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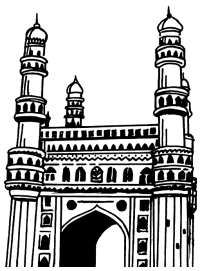

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MBA
II Year IV Semester

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II Year IV Semester

INTERNATIONAL FINANCIAL MANAGEMENT

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UNIT I

INTRODUCTION :

An overview, Importance, nature and scope of International Financial Management, Domestic FM Vs. IFM, International Business Methods, Recent changes and challenges in International Financial Management.

1.1 INTERNATIONAL FINANCIAL MANAGEMENT

Q1. What is International Financial Management ?

(OR)

What do you understand by International Financial Management?

(OR)

What do you mean by International Financial Management?

Ans : **(Sep.-20, May-19)**

Meaning

International Financial Management is important to companies that have no international business because these companies must recognize how their foreign competitors will be affected by movements in exchange rates, foreign interest rates, labor costs, and inflation. Such economic characteristics can affect the foreign competitors' costs of production and pricing policies.

International Financial Management came into being when the countries of the world started opening their doors for each other. This phenomenon is well known with the name of "liberalization". Due to the open environment and freedom to conduct business in any corner of the world, entrepreneurs started looking for opportunities even outside their country-boundaries.

The spark of liberalization was further aired by swift progression in telecommunications and transportation technologies that too with increased accessibility and daily dropping prices. Apart from everything else, we cannot forget the contribution of financial innovations such as currency derivatives; cross border stock listings, multi-currency bonds and international mutual funds.

The resultant of liberalization and technology advancement is today's dynamic international business environment. Financial management for a domestic business and an international business is as dramatically different as the opportunities in the two. The meaning and objective of financial management does not change in international financial management but the dimensions and dynamics changes drastically.

Definition

(i) According to Archer and Ambrosia International financial management is the management of a firm's assets and liabilities considering the global economy in which the firm operates.

"Financial management is the application of the planning and control functions to the finance functions"

1.1.1 Importance

Q2. Explain the importance of international financial management.

(OR)

Explain the implications of international financial management.

Ans : **(Dec.-19, May-19)**

Four major facets which differentiate international financial management from domestic financial management are introduction of foreign

currency, political risk and market imperfections and enhanced opportunity set.

1. Foreign Exchange

It's an additional risk which a finance manager is required to cater to under an International Financial Management setting. Foreign exchange risk refers to the risk of fluctuating prices of currency which has the potential to convert a profitable deal into a loss making one.

2. Political Risks

Political risk may include any change in the economic environment of the country viz. Taxation Rules, Contract Act etc. It is pertaining to the government of a country which can anytime change the rules of the game in an unexpected manner.

3. Market Imperfection

Having done a lot of integration in the world economy, it has got a lot of differences across the countries in terms of transportation cost, different tax rates, etc. Imperfect markets force a finance manager to strive for best opportunities across the countries.

4. Enhanced Opportunity Set

By doing business in other than native countries, a business expands its chances of reaping fruits of different taste. Not only does it enhances the opportunity for the business but also diversifies the overall risk of a business.

1.1.2 Nature

Q3. Explain the Nature of International Financial Management.

Ans : **(Imp)**

1. Investment Decisions

When a company innovate a specific technology and its product is mature in the markets abroad or when the company wants to reap the location advantage in a foreign country, it sets up an affiliate there. Whatever the motivation behind foreign investment or foreign manufacturing, the company evaluates the cash inflow and outflow during the life of the project and makes investment only when the net present value of cash flows is positive. Besides, it takes into account the foreign exchange risk and the political risk involved.

IFM thus studies the different theories of overseas production, the various strategies of investment, capital budgeting decision and evaluation of foreign exchange and political risks pertaining to overseas investment.

2. International Working Capital Decisions

When foreign operation begins, the parent company evaluates different sources of working capital so that the cost of financing is the cheapest. In this context, an international company maintains an edge over a domestic company so far as it can easily reach the international financial market or can siphon resources from one subsidiary to another.

When targeting sources of funds, it has also to decide the size of current assets because these facts have a close link with the cost of production and the overall profitability of the firm. IFM helps in taking a correct decision regarding the size of working capital and suggests a mechanism for its management. It also deals with how foreign trade is financed.

3. Financial Decisions of the MNCs

Any investment needs rising of funds. The MNCs take advantage of the many innovations which have taken place in the international financial market and IFM guides them on how to take advantage of these. It deals with how different instruments are issued to raise funds and how swaps are used for minimizing the cost of funds. The nature and management of interest-rate exposure too form a part of IFM.

4. International Accounting and Taxation/ Money Management Decisions

International accounting forms an integral part of IFM. It analyses the techniques for consolidation of financial statements of the various affiliates, international audit, international financial reporting and international taxation. Transfer pricing is an important area of international accounting as it is used for lowering the overall burden of taxes and tariff as well as for working capital management. Similarly, international tax system should be so designed that it fosters economic efficiency and does not come in the way of the cross-border movement of goods and factors of production.

Q4. What are multi national corporations (MNCs) and what economic roles do they play?

Ans :

A Multinational Corporation (MNC) is a company involved in producing and selling goods and services in more than one country. It usually consists of a parent company located in its home country with numerous foreign subsidiaries. As business expands, the awareness of opportunities in foreign markets also increases. This, ultimately, evolves into some of them becoming MNCs so that they can enjoy the benefits of international business opportunities.

A knowledge of International Finance is crucial for MNCs in two important ways. First, it helps the companies and financial managers to decide how international events will affect the firm and what steps can be taken to gain from positive developments and insulate from harmful ones. Second, it helps the companies to recognize how the firm will be affected by movements in exchange rates, interest rates, inflation rates and asset values.

The consequences of events affecting the stock markets and interest rates of one country immediately show up around the world. This is due to the integrated and interdependent financial environment which exists around the world. Also, their have been close links between money and capital markets. All this makes it necessary for every MNC and aspiring manager to take a close look at the ever changing and dynamic field of International Finance.

Roles

1. Non-Debt Creating Capital Inflows

In pre-reform period India was greatly dependent on External Commercial Borrowing (ECB) which were debt-creating capital inflows resulting in an increase of external debt and debt service payments. It has also resulted in balance of payments crisis in 1991. Through direct foreign investment of MNCs liability of debt-servicing payments can be prevented. MNCs can effectively minimize the stress of balance of payments of India.

2. Transfer of Technology

MNCs also play an active role in transferring modem technology to developing countries which is required to enhance productivity of labourers and to start new productive ventures. Beside new technology, MNCs also transfer skills and technical know how to use new machinery. MNCs play an important role in Indian economy to upgrade technology by spending a large amount of money which will benefit the developing countries.

3. Promoting Exports

MNCs play an important role in promoting exports of country by producing goods at cheaper rates and efficiently. MNCs were allowed to export the product in order to gain foreign exchange for India.

4. Investment in Infrastructure

MNCs has much financial resources and are capable to raise resources both inside and outside India. MNCs can invest in infrastructure which leads to industrial progress and create employment opportunities in Indian economy. Hence, MNCs stimulate economic growth.

1.1.3 Scope

Q5. Explain the scope of international financial management.

(OR)

Explain the components of international financial management.

Ans : **(Dec.-19, May-19, Imp.)**

International financial management is subject to several external forces. The more important of them, namely foreign exchange markets, currency convertibility, international monetary system, balance of payments, and international financial markets.

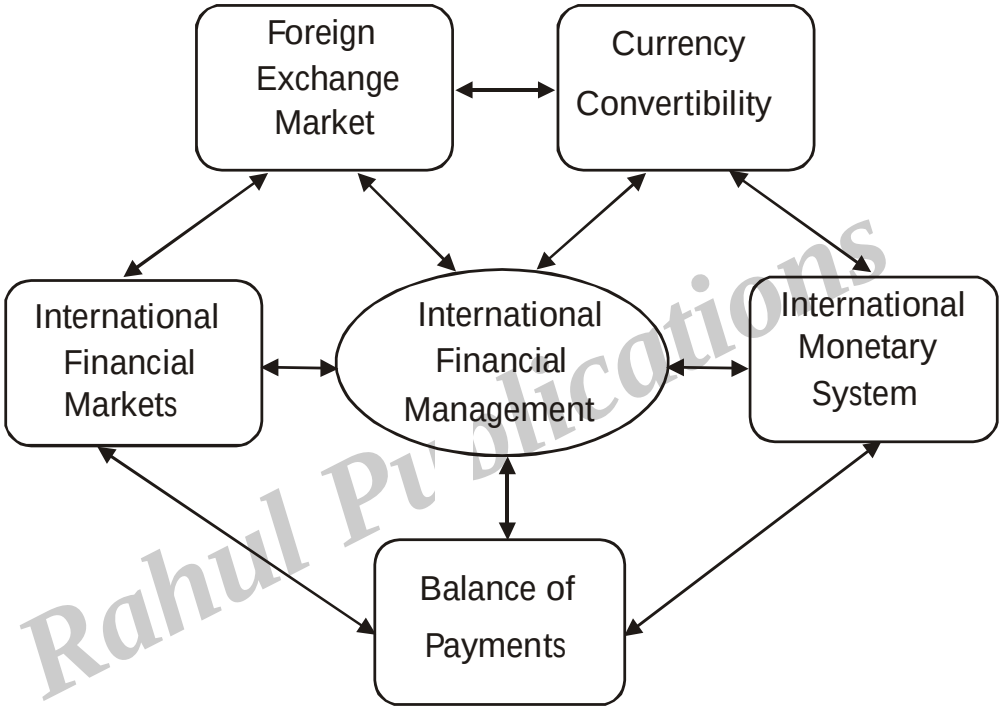

Fig. : Scope of International Financial Management

1. Foreign Exchange Market

The foreign exchange market is the place where money denominated in one currency is bought and sold with money denominated in another currency. For example, if US firm imports goods from a British company, US dollar needs to be converted into sterling. This conversion from one currency into another is typical of the transactions that take place in the foreign exchange market.

A well developed foreign exchange market is of vital importance to international business as it discharges three important functions; facilitate, conversion of currencies, provides credit for international transactions, and minimizes exposure to the risks of exchange rate fluctuations.

2. Currency Convertibility

The discussion of the foreign exchange market was based on the assumption that the currencies of various countries are freely convertible into other currencies. This assumption is not valid. Many countries restrict the ability of residents and non-residents to convert the local currency into foreign currency, making international businesses more difficult.

A country's currency is said to be freely convertible when the country's government allows both residents and non-residents to purchase unlimited amounts of foreign currencies with the local currency. A currency is non- convertible when neither residents nor non-residents are allowed to convert local currency into a foreign currency.

3. International Monetary System

Every country needs to have its own monetary system and an authority to maintain order in the system. Monetary system facilitates trade and investment. India has its own monetary policy that is administered by the Reserve Bank of India. Primarily, RBI aims at controlling inflation and money supply and maintaining an interest rate regime that is helpful to economic growth.

Extending the argument to the global level, there is need for an international monetary system to promote trade and investment across the countries. Such a system has been in existence since 1944. It was in that year that representatives of 44 countries met at Bretton Woods (New Hampshire, USA) to give a concrete shape to the international monetary system and to decide on the institutional framework to maintain such a system.

An agreement was signed by all the representatives present (the agreement came to be known as Bretton Woods Agreement) committing themselves to set up two major institutions - International Monetary Fund (IMF) and the World Bank. The task of the IMF would be to maintain order in the international monetary system, and that of the World Bank would be to promote general economic development.

4. Balance of Payments

Balance of Payments (BOP) is a statistical statement that systematically summarizes, for a specified period of time, the monetary transactions of an economy with the rest of the world. BOP data help to measure financial transactions between residents of the country and residents of all other countries. Transactions include exports and imports of goods and services, income flows, capital flows, and gifts and similar one-sided transfer payments.

5. International Financial Market

The international financial market can be compartmentalized into two segments. One is the international money market which is represented by the flow of short-term funds. International banks or the short-term securities come under this segment. On the other hand, the international capital market forms the other segment where medium and long-term funds flow. Irrespective of such a distinction between the two segments, there are a number of agencies and instruments through which funds move to the resource-needy institutions or firms.

Q6. Briefly discuss the distinguishing features of international finance.

Ans :

International Finance is a distinct field of study and certain features set it apart from other fields The important distinguishing features of international finance are discussed below:

1. Foreign exchange risk

An understanding of foreign exchange risk is essential for managers and investors in the modem day environment of unforeseen changes in foreign exchange rates. In a domestic economy this risk is generally ignored because a single national currency serves as the main medium of exchange within a country. When different national currencies are exchanged for each other, there is a definite risk of volatility in foreign exchange rates. The present International Monetary System set up is characterized by a mix of floating and managed exchange rate policies adopted by each nation keeping in view its

interests. In fact, this variability of exchange rates is widely regarded as the most serious international financial problem facing corporate managers and policy makers.

At present, the exchange rates among some major currencies such as the US dollar, British pound, Japanese yen and the euro fluctuate in a totally unpredictable manner. Exchange rates have fluctuated since the 1970s after the fixed exchange rates were abandoned. Exchange rate variation affect the profitability of firms and all firms must understand foreign exchange risks in order to anticipate increased competition from imports or to value increased opportunities for exports.

2. Political risk

Another risk that firms may encounter in international finance is political risk. Political risk ranges from the risk of loss (or gain) from unforeseen government actions or other events of a political character such as acts of terrorism to outright expropriation of assets held by foreigners. MNCs must assess the political risk not only in countries where it is currently doing business but also where it expects to establish subsidiaries. The extreme form of political risk is when the sovereign country changes the "rules of the game" and the affected parties have no alternatives open to them.

3. Expanded opportunity sets

When firms go global, they also tend to benefit from expanded opportunities which are available now. They can raise funds in capital markets where cost of capital is the lowest. In addition, firms can also gain from greater economies of scale when they operate on a global basis.

4. Market imperfections

The final feature of international finance that distinguishes it from domestic finance is that world markets today are highly imperfect. There are profound differences among nations' laws, tax systems, business practices and general cultural environments. Imperfections in the world financial markets tend to restrict the extent to which investors can diversify their portfolio. Though there are risks and costs in coping with these market imperfections, they also offer managers of international firms abundant opportunities.

1.2 DOMESTIC FM VS. IFM

Q7. How International Financial Management is different from Financial Management at Domestic Level.

(OR)

Compare and contrast between international and domestic financial management.

(OR)

Distiguish between international finance and domestic finance.

(OR)

How international financial management is differ from domestic financial management?

(OR)

Explain the differences between Domestic FM and IFM.

Ans : **(Sep.-20, Imp.)**

S.No.	Nature	International Financial Management	Domestic Financial Management
1.	**Introduction**	International Financial Management is a well-known term in today's world and it is also known as international finance. It means financial management in an international business environment. It is different because of the different currency of different countries, dissimilar political situations, imperfect markets, diversified opportunity sets.	International Financial Management came into being when the countries of the world started opening their doors for each other. This phenomenon is well known by the name of "liberalization"
2.	**International Financial Management Vs. Domestic Financial Management**	International finance is different from domestic finance in many aspects and first and the most significant of them is foreign currency exposure. There are other aspects such as the different political, cultural, legal, economical, and taxation environment. International financial management involves a lot of currency derivatives whereas such derivatives are very less used in domestic financial management.	In domestic financial management, we aim at minimizing the cost of capital while raising funds and try optimizing the returns from investments to create wealth for share-holders. We do not do any different in inter-national finance. So, the objective of financial management remains same for both domestic and international finance i.e., wealth maximization of shareholders. Still, the analytics of international finance is different from domestic finance.
3.	**Foreign Exchange Risk**	It's an additional risk which a finance manager is required to cater to under an International Finan-cial Management setting. Foreign exchange risk refers to the risk of fluctuating prices of currency which has the potential to convert a profitable deal into a loss making one.	In domestic financial management the finance manager is required to deal in to deal with foreign exchange, so there is no currency exchange risk.
4.	**Exposure to Foreign Exchange**	The most significant difference is of foreign currency exposure. Currency exposure impacts almost all the areas of an international business starting from your purchase from suppliers, selling to customers, investing in plant and machinery, fund raising etc. Wherever you need money, currency exposure will come into play and as we know it well that there is no business transaction without money.	In domestic financial management exposure to a single currency of particular country. Entire business transaction takes place in single currency.
5.	**Use of Derivatives Instrument**	In international financial management we use derivatives instrument to hedge the risk. risk.	In domestic financial management we do not use derivatives because there is less
6.	**Legal and Tax Environ-ment**	The other important aspect to look at is the legal and tax front of a country. Tax impacts directly to your product costs or net profits i.e. 'the bottom line' for which the whole story is written. Inter-national finance manager will look at the taxation structure to find out whether the business which is feasible in his home country is workable in the foreign country or not. The manager has to deal with different tax structure and legal laws & it's difficult to manage this.	In domestic financial management the finance manager have to deal with domestic country's legal rules and tax structure. He is more familiar with the laws of domestic country.
7.	**Macro Business Environment**	An international business is exposed to altogether a different economic and political environment. All trade policies are different in different countries. Financial manager has to critically analyze the policies to make out the feasibility and profitability of their business propositions.	In domestic financial management the manager is well aware the local macro business environment and he have to deal with macro business environment of single country.

8.	**Different Standards of Reporting**	If the business has a presence in say US and India, the books of accounts need to be maintained in US GAAP and IGAAP. It is not surprising to know that the booking of assets has a different treatment in one country compared to other. Managing the reporting task is another big difference. The financial manager or his team needs to be familiar with accounting standards of different countries.	In domestic financial management have to deal with reporting standard of domestic country only.
9.	**Capital Management**	In an MNC, the financial managers have ample options of raising the capital. A number of options create more challenge with respect to the selection of the right source of capital to ensure the lowest possible cost of capital.	In domestic financial management, there is single market to raise capital, there is no option go outside the domestic boundaries.
10.	**Banking Regulations**	The international financial management have to deal and follow the banking regulations of different countries. The different banking rule and regulations may negatively impact the international financial management.	The domestic financial management have to domestic country. There is more familiarity deal with banking rules and regulations of with banking rules and regulations.
11.	**Cultural Differences**	The international financial management deals with cultural differences of different countries, values, traditions etc. differ country to country. It effects the international financial management.	The domestic financial management deals with cultural environment of domestic country, so there is less risk due to cultural differences.
12.	**The Different Group of Stakeholders**	It is not only which along matters, there are other things which carry greater importance as the group of suppliers, customers, lenders, shareholders etc. All they carry altogether a different culture, a different set values and most importantly the language also may different. All this effect the international financial management.	The domestic financial management deals with stakeholders of single country and more information available about their like, dislike, preferences etc.

Q8. Explain the Factors influencing the development of International Finance.

(OR)

Briefly explain the factors influencing the growth of internal finance.

Ans :

(i) Impact of Inflation

If a country's inflation rate increases relative to the countries with which it trades, its current account will be expected to decrease, other things being equal. Consumers and corporations in that country will most likely purchases more goods overseas (due to high local inflations), while the country's exports to other countries will decline.

(ii) Impact of National Income

If a country's income level (national income) increases by a higher percentage than those of other countries, its current account is expected to decrease, other things being equal. As the real income level (adjusted for inflation) rises, so does consumption of goods. A percentage of that increase in consumption will most likely reflect an increased demand for foreign goods.

(iii) Impact of Government Policies

A country's government can have a major effect on its balance of trade due to its policies on subsidizing exporters, restrictions on imports, or lack of enforcement on policy.

(iv) Subsidies for Exporters

Some governments offer subsidies to their domestic firms, so that those firms can produce products at a lower cost than their global competitors. Thus, the demand for the exports produced by those firms is higher as a result of subsidies.

Many firms in China commonly receive free loans or free land from the government. These firms incur a lower cost of operations and are able to price their products lower as a result, which enables them to capture a larger share of the global market.

(v) Restrictions on Imports

If a country's government imposes a tax on imported goods (often referred to as a tariff), the prices of foreign goods to consumers are effectively increased. Tariffs imposed by the U.S. government are on average lower than those imposed by other governments. Some industries, however, are more highly protected by tariffs than others. American apparel products and farm products have historically received more protection against foreign competition through high tariffs on related imports.

In addition to tariffs, a government can reduce its country's imports by enforcing a quota, or a maximum limit that can be imported. Quotas have been commonly applied to a variety of goods imported by the United States and other countries.

(vi) Impact of Exchange Rates

Each country's currency is valued in terms of other currencies through the use of exchange rates, so that currencies can be exchanged to facilitate international transactions.

1.3 INTERNATIONAL BUSINESS

Q9. Define International Business. Explain the importance of International Business.

Ans :

International financial management (IFM) is concerned with the management of international business (IB) - related financial functions, commonly known as the international financial functions. The nature and scope of IFM will thus be clear if one tries to understand the nature and modes of international business, the forms of financial functions carried out by those participating in IB, and the complexities of international financial functions that differentiate them from domestic financial functions.

IB means carrying of business activities beyond national boundary. These activities include normally international trade of goods and services and also international production of goods and provision of services normally under the guard of foreign direct investment (FDI).

Importance

1. Expand Sales

The sales of any organization depend on the number of customers, their interest in the product/service and their purchasing power. The number of customers and their purchasing power are higher for the world as a whole than any single nation.

2. Minimize Risk

The important motive behind international business is that the organizations want to minimize their risk by minimizing the swings in sales and profits. They try to reduce their vulnerability to a single economy by having a border base in multiple geographies that equips them better against the downturn.

3. Acquire Resources

The other reason for entering into international business is to acquire resources such as raw materials, components, technology, capital, products or services. The reasons could be :

a) the non-availability of the resources in the home country.

b) the high price of the resources in the home country.

c) to enhance the quality/standard of the resources.

4. Cost

The cost aspect also plays an important role in the inclination of organizations towards international business. Many organizations go in for international business in order to become more competitive internationally by reducing their costs.

5. Regional Economic Integration

Regional economic integration basically means coming together of nations in a particular geographic location by way of reducing/eliminating all the tariff and non-tariff barriers among themselves.

6. Technology

The technological developments have made possible the journey of globalization from a theoretical concept to a practical reality. The main contributors in this have been the technological developments in transportation, information and communication technology.

7. Multinational Enterprises

A multinational enterprise (MNE), is a corporation or an enterprise that manages production or delivers services in more than one country. It can also be referred to as an international corporation. The International Labour Organization (ILO) has defined an MNC as a corporation that has its management headquarters in one country, known as the home country, and operates in several other countries, known as host countries.

8. Counter-competition

Another reason for international business is the counter-competition strategy which the organizations follow. Organizations want to enter the foreign market in order to nullify/ diminish competition in the home market or put on a defensive the potential competitor or they want to have a feel of global competition so that they could defend their domestic market share in a better way.

9. Domestic Market Constraints

Domestic demand constraints drive many companies to expanding the market beyond the national border.

The market for a number of products tends to saturate or decline in the advanced countries. This often happens when the market potential has been almost fully tapped.

In United States, for example, the stock of several consumer durables like cars, TV sets etc. exceed the total number of households. Estimates are that in the first quarter of the 21st century, while the population in some of the advanced economies would saturate or would grow very negligibly, in some others there would be a decline. Such demographic trends have very adverse effects on certain lines of business.

1.3.1 International Business Methods

Q10. Explain the various International Business Methods.

(OR)

What are the various methods of international financial?

(OR)

What are the various methods by which international firms conduct their business?

(OR)

Briefly explain the five methods used to conduct international business activity by firms.

Ans : **(May-19, Imp.)**

Firms use several methods to conduct international business. The most common methods are these :

1. Exporting
2. Licensing
3. Franchising

4. Joint Ventures
5. Management contracts

(i) Exporting

Exporting requires the least amount of involvement by a firm in terms of resources needed and allocated to serving an overseas market. Basically, the company uses existing domestic capacity for production, distribution, and administration and designates a certain portion of its home production to a market abroad. It makes the goods locally and sends them by air, ship, rail, truck, or even pipeline across its nation's borders into another country's market.

Entrance into an export market frequently begins casually, with the placement of an order by a customer overseas. At other times, an enterprise sees a market opportunity and actively decides to take its products or services abroad. A firm can be either a direct or an indirect exporter. As a direct exporter, it sees to all phases of the sale and transmittal of the merchandise. In indirect exporting, the exporter hires the expertise of someone else to facilitate the exchange.

Forms

Forms of exporting includes :

1. **Indirect Exporting :** Indirect exporting is exporting the products either in their original form or in the modified form to a foreign country through another domestic country.
2. **Direct Exporting :** Direct exporting is selling the products in a foreign country directly through its distribution arrangements or through a host country's.

   Ex. : Baskin Robins initially exported its Ice Cream to Russia in 1990 and later opened 74 outlets with Russian partners. Finally in 1995 it established its Ice Cream plan in Moscow.

