) and two different plurilateral agreements (to which only some WTO members are parties).

12.9.1 Objectives of WTO

The objective of the WTO is to help its members use trade as a means to raise living standards, create jobs and improve people's lives. The WTO operates the global system of trade rules and helps developing countries build their trade capacity. It also provides a forum for its members to negotiate trade agreements and to resolve the trade problems they face with each other. The overall objectives of WTO are:

- **Improving people's lives:** The fundamental goal of the WTO is to improve the welfare of people around the world. The WTO's founding Marrakesh agreement recognizes that trade should be conducted with a view to raising standards of living, ensuring full employment, increasing real income and expanding global trade in goods and services while allowing for the optimal use of the world's resources.
- **Negotiating trade rules:** The WTO was born out of decades of negotiations aimed at progressively reducing obstacles to trade. Where countries have faced trade barriers and wanted them lowered, the negotiations have helped to open markets for trade. Conversely, in some circumstances, WTO rules support maintaining trade barriers, for example, to protect consumers or the environment.
- **Overseeing WTO agreements:** At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading na-

tions. Essentially contracts, these documents provide the rules for international commerce and bind governments to keep their trade policies within agreed limits. Their goal is to help producers of goods and services, exporters and importers conduct their business, with a view to raising standards of living, while allowing governments to meet social and environmental objectives.

- **Maintaining open trade:** The system's overriding purpose is to help trade flow as freely as possible, provided, there are no undesirable side effects, because this stimulates economic growth and employment and supports the integration of developing countries into the international trading system. Its rules have to be transparent and predictable, to ensure that individuals, companies and governments know what the trade rules are around the world, and to assure them that there will be no sudden changes of policy.
- **Settling disputes:** Trade relations often involve conflicting interests. Agreements, including those painstakingly negotiated in the WTO, often need interpreting. The most harmonious way to settle these differences is through a neutral procedure based on an agreed legal foundation. That is the purpose behind the dispute settlement process written into the WTO agreements.

12.9.2 Functions of WTO

- negotiating the reduction or elimination of obstacles to trade (import tariffs, other barriers to trade) and agreeing on rules governing the conduct of international trade (e.g. antidumping, subsidies, product standards, etc.)
- administering and monitoring the application of the WTO's agreed rules for trade in goods, trade in services, and trade-related intellectual property rights
- monitoring and reviewing the trade policies of our members, as well as ensuring transparency of regional and bilateral trade agreements
- settling disputes among our members regarding the interpretation and application of the agreements

- building capacity of developing country government officials in international trade matters
- assisting the process of accession of some 30 countries who are not yet members of the organization
- conducting economic research and collecting and disseminating trade data in support of the WTO's other main activities
- explaining to and educating the public about the WTO, its mission and its activities.

12.9.3 Structure of WTO Secreteriate

The WTO Secretariat is headed by a Director-General. Divisions come directly under the Director-General or one of the Deputy Directors-General. The Office of the Director-General provides support to the Director General in the exercise of his/her functions as head of the WTO Secretariat, in a manner that fulfills the WTO's mandate, that advances its role and functions, and that best services its Members and Observers. NgoziOkonjo-Iweala is the seventh Director General of the WTO. She took office on 1 March 2021, becoming the first woman and the first African to serve as Director General. Her term of office will expire on 31 August 2025.

The responsibility of the WTO Secretariat is to provide top-quality, independent support to WTO member governments on all of the activities that are carried out by the Organization, and to serve the WTO with professionalism, impartiality and integrity. The Secretariat is a multicultural team of highly-qualified individuals who possess the wide range of skills, knowledge and experience required to handle the Secretariat's responsibilities and to work together as an efficient and diligent international civil service.

12.9.4 Role of the Secreteriate

The WTO Secretariat, with offices only in Geneva, has 625 regular staff and is headed by a Director-General. Since decisions are taken by Members only, the Secretariat has no decision-making powers. Its main duties are to supply technical and professional support for the various councils and committees, to provide technical assistance for developing countries, to monitor and analyze developments in world trade, to provide infor-

mation to the public and the media and to organize the ministerial conferences. The Secretariat also provides some forms of legal assistance in the dispute settlement process and advises governments wishing to become Members of the WTO.

The Secretariat staff includes individuals representing about 83 nationalities. The professional staff is composed mostly of economists, lawyers and others with a specialization in international trade policy. There is also a substantial number of personnel working in support services, including informatics, finance, human resources and language services. The total staff complement is composed almost equally of men and women. The working languages of the WTO are English, French and Spanish.

12.9.5 Membership of WTO

The WTO is open to states and customs territories with full autonomy over their external commercial relations. The accession process promotes the integration of new members into the global economy. The WTO currently has 164 members, of which 117 are developing countries or separate customs territories. The WTO's members represent 98 per cent of world trade. WTO activities are supported by a Secretariat of some 700 staff, led by the WTO Director-General. The Secretariat is located in Geneva, Switzerland, and has an annual budget of approximately CHF 200 million ($180 million, €130 million). The three official languages of the WTO are English, French and Spanish.

Decisions in the WTO are generally taken by consensus of the entire membership. The highest institutional body is the Ministerial Conference, which meets roughly every two years. A General Council conducts the organization's business in the intervals between Ministerial Conferences. Both of these bodies comprise all members. Specialized subsidiary bodies (Councils, Committees, Sub-committees), also comprising all members, administer and monitor the implementation by members of the various WTO agreements.

12.9.6 Principles of the trading system of WTO

The WTO agreements are lengthy and complex because they are legal texts covering a wide range of activities. They deal with agriculture, textiles and clothing, banking, telecommunications, government purchases, industrial standards and product safety, food sanitation regulations, intellectual property, and much more. But a number of simple, fundamental principles run throughout all of these documents. These principles are the foundation of the multilateral trading system. They are:

- Trade without discrimination:
  - **Most-favoured-nation (MFN) -** treating other people equally: Under the WTO agreements, countries cannot normally discriminate between their trading partners. Grant someone a special favour (such as a lower customs duty rate for one of their products) and you have to do the same for all other WTO members. This principle is known as most-favoured-nation (MFN) treatment.
  - **National treatment -** Treating foreigners and locals equally: Imported and locally-produced goods should be treated equally, at least after the foreign goods have entered the market. The same should apply to foreign and domestic services, and to foreign and local trademarks, copyrights and patents.
- **Freer trade (gradually, through negotiation):** Lowering trade barriers is one of the most obvious means of encouraging trade. The barriers concerned include customs duties (or tariffs) and measures such as import bans or quotas that restrict quantities selectively. From time to time other issues such as red tape and exchange rate policies have also been discussed.
- **Predictability (through binding and transparency):** Sometimes, promising not to raise a trade barrier can be as important as lowering one, because the promise gives businesses a clearer view of their future opportunities. With stability and predictability, investment is encouraged, jobs are created and consumers can fully enjoy the

benefits of competition, choice and lower prices. The multilateral trading system is an attempt by governments to make the business environment stable and predictable.

- **Promoting fair competition:** The WTO is sometimes described as a "free trade" institution, but that is not entirely accurate. The system does allow tariffs and, in limited circumstances, other forms of protection. More accurately, it is a system of rules dedicated to open, fair and undistorted competition.
- **Encouraging development and economic reform:** The WTO system contributes to development. On the other hand, developing countries need flexibility in the time they take to implement the system's agreements. And the agreements themselves inherit the earlier provisions of GATT that allow for special assistance and trade concessions for developing countries.



Check your progress

1.Write True or False:

a) IDA was established on September 24, 1965.

b) IDA is the part of the World Bank that helps the world's poorest countries.

c) International Financial Corporation (IFC) is a sister organization of the World Bank and member of the World Bank Group.



12.10 LET'S SUM UP

- The International Bank for Reconstruction and Development (IBRD) is frequently called as World Bank.
- The Asian Development Bank's primary mission is to foster growth and cooperation among countries in the Asia-Pacific Region.

- The New Development Bank (NDB) was established by BRICS countries with the objective of financing infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries.

- International Development Association (IDA) is the part of the World Bank that helps the world's poorest countries. The IDA is one of the largest sources of assistance for the world's 74 poorest countries and is the single largest source of donor funds for basic social services in these countries.

- International Financial Corporation (IFC) is a sister organization of the World Bank. It was established with the specific subject of providing finance to the private sector.

- The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. Its primary purpose is to open trade for the benefit of all and to ensure that trade flows as smoothly, predictably and freely as possible.

12.11 ANSWER TO CHECK YOUR PROGRESS

Ans to Q. No. 1. (a) International Bank for Reconstruction and Development

(b) False

(c) Brazil, Russia, India, China and South Africa

(d) True

Ans to Q. No. 2. (a) False

(b) True

(c) True



12.12 FURTHER READING

1. International Business -V.K. Bhalla, Publisher- S Chand
2. International Business -Text and Cases -Cherunilam, F., Publisher- PHI Learning Pvt. Ltd.
3. Multinational Financial Management -Shapiro, A. C., Publisher- Prentice Hall of India



12.13 MODEL QUESTIONS

1. Write a brief note on Asian Development Bank (ADB).
2. Write a brief note on International Finance Corporation (IFC).
3. Write a brief note on International Development Association (IDA).
4. Explain the objectives and functions of International Development Association.
5. Describe the objectives and functions of Asian Development Bank.
6. Discuss in what circumstances the New Development Bank was established. Describe its area of operations.
7. Write short notes on:

    i) International Financial Corporation

    ii) International Development Association

    iii) ASEAN Coordinating Council

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UNIT-13 INTERNATIONAL FINANCIAL MARKET INSTRUMENTS

UNIT STRUCTURE

13.1 Learning Objectives

13.2 Introduction

13.3 Meaning of international financial market instruments

13.4 American Depositary Receipts (ADRs)

- 13.4.1 Definition of ADR
- 13.4.2 Working of American Depositary Receipts
- 13.4.3 Types of ADRs

13.5 Global Depositary Receipt (GDRs)

- 13.5.1 Shares per Global Depositary Receipt
- 13.5.2 Definition of GDR

13.5.3 Trading of Global Depositary Receipt Shares

- 13.5 4 Effect of GDRS in Indian capital market

13.6 Difference between ADR and GDR

13.7 Indian Depository Receipts (IDRs)

- 13.7.1 Eligibility to issue IDRs
- 13.7.2 Issue process

13.8 Euro Issues

- 13.8.1 Advantage of Euro Issues
- 13.8.2 Disadvantage of Euro Issues

13.9 Other international Issues (Foreign Euro-Bonds)

13.10 Different types of Foreign Bonds

13.11 Financial Swap

- 13.11.1 Different types of swaps
- 13.11.2 Uses of swap

13.12 Derivatives

13.13 Derivatives Vs Swaps

13.14 Let Us Sum Up

13.15 Further Readings

13.16 Answers to Check Your Progress

13.17 Further Reading

13.18 Possible Questions

13.1 LEARNING OBJECTIVES

After going through this unit learners will able to:

- State the meaning of international financial market instruments
- Understand the meaning, definition and working of American Depository Receipts
- Know the meaning, definition and trading of Global Depository Receipts
- Enumerate the differences between ADRs and GDRs
- State the meaning of IDRs
- Describe the meaning, advantages, disadvantages and sources of Euro Issues
- Describe Different types of Foreign Bonds
- Understand Financial Swap

13.2 INTRODUCTION

The international financial market is the market for instruments denominated in foreign currencies with a maturity of different periods. In international financial market individuals buy and sell foreign assets such as stock, Bonds, currencies. The various instruments used to raise funds abroad include equity, straight debt or hybrid instruments. This unit discusses about such international financial instruments like American Depository Receipts (ADR) and Global Depository Receipts (GDR).

13.3 MEANING OF INTERNATIONAL FINANCIAL MARKET INSTRUMENTS

The instruments traded in the international financial markets are called international financial market instruments. This instruments are denominated in foreign currencies with a maturity of different periods from one day to one year. This includes borrowing and lending of funds, of short-term nature. International financial markets consist of mainly international banking services and international money and capital markets. The banking services are provided by international banks and they include trade financing, foreign exchange, foreign investment, hedging instruments such as forwards and options, etc. The international money market includes the Eurocurrency markets, Euro credits, Euro notes, Euro commercial paper, etc. The various financial instruments used in international capital market include Global Depository Receipts (GDR), American Depository Receipts (ADR), Indian Depository Receipts (IDR), Foreign Currency Convertible Bonds, and External Commercial Borrowing.

13.4 AMERICAN DEPOSITARY RECEIPTS (ADRs)

An American Depositary Receipt (ADR) is a negotiable certificate issued by a U.S. depository bank representing a specified number of shares-or as little as one share-investment in a foreign company's stock. The ADR trades on markets in the U.S. as any stock would trade.

ADRs represent a feasible, liquid way for U.S. investors to purchase stock in companies abroad. Foreign firms also benefit from ADRs, as they make it easier to attract American investors and capital without the hassle and expense of listing themselves on U.S. stock exchanges. The certificates also provide access to foreign listed companies that would not be open to U.S. investment otherwise.

13.4.1 Definition of ADR

American Depository Receipt is a negotiable certificate, issued by a US bank, denominated in US$ representing securities of a foreign company

trading in the United States stock market. The receipts are a claim against the number of shares underlying. ADR's are offered for sale to American investors. By way of ADR, the US investors can invest in non-US companies. The dividend is paid to the ADR holders, is in US dollars. ADR's are easily transferable, without any stamp duty. The transfer of ADR automatically transfers the number of shares underlying.

13.4.2 Working of American Depositary Receipts

ADRs are denominated in U.S. dollars, with the underlying security held by a U.S. financial institution overseas. ADR holders do not have to transact the trade in the foreign currency or worry about exchanging currency on the forex market. These securities clear through U.S. settlement systems. To offer ADRs a U.S. bank will purchase shares on a foreign exchange. The bank will hold the stock as inventory and issue an ADR for domestic trading. ADRs list either on the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), or the NASDAQ, but they are also sold over-the-counter (OTC). U.S. banks require that foreign companies provide them with detailed financial information. This requirement makes it easier for American investors to assess a company's financial health.

13.4.3 Types of ADRs

American depositary receipts come in two basic categories:

- **Sponsored ADR:** A bank issues a sponsored ADR on behalf of the foreign company. The bank and the business enter into a legal arrangement. Usually, the foreign company will pay the costs of issuing an ADR and retaining control over it. While the bank will handle the transactions with investors. Sponsored ADRs are categorized by what degree the foreign company complies with U.S. Securities and Exchange Commission (SEC) regulations and American accounting procedures.
- **Unsponsored ADR:** A bank also issues an unsponsored ADR. However, this certificate has no direct involvement, participation or even permission from the foreign company. Theoretically, there could be several unsponsored ADRs for the same foreign company, issued

by different U.S. banks. These different offerings may also offer varying dividends. With sponsored programs, there is only one ADR, issued by the bank working with the foreign company.

One primary difference between the two types of ADRs is where investors can buy them. All except the lowest level of sponsored ADRs register with the SEC and trade on major U.S. stock exchanges. Unsponsored ADRs will trade only over-the-counter. Also, unsponsored ADRs never include voting rights.