Advantages

1. **Increased sales and profits :** Selling goods and services to a market the company never had before boost sales and increases revenues. Additional foreign sales over the long term, once export development costs have been covered, increase overall profitability.
2. **Enhanced domestic competitiveness :** Most companies become competitive in the domestic market before they venture in the international arena. Being competitive in the domestic market helps companies to acquire some strategies that can help them in the international markets.
3. **Gain global market shares :** By going international, companies will participate in the global market and gain a piece of the huge international marketplace.
4. **Diversification :** Selling to multiple markets allows companies to diversify their business and spread their risk. As a result, companies are not be tied to changes within the domestic market or of one specific country.
5. **Lower Per Unit Costs :** Capturing an additional foreign market will usually expand production to meet foreign demand. Increased production can often lower per unit costs and lead to a more efficient use of existing capacities.
6. **Compensation for seasonal demands :** Companies whose products or services are only used during certain seasons domestically may be able to sell their products or services in foreign markets during different times of the year.
7. **Potential for company expansion :** Companies who venture into the export business usually have to have a presence or representation in the foreign market. This might require additional personnel and thus lead to expansion.
8. **Sell excess production capacity :** Companies who have excess production for any reason can probably sell their products in a foreign market and not be forced to give deep discounts or even dispose of their excess production.
9. **New Knowledge and Experience :** Going international can yield valuable ideas and information about new technologies, new marketing techniques and foreign competitors. The gains can help a company's domestic as well as foreign businesses.

10. **Product life cycle expansion :** Many products go through various cycles namely introduction, growth and maturity before declining signifying the end of their usefulness in a specific market. Once a product reaches its mature stage in a given market, it can be introduced to a different market where it will be perceived as new.

Disadvantages

While the advantages of exporting far outweigh the disadvantages, SMEs face the following challenges when venturing into the international marketplace.

1. **Extra costs :** Because it takes more time to develop extra markets, and the pay back periods are longer, the up-front costs for developing new promotional materials, allocating personnel to travel and other administrative costs associated to market a product can strain the meager financial resources of SME.
2. **Product modification :** When exporting, companies may need to modify their products to meet foreign country safety and security codes, and other import restrictions. At a minimum, modification is often necessary to satisfy the importing country's labeling or packaging requirements.
3. **Financial risk :** Collections of payments using the available methods (open-account, prepayment, consignment, documentary collection and letter of credit) are not only more time-consuming than for domestic sales, but also more complicated. Thus, companies must carefully weigh the financial risk involved in doing international transactions.
4. **Export licenses and documentation :** Though the trend is toward less export licensing requirements, the facts that some companies have to obtain an export license is to export their goods make them less competitive. In many instances, the documentation required to export is more involved than for domestic sales.
5. **Market information :** Finding information on foreign markets is unquestionably more difficult and time-consuming than finding information and analyzing domestic markets. In less developed countries, for example, reliable information on business practices, market characteristics and cultural barriers may be unavailable or very limited.

(ii) Licensing

Licensing is a contractual agreement in which one firm permits another to produce and market its product and use its brand name is return for a royalty or other compensation.

Licensing provides advantages to both parties. The licensor receives profits in addition to these generated from operations in domestic markets. These profits may be additional revenues from a single process or method used at home that the manufacturer is unable to utilize abroad. The method or process could have the beneficial effect of extending the life cycle of the firm's product beyond that which it would experience in local markets.

Advantages

1. Low investment on the location.
2. Low financial risk to licensor.
3. Less efforts, licensor can investigate the foreign market.
4. Licensee gets the benefits with less investment on R & D.
5. Licensee escapes himself from the risk of product.

Disadvantages

1. Reduce the opportunities for both the licensor and licensee.
2. Both parties are responsible for quality and promoting the product.
3. High cost and both parties involve in the market.
4. There is scope for misunderstanding in agreement.
5. Trade secrete can leakage licensee may develop reputation.

(iii) Franchising

Franchising is a form of licensing. The franchising can exercise more control over the franchised compared to that in licensing. International franchising is growing at a fast rate.

Under franchising, an independent organization called the franchise operates the business under the name of another company called the franchiser.

Services

Under this agreement the franchisee pays a fee to the franchiser. The franchiser provides the following services to the franchisee.

- Trade marks
- Operating system
- Product reputations
- Continuous support system like advertising.

Employees, training, reservation services, quality assurance programmes etc.

Basic Issues

1. The franchiser has been successful in his home country. McDonald was successful in USA due to the popular many and fast and efficient services.
2. The factor for the success of McDonald are later transported to other countries.
3. The franchiser may have the experience in franchising in the home country before going for international franchising.
4. Foreign investors should come froward for introducing the product on franchising basis.

Franchising Agreements

The franchising agreement should contain important items as follows :

1. Franchisee has to pay a fixed amount and royalty based on the sales to the franchiser.
2. Franchise should agree to adhere to follow the franchiser's requirements like appearance, financial reporting, operating procedures, customer services etc.
3. Franchiser helps the franchisee in establishing the manufacturer facilities, service facilities, advertising, corporate image etc.
4. Franchiser allows the franchisee some degree of flexibility in order to meet the local tastes and preferences.

Franchising is more popular in USA.

Advantages

1. Franchiser can enter global market with low investment and low risk.
2. Franchiser can get the information regarding the market culture, customs and environment of the host country.
3. Franchiser learn more lessons from the experiences of the franchisee.
4. Franchise can easily start a business with low risk.
5. Franchise get the benefits of R & D with low cost.
6. Franchise escapes from the risk of product feature.

(iv) Joint Venture

Under a Joint Venture (JV) arrangement, the foreign company invites an outside partner to share stock ownership in the new unit. The particular participation of the partners may vary with some companies accepting either a minority or majority position.

Once a joint venture partner secures part of the operation, the international firm can no longer function independently, which sometimes leads to inefficiencies and disputes over responsibility for the venture. If an international firm has strictly defined operating procedures such as for budgeting, planning, and marketing it may become difficult to get the JV company to accept the same methods of operation.

It may also arise when the JV partner wants to maximize dividend payout instead of reinvestment, or when the capital of the JV has to be increased and one side is unable to raise the required funds. JVs can be successful if the partners share the same goals with one of them accepting primary responsibility for operations matters.

Advantages

1. Joint ventures are commonly used because they offer important advantages to the foreign firm.
2. By bringing in a partner, the company can share the risk for a new venture.
3. Joint Venture partner may also have important skills or contracts of value to the international firm.
4. Sometimes, the partner may be an important customer who is willing to contract for a portion of the new units output in return for an equity participation.
5. The partner may also represent important local business interests with excellent contracts to the government.
6. A firm with advanced product technology may also gain market access through the Joint Venture route by teaming up with companies that are prepared to distribute its products.

Disadvantages

1. Joint venture result in disputes between or among parties due to varied interests.
2. The partners delay the decision-making once the dispute arises. Then the operation becomes unresponsive and inefficient.
3. Decision-making is normally slowed down in Joint venture due to the involvement of a number of parties.
4. Scope of collapse of Joint venture is more due to entry of competitors, changes in the business environment in the two countries, changes in the partners strength, etc.

(v) Management Contract

One of the most important assets a company may have at its disposal is management talent, which it can transfer internationally, to its own foreign investment.

(a) Management contracts are means by which a company may transfer such talent by using part of its management personnel to assist a foreign company for a specified period for a fee.

(b) The company may gain income with this little capital outlay.

(c) Contracts usually cover three to five years, and fixed fees or fees based on volume rather than profits are most common.

Q11. Explain the various theories of International business.

Ans :

The following are the various theories of international trade.

1. Mercantilism
2. Absolute Advantage
3. Comparative Advantage
4. Heckscher-Ohlin Theory
5. Product Life Cycle Theory
6. Global Strategic Rivalry Theory
7. National Competitive Advantage Theory

Above are the 7 different types of international trade theories, which are presented by the various authors in between 1630 and 1990.

1. Mercantilism

The oldest of all international trade theories, Mercantilism, dates back to 1630. At that time, Thomas Mun stated that the economic strength of any country depends on the amounts of silver and gold holdings. Greater are the holdings, more economically independent a country is.

Furthermore, the idea of favoring greater exports and promoting efforts to minimize imports also belongs to the same theory. Well! The thinking behind this concept is evident since you pay for the imports from the pay that you get from exports. So, if you a country has a lot to pay for the imported products then it will get from exported products, its economy will get inclined towards declination. Even though the view is old but the roots of modern thinking towards the financials is deeply embedded in it.

2. Absolute Advantage

The Theory of Absolute Advantage is based on the notion of increasing the efficiencies in the production processes. In 1776, Adam Smith, a renowned financial expert of the time being, proposed the theory that the manufacturing a product with high efficiency as compared to any other country on the globe is highly advantageous.

The concept can just be understood by the idea that if two countries specialize in exactly same kind of product. But the product of one country being better in quality or lower in price will bring tremendous absolute advantage to the country as compared to the other one. From another point of view, if two countries specialize in entirely different products, then they can quickly increase their influence in their localities by having trade with each other (by creating absolute advantages at both ends).

3. Comparative Advantage

As compared to absolute advantage, Comparative Advantage favors relative productivity. According to this concept, as put forward by David Ricardo in 1817, a country with maximum absolute advantage in the creation of more than one product as compared to other, can still trade with another country with less efficient ways to create that product, that's readily available in first, to boost its productivity.

4. Heckscher-Ohlin Theory

Both the Absolute as well as Comparative international trade theories assume that the choice of the product that can prove itself to be of great advantage is led by free and open markets instead of using the resources available inland. That's what caused Bertil Ohlin and Eli Heckscher to put forward the idea of determination of the prices that relies on the differences in supply and demands.

This can just be understood as, if the supply of a product grows greater than it is in demand in the market, its price falls and vice versa. So, export of a country should mainly consist of the product that is abundantly available in it, and imports should count the products that are in high demand. Since, this concept ensures utilization the country's factors like labor, land and funding sources for the purpose of product manufacturing that's why it is also known by the name of "factor proportion theory."

5. Product Life Cycle Theory

In the 1970s, Raymond Vernon introduced the notion of using a product's life cycle to explain global trade patterns, in the field of marketing. According to theory, as the demand for a newly created product grows, the home country starts exporting it to other nations. Where when the demand grows, local manufacturing plants are opened to meet the request. And the scenario covers the whole globe time to time, thus making that product a standardization.

You can take the example of computers in consideration to understand how this works. The earlier personal computers appeared in 1970's available only in a few countries and from 1980's to 1990's, the product was moving through the stage of maturity where the production spread to many other nations. And now in 21 st century, every third house has a PC in it.

6. Global Strategic Rivalry Theory

The continuous evolutionary behavior of international trade theories brings us back in the 1980's where Kalvin Lancaster and Paul Krugman introduced the concept of strategies, based on global level rivalries, targeting multinational corporations and the struggle needed in achieving higher advantages as compared to other international companies.

According to the concept, a new firm needs to optimize a few factors that will lead the brand in overcoming all the barriers to success and gaining an influential recognition in that global market. In all these factors, a thorough research and timed developmental

steps are crucial. Whereas, having the complete ownership rights of intellectual properties is also necessary.

Furthermore, the introduction of unique and useful methods for manufacturing as well as controlling the access to raw material will also come handy in the way.

7. National Competitive Advantage Theory

Michael Porter in 1990's suggested that the success of any business in international trade depends on upgradable and innovational capacities of the industry as well as four other factors, which determine how that firm is going to perform in this global level race. The main concept behind this theory gives the feel of holding factor proportion as well as many other international trade theories in it.

One of those factors is the availability of resources in the local market and their prices which are necessary for providing a sustainable and stable environment for the trade to grow. Moreover, the ability of the firm to face competitors and its capacity to upgrade itself also determines the success rate of that brand. Furthermore, keeping the track of the change in demand and the behavior of local suppliers is also important.

Q12. Explain the advantages and disadvantages of International Business.

Ans :

Firms engage in International Business because of various reasons, all of which are linked to the desire of either increasing profits and sales or protecting them from being eroded by competition.

Advantages

1. Expansion of Sales and Profits

The main objective of any firm is to increase the sales and profits when this not achieved at home by any reason, firm began to search for new markets by increasing their sales and reaching international market. So increased sales are a major motive for company's expansion into international business. Many of small companies also depends on foreign sales.

2. Expanding the Production Capacity

Some of the domestic companies expanded their production capacities more than the demand for the product in the domestic countries. These companies, in such cases are forced to sell their excess production in foreign developed countries.

Eg. : Toyota of Japan.

3. Availability of Technology and Managerial Competence

Availability of advanced technology and managerial competence in some countries act as pulling factors for business firm from the home country. Companies from the developing world are attached by the developed countries due to these reasons. In fact American companies, in recent years, depend on Japanese for technology and management enterprise.

4. High Cost of Transportation

Initially companies enter foreign countries through their marketing operations. At this stage, the companies realize the challenge from the domestic companies. Added to this, the home companies enjoy higher profits margins where as the foreign firms suffer from lower profit margins. The major factor for this situation is the cost of transportation of the products.

5. Nearness to Raw Materials

The sources of highly qualitative raw material and Bulk raw materials is a major for attracting the companies from various foreign countries. Most of the us based and European based companies located their manufacturing facilities in Saudi Arabia, Bahrain, Qatar, Oman, Iran and other middle east countries due to the availability petroleum.

6. Availability of Duality Human Resources at Low Cost

This is a major factor in recent times, for software, high technology and Tele-communication companies to locate their operations in India. India is a major source for high quality and low cost human resources

unlike U.S.A. developed European countries and Japan. Importing Human Resources from India by these firms is costly rather than locating their operations in India. Hence these companies started their operations in India and other similar countries.

7. Liberalization and Globalization

Most of the countries in the globe liberalized their economies and opened their countries to the rest of the globe. These changed policies attracted the multinational companies to extend their operations to these countries.

8. To Increase Market Share

Some of the large scale business firms would like to enhance their market share in the global market by expanding and intensifying their operations in various foreign countries. Companies that expand internally to be oligopolistic. Smaller companies expand internationally for survival while the larger companies expand to increase the market share.

9. To avoid tariffs and import quotas

It was quite common before globalization that the Govt's imposed tariffs or duty on imports to protect the domestic company. Some times Govt. Also fixes import quotas in order to reduce the competition to the domestic companies from the competent foreign companies. These practices are pre valuer not only in developing countries but also in advanced countries.

10. Minimizing the Competitive Risk

Some companies engage in International Business for defensive reasons. They want to counter competitors advantage which they may gain in foreign market, due to which, they could be hurt domestically. Such companies to avoid such a fear may enter foreign markets primarily to preveur a competitor from gaining advantage.

Disadvantages

1. Political Factors

The major factors that discourage the spread of international business is political instability. Frequent changes of political parties in power and thereby changes in Government policies of a country creates political risks for the growth of international business.

2. Exchange Instability

Depreciation in value of currencies of different countries is caused due to imbalances in the balance of payments, political changes and foreign indebtedness. This leads to changes in the exchange rates of domestic currencies in terms of foreign currencies. This factor demotivates the growth of international business.

3. High Cost

Internationalizing the domestic business involves many activities such as market survey, product improvement, quality up gradation, managerial efficiency, etc. These activities involves high cost and risk and they need huge investment. Hence many business houses restrict themselves from international their business.

4. Bureaucratic Practices of Government

Delays in sanctions, grating permission and licences to foreign companies are bureaucratic attitudes and practices of Government. The best example is Indian Government before 1991.

5. Tariffs, Quotas and Trade Barriers

In order to protect domestic business the Governments of different countries impose tariffs, import and export quotas and trade barriers. Imposition of barriers is based on political and diplomatic relations between or among Governments.

1.4 Recent Changes and Challenges in International Financial Management

Q13. Explain the recent changes in International Financial Management.

(OR)

What are the recent changes in International Financial Management?

Ans : **(Dec.-19)**

International trade is increasingly recognized as a vital engine for economic development. IFM has undergone vast changes in international trade and global financial markets. In 2004, the value of world merchandise trade rose by nearly 21%, the highest growth rate in 25 years, amounting to nearly USD 8.9 trillion. Taking account of dollar price changes, real world merchandise trade expanded by 9% in 2004, almost doubling from 5% in 2003. It continues to grow more rapidly than global Gross Domestic Products (GDP).

For example, world trade grew at nearly 6% on average in 1994-2004, while global GDP at market exchange rates grew less than 3% in the same period. In the meantime, a number of new trends in international trade have been observed over recent years.

Mentioned below are among such trends which, in particular, are relevant when preparing the Framework.

1. Developing countries' trade

In 2004, the share of developing countries in world merchandise trade stood at 31%, having increased from about 20% in the mid-1980s. This is the highest level since 1950. It is observed that developing countries are increasingly becoming an important destination for the exports of developed countries.

Among those, in particular, some problems have been recognized in identifying tariff classification and assessing the Customs value of second-hand goods such as used cars, computer equipment, machinery and clothing. Also, developing countries contributed more to the 2003 growth of world merchandise trade than developed countries. It was estimated that nearly four-fifths of the real growth in 2003 was attributable to developing countries, including transition economies.

2. Trade in agricultural and manufactured goods

Manufactured goods, excluding mining products, recorded above average growth in world merchandise trade during the past two decades (WTO, 2004a; 2005b). As a result, they accounted for around three-quarters of world merchandise trade in 2003.

By contrast, the share of agricultural goods trade remained at around 9% in the three preceding years, which represented approximately 2% below the average level in the 1990s. One of the notable trends is that processed agricultural goods have become more important within trade in agricultural goods over the past decade. They accounted for 48% of global trade in agricultural goods in 2001-2, rising from 42% in 1990-1. This upward trend can be observed across countries and agricultural product groups throughout the 1990-2002 period.

3. Trade between partners of Regional Trade Agreements (RTAs)

A surge in trade between RTA partners was achieved mainly by a recent proliferation of RTAs. According to a recent WTO report (2004b), some 220 RTAs were estimated operational as of October 2004, of which 150

had been notified to the GATT/WTO. Nearly all WTO Members belong to at least one RTA, and each belongs to six RTAs on average (World Bank, 2005b). The number of RTAs is likely to continue to increase in coming years, considering the number of RTAs under negotiation.

Consequently, it was estimated that the share of trade between RTA partners of world merchandise trade will grow to 55% by 2005 if all expected RTAs are concluded, rising from 43% at present.

4. South-South Trade

Merchandise trade between developing countries, i.e. South-South trade, has significantly increased at an annual average rate of 11% during the past decade, accounting for nearly 13% of world merchandise trade in 2000. Around 40% of exports from developing countries were destined for other developing countries. Intra-regional trade, in particular through RTAs, played a central role in the rise of South-South trade. Also, interregional trade showed signs of growth, albeit on a smaller basis. In addition, intra-Asia trade took a dominant position in this trend, accounting for around 80% of the total South-South trade in 2000, but strong growth in intra-regional trade in Africa and Latin America was also observed.

5. Global production network

Global production specialization has advanced, in particular in manufactured goods. Firstly, the share of manufactured goods within world merchandise trade has grown significantly throughout the world. Secondly, the share of parts and components exports of total merchandise exports has greatly increased in all six regions of the world, for example from 6% in 1980 to 15% in 2002 in the East Asia region. Thirdly, exported goods contain a significant portion of imported intermediate inputs.

In the "international segmentation of production", intermediate inputs are exported for more processed intermediate inputs, which are then exported to the next stage in production.

6. Intra-firm trade

Intra-firm trade, i.e. trade within the same company and/or its affiliates, reportedly accounts for around one-third of world merchandise trade, although aggregate data are only available for a few countries. In the case of the US, for example, it accounted for 36.2% of exports and 39.4% of imports in 1999, having remained stable over the 1990s. In Japan, on the other hand, it accounted for 30.8% of exports and 23.6% of imports in 1999, which have significantly increased over the same period.

7. E-commerce

Electronic commerce has become a dominant factor in international trade and business, although traditional methods of trade and business continue to be utilized widely. For example, the use of Information and Communication Technology (ICT) such as Internet communication has made cross-border activities easier and more practical.

Q14. Explain the various challenges in IFM ?

(OR)

Discuss the challenges in IFM ?

(OR)

Enumerate the emerging challenges of international financial management.

Ans : **(Dec.-19, May-19)**

A firm as a dynamic entity had to continuously adapt itself to changes in its operating environment

as well as in its own goals and strategy. The decades of 1980's and 1990's were characterized by unprecedented pace of environmental changes for most Indian firms.

Political uncertainties at home and abroad, economic liberalization at home, greater exposure to international markets, marked increase in the volatility of critical economic and financial variables such as exchange rates and interest rates, increased competition, threats of hostile takeovers are among the factors that have forced many firms to thoroughly rethink their strategic posture.

The start of the 21st century was marked by an even greater acceleration of environmental changes and significant increase in uncertainties facing the firm. As we approach the WTO deadlines pertaining to removal of trade barriers, companies will have to face even greater competition at home and abroad.

Capital account convertibility of the rupee is expected to be put in place anytime. Ceilings on foreign portfolio investment are being revised upwards and barriers to foreign direct investment in India are being steadily lowered. Indian banking sector is being opened up to significant increase in foreign stake.

During 2004 and early 2005, the rupee has shown an upward trend against the US dollar putting a squeeze on margins of exporting industries. On the whole, the process of integration of India in the global economy is expected to accelerate and hence exposure of Indian companies to global financial markets is certainly going to increase significantly during years to come.

1. Change Based on Environment

To keep up-to-date with significant environmental changes and analyze their implications for the firm. Among the variables to be monitored are exchange rates, interest rates and credit conditions at home and abroad, changes in industrial, tax and foreign trade policies, stock market trends, fiscal and monetary developments, emergence of new financial instruments and products, etc.

2. Adapt Finance Function of Firms Own Strategic Posture

To be able to adapt the finance function to significant changes in the firm's own strategic posture. A major change in the firm's product-market mix, opening up of a sector or an industry so far prohibited to the firm, increased pace of diversification, a significant change in operating results, and substantial reorientation in a major competitor's strategic stance are some of the factors that will call for a major financial restructuring, exploration of innovative funding strategies, changes in dividend policies. Asset sales to overcome temporary cash shortages and a variety of other responses may be required.

3. To take in stride past failures and mistakes

To take in stride past failures and mistakes to minimize their adverse impact. A wrong takeover decision, a large foreign loan in a currency that has since started appreciating much faster then expected, a floating rate financing obtained when the interest rates were low and have since been rising rapidly, a fix-price supply contract which becomes insufficiently remunerative under current conditions and a host of other errors of judgement which are inevitable in the face of the enormous uncertainties. Ways must be found be contain the damage.

4. To design and implement effective solutions

To design and implement effective solutions to take advantage of the opportunities

offered by the markets and advances in financial theory. Among the specific solutions are uses of options, swaps and futures for effective risk management, securitization of assets to increase liquidity, innovative funding techniques, etc.

More generally, the increased complexity and pace of environmental changes calls for greater reliance on financial analysis, forecasting and planning, greater coordination between the treasury management and control functions and extensive use of computers and other advances in information technology.

5. Technology

The level of technological advancement achieved by nation sometimes acts as an impediment in international business. The quality of poor infrastructure in India – erratic power supply, poor quality of rail and road transport and missing of world level communication systems forced many world-class organizations, in spite of the huge lucrative Indian market, to set up their plants/operations in other nations like Thailand and Taiwan.

Similarly, the successful organizations of developing nations find it very difficult to operate in highly developed technical countries such as U.S., Germany and japan.

Short Question and Answers

1. What is International Financial Management ?

Ans :

Meaning

International Financial Management is important to companies that have no international business because these companies must recognize how their foreign competitors will be affected by movements in exchange rates, foreign interest rates, labor costs, and inflation. Such economic characteristics can affect the foreign competitors' costs of production and pricing policies.

International Financial Management came into being when the countries of the world started opening their doors for each other. This phenomenon is well known with the name of "liberalization". Due to the open environment and freedom to conduct business in any corner of the world, entrepreneurs started looking for opportunities even outside their country-boundaries.

The spark of liberalization was further aired by swift progression in telecommunications and transportation technologies that too with increased accessibility and daily dropping prices. Apart from everything else, we cannot forget the contribution of financial innovations such as currency derivatives; cross border stock listings, multi-currency bonds and international mutual funds.

The resultant of liberalization and technology advancement is today's dynamic international business environment. Financial management for a domestic business and an international business is as dramatically different as the opportunities in the two. The meaning and objective of financial management does not change in international financial management but the dimensions and dynamics changes drastically.

Definition

(i) According to Archer and Ambrosia International financial management is the management of a firm's assets and liabilities considering the global economy in which the firm operates.

"Financial management is the application of the planning and control functions to the finance functions"

2. What are the various methods of international financial?

Ans :

Firms use several methods to conduct international business. The most common methods are these :

(i) Exporting

(ii) Licensing

(iii) Franchising

(iv) Joint Ventures

(v) Management contracts

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Franchising is a form of licensing. The franchising can exercise more control over the franchised compared to that in licensing. International franchising is growing at a fast rate.

Under franchising, an independent organization called the franchise operates the business under the name of another company called the franchiser.

(iv) Joint Venture

Under a Joint Venture (JV) arrangement, the foreign company invites an outside partner to share stock ownership in the new unit. The particular participation of the partners may vary with some companies accepting either a minority or majority position.

Once a joint venture partner secures part of the operation, the international firm can no longer function independently, which sometimes leads to inefficiencies and disputes over responsibility for the venture. If an international firm has strictly defined operating procedures such as for budgeting, planning, and marketing it may become difficult to get the JV company to accept the same methods of operation.

It may also arise when the JV partner wants to maximize dividend payout instead of reinvestment, or when the capital of the JV has to be increased and one side is unable to raise the required funds. JVs can be successful if the partners share the same goals with one of them accepting primary responsibility for operations matters.

(v) Management Contract

One of the most important assets a company may have at its disposal is management talent, which it can transfer internationally, to its own foreign investment.

3. What are the recent changes in International Financial Management?

Ans :

1. Developing countries' trade

In 2004, the share of developing countries in world merchandise trade stood at 31%, having increased from about 20% in the mid-1980s. This is the highest level since 1950. It is observed that developing countries are increasingly becoming an important destination for the exports of developed countries.

Among those, in particular, some problems have been recognized in identifying tariff classification and assessing the Customs value of second-hand goods such as used cars, computer equipment, machinery and clothing. Also, developing countries contributed more to the 2003 growth of world merchandise trade than developed countries. It was estimated that nearly four-fifths of the real growth in 2003 was attributable to developing countries, including transition economies.

2. Trade in agricultural and manufactured goods

Manufactured goods, excluding mining products, recorded above average growth in world merchandise trade during the past two decades (WTO, 2004a; 2005b). As a result, they accounted for around three-quarters of world merchandise trade in 2003.

By contrast, the share of agricultural goods trade remained at around 9% in the three preceding years, which represented approximately 2% below the average level in the 1990s. One of the notable trends is that processed agricultural goods have become more important within trade in agricultural goods over the past decade. They accounted for 48% of global trade in agricultural goods in 2001-2, rising from 42% in 1990-1. This upward trend can be observed across countries and agricultural product groups throughout the 1990-2002 period.

3. Trade between partners of Regional Trade Agreements (RTAs)

A surge in trade between RTA partners was achieved mainly by a recent proliferation of RTAs. According to a recent WTO report (2004b), some 220 RTAs were estimated operational as of October 2004, of which 150 had been notified to the GATT/WTO. Nearly all WTO Members belong to at least one RTA, and each belongs to six RTAs on average (World Bank, 2005b). The number of RTAs is likely to continue to increase in coming years, considering the number of RTAs under negotiation.

Consequently, it was estimated that the share of trade between RTA partners of world merchandise trade will grow to 55% by 2005 if all expected RTAs are concluded, rising from 43% at present.

4. Explain the differences between Domestic FM and IFM.

Ans :

S.No.	Nature	International Financial Management	Domestic Financial Management
1.	**Introduction**	International Financial Management is a well-known term in today's world and it is also known as international finance. It means financial management in an international business environment. It is different because of the different currency of different countries, dissimilar political situations, imperfect markets, diversified opportunity sets.	International Financial Management came into being when the countries of the world started opening their doors for each other. This phenomenon is well known by the name of "liberalization"
2.	**International Financial Management Vs. Domestic Financial Management**	International finance is different from domestic finance in many aspects and first and the most significant of them is foreign currency exposure. There are other aspects such as the different political, cultural, legal, economical, and taxation environment. International financial management involves a lot of currency derivatives whereas such derivatives are very less used in domestic financial management.	In domestic financial management, we aim at minimizing the cost of capital while raising funds and try optimizing the returns from investments to create wealth for share-holders. We do not do any different in inter-national finance. So, the objective of financial management remains same for both domestic and international finance i.e., wealth maximization of shareholders. Still, the analytics of international finance is different from domestic finance.
3.	**Foreign Exchange Risk**	It's an additional risk which a finance manager is required to cater to under an International Finan-cial Management setting. Foreign exchange risk refers to the risk of fluctuating prices of currency which has the potential to convert a profitable deal into a loss making one.	In domestic financial management the finance manager is required to deal in to deal with foreign exchange, so there is no currency exchange risk.
4.	**Exposure to Foreign Exchange**	The most significant difference is of foreign currency exposure. Currency exposure impacts almost all the areas of an international business starting from your purchase from suppliers, selling to customers, investing in plant and machinery, fund raising etc. Wherever you need money, currency exposure will come into play and as we know it well that there is no business transaction without money.	In domestic financial management exposure to a single currency of particular country. Entire business transaction takes place in single currency.

5. Define International Business.

Ans :

International financial management (IFM) is concerned with the management of international business (IB) - related financial functions, commonly known as the international financial functions. The nature and scope of IFM will thus be clear if one tries to understand the nature and modes of international business, the forms of financial functions carried out by those participating in IB, and the complexities of international financial functions that differentiate them from domestic financial functions.

IB means carrying of business activities beyond national boundary. These activities include normally international trade of goods and services and also international production of goods and provision of services normally under the guard of foreign direct investment (FDI).

6. Disadvantages of International Business.

Ans :

1. Political Factors

The major factors that discourage the spread of international business is political instability. Frequent changes of political parties in power and thereby changes in Government policies of a country creates political risks for the growth of international business.

2. Exchange Instability

Depreciation in value of currencies of different countries is caused due to imbalances in the balance of payments, political changes and foreign indebtedness. This leads to changes in the exchange rates of domestic currencies in terms of foreign currencies. This factor demotivates the growth of international business.

3. High Cost

Internationalizing the domestic business involves many activities such as market survey, product improvement, quality up gradation, managerial efficiency, etc. These activities involves high cost and risk and they need huge investment. Hence many business houses restrict themselves from international their business.

4. Bureaucratic Practices of Government

Delays in sanctions, grating permission and licences to foreign companies are bureaucratic attitudes and practices of Government. The best example is Indian Government before 1991.

5. Tariffs, Quotas and Trade Barriers

In order to protect domestic business the Governments of different countries impose tariffs, import and export quotas and trade barriers. Imposition of barriers is based on political and diplomatic relations between or among Governments.

7. Nature of International Financial Management.

Ans :

1. Investment Decisions

When a company innovate a specific technology and its product is mature in the markets abroad or when the company wants to reap the location advantage in a foreign country, it sets up an affiliate there. Whatever the motivation behind foreign investment or foreign manufacturing, the company evaluates the cash inflow and outflow during the life of the project and makes investment only when the net present value of cash flows is positive. Besides, it takes into account the foreign exchange risk and the political risk involved.

IFM thus studies the different theories of overseas production, the various strategies of investment, capital budgeting decision and evaluation of foreign exchange and political risks pertaining to overseas investment.

2. International Working Capital Decisions

When foreign operation begins, the parent company evaluates different sources of working capital so that the cost of financing is the cheapest. In this context, an international company maintains an edge over a domestic company so far as it can easily reach the international financial market or can siphon resources from one subsidiary to another.

When targeting sources of funds, it has also to decide the size of current assets because these facts have a close link with the cost of production and the overall profitability of the firm. IFM helps in taking a correct decision regarding the size of working capital and suggests a mechanism for its management. It also deals with how foreign trade is financed.

3. Financial Decisions of the MNCs

Any investment needs rising of funds. The MNCs take advantage of the many innovations which have taken place in the international financial market and IFM guides them on how to take advantage of these. It deals with how different instruments are issued to raise funds and how swaps are used for minimizing the cost of funds. The nature and management of interest-rate exposure too form a part of IFM.

8. What are multi national corporations (MNCs) and what economic roles do they play?

Ans :

A Multinational Corporation (MNC) is a company involved in producing and selling goods and services in more than one country. It usually consists of a parent company located in its home country with numerous foreign subsidiaries. As business expands, the awareness of opportunities in foreign markets also increases. This, ultimately, evolves into some of them becoming MNCs so that they can enjoy the benefits of international business opportunities.

A knowledge of International Finance is crucial for MNCs in two important ways. First, it helps the companies and financial managers to decide how international events will affect the firm and what steps can be taken to gain from positive developments and insulate from harmful ones. Second, it helps the companies to recognize how the firm will be affected by movements in exchange rates, interest rates, inflation rates and asset values.

9. Advantages of International Business

Ans :

(i) Expansion of Sales and Profits

The main objective of any firm is to increase the sales and profits when this not achieved at home by any reason, firm began to search for new markets by increasing their sales and reaching international market. So increased sales are a major motive for company's expansion into international business. Many of small companies also depends on foreign sales.

(ii) Expanding the Production Capacity

Some of the domestic companies expanded their production capacities more than the demand for the product in the domestic countries. These companies, in such cases are forced to sell their excess production in foreign developed countries.

Eg. : Toyota of Japan.

(iii) Availability of Technology and Managerial Competence

Availability of advanced technology and managerial competence in some countries act as pulling factors for business firm from the home country. Companies from the developing world are attached by the developed countries due to these reasons. In fact American companies, in recent years, depend on Japanese for technology and management enterprise.

(iv) High Cost of Transportation

Initially companies enter foreign countries through their marketing operations. At this stage, the companies realize the challenge from the domestic companies. Added to this, the home companies enjoy higher profits margins where as the foreign firms suffer from lower profit margins. The major factor for this situation is the cost of transportation of the products.

UNIT II

INTERNATIONAL FLOW OF FUNDS :
Balance of Payments (BOP), Fundamentals of BOP, Accounting components of BOP, Factors affecting International Trade flows, Agencies that facilitate International flows. Indian BOP Trends.

INTERNATIONAL MONETARY SYSTEM :
Evolution, Gold Standard, Bretton Woods's system, the flexible exchange rate regime, evaluation of floating rates, the current exchange rate arrangements, the Economic and Monetary Union (EMU)

2.1 BALANCE OF PAYMENTS (BOP)

Q1. Define Balance of payment ? Explain the characteristics of BOP ?

(OR)

What is meant by balance of payments?

Ans : **(Sep.-20)**

Introduction

The balance of payments (BoP) is a statistical statement that systematically summarizes, for a specific period (typically a year or quarter), the economic transactions of an economy with the rest of the world. It covers (a) all the goods, services, factor income and current transfers an economy receives from or provides to the rest of the world; and (b) capital transfers and changes in an economy's external financial claims and liabilities.

Definition

(i) According to Kindleberger Balance of payments is "a systematic record of all economic transactions between the residents of the reporting country and residents of foreign countries during a given period of time".

Characteristics

Main features of balance of payments are as under :

1) Systematic Record

It is a systematic record of receipts and payments of a country with other countries.

2) Fixed Period of Time

It is a statement of account pertaining to a given period of time, usually, one year

3) Comprehensiveness

It includes all the three items i.e., visible, invisible and capital transfers.

4) Double Entry System

Receipts and payments are recorded on the basis of double entry system.

5) Self-balanced

From the point of view of accounting, double entry system keeps automatically debit and credit sides of the accounts in balance.

6) Adjustment of Differences

Whenever there is difference in actual total receipts and payments, need is felt for necessary adjustment.

7) All Items-Government and Non-Government

Balance of payments includes receipts and payments of all items government and non-government.

Q2. Explain the functions of BOP ?

Ans :

The main functions of a country's BOP are:

1. The BOP helps understand how various economic transactions are brought into balance in a given period. These transactions can include trade in goods and services; purchase and sale of assets, including securities; and transfer of funds through grants, aids and repatriations.

2. An analysis of the BOP also reveals how a country is paying for its imports and other transactions, the extent of export earnings in the total credits, and the adequacy of foreign exchange reserves.

3. The BOP also indicates the extent of external indebtedness of a country, along with its cushion of foreign assets. This enables the government to make appropriate decisions with regard to monetary and fiscal policies, foreign trade, and international payments. In other words, BOP acts as a guide to the monetary, fiscal, trade, and exchange rate policies of a government.

4. BOP statistics are also used extensive by business enterprises and others who engage in international economic transactions.

Q3. Explain the importance of Balance of Payments.

(OR)

Why is it useful to examine a company's balance of payments data?

Ans : **(Sep.-20)**

- It permits a judgement on the economic and financial situation of a country in the short-term.
- If a country has significant deficit, it will have a tendency to take stiff measures for diminishing its imports.
- Prices of imported materials may go up. In certain countries, a large deficit of BOP may lead to measures of exchange control, or restriction on repatriation of dividends, interests, etc.
- BOP provides foresight regarding the type of exchange rates (in-crease/decrease) to prevail consistent deficit of BOP has an unfavourable effect on exchange rate.
- In a system of fixed exchange rates, persistent deficit leads to a devaluation and vice versa.
- Likewise, in a system of floating rates, persistent deficit would signal an ongoing depreciation of the currency of the country concerned.

2.1.1 Fundamentals of BOP

Q4. Discuss about Fundamentals of BOP.

(OR)

Explain the fundamentals of BOP ? Accounting.

Ans :

The Fundamentals of Balance of Payment (BOP) accounting is that "BOP must always balance". If the BOP is not balanced it means some aspects have not been counted or some aspects counted are incorrect. Balance of Payment (BOP) will be in equilibrium. The factors which cause imbalance in country's currency are supply and demand. The entire BOP belonging to a single country is always balanced and the subaccount of the BOP like merchandise trade balance are unbalanced.

The overview of major subaccounts of BOP are,

Generic Balance of Payments

1. Current Account

a) Net export/import of goods

b) Net export/import of services

c) Net income

d) Net transfers.

I(a-d) = Current account balance

2. Capital Account

Capital transfers related to the purchase and sale of fixed assets.

3. Financial Account

a) Net foreign direct investment

b) Net portfolio investment

c) Other financial items.

1 + 2 + 3 = Basic balance

4. Net Errors and Omissions Account Missing data such as illegal transfers

1 + 2 + 3 + 4 = Overall Balance

5. Reserves and Related Items: Official Reserve Account

Changes in official monetary reserves including gold, foreign exchange and IMF position.

Elements

The three essential elements of the actual process of measuring international economic activity are as follows,

a) Defining international economic transaction

b) Understanding the flow of goods, services, assets and money create debits and credits to the overall BOP

c) Understanding the book-keeping procedures for BOP accounting

(a) Defining International Economic Transactions

Identifying international transaction is not difficult. The international transactions include export of merchandise goods, like trucks, machinery, computers, telecommunications equipment etc. Imports pertaining to French wine, Japanese Cameras and German automobiles comes under international transactions. The purchase of a glass figure in venice, Italy by an Indian tourist is considered as an Indian merchandise import. The expenditure incurred by Indian tourists for services are entered in Indias balance of payments as imports of travel services in the current account. Under International Financial transactions if foreign resident purchases an Indian GDR then it is recorded in the capital/financial account of the Indian BOP.

(b) The BOP as a Flow Statement

The Balance of Payment (BOP) is not a balance sheet but it is a cash flow statement. BOP records all international transactions from time to time in a year and also identify the flow of purchases and payments between a country and all other countries. It records all international transactions but does not add up the value of all assets and liabilities as balance sheet does on specific date.

The business transactions which dominates the BOP are of two types,

i) Exchange of Real Assets

The exchange of goods and services are totally for money. Exchange of goods include automobiles, computers, watches, textiles etc. and services include banking services, consulting services, travel services etc.

ii) Exchange of Financial Assets

It includes the exchange of financial claims like stocks, bonds, loans, purchases or sales of companies for other financial claims or money.

(c) BOP Accounting

The measurement related to international transactions with in or outside the country is a difficult task. The reasons behind this problems are mistakes, errors and statistical discrepancies and not following the principle of double-entry book-keeping. Current and capital/financial account entries are recorded separately. All these factors leads to discrepancies for both debits and credits. The firm should maintain the principle of double-entry book-keeping for recording all the transactions and to avoid discrepancies between debits and credits.

A. Current Accounts

Goods Account

Exports (+)

Imports (–)

Balance on Goods Account = A(I)

Services Account

Receipts as interest and dividends, tourism receipts for travel and financial charges (+)

Payments as interest and dividends, tourism payments for travel and financial charges (–)

Unilateral Transfers

Gifts, donations, subsidies received from foreigners (+)

Gifts, donations, subsidies made to foreigners (–)

Balance on Unilateral Transfers Account = A(III)

Current Account Balance : A(I) + A(II) + A(III)

B. Long-term Capital Account

Foreign Direct Investment (FDI)

Direct investment by foreigners (+)

Direct investment abroad (–)

Balance on Direct Foreign Investment = B(I)

Portfolio Investment

Foreigner's investment in the securities of the country (+)

Investment in securities abroad (–)

Balance on Portfolio Investment = B(II)

Balance on Long-term Capital Account = B(I) + B(II)

Private Short-term Capital Flows

Foreigners' claim on the country (+)

Short-term claim on foreigners(–)

Balance on Short-term Private Capital Account = B(II)

Overall Balance : [A(I) + A(II) + A(III) + [B(I) + B(II) + B(III)]

C. Official Reserves Account

Decrease or increase in foreign exchange reserves.

2.1.2 Accounting components of BOP

Q5. Describe the components of Balance of Payment.

(OR)

Discuss the structure of Balance of Payment.

(OR)

Explain the components of balance of payments.

(OR)

Explain the structure of balance of payments statement.

Ans : **(Imp.)**

1. The Current Account

The current account records at exports and imports of merchandise and invisibles. Merchan-dise includes agricultural commodities and industrial components and products. Invisibles include (a) services, (b) income flows, and (c) unilateral transfers.

Exports of services include spending by foreign tourists in the country and overseas earnings of residents, including firms. This encompasses earnings on various services (like banking, insurance, consulting, and accounting) and earning of royalties, transportation, and communication. Imports of services include resident tourists' spending abroad, payments made to foreign firms for their services, and royalties on foreign books and movies.

Other items under the current account include profits remitted by foreign branches of Indian firms, interest received on foreign investments, interest paid on foreign borrowing, and funds received from foreign governments for the maintenance of their embassies and consulates. In other words, earnings in the form of interest, dividends, and rent, also known as *factor income,* received by the residents of a country and the income payments (e.g., interest, dividends, rents, etc) made by the residents of the country to foreigners form part of the current account of the BOP.

Also part of the current account are official transfers like contributions to international institutions, gifts or aid to foreigners, and private transfers like cash remittances by nationals residing abroad (such as non-resident Indians sending money to their relatives in India). As these transfers of funds do not involve any specific services rendered by the residents of the country, they are referred to as *unilateral transfers.* In the case of unilateral transfers, there is a flow of goods, services, or funds in only one direction, as against the merchandise or services trade in which goods or services flow in one direction and payments flow in the opposite direction.

Thus, all commercial transactions (exports and imports of goods and services), private remittances, and transfers of goods and services from the government of the home country to foreign governments (such as the sale of military goods to foreign governments and payment of pensions to persons abroad) constitute the current account of a country.

All exports of goods and services are credited to the current account and all imports of goods and services are debited to the current account. The interests, dividends, and other incomes received on assets held abroad are credited to the current account, while the interests, dividends, and other payments made on foreign assets held in the country are debited to the current account.

The remittances received from abroad are credited to the current account and the remittances made to other countries are debited to the current account. That is, the receipt of funds in the form of gifts and grants under unilateral transfers gives rise to a demand for the home currency, just as the export of goods and services does. Such trans-actions are recorded as credit entries in the BOP.

Similarly, unilateral transfers to foreigners (gifts and aid to foreigners) increase the supply of

the home currency in the foreign exchange market, just as the import of goods and services does, so, such transactions are recorded as debit entries in the BOP. Thus, all credit entries represent transactions involving receipts from foreigners and all debit entries represent transactions involving payments to foreigners. In order to satisfy the principle of double-entry bookkeeping, it is necessary to treat unilateral transfers as goodwill being purchased or imported by the donor from the recipient of the grant, gift, or aid.

2. The Capital Account

The capital account of BOP reflects the capital inflows and outflows of the country. The pur-chases of real assets (physical assets like lands, buildings, and equipment) located abroad and financial securities (e.g., stocks and bonds) issued by foreign governments or foreign companies are called capital transactions. The difference between such purchases made by the residents of one country (say, India) in all other countries, and such purchases by residents of all other countries in India, is called the balance on capital account.

The capital account includes foreign equity investments, loans, and other foreign investments. Foreign equity investments may take the form of either portfolio investments or direct investments. Portfolio investments are cross-border transactions associated with changes in ownership of financial assets and liabilities. Direct investment occurs when there are cross-border outflows and inflows of equity capital. Such ownership of a foreign operating business gives a measure of control to the investors.

An example of direct investment is an Indian firm promoting business in a foreign country. When a foreign institutional investor buys the equity stock of an Indian company, it is an instance of portfolio investment. Note that portfolio investment involves the buying of foreign financial assets (e.g., shares and bonds) without any change in the control of the concerned company, whereas foreign direct investments may result in the transfer of control of the company.

3. The Reserve Account

The official reserve account of the BOP measures a country's official reserves, which are in the form of liquid assets like the central bank's holding of gold. These reserves also include foreign exchange in the form of balances with foreign banks and the IMF, and the government's holding of SDRs. While an increase in the holdings of foreign currency reserves by the country's central bank (e.g., Reserve Bank of India) is debited to the official reserve account, a decrease in the holdings of foreign currency reserves by the country's central bank is credited to the reserve account.

The following are the functions of foreign exchange reserves :

- The official reserve account is used to maintain the exchange value of the home currency in the foreign exchange market at a desired level. The monetary authority of a country may intervene in the foreign exchange market through the official reserve account, by buying or selling the home currency, and thus maintaining the exchange value at the desired level. A country holds reserves so that it will have the power to defend its home currency in the foreign exchange market.
- The surplus or deficit on current account and capital account are reflected in changes in official reserves. A drop in reserves occurs when the country sells off its reserve assets like gold to acquire foreign exchange to finance a deficit in its BOP. A balance of payments surplus (surplus in current account and capital account put together) may lead to the acquisition of reserve assets from foreign agencies. Such adjustments can be made in the official reserve account in order to maintain BOP equilibrium.

PROBLEMS

1. You are required to find out the overall balance, showing clearly all the sub-balances from the following data :

(i) UC Corporation of the USA invests in India Rs. 3,00,000 to modernize its Indian subsidiary.

(ii) A tourist from Egypt buys souvenirs worth Rs. 3000 to carry with him. He also pays hotel and travel bills of Rs. 5,000 to Delhi Tourist Agency.

(iii) The Indian subsidiary of UC Corporation remits, as usual, Rs. 5,000 as dividends to its parent company in the USA.

(iv) This Indian subsidiary of UC Corporation sells a part of its production in other Asian countries for Rs. 1,00,000.

(v) The Indian subsidiary borrows a sum of Rs. 2,00,000 (to be paid back in a year's time) from the German money market to resolve its urgent liquidity problem.

(vi) An Indian company buys a machine for Rs. 1,00,000 from Japan and 60 percent payment is made immediately; the remaining amount is to be paid after 3 years.

(vii) An Indian subsidiary of a French Company borrows Rs. 50,000 from the Indian public to invest in its modernization programme.

Sol :

Sources and Uses of Funds

S. No.	Sources	Uses of Nature
1.	3,00,000	Direct Foreign Investment
2.	(a) 3,000	Goods exported
	(b) 5,000	Services (invisible) rendered
3.	5,000	Dividends paid
4.	1,00,000	Goods exported
5.	2,00,000	Short-term borrowing
6.	(a) 1,00,000	Equipment imported
	(b) 40,000	Increase in claim on India (Portfolio)
	6,48,000	1,05,000

BoP Statement

A. Current Account

Goods Account

Exports : Rs 1,03,000 (+)

Imports : Rs 1,00,000 (–)

Balance : Rs 3,000 (+)

Invisible Account

Payment Received : Rs 5,000 (+)

Payment Made : Rs 5,000 (–)

Balance : Nil

Current Account Balance : Rs 3,000 (+)

B. Capital Account

(Foreign Direct Investment)

Inflow : Rs 3,00,000 (+)

Outflow : Nil

Balance : Rs 3,00,000 (+)

(Portfolio Investment)

Inflow : Rs 40,000 (+)

Outflow : Nil

Balance : Rs 3,40,000 (+)

(Long-term Capital Balance) : Rs 3,40,000 (+)

(FDI + Portfolio)

(Short-term Capital Account)

Inflow : Rs 2,00,000 (+)

Outflow : Nil

Balance : Rs 2,00,000 (+)

Capital Accounts Balance : Rs 5,40,000 (+)

Overall Balance : Rs 5,43,000 (+)

There is a net surplus of Rs 5,43,000 in the balance of payments. This means, there will be an increase of reserves by this amount.

2. Prepare a BOP statement for France from the following data:

France exports goods worth FFrs 5000

France imports goods worth FFrs 4000

i) Expenditure of foreign tourists in France. FFrs 2500

ii) France makes interest and dividend payments Foreigners; FFrs 2000

iii) A France working in USA sends a cheque to his wife in Paris FFrs 500

iv) France telecom invests in India FFrs 4500

v) IBM invests in France FFrs 4500

vi) A France resident buys a German bonds : FFrs 300

vii) A Swiss resident buys a French Bonds : FFrs 5000

viii) France borrows FFrs 3800 for short term

Sol.