ADRs are additionally categorized into three levels, depending on the extent to which the foreign company has accessed the U.S. markets:

- **Level-I**: This is the most basic type of ADR where foreign companies either don't qualify or don't want to have their ADR listed on an exchange. This type of ADR can be used to establish a trading presence but not to raise capital. Level-I ADRs found only on the over-the-counter market has the loosest requirements from the Securities and Exchange Commission (SEC) and they are typically highly speculative. While they are riskier for investors than other types of ADRs, they are an easy and inexpensive way for a foreign company to gauge interest for its securities in the U.S.
- **Level-II:** As with Level-I ADRs, Level-II ADRs can be used to establish a trading presence on a stock exchange, and they can't be used to raise capital. Level-II ADRs have slightly more requirements from the SEC than do Level-I ADRs, but they get higher visibility and trading volume.
- **Level-III:** Level-III ADRs are the most prestigious of the three ADR levels. With these, an issuer floats a public offering of ADRs on a U.S. exchange. They can be used to establish a substantial trading presence in the U.S. financial markets and raise capital for the foreign issuer. They are subject to full reporting with the SEC.

13.5 Global Depositary Receipt (GDRs)

A Global Depositary Receipt (GDR) is a bank certificate issued in more than one country for shares in a foreign company. A Global Depository

Receipt is very similar to an American Depository Receipt (ADR). It is a type of bank certificate that represents shares in a foreign company, such that a foreign branch of an international bank then holds the shares. The shares themselves trade as domestic shares, but, globally, various bank branches offer the shares for sale. Private markets use GDRs to raise capital denominated in either U.S. dollars or Euros. When private markets attempt to obtain Euros instead of U.S. dollars, GDRs are referred to as European Depositary Receipts (EDRs).

Investors trade GDRs in multiple markets, which they generally refer to as capital markets as they are considered to be negotiable certificates. Investors use capital markets to facilitate the trade of long-term debt instruments and for the purpose of generating capital. GDR transactions in the international market tend to have lower associated costs than some other mechanisms that investors use to trade in foreign securities.

13.5.1 Shares Per Global Depositary Receipt

Each GDR represents a particular number of shares in a specific company. A single GDR can represent anywhere from a fraction of a share to multiple shares, depending on its design. In a situation that involves multiple shares, the receipt value shows an amount higher than the price for a single share. Depository banks manage and distribute various GDRs and function in an international context.

13.5.2 Definition of GDR

GDR or Global Depository Receipt is a negotiable instrument used to tap the financial markets of various countries with a single instrument. The receipts are issued by the depository bank, in more than one country representing a fixed number of shares in a foreign company. The holders of GDR can convert them into shares by surrendering the receipts to the bank. Prior approval of Ministry of Finance and FIPB (Foreign Investment Promotion Board) is taken by the company planning for the issue of GDR.

13.5.3 Trading of Global Depositary Receipt Shares

Companies issue GDRs to attract interest by foreign investors. GDRs provide a lower-cost mechanism in which these investors can participate. These shares trade as though they are domestic shares, but investors can purchase the shares in an international marketplace. A custodian bank often takes possession of the shares while the transaction processes, ensuring both parties a level of protection while facilitating participation.

Brokers who represent the buyer manage the purchase and sale of GDRs. Generally, the brokers are from the home country and are sellers within the foreign market. The actual purchase of the assets is multi-staged, involving a broker in the investor's homeland, a broker located within the market associated with the company that has issued the shares, a bank representing the buyer, and the custodian bank.

If an investor desires, brokers can also sell GDRs on their behalf. An investor can sell them as-is on the proper exchanges, or the investor can convert them into regular stock for the company. Additionally, they can be canceled and returned to the issuing company.

13.5 4 Effect of GDRS in Indian Capital Market

Indian capital markets are largely affected by GDRs from its very inception having the following characteristics:

- Transactions from Indian stock market are shifted from domestic to foreign market.
- Since the Indian stock markets depend on the World-wide market, investors are now acquainted with the up to-date economic affairs of the world as well
- Retail investors of India are practically outlined from the investment point of view.

13.6 DIFFERENCE BETWEEN ADR AND GDR

ADR and GDR are commonly used by the Indian companies to raise funds from the foreign capital market. The principal difference between ADR and GDR is in the market; they are issued and in the exchange, they are listed. While **ADR** is traded on US stock exchanges, **GDR** is traded on European stock exchanges. ADR and GDR are two depository receipts that are traded in local stock exchange but represent a security issued by a foreign public listed company.

Comparison Chart

Basis For Comparison	**ADR**	**GDR**
Meaning	ADR is a negotiable instrument issued by a US bank, representing non-US company stock, trading in the US stock exchange.	GDR is a negotiable instrument issued by the international depository bank, representing foreign company's stock trading globally.
Relevance	Foreign companies can trade in US stock market.	Foreign companies can trade in any country's stock market other than the US stock market.
Issued in	United States domestic capital market.	European capital market.
Listed in	American Stock Exchange such as NYSE or NASDAQ	Non-US Stock Exchange such as London Stock Exchange or Luxemberg Stock Exchange.
Negotiation	In America only.	All over the world.
Disclosure Requirement	Onerous	Less onerous
Market	Retail investor market	Institutional market.

13.7 INDIAN DEPOSITORY RECEIPTS (IDRs)

An Indian Depository Receipt (IDR) is an instrument denominated in Indian Rupees in the form of a depository receipt created by a Domestic Depository (custodian of securities registered with the Securities and Exchange Board of India) against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian Securities Markets. The IDR is a specific Indian version of the similar global depository receipts. A foreign company can access Indian securities market for raising funds through issue of Indian Depository Receipts (IDRs). The foreign company IDRs will deposit shares to an Indian depository. The depository would issue receipts to Indian investors against these shares. The benefit of the underlying shares (like bonus, dividends etc.) would accrue to the depository receipt holders in India. IDR's are based on the original American Depository Receipts that were first introduced in 1927 in the US.

The Ministry of Corporate Affairs of the Government of India, using section 642 read with section 605A had prescribed the Companies (Issue of Indian Depository Receipts) Rules, 2004 (IDR Rules) vide notification number GSR 131(E) dated February 23, 2004. The rules for IDRs were operationalized by the SEBI, the Indian markets regulator in 2006. Operation instructions under the Foreign Exchange Management Act were issued by the Reserve bank of India on July 22, 2009. The SEBI has been notifying amendments to these guidelines from time to time. The Standard Chartered PLC became the first global company to file for an issue of Indian depository receipts in India in 2010.

13.7.1 Eligibility to Issue IDRs

The regulations relating to the issue of IDRs is contained in Securities and Exchange Board of India (Issue of capital and disclosure requirements) Regulations, 2009, as revised from time to time. According to Clause 26 in Chapter III ("Provisions as to public issue"), the following are required of any company intending to make a public issue in India:

- It has net tangible assets of at least Indian Rupee three crore in each of the preceding three full years (of twelve months each), of which not more than fifty per cent are held in monetary assets: Provided that if more than fifty percent of the net tangible assets are held in monetary assets, the issuer has made firm commitments to use such excess monetary assets in its business or project;
- It has a track record of distributable profits in terms of section 205 of the Companies Act, 1956, for at least three out of the immediately preceding five years: Provided that extraordinary items shall not be considered for calculating distributable profits;
- It has a net worth of at least INR one crore in each of the preceding three full years (of twelve months each);
- The aggregate of the proposed issue and all previous issues made in the same financial year in terms of issue size does not exceed five times its pre-issue net worth as per the audited balance sheet of the preceding financial year;
- If it has changed its name within the last one year, at least fifty per cent. of the revenue for the preceding one full year has been earned by it from the activity indicated by the new name.

Further, Clause 97 in Chapter X stipulates additional requirements from a foreign company intending to make an issue of IDRs, an issuing company making an issue of IDR shall also satisfy the following:

- The issuing company is listed in its home country;
- The issuing company is not prohibited to issue securities by any regulatory body;
- The issuing company has track record of compliance with securities market regulations in its home country.

13.7.2 Issue Process

According to SEBI guidelines, IDRs will be issued to Indian residents in the same way as domestic shares are issued. The issuer company will make a public offer in India, and residents can bid in exactly the

same format and method as they bid for Indian shares. The issue process is exactly the same: the company will file a draft Red Herring Prospectus (DRHP), which will be examined by SEBI. The general body of investors will get a chance to read and review the DRHP as it is a public document, available on the websites of SEBI and the book running lead managers. After SEBI gives its clearance, the company sets the issue dates and files the document with the Registrar of Companies.

In the next step, after getting the Registrar's registration ticket, the company can go ahead with marketing the issue. The issue will be kept open for a fixed number of days, and investors can submit their application forms at the bidding centers. The investors will bid within the price band and the final price will be decided post the closure of the Issue. The receipts will be allotted to the investors in their Demat account as is done for equity shares in any public issue. On 26 October 2010, SEBI notified the framework for rights issue of Indian Depository Receipts (IDRs). Disclosure requirement for IDR rights would more or less be in line with the reduced requirement applicable for domestic rights issue.



Check your progress

1. Answer as directed:

a) International financial market instruments are denominated in foreign currencies with a maturity of different periods. (Write True or False)

b) American Depositary Receipt (ADR) is a negotiable certificate issued by a _____ bank. (Fill in the gap)

c) Write the full form of ADR.

d) Write the full form of IDR.

13.8 EURO ISSUES

Euro-issues mean the issue which is listed on European Stock Exchange although the subscriptions for the same may come from any corner of the world other than India. Euro issue is a name given to sources of finance or capital available to raise money outside the home country in for-

eign currency. The most commonly used sources of funds that fall under Euro issues are American Depository Receipts (ADRs), Global Depository Receipts (GDRs), and Foreign Currency Convertible Bonds (FCCB) among others.

- **Global Depository Receipts (GDR) :** Under GDR option, the company is permitted to issue equity shares and companies can keep them in the custody of a domestic custodian. The overseas depository bank, upon instruction from domestic custodian bank, issues fresh securities in the nature of GDR for the foreign market against shares kept under local custodian bank.
- **American Depository Receipts (ADRs) :** The ADRs are similar to GDR in all major aspects; however, the differentiating feature is that the ADRs are more likely to be listed and traded on New York Stock Exchange while GDRs are usually listed on exchanges in Europe.
- **Foreign Currency Convertible Bonds (FCCBS) :** FCCBs are very similar to bonds in nature and can be converted into an equity stock by the bond holder at a later date at a pre-agreed price. These, like ADR and GDR, are issued by Indian companies outside the home country in foreign currency. These enjoy higher preference as they are issued as bonds, but at the same time, do not dilute the holding on an immediate basis and can help companies to raise money at a cheaper rate of interest. The FCCBs issued by companies also have to be done within the set of guidelines permitted by the government of India.

13.8.1 Advantage of Euro Issues

Some of the major advantages and limitations of Euro issues to enable the better understanding of the concept and understand why companies find it attractive to raise money through this route are as follows:

- Raising funds by way of euro issue acts as a cheap source of foreign currency funds for the company without exchange risks especially for companies that have foreign currency receivables.

- In a case of funding by way of equity, debt to equity ratios and debt service coverage ratio wouldn't be an issue.
- Euro issues provide a larger market and international access to funds and may lead to easy larger volume funding which may be difficult from domestic sources. It opens up many new opportunities for the companies in new markets.
- Companies gain international exposure and can enhance liquidity for its shares.

13.8.2 Disadvantage of Euro Issues

Despite many advantages of euro issues making it an attractive source of finance for companies; there are few limitations of euro issues which need to be evaluated before choosing the right option. The limitations are given below:

- Though euro issues are usually available at lower costs, companies which do not have adequate receivables may run currency exchange risk and may have to incur hedging costs which may turn out to be higher than the cost saved.
- Not all companies can avail funds via euro issues. The companies have to follow the guidelines issued by Reserve Bank of India and meet the criterions to avail funding through this route.
- Companies may have to undergo stake dilution if raised by way of equity or convertible bonds.

13.9 OTHER INTERNATIONAL ISSUES (FOREIGN EURO-BONDS)

Needless to say that, GDRs is not the single source of investment for receiving foreign currency finance. There is one additional method by which foreign currency finance offered by companies from the International Capital Market the Euro-Bonds. It is interesting to note that domestic capital market of different countries uses different names for such bonds issue e.g. Bull Dogs' in U K. Swiss Frances in Switzerland etc. similarly, each domestic market of a country maintains its own rules and regulations. That

is why, borrower from one country may borrow in some other country's currency of course according to the rules and regulations prevailed in that country.

13.10 DIFFERENT TYPES OF FOREIGN BONDS

- **Euro-Convertible Bonds:** We know that a convertible bond is a debt instrument that provides the holder of the bond an option to convert the bond into equity shares of the company. Normally, at the time of conversion, the price of the equity shares is inclusive of certain premium money although the bonds carry fixed percentage of interest.

- **Euro-Convertible Zero-Bonds**: These bonds also are similar to convertible bonds. Interest is not paid on the bonds. At the same time conversion of bonds is made on marketing at pre-determined price. Normally the period of maturity is taken for 5 years.

- **Euro-Bonds with Equity Warrants**: These bonds contain a coupon rate/prices which has been determined by the market rate/ price. Pure bonds are transacted at a discount. The investors who prefer to create a fixed income funds may use this bonus for their purposes.

- **General Euro-Bonds**: It has already been explained that bonds are debt instruments. Thus a plain Euro-Bond is also a debt instrument. Investor who wants to invest his investment for the purpose of adding/increasing his investments do not prefer it.

13.11 FINANCIAL SWAP

A swap is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments. Swaps are derivative instruments that represent an agreement between two parties to exchange a series of cash flows over a specific period of time. Swaps offer great flexibility in designing and structuring contracts based on mutual

agreement. This flexibility generates many swap variations, with each serving a specific purpose. Swaps comprise one type of derivative, but its value is not derived from an underlying security or asset.

A financial swap is a derivative contract where one party exchanges or 'swaps' the cash flows or value of one asset for another. For example, a company paying a variable rate of interest may swap its interest payments with another company that will then pay the first company a fixed rate. Through a swap, one party promises to make a series of payments in exchange for receiving another set of payments from the second party. Swaps usually include cash flows based on notional principal amounts like bonds or loans but the instruments can vary.

Swaps can be considered as a relatively new type of derivative as they were introduced in the late 1980s and have quickly become one of the most commonly and frequently used traded financial contracts. Exchange in swap takes place at a predetermined time, as specified in the contract. Swaps are not exchange oriented and are traded over the counter, usually the dealing are oriented through banks. Swaps can be used to hedge risk of various kinds which includes interest rate risk and currency risk. Currency swaps and interest rates swaps are the two most common kinds of swaps traded in the market.

13.11.1 Different Types of Swaps

Though there are countless types of swaps, we have listed the most common ones below:

- **Interest Rate Swaps:** Interest rate swaps are the most commonly used swaps and are also known as plain vanilla interest swaps. These are involving parties exchanging cash flows so that they can fledge against an interest rate risk or speculate. These cash flows are based on a notional principal amount that is agreed upon by both the parties (this amount is not exchanged). The currency used in both the cash flows is the same and the dates (called settlement dates) are decided beforehand by both the parties. The

payments are usually made monthly, quarterly or annually but the time interval can be set in any manner by the parties involved.