Statement showing balance of payments for France

Particulars	Amt	Amt
Current Account		
Merchandise Accounts		
Exports	5000 ffr	
Imports	– 4000 ffr	
Balance		1000 ffr
Services Accounts/Invisible Account		
Tourist receipts for travel in France	2,500 ffr	
Interest & dividend payment to foreigners	– 2000 ffr	
Balance		500 ffr
Unilateral transfers		
Cheque received	500 ffr	
Balance		500 ffr
Current Account balance (A)		2000 ffr
Capital account		
Long term capital flows:		
IBM Invest in France	4,500 ffr	
France telecom invest in India	– 4,500 ffr	
Purchase German bonds	– 300 ffr	
Swiss resident buys a french bond	500 ffr	
Balance		200 ffr
Short term capital flows :		
Short term liability	– 3800 ffr	
Balance		– 3800 ffr
Capital account balance		– 3600 ffr
Overall Balance (A) + (B)		– 1600 ffr

3. Proton, Inc. is a U.S. based multinational manufacturing firm, with wholly owned subsidiaries in Brazil, Germany and China in addition to domestic operations in the United States. Proton is traded on the NADSAQ. Luzon currently has 6,50,000 shares outstanding. The basic operating characteristics of the various business units are as follows :

	US Parent Company	Brazilian Subsidiary	German Subsidiary	Chinese Subsidiary
Business Performance (00s)	(US$)	(reals, R$)	(euros, €)	(yuan, ¥)
Earnings before taxes, EBT (Local currency)	4,500.00	6,250.00	4,500.00	2,500.00
Tax rate	35%	25%	40%	30%
Average exchange rate for the	—	1.8000	0.7018	7.7500

Required :

(a) Determine the Net Profit from each unit in local currency.

(b) Determine the Consolidated Net Profit for the Parent in USD.

(c) Determine the EPS in USD.

Sol :

Business Performance (00s) (000s)	US Parent Company (US$)	Brazilian Subsidiary (real, R$)	German Subsidiary (euros, €)	Chinese Subsidiary (yuan, Y)
Earnings before taxes, EBT (Local currency)	4500.00	6250.00	4500.00	2500.00
Less : Tax rate	1575.00	1562.50	1800.00	750.00
	(4500 × 35%)	(6250 × 25%)	(4500 × 40%)	(2500 × 30%)
	2925.00	**4687.50**	**2700.00**	**1750.00**
Average exchange rate for the period (per USD)	__	**1.8000**	**0.7018**	**7.7500**

(a) Net profit of Individual subsidiary [in USD]:

$$\left(\frac{2925.00}{1}\right) = \$\ 2925.00, \left(\frac{4687.50}{1.8000}\right) = \$\ 2604.17,$$

$$\left(\frac{2700.00}{0.7018}\right) = \$\ 3847.25, \left(\frac{1750.00}{7.7500}\right) = \$\ 225.81$$

(b) Consolidated net profit for the parent (in USD) = 2925.00 + 2604.17 + 3847.25 + 225.81

= $ 9602.23

No. of shares outstanding = $650.00 shares.

(c) Calculation of Earning Per share (EPS) in USD $= \frac{\text{Consolidated Net Profit}}{\text{No. of Shares Outstanding}}$

$$= \frac{\$\ 9602.23}{\$\ 650.00}$$

$$= \$\ 14.77$$

4. Record the effect of following transaction and the balance of payment statement

(i) An Indian company exports tables worth ` 40,000 to USA on an agreement of collecting its payment after 3 months.

(ii) A tourist spends ` 10,000 in Germany, he is an Indian resident.

(iii) ` 3,00,000 is given by the Indian government as a aid program for the flood victims of neighbouring country.

(iv) Foreign balance in an Indian bank account is increased to make a payment of foreign stock worth ` 1000 being purchased by an Indian resident.

(v) Short-term bills of Indian worth the 500 are purchased by a foreign investor and its payment is made by his Indian bank account.

Sol.

Particulars		Debit(`)	Credit(`)
1.	Outflow of short term capital merchandise exports	4000	40,000
2.	Tourism services outflow of short-term capital	10,000	10,000
3.	Unilateral transfer outflow of short-term capital	3,00,000	3,00,000
4.	Inflow of long term capital (foreign stock)	1,000	
	Outflow of short-term capital		1,000
5.	Outflow of short-term capital	500	
	in flow of short-term capital		500
	The balance of payment of India is as follows,		

Particulars	Debit(`)	Credit(`)
Merchandise		40,000
Services	10,000	
Unilateral transfer	3,000,000	
Short-term capital		
[10000 + 300000 + 500 - (40000 + 500)]		2,71,000
Long-term capital	1,000	
	3,11,000	3,11,000

2.1.3 Indian BOP Trends

Q6. List out the recent trends of BOP in India.

(OR)

Explain Indian BOP Trends.

Ans : **(Dec.-19)**

During post-independence period India's balance of payments was unfavourable i.e., there was deficit in balance of payments, but at the time of second world war it was favourable. Deficit in balance-of-payments in each plan is illustrated in the tabular form.

1. Pre-Planning Period

Pre-planning period lies from the year 1947 to 1951. The deficit in balance of payment on current account during the pre-planning period was `240 crore. In the year 1949 the rupee value was devalued but there was no improvement in the circumstances.

2. First Plan (1951 - 56)

The duration of the first year plan was from 1951 to 1956, the deficit in balance of payments on current account was Rs. 42 crore only.

3. Second Plan (1956-1961)

The duration of the 2nd five year plan was 1956 to 1961. During this plan there was an increase in the deficit of balance of payments. It was Rs.1,725 crore due to heavy imports of machines, raw materials and food grains.

4. Third Plan (1961-65)

The duration of this plan was from 1961-1965. Again in this period there was an increase and deficit in balance of payments due to Indo-China and Indo-Pak war, huge imports of military equipments and food grains, this resulted in the shortage of food grains. The deficit was increased to 951 crore.

5. Three-Annual Plans (1966-1969)

There was further rise in the deficit of balance of payments on current accounts i.e., it increased from `1951 to `2,015 crores due to shortage of food in the nation. This period also witnessed heavy imports of food grains and also heavy interest payment on foreign loans.

6. Fourth Plan (1969-74)

The duration of this plan was from 1969 to 1974. During this period the balance of payments was favourable which was about Rs. 100 crore. It was for the first time after independence that the BOP were favourable due to many reasons like increase in exports, decrease in imports, rise in receipts from invisible items and so on.

7. Fifth Plan (1974-74)

The duration of this plan was from 1974 to 1978. The balance of payments was increased to 3,082 crore. Several factors accounted for this increase like the minimization in the deficit balance of payments with an increase in exports and restrictions on imports, restriction on smuggling, greater number of tourist visiting India and remittances from Indians residing abroad. All these factors together contributed towards making the BOP favourable.

8. Sixth Plan (1980-85)

The duration of this plan was from 1980-1985. During this plan, their was again unfavourable/ deficit is balance of payment and the deficit was 11,384 crore.

India's Balance of Payments [Current Account]

Plan	Balance of Payments on Current Account [Rs. in crore]
First plan [I plan]	(-) 42
Second plan [II plan]	(-) 1,725
Third plan	(-) 1,951
Three annual plans	(-) 2, 015
Fourth plan	(+) 100 [Favourable]
Fifth plan	(+) 3,082 [Favourable]
Sixth plan	(-) 11,384
Seventh plan	(-) 38,313
Eighth plan	(-) 59, 832
Ninth plan	(-) 62,715
Tenth plan [2002-03]	+19,987 [Favourable]
[2003 - 04]	+47,952 [Favourable]
[2004 - 05]	(-) 12,174
[2005 - 06]	(-) 43,737
[2006 - 07]	(-) 45,343

(Source: Statistical Outline of India, 2007-08 and economic survey 2007-08)

9. Seventh Plan (1985-90)

The duration of this plan was from 1985-1990. Gulf war took place during this period, which greatly effected the Indian balance of trade and balance of payments. The price of the petrol fares were increased and there was decline in the invisible receipts from abroad. Thus, deficit in balance of payments on current accounts was accounted nearly Rs.38, 313 crore.

10. Eighth Plan (1992-1997)

The duration of this period was from 1992 to 1997. The actual commencement of eighth plan was in the year 1990, but it was started in the year 1992. The deficit in balance of payments, on current accounts however decreased in these two years. Therefore, there was a fall in the level of foreign exchange reserves upto Rs.4,388 crore and current account deficit was around ? 17,366 crore.

During eighth plan the balance-of-payment were unfavorable, as there was an increase in the import of capital goods and crude oil prices were increased greatly, thus current account deficit was upto Rs.59.832 crore.

11. Ninth Plan [1997-2002]

The duration of this plan was from 1997 to 2002. The first four years of this plan recorded a deficit of Rs.69,434 crore, but in the last year of this plan i.e., 2001-02 a surplus of Rs.6,719 crore was gained. Thus, there was considerable decrease in the current account deficit i.e., it reduced from Rs.69,434 to 62,715 crore by the end of this plan i.e., (69,434 - 6,719 = 62, 715).

12. Tenth Plan (2002-07)

The duration of this plan was from 2002 to 2007. The first year of this plan recorded a surplus of Rs.19,987 crore. In the year 2003-04 there was a surplus in current account balance of payments of Rs.47,952 crore. By the end of this plan current account deficit was declined considerably to Rs.45,343 crore.

Trends in Overall Balance-of-Payments

India's balance-of-payments consists of balance-of-payments on current account and capital account. Several attempts have been made in order to attract the foreign investment with the help of economic reforms of 1991 which has been successful with an increase in capital receipts. The status of India's overall balance-of-payments has been represented in the tabular form.

Overall Position of India's Balance-of-Payments [` in Crore]

Year	Balance-of-Payment on Current Account	Balance-of-Payment on Capital Account	Total Balance-of-Payment [Capital + Current Account]
1990 - 91	(–) 17,366	(+) 12,895	(–) 4,471
2000 - 01	(–) 11,431	(+) 39,093	(+) 27,662
2003 - 04	(+) 47,952	(+) 96,042	(+) 1,43,994
2004 - 05	(–) 12,174	(+) 1,28,081	(+) 1,15,907
2005 - 06	(–) 43,737	(+) 1,09,633	(+) 65,896
2006 - 07	(–) 45,343	(+) 2,08,977	(+) 1,63,634

Since, many years balance-of-payments on capital account is positive which is being acting as a support in the overall balance of payments and this is further accessing in increasing the forex reserves of India by April 4th 2008 the status of India's forex reserves was U.S $ 311.9 billion.

Q7. What are the limitations of BOP?

Ans :

- BOP is an important source of information on economic and financial situation of a country. The analysis of different accounts in a BOP Statement, inter-se, enables one to understand or foresee the circumstantial or structural equilibria.
- Sources of information used to prepare a BOP Statement are varied, namely, central bank, institutions linked with external trade such as Export-Import (EXIM) Bank, and customs authorities, etc.
- A perfect coherence among these sources may not be possible.
- Thus, the account Errors and Omissions serves to bring about an equilibrium between economic operations and their monetary counterparts.
- BOP Statement is established in terms of transactions. That is, it takes into account transactions rather than settlements. But the dates of effective settlements may be far distant in time from the

dates of delivery owing to advances accorded, commercial credits, delay in payments or non-payments, etc.

- BOP is expressed in national currency. But often the operations have been done in other currencies. This causes the problem of exchange gain or loss, which is ignored. Some countries like Japan prepare the BOP Statement in two currencies, Yen and US dollar.

2.2 Factors Affecting International Trade Flows

Q8. Explain the factors affecting International Trade Flows.

(OR)

What are the factors Affecting on International Trade Flows?

Ans : **(Dec.-19, May-19)**

International trade can significantly affect a country's economy, it is important to identify and monitor the factors that influence it. The most influential factors are:

1. Inflation
2. National income
3. Government policies
4. Exchange rates

1. Inflation

If a country's inflation rate increases relative to the countries with which it trades, its current account will be expected to decrease, other things being equal. Consumers and corporations in that country will most likely purchase more goods overseas (due to high local inflation), while the country's exports to other countries will decline.

2. National Income

If a country's income level (national income) increases by a higher percentage than those of other countries, its current account is expected to decrease, other things being equal. As the real income level (adjusted for inflation) rises, so does consumption of goods. A percentage of that increase in consumption will most likely reflect an increased demand for foreign goods.

3. Government Policies

A country's government can have a major effect on its balance of trade by its policies on subsidizing exporters, restrictions on imports, or lack of enforcement on piracy.

a) Subsidies for Exporters

Some governments offer subsidies to their domestic firms so that those firms can produce products at a lower cost than their global competitors. Thus, the demand for the exports produced by those firms is higher as a result of subsidies.

b) Restrictions on Imports

A country's government can also prevent or discourage imports from other countries. By imposing such restrictions, the government disrupts trade flows. Among the most commonly used trade restrictions are tariffs and quotas.

c) Lack of Restrictions on Piracy

In some cases, a government can affect international trade flows by its lack of restrictions on piracy.

4. Exchange Rates

Each country's currency is valued in terms of other currencies through the use of exchange rates. Currencies can then be exchanged to facilitate international transactions. The values of most currencies fluctuate overtime because of market and government forces. If a country's currency begins to rise in value against other currencies, its current account balance should decrease, other things being equal. As the currency strengthens, goods exported by that country will become more expensive to the importing countries. As a consequence, the demand for such goods will decrease.

2.3 AGENCIES THAT FACILITATE INTERNATIONAL FLOWS

Q9. Explain the various agencies which facilitate International flows.

(OR)

What are the different agencies that Facilitate International Flow of funds?

(OR)

Describe briefly the role of IMF.

Ans : **(May-19)**

A variety of agencies have been established to facilitate international trade and financial transactions. These agencies often represent a group of nations. A description of some of the more important agencies follows.

A) International Monetary Fund (IMF)

The United Nations Monetary and Financial Conference held in Bretton Woods, New Hampshire, in July 1944 was called to develop a structured international monetary system. As a result of this conference, the International Monetary Fund (IMF) was formed. The major objectives of the IMF, as set by its charter, are to

(i) Promote cooperation among countries on international monetary issues

(ii) Promote stability in ex-change rates

(iii) Provide temporary funds to member countries attempting to correct imbalances of international payments

(iv) Promote free mobility of capital funds across countries, and

(v) Promote free trade. It is clear from these objectives that the IMF's goals encourage increased internationalization of business.

The IMF is overseen by a Board of Governors, composed of finance officers (such as the head of the central bank) from each of the 185 member countries. It also has an executive board composed of 24 executive directors representing the member countries. This board is based in Washington, D.C., and meets at least three times a week to discuss ongoing issues.

One of the key duties of the IMF is its compensatory financing facility (CFF), which attempts to reduce the impact of export instability on country economies. Although it is available to all IMF members, this facility is used mainly by developing countries. A country experiencing financial problems due to reduced export earnings must demonstrate that the reduction is temporary and beyond its control. In addition, it must be willing to work with the IMF in resolving the problem.

Each member country of the IMF is assigned a quota based on a variety of factors reflecting that country's economic status. Members are required to pay this assigned quota. The amount of funds that each member can borrow from the IMF depends on its particular quota.

The financing by the IMF is measured in special drawing rights (SDRs). The SDR is not a currency but simply a unit of account. It is an international reserve asset created by the IMF and allocated to member countries to supplement currency reserves. The SDR's value fluctuates in accordance with the value of major currencies.

The IMF played an active role in attempting to reduce the adverse effects of the Asian crisis. In 1997 and 1998, it provided funding to various Asian countries in exchange for promises from the respective governments to take specific actions intended to improve economic conditions.

Funding Dilemma of the IMF

The IMF typically specifies economic reforms that a country must satisfy to receive IMF funding. In this way, the IMF attempts to ensure that the country uses the funds properly. However, some countries want funding without adhering to the economic reforms required by the IMF.

For example, the IMF may require that a government reduce its budget deficit as a condition for receiving funding. Some governments have failed to implement the reforms required by the IMF.

IMF Funding during the Credit Crisis

In 2008, the IMF used $100 billion to provide short-term loans for temporary funding for developing countries that were devastated by the credit crisis. These funds represented 50 percent of the IMF's total resources. The IMF organized a $25 billion package of loans for Hungary and a $16 billion loan for Ukraine. It also provided funding to some other Eastern European countries and to Brazil, Mexico, and South Korea. The governments of Eastern Europe had borrowed from European banks, and had they defaulted on their loans, more problems might have been created for those banks that had provided loans.

B) World Bank

The International Bank for Reconstruction and Development (IBRD), also referred to as the World Bank, was established in 1944. Its primary objective is to make loans to countries to enhance economic development. For example, the World Bank recently extended a loan to Mexico for about $4 billion over a 10-year period for environmental projects to facilitate industrial development near the U.S. border. Its main source of funds is the sale of bonds and other debt instruments to private investors and governments. The World Bank has a profit-oriented philosophy. Therefore, its loans are not subsidized but are extended at market rates to governments (and their agencies) that are likely to repay them.

A key aspect of the World Bank's mission is the Structural Adjustment Loan (SAL), established in 1980. The SALs are intended to enhance a country's long-term economic growth. For example, SALs have been provided to Turkey and to some less developed countries that are attempting to improve their balance of trade.

Because the World Bank provides only a small portion of the financing needed by developing countries, it attempts to spread its funds by entering into co-financing agreements. Co-financing is performed in the following ways:

- **Official aid agencies**

  Development agencies may join the World Bank in financing development projects in low-income countries.

- **Export credit agencies**

  The World Bank co-finances some capital-intensive projects that are also financed through export credit agencies.

- **Commercial banks**

  The World Bank has joined with commercial banks to provide financing for private-sector development. In recent years, more than 350 banks from all over the world have participated in co-financing, including Bank of America, J.P. Morgan Chase, and Citi group.

The World Bank recently established the Multilateral Investment Guarantee Agency (MIGA), which offers various forms of political risk insurance. This is an additional means (along with its SALs) by which the World Bank can encourage the development of international trade and investment.

The World Bank is one of the largest borrowers in the world; its borrowings have amounted to the equivalent of $70 billion. Its loans are well diversified among numerous currencies and countries, and it has received the highest credit rating (AAA) possible.

C) World Trade Organization

World Trade Organization (WTO) was created as a result of the Uruguay Round of trade negotiations that led to the GATT accord in 1993. This organization was established to provide a forum for multilateral trade negotiations and to settle trade disputes related to the GATT accord. It began its operations in 1995 with 81 member countries, and more countries have joined since then.

Member countries are given voting rights that are used to make judgments about trade disputes and other issues.

D) International Financial Corporation

In 1956 the International Financial Corporation (IFC) was established to promote private enterprise within countries. Composed of a number of member nations, the IFC works to promote economic development through the private rather than the government sector. It not only provides loans to corporations but also purchases stock, thereby becoming part owner in some cases rather than just a creditor. The IFC typically provides 10 to 15 percent of the necessary funds in the private enterprise projects in which it invests, and the remainder of the project must be financed through other sources. Thus, the IFC acts as a catalyst, as opposed to a sole supporter, for private enterprise development projects. It traditionally has obtained financing from the World Bank but can borrow in the international financial markets.

E) International Development Association

The International Development Association (IDA) was created in 1960 with country development objectives somewhat similar to those of the World Bank. Its loan policy is more appropriate for less prosperous nations. However, the IDA extends loans at low interest rates to poor nations that cannot qualify for loans from the World Bank.

F) Bank for International Settlements

The Bank for International Settlements (BIS) attempts to facilitate cooperation among countries with regard to international transactions. It also provides assistance to countries experiencing a financial crisis. The BIS is sometimes referred to as the "central banks' or the "lender of last resort." It played an important role in sup-porting some of the less developed countries during the international debt crisis in the early and mid-1980s. It commonly provides financing for central banks in Latin American and Eastern European countries.

G) OECD

The Organization for Economic Cooperation and Development (OECD) facilitates governance in governments and corporations of countries with market economics. It has 30 member countries and has relationships with numerous countries. The OECD promotes international country relationships that lead to globalization.

H) Regional Development Agencies

Several other agencies have more regional (as opposed to global) objectives relating to economic development. These include, for example, the Inter-American Development Bank (focusing on the needs of Latin America), the Asian Development Bank (established to enhance social and economic development in Asia), and the African Development Bank (focusing on development in African countries).

In 1990, the European Bank for Reconstruction and Development was created to help the Eastern European countries adjust from communism to capitalism. Twelve Western European countries hold a 51 percent interest, while Eastern European countries hold a 13.5 percent interest. The United States is the biggest shareholder, with a 10 percent interest. There are 40 member countries in aggregate.

2.4 INTERNATIONAL MONETARY SYSTEM

Q10. What is International Monetary System?

Ans :

International monetary systems are sets of internationally agreed rules, conventions and supporting institutions that facilitate international trade, cross border investment and generally the reallocation of capital between nation states. They provide means of payment acceptable between buyers and sellers of different nationality, including deferred payment.

To operate successfully, they need to inspire confidence, to provide sufficient liquidity for fluctuating levels of trade and to provide means by

which global imbalances can be corrected. The systems can grow organically as the collective result of numerous individual agreements between international economic actors spread over several decades. Alternatively, they can arise from a single architectural vision as happened at Bretton Woods in 1944.

The international monetary system consists of

i) exchange rate arrangements;

ii) capital flows; and

iii) a collection of institutions, rules, and conventions that govern its operation.

Domestic monetary policy frameworks are essential to the global system. A well-functioning system promotes economic growth and prosperity through the efficient allocation of resources, increased specialization in production based on comparative advantage, and the diversification of risk. It also encourages macroeconomic and financial stability by adjusting real exchange rates to shifts in trade and capital flows.

To be effective, the international monetary system must deliver both sufficient nominal stability in exchange rates and domestic prices, and timely adjustment to shocks and structural changes. Attaining this balance can be very difficult. Changes in the geographic distribution of economic and political power, the global integration of goods and asset markets, wars, and inconsistent monetary and fiscal policies all have the potential to undermine a monetary system. Past systems could not incent systemic countries to adjust policies in a timely manner.

The question is whether the current shock of integrating one-third of humanity into the global economy – positive as it is – will overwhelm the adjustment mechanisms of the current system.

2.4.1 Evolution

Q11. Explain the evolution of International Financial System.

Ans :

The International Monetary System has evolved over the course of centuries and defines the overall financial environment in which multinational corporations operate. The international monetary system consists of elements such as laws, rules, agreements, institutions, mechanisms and procedures which affect foreign exchange rates, balance of payments adjustments, international trade and capital flows.

This system will continue to evolve in the future as the international business and political environment of the world economy continues to change. The International Monetary System plays a crucial role in the financial management of a multinational business and economic and financial policies of each country.

Evolution of the international Monetary System can be analyzed in four stages as follows :

1) The Gold Standard, 1876 - 1913

2) The Interwar Years, 1914 - 1944

3) The Bretton Woods System, 1945 - 1973

4) Flexible Exchange Rate Regime since 1973

2.4.1.1 Gold Standard

Q12. How exchange rates are determined as per Gold standard ?

(OR)

Write a brief note on Gold Standard.

(OR)

"Gold Standard provide price stability besides automaticity in exchange rate and BOP adjustment". Discuss.

Ans : **(Imp.)**

The gold standard is a monetary system in which the standard economic unit of account is a fixed weight of gold. There are distinct kinds of gold standard. First, the gold specie standard is a system in which the monetary unit is associated with circulating gold coins, or with the unit of value defined in terms of one particular circulating gold coin in conjunction with subsidiary coinage made from a lesser valuable metal.

Similarly, the gold exchange standard typically involves the circulation of only coins made of silver or other metals, but where the authorities guarantee a fixed exchange rate with another country that is on the gold standard.

Under the classical gold standard, from 1870 to 1914, the international monetary system was largely decentralized and market-based. There was minimal institutional support, apart from the joint commitment of the major economies to maintain the gold price of their currencies. Although the adjustment to external imbalances should, in theory, have been relatively smooth, in practice it was not problem-free.

Surplus countries did not always abide by the conventions of the system and tried to frustrate the adjustment process by sterilizing gold inflows. Deficit countries found the adjustment even more difficult because of downward wage and price stickiness. Once the shocks were large and persistent enough, the consequences of forfeiting monetary independence and asymmetric adjustment ultimately undermined the system.

The gold standard did not survive World War I intact. Widespread inflation caused by money-financed war expenditures and major shifts in the composition of global economic power undermined the prewar gold parities. Crucially, there was no mechanism to coordinate an orderly return to inflation-adjusted exchange rates. When countries, such as the United Kingdom in 1925, tried to return to the gold standard at overvalued parities, they were forced to endure painful deflation of wages and prices in order to restore competitiveness. Though this was always going to be difficult, it proved impossible when surplus countries thwarted reflation.

During the Great Depression, with an open capital account and a commitment to the gold-exchange standard, the United States could not use monetary policy to offset the economic contraction. Fidelity to gold meant that the deflationary pressures from the United States spread quickly, further weakening the global economy. Unable to adjust to these pressures, countries were forced to abandon the system. Though deficit countries experienced the first crisis, all countries suffered from the eventual collapse – a lesson that was repeated in subsequent systems.

Gold standard exists when most countries :

- have a fixed ex-rate between ounce of gold and currency.
- use gold coins as the primary medium of exchange.
- domestic money stock had to rise and fall with gold flows.
- bank notes has to be backed with gold to assure full convertibility to gold.
- allow unrestricted gold flows – gold can be exported or imported freely.

Q13. State the Advantages and Disadvantages of Gold Standard.

Ans :

Advantages

The following are the Advantages of Gold Standard are :

1. Long-term price stability has been described as the great virtue of the gold standard. Under the gold standard, high levels of inflation are rare, and hyperinflation is impossible as the money supply can only grow at the rate that the gold supply increases. Economy-wide price increases caused by ever-increasing amounts of currency chasing a constant supply of goods are rare, as gold supply for monetary use is limited by the available gold that can be minted into coin. High levels of inflation under a gold standard are usually seen only when warfare destroys a large part of the economy, reducing the production of goods, or when a major new source of gold becomes available.
2. The gold standard limits the power of governments to inflate prices through excessive issuance of paper currency. It provides fixed international exchange rates between those countries that have adopted it, and thus reduces uncertainty in international trade. Historically, imbalances between price levels in different countries would be partly or wholly offset by an automatic balance-of-payment adjustment mechanism called the "price specie flow mechanism."
3. The gold standard makes chronic deficit spending by governments more difficult, as it prevents governments from inflating away

the real value of their debts. A central bank cannot be an unlimited buyer of last resort of government debt. A central bank could not create unlimited quantities of money at will, as there is a limited supply of gold.

Disadvantages

The following are the disadvantages of Gold Standard are :

1. The total amount of gold that has ever been mined has been estimated at around 142,000 metric tons. This is less than the value of circulating money in the U.S. alone, where more than $8.3 trillion is in circulation or in deposit. Therefore, a return to the gold standard, if also combined with a mandated end to fractional reserve banking, would result in a significant increase in the current value of gold, which may limit its use in current applications.

   However, this is specifically a disadvantage of return to the gold standard and not the efficacy of the gold standard itself. Some gold standard advocates consider this to be both acceptable and necessary.

2. Deflation rewards savers and punishes debtors. Real debt burdens therefore rise, causing borrowers to cut spending to service their debts or to default. Lenders become wealthier, but may choose to save some of their additional wealth rather than spending it all. The overall amount of expenditure is therefore likely to fall. Deflation also prevents a central bank of its ability to stimulate spending. However in practice it has always been possible for governments to control deflation by leaving the gold standard or by artificial expenditure.

3. Monetary policy would essentially be determined by the rate of gold production. Fluctuations in the amount of gold that is mined could cause inflation if there is an increase, or deflation if there is a decrease. Some hold the view that this contributed to the severity and length of the Great Depression as the gold standard forced the central banks to keep monetary policy too tight, creating deflation. Milton Friedman however argued that the main cause of the severity of the Great Depression in the United States was the Federal Reserve, and not the gold standard, as they willfully kept monetary policy tighter than was required by the gold standard.

4. James Hamilton contended that the gold standard may be susceptible to speculative attacks when a government's financial position appears weak, although others contend that this very threat discourages governments' engaging in risky policy.

   For example, some believe that the United States was forced to raise its interest rates in the middle of the Great Depression to defend the credibility of its currency after unusually easy credit policies in the 1920s. This disadvantage however is shared by all fixed exchange rate regimes and not just limited to gold money. All fixed currencies that appear weak are subject to speculative attack.

5. If a country wanted to devalue its currency, it would generally produce sharper changes than the smooth declines seen in flat currencies, depending on the method of devaluation.

2.4.1.2 Interwar Years

Q14. Discuss in detail about Interwar Years.

Ans :

The gold standard as an International Monetary System worked well until World War I interrupted trade flows and disturbed the stability of exchange rates for currencies of major countries. There was widespread fluctuation in currencies in terms of gold during World War I and in the early 1920s. The role of Great Britain as the world's major creditor nation also came to an end after World War I. The United States began to assume the role of the leading creditor nation.

As countries began to recover from the war and stabilize their economies, they made several attempts to return to the gold standard. The United States returned to gold in 1919 and the United Kingdom in 1925. Countries such as Switzerland, France and Scandinavian countries restored the gold standard by 1928.

The key currency involved in the attempt to restore the international gold standard was the pound sterling which returned to gold in 1925 at the old mint parity exchange rate of $ 4.87/£. This was a great mistake since the United Kingdom had experienced considerably more inflation than the United States and because UK had liquidated most of its foreign investment in financing the war. The result was increased unemployment and economic stagnation in Britain.

The pound's overvaluation was not the only major problem of the restored gold standard. Other problems included the failure of the United States to act responsibly, the undervaluation of the French franc and a general decrease in the willingness and ability of nations to rely on the gold standard adjustment mechanism.

In 1934, the United States returned to a modified gold standard and the US dollar was devalued from the previous $ 20.67/ounce of gold to $ 35.00/ounce of gold. The modified gold standard was known as the Gold Exchange Standard. Under this standard, the US traded gold only with foreign central banks, not with private citizens. From 1934 till the end of World War II, exchange rates were theoretically determined by each currency's value in terms of gold. World War II also resulted in many of the world's major currencies losing their convertibility. The only major currency that continued to remain convertible was the dollar.

Thus the interwar period was characterized by half-hearted attempts and failure to restore the gold standard, economic and political instabilities, widely fluctuating exchange rates, bank failures and financial crisis. The Great Depression in 1929 and the stock market crash also resulted in the collapse of many banks.

2.4.1.3 Bretton Woods System

Q15. Explain briefly about Bretton Woods System ?

(OR)

Explain sailent features of Bretton wood's system. Discuss the reasons for its failure.

Ans : **(Sep-20)**

A conference was held at Bretton Woods in the USA, in July 1944, in order to put in place a new international monetary system. The major objectives of this conference were :

1) to review the existing rules,

2) to devise a system to encourage international monetary cooperation, and

3) to establish an international institution to ensure good functioning of the system.

The Bretton Woods system of monetary management established the rules for commercial and financial relations among the world's major industrial states in the mid 20th century. The Bretton Woods system was the first example of a fully negotiated monetary order intended to govern monetary relations among independent nation-states. The chief features of the Bretton Woods system were an obligation for each country to adopt a monetary policy that maintained the exchange rate by tying its currency to the U.S. dollar and the ability of the IMF to bridge temporary imbalances of payments.

Features

Main characteristics of the international monetary system developed at Bretton Woods can be summarized as follows :

- Fixed rates in terms of gold (i.e. a system of gold standard), but only the US dollar was convertible into gold as the USA ensured convertibility of dollars into gold at international level.
- A procedure for mutual international credits.
- Creation of International Monetary Fund (IMF) to supervise and ensure smooth functioning of the system. Countries were expected to pursue the economic and monetary policies in a manner so that fluctuations of currency remained within a permitted margin of ±1 percent. That is, the central bank of every country had to intervene to buy or sell foreign exchange, depending on the need.

- Devaluations or revaluations of more than 5 percent had to be done with the permission of the IMF. This measure was necessary to avoid chain devaluations like the ones which occurred before the Second World War.

The purpose of the Bretton Woods meeting was to set up new system of rules, regulations, and procedures for the major economies of the world. The main goal of the agreement was economic stability for the major economic powers of the world. The system was designed to address systemic imbalances without upsetting the system as a whole.

The Effect of Bretton Woods on the US Dollar

The Bretton Woods system established the US Dollar as the reserve currency of the world. It also required world currencies to be pegged to the dollar rather than gold. The demise of Bretton woods started in 1971 when Richard Nixon took the US off of the Gold Standard to stem the outflow of gold.

By 1976 the principles of Bretton Woods were abandoned all together and the world currencies were once again free floating. Bretton Woods is an important event for forex traders because it was truly the founding of forex trading.

Bretton Woods Agreement Produced Three Propositions

1) The stable exchange rates under the gold standard before world war I were desirable but there were certain conditions to make adjustments in exchange rates necessary,

2) Performance of fluctuating exchange rates had been unsatisfactory, and

3) The complex network of government controls during 1931-1945 deterred the expansion of world trade and investment. However there were certain conditions which required government controls over international trade and payments.

The Bretton woods system worked without major changes from 1947 till 1971. During this period, the fixed exchange rates were maintained by official intervention in the foreign exchange markets. International trade expanded in real terms at a faster rate than world output and currencies of many nations, particularly those of developed countries, became convertible.

The stability of exchange rates removed a great deal of uncertainty from international trade and business transactions thus helping the countries to grow. Also, the working of the system imposed a degree of discipline on the economic and financial policies of the participating nations. During the 1950s and 1960s, the IMF also expanded and improved its operation to preserve the Bretton woods system.

The system, however, suffered from a number of inherent structural problems. In the first place, there was much imbalance in the roles and responsibilities of the surplus and deficits nations. Countries tight and stringent economic policy measures if they wanted to take help from the IMF and stop the drain on their reserves.

The basic problem here was the rigid approach adopted by the IMF to the balance of payments disequilibria situation. The controversy mainly centres on the 'conditionality issue,' which refers to a set of rules and policies that a member country is required to pursue as a prerequisite to using the IMF's resources. These policies mainly try and ensure that the use of resource by concerned members is appropriate and temporary.

The IMF distinguishes between two levels of conditionality, low conditionality where a member needs funds only for a short period and high conditionality where the member country wants a large access to the fund's resources. This involves the formulation of a formal financial programme containing specific measures designed to eliminate the country's balance of payments disequilibrium.

Use of IMF resources, under these circumstances, requires IMF's willingness that the stabilization programme is adequate for the achievement of its objectives and an understanding by the member to implement it.

The Collapse of the Bretton Woods System

Backing currency by the gold standard started to become a serious problem throughout the late 1960s. By 1971, the issue was so bad that US President Richard Nixon gave notification that the ability to convert the dollar to gold was being

suspended "temporarily." The move was inevitably the final straw for the system and the agreement that outlined it.

Still, there were several attempts by representatives, financial leaders, and governmental bodies to revive the system and keep the currency exchange rate fixed. However, by 1973, nearly all major currencies had begun to float relatively toward one another, and the entire system eventually collapsed.

2.4.1.4 Flexible Exchange Rate Regime

Q16. Explain the concept of Flexible Exchange Rate Regime.

Ans :

The collapse of the Bretton Woods system was followed by the flexible exchange rate regime which was approved in January 1976 when the members of International Monetary Fund (IMF) met in Jamaica and agreed to develop a new set of rules for the international monetary system. The following are the important elements of the Jamaica Agreement.

1. The flexible exchange rates was accepted by all the members of IMF and central banks were permitted to interfere in the Exchange markets for settling the unwarranted volatilities.
2. Gold was demonetized and was no longer used as an international reserve asset. About half of the gold holdings of IMF was send to the members and the other half of the gold holdings was sold. The money which was obtained from an event or activity was used for assisting poor countries.
3. The non-oil exporting countries and less developed countries were allowed to have greater access to IMF. The IMF helped the countries which were facing difficulties with respect to balance of payments and exchange rate. But, IMF gave help and granted loans to the member countries only on the obligation that those countries adopt the macro economic policy prescriptions of IMF. This obligation which deals with the deflationary macroeconomic policies and elimination of different subsidy programs, induces unfriendliness and jealousy among the individuals of developing countries who receives the balance of payments loans of IMF.

Since March 1973, the exchange rates were more significantly liable to changes when compared to the exchange rates which were under the Bretton woods system. The decrease of the dollar between 1970 and 1973 denotes the shift from Bretton Woods to the flexible exchange rate system.

Q17. What is fixed exchange rate system? State the advantages of fixed exchange rate system.

Ans :

A fixed exchange rate, sometimes called a pegged exchange rate, is a type of exchange rate regime wherein a currency's value is matched to the value of another single currency or to a basket of other currencies, or to another measure of value, such as gold.

A fixed exchange rate is usually used to stabilize the value of a currency against the currency it is pegged to. This makes trade and investments between the two countries easier and more predictable, and is especially useful for small economies where external trade forms a large part of their GDP.

- It can also be used as a means to control inflation. However, as the reference value rises and falls, so does the currency pegged to it. In addition, according to the Mundell-Fleming model, with perfect capital mobility, a fixed exchange rate prevents a government from using domestic monetary policy in order to achieve macroeconomic stability.
- It is important to note that financial markets have developed sophisticated derivatives that allow firms to hedge future exchange rate fluctuation risks. Regardless, fixed exchange rates are still fairly common.
- It is important to realize that demand and supply for currency still exist as in the case of floating exchange rates. However, changes in demand and supply theoretically no longer affect the price of the currency, which is fixed. However, as we will soon see, the price of the currency may only remain fixed in the short run; there may be substantial long run changes in the exchange rate.

- One could almost argue that the key distinction between fixed and floating rates is a trade off of continuous, small changes in the exchange rate for discrete, larger changes. However, before we explore the long run determination of the exchange rate in a fixed exchange rate system, let's examine the basic structure.
- In a fixed exchange rate system, the Central Bank stands ready to exchange local currency and foreign currency at a pre-announced rate.
- One important concept to keep in mind is the market equilibrium exchange rate, the rate at which supply and demand will be equal, i.e. markets will clear. In a flexible exchange rate system, this is the spot rate. In a fixed exchange rate system, the pre-announced rate may not coincide with the market equilibrium exchange rate.

Advantages

1) Fixed rates provide greater certainty for exporters and importers and under normally circumstances there is less speculative activity - although this depends on whether the dealers in the foreign exchange markets regard a given fixed exchange rate as appropriate and credible. Sterling came under intensive speculative attack in the autumn of 1992 because the markets perceived it to be overvalued and ripe for a devaluation.

2) Fixed exchange rates can exert a strong discipline on domestic firms and employees to keep their costs under control in order to remain competitive in international markets. This helps the government maintain low inflation - which in the long run should bring interest rates down and stimulate increased trade and investment.

Q18. What are the differences between fixed exchange system and floating exchange rate system?

Ans : **(Imp.)**

S.No.	Fixed Exchange Rate System	S.No.	Floating Exchange Rate System
1.	It is a system under which the exchange rates are either same or fluctuates within a limited boundary.	1.	It is a system in which the market forces (Demand and supply) determines the exchange rate.
2.	Fixed exchange rate system is not that much flexible, but government interferes in such situations a where the exchange rates	2.	It is completely free floating exchange rate system i.e., completely flexible in which exchange rates gets adjusted as per demand and supply factors.
3.	Multinational firms are not subjected to the changes that takes place in future because the government holds the authority to either devalue or revalue the exchange rate.	3.	In the floating exchange rate system the firms are always subjected to the fluctuations in the exchange rate as they follow a floating exchange rate system and there is no government intervention.
4.	A fixed exchange rate system enables the countries to experience the economic conditions of other nations.	4.	A floating exchange rate system protects one country from inflation prevailing in the other country.
5.	A fixed exchange rate system allows a country to be exposed to unemployment situation of other countries.	5.	A floating exchange rate system protects a country from facing and experiencing unemployment conditions in other countries.

2.5 Evaluation of Floating Rates

Q19. Describe briefly about Evaluation of Floating Rates.

Ans :

The fixed rate and floating rate systems have diverse natures and characteristics. Therefore, both of the systems cannot meet the same goals of certainty, stability and inflation control. Advocates of the fixed rate plan believe that the certainty and rigidity of exchange rates can promote economic efficiency, public confidence and inflation control. In recent years, several US public officials have been encouraging the return of some kind of gold standard. If this system could indeed work as intended, there would probably be no need to have more than one world currency.

Experience has shown that fixed rates do not work well for a prolonged period. Fixed rates were often said to have been responsible for price stability from 1792 to 1271. Actually, wholesale prices fluctuated quite widely throughout that period. The United Kingdom's wholesale price index is a good example. From the base of 100 in 1930, the index increased to 162 in 1946, 406 in 1956, 507 in 1966, and 1248 in 1976. If inflation seemed to be controlled when the link between a currency and gold was restored, the effect took place only at the time of the action and was, at best, temporary. Also, for fixed rates to work, the gold price must remain fixed to control inflation - a difficult if not impossible requirement.

Other problems associated with fixed rates include massive capital flows during a crisis and the closing of financial markets. According to Morgan Guaranty, between 1976 and 1985, citizens of Mexico and Venezuela sent $53 billion and $ 30 billion, respectively, out of their countries. Also, it is unrealistic to believe that the United States wants its money supply to be backed by gold and to be at the mercy of such major gold producers as South Africa and the Soviet Union.

If fixed rates were effective once, they are not now. As noted in an IMF publication, "the par value system and its adjustment mechanism appeared to be working well during the second decade of the Fund's operations. This was mainly due to high levels of employment and low and fairly uniform rates of inflation among the industrial countries, the willingness of members whose payments positions were strengthening during the period to accumulate US dollars and the ready adoption by countries of domestic measures to correct disequilibrium in their balance of payments." Most, if not all, of the necessary conditions no longer exist today.

Critics of floating exchange rates contend that the system causes uncertainty which discourages trade while promoting speculation. Actually,' since 1973, the exchange markets have clearly demonstrated their resilience and their ability to maintain appropriate rates of exchange. As concluded in a study conducted by the IMF, "exchange rate volatility since the early 1970 s does not appear to have impeded world trade." In fact, world exports climbed stead for eight years after the float was put in place and it is apparent that the system does nor interfere with world exports.

The crime that uncertainty encourages investors to speculate and destabilise exchange rates is probably invalid. The fixed rate system is more likely to encourage speculation by giving speculators a one-way, no-loss bet to make money since the exchange rate can only move in one direction once the upper limit is reached. Whatever the fault of the floating rates, the fixed regime is subject to the same fault, probably, to a greater magnitude.

Because of a lack of inherent discipline imposed by fixed rates, floating currencies are said to encourage inflation. In reality, the flexible rate system makes-the consequences of inflationary policies more readily apparent to the general public, labour and employers in the form of a declining foreign value of the currency and an upward trend in domestic prices. This public awareness makes it easier to implement proper policies to correct the situation without reaching a crisis atmosphere, as otherwise might occur. These countries are then able to pursue the mixture of unemployment and price objectives that they prefer and that are consistent with international equilibrium.

2.6 The Current Exchange Rate Arrangements

Q20. Explain the various classification of Exchange Rate Arrangements.

(OR)

Explain the Current Exchange Rate Arrangements. How does exchange rates regime effect on international monetary system.

Ans : **(May-19)**

The classification system is based on members' actual, de facto, arrangements as identified by IMF staff, which may differ from their officially announced arrangements. The scheme ranks exchange rate arrangements on the basis of their degree of flexibility and the existence of formal or informal commitments to exchange rate paths. It distinguishes among different forms of exchange rate regimes, in addition to arrangements with no separate legal tender, to help assess the implications of the choice of exchange rate arrangement for the degree of monetary policy independence.

The system presents members' exchange rate regimes against alternative monetary policy frameworks with the intention of using both criteria as a way of providing greater transparency in the classification scheme and to illustrate that different exchange rate regimes can be consistent with similar monetary policy frameworks.

1. Exchange Arrangements with No Separate Legal Tender

The currency of another country circulates as the sole legal tender (formal dollarization), or the member belongs to a monetary or currency union in which the same legal tender is shared by the members of the union. Adopting such regimes implies the complete surrender of the monetary authorities' independent control over domestic monetary policy.

2. Currency Board Arrangements

A monetary regime based on an explicit legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate, combined with restrictions on the issuing authority to ensure the fulfillment of its legal obligation.

3. Other Conventional Fixed Peg Arrangements

The country (formally or de facto) pegs its currency at a fixed rate to another currency or a basket of currencies, where the basket is formed from the currencies of major trading or financial partners and weights reflect the geographical distribution of trade, services, or capital flows. The currency composites can also be standardized, as in the case of the SDR.

There is no commitment to keep the parity irrevocably. The exchange rate may fluctuate within narrow margins of less than ±1 percent around a central rate-or the maximum and minimum value of the exchange rate may remain within a narrow margin of 2 percent-for at least three months.

4. Pegged Exchange Rates within Horizontal Bands

The value of the currency is maintained within certain margins of fluctuation of at least ±1 percent around a fixed central rate or the margin between the maximum and minimum value of the exchange rate exceeds 2 percent. It also includes arrangements of countries in the exchange rate mechanism (ERM) of the European Monetary System (EMS) that was replaced with the ERM II on January 1, 1999.

5. Crawling Pegs

The currency is adjusted periodically in small amounts at a fixed rate or in response to changes in selective quantitative indicators, such as past inflation differentials vis-à-vis major trading partners, differentials between the inflation target and expected inflation in major trading partners, and so forth. Maintaining a crawling peg imposes constraints on monetary policy in a manner similar to a fixed peg system.

6. Exchange Rates within Crawling Bands

The currency is maintained within certain fluctuation margins of at least ±1 percent

around a central rate-or the margin between the maximum and minimum value of the exchange rate exceeds 2 percent-and the central rate or margins are adjusted periodically at a fixed rate or in response to changes in selective quantitative indicators.

7. Managed Floating with No Pre-determined Path for the Exchange Rate

The monetary authority attempts to influence the exchange rate without having a specific exchange rate path or target. Indicators for managing the rate are broadly judgmental (e.g., balance of payments position, international reserves, parallel market developments), and adjustments may not be automatic. Intervention may be direct or indirect.

8. Independently Floating

The exchange rate is market-determined, with any official foreign exchange market intervention aimed at moderating the rate of change and preventing undue fluctuations in the exchange rate, rather than at establishing a level for it.

Q21. Explain the factors influencing Current Exchange Rate.

Ans :

The following factors have an impact on current exchange rates:

1. Inflation

If the rate of inflation in a country is lower than that in another country, demand for the former's exports will rise. This, in turn, would create rising demand for that country's currency, exerting upward pressure on its value.

2. Change in Competitiveness

Related to the inflation rate, this factor affects exchange rates considerably. Goods and services produced by a country can become more competitive in the global market as a result of an increase in labor productivity. This increases the demand for these goods. A high volume of trade results in appreciation in the value of the country's currency.

3. Higher Interest Rates

When the interest rates offered by banks or financial institutions of a particular country rise, depositing money in that country becomes a profitable investment option. This results in increased demand for the currency of that country.

4. Speculation

This is more of a sentimental factor than an economic one. Some people believe that the value of a country's currency may rise in the near future. They buy the currency to earn profits, following appreciation in the exchange rates. This buying activity results in increased demand for the currency.

5. Current Account Surplus

This factor is guided by the balance of trade of a country. When the value of the country's exports exceeds the value of its imports, the inflow of foreign currency is higher than the outflow.

6. Value of Other Currencies

The strength or weakness of a currency can lead to a decline or rise in the value of another currency. For example, the weakening of the Euro led to the appreciation of the exchange rate of pound sterling between 1999 and 2001.

Current exchange rates are determined by the market forces of demand and supply. Most governments play a limited role in influencing exchange rates. Since the forex market is so vast, global exchange rates can not be impacted by an individual trader.

2.7 THE ECONOMIC AND MONETARY UNION (EMU)

Q22. Explain briefly about The Economic and Monetary Union (EMU).

(OR)

Discuss about Economic and Monetary Union.

Ans : **(Dec-19)**

An economic and monetary union is a type of trade bloc which is composed of a economic union (common market and customs union) with a monetary union. It is to be distinguished from a mere monetary union (e.g. the Latin Monetary Union in the 19th century), which does not involve a common market. This is the fifth stage of economic integration. EMU is established through a currency-related trade pact. An intermediate step between pure EMU and a complete economic integration is the fiscal union.

A first attempt to create an economic and monetary union between the members of the European Communities goes back to an initiative by the European Commission in 1969, which set out the need for "greater coordination of economic policies and monetary cooperation" (Barre Report), which was followed by the decision of the Heads of State or Government at their summit meeting in The Hague in 1969 to draw up a plan by stages with a view to creating an economic and monetary union by the end of the 1970s.

In June 1988 the European Council confirmed the objective of the progressive realization of Economic and Monetary Union (EMU). It mandated a committee chaired by Jacques Delors, the then President of the European Commission, to study and propose concrete stages leading to this union.

The committee was composed of the governors of the European Community (EC) national central banks; Alexandre Lamfalussy, the then General Manager of the Bank for International Settlements (BIS); Niels Thygesen, professor of economics, Denmark; and Miguel Boyer, the then President of the Banco Exterior de España.

Q23. Explain the advantages and criticisms of Economic Monetary Union.

Ans :

Advantages

The primary advantage of EMU is that it has helped in stabilizing exchange rates in the currencies of member states. In other words, currencies cease to fluctuate. This, in turn, is likely to lead to several gains on the economic front :

1. Elimination of the transaction costs otherwise required to be incurred in dealing with multiple currencies; it also resolves uncertainties associated with fluctuations in exchange rates.
2. All prices will be in the common currency and, therefore, obviously, it is likely to bring about a greater transparency in prices.
3. Better functioning of financial markets due to a single currency. This apart, liquidity of financial markets is going to be enhanced.
4. Great credibility with respect to the world outside.