- **Currency Swaps:** In a currency swap, both the parties exchange interest as well as principal payments on the debt (it is denominated in different currencies). This is not based on a notional amount but is exchanged along with the interest obligations. These contracts might involve different countries. These are considered to be a part of foreign exchange transactions and hence are not required by law to be included in the balance sheet of the company.
- **Commodity Swaps:** Commodity swaps involve the exchange of a floating commodity price and consists of a floating leg component and a fixed leg component. The former is linked to the market price of the underlying commodity (like oil, fuel, precious metals, livestock, grains, etc.) while the latter is specified in the contract as the producer of the commodity decides to pay a floating rate (it is determined by the spot market price of the underlying commodity). The most commonly used commodity for these swaps is crude oil and generally involve large institutions due to the nature and size of the contracts. A commodity swap is usually used to hedge against the price change in the market for crucial and valuable commodities like livestock, oil, etc.
- **Credit Default Swap (CDS):** In Credit Default Swap, both the parties get into an agreement in which the one pays the lost principal and interest of a loan to the CDS buyer in case a borrower defaults on the loan. The majority of the CDS contracts are maintained via an ongoing premium payment (which is quite similar to the regular premiums due on an insurance policy) and usually involve mortgage-backed securities or municipal and corporate bonds.
- **Total Return Swaps:** In total return swaps, the overall returns from an asset are traded for a fixed (or variable) interest rate. This exposes the party that is paying the fixed rate to the underlying

asset which is usually a stock, bond or index. Hence the second party can reap benefits from this asset without actually owning it. The parties involved in this swap are called total return payer and total return receiver.

- **Debt-Equity Swaps:** Debt or equity swaps act as a refinancing deal that involves the exchange of debt for equity. In this swap, the debt holder gets an equity position for the cancellation of the debt. It covers a way for struggling companies to relocate their capital structure. Since such companies can't pay off their debts, they opt to get involved in debt-equity swaps to delay the payment.

13.11.2 Uses of Swap

- To create either synthetic fixed or floating rate liabilities or assets,
- To hedge against adverse movements,
- As an asset liability management tool,
- To reduce the funding cost by exploiting the comparative advantage that each counterparty has in the fixed/floating rate markets, and
- For trading.

13.12 DERIVATIVES

A derivative denotes a contract between two parties, with its value generally determined by an underlying asset's price. Common derivatives include futures contracts, options, forward contracts and swaps. The value of derivatives generally is derived from the performance of an asset, index, interest rate, commodity, or currency. For example, an equity option, which is a derivative, derives its value from the underlying stock price. In other words, the value of the equity option fluctuates as the price of the underlying stock fluctuates. A buyer and a supplier, for example, might enter into a contract to lock in a price for a particular commodity for a set period of time. The contract provides stability for both parties. The supplier is guaranteed a revenue stream, and the buyer is guaranteed supply of the commodity in question.

However, the value of the contract can change if the market price of the commodity changes. If the market price goes up during the contract period, the derivative value goes up for the buyer because he is getting the commodity at a price lower than market value. In that case, the derivative value would go down for the supplier. The opposite would be true if the market price dropped during the time period covered by the contract.

13.13 DERIVATIVES VS SWAPS

Derivatives are contracts involving two or more parties with a value based on an underlying financial asset. Often, derivatives are a means of risk management. Initially, international trade relied on derivatives to address fluctuating exchange rates, but the use of derivatives has expanded to include many different types of transactions.

Swaps are a type of derivative that has a value based on cash flows. Naturally, one party's cash flow is fixed while the other's is variable in some way.



CHECK YOUR PROGRESS

2. What is Financial Swap?3. Swaps offer great flexibility in designing and structuring contracts based on mutual agreement. (True or False)



13.14 LET US SUM UP

- The instruments that traded in the international financial markets are called international financial market instruments.
- International financial market instruments are denominated in foreign currencies with a maturity of different periods from one day to one year.

- Depository Receipt is a mechanism through which a domestic company can raise finance from the international equity market.
- An American depositary receipt (ADR) is a negotiable certificate issued by a U.S. depository bank representing a specified number of shares-or as little as one share-investment in a foreign company's stock.
- A Global Depositary Receipt (GDR) is a bank certificate issued in more than one country for shares in a foreign company.
- Companies want to trade their shares in overseas stock exchange need to get them listed through ADR or GDR.
- Euro-issues mean the issue which is listed on European Stock Exchange although the subscriptions for the same may come from any corner of the world other than India.
- An Indian Depository Receipt (IDR) is an instrument denominated in Indian Rupees in the form of a depository receipt created by a Domestic Depository against the underlying equity of issuing company to enable foreign companies to raise funds from the Indian Securities Markets.
- A swap is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments.



13.15 FURTHER READINGS

- Financial Markets and Services –By E. Gordon & Dr. K Natarajan
- India Financial System –By M Y Khan
- Indian Financial System –By Gobinda Deka
- Financial Services – By M. P. Tripathy



13.16 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q. No. 1. (a) True (b) U.S. depository

(c) American Depository Receipts (d) Indian Depository Receipts

Ans to Q. No. 2. A swap is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments.

Ans to Q. No. 3. True



13.17 FURTHER READING

1. International Business -V.K. Bhalla, Publisher- S Chand
2. International Business -Text and Cases -Cherunilam, F., Publisher- PHI Learning Pvt. Ltd.
3. Multinational Financial Management -Shapiro, A. C., Publisher- Prentice Hall of India



13.18 POSSIBLE QUESTIONS

1. Write short notes on the following:

a) American Depository Receipts (ADRs)

b) Global Depository Receipts (GDRs)

c) Indian Depository Receipts (IDRs)

d) Euro Issues

e) Derivatives

2. Distinguish between ADRs and GDRs.
3. Give the meaning of ADRs. Write a detail note on types and working procedure of ADRs.
4. What do you mean by GDRs? Describe the effects of GDRs in Indian capital market.
5. What do you mean by Financial Swap? Describe its various types.
6. What is derivatives? Distinguish between financial swap and derivatives.

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UNIT 14: INSTITUTIONS IN INTERNATIONAL BANKING

UNIT STRUCTURE

14.1 Learning Objective

14.2 Introduction

14.3 Meaning of International Banking

- 14.3.1 Characteristics of International Banks
- 14.3.2 Rationale of International Banking
- 14.3.3 Scope of International Banking

14.4 Capital Adequacy

- 14.4.1 Basel Norms
- 14.4.2 Meaning of Capital Adequacy Ratio

14.5 Loan Loss Provisioning and Regulatory-Legal and Accounting

- 14.5.1 Meaning of Loan Loss Provisioning
- 14.5.2 Importance of Loan Loss Provisioning
- 14.5.3 Loan Loss Provision-Legal and Accounting
- 14.5.3.1 Comparison of IAS 39 and IFRS 9

14.6 Issues in International Banking

14.7 Forex Currency Accounts

- 14.7.1 Types of Foreign Currency Accounts
- 14.7.2 Benefits of Foreign Currency Account
- 14.7.3 Demerits of Foreign Currency Account
- 14.7.4 Risks of a Foreign Currency Accounts

14.8 Offshore Banking Centers

- 14.8.1 Functions of offshore banking
- 14.8.2 Difference between offshore and onshore banking

14.8.3 Advantages and Disadvantages of offshore banking

14.8.4 Offshore centres in India

14.9 Let Us Sum Up

14.10 Further Reading

14.11 Answer to Check Your Progress

14.12 Model Questions

14.1: LEARNING OBJECTIVE

After going through this unit, you will be able to:

- To understand the concept of international banking and to supplement one's knowledge of general banking functions through examining the issues and provisioning practices relating to these functions in foreign states.
- To know the concept of capital adequacy and foreign currency accounts.
- To identify and analyse the factors that contribute to the growth of offshore banking.

14.2: INTRODUCTION

With the rapid expansion of international networks, the banking sector occupies a pivotal position in the global economy as it has access to the capital, the technology capabilities and the international network to facilitate these activities.

International banking is a key component of the global economy. Globalisation and growing economies around the world have led to the development of international banking facility. The world is now a marketplace and each business wants to exploit it. Geographical boundaries are no more a concern. With access to technology, banking facilities have grown vastly.

14.3 MEANING OF INTERNATIONAL BANKING

International Banking is a type of banking that has presence across international borders. It is a financial entity that offers financial services like lending opportunities and payment accounts to foreign clients. Basically the clients of these banks can be both individuals and companies. However, every international bank has its own policy of choosing who they can do business with.

It is a sub-set of commercial banking transactions and activity having a cross-border and/or cross currency elements. It comprises of range of transaction that can be distinguished from purely domestic operation.

- Currency of denomination of the transaction
- The residence of the bank customer
- The location of the booking office

It is an arrangement of financial service by a residential bank of one country to the residents of another country. Mostly multinational companies and individuals use this baking facility for transacting.

It is a banking institution that operates overseas and actively manages foreign accounts. Although the roles and basic functions of an international bank are similar to other banking institutions, the ability to deliver typical functions to customer and business accounts in different countries is the fundamental difference of international banks and smaller rationalized banking systems.

Example: Suppose Microsoft, an American company is functioning in London. It is in need of funds to meet its working capital requirements. In such scenario, Microsoft can avail the banking services in form of loans, overdraft or any other financial service through banks in London. Here, the residential bank of London shall be giving its services to an American company. Therefore, the transaction between them can be said to be part of international banking facility.

14.3.1 Characteristics of International Banks

1. **Expansion:** International banking assists to expand their business and trade activities beyond the boundaries of a nation. Economic growth and conducive climate for carrying out the business activities in new nations are the factors because of which many enterprises are looking beyond the borders of their own nations for their business growth. Competitive advantages in respect of price, demand and supply factors, future growth opportunities, cost of production and operating costs, etc. are some of the other important factors for expansion of international trade and finance. In view of this, the presence of banks across the nations has led to the growth of international banking.

2. **Flexibility:** International banking facility provides flexibility to the multinational companies to deal in multiple currencies. The major currencies that multinational companies or individuals can deal with include euro, dollar, pounds, sterling and rupee. The companies having headquarters in other countries can manage their bank accounts and avail financial services in other through international banking without any hassle.

3. **Accessibility:** International banking provides accessibility and ease of doing business to the companies from different countries. An individual or MNC can use their money anywhere around the world. This gives them a freedom to transact and use their money to meet any requirement of funds in any part of the world.

4. **International Transactions:** International banking allows the business to make international bill payments. The currency conversion facility allows the companies to pay and receive money easily. Also, the benefits like overdraft facility, loans, deposits, etc. are available every time for overseas transactions.

5. **Accounts maintenance:** A multinational company can maintain the records of global accounts in a fair manner with the help of interna-

tional banking. All the transactions of the company are recorded in the books of the banks across the globe. By compiling the data and figures, the accounts of the company can be maintained.

14.3.2 Rationale of International Banking

Banks undertake international operations in order to expand their revenue/ profit base, acquire resources from foreign countries, or diversify their activities. Specific reasons expanding operations abroad include the saturation of domestic market; discovery of lucrative opportunities in other countries; desire to expand volume of operations in order to obtain economy of scale. Further motives of operating internationally are as follows:

1. **Low Marginal Costs:** Managerial and marketing knowledge developed at home can be used abroad with low marginal costs.
2. **Knowledge Advantage:** The foreign bank subsidiary can draw on the parent bank's knowledge of personal contacts and credit investigations for use in that foreign market.
3. **Home Nation Information Services:** Local firms in a foreign market may be able to obtain more complete information on trade and financial markets in the multinational bank's home nation than is obtainable from foreign domestic banks.
4. Companies in a country with a bank's subsidiary will get more complete information from the subsidiary than they could have gotten from the parent company.
5. **Prestige**: Large banks have high perceived prestige, liquidity and deposit safety that can be used to attract clients abroad.
6. **Regulatory Advantage:** Multinational banks are often not subject to the same regulations as domestic banks.
7. **Risk reduction:** Greater stability of earnings is possible with international diversification.
8. **Growth:** Foreign markets may offer opportunities to growth not found domestically.

14.3.3 Scope of International Banking:

The world is groping for the correct international banking system. Countries like the United States, Great Britain and the countries of the European Community with long and generally successful banking systems tend to be missionaries for open banking regimes: banks from other countries are encouraged to enter and compete. Developing economies like most of the third world are more restrictive and seem to be looking to strengthen their own banking systems before opening themselves to undue competition. There does seem to be looking to strengthen their own banking systems before opening themselves to undue competition. There does seem, however, to be an inevitably to increased openness and increased internationalisation. Even among some of the most restrictive countries, such developments as increased tourism and the sending of foreign money from expatriates ineluctably stimulates a commitment of some sort to international banking and the ability to exchange one currency to another. Breakdown of the Bretton Woods system of fixed exchange rates in the 1970s has contributed to dependence upon international banks and their flexible and continually adaptable methods for exchanging currency. This has, of course, resulted in the computerised on-line, real-time market for the exchange of currencies that exists today. International flows of capital for investment have added to the role of international banks.

International banking consists of the provision of banking services to non-residents and to residents in foreign currencies from offices located in the home country, as well as proprietary trading and on behalf of customers, without establishing a foreign presence. The types of services include domestic currency non-resident deposits and loans, foreign currency resident and non-resident deposits and loans, international payments and settlements, trade finance, foreign exchange, currency and bond trading and euro currency banking and correspondent banking.

International banks offer a full range of services that seek to accommodate and facilitate diverse banking activities. International banks are equipped with advanced automated facilities that enable customers to bank freely

and perform diverse transactions via online banking services. Online banking as part of international banking services convert regular international bank accounts into internationally accessible accounts, whether they are current, corporate, personal or private banking accounts. These accounts can be conveniently consulted in the privacy of one's home and transactions can be made without hindrances in business operations.

The multicurrency component of international banking allows for making payments and receiving funds in diverse currencies which include American dollars, Sterling and Euro to name a few. International banking accounts are generally given very attractive interest rates due to the magnitude of the international banking sector and the level of competition that takes place as international banks attempt to dominate larger portions in world markets.

14.4 CAPITAL ADEQUACY

Banks in the modern world face an inherent risk of insolvency. Since the banks are so highly leveraged, there could be a run on the bank any moment if their reserves are considered to be inadequate by the market. Hence, banks must maintain adequate capital in their vaults if they want to survive. Regulators' endeavour to ensure that financial institutions, banks and investment firms have enough capital to ensure their businesses remains stable. This measure not only protects depositors within the industry but also the larger economy as failures of institutions, such as banks can have wider scale repercussions.

Capital Adequacy is therefore the statutory minimum capital reserve that a financial institution or investment firm must have available and regulatory capital adequacy provisions thus require relevant firms to maintain these minimum levels of capital, calculated as a percentage of its risk weighted assets.

14.4.1 Basel Norms

The Basel Committee on Banking Supervision (BCBS) is a committee of banking supervisory authorities which published the Basel Accords i.e., rules regarding capital requirements. BCBS is a comprehensive set of reform

measures to strengthen the regulation, supervision and risk management of the banking sector. It consists of representatives from central banks and regulatory authorities of 27 countries (including India). Its secretariat (administrative office) is located at the Bank of International Settlements(BIS)headquartered in the city of Basel in Switzerland. Hence the name Basel norms. Thus, Basel norms are international banking regulations issued by the Basel Committee on Banking Supervision (BCBS). It is an effort to coordinate banking regulations across the globe, with the goal of strengthening the international banking system. The Basel Committee has issued three sets of regulations as of 2018 known as Basel 1, 2 and 3.

Basel 1: Basel 1 was introduced in the year 1988.It focussed primarily on credit (default) risk faced by the banks. Basel 1 sets out the minimum capital requirements of financial institutions with the goal of minimising credit risk. Banks that operate internationally are required to maintain a minimum amount (8%) of capital based on a per cent of risk weighted assets. India adopted Basel 1 guidelines in 1999.