EMU signifies giving up an independent national monetary policy. There seems to be an agreement among the member states that the effect of the EMS will be beneficial for the economic growth of Europe.

EMU helps in lowering the interest rates for Members States of EU as lenders found their currencies to be less volatile to exchange rate fluctuations and, therefore, demanded less risk premiums as a part of the interest rates charged by them. The lowering of interest rates is expected to promote investments and lower their debt service burden.

Criticisms

1. Concerns about the EMU center around loss of national sovereignty for each of the individual participating states. Some fear that the participating states may not be able to pull out of a national economic crisis without the ability to devalue its national currency and encourage exports.
2. Others worry that the participating European states will be forced to give tax breaks to compete with each other and that companies may have to lower wages for their employees and to lower prices on goods that they produce. Because taxes continue to be levied at the national level and not by the EMU, tax policy cannot be used as a tool to help individual states that may be experiencing an economic downturn. In this way, the EMU differs from the United States which has both a single federal monetary policy and a primarily centralized tax system.

Short Question and Answers

1. What are the different agencies that Facilitate International Flow of funds?

Ans :

A variety of agencies have been established to facilitate international trade and financial transactions. These agencies often represent a group of nations. A description of some of the more important agencies follows.

A) International Monetary Fund (IMF)

The United Nations Monetary and Financial Conference held in Bretton Woods, New Hampshire, in July 1944 was called to develop a structured international monetary system. As a result of this conference, the International Monetary Fund (IMF) was formed. The major objectives of the IMF, as set by its charter, are to

(i) Promote cooperation among countries on international monetary issues

(ii) Promote stability in ex-change rates

(iii) Provide temporary funds to member countries attempting to correct imbalances of international payments

(iv) Promote free mobility of capital funds across countries, and

(v) Promote free trade. It is clear from these objectives that the IMF's goals encourage increased internationalization of business.

B) World Bank

The International Bank for Reconstruction and Development (IBRD), also referred to as the World Bank, was established in 1944. Its primary objective is to make loans to countries to enhance economic development. For example, the World Bank recently extended a loan to Mexico for about $4 billion over a 10-year period for environmental projects to facilitate industrial development near the U.S. border. Its main source of funds is the sale of bonds and other debt instruments to private investors and governments. The World Bank has a profit-oriented philosophy. Therefore, its loans are not subsidized but are extended at market rates to governments (and their agencies) that are likely to repay them.

C) World Trade Organization

World Trade Organization (WTO) was created as a result of the Uruguay Round of trade negotiations that led to the GATT accord in 1993. This organization was established to provide a forum for multilateral trade negotiations and to settle trade disputes related to the GATT accord. It began its operations in 1995 with 81 member countries, and more countries have joined since then. Member countries are given voting rights that are used to make judgments about trade disputes and other issues.

D) International Financial Corporation

In 1956 the International Financial Corporation (IFC) was established to promote private enterprise within countries. Composed of a number of member nations, the IFC works to promote economic development through the private rather than the government sector. It not only provides loans to corporations but also purchases stock, thereby becoming part owner in some cases rather than just a creditor. The IFC typically provides 10 to 15 percent of the necessary funds in the private enterprise projects in which it invests, and the remainder of the project must be financed through other sources. Thus, the IFC acts as a catalyst, as opposed to a sole supporter, for private enterprise development projects. It traditionally has obtained financing from the World Bank but can borrow in the international financial markets.

2. Bretton Woods System

Ans :

A conference was held at Bretton Woods in the USA, in July 1944, in order to put in place a new international monetary system. The major objectives of this conference were :

1) to review the existing rules,

2) to devise a system to encourage international monetary cooperation, and

3) to establish an international institution to ensure good functioning of the system.

The Bretton Woods system of monetary management established the rules for commercial and financial relations among the world's major industrial states in the mid 20th century. The Bretton Woods system was the first example of a fully negotiated monetary order intended to govern monetary relations among independent nation-states. The chief features of the Bretton Woods system were an obligation for each country to adopt a monetary policy that maintained the exchange rate by tying its currency to the U.S. dollar and the ability of the IMF to bridge temporary imbalances of payments.

3. Gold standard

Ans :

The gold standard is a monetary system in which the standard economic unit of account is a fixed weight of gold. There are distinct kinds of gold standard. First, the gold specie standard is a system in which the monetary unit is associated with circulating gold coins, or with the unit of value defined in terms of one particular circulating gold coin in conjunction with subsidiary coinage made from a lesser valuable metal.

Similarly, the gold exchange standard typically involves the circulation of only coins made of silver or other metals, but where the authorities guarantee a fixed exchange rate with another country that is on the gold standard.

Under the classical gold standard, from 1870 to 1914, the international monetary system was largely decentralized and market-based. There was minimal institutional support, apart from the joint commitment of the major economies to maintain the gold price of their currencies. Although the adjustment to external imbalances should, in theory, have been relatively smooth, in practice it was not problem-free.

4. Explain Indian BOP Trends.

Ans :

During post-independence period India's balance of payments was unfavourable i.e., there was deficit in balance of payments, but at the time of second world war it was favourable. Deficit in balance-of-payments in each plan is illustrated in the tabular form.

1. Pre-Planning Period

Pre-planning period lies from the year 1947 to 1951. The deficit in balance of payment on current account during the pre-planning period was `240 crore. In the year 1949 the rupee value was devalued but there was no improvement in the circumstances.

2. First Plan (1951 - 56)

The duration of the first year plan was from 1951 to 1956, the deficit in balance of payments on current account was Rs. 42 crore only.

3. Second Plan (1956-1961)

The duration of the 2nd five year plan was 1956 to 1961. During this plan there was an increase in the deficit of balance of payments. It was Rs.1,725 crore due to heavy imports of machines, raw materials and food grains.

4. Third Plan (1961-65)

The duration of this plan was from 1961-1965. Again in this period there was an increase and deficit in balance of payments due to Indo-China and Indo-Pak war, huge imports of military equipments and food grains, this resulted in the shortage of food grains. The deficit was increased to 951 crore.

5. Three-Annual Plans (1966-1969)

There was further rise in the deficit of balance of payments on current accounts i.e., it increased from `1951 to `2,015 crores due to shortage of food in the nation. This period also witnessed heavy imports of food grains and also heavy interest payment on foreign loans.

6. Fourth Plan (1969-74)

The duration of this plan was from 1969 to 1974. During this period the balance of payments was favourable which was about Rs. 100 crore. It was for the first time after independence that the BOP were favourable due to many reasons like increase in exports, decrease in imports, rise in receipts from invisible items and so on.

5. Define Balance of payment

Ans :

Introduction

The balance of payments (BoP) is a statistical statement that systematically summarizes, for a specific period (typically a year or quarter), the economic transactions of an economy with the rest of the world. It covers (a) all the goods, services, factor income and current transfers an economy receives from or provides to the rest of the world; and (b) capital transfers and changes in an economy's external financial claims and liabilities.

Definition

(i) According to Kindleberger Balance of payments is "a systematic record of all economic transactions between the residents of the reporting country and residents of foreign countries during a given period of time".

6. Explain the functions of BOP ?

Ans :

The main functions of a country's BOP are:

1. The BOP helps understand how various economic transactions are brought into balance in a given period. These transactions can include trade in goods and services; purchase and sale of assets, including securities; and transfer of funds through grants, aids and repatriations.
2. An analysis of the BOP also reveals how a country is paying for its imports and other transactions, the extent of export earnings in the total credits, and the adequacy of foreign exchange reserves.
3. The BOP also indicates the extent of external indebtedness of a country, along with its cushion of foreign assets. This enables the government to make appropriate decisions with regard to monetary and fiscal policies, foreign trade, and international payments. In other words, BOP acts as a guide to the monetary, fiscal, trade, and exchange rate policies of a government.
4. BOP statistics are also used extensive by business enterprises and others who engage in international economic transactions.

7. Importance of Balance of Payments.

Ans :

- It permits a judgement on the economic and financial situation of a country in the short-term.
- If a country has significant deficit, it will have a tendency to take stiff measures for diminishing its imports.
- Prices of imported materials may go up. In certain countries, a large deficit of BOP may lead to measures of exchange control, or restriction on repatriation of dividends, interests, etc.
- BOP provides foresight regarding the type of exchange rates (in-crease/decrease) to prevail consistent deficit of BOP has an unfavourable effect on exchange rate.
- In a system of fixed exchange rates, persistent deficit leads to a devaluation and vice versa.
- Likewise, in a system of floating rates, persistent deficit would signal an ongoing depreciation of the currency of the country concerned.

8. What are the factors Affecting on International Trade Flows?

Ans :

International trade can significantly affect a country's economy, it is important to identify and monitor the factors that influence it. The most influential factors are:

1. Inflation
2. National income
3. Government policies
4. Exchange rates

1. Inflation

If a country's inflation rate increases relative to the countries with which it trades, its current account will be expected to decrease, other things being equal. Consumers and corporations in that country will most likely purchase more goods overseas (due to high local inflation), while the country's exports to other countries will decline.

2. National Income

If a country's income level (national income) increases by a higher percentage than those of other countries, its current account is expected to decrease, other things being equal. As the real income level (adjusted for inflation) rises, so does consumption of goods. A percentage of that increase in consumption will most likely reflect an increased demand for foreign goods.

3. Government Policies

A country's government can have a major effect on its balance of trade by its policies on subsidizing exporters, restrictions on imports, or lack of enforcement on piracy.

a) Subsidies for Exporters

Some governments offer subsidies to their domestic firms so that those firms can produce products at a lower cost than their global competitors. Thus, the demand for the exports produced by those firms is higher as a result of subsidies.

b) Restrictions on Imports

A country's government can also prevent or discourage imports from other countries. By imposing such restrictions, the government disrupts trade flows. Among the most commonly used trade restrictions are tariffs and quotas.

c) Lack of Restrictions on Piracy

In some cases, a government can affect international trade flows by its lack of restrictions on piracy.

4. Exchange Rates

Each country's currency is valued in terms of other currencies through the use of exchange rates. Currencies can then be exchanged to facilitate international transactions. The values of most currencies fluctuate overtime because of market and government forces. If a country's currency begins to rise in value against other currencies, its current account balance should decrease, other things being equal. As the currency strengthens, goods exported by that country will become more expensive to the importing countries. As a consequence, the demand for such goods will decrease.

9. What is International Monetary System?

Ans :

International monetary systems are sets of internationally agreed rules, conventions and supporting institutions that facilitate international trade, cross border investment and generally the reallocation of capital between nation states. They provide means of payment acceptable between buyers and sellers of different nationality, including deferred payment.

To operate successfully, they need to inspire confidence, to provide sufficient liquidity for fluctuating levels of trade and to provide means by which global imbalances can be corrected. The systems can grow organically as the collective result

of numerous individual agreements between international economic actors spread over several decades. Alternatively, they can arise from a single architectural vision as happened at Bretton Woods in 1944.

The international monetary system consists of

i) exchange rate arrangements;

ii) capital flows; and

iii) a collection of institutions, rules, and conventions that govern its operation.

10. Advantages of Gold Standard.

Ans :

1. Long-term price stability has been described as the great virtue of the gold standard. Under the gold standard, high levels of inflation are rare, and hyperinflation is impossible as the money supply can only grow at the rate that the gold supply increases. Economy-wide price increases caused by ever-increasing amounts of currency chasing a constant supply of goods are rare, as gold supply for monetary use is limited by the available gold that can be minted into coin. High levels of inflation under a gold standard are usually seen only when warfare destroys a large part of the economy, reducing the production of goods, or when a major new source of gold becomes available.

2. The gold standard limits the power of governments to inflate prices through excessive issuance of paper currency. It provides fixed international exchange rates between those countries that have adopted it, and thus reduces uncertainty in international trade. Historically, imbalances between price levels in different countries would be partly or wholly offset by an automatic balance-of-payment adjustment mechanism called the "price specie flow mechanism."

3. The gold standard makes chronic deficit spending by governments more difficult, as it prevents governments from inflating away the real value of their debts. A central bank cannot be an unlimited buyer of last resort of government debt. A central bank could not create unlimited quantities of money at will, as there is a limited supply of gold.

11. Disadvantages of Gold Standard.

Ans :

1. The total amount of gold that has ever been mined has been estimated at around 142,000 metric tons. This is less than the value of circulating money in the U.S. alone, where more than $8.3 trillion is in circulation or in deposit. Therefore, a return to the gold standard, if also combined with a mandated end to fractional reserve banking, would result in a significant increase in the current value of gold, which may limit its use in current applications.

   However, this is specifically a disadvantage of return to the gold standard and not the efficacy of the gold standard itself. Some gold standard advocates consider this to be both acceptable and necessary.

2. Deflation rewards savers and punishes debtors. Real debt burdens therefore rise, causing borrowers to cut spending to service their debts or to default. Lenders become wealthier, but may choose to save some of their additional wealth rather than spending it all. The overall amount of expenditure is therefore likely to fall. Deflation also prevents a central bank of its ability to stimulate spending. However in practice it has always been possible for governments to control deflation by leaving the gold standard or by artificial expenditure.

3. Monetary policy would essentially be determined by the rate of gold production. Fluctuations in the amount of gold that is mined could cause inflation if there is an increase, or deflation if there is a decrease. Some hold the view that this contributed to the severity and length of the Great Depression as the gold standard forced the central banks to keep monetary policy too

tight, creating deflation. Milton Friedman however argued that the main cause of the severity of the Great Depression in the United States was the Federal Reserve, and not the gold standard, as they willfully kept monetary policy tighter than was required by the gold standard.

12. What is fixed exchange rate system?

Ans :

A fixed exchange rate, sometimes called a pegged exchange rate, is a type of exchange rate regime wherein a currency's value is matched to the value of another single currency or to a basket of other currencies, or to another measure of value, such as gold.

A fixed exchange rate is usually used to stabilize the value of a currency against the currency it is pegged to. This makes trade and investments between the two countries easier and more predictable, and is especially useful for small economies where external trade forms a large part of their GDP.

- It can also be used as a means to control inflation. However, as the reference value rises and falls, so does the currency pegged to it. In addition, according to the Mundell-Fleming model, with perfect capital mobility, a fixed exchange rate prevents a government from using domestic monetary policy in order to achieve macroeconomic stability.
- It is important to note that financial markets have developed sophisticated derivatives that allow firms to hedge future exchange rate fluctuation risks. Regardless, fixed exchange rates are still fairly common.
- It is important to realize that demand and supply for currency still exist as in the case of floating exchange rates. However, changes in demand and supply theoretically no longer affect the price of the currency, which is fixed. However, as we will soon see, the price of the currency may only remain fixed in the short run; there may be substantial long run changes in the exchange rate.

13. What are the differences between fixed exchange system and floating exchange rate system?

Ans :

S.No.	Fixed Exchange Rate System	S.No.	Floating Exchange Rate System
1.	It is a system under which the exchange rates are either same or fluctuates within a limited boundary.	1.	It is a system in which the market forces (Demand and supply) determines the exchange rate.
2.	Fixed exchange rate system is not that much flexible, but government interferes in such situations a where the exchange rates	2.	It is completely free floating exchange rate system i.e., completely flexible in which exchange rates gets adjusted as per demand and supply factors.
3.	Multinational firms are not subjected to the changes that takes place in future because the government holds the authority to either devalue or revalue the exchange rate.	3.	In the floating exchange rate system the firms are always subjected to the fluctuations in the exchange rate as they follow a floating exchange rate system and there is no government intervention.

Exercise Problems

1. How are the following transactions entered in the U.S. balance of payment?
   (a) A U.S. firm exports $100 worth of goods to the UK payable in 3 months.
   (b) After 3 months the English importer pays by drawing down her dollar deposits in a New York bank.
   (c) What is left of transactions?
   (d) If they occur in the same calender year? If they do not ?

2. Prepare a BOP statement for France from the following data:

   France exports goods worth FFrs 5000

   France imports goods worth FFrs 4000

   i) Expenditure of foreign tourists in France. FFrs 2500
   ii) France makes interest and dividend payments Foreigners; FFrs 2000
   iii) A France working in USA sends a cheque to his wife in Paris FFrs 500
   iv) France telecom invests in India FFrs 4500
   v) IBM invests in France FFrs 4500
   vi) A France resident buys a German bonds : FFrs 300
   vii) A Swiss resident buys a French Bonds : FFrs 5000
   viii) France borrows FFrs 3800 for short term

UNIT III

FOREIGN EXCHANGE MARKET :

Function and Structure of the Forex markets, major participants, types of transactions and settlements dates, Foreign exchange quotations. Process of arbitrage, speculation in the forward market. Currency Futures and Options Markets, Overview of the other markets – Euro currency market, Euro credit market, Euro bond market, International Stock market.

3.1 Foreign Exchange Market

Q1. What is Foreign Exchange Market (Forex market)? Discuss the characteristics of foreign exchange market.

Ans : **(Imp.)**

Meaning

The foreign exchange market is over a counter (OTC) global marketplace that determines the exchange rate for currencies around the world. This foreign exchange market is also known as Forex, FX, or even the currency market. The participants engaged in this market are able to buy, sell, exchange, and speculate on the currencies.

These foreign exchange markets are consisting of banks, forex dealers, commercial companies, central banks, investment management firms, hedge funds, retail forex dealers, and investors. In our prevailing section, we will widen our discussion on the 'Foreign Exchange Market'.

Definitions

(i) According to Paul Einzig, "The foreign exchange market is the system in which the conversion of one national currency in to another takes place with transferring money from one country to another."

(ii) According to Kindleberger, "It is place where foreign moneys are bought and sold."

The foreign exchange market, also known as the forex, FX, or currency market, involves the trading of one currency for another. Prior to 1996 the market was confined to large corporate banks and international corporations. However it has since opened up to include all traders and speculators.

Characteristics

Following are the important features of foreign exchange market.

(i) High Liquidity

The foreign exchange market is the most liquid financial market in the world. It involves the trading of various currencies across the globe. All traders in this market are free to buy or sell currencies anytime as per their choice. They are free to exchange currencies without prices of currencies being traded getting affected. Currencies prices remain the same both at the time of order placed and executed thereby enabling to earn the expected prices.

(ii) Market Transparency

Trader in the foreign exchange market has full access to all market data and information. They can easily monitor different countries' currencies price fluctuations through real-time portfolio and account tracking without the need of a broker. All this information helps in making better trading decisions and control over investments.

(iii) Dynamic Market

The foreign exchange market is a dynamic market. In these markets, currency values change every second and hour. These values changes in accordance with changing forces

of demand and supply which also helps in determining the exchange rates. Due to its fast-changing character, this market is termed as the perfect market to trade.

(iv) Operates 24 Hours

Foreign exchange markets function 24 hours a day. It provides a platform where currencies can be traded anytime by traders. It provides a convenient time to all necessary adjustments when and wherever needed.

(v) Lower Trading Cost

The forex market has a very low trading cost. In these markets, there are no commissions like in case of any other investments. Any difference between buying and selling prices of currencies is the only cost of trading in the forex market. As there are low costs then the possibility of incurring losses is also minimum thereby making it possible for small investors to make good profit from trading.

(vi) Dollar Most Widely Traded

The dollar is the most dominant currency in the foreign exchange market. This currency is paired with every country's currency being traded in the forex market. In a major proportion of transactions every day, the dollar is one of the two currencies being traded.

3.1.1 Functions

Q2. What are the functions of foreign exchange market?

Ans : **(May-19)**

The various functions of the Foreign Exchange Market are as follows:

(i) Transfer Function: The basic and the most obvious function of the foreign exchange market is to transfer the funds or the foreign currencies from one country to another for settling their payments. The market basically converts one's currency to another.

(ii) Credit Function: The forex provides short-term credit to the importers in order to facilitate the smooth flow of goods and services from various countries. The importer can use his own credit to finance foreign purchases.

(iii) Hedging Function: The third function of a foreign exchange market is to hedge the foreign exchange risks. The parties in the foreign exchange are often afraid of the fluctuations in the exchange rates, which means the price of one currency in terms of another currency. This might result in a gain or loss to the party concerned.

3.1.2 Structure of the Forex Markets

Q3. Explain the structures of Foreign Exchange Market ?

Ans : **(May-19)**

The following figure depicts the structure of foreign exchange markets,

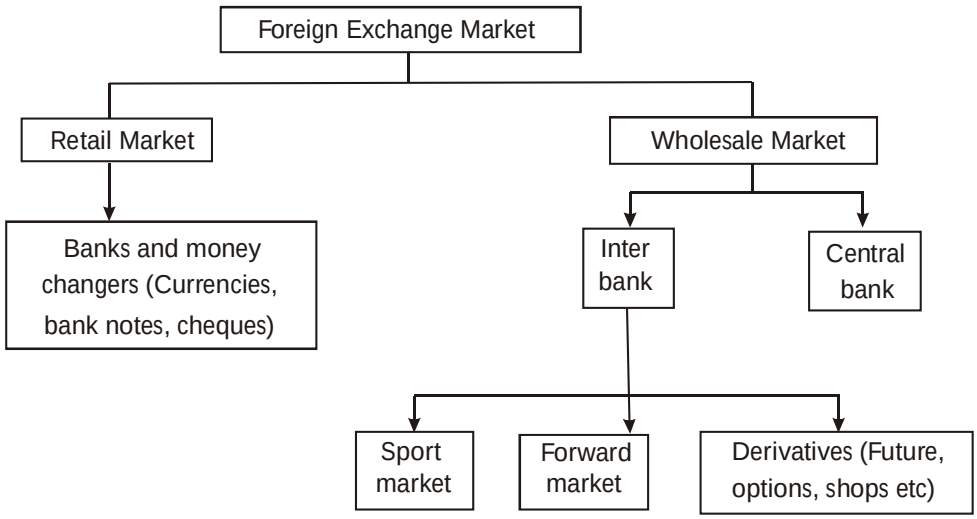

Fig. : Structure of FOREX Market

1. Retail Market

The transactions in the retail market are exchange of currency, bank draft, bank notes ordinary and traveller's cheques etc.,

2. Wholesale Markets

In case of wholesale market, regional offices and head offices of major commercial banks are the market makers wholesale market is broadly classified into inter-bank mark and central bank.

i) Inter-bank

In inter-bank market, banks trade in currencies. Banks transfer deposits from sellers to buyers accounts. Compared to bank notes market, inter-bank market is much wider. Inter-bank market is sub divided into spot market, forward market and derivatives.

a) Spot Market : Spot market includes transactions involving sale and purchase of currencies for immediate delivery at a rate existing on the day or transaction which is known as spot rate.

b) Forward Market. In forward market, the transactions that are to be settled on a future date as specified in the contract. The delivery of foreign exchange takes place on date further beyond two days, say after a fortnight, one months, two months or so on.

The rate of exchange for the transaction is agreed up on the very day the deal is finalized and is known as forward rate.

c) Derivatives. A derivative is a financial contract or an instrument value and the performance of some underlying asset. Derivatives are subdivided into,

- **Future Market :** It is localized exchange where derivatives instruments called future are traded with currency as its underlying financial instrument.
- **Option Market :** In this market, the derivation instrument option is traded which gives choice to a foreign exchange market operator to buy or sell a foreign currency on or up to a date at a specified rate.

- **Swap Market :** In this market, the instrument called as "swaps" are traded.

ii) Central Banks

The central banks in most of the countries have been charged with the responsibility of maintaining the external value of the currency of the country.

The main players in the foreign exchange market are large commercial banks, forex brokers, large corporations and central banks. The central banks normally enter the market to smoothen out fluctuations in the exchange rate or to maintain fixed exchange rates.

Large commercial banks deal in the market both for executives as their clients (both corporater and individuals) orders and on their own account. They act as market makers i.e., they stand ready to buy or sell their currencies at specific prices at all points of time. Commercial banks give on demand to quote for a particular currency against another currency i.e., the rate at which they are ready to buy or sell the former against the latter.

At these rates, they stand ready to take any side of the transaction (buy or sell) that the customer chooses maximum and the minimum amount of the currencies acceptable to the bank, though not specified at the time of making a quote, generally understood according to the conventions of the markets.

This may not necessarily be applicable to amounts smaller or larger than those acceptable according to the going conventions. In the foreign markets, there are numerous market makers and all of them would be giving different quotes for the same pair of currencies simultaneously at any point of time.

It would be very difficult for a player to keep track of all the quotes available in the market and hence chooses the one that is considered the most favorable.

As a result, a number of trades may be taking place simultaneously at different exchange rates. The market making activity of commercial banks along with speculation, makes markets extremely liquid especially for the major currencies of the world.

The foreign exchange brokers do not actually buy or sell any currency. They do the work of bringing buyers and sellers together. They deal in most of the major currencies and hold exhaustive information about it. Other players in the market, especially commercial banks approach the brokers for information about the quotes of other commercial banks.