Basel 2: In 2004, BCBS published Basel 2 guidelines which were the refined, reformed and more complex version of Basel 1. While Basel 1 focussed on credit risk, Basel 2 includes market and operational risks besides credit risks

Basel 3: Basel 3 guidelines were released in December, 2010 which was introduced in response to the financial crisis of 2008. The guidelines aim to promote a more resilient banking system by focusing on four vital banking parameters viz. capital, leverage, funding and liquidity. Basel 3 capital regulations are based on three mutually reinforcing pillar. These pillars are:

1. **Pillar 1:** Enhanced minimum capital standards and liquidity requirement
2. **Pillar 2**: Enhanced supervisory review process of Capital Adequacy
3. **Pillar 3:** Enhanced risk disclosure and market discipline

14.4.2 Meaning of Capital Adequacy Ratio

The capital adequacy ratio, also known as capital to risk-weighted assets ratio, measures a bank's financial strength by using its capital and assets. It is defined as the ratio of banks capital in relation to its current liabilities and risk weighted assets. It is used to protect depositors and promote the stability and efficiency of financial systems around the world.

An appropriate level of capital adequacy ensures that the bank has sufficient capital to expand its business, while at the same time its net worth is enough to absorb any financial downturns without becoming insolvent. It is the ratio which determines banks capacity to meet the time liabilities and other risks such as credit risk, market risk, operational risk, etc. In other words, this ratio is enforced by the bank regulators to protect depositors and promote stability and efficiency in the financial system.

Capital adequacy ratio is defined as:

CAR=Tier 1 +Tier 2 + Tier 3 capital (capital funds)/Risk Weighted Assets (RWA)

The capital used to calculate the capital adequacy ratio is divided into three tiers.

Tier-One Capital: It is the core capital comprised of equity capital, ordinary share capital, intangible assets and audited revenue reserves. Tier-one capital is used to absorb losses and does not require a bank to cease operations.

Tier-Two Capital: It comprises unaudited retained earnings, unaudited reserves and general loss reserves. This capital absorbs losses in the event of a company winding up or liquidating.

Tier-Three Capital: This is arranged to meet part of market risk viz. changes in interest rate, exchange rate, equity prices, commodity prices, etc. To quantify as Tier-Three Capital, assets must be limited to 250%of a bank's Tier-One capital, be unsecured subordinated and have a minimum maturity of 2 years.

The risk-weighted assets take into account credit risk, market risk and operational risk. It is calculated by looking at a bank's loans, evaluating the risk and then assigning a weight.



CHECK YOUR PROGRESS

1. What is meant by International Banking?
2. What are the characteristics of International Banks?
3. What is capital adequacy ratio?
4. What are Basel norms?
5. What is BCBS?
6. When was Basel 1 guideline introduced?
7. What are the three pillars of Basel 3?
8. What is Tier 1 capital?
9. What is Tier 2 capital?
10. What is risk weighted assets?

14.5 LOAN LOSS PROVISIONING AND REGULATORY-LEGAL AND ACCOUNTING

The financial system of a nation being the lifeline of its economy is expected to have ample preparation to confront and mitigate any shock inherent in a market-driven business. Loan-loss provisioning is a systematic way of handling risks rationally, signalling managerial prudence. Banks across the globe follow a dynamic provision policy.

Banks are financial institutions that primarily collect deposits and issue loan to individuals, firms and governments to finance consumption, investment and capital expenditure; thereby contributing to economic growth. Bank lending to borrowers often give rise to credit risk if borrowers are unable to repay the principal and/or interest on the loan facility due to unfavourable

economic conditions and related factors. To mitigate credit risk, in principle, banks will aside a specific amount as a cushion to absorb expected loss on banks' loan portfolio and this amount is referred to as loan loss provisions or provisions for bad debts.

14.5.1 Meaning

A Loan loss provision (LLP) is an expense set aside as an allowance for uncollected loans and loan payments. It is a credit risk management tool used by banks to mitigate expected losses on bank loan portfolio. This provision is used to cover a number of factors associated with potential loan losses, including bad loans, customer defaults and renegotiated terms of a loan that incur lower than previously estimated payments.

14.5.2 Importance of Loan Loss provisioning:

Loan loss provisioning practices have always been an area of focus for supervisory authorities due to their significant effect on banks' financial condition. Bank LLP continue to receive much attention from bank regulators/ supervisors and accounting standard setters due to the following reasons:

i. Banks 'large amount of loan on their balance sheet makes them vulnerable to loan default arising from deteriorating economic conditions which affects borrowers 'ability to repay, requiring banks to keep sufficient LLPs in anticipation of expected loan losses.

ii. LLPs are often procyclical and could worsen an existing recession if unanticipated, and this was evident at the peak of the 2008 global financial crisis as many US and European banks significantly increased their LLP estimates which further eroded bank profit and led to losses that depleted bank capital, requiring Central Bank intervention in the form of bailouts.

iii. Bank LLP is a significant accrual and bank managers have significant discretion in the determination of LLP estimates and such discretion can be exploited to meet opportunistic financial reporting objectives rather than solely for credit risk purposes.

iv. Bank LLP estimate is a crucial micro-prudential surveillance tool that bank supervisors use to assess the quality of banks' loan portfolio.

v. Bank LLP is also a crucial indicator of the in formativeness of bank accruals from an accounting standard-setting perspective,

vi. Bank LLP has become the most debated accounting number in bank financial reporting after bank profitability and derivatives since the 2008 global financial crisis.

Bank LLP plays a crucial role for bank stability and soundness while fulfilling their lending function to individuals, firms and governments ;therefore, bank regulators require banks to keep adequate LLPs to mitigate expected losses although there is no agreement among banks for what constitutes' adequate' loan loss provisioning .Moreover, despite the growing concern that bank managers can opportunistically exploit their discretion to overstate LLPs when expected credit risks are actually low, bank supervisors still require banks to maintain higher LLPs persistently as a safety net for present or future loan losses.

14.5.3 Loan Loss Provision-Legal and Accounting

The International Accounting Standards Board (IASB) and other accounting standard setters set out principles-based standards on how banks should recognise and provide for credit losses for financial statement reporting purposes. In 24 July 2014, the IASB issued International Financing Reporting Standard 9 –Financial Instruments (IFRS 9), which introduced an "expected credit loss" (ECL) framework for the recognition of impairment. It adopted a forward-looking loan loss provisioning approach to reduce bank procyclicality through timelier loan loss recognition.

Meaning of IFRS 9: IFRS 9 is an International Financial Reporting Standard (IFRS) published by the International Accounting Standards Board (IASB). It contains three main topics: classification and measurement of financial instruments, impairment of financial assets and hedge accounting.

Objective of IFRS 9: The objective of IFRS 9 is to establish principles for the financial reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements for their assessment of the accounts, timing and uncertainty of the entity's future cash flows.

Regulatory treatment of accounting provisions:

The timely recognition of, and provision for, credit losses promote safe and sound banking systems and play an important role in bank supervision. Since Basel 1, the Basel Committee on Banking Supervision (BCBS) has recognised that there is a close relationship between capital and provisions. This is reflected in the regulatory treatment of accounting provisions under the Basel capital framework.

1. **IFRS 9 is a significant improvement on IAS 39 in that it requires banks to recognise expected rather than incurred credit losses.** This subtle but important conceptual shift has long been supported by banking supervisors and should lead to the recognition of more timely and possible higher loan loss provisions. Moreover, from the point of view of the transparency of financial statements, IFRS 9 makes the valuation of loans more informative by incorporating a more accurate estimate of their expected future cash flows.
2. **IFRS 9 addresses two of the major shortcomings of IAS 39 and requires a more comprehensive assessment of credit risk.** First, it eliminates the (IAS39) requirement that a loss event must have occurred in order to trigger the recognition of credit losses. Under IFRS9, all loans are subject to provisioning requirements based on expected credit losses. Second, it requires entities to consider future events/forecasts in determining credit loss expectations. In addition, IFRS 9 provides a more granular assessment of credit risk by requiring entities to place financial instruments into three distinct risk buckets, including "performing (Stage 1),"

underperforming (Stage 2)" and "non-performing (Stage 3) rather than the "unimpaired" and "impaired" categories under IAS 39.

3. While the "impaired" category and the associated provisioning requirements under IAS 39 is virtually identical to the Stage 3 category under IFRS 9, there are significant differences in the treatment of the "unimpaired" category between IAS 39 and IFRS 9. In particular, unimpaired loans under IAS 39 require minimal provisions, while IFRS requires banks to disaggregate unimpaired loans into Stage 1(performing)and Stage 2(underperforming)categories and to determine provisions based, respectively, on 12 month and lifetime expected credit losses. In this regard, as soon as a credit is originated (or purchased), banks are required to recognise provisions based on 12-month expected losses (i.e. Stage 1 loans). Once a loan has experienced a "significant increase in credit risk" since initial credit recognition (although it may still be making payments), it should move to Stage 2 with provisions being recognised based on lifetime expected losses. Collectively, most of the provisions associated with Stage 1 and 2 loans can generally be considered as "new" provisions that were not required under IAS39.

4. Notwithstanding these enhancements, IFRS 9 raises a range of implementation challenges. First, it continues to allow banks to accrue interest income on a NPA following the same practice permitted under IAS 39. Second, it significantly expands the role of credit judgement that may accentuate differences in loan loss provisioning outcomes across banks and jurisdictions, given a similar set of facts and circumstances.

5. Experienced credit judgement will be particularly important in at least six key areas, all of which can materially influence both the timing and size of recognised credit loss provisions:

   - ***Estimating ECL provisions for performing (Stage 1) loans:*** Many banks may not have sufficient data and/or a robust framework to support credit loss estimates for per-

forming loans based on a 12-month ECL.This could result in significant variation in provisioning practices across banks.

- ***Triggers used to mitigate loans from Stage 1 to Stage 2:*** The timing of reclassifications from Stage 1 to Stage 2 can materially influence the level of provisions held, as the former (Stage 1) requires provisions based on a 12-month ECL, while the latter (Stage 2) requires lifetime ECL provisions. Banks are required to reclassify loans from Stage 1 to Stage 2 if there has been a "significant increase in credit risk". The difficulty arises because the term is not specifically defined, although the standard does indicate that there is a presumption that a loan should migrate to Stage 2 once it is more than 30 days past due. While some banks may use the 30-day past due criteria to place a loan in Stage 2, others may use more qualitative, forward-looking triggers.
- ***Estimating lifetime ECL for Stage 2 loans:*** Once a determination is made that a loan is in Stage 2 category, the obligation to estimate /project the likelihood of credit default over its remaining life is a new requirement that will require a significant amount of professional judgement, possibly leading to different provisioning outcome.
- ***Use of forward-***looking information: Practices could vary significantly across banks regarding the type of forward-looking information used) i.e what constitutes "reasonable and supportable "information), the time horizon (i.e how far into the future to look) and how to incorporate the information in determining ECL provisions.
- ***Criteria used to reclassify forborne (restructured) loans from Stage 2/3 to Stage 1/2:*** If a borrower has demonstrated its repayment capacity based on the revised terms over a period of time, banks are allowed to upgrade the credit quality of the loan. As the standard does not define what

constitutes a “period of time”, practices could vary significantly across banks in the absence of relevant supervisory guidance.

- ***Loss estimate for Stage 3 loans and collateral valuation:*** For most Stage 3 loans, the probability of default will be at or close to 1. Therefore, the incurred losses related to Stage 3 loans will be heavily driven by the value assigned to collateral. While the challenges in collateral valuation practices are not specific to IFRS 9, inflated collateral values will materially understate the level of required credit loss provisions, particularly for non-performing (Stage 3) assets. In this regard, a critical component in deriving reasonable collateral values is to ensure that banks realistically consider the time and costs required to access and sell collateral (time value of money) as a key part of the collateral valuation process. This is particularly important in jurisdictions where the judicial framework results in long delays for banks seeking access to the collateral of defaulted borrowers.

14.5.3.1 Comparison of IAS 39 and IFRS 9:

IFRS 9 is a major improvement on IAS 39 and addresses two significant weaknesses of the prior standard: it eliminates the loss event threshold to trigger the recognition of credit losses, and it also requires entities to consider future events and forecasts in determining credit loss provisions. IFRS 9 also requires entities to place financial instruments into one of three distinct risk buckets. Under IAS 39 they were designated as “Impaired “or “Unimpaired”. Under IFRS 9 They are now designated as “Performing” (Stage 1),” Underperforming” (Stage 2) or “Non-performing” (Stage 3).

For loans in the Stage 1 category, provisions are required based on 12 month expected losses (that is, the probability of default over the next 12 months multiplied by the loss if they default)..Once a loan

has experienced a “significant increase in credit risk”, it should be moved to Stage 2,with provisions being recognised on lifetime expected losses(in this case, the probability of default over the remaining life of the loan multiplied by loss given default).Estimated provisions for Stage 3 loans are also based on lifetime losses, though the probability of default calculation-since Stage 3 loans by definition are non-performing-is likely to be higher than Stage 2 loans and should generally result in higher provisions.

The assessment of whether a loan has experienced a significant increase in credit risk varies by product and risk segment. It requires use of qualitative criteria and experienced credit risk judgement.

As opposed to IAS 39 which required a best estimate approach, IFRS 9 requires multiple forward-looking macro-economic and workout scenarios for the estimation of expected credit losses.

14.6 ISSUES IN INTERNATIONAL BANKING

The trend towards globalisation of financial markets has been given further impetus in recent years by the dismantling of exchange controls, a dramatic rise in cross-border investment flows and increased access to domestic banking markets by foreign institutions. At the same time, banking can no longer be regarded as a distinct financial service, having become intermingled with other financial activities, including securities business. Another important development has been banks ‘growing involvement in financial derivatives. Finally, banks all over the world face increasing competition as a result of a dismantling of domestic restrictive practices; the liberalisation of cross-border activities and the displacement of conventional bank lending by securities financing. The above trends pose formidable problems for bank regulatory authorities who have to cope not only with a riskier banking system, but a banking system whose boundaries have become unclear and which is increasingly prone to contagious disorders originating in other areas of the financial services industry.

Global Banking plays a vital role in our economy. Today, banks are being used in different ways. Some of the issues faced in international banking are discussed below:

1. **Legal Issues**: Legal considerations are an integral part of all bank lending. When cross- border flows necessarily involve the legal system and courts of more than one country, there is a need for comprehensive and comprehensible agreement among all parties**.** Many of the legal problems associated with international banking transactions arise because such transactions inevitably impinge upon the laws of more than one country. At the very least, two systems of law will be applicable and in many transactions considerably, more than two. For example, a syndicated loan agreement may impinge upon law of at least a dozen different countries, depending upon the geographic make-up of the bank syndicate. Even in a simple two party loan agreement a number of different legal systems may become involved for example, because an independent currency is used or the loan is guaranteed by a third party based in an independent country.

2. **Regulatory Issues:** It include issues arising against cross border supervision of banks, regulation of foreign banks (by home or host supervisor) need for international agreements to ensure stability without generating moral hazards, need to keep a “level playing field” e.g. via capital adequacy agreements, regulation of offshore financial centres, regulation of hedge funds and other offshore vehicles.

   The 2008 global financial crisis has reshaped the landscape of international banking. Subsequent to the widespread government bailout, series of regulatory reforms have taken place aimed to reduce risk-taking activities in the banking industry. Structural reforms are also introduced aiming at separating high-risk investment banking from low-risk retail banking and restricting bank exposure to hedge funds’ investments and private equity. The thrust of capital market reforms attempts to reshape bank behaviour through trans-

porting OTC derivatives onto exchanges, transforming post trade execution of many financial instruments, and reassigning the roles of many banks and market operators. Accounting standard setters have been addressing this issue through adjusting disclosure rules. Despite banks subject to market discipline, prudential regulation and accounting regulation, still continuously expose new problems and pose great challenge to regulators.

3. **International Banking evolvement through mergers and acquisitions**: The banking industry has undergone major consolidation in recent years with a number of global players emerging through successive mergers and acquisitions. Consolidation has been considered a strategic tool and it has become worldwide development, driven by apparent edges of scale-economies, geographical diversification, and lower costs through branch and worker's rationalization, cross-border enlargement and market share concentration. When merger agreements are struck, the integration of two banks 'IT systems often present a major hurdle. Therefore, deciding the well-structured approach to IT integration is necessary. Strategy and development of international banking system change every time with

4. **Implementation of Basel 3**: The Basel 3 rules need to be implemented in a timely and globally consistent manner. All member countries of the Basel Committee must now translate the Basel 3 texts into national regulations and legislation in time to meet the 2013 deadline. The Committee and its oversight body of Governors and Heads of Supervision have consistently stated that the new standards will be introduced in a manner that does not impede the economic recovery. Thus, they have chosen a staggered timeline for implementation. The Basel 3 requirements themselves were scheduled to be introduced from 2013 until 2015; however, implementation was extended repeatedly to 31 March 2019 and then again until 1 January 2022.TBasel 3 is the core regulatory response to problems revealed by the financial crisis. Delay or weakening of the

agreements would jeopardise financial stability and the robustness of the recovery over the long term. The full, timely and consistent implementation of all relevant standards by banks, along with rigorous enforcement by supervisors, is critical. Ultimately, both the official and the private sector will reap the benefits of a more stable financial system.

5. **More Intensive and more Intrusive Supervision**: Implementation efforts need to be supplemented by strong and enhanced supervision of individual banks. Strong supervision is needed to ensure that banks operate with capital levels, liquidity buffers and risk management practices that are commensurate with the risks taken. It must also address the consequences of financial innovation or risks of regulatory arbitrage that regulation cannot fully capture and more generally, address the firm-level consequences of emerging risks and economic developments. National authorities must supervise in a more intensive and more intrusive fashion, especially for the largest and most complex banks.

6. **Systematically Important Financial Institutions**: Reducing the risks posed by financial institutions that are systematic in a global context (global systematically important financial institutions or G-SIFIs) is a high priority for the international regulatory community. Basel 3 will enhance the quality and quantity of capital for all banks, but it does not fully address the externalities or spill over effects that G-SIFIs generate. Additional policy tools are necessary.

7. **Shadow Banking**: Shadow Banking refers to credit intermediation that takes place outside the traditional banking system and involves maturity or liquidity transformation. Examples include the activities of money market funds, lending by unregulated finance companies, and the issuance by specialised conduits and investment vehicles of commercial paper backed by longer-term assets and the funding of securitisation activities through repo markets. The shadow banking system is, however, closely intertwined with the regulated sys-

tem. Large banks typically draw substantial income from shadow banking activities and retain both direct and indirect credit and operational exposures to them through business lines such as loan origination, credit enhancements, backup liquidity lines, brokerage services, warehousing and credit insurance. The activities of the shadow banking system need to be monitored in order to improve the ability of authorities and market participants to understand and anticipate the build-up systematic risks.

8. **Islamic Banking Issues**: Today, Islamic Banking has become one of the fastest growing segments of the international banking and capital markets. It is found in most parts of the world. Islamic banking is a system of banking with Shariah laws, which is against the collection or payment of interest, commonly called 'Riba'.

   Islamic Banking faces some challenges and issues in all over the world like

   - **Standardisation**-It is urgently required in the following areas:

     a) Islamic financing vocabulary as there is no proper method which is used for the Islamic Banking.

     b) Financial instruments and their documentation are much difficult for all the Islamic financial institutions as compared to other financial institution.

     c) Pricing formulas for Islamic financial products uses standard pricing formula under the law of Shariah.

   - **Public Awareness**: It is another issue in Islamic Banking to develop awareness in people towards public education campaigns, making Islamic financing course as a part of business supervision program, etc.

   - Training of banking employees professionals in the use of Islamic financial products.

- Lack of qualified manpower
- Emphasis on Shariah audit instead of reliance on Shariah supervision.
- Finance gap between Islamic banks and SMEs.



CHECK YOUR PROGRESS

11. What is meant Loan Loss Provision?
12. What is the full form of IASB?
13. What did IASB replace and when?
14. What is meant by IFRS 9?
15. What is the difference between IAS 39 and IFRS 9?
16. Why do legal problems are associated with international banking transactions?
17. What are regulatory issues in international banking?

14.7 FOREX CURRENCY ACCOUNTS

Foreign Currency Account (FCA) is a transactional account denominated in a currency other than the home currency and can be maintained by a bank in the home country (onshore) or a bank in another country (offshore).

It is also called multicurrency or borderless account that allows sending and receiving funds in multiple foreign currencies, potentially changing the current way of conducting international business. Through these borderless accounts, funds are either exchanged into US dollars or held in the currency of the transaction until the exchange.

The major benefit of a multicurrency account is the ability to send and receive funds in different currencies while avoiding an exchange between them.

14.7.1 Types of Foreign Currency Accounts

1. **Nostro Account:** It is a demand deposit account, denominated in foreign currencies maintained by domestic banks with overseas/ foreign banks are called NOSTRO accounts. NOSTRO means 'our account with you'.

   For example, if State Bank of India, Mumbai has a Dollar account with American Express Bank, New York then such an account would be called a VOSTRO account. The account would be in the host country's currency.e.in US dollar. All foreign exchange transactions are routed through Nostro accounts by Indian Bank.

2. **Vostro Accounts:** Demand deposit accounts, denominated in domestic currency maintained by overseas banks with domestic banks are called VOSTRO accounts. VOSTRO account means 'your account with us'

   For example, If Standard Chartered Bank, London has an INR account with Syndicate Bank, New Delhi then such an account would be called a VOSTRO account. The account would be maintained in home currency where account is opened, i.e. Indian Rupees.

3. **Loro Accounts**: The term Loro is used when the NOSTRO/ VOSTRO account is referred to, by a bank other than the account maintaining bank and the bank with which that account is maintained. In other words, it is used when referring to third party accounts.

   Thus if Canara Bank, Mumbai has an account with Citi Bank, New Delhi denominated in US Dollars, then when Bank of Baroda has to refer to this account during the course of correspondence with Citi Bank, it would refer to it as LORO account, meaning their account with you.

14.7.2 Benefits of Foreign Currency Account:

- **Hold multiple currencies:** While transacting business overseas, the hassle faced at the time of exchanging the money or depositing foreign currency is eliminated.

- **Leverage exchange rates:** It allows switching among currencies in the account to take advantage of strong exchange rates.
- **Low fees:** Many foreign currency accounts designed for international customers waive maintenance and other fees depending on one's business.

14.7.3 Demerits of Foreign Currency Account:

- **Potential for fees:** One can be charged special cash handling fees on some of the transactions.
- **High minimum:**
- **Low interest**: Foreign currency accounts are notorious for low interest rates.

14.7.4 Risks of a Foreign Currency Accounts

- **Currency value changes:** The value of money fluctuates constantly. A sudden rise or fall affects the total balance of the account.
- **Fees:** Bank fees are high on these accounts compared to a regular local transaction account.

14.8 OFFSHORE BANKING CENTERS

Offshore Banking Centers (OBCs) have developed during the last decades to the point where they have come to play a major role in the innovative world of international finance. This phenomenal growth can be attributed to factors like the restrictive policies and regulatory procedures in banking in some industrialised developed countries, expansion of international trade, impact of the recycling of petrodollars and the borrowing requirements of developing countries. These phenomena combined with a telecommunications revolution which enables banking institutions to access large quantities of current financial information and to disseminate it via a global network, have accelerated the growth of the OBCs. In turn, this OBCs expansion has contributed to the development of world finance and the world economy in a number of ways.

Offshore simply means anything outside of a country's jurisdiction. The word "offshore bank" originated when the banks were vested on the Islands of British Channel, off the coast of northwest France. These banks were installed as tax shelter to captivate further investment.

Offshore banking is financial intermediation performed primarily for borrowers and depositors who are not residents of the country where the bank is located. Its principal attraction is its freedom from intrusive official regulation.

Offshore banking is a legitimate financial exercise or a legal banking activity in which the bank in which the deposits are held is located in an offshore financial center, i.e. the deposit of funds are made by a company or individual in a bank that is located outside their national residence. It is licensed by offshore banking legislation in the foreign domain that gives financial and legal advantages like privacy where confidentiality is strict policy, low or no taxation and security against the political and financial environment. For example, offshore banking units located in the Cayman Islands and Mauritius do not pay any tax, while those in Singapore pay at a rate of just 10 per cent. It accepts deposits and investments from non-resident individuals and companies. Example: Swiss Bank.

A company or an individual maintain the offshore account for tax benefits and many other legal benefits. In offshore banking, one can open a multi-currency account numbers, each named in a different currency. It involves the securing of assets in financial institutions in foreign countries, which may be limited by the laws of the customer's home nation, can be used to avoid certain unfavourable circumstances should the funds be kept in a financial institution in the home nation. This can include the avoidance of tax obligations as well as making it more difficult for these assets to be seized by a person or entity in the home nation.

Thus, Offshore Banking Centers are a type of banking system in a country that allows foreign accounts, independent of the banking regulations of the country offering special products and services like:

- Personal and corporate current or checking account (overdraft services)
- Person or corporate savings account
- Electronic, internet or online banking
- Deposits and withdrawals
- Wire and electronic transfers
- Foreign exchange transactions
- Letters of credit (export and import)
- Investment Management
- Trustees Services
- Global debit and ATM card
- Credit cards, etc.

14.8.1 Functions of offshore banking

Offshore banking has often been associated with the underground economy and organised crime, via tax evasion and money laundering. The real truth is: offshore banks, offshore banking and the associated offshore bank account are legal vehicles which allow the depositor:

- To facilitate global enterprise and other international business activities;
- To safeguard and protect assets;
- To maintain strict personal and business privacy;
- To engage in efficient and reliable tax planning;
- To enable astute money management.

14.8.2 Difference between offshore and onshore banking

Onshore banking generally indicates to a bank that is situated inside the country of domicile. According to the onshore banking the depositor and the deposits are governed to the tax, legislations, rule of foreign exchange of that particular country.

An onshore banking is generally the regular and prevalent branch of the normal banks in which a customer raises its savings and funds. The activi-

ties and exercises of an onshore bank run under the guidelines and rules of governing authorities and institutions.

The difference between offshore banking and onshore banking are discussed below:

Basis	Offshore Banking	Onshore Banking
Meaning	An offshore banking is one which is located in a contrasting jurisdiction from the depositors and capitalists.	Onshore banking activities are undertaken within the jurisdiction and territories of a nation.
Privacy and Secrecy	In offshore banking, authorities, regulators and even governments cannot access information except few exceptions.	In onshore banking, there is a standard privacy and security policy.
Stability	In offshore banking, the stability remains neutral in any compass of time for example- wars, economic fluctuations, political amendments, changes in rules and regulations, etc. Thus the account does not get affected.	In onshore banking, all types of adverse conditions impact the flow and working of accounts.
Initial Deposits	In offshore banking, the initial deposit is in large amount.	In onshore banking, the initial amount is much lesser than the offshore banking account.
Flexibility	Offshore banking is highly flexible because it serves the specific services as per their need. It has a high level of personalization.	Onshore Banking is not flexible but it provides services upto a certain extent of personalization.
Reputation of client	Offshore banking has a high level of goodwill because of high net worth customers who deal in international trade.	Onshore banking holds a average level of goodwill and reputation in the market as the customers are from the national boundary.
Eligibility of customer	Only non-resident individual can open an account in the offshore banking.	In onshore banking, the standard eligibility requirement is followed.
Tax benefits	An offshore bank account has no tax or a negligible tax.	An onshore bank account has standard tax rules.
Rules and Regulation	Offshore banking has minimum rules and regulation.	Onshore banking has to follow standard rules and regulations of many authorities like tax department, central bank and government.

14.8.3 Advantages and Disadvantages of offshore banking

Advantages:

1. The residents of a politically disturbed/turmoil area who suffers from the fear of their assets being frozen, seized or disappear may find offshore banking advantageous as it provides access to politically and economically stable jurisdictions.
2. Some offshore banks may operate with a lower cost base and can provide higher interest rates than the legal rate in the home country due to lower overheads and a lack of government intervention.
3. Interest is generally paid by offshore banks without tax being deducted. This is an advantage to individuals who do not pay tax on worldwide income, or who do not pay tax until the tax return is agreed, or who feel that they can illegally evade tax by hiding the interest income.
4. Huge inflow of foreign exchange
5. Higher interest rate on deposits
6. No reserve requirement
7. Interest rates are not controlled
8. Income generated in forms of license fees
9. Enhances the country's image
10. Infrastructure development

Disadvantages of Offshore Banking

1. Encourage shady dealing and financial crimes due to lax policies.
2. **Money laundering:** Offshore banking has been associated with the underground economy and organised crime, through money laundering.
3. **Tax evasion:** The existence of offshore banking encourages tax evasion by providing tax evaders with an attractive place to deposit their hidden income.

4. **Capital flights:** Developing countries can suffer due to the spread at which money can be transferred in and out of their economy as "hot money". This "hot money "is aided by offshore accounts and can increase problems in financial disturbance.
5. Volatility in foreign exchange market
6. Loss in government revenue
7. **Increased inequalities:** Offshore banking is usually more accessible to those on higher incomes, because of the costs of the establishing and maintaining offshore accounts. The tax burden in developed countries thus falls disproportionately on middle-income groups.
8. Offshore jurisdictions are often remote, so physical access and access to information can be difficult.

14.8.4 Offshore Centres in India

Evolution of Offshore Banking in India:

Financial experts have been pleading to establish an offshore banking center in India. Geographically, India provides distinct advantages in attracting offshore banking units, because it has a stable economic and political performance, a vast market, technical manpower that could find employment in these centers. Another advantage is that the Indian market would open a little before the Tokyo market closes, and close before New York opens, thus providing a vital time link for international money market dealers.

For long, Mumbai was considered suitable for establishing offshore banking as the city has all the requirements like good infrastructure in the form of telecommunications and services, abundant and well-trained manpower and presence of many international banks, both Indian and foreign, already engaged in international banking.

The Sodhani Committee on Foreign Exchange Reforms (1996) has recommended allowing Indian banks and financial as against the general recommendation of permitting offshore banking units only at Mumbai, the

present proposal is to permit them at Special Economic Zones. This is a wise move since both offshore banking centers and SEZs have many things in common as regards administration and purpose. The establishment of offshore centers in India was foreseen when the FERA was replaced by FEMA, 1999.Article 10 of FEMA included offshore banking units as one of the authorities to whom the RBI could delegate powers for dealing in foreign exchange.

- The Sodhani Committee on Foreign Exchange Reforms (1996) has recommended offshore banking in India.
- The establishment offshore centers in India was foreseen when the Foreign Regulation Act(FERA)was replaced by the Foreign Exchange Management Act,1999 (FEMA). Article 10 of FEMA included offshore banking units as one of the authorities to whom the RBI could delegate powers for dealing in foreign exchange.
- Beginning of offshore banking in India was by permitting for the first time Offshore Banking Units (OBUs) to be set up in SEZs.
- Participation of the Indian Banks: State Bank of India, Indian Overseas Bank, Bank of India, Bank of Baroda, ICICI Bank.