The brokers serve three important purposes in foreign currencies. First, instead of hunting around in the market for quotes, one can approach a broker and find out these prices. Second is that brokers help the prospective buyers or sellers keep their identity secret till the deal is struck. This prevents the quote being affected by the inquirer's position, i.e., whether he needs to buy or sell. Lastly, even when there is buying or selling requirements, commercial banks can keep their quotes from going too far away from the quotes by other banks by inquiring about the market quotes from the brokers.

While small corporations generally approach commercial banks for their needs, large corporations some times operate in the market on their own.

3.2 Major Participants in Foreign Exchange Market

Q4. Explain the various participants in Foreign Exchange Market ?

Ans : **(Imp.)**

Any person, who exchanges currency of one country for currency of another country or needs such services, is said to an participant in foreign exchange markets. The main players in forex market are as follows,

(i) Customers

The customers who are engaged in foreign trade participate in foreign exchange market by availing the services of the agencies undertaking foreign exchange operations. It includes individuals, tourists, importers, exporters, investment managers and corporate treasurers who exchange domestic currency for foreign currency and vice versa.

(ii) Commercial Banks

They are most active players in the forex market. Major commercial banks dealing with international transactions offer services for conversion of one currency into another. They have a wide network of branches/ correspondent banks all over the world enabling them to undertake international transactions in an efficient and effective manner.

All the major commercial banks that have been authorized to deal in foreign exchange collectively constitute what is known as "Inter-Bank Market". On account of exchange control regulations, the commercial banks have to conduct their foreign exchange operations as per the local regulatory framework.

(iii) Central Banks

The central banks in most of the countries have been charged with the responsibility of maintaining the external value of the currency of the country.

The Central bank has to ensure orderliness in the movement of exchange rates. This is achieved by central bank's intervention in the foreign market.

When the market rate of the currency reaches the upper lines called as "upper intervention point", the central bank of that country must increase the sale of its own currency in exchange for other currencies.

Similarly, the central bank must sell foreign currencies and buy its own currency when the market rate reaches the lower lines called "Lower Intervention Point".

(iv) Exchange Brokers

Forex brokers plays a very important role in the foreign exchange markets. However, the extent to which services of forex brokers are utilized depends on the tradition and practice prevailing at a particular forex market centre.

In London, New York and Paris inter-bank transactions are put through forex brokers. Similarly, in India dealing is done in inter-bank market through forex brokers. The forex brokers are not allowed to deal on their own account all over the world as in India.

(v) Speculators

Central banks, commercial banks, corporates and individuals who undertake activity of buying and selling of foreign currencies for booking short-term profits by taking advantage of exchange rate movements are known as speculators. They play a very important and active role in the foreign exchange markets. In fact, a major junk of foreign exchange dealings in the market is due to speculative activities.

3.3 TYPES OF TRANSACTIONS AND SETTLEMENTS DATES

Q5. Describe how various types of transactions take place in spot and forward markets.

Ans :

Transactions in Markets

Transactions in foreign exchange markets or interbank markets are usually being carried out using a communication network called SWIFT (Society for Worldwide Interbank Financial Tele-communications). The transactions should be carried out in accordance to the guidelines given by the concerned regulatory authorities of each country. As there is no face-to-face exchange, there is a greater chance of frauds taking place. In order to avoid this, in US Commodity Futures Trading Commission regulates the foreign exchange trade and frauds while in India foreign exchange is basically regulated by foreign exchange management Act. 2000.

Settlement Date

Settlement date is the date on which the settlement of transactions between the countries actually takes place. Settlement date is also called "value date". The countries involved in settlement are called as the "settlement locations" and the location of banks involved in settlement are called

"dealing locations". Settlement date for both banks will be the same as the settlement of transactions takes place only when the two banks are open.

In foreign exchange market transactions are being classified into three types on the basis of the settlement date, nature and time of the transaction between the countries. They are,

(a) Spot transactions

(b) Forward transactions

(c) Swap transactions.

(a) Spot Transactions

Transactions related to buying of foreign exchange in the inter-bank market is a spot transaction.

On the second day of business, the transactions relating to payment and delivery takes place. Thus, settlement date is "value date".

Foreign currency transactions through CHIPS are carried on value date. On this date, calculations relating to inter-bank payments are done and also payments received from Federal Reserve Bank by 6.00 p.m through CHIPS.

(b) Forward Transactions

Forward transactions are also called as outright forward transactions. Forward transactions usually take place between two banks in order to exchange currency between them at a pre-determined future date. The exchange rate will be fixed on the date of transaction along with the date of exchange. The settlement date for a forward transaction can be determined by,

(i) Determining the settlement date for the spot transaction i.e., two business days from the transaction date.

(ii) Later on to this date one month is being added which will give the date of settlement for forwards.

Maturity period for forward transactions usually would be 1 month, 2, 3, 6, 9 and 12 months.

If the settlement date in forward transaction is a holiday, then the transaction will be carried out on the next business day.

(c) Swap Transaction

Swap transaction is a combination of either spot and forward or forward-forward transactions. Mostly it will be spot-forward swap.

(i) Spot-forward Swap: A dealer can carry out both spot and forward transactions in opposite direction i.e., buying 'yen' against 'dollar' in spot transactions and selling 'yen' against dollar in forward transactions. In these transactions the dealer is not exposed to any type of risk.

(ii) Forward-forward Swaps: This type of swaps involve both forward-forward transactions in which a dealer enters into buy and sell contract of currency under forward contracts.

A swap is a temporary contract of currency exchange between the countries to deliver it at a future date.

(iii) Short Date Transactions: In short date transactions the dealer will settle the transactions before the spot date i.e., settlement of transactions on the transaction date. Sometimes, these transactions involves a business day for settlement.

Q6. Explain the various instruments of Foreign Exchange Market.

Ans :

The instruments, with the help of which the international payments are effected. They are,

(i) Cheques and Bank Drafts

Persons dealing with foreign exchanges can use bank cheques as well as bank drafts in order to make payments. The cheque is drawn on particular bank instead of a person.

(ii) Bills of Exchange

It is also called as foreign bill of exchange which is an unconditional order in writing

addressed by one person to another. It mentions the person to whom a certain sum is to be paid either on demand or on specific date.

(iii) Mail Transfer (MT)

Under this, funds are transferred from one account of a destination to the another destination in the nation by mail. For international payments air-mail is used.

(iv) Telegraphic Transfers (TT)

By this method a sum can be transferred from one place to another place in the world by cable or telex. This is the quickest method of transferring fund from one place to another.

3.4 Foreign Exchange Quotations

Q7. Write about various Foreign Exchange Quotations.

Ans :

A foreign exchange quotation is also called as foreign exchange quote refers to a statement of willingness for buying or selling of currency at a given price and time. It refers to the price of one currency being expressed in another.

Generally, foreign exchange quotations are expressed as domestic currency price paid for a foreign currency. Some times, compared with many foreign currencies. Since it is not followed globally a standardised system of quoting introduced by inter-banking markets.

1. Inter-bank Quotations

Inter-bank quote is the quote given by one bank to another bank. In foreign exchange transactions, U.S dollar is widely used currency.

There are two ways of stating foreign exchange quotations. They are,

(i) Foreign currency price of one dollar (European quote).

(ii) Dollar price of a unit of foreign currency (American quote).

In the world, mostly foreign currencies are expressed in units of their currency to buy one dollar.

For example, exchange rate between U.S dollar and Swiss Franc is S.F 1.600/$ read as 16000 Swiss Francs per dollar.

Which means 1.6000 Swiss francs is paid to buy one U.S dollar. This is expressed in European terms, since foreign currency termed as of one U.S dollar.

The second method which is expressed as $0.6250/ SF, read as $0.6250 dollars per Swiss Franc which means 0.6250 U.S dollars paid to get one Swiss Franc. This is called American terms, since U.S dollar expressed as one unit of foreign currency.

Inter-bank quotations are mostly expressed in European terms.

Even though Japanese terms and Asian terms are used but European terms is popular and used world wide since 1978. This is also the year when telecommunications were introduced in trading.

2. Direct and Indirect Quotations

Taking home or foreign currencies as base, quotations are divided into two types. They are,

(a) Direct quotation

(b) Indirect quotation.

(a) Direct Quotation

A direct quote is the quote where the exchange rate is expressed in terms of number of units of the domestic currency per unit of foreign currency.

Direct quote refers to unit of domestic currency of a foreign currency. For example, inter-bank foreign exchange quotation “SF 1.6000/$”.

In terms of Switzerland it is a direct quotation and for United States it is an indirect quotation.

(b) Indirect Quotation

An indirect quote is where the exchange rate is expressed in terms of number of units of the foreign currency for a fixed number of units of a domestic currency.

Indirect quote refers to a unit of foreign currency of domestic currency.

Consider the given example, but when it is converted as "$0.6250/SF" in terms of United States, it is a direct quote and for Switzerland it is an indirect quote.

The direct quote is called as internal value with regard to domestic currency. Indirect quote is called as internal value with regard to foreign currency.

The assumption which we consider as domestic and foreign currency is the basis for such quotations.

3. Bid and Ask Quotations

Interbank quotations are expressed as BID and ASK.

Bid refers to the price at which dealer is ready to purchase one currency for other or the rate at which a bank is ready to buy a currency is called "BID rate".

Ask refers to the price at which dealer is ready to sell one currency for another or the rate at which a bank is ready to sell a currency is called as ask rate. The difference between bid and ask rate is called as "spread rate". Bid rate is always lower than the ASK rate.

Bid and ask is used by dealers to make profits, as they buy (Bid) at one currency which has one value and sell(Ask) at another currency. In foreign exchange markets, bid and ask are treated as complex transactions.

4. Forward Quotations Expressed on Point Basis

Generally, quotations which are expressed in terms of points are always forward rates.

On the basis of period of maturity terms of points it is also called as cash rates and swap rates.

In a quotation last digit is referred as point, generally right digit of a decimal point. For U.S dollars, four decimal points are considered. For Japanese Yen only two.

Generally, 0.0001 is a point for other currencies.

Forward quotation is the difference between forward rate and spot rate, but not foreign exchange rate.

Forward bid and ask quotations for more than two years are called swap rates.

Borrowing for short-term in one currency and lending another currency for same period is swap.

5. Forward Quotations Expressed in Percentages

Forward quotations not only expressed as points but also in percentages, taking spot rate as deviation. This is helpful in comparison of forward market discounts and premiums which differ in interest rates.

When these percentages take domestic currencies and foreign currencies as basis, they are expressed as,

6. Forward Quotations in Foreign Currency

In indirect quote, percentages can be calculated as,

$$f¥ = \frac{\text{Spot rate} - \text{Forward rate}}{\text{Forward rate}} \times \frac{360}{n} \times 100$$

Where, n = Period of contract generally expressed in days.

Consider an example, foreign currency with respect to home currency spot rate is ¥105.65/$ and four month forward rate is ¥105.04/$.

Then, $f¥ = \frac{105.65 - 105.04}{105.04} \times \frac{360}{120} \times 100$

$= + 1.742\%$ per annum.

Note

Since it is four months contract, so here n = 120 days.

Since, there is a premium of 1.742% per annum by yen over dollar '+' sign is used.

Forward Quotations in Domestic Currency (Direct quotations)

In direct quotes percentages can be calculated as,

$$f¥ = \frac{\text{Forward rate} - \text{Spot rate}}{\text{Spot rate}} \times \frac{360}{120} \times 100$$

Consider spot rate of home currency expressed in foreign currency, sport rate \$0.009465215/¥

4 months forward rate is \$0.009465215/¥, then,

$$f¥ = \frac{0.009520183 - 0.009465215}{0.009465215} \times \frac{360}{120} \times 100$$

$= + 1.742\%$ per annum

Forward Yen has 1.742% premium over the dollar.

Routers, PLC and websites of related countries central bank are considered as sources for foreign exchange quotations quoted world wide in newspapers, on-line information is also available.

In India, Reserve Bank of India, Central Bank of India and Foreign Exchange Dealer's Association of India (FEDAI) quotes U.S dollars, sterling pound, euro and Japanese yen as spread and forward and spot information. These are called reference rates.

PROBLEMS

1. Convert the following rates into outright rates and indicate their spreads.

`/$	**35.6300/25**
`/£	**55.2200/35**
`/DM	**23.9000/30**

Sol :

Calculation of outright rates and their spreads.

Quote	Bid Rate	Ask Rate	Spread
`/$	35.6300	35.6325	0.0025
`/£	55.2000	55.2235	0.0235
`/DM	23.9000	23.9030	0.0030

2. The spot exchange rate between the French francs and the U.S.$ on a particular day was quoted as 5.4745 and 0.1826.7.

(a) If you wished to exchange $2000 to FFr on this date, how many francs would you receive?

(b) If your friend Mohan, who lives in Paris, wanted to buy merchandise from an American corporation at a price of $218.98, how many francs would he have to pay ?

Sol :

Given that,

$1 = FFr 5.4745 or FFr 1 = $0.18267

(a) $1 = FFr 5.4745

$\therefore$ $2000 = 5.4745 × 2000

= FFr 10949

We will receive FFr 10949 in exchange for $2000.

(b) Again, $1 = FFr 5.4745

$218.98 = 218.98 × 5.4745 = FFr 1198.8060

$\therefore$ Mohan have to pay FFr 1198.8060 to buy that merchandise.

---

3. Assume the buying rate for DM spot in New York is $ 0.40.

(a) What would you expect the price of the U.S dollar to be in Germany?

(b) If the dollar were quoted in Germany at DM 2.60, how is the market supposed to react?

Sol :

Given that, x

1 DM = $0.40 in New York

(a) Price of U.S dollar in Germany should be,

$$\left(\frac{1}{0.4}\right) = 2.5 \text{ DM} = \$1$$

(b) If dollar in Germany is 2.6 DM = $1, then people would be expected to buy dollars in New York (Where they are cheaper compared to Germany) and sell dollars in Germany.

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4. On the same date that the DM spot was quoted $4.0 in New York, the price of the pound sterling was quoted $1.80.

(a) What would you expect the price of the pound to be in Germany?

(b) If the pound were quoted in Frankfurt at DM 4.40/pound, what would you do to project from the situation?

Sol :

In New York, DM 1 = $4.0

Pound 1 = $1.80

(a) To find price of pound in Germany, i.e.,

DM/£ we need to find the product of, DM/$ and $/Dollar

DM/$ = 2.5 and $/£ = 1.8

Therefore, DM/£ = 2.5 × 1.8 = 4.5 Thus, DM 4.5 = £1

(b) In Frankfurt, DM = 4.40 = £1 while in New York,

DM 4.5 = £1

Then, to project from the situation, we'll buy pounds in Frankfurt and sell them in New York.

5. You have received a telex advice from your Middle East correspondent stating that,

(i) It has placed to the credit of your account with New York correspondent a sum of U.S. $500,000.

(ii) And requesting you to credit equivalent value in rupees to their rupee account with you interbank rates in Mumbai are 39.1575/39.1625. What rate would you apply and what rupee equivalent would you credit to the account of the Middle East correspondent with you?

Sol :

It is a sale of rupees to the Middle East correspondent. The proceeds of rupees have to be credited to their rupee account. Since, this is an interbank transaction, no separate margin is loaded on the rates and it is assumed that the rates quoted include the project margin also.

The applicable rate per scale of rupee (for buying dollars) is ` 39.1574.

For U.S. $ 500,000 @ 39.1575, the rupee equivalent would be ` 19,578,750.

6. If the exchange rate in Mumbai Interbank market and London market are as follows,
Interbank market-Mumbai: $1 = Rs. 41.2550" 41.265.
Interbank market-London : 1£ = $1.6520 - 1.6527
At what rate can an importer buy £1 against rupees?

Sol :

The transaction will proceed like this,

(i) Interbank market - Mumbai takes ` 41.2650 and gives $1 (this amount is taken to London market for conversion into £)

(ii) London market - Takes $1.6527 and gives £1

(iii) Calculation of cross RATE.

∴ £1 = ? ` (In other words ?/£ rate)

Given that,

`/$ = 41.2650

$/£ = 1.6527

$$\frac{`}{£} = \frac{`}{\$} \times \frac{\$}{£}$$

$$\therefore \quad \frac{`}{£} = 41.2650 \times 1.6527 = 68.1986$$

£1 = ` 68.1986

7. You have called your foreign exchange trader and asked for quotations on Belgium Franc sport, 1-month, 3-months and 6-months. The trader has responded with the following,

$0.024479/813/58/7 13/10

(a) What does this mean in terms of dollars per Belgium Francs?

(b) If you wished to buy spot Belgium Francs, how much would you pay in $?

(c) If you wanted to purchase spot $, how much would you pay in BEF?

Sol :

(a) Calculation of Outright Quotes for $ per BEF

Particulars	Bid ($/BEF)	Ask($/BEF)
Spot	0.024479	0.024481
1 - month forward	0.024482	0.024486
3 - months forward	0.024471	0.024474
6 - months forward	0.024466	0.024471

(b) Spot ($/BEF) Rate is 0.024481

Thus, if we want to buy BEF, we need to pay $ 0.024481 for every BEF.

(c) Spot Bid Rate ($/BEF) = 0.024471

To purchase $. we need to sell BEF. The dealer is ready to buy BEF at $ 0.0244791.

3.5 PROCESS OF ARBITRAGE

Q8. Define arbitrage. Explain different forms of arbitrage process.

(OR)

What is the process of Arbitrage?

Sol : **(Dec.-19)**

The term arbitrage refers to the purchase of a currency by speculators in the monetary centre where it is cheaper for immediate resale in the monetary centre where it is more expensive so as to make a profit. The process of arbitrage helps in keeping the exchange rate between any two currencies the same in different monetary centres.

However, as arbitrage continues, the exchange rate between the two currencies trends to get equalised in the two monetary centres. What actually happens is that the sale of pounds in London increases the supply of pounds there, thus resulting in a decrease in the dollar price of pounds in London. In New York, arbitrage increases the demand for pounds in New York thereby increasing the dollar price of pounds in New York. This process continues till the dollar prices become equal in the two countries so that arbitrage does not remain profitable now.

Types

(i) Currency Arbitrage

Until recently the pervasive practice among bank dealers was to quote all currencies against the U.S Dollar when trading among themselves.

Now, however about 40% of all currency trades don't involve the dollar and that percentage is growing. For example, Swiss banks may quote the dutch mark against the Swiss franc and German banks may quote pounds sterling in terms of Deutsche marks.

Exchange trades are continually alert to the possibility of taking advantage, through currency arbitrage transactions, of exchange rate inconsistencies in different money centers. These transactions involve buying a currency in one market and selling it in another. Such activities tend to keep exchange rates uniform in the various markets.

For example, suppose that the pound sterling is bid at 1.9809 in New York and the Deutsche mark at 0.6251 in Frankfurt. At the same time, London banks are offering pounds sterling at DM 3.1650.

The astute trader would sell dollars for Deutsche marks in Frankfurt, use the Deutsche marks to acquire sterling pounds in London, and sell the pounds in New York.

Specifically, the trader could acquire DM 1,599,744.04 for 1,000,000 in Frankfurt, sell these Deutsche marks for 505,448.35 in London, and resell the pounds in New York for 1,001,242.64.

Thus, a few minutes work would yield a profit of 1,242.64. In effect the trader would, by arbitrating through the DM, be able to acquire sterling at 1.9784 in London (0.6251 × 3.1650) and sell it at 1.9809 in New York.

This sequence of transactions known as triangular currency arbitrage is depicted as follows,

1. Sell 1,000,000 in Frankfurt at DM 1= 0.6251 for DM 1,599,744.04.
2. Sell these Deutsche marks in London at 1 = DM 3.1650 for 505,448.35.
3. Resell the pounds sterling in New York at 1 = 1.9809 for 1,001,242.64.
4. Net profit equals 1,242.64.

(ii) Triangular Arbitrage

Foreign exchange contains many inconsistencies as they are traded in different locations. In order to reduce these inconsistencies triangular arbitrage is used.

This refers to a profit-seeking where one currency is used in buying second currency and through that third currency. Where third is used to buy first, thus forming a triangle, going to the place where he has started.

Triangular arbitrage is used to eradicate inconsistencies between direct quotations and cross-rate quotations.

Example

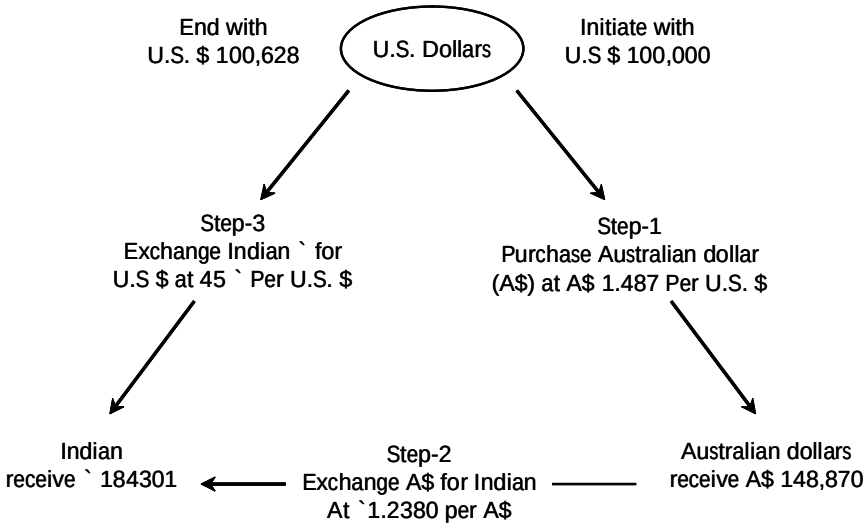
Direct Quotations

Indian rupees per U.S dollar 45 `/U.S $

Australian dollar per U.S dollar 1,4870 A$/U.S $.

Cross-rate Quotations

Indian rupees per Australian dollars 25 `/A $.



(iii) Interest Rate Arbitrage

Interest arbitrage refers to the international flow of short-term liquid capital to earn a higher return abroad. It means migration of short term capital across international financial centers in search of better safety and returns. As in the case of exchange rate arbitrage, interest arbitrage also has the effect of reducing and wiping cut interest differential. This is because the movement of funds from a low-interest to a higher interest centre means that the supply of funds in the higher interest centre increases and leads to a decline in interest rate, while just the opposite happens in the centre where interest rate is low. This can also be seen in another way.

The funds flowing into the high- interest centre are invested in various financial instruments like treasury bills, short term bonds and deposits etc. This increases their price which is the same thing as a decline of interest earned on them. Correspondingly, the supply of funds declines in the centre from where they are moving out. This reduces the demand for financial instruments in which they were invested causing a decline in their prices (which means higher rates of earnings from them). This process continues till the interest rate differential is wiped out.

(a) Uncovered Interest Rate Arbitrage : The transfer of funds abroad to take advantage of higher interest rates in foreign monetary centers usually involves the conversion of the domestic currency to the foreign currency, to make the investment. At the time of maturity, the funds (plus the interest) are reconverted from the foreign currency to the domestic currency. During the period of investment, a foreign exchange risk is involved due to the possible depreciation of the foreign currency. If such a foreign exchange risk is covered, we have covered interest arbitrage, otherwise we have uncovered interest arbitrage.

(b) Covered Interest Rate Arbitrage : Interest arbitrage is usually covered as investors of short-term funds abroad generally want to avoid the foreign exchange risk. To do this, the investor exchanges the domestic currency for the foreign currency at the current spot rate so as to purchase the foreign treasury bills and at the same time he sells forward the amount of the foreign currency he is investing plus the interest he will earn so as to coincide with the maturity of his foreign investment. Thus, covered interest arbitrage refers to the spot purchase of the foreign currency to make the investment and offsetting the simultaneous forward sale (swap of the foreign currency) to cover the foreign exchange risk.

3.6 Speculation in the Forward Market

Q9. Explain briefly about speculation in the forward market.

(OR)

What is speculation in forward market?

Ans : **(Dec.-19)**

Speculation is a process of attempting to generate profits by trading on assumptions expectations of the prices in the future. In forward markets the transactions are being settled on the basis of the determined rate and settlement date in an agreement at the time of transaction.

The speculator in forward market usually goes for speculation of the forwards expecting that the expected spot price and the present forward price would differ from each other in the future for the same date.

The success of a dealer depends on the relative position of the future spot price and the current forward rate but not on the direction of the movement of the spot rate.

Example 1:

If the US bank buy $2,000,000 in forward market with a maturity period of 3 months at an exchange rate of `40.00/$ from Indian bank. After 3 months US bank will receive an amount of $2,000,000 by paying `8,00,00,000/- to Indian bank. If US bank at the same time decides to sell $2,000,000 to Indian bank in spot market at a rate of ` 42.00/$ it would then receive ? 8,40,00,000 from the Indian bank. Thus, by doing this the US bank would be able to earn a profit of ` 40,00,000.

It is not possible for a speculator to determine ROI from the forward transactions on the basis of the profits.

Example 2:

If US bank is willing to sell the forward dollars before its maturity period i.e., before 3 months at the prevailing rate and buy the dollars exactly after 3 months at the same rate then the profit or loss of US bank will basically depend upon the rate at which it sells the dollar to the Indian bank.