Offshore Banking Canters in India

- Exporters would benefit in terms of finer margins on loans and better foreign exchange rates available via an offshore banking unit.
- The benefits of multi-currency operations which, to an extent, minimize currency fluctuation risk.
- Salaries paid by offshore banks and local expenditure incurred by them contribute to the economy's welfare.
- India may earn revenue in the form of license fees, profit taxes imposed on the banks operating in the area.
- Benefit of bank's funds in the form of capital and liquidity requirements.

- The country can gain improved access to the international capital markets.
- The domestic financial system may become more efficient through increased competition and exposure of the domestic banks to the practices of offshore banks.
- The offshore banking centers will provide opportunities to train the local staff which will, in turn, contribute to faster economic growth.
- The offshore banking units would help channelize non-resident Indian investments.
- Setting up offshore banking centers would trigger enforced development of more advanced communication facilities.

The role of Reserve Bank of India has been very critical in initiating the process of offshore baking in India .For plenty of years ,the various Indian banks had been trying to convince the Reserve Bank of India to introduce offshore banking in the country.Eventually,the Reserve Bank of India understanding the needs and prospects of offshore banking in India ,allowed the setting up of offshore units in the Special Economic Zones(SEZs).Many of the Indian banks made use of that provision to set up offshore banks in India.

The Government of India has introduced the Special Economic Zones (SEZ) scheme with a view to providing an internationally competitive and a hassle free environment for export production. As per the Government's policy SEZs will be a specially delineated duty free enclave and deemed to be a foreign territory for the purpose of trade operations and duties/tariffs so as to usher in export-led growth of the economy. The OBUs virtually would be foreign branches of Indian banks located in India. These OBUs, inter alia, would be exempt from reserve requirements and provide access to SEZ units and SEZ developers to international finances at international rates. The Reserve Bank of India (RBI) has permitted banks operating in India, whether Indian public/ private sector or foreign, to set up OBUs in the SEZs. The OBUs would

carry out essentially wholesale banking operations. The OBUs will be set up as branches of the banks and therefore no separate assigned capital will be required. All prudential norms applicable to overseas branches of Indian banks would apply to OBUs. The OBUs would be regulated and supervised by the RBI. They will be required to scrupulously follow “Know Your Customer” and other antimony laundering directives of RBI from time to time.

Over the years, India has tightened the legal framework to combat money laundering and other cross border financial crime. These include the Prevention of Money Laundering Act 2002, passed keeping in view the FATF deliberations and recommendations and international initiatives at the United Nations and others. There are other laws such as The Smugglers and Foreign Exchange Manipulation (Forfeiture of Property) Act of 1976, The Code of Criminal Procedures 1973, Prevention of Corruption Act 1988, The Narcotic drugs and Psychotropic Substances Act of 1985.

With the introduction of offshore banking numerous banks made a beeline for setting up an offshore banking unit at the SEZs. One of the banks which took to offshore banking in India is the Bank of Baroda. It set up an offshore unit in the city of Mumbai. Punjab National Bank is another bank which boasts of an offshore banking unit at Santa Cruz Electronics Export Promotion Zone or SEEPZ in Mumbai. The State Bank of India is also one of the banks with an offshore unit at SEEPZ.

Few Indian banks, such as State Bank of India, Indian Overseas Bank, Bank of India and Bank of Baroda have set up offshore banking units for deposit taking and final lending at Bahrain, Hong Kong, Colombo, Cayman Islands, and so on. Indian Bank, Bank of Baroda and Union Bank of India jointly floated a deposit taking company, IBU International Finance, in Hong Kong for both offshore and onshore banking.

The benefits for the Indian banks from these ventures are:

- Sizeable profits-as these ventures involve relatively low operating costs.

- With multi-currency deposit bases, the banks would be able to serve better the needs of their customers who have set up joint ventures abroad in the form of foreign currency finance.
- The banks would strengthen the country's balance of payments through repatriation of profits from the venture.



CHECK YOUR PROGRESS

18. What is Foreign Currency Account?
19. What are the different types of Foreign Currency Accounts?
20. What is offshore banking?
21. What is onshore banking?
22. Who has recommended the offshore banking in India



14.9 LET US SUM UP

- International Banking is a type of banking that has presence across international borders. It is a financial entity that offers financial services like lending opportunities and payment accounts to foreign clients.
- Expansion, flexibility, accessibility, international transactions, accounts maintenance are some of the characteristics of international banks.
- Capital Adequacy is the statutory minimum capital reserve that a financial institution or investment firm must have available.
- Basel norms are international banking regulations issued by the Basel Committee on Banking Supervision (BCBS), is an effort to coordinate banking regulations across the globe, with the goal of strengthening the international banking system.
- The capital used to calculate the capital adequacy ratio is divided into three tiers –Tier 1, Tier 2 and Tier 3.

- Capital Adequacy Ratio is defined as the ratio of banks capital in relation to its current liabilities and risk weighted assets. I
- The Indian Accounting Standard Board (IASB) replaced IFRS 9 Financial Instruments with IAS 39 Financial Instruments on 24 July 2014.
- Foreign Currency Account (FCA) is a transactional account denominated in a currency other than the home currency and can be maintained by a bank in the home country (onshore) or a bank in another country (offshore).
- Offshore Banking Centers are a type of banking system in a country that allows foreign accounts, independent of the banking regulations of the country offering special products and services.



14.11 ANSWER TO CHECK YOUR PROGRESS

Ans to Q. No. 1. It is an arrangement of financial service by a residential bank of one country to the residents of another country.

Ans to Q. No. 2. Expansion, flexibility, accessibility, international transactions, accounts maintenance are some of the characteristics of international banks.

Ans to Q. No. 3. The capital adequacy ratio, also known as capital to risk-weighted assets ratio, measures a bank's financial strength by using its capital and assets.

Ans to Q. No. 4. The Basel norms are international banking regulations issued by the Basel Committee on Banking Supervision (BCBS).

Ans to Q. No. 5. The full form of BCBS is Basel Committee on Banking Supervision, is a committee of banking supervisory authorities which published the Basel Accords i.e., rules regarding capital requirements.

Ans to Q. No. 6.1988

Ans to Q. No. 7. Minimum Capital Standards, Supervisory Review Process and Market Discipline are the three pillars of Basel 3.

Ans to Q. No. 8. Tier 1 is the core capital comprised of equity capital, ordinary share capital, intangible assets and audited revenue reserves.

Ans to Q. No. 9. Tier 2 capital comprises unaudited retained earnings, unaudited reserves and general loss reserves.

Ans to Q. No. 10. R isk weighted assets is a measure of amount of bank assets, adjusted for risks.

Ans to Q. No. 11. A Loan loss provision (LLP) is an expense set aside as an allowance for uncollected loans and loan payments. It is a credit risk management tool used by banks to mitigate expected losses on bank loan portfolio

Ans to Q. No. 12. The International Accounting Standards Board

Ans to Q. No.13. IASB replaced IFRS 9 Financial Instruments with IAS 39 Financial Instruments on 24 July 2014.

Ans to Q. No.14. IFRS 9 is an International Financial Reporting Standard (IFRS) published by the International Accounting Standards Board (IASB). It contains three main topics: classification and measurement of financial instruments, impairment of financial assets and hedge accounting.

Ans to Q. No.15. The main difference between the two accounting standards is that the new standard (IFRS 9) requires a recognition of credit loss allowances on initial recognition of financial assets, whereas previously under IAS 39, impairment is recognised at a later stage when a credit loss event has occurred.

Ans to Q. No. 16. The legal problems are associated with international banking transactions because such transactions inevitably impinge upon the laws of more than one country.

Ans to Q. No. 17. Regulatory issues in international banking include issues arising against cross border supervision of banks, regulation of

foreign banks (by home or host supervisor) need for international agreements to ensure stability without generating moral hazards, need to keep a "level playing field" e.g. via capital adequacy agreements, regulation of offshore financial centres, regulation of hedge funds and other offshore vehicles.

Ans to Q. No. 18. Foreign Currency Account (FCA) is a transactional account denominated in a currency other than the home currency and can be maintained by a bank in the home country (onshore) or a bank in another country (offshore).

Ans to Q. No. 19. The different types of Foreign Currency Accounts are:

a) Nostro Account

b) Vostro Account

c) Loro Accounts

Ans to Q. No. 20. Offshore banking is financial intermediation performed primarily for borrowers and depositors who are not residents of the country where the bank is located. Its principal attraction is its freedom from intrusive official regulation.

Ans to Q. No. 21. Onshore banking generally indicates to a bank that is situated inside the country of domicile. The depositor and the deposits are governed to the tax, legislations, rule of foreign exchange of that particular country.

Ans to Q. No. 22. The Sodhani Committee on Foreign Exchange Reforms (1996) has recommended offshore banking in India.



14.12 MODEL QUESTIONS

1. What is International Banking? State the characteristics of International Banking.
2. Discuss the importance of Loan Loss Provisioning along with the regulatory treatment.

3. Discuss the main issues of concern in International Banking.
4. Write short notes:
    a) Capital Adequacy
    b) Forex Currency Accounts
5. What is meant by offshore banking centers? Differentiate between offshore banking and onshore banking.
6. Discuss the evolution of offshore banking in India.



14.10 FURTHER READING

Management of Banking

1. International Business
    - V.K. Bhalla
2. International Banking
    - Murali Krishna Sarma
    - O.S. Shrivastava

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UNIT 15 EURO DOLLAR MARKET

UNIT STRUCTURE

15.1 Learning Objective

15.2 Introduction

15.3 Meaning of Euro Dollar Market

15.3.1 Characteristics of Euro dollar

15.3.2 Origin of the Euro dollar market

15.3.3 Benefits of Eurodollar market

15.3.4 Demerits of Eurodollar market

15.3.5 Effects of Euro-Dollar Market on International Financial System

15.4 Mechanism-Syndicated Credit Procedures

15.4.1 Meaning of Loan Syndication

15.4.2 The Syndicate Process

15.4.3 Parties involved in a Syndicated Loan transaction

15.4.4 Advantages of Syndicated Loans

15.5 External Commercial Borrowings

15.5.1 Procedure of raising ECB

15.5.2 Advantages of ECBs

15.6 Mergers and Acquisitions

15.6.1 Meaning of Merger

15.6.1.1 Types of Merger

15.6.2 Meaning of Acquisition

15.6.3 Implications of merger and acquisition in the banking sector

15.7 Cases of recent merger, acquisitions and bank failures

15.7.1 Scenario of Bank Mergers in Indian context

15.7.2 Merger and Acquisition-World Banking Scenario

15.7.3 Cross –border mergers and acquisitions in banking and bank failures

15.7.3.1 Cases of recent bank failures

15.8 Let Us Sum Up

15.9 Further Reading

15.10 Answer to Check Your Progress

15.11 Model Questions

15.1 LEARNING OBJECTIVE

After going through this unit, you will be able to:

- To understand the importance of Euro dollar market and its position in international financial affairs.
- To understand the loan syndication procedure.
- To understand the concept of External Commercial Borrowings.
- To analyse the role of mergers and acquisitions in the banking industry.

15.2 INTRODUCTION

Due to the huge expansion in international trade from the early 1970's, there was a huge growth in demand for foreign currencies to settle trade transactions. The availability of currencies for trading and so the development of the foreign exchange market itself, was facilitated by the development of the Eurodollar market.

The Euro-dollar market is one of the world's biggest capital markets and consists of sophisticated financial instruments. The very rapid expansion of the Euro-dollar market during the last decade and its present size has earned it a prominent position in international financial affairs. It has caused a profound influence upon the money and capital markets of the western world.

15.3 MEANING OF EURO DOLLAR MARKET

Eurodollars are time deposits denominated in U.S dollars at foreign banks or overseas branches of American banks and thus are not under the jurisdiction of the Federal Reserve.

Eurodollars have come into existence on account of the regulation issued by the Board of Governors of the U.S. Federal Reserve System, which does not permit the banks to pay interest to the depositors above a certain limit. As such, banks outside the United States tend to expand their dollar business by offering higher deposit rates and charging lower lending rates, as compared to the banks inside the U.S.

Euro-dollar market is the creation of the international bankers. It is simply a short-term money market facilitating banks' borrowings and lending of U.S. dollars. The Euro-dollar market is principally located in Europe and basically deals in U.S. dollars. Euro-dollar operations are unique in character, since the transactions in each currency are made outside the country where that currency originates.

But, in a wider sense, the Euro-dollar market is part of the Euro-currency market. It is confined to the external lending and borrowing of the world's most convertible currencies like United States dollar, British pound sterling, Swiss franc, French franc, the Dutch guilder, the German mark and the Italian lire.

Thus in spite of Euro-dollar market is wholly unofficial in character, it has become an indispensable part of the international monetary system making it one of the largest markets for short-term funds.

15.3.1 Characteristics of Euro dollar market:

1. **International Market:** The Euro-dollar market is one of the world's primary international market and it under no national control. It has come up as the most important channel for mobilising and deploying funds on an international scale.
2. **Independent Market:** The market is relatively free, because its deposits are not subject to American banking regulations. As

the deposits are outside of the United States, the banks holding these deposits do not have to adhere to the Federal Reserve's reserve requirements, and the Securities and Exchange Commission does not regulate Eurodollar securities.

3. **Wholesale Market:** It is essentially a wholesale market. The transactions include, on the one hand, large banks extensive international operations and on the other hand, governments, large government agencies or private corporations. The average size of transactions, lending or borrowing is quite large.
4. **Competitive and Sensible Market:** The Euro-dollar market is a highly competitive as the market is growing and accepted internationally. It is sensible market as it responds faster to the changes in demand and supply of the funds and also reacts to changes in the interest rates.
5. **Short Term Market:** It has emerged as a flexible money market in which short-term funds often move very rapidly from surplus nations to deficit nations.
6. **Inter-Bank Market:** The vast bulk of the market is confined to interbank operations.

15.3.2 Origin of the Eurodollar market:

The motivation underlying the inception of the Eurodollar market was the desire to avoid regulation, either regulation already in effect or additional restrictions that depositors feared might be imposed. Among the first depositors of dollars in European banks were the Russians. Soviet enterprises were earning dollars both by selling gold and by exporting to the United States and to other countries. They feared that accounts opened in U.S banks might be attached by Americans who had claims against the Soviet Government. The preferred alternative, therefore, was to place their dollar earnings in European banks. The 1958 abolition of most exchange controls in Europe permitted the growth of the Eurodollar market to accelerate. By the mid 1960's this market was a recognised force in European credit markets.

During the credit crunch of 1968 and 1969, U.S. commercial banks relied on the Eurodollar market to escape the effects of the interest rate ceiling imposed by the Federal Reserve under Regulation. The larger American banks directed their foreign branches to bid for dollars by offering yields above the level permitted in the United States. The head offices then borrowed heavily from their overseas branches. A portion of the new deposits attracted by overseas branches during this period apparently represented funds transferred out of the United States by Americans. Additional deposits were also attracted from foreigners, including foreign central banks. In October 1969 the Federal Reserve imposed a stiff reserve requirement on head office borrowings from abroad. The incentive for American banks to obtain funds overseas was reduced in June 1973 when large denomination certificates of deposits were exempted from Regulation Q limitations on maximum interest yields.

Some central banks-both European and others –have deposited a portion of their reserves in European commercial banks rather than investing in say, U.S. Treasury bills. Banks in London and other financial centers have found accepting deposits in dollars and other foreign currencies and extending loans in these currencies to be profitable because no reserves are required against such deposit liabilities and because this business could be added to their normal functions at modest cost. The extra expense is small because these banks were already engaged in a large volume of international transactions and had well-established relationships with customers in a variety of countries. Most Eurocurrency transactions are for large amounts and can be handled at wholesale rates.

The Eurocurrency markets, the largest of which is the Eurodollar market, have also had an important positive impact on economic activity in the countries where they have evolved. These markets constitute a highly efficient system for allocating credit among lenders and borrowers. They have facilitated a higher level of domestic and international commerce than would have been likely in their

absence. The removal in 1958 of most European restrictions on the conversion of foreign exchange and the rapid growth of international trade in the 1960s, a large proportion of which was financed in dollars, created a need for dollar loan and deposit services in European during normal working hours. Banks understandably strove to satisfy this demand and finance additional commerce. The resulting gain in output and employment is the chief real economic benefit produced by the banks and other institutions that have jointly constructed the Eurocurrency financial market.

15.3.3 Benefits of Eurodollar market

1. It has provided a truly international short-term capital market, owing to a high degree of mobility of the Euro-dollars.
2. Euro-dollars are useful for the financing of foreign trade.
3. It has enabled the financial institutions to have greater flexibility in adjusting their cash and liquidity positions.
4. It has enabled importers and exporters to borrow dollars for financing trade, at cheaper rates than otherwise obtainable.
5. It has helped in reducing the profit margins between deposit rates and lending rates.
6. It has enhanced the quantum of funds available for arbitrage.
7. It has enabled monetary authorities with inadequate reserves to increase their reserves by borrowing Euro-dollar deposits.
8. It has enlarged the facilities available for short-term investment.

15.3.4 Demerits of Eurodollar market

1. It may lend banks and business firms to over-trade.
2. It may weaken discipline within the banking communities.
3. It involves a grave danger of sudden large-scale withdrawal of credits to a country.
4. It has rendered official monetary policies less effective for the countries involved

15.3.5 Effects of Euro-Dollar Market on International Financial System:

1. The position of dollar has been strengthened temporarily, since its operations of borrowing of dollars have become more profitable rather than its holdings.
2. It facilitates the financing of balance of payments surpluses and deficits. Especially, countries having deficit balance of payments tend to borrow funds from the Euro-dollar market, herby lightening the pressure on their foreign exchange reserves.
3. It has promoted international monetary cooperation.
4. Over the last decade, the growth of Euro-dollar has helped in easing of the world liquidity problem.
5. Euro dollars are not spendable money, but are money substitutes such as time deposits in a bank.
6. In countries without efficient money markets, access to a competitive Eurodollar market may reduce the demand for domestic money as residents shift funds to the offshore market and earn profit.
7. If the euro dollar market encourages more international capital flows, then central banks need to engage in more sterilization operations to achieve their domestic monetary policy.



CHECK YOUR PROGRESS

1. What is meant by Euro dollar deposit?
2. Who were the first depositors of dollars in European banks?
3. Are the deposits of Eurodollar subject to American banking regulations?
4. When and why did U.S. commercial banks relied on the Eurodollar market?
5. Which is the largest of the Euro currency market?

15.4 MECHANISM-SYNDICATED CREDIT PROCEDURES

The syndicated lending process has emerged as one of the most popular, significant and notable financing instruments in the international financial markets. Compared to other funding techniques, a syndicated credit remains by far the simplest way for different types of borrowers to raise financing from the international markets

While the technique of syndicated loan has been tried and accepted in various national markets, the Euro market remains by far the biggest source of such credits. Euro market evolved the concept of lending funds for medium-to-long term on “variable” (or floating) interest rate basis, thereby protecting them against constantly changing interest rates.

15.4.1 Meaning of Loan Syndication

Loan syndication involves a small group of knowledgeable and well capitalised banks that agree to provide the entire loan to a much wider range of smaller banks by sharing of credit risk. In simple words, it is a financing facility offered by a group of lenders, referred as a syndicate who work together to provide funds for a single borrower.

Loan syndication provides borrowers with certainty about the amount and the price of funds, while allowing wide distribution. If many banks are able to the share in small parts of different loans, their ‘risk ‘will be more diversified and they will be willing to make more loans. In the Euro market, a borrower may come from one country, with its own regulations and accounting norms, while lenders are from other nations. Much of the risk reduction is performed not only by credit analysis, monitoring and control, but by taking smaller amounts of more diversified assets(loans), and by relying on the monitoring role of the ‘lead bank ‘or banks.

15.4.2 The Syndicate Process:

The syndication process commences with an invitation for bids from borrowers. Sophisticated borrowers invite bids from Euro banks by defining important loan parameters e.g. amount, currency preferred, final maturity, grace period and preferred amortisation.

Bids are generally invited on a fully underwritten basis opposed to a best effort basis. As the term indicates, fully underwritten bids convey the commitment of bidders to provide funding, irrespective of the market response. On the other hand, bidders submitting bids on a best effort basis are not confident of raising the finance from the market.

The bid letter will be addressed to the borrower and signed by prospective banks spelling out broadly the terms and conditions on which each bidding bank would be prepared to accept the role as an arranger or lead manager for the syndication arrangement.

Thereafter, the borrower will carefully examine the bid submitted by each bank. Each bank that submitted its bid will be called separately to discuss the terms and conditions submitted in their respective bids. The borrower will not reveal the terms of a bid submitted by one bank to the other bank/s. A strict confidentiality is maintained.

The borrower will then select the bid that suits it most. It must be carefully understood that the criteria for choosing a bid is not dependent on the lowest cost but other factors are equally important. These factors (terms and conditions) would be best understood and appreciated after reviewing all relevant features that are included in a bid format and are integral in tying-up a syndicated credit arrangement.

Based on the cost computation and other vital dimensions of the total loan deal, the borrower chooses the deal that best suits his requirement. The borrower then awards the mandate to the selected bidder.

The mandate empowers the lead manager (selected bid) to go ahead with the transaction under the terms and conditions that are defined, settled and conveyed through the mandate.

The mandate bank undertakes two distinct tasks at this stage:

1. Formation of a syndicate of banks and
2. Documentation processing

By means of an invitation telex, specifying the terms and conditions of the mandate, the lead manager invites the participation of other banks in the proposed transaction. Procedures for sharing the “Front-End Fees “have also to be specified to enable loan participants to take a view on the returns they can expect from the transaction. This process takes 2-3 weeks.

The syndication process involves the circulation of an Information Memoranda, a confidential document containing the negotiations concerning the sharing of fees and the level of participation of other banks interested in the transaction. The Information Memoranda describes the borrowing entity, its formation, ownership and management. Detailed account of the operations, past and present, cash-flows, summary of financial analysis. This document is prepared by the borrower and the lead manager.

The Information Memoranda also contains a detailed description of guarantors (if any). Many developing countries or Government owned Corporations carry the guarantee of their respective governments. It contains the geographical, political, economic and financial aspects of the guarantor e.g. balance of payment position, external debt, etc.

The lead bank is responsible for providing credit information and loan documentation to the participating banks.

The loan is appraised by the bank/financial institution. Then the financial institution informs the applicant borrower of such sanction along with the detailed terms and conditions and arrangements of other lenders. The loan is appraised and sanctioned by the bank/financial institution. Then the financial institution informs the applicant borrower of such sanction along with the detailed terms and conditions and arrangements of other lenders. The sanction letter mainly covers amount of loan, interest, commitment, charge security for the loan conversion option, repayment of loan etc.

15.4.3 Parties involved in a Syndicated Loan transaction:

1. **Borrower:** Requirement of capital for expansion project or acquisition transaction. The borrower is responsible for loan and interest repayment.
2. **Investment Bankers**: Act as a facilitator in the loan transaction.
3. **Lead Bank:** Responsible for structuring the loan transaction.
4. **Participating Banks:** All banks who participate in loan syndication are known as participating bank.

15.4.4 Advantages of Syndicated Loans:

1. Syndicated loan facilities can increase competition, prompting other banks to increase their efforts to put market information in front in hopes of being recognised.
2. There is flexibility in structure and pricing as the borrowers have a variety of options in shaping their syndicated loan, including multicurrency options, risk management techniques and prepayment rights without penalty.
3. Syndicated facilities bring businesses the best prices in aggregate and spare companies the time and effort of negotiating individually with each bank.
4. Syndicated loans bring the borrower greater visibility in the open market.

15.5 EXTERNAL COMMERCIAL BORROWINGS

External Commercial Borrowings (ECBs) are borrowings raised from the international markets by corporates. These overseas borrowings are governed by an ECB policy which is administered by the finance ministry along with the RBI.Indian companies can access funds on a first-come-first-serve basis within an overall limit set in the ECB guidelines.

External Commercial Borrowings supplement domestically available resources for expansion of existing capacity as well as for fresh investment. Indian companies have preferred this route to raise funds as the cost of borrowing is low in the international markets.

ECB is an instrument used in India to facilitate the access to foreign money by Indian corporations and PSUs (public sector undertakings). It is a key component of India's overall external debt which includes external debt which includes commercial bank loans, buyers' credit, suppliers' credit, securitized instruments (such as floating rate notes and fixed rate bonds) availed from non-resident lenders with minimum average maturity of three years. It also includes credit from official export credit agencies and commercial borrowings from the private sector window of multilateral financial institutions

such as International Finance Corporation, Asian Development Bank, etc. ECBs cannot be used for investment in stock market or speculation in real estate.

15.5.1 Procedure of raising External Commercial Borrowings:

External Commercial Borrowings (ECBs) can be availed through two routes-automatic route and approval route.

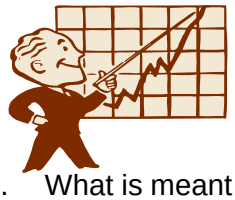
1. **Automatic Route:** Under the automatic route, ECBs can be assessed up to a limit without any discretionary approval and beyond the limit; specific approvals are needed from the RBI/Government. ECBs for investment in the real sector-the industrial sector, especially the infrastructure sector in India are under the automatic route, i.e., they do not require RBI/ government approval.
2. **Approval Route:** Under the approval route, applicants are required to submit an application in a form for ECB through designated Authorised Dealer (AD) to the RBI along with necessary documents. The RBI has set up an Empowered Committee to consider proposals coming under the approval route.

   RBI shall grant approval based on overall guidelines, macro-economic situation and merits of the proposal.

15.5.2 Advantages of External Commercial Borrowings (ECBs):

1. ECBs provide opportunity to borrow large volume of funds.
2. The funds are available for relatively long term.
3. It provides access to international markets for the borrowers and gives good exposure to opportunities globally.
4. Corporate can raise ECBs from internationally recognised sources such as banks, export credit agencies, international capital markets, etc.
5. As the interest rate is far less compared to the interest rate on the debt raised in India, domestically it is highly preferred mode of instrument of raising fund.

6. ECBs provide foreign currency funds to the corporate sector that are necessary for import of capital goods, etc.
7. It does not dilute equity shareholding in a company as it is a way of raising capital without giving away any control, as debt holders do not have voting rights, etc.
8. The avenues of lower cost funds can improve the profitability of the companies and can aid economic growth.



CHECK YOUR PROGRESS:

6. What is meant by Loan Syndication?
7. Why do banks engage in loan syndication?
8. Which is the biggest source of credit of syndicated loan?
9. Who is the Lead Manager?
10. Who prepares the Information Memoranda?
11. What are External Commercial Borrowings?
12. State the two routes through which External Commercial Borrowings can be raised.

15.6 MERGERS AND ACQUISITIONS

Mergers and Acquisitions have been the principal tools of corporate restructuring in India after the implementation of economic reforms since 1991.The Indian corporate sector has experienced a major restructuring through mergers and acquisitions with the changes brought about in the MRTP Act as well as in the Industrial Policy Resolution of June 1991, which relaxed the norms for licensing and growth.

Mergers and Acquisition is a useful tool for the growth and expansion in any industry and the Indian Banking Sector is no exception. It is helpful for the survival of the weak banks by merging into the larger bank.

15.6.1 Meaning of Merger

Merger is defined as the combination of two relatively comparable organisations into one. It occurs when two or more companies combines

and the resulting firm maintains the identity of one of the firms. One or more companies may merge with an existing company or they may merge to form a new company. Usually the assets and liabilities of the smaller firms are merged into those of larger firms. Merger may take two forms:

- **Merger through absorption:** Absorption is a combination of two or more companies into an existing company. All companies except one loose their identity in a merger through absorption. For example, absorption of Tata Fertilisers Limited (TFL) by TCL, an acquiring companies (a buyer), survived after merger with TFL, and transferred its assets, liabilities and shares to TCL.
- **Merger through Consolidation:** A consolidation is a combination of two or more companies into a new company. In this form of merger all companies are legally dissolved and a new entity is created. In consolidation the acquired company transfer its assets, liabilities and shares to the acquiring company for cash or exchange of assets. For example, the merger of Hindustan Computers Ltd. Hindustan Instruments Limited and India Reprographics Limited to an entirely new company called HCL Limited.

15.6.1.1 Types of merger

Mergers are of many types. Mergers may be differentiated on the basis of activities, which are added in the process of the existing product or service lines. Mergers can be categorised into the following four types:

1. **Horizontal Merger:** It is a combination of two or more corporate firms dealing in same lines of business activity. Horizontal merger is co centric merger, which involves combination of two or more business units related to technology, production process, marketing research, development and management. Elimination and reduction in competition, putting an end to price cutting, economies of scale in production, research and development, marketing and management are the motives underlying such mergers
2. **Vertical Merger:** It is the joining of two or more firms in different stages of production or distribution that are usually separate. The

vertical mergers chief gains are identified as the lower buying cost of material, minimization of distribution costs, assured supplies and market increasing or creating barriers to entry for potential competition or placing them at a cost disadvantage.

3. **Conglomerate Merger:** It is the combination of two or more unrelated business units in respect of technology, production process or market and management. In other words, firms engaged in the different or unrelated activities are combined together. Diversification of risk constitutes the rational for such merger moves.
4. **Concentric Merger:** It is based on specific management functions whereas the conglomerate mergers are based on the general management functions. If the activities of the segment brought together are so related that there is carry over on specific management functions. Such as marketing research, marketing, financing, manufacturing and personnel.

15.6.2 Meaning of Acquisition

An acquisition or takeover is the purchase by one person of controlling interest in the share capital or all or substantially all of the assets and/or liabilities, of the target. Takeover may be friendly or hostile, and may be effected through agreements between the offer or and the majority shareholders, purchase of shares from the open market or by making an offer for acquisition of the target's shares to the entire body of shareholders.

Acquisitions may be by way of acquisition of shares of the target, or acquisition of assets and liabilities of the target.

15.6.3 Implications of merger and acquisition in the banking sector:

Mergers and acquisitions are the important process in the banking industry to make financial gains enormously. It is the result of business strategy bringing with them a sense of uncertainty. Despite the restructuring frenzy, such strategic transactions in the banking sector could fail or perform far below potential because of mistakes in post-merger integration. On the other hand, it could also be arousing success.

The possible outcomes of mergers and acquisitions in banking sector are downsizing, relocations, technological changes and an insecure feeling among employees. The most common attitude that prevail in 'bank mergers' is the attitude of 'us versus them due to issues like seniority. This attitude gets further aggravated if there are cultural differences and lack of acceptance of each other's processes if one bank is superior in terms of tasks and methodologies than the other.

Merger seems to lead to financial and strategic growth. 'Survival of the fittest 'has become a reality in the case of commercial banks. In this era of globalisation, banks will have to be competitive in order to face challenges and leverage opportunities

The banking sector in India is mature in supply and product range with banks having clean, strong and transparent balance sheets. The main growth drivers in the Indian banking industry are increased retail credit demand, expansion of ATMs and debit cards, improved macroeconomic conditions, diversification, interest rate spreads and regulatory and policy changes, specifically the Banking Regulation Act. The impact of merger and acquisition in Indian banking industry includes creating a new large entity, providing massive scale economies and improved distribution in India.

15.7 CASES OF RECENT MERGER, ACQUISITIONS AND BANK FAILURES

15.7.1 Scenario of Bank Mergers in Indian context

Indian banking industry is consolidating to compete with their global counterparts. The Reserve Bank of India (RBI), stepped in to closely monitor the performance of some of the smaller banks, including private banks, when it turned insolvent due to asset quality problems and the inability to inject timely equity The RBI forced a merger with a strong bank in the interests of depositors. Notable instances were the merger of New Bank of India with Punjab National Bank in 1993, Sikkim Bank with Union Bank of India in 1999, Banaras State Bank with Bank of Baroda in 2002, Nedungadi Bank

with Punjab National Bank in 2003, Global Trust Bank with Oriental Bank of Commerce in 2004, etc.

In a major move that has been set to redefine India's banking space, Finance Minister of India; Nirmala Sitharam announced amalgamation of ten public sector banks into four big banks that has been implemented from 1st April 2020.

Table 1: Recent Merger List of PSU Banks in India 2020

Sl.No.	**Acquirer Banks**	**Banks to be Merged**
1	Punjab National Bank(PNB)	Oriental Bank of Commerce and United Bank of India
2	Indian Bank	Allahabad Bank
3	Canara Bank	Syndicate Bank
4	Union Bank of India	Andhra Bank and Corporation Bank

Following the consolidation, there are now seven large public sector banks (PSBs), and five smaller ones. The total number of public sector banks in the country has come down from 18 to 12 from April 1, 2020.

The Banks' merger has resulted in the creation of seven large PSBs with scale and national reach, with each amalgamated entity having business of over Rs.8 lakh crore and it has helped to create banks with scale comparable to global banks and capable of competing effectively in India and globally.

In addition, consolidation would also provide impetus to merged entities by increasing their ability to support larger ticket-sized lending and have competitive operations by virtue of greater financial capacity.

Table 2: Bank Mergers in the past

Year of Merged	Acquirer Bank	Name of the Banks merged into(Bank targeted)
Aug-19	Indian Bank	Indian Bank and Allahabad Bank
Aug-19	Union Bank	Union Bank, Andhra Bank and Corporate Bank
Aug-19	Canara Bank	Canara Bank and Syndicate Bank
Aug-19	Punjab National Bank	Punjab National Bank, Oriental Bank of Commerce and United Bank of India
Apr-19	Bank of Baroda	Vijaya Bank and Dena Bank
Apr-17	State Bank of India	Bharatiya Mahila Bank(BMB)
Apr-17	State Bank of India	All the 5 associates of SBI
Nov-14	Kotak Mahindra Bank	ING Vyasa Bank
May-10	ICICI Bank	Bank of Rajasthan
2008	HDFC Bank	Centurion Bank of Punjab
2007	Indian Overseas Bank	Bharat Overseas Bank
2006	Federal Bank	Ganesh Bank of Kurandwad
2006	Industrial Development Bank of India	United Western Bank
2006	Centurion Bank of Punjab	Lord Krishna Bank
2006	ICICI Bank	Sangli Bank
2005	Centurion Bank	Bank of Punjab
2004	Bank of Baroda	South Gujarat Local Area Bank
2004	Industrial Development Bank of Indial	DBI Bank Ltd.
2004	Oriental Bank of Commerce	Global Trust Bank

Case 1: Merger of five SBI Associate Banks and Bharatiya Mahila Bank merged with SBI (2017)

In the last few years banking sector has witnessed many tremendous mergers and one of the most prominent mergers is a merger of five associates of SBI and Bharatiya Mahila Bank getting merged in SBI. The vision was to

have strong banks rather than having large number of banks. This resulted in SBI being one amongst the 50 largest banks in the world. The total customer base of the bank has reached 37 crores with the 24000 branch network and nearly 59000 ATMs across the country.

Case 2: Merger of Bank of Baroda, Dena Bank and Vijaya Bank (2019)

On 1st April 2019 Bank of Baroda was merged with Dena Bank and Vijaya Bank. As a result Bank of Baroda became India's second-largest PSBs. Most of the mergers done in the past have proved to be an overall success for the weaker banks. Hence going by the track record merger and acquisition in Indian banking have been fruitful for the Indian Economy.

15.7.2 Merger and Acquisition-World Banking Scenario

The International Banking scenario has shown major changes in the past few years in terms of the Mergers and Acquisitions. Due to the financial system deregulation, entry of new players and products with advanced technology, globalisation of the financial markets, changing customer behavior, wider services at cheaper rates, shareholder wealth demand, etc. have been on rise.

In this scenario, Mergers and Acquisitions is one of the widely used strategies by the banks to strengthen and maintain their position in the market. For expanding the operations and cutting costs, Banking Sector has been using mergers and acquisitions worldwide as a strategy for achieving larger size, increased market share, faster growth and synergy for becoming more competitive through economies of scale.

Case 1: The Merger of Bank of Tokyo Mitsubishi and UFJ Bank

On 9 September 2005, Mitsubishi Tokyo Financial Group (MTFG) and United Financial of Japan(UFJ Holdings) announced that they had received the approval for the merger and began joint operations as merged entity with the new name Mitsubishi Tokyo UFJ Financial Group,Inc.(MUFG) from 1 October 2005.The commercial banks within the two financial groups ,Bank of Tokyo Mitsubishi Ltd.(BTM) and UFJ Bank Limited were merged on 1

January 2006 and the new bank was named as Bank of Tokyo Mitsubishi-UFJ Bank. The new bank, in short, is also known as MUFJ Bank. After the merger, MUFJ Bank became one among the world's largest financial groups in terms of assets amounting to 1, 97,001.6 billion Japanese yen. This merger captured the attention of the business world because it helped both the organisations to create monopolistic power in the Japanese banking industry. Nobuo Kuroyanagi (President/CEO MTFG), a 63-old lifetime committed employee who had worked for MTFG from the age of 23 in a range of positions, was the main focal person to press the button to open the curtains for the merger drama.

MTFG had set an aspiration of being one of the top five financial groups in the world. They had aimed to achieve this by creating a premier, comprehensive, financial group that can succeed against competitors globally. They wanted a bank with an extensive and a well-balanced financial network, locally and internationally.

Case 2: JP Morgan Chase

In the year 2000 Chase Manhattan Bank purchased JPMorgan for approximately $30 billion in stock. Then in 2004 the bank purchased Bank One in a $58 billion deal that resulted in JP Morgan becoming the second largest bank in the U.S.at the time.

Case 3: Bank of America

In 1998, the merger of Bank of America and Nations Bank created the entity known as Bank of America with assets $570billion and an extensive network of 4800 branches. Then in the mid-2000s, Bank of America completed one major deal every year. Between 2004 and 2007, the bank bought FleetBoston Financial for $47 billion, credit card giant MBNA for $35 billion, U.S. Trust for $3.3 billion and LaSalle Bank for $21 billion

15.7.3 Cross –border mergers and acquisitions in banking and bank failures:

Cross-border Mergers and Acquisitions are a part of economic life in a liberalizing and globalising world. Cross-border Mergers and Acquisitions share the primary virtues of FDI from the point of view of both the host and home countries, such as being an important means of transferring capital, improving technology and efficiency and stimulating growth.

Mergers and Acquisitions have sprung up in the recent years in Indian Banks seeking international presence. In the last two decades, there has been a jump in the Indian diaspora working abroad. A new recent trend is the increase in the interest of foreign expats to work in India. Both these communities seek banking products in remittances and other cross border retail products. Further firms are looking for funds overseas for various purposes ranging from capital expenditure to leveraged M&A financing. Hence, Indian banks are setting up branches and subsidiaries overseas and foreign banks are expanding their operations in India. These bank branches (set up abroad) further target the local population to be profitable and hence target local acquisitions. Evidently, this results in an M&A opportunity for Foreign Banks to acquire an Indian Bank and also Indian Bank to acquire foreign banks. For example, ICICI Bank has made an acquisition of a bank in Europe in 2006 to establish itself in a geographical area. Then State Bank of India has acquired Indonesia-based PT Bank IndoManex, a closely held bank with seven branches in Jakarta, Bandung and Surabaya in 2005.Prior to this SBI has also acquired Indian Ocean International bank in Mauritius and Giro Commercial Bank in Kenya.

15.7.3.1 Cases of recent bank failures:

Meaning: A bank failure is the closing of a bank by a federal or state banking regulatory agency.

While mergers and acquisitions worldwide have numbered in the thousands in recent years, all are not successful investment transactions.

Case 1 -Lehman Brothers Holdings Inc.: It was a 158-year-old global financial service. It was the fourth largest investment bank in the United States. The financial world changed forever when Lehman Brothers collapsed on September15, 2008. Lehman Brother Holding Inc. convulsed world markets and wrecked the fortunes of millionaire financiers. The stock market crashed and trillions of dollars were evaporating from the economy.

Lehman's bankruptcy filing is the largest in US history and is thought to have played a major role in the unfolding of the financial crisis of 2007-2008. When Lehman Brothers filed for bankruptcy, Barclays (second larg-

est bank in the United Kingdom) announced that it was buying the collapsed bank's prized US investment banking and capital markets business for US $250m.It purchased Lehman's North American investment-banking and trading divisions along with its New York headquarters building. The next week, Nomura Holdings (a leading Japanese financial holding company) announced that it would acquire Lehman Brother's franchise in the Asia-Pacific region, including Japan, Hong Kong and Australia as well as Lehman Brothers 'investment banking and equities businesses in Europe and the Middle East.

The Financial Crisis of 2007-2008 led to many bank failures in the United States. The Federal Deposit Insurance Corporation (FDIC) closed 465 failed banks from 2008 to 2012.In contrast, in the five years prior to 2008, only 10 banks failed.

Case 2-Washington Mutual, Inc.-abbreviated to WaMu-was a saving bank holding company and the former owner of WaMu Bank, which was the United States 'largest savings and loan association until its collapse in 2008.

Case 3-Western bank, a wholly owned bank subsidiary of W Holding Company, failed on April 30, 2010 and its deposits and assets were seized by the Federal Deposit Insurance Corporation and subsequently sold to Banco Popular de Puerto Rico.

Table 3: List of Recent Bank failures:

Bank name	City	Acquiring Institution	Closing Date
The First State Bank	Barboursville, United States	MVB Bank, Inc.	April 3,2020
Ericson State Bank	Ericson, United States	Farmers and Merchants Bank	February 14,2020
City National Bank of New Jersey	Newark, United States	Industrial Bank	November 1,2019
Resolute Bank	Maumee, United States	Buckeye State Bank	October 25,2019
Louisa Community Bank	Louisa, United States	Kentucky Farmers Bank Corporation	October 25,2019

The Enloe State Bank	Cooper, United States	Legend Bank,N.A.	May 31,2019
Washington Federal Bank for Savings	Chicago	Royal Savings Bank	December 15,2017
The Farmers and Merchants State Bank of Argonia	Argonia	Conway Bank	October 13,2017
Fayette County Bank	Saint Elmo	United Fidelity Bank,fsb	May 26,2017
Guaranty Bank	Milwaukee	First-Citizens Bank & Trust Company	May 5,2017
First NBC Bank	New Orleans	Whitney Bank	April 28,2017
Proficio Bank	Cottonwood Heights	Cache Valley Bank	March 3,2017
Seaway Bank and Trust Company	Chicago	State Bank of Texas	January 27,2017
Harvest Community Bank	Pennsville	First-Citizens Bank & Trust Company	January 13,2017



CHECK YOUR PROGRESS:

13. What is merger?
14. What is absorption?
15. What is consolidation?
16. What is acquisition?
17. What is Horizontal Merger?
18. What is Vertical Merger?
19. What is Conglomerate Merger?



15.8 LET US SUM UP

- Eurodollars are time deposits denominated in U.S dollars at foreign banks or overseas branches of American banks.
- Euro-dollar market is the creation of the international bankers. It is simply a short-term money market facilitating banks' borrowings and lending of U.S. dollars.

- The characteristics of Euro dollar market are that it is basically an international, independent, wholesale market. It is highly competitive and sensible with a short term interbank transactions.
- Eurodollars have come into existence on account of the regulation issued by the Board of Governors of the U.S. Federal Reserve System, which does not permit the banks to pay interest to the depositors above a certain limit. As such, banks outside the United States tend to expand their dollar business by offering higher deposit rates and charging lower lending rates, as compared to the banks inside the U.S.
- Loan syndication involves a small group of knowledgeable and well capitalised banks that agree to provide the entire loan to a much wider range of smaller banks by sharing of credit risk.
- External Commercial Borrowings (ECBs) are borrowings raised from the international markets by corporates.
- Mergers and Acquisitions have been the principal tools of corporate restructuring in India since 1991. It is a useful tool for the growth and expansion in the banking industry which helps in survival of the weak banks by merging into the larger bank.



15.9 FURTHER READING

1. Management of Banking and Financial Services
    - Padmalatha Suresh
    - Justin Paul
2. Strategic Management
    - VSP Rao
    - V Hari Krishna
3. The Indian Financial System
    - Bharati V. Pathak

15.10 ANSWER TO CHECK YOUR PROGRESS

Ans to Q. No. 1. Eurodollars are time deposits denominated in U.S dollars at foreign banks or overseas branches of American banks.

Ans to Q. No. 2. The Russians were the first depositors of dollars in European banks.

Ans to Q. No. 3. The deposits are not subject to American banking regulations.

Ans to Q. No. 4. During the credit crunch of 1968 and 1969, U.S. commercial banks relied on the Eurodollar market to escape the effects of the interest rate ceiling imposed by the Federal Reserve under Regulation.

Ans to Q. No. 5. Euro dollar market, a part of the Euro currency market is considered to be the largest.

Ans to Q. No. 6. Syndicated loans are credits granted by a group of banks to a borrower.

Ans to Q. No. 7. Loan syndication allows banks to diversify, expanding their lending to broader geographic areas and industries.

Ans to Q. No. 8. The Euro market is the biggest source of credit of syndicated loan.

Ans to Q. No. 9. The arranging bank is the lead manager.

Ans to Q. No. 10. Information Memoranda document is prepared by the borrower and the lead manager.

Ans to Q. No. 11. External Commercial Borrowings (ECBs) are borrowings raised from the international markets by corporates.

Ans to Q. No. 12. Automatic Route and Approval Route

Ans to Q. No. 13. Merger is defined as the combination of two relatively comparable organisations into one. It occurs when two or more companies combines and the resulting firm maintains the identity of one of the firms.

Ans to Q. No. 14. Absorption is a combination of two or more companies into an existing company. All companies except one lose their identity in a merger through absorption



15.10 MODEL QUESTIONS

1. How did the Eurodollar market originate? What factors have been responsible for its growth?
2. What is the procedure of loan syndication?
3. What is meant by External Commercial Borrowings? Elucidate the impact of ECBs on Indian economy.
4. What are the implications of mergers and acquisitions in the banking sector?

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