Unlike the spot speculations the forward speculator does not take into consideration the interest rates. Thus, in forward markets the speculators first invest their liquid money in the local money markets in order to avoid the risks generated in spot against forward transactions. Though it is receiving a profit of ` 40,00,000 in this transaction. It need to deposit it in the financial institutions where it has a liability to pay in order to fulfill the trade.

If the value of a spot dollar is zero during three months then the cost incurred for US bank in buying $2,000,000 will be a loss 8,00,00,000) otherwise, if the dollar value remains same, the bank can generate a profit of ` 40,00,000.

It is not possible for a forward speculator to speculate the forward contracts after their maturity date.

3.7 Currency Futures and Options Markets

Q10. Define future contracts. What are the features of future contract?

Ans :

Meaning

In futures contract, two parties with mutual understanding enters into an agreement, one party agrees to buy while the other party agrees to sell, at a future date for a certain price. In this contract, time, quantity, delivery place, value and quality (only in case of commodities) are decided in advance; only the price is negotiated on the expiry date. These contracts are traded through exchanges and are standardized in nature.

In these contracts, there is an exchange party known as clearing house, between buyer and seller to trade, usually to avoid the risk of failure of payment by any party. These contracts can be easily converted either from long position to short position or from short position to long position. Hence, these contracts possess adequate liquidity. The settlement of Futures Contracts is done on a daily basis profits or losses, can be known daily. Majority of the people prefer Futures Contracts over to Forward Contracts as they are usually traded through stock exchanges.

The futures contract can not only be for currencies but also for securities and financial

instruments. The futures contract also specifies the day when the exchange is to be taking place and also the delivery time. Both the parties entering into a futures contract are liable to pay a negotiated brokerage fees. The concept of foreign exchange futures contract can be explained with the help, following example.

Suppose there are two parties A and B. A is a businessman residing in London while B is residing in India. B ordered goods A and both parties enter into a Future contract, where B promises to pay A GBP 2000 at a price of `68/£. A accepts B's offer. The contract is to be executed after a period of 3 months. At the end of the 3rd month B makes the payment to A at the contract rate, but the market price of GBP on that day was `66/£, *B* has incurred a loss, but if the market price of exchange would have been `70/£ *B* would had made a profit. Therefore, by entering into such contract both A and B minimize their risk to some extent.

Features

The following are the features of future contracts,

1. Recognized Exchanges

The futures contracts are traded only on government recognized or organized exchanges. These contracts are not traded over the counter. These exchanges provide a sense of security to the parties entering into such contracts. It also serves as a ready market for purchase and sale of the futures contracts. Hence, this is one of the major feature of a futures contract.

2. Standardization

The Futures contracts date of delivery or exchange is set by the organized exchange. The date of exchange or delivery cannot be changed by a mutual discussion between both the parties involved the future contracts do not exercise flexibility similar to that of a forwards contract. Therefore, the future contract is much more standardized than the forwards contract.

3. Clearing House

In every deal, the exchange or the clearing house is necessarily involved as a third party. Suppose A and B are traders. A strikes a deal with the clearing house. B to strikes a deal with the clearing house.

A, if it is a buyer of the currency, shall acquire a long position with the clearing house, while B being the seller of the currency, shall acquire a short position with the clearing house. In fact, the obligation of the buyer and the seller does not lie with each other but they lies with the clearing house.

After a transaction is recorded, the clearing house substitutes itself for the other party, meaning that it becomes the seller to every buyer and buyer for every seller. In this way it guarantees the performance of every transaction done on the floor of the exchange. If a buyer of a currency futures contract likes to close out its position before the settlement date, it sells an identical futures contract.

The difference between the price of purchasing futures and the price of selling futures will determine the loss/ gain to the party. Similarly, a seller of a futures contract closes out its position by purchasing a currency futures contract.

4. Margin Requirements

Trading in currency futures is subjected to specific margin and maintenance requirements. A margin is satisfied on the ground that, the traders represent a source of credit risk to the exchange or the clearing house, as long futures traders may not have sufficient funds to buy the underlying foreign currency.

In order to cover the risk, they are required to deposit margin money with the clearing house.

This is normally in the form of cash deposits, although liquid securities are also used. The initial margin amount varies from one exchange to the other.

It is returned on the completion of a contract. If it is in the form of securities, the interest

earned there on is also paid to the traders. In case of forward contracts, there is no question of margin and maintenance requirements.

5. Marking to Market

In case of forward contracts, the deal is settled on the maturity but in case of currency futures, the rates are matched every day with the movements in spot rates and on this basis, gains and losses are settled every day. This process is called marking to the market.

The process of marking to market can be explained with the help of an example. Suppose an investor buys Canadian dollar futures (Can. $1,00,000) at U.S $0.75 on Monday morning which is to mature within two days.

At the close of Tuesday, if the price moves upto U.S $0,755, the investor shall profit 1,00,000 × (U.S $0,755 - 0.750) or U.S $500 and if the price falls on U.S $0,749, the investor will have to bear the loss. The amount of loss will be deducted from the margin money. If the loss is big, as a result, the margin money falls below a certain level, which is known as the maintenance margin, the investor receives a margin call from the clearing house for depositing the margin money within a specified period.

Again, on Wednesday, the prevailing price on that particular day will be compared with the price prevailing on Tuesday and the gain or loss will be determined. On the maturity day, the investor receives the amount of the contract after the adjustment of the profit/ loss.

However, it may be mentioned that in very few cases, the amount of the contract flows to the investor. In majority of the cases, there is a matching contract in the opposite direction. The investor gets only the difference.

The purpose of the daily settlement procedure is to create a safer futures market so that the less credit worthy investors could participate. Forward contracts, on the other hand, witness cash flow only on the date of maturity that makes the contract more risky.

Nevertheless, forward contracts are widely used because they are available at many financial centres. Their amount can be tailored to individual needs as they have no standard size and maturity of thousands of transactions taking place daily is not necessarily compatible with the fixed maturity of the futures.

6. Rare Exchange of Currencies

Actual exchange of currencies is very rare in case of futures contract. It is often used only as a risk minimizing technique. Before the maturity of the contract most of the parties enter into a contract of opposite direction, thereby, cancelling the existing futures contract. Therefore, actual delivery is very rare in futures contract.

Q11. Define forward contracts. Explain different types of forward contract.

Ans :

Meaning

Forward contract is a contract for buying and selling something at a future date, for a price agreed at the time of contract. These contracts are performed only in the future and the issues related to cost of transaction, place of settlement, date and time of settlement and what thing is purchased or to be sold are agreed upon the signing of the contract by both the parties.

Forward contracts are very flexible in nature for deciding the price quality, quantity, delivery time and location. There exist a default risk in this contract, as each individual party is dependent on the other party for performance of the contract. These contracts possess a low amount of liquidity, when compared to future contract that are highly liquid in nature.

Definition

According to BIS Triennial Survey 2004

A forward contract may be defined as "a transaction that involves exchange of two currencies at a rate agreed on the date of the contract, for value or delivery at sometime in the future.

A forward contract, for the future delivery of a specific underlying asset, should have the following information,

i) Name of the principal party

ii) Name of the counter party

iii) Name of the underlying asset to be delivered

iv) Amount or value of the contract

v) Date of delivery

vi) Place of delivery

vii) Price of the commodities

viii) The date when the contract is sold to the buyer

ix) The value date

x) Other terms and conditions.

The purchaser, in a forward contract, has an obligation to receive the delivery under the defined terms of the contract, whereas the seller is also obliged to make the delivery as per the terms and conditions of the forward contract. The contract is settled in the near future on the maturity date.

Types

There are two types of forward contract. They are,

1. Non-deliverable forward (NDF) contract.
2. Option dated forward contract

1. Non-Deliverable Forward (NDF) Contract

It is a short-term forward 'Cash settlement' currency derivative instrument. It is usually for a notional amount. Both parties in this contract decide on the forward rate and the date of settlement. The forward rate is compared with that of the spot rate for the currency pair on the fixing date. The NDF was first developed in USA and it is a variant of outright forward contract the currencies quoted in this contract are China yuan, Indian rupee, the Philippine Peso etc.

2. Option Dated Forward Contract

The parties concerned in this currency forward contract exchange, their currency pair at a predetermined price but considers two predetermined rates. This contract facilitates allowances for shipment delays or uncertainty in delivery. This contract helps corporate customers possessing foreign currency receivable or payable.

Q12. Explain hedging with currency futures and speculation with currency futures.

Ans :

The investors can hedge the foreign exchange currency nsk with the help of currency futures.

The following are the decisions which are involved with respect to the hedging with the currency futures,

1. The Choice of Underlying Currency

The most vital point to decide is to take a decision about the currency in which futures contract can be formed. For instance, if in case the producer from India is interested to buy certain raw-materials from Japan then, he may enter into futures contract in Japanese yen as he wants to hedge currency-risk in Yen against Indian rupee.

Suppose if there are no such futures available in the market (i.e., between rupee and Yen) then, the trader will select from other currencies in order to hedge in the futures. However, this selection is not an easy task as the trader may select either rupee with dollar (or) rupee with pound. This process of hedging is called/termed as 'cross hedging'.

2. Choice of the Maturity of the Contract

The next decision in hedging via., currency futures is to choose the currency whose maturity is proxim (closer) to the need of that currency. For instance, if an Indian company is in a contract of three month, USD payable on 28th April, 2005. This contract would get matured on 28th July, 2005. Suppose if there is no INR/USD futures contract maturity on that date since most of the traded contracts mature on 3rd Wednesday of June, September, etc. Immediate step/action is to be taken by the company which is to "Sell rupee [INR] July contract" closer to the maturity of the payable. The main point to be considered in such a circumstance would be to which maturity of the specific contracts must be selected. The futures price intersect/ converge with spot price on (or) near maturity of the contract. Then hedging company needs to ascertain as to whether convergence, functions in its favour (or) against it. For selecting the maturity of the contracts two factors need to be considered,

(i) Liquidity

Liquidity in near contracts may be high and bid-ask spreads low when compared to distant contracts.

(ii) Volatility-of-Basis

It is observed that if there exists bigger gap between lifting the hedge and delivery date of the futures contract then, basis-risk would be more.

3. Choice of the Number of Contracts [Hedging Ratio]

The last decision with regards to hedging is to decide the hedging Ratio [HR]. The value of the futures position must be considered for matching it with the value of the cash market position. Since, futures markets are highly standardized markets, correct match would not be possible but hedge ratio must be near to unity as possible. Hedge Ratio [HR] can be stated as,

$$HR = \frac{F_p}{F_c}$$

Where,

HR = Hedge ratio

F_p = Value of the futures position

F_c = Value of the cash position.

Speculation with Currency Futures

Currency futures are used by speculators in order to acquire profits with the increase in spot rate of a specific currency mentioned in the currency futures contract. Alternatively, if spot rate decrease below the rate specified in contract then speculator sell currency futures. These transactions involve some nominal amount of cost which is deducted from the gain. Transaction cost is important for speculators but it is not so for general public.

Speculation using futures is categorized as follows,

1. Open Position Trading

In this speculation, speculator bets on changes in the price of a specific futures contract.

2. Spread Trading

In this speculation, speculators bets on changes taking place in price differences between two futures contracts.

Spread trading is conservative form of speculation wherein one futures contract is purchased and another futures contract is sold. Spreads are two types i.e., Intra currency spread and Inter currency spread.

(a) Intra Currency Spread

In intra-currency spread, with two delivery dates, speculators can buy/sell same currency provided rates in such two delivery dates are not same.

(b) Inter Currency Spread

In inter currency spread, with same delivery date, speculators can buy/sell futures contracts but of two different currencies.

Q13. What are the differences between Forward Contract and Future Contract ?

Ans :

S.No.	Nature	Forward Contract	Future Contract
1.	**Trading**	It does not involve exchange rates in buying and selling. **Eg:** Over the counter market.	Deals with exchange rates in trading or buying and selling. **Eg:** Exchange traded derivatives.
2.	**Agreement**	There is an agreement between two parties and it does not allow any third party to enter a contract.	Contract is entered and settled with the help of a third party known as "clearing house of exchange contract".
3.	**Contract obligations**	The contracts vary as per the nature and type of trade or business; the terms of the contract can be modified easily.	The contract is organized and rigid in nature.
4.	**Credit risk**	Parties of the contract suffers from high degree of credit risk.	In this, the clearing house association and the parties take credit risk on each other.
5.	**Liquidity**	Low degree of liquidity as contracts are adjusted now and then.	Due to exchange flexibility and standardization of of contract there is a greater amount of liquidity present in the contract.
6.	**Price**	The prices of the commodities are low due to scattered markets.	The prices are fair due to visible exchange market.
7.	**Standardization**	Customized contracts, designed to meet the requirements of the parties.	Highly standardized, only price is arbitrated.
8.	**Delivery of goods**	The person to whom the goods are to be delivered are specified.	No such specification is mentioned about who takes the delivery.
9.	**Profit or loss**	The profit or losses are known only at the time of settlement or termination of contract.	The amount of profit or loss is settled every day between the parties. These are settled every day
10.	**Marking**	These transactions are completed only on a settlement date as mentioned in the contract.	at a price based on price that is marked to market.

Q14. What is an option? Explain different types of options.

Ans :

Meaning

An option is the right but, not the obligation to buy or sell something on a specified date at a specified price. In the securities market, an option is a contract between two parties to buy or sell specified number of shares, at a later date, for an agreed price. Three parties are involved in the option trading, i.e., the option seller, buyer, and the broker.

1. The option seller or writer is a person who grants someone else the option to buy or sell. He receives a premium on its price.
2. The option buyer pays a price to the option writer to induce him to write the option.
3. The securities broker acts as an agent to find the option buyer and seller and receives a commission or fee for it.

There are two types of options, namely, call option and put option. A call option is a contract giving the right to buy the shares. Whereas the put option is a contract giving the right to sell the shares.

Option contracts can be traded either over the counter or in an organized exchange. The options contract is also a valuable instrument in minimizing risk.

Cross-currency options were permitted by the RBI in January 1994 and options contracts between the Indian rupee and foreign currency was recently in the year 2003.

The following are the basic terms used in the options contract. These terms help in understanding the options contracts further.

Types

1. Call Option

In call option, buyers are bulls who are optimistic in nature and will be in an assumption of raising the prices in future. Therefore, they buy the shares or takes a long position in advance.

As the call buyer is very much confident that the prices will increase in future, he enters into an option market with the seller by paying a premium amount. Here, seller will be in an opposite illusion that the prices will decrease in future. Call option states that, if the prices increases, the seller has to pay to the buyer and if prices decreases then the buyer will lose his premium amount and automatically the option is expired.

The buyer will gain, if spot price (S) is greater than the strike price (X) along with the premium (C), this means,

Buyer's gain = S – X – C

Suppose a firm purchases a call option at a strike price of `200 per share by paying a premium of `15 per share. Total number of shares are 10,000.

If the spot rate at maturity is `225 then the gain to the option buyer or call buyer will be, `(225 – 200 – 15) = `10 Profit = 10 × 10,000 = `1,00,000

This is a fully profit situation. If the spot rate on maturity is `210 then the gain to the buyer will be zero, which is a break-even point situation. The buyer is said to have a partial loss if the spot rate is between `200 and 10 because he is losing partial premium amount. Finally, the buyer is said to have a fully loss condition when the spot rate is below `200, a$ he incurs a maximum loss of losing the complete premium.

For option buyers, profits are unlimited and losses are limited to only premium paid by them, whereas sellers get profits in the form of premium which are limited and has to bear unlimited losses (difference between the strike price and spot price).

2. Put Option

In put option, buyers are bears, who are pessimistic in nature and will assume that the prices will decrease in future. Therefore, he makes a sell position. Put buyer enters into a put option with the seller by paying a premium amount. On the other hand, seller will be in a contrast assumption of increasing the prices in future. In put option, the seller needs to pay to the buyer if prices decrease and if there is an increase in prices, then buyer will lose his premium amount and the option simply expires.

The buyer will gain if spot price (S) is less than the strike price (X) by paying a premium (C) that is.

Buyer's gain = X – S – C

Suppose in put option, strike price of a deal is `200 per share by paying a premium of `10 per share and the total number of shares are 10,000. If the spot price at maturity is at `185 then the profit to the buyer will be (200 – 185 – 10) = per share.

Profit = 5 × 10,000 × 50,000/-

This is a fully profit situation.

Buyer will break-even when the gain is zero. And it is arrived when the spot rate on maturity is `190.

i.e., 200 – 190 – 10 = 0

Partial loss situation is achieved when the spot rate is between 190 and 200 because he is losing partial premium amount.

i.e., (200 – 195) – 10 = 5 – 10 = – 5 (loss)

(i.e., 195 is the value between 190 and 200)

And lastly, the buyer is said to have a fully loss condition when the spot rate is more than the strike price with spot price at X210 on maturity is,

200 – 210 –10 = – 20

For put buyers, profits are unlimited, i.e., (difference between spot and strike price) and losses are limited (payment of premium). Whereas, for put sellers, profits are limited (premium received) and losses are unlimited (difference between spot and strike price).

Q15. Explain the terminology used in options contract.

Ans :

1. Exercise Price (or) Strike Price

The price stated in the contract for buying or selling ; of a currency is called the strike price or exercise price. This price is pre-decided and stated in the options contract.

2. Maturity Date

The date on which the contract can be exercised is I known as the maturity date. This is commonly known as the expiry date of a options contract. The contracts traded through exchanges have a standard date of expiry or maturity.

3. American Option

The options contract which can be exercised on any day throughout its time period, i.e., from contract date till the date of maturity, is known as an American option contract of call or put.

4. European Option

When options are to be exercised strictly, only on the expiration date then it is termed as a European option.

European and American options are no where related with the geographic area. An American option has an edge over the European option as they have traded throughout the world including Europe.

5. Premium

It is also known as the option value or option price; premium is the value or price of the option that the option-buyer pays to the option-seller at the time of signing the contract. It is not refundable even when the option is not exercised. The amount of premium is the sum of the option's intrinsic value and its time value which are explained as under.

6. Intrinsic Value

Intrinsic value denotes the extent to which an option would currently be profitable to exercise. In other words, it represents the gains accruing to the holder on the exercise of the option. In the case of a call option, it is the excess of the current spot rate over the strike price. If *S* is the current spot rate and *X* is the strike price, then the intrinsic value of a call option is,

$I_{call} = S > X$

The intrinsic value of a put option will naturally be represented by an excess of strike price over the current spot rate. In other words, the intrinsic value of a put option is,

$I_{call} = S < X$

Thus, it can be said that, when the option is in-the-money, it has some intrinsic value. The intrinsic value of an option-put or call may be positive or it may be zero. But, it cannot be negative, because the option-buyer will not exercise the option if the option is out-of-the-money.

7. Time Value

Time value of an option represents the sum of money that a buyer is willing to pay over and above the intrinsic value. Time value of an option exists because the spot rate of the underlying currency is expected to move towards an in-the-money position, between the signing of the contract and the maturity date.

On the maturity date, the time value of the option is zero and the premium is entirely represented by the intrinsic value. Again, if there is an at-the-money position, i.e., there is no intrinsic value and option premium is represented entirely by the time value.

Between these two positions, the premium is represented partly by the intrinsic value and partly by the time value. Suppose, the strike price of a call option is `6000/£, the premium is `0.05 per British pound and the spot rate is `60.05/£.

The amount of premium = `0.05 × 62,500 = `3,125

Intrinsic value = `(60.02 - 60.00) × 62,500 = `1,250

Time value = `3,125 + 1,250 = `4,375.

8. At-the-Money

A situation is known as at-the-money when the strike price is equal to the spot price on the maturity date.

9. In-the-Money

The call option is said to be in-the-money. In the case of a put option, an in-the-money situation warrants that the spot rate should be lower than the strike price. In that situation, when the option-buyer exercises the option, he is in-the-money because only then he can gain.

10. Out-of-the-Money

This is the exact opposite of in-the-money situation. This entails that, the spot rate should be lower than the strike rate in the case of a call option and higher than the strike rate in the case of a put option.

Q16. Explain the use of currency options in exchange rate risk management.

Ans :

Option is also used to reduce the means of risk as it is also a type of financial derivatives.

Option is used to offset the risk which is arising as a result of the changes made in the prices.

Options are of two types,

1. Call option and
2. Put option

1. Call option

Call option can be exercised to buy the security or asset at a strike price when its market price exceeds the strike price.

2. Put option

put option is used to sell the asset or security where the market price falls below the strike price.

➢ **Fixed Hedge**

Fixed hedge is a situation where the amount of underlying asset becomes equal to the size of the option being hedged.

Sometimes, hedging through derivatives can be beneficial while at some other instance of time it may not be beneficial so, it is important to decide before hedging with the option. In such type of situations, different risk hedging techniques have been adopted like diversification etc. Futures and forwards are the other derivatives like options, so it is possible to choose derivatives depending on the situations.

The options and futures can be assessed as follows,

➢ **Buying Option**

(a) Allows the investor to earn profits even under favourable changes in the stock price.

(b) Buyer has no obligation to perform.

(c) Premium must be paid.

➢ **Writing Option**

(a) Due to movement or changes in the price investor has to suffer losses.

(b) This option is useful where there exist small changes in the stock prices.

(c) Receipts are made after paying the premium. Futures/Forwards

(a) Every contract consists of separate obligations for both the parties which need to be fulfilled.

(b) Premiums are not paid

(c) Basis risk replaces the outright risk.

(d) Portfolio return decreases towards the short term money market rates.

Strategies

Following are the strategies used in hedging risk.

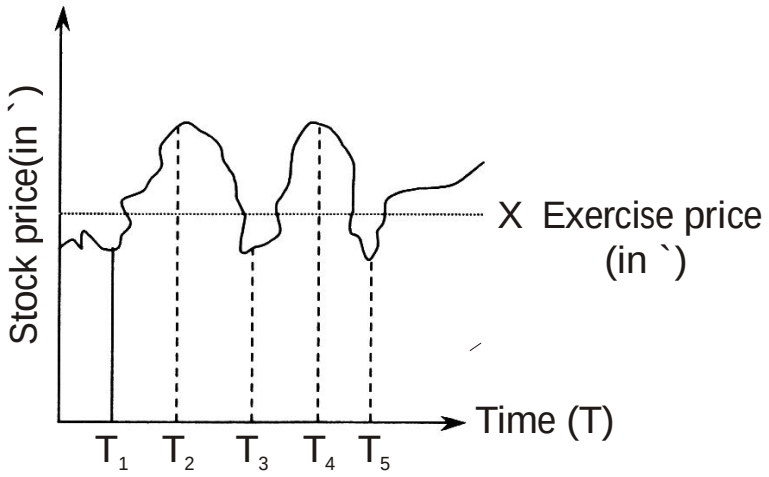
1. Naked and Covered Option

Naked and covered option of positions cannot be used as an effective hedging instrument, if the option is not exercised. However, if the option is exercised then this strategy is found to be quite suitable. Otherwise, it will be expensive.

2. A Stop-Loss Strategy

A stop-loss strategy is another hedging strategy wherein the trading of securities (i.e., their purchase and sale) occurs against writing a call or put option. Suppose an investor has written down a call option by paying the spot price 'X', he has purchased one unit of stock with a specific maturity period. Investor hedges himself as soon as the price of the stock varies with respect to the spot or the exercise price (X). i.e., an investor disposes (sells-off) the stock when the price falls below 'X' and purchases whenever the prices rise above 'A'.

When the stock price exceeds the exercise price then investor has to hold covered position, while on its decline, he has to hold a naked position option. Such a stop-loss strategy can be better explained with the help of the following figure.



Where, at time periods, T_1 ,T_3 and T_5 - Investor undergoes long position (i.e., purchases the stock).

However, at time periods T_2 and T_4 - Investor undergoes short position (i.e., sells the stock).

Thus, a stop-loss strategy must be framed in such a manner that it should ensure that the investor only holds those stocks whose options are in-the- money but not those stocks whose options are out- of-the money.

Through the stop-loss strategy, the following points must be noted,

(a) Cash flows occur at different time periods which needs to be discounted.

(b) The trading of stocks (i.e., purchase and sale) is associated with certain amount of transaction cost. Thus, it should not be done at an exercise price 'X'.

Thus, it must be noted that eventhough the stop-loss strategy attracts the investors superficially but in practise it may not be able to generate the fruitful results.

3. Zero-cost Option Strategy

Zero-cost option strategy is a type of hedging strategy which involves the simultaneous purchase and sale of option at a fixed premium providing same size to the receiver of the option premium.

PROBLEMS

8. Consider the three month future contract on S and P 500. Suppose that the stock underlying the index provide a dividend yield of 1% p.a, that the current value of index is 400 and that continuously risk free rate of interest is 6% p.a. Calculate the future price.

Sol :

Given that,

Current value of index = 400

Divided yield = 1% p.a

Continuous risk free interest rate = 6%

∵ Future price,

$$F = S \times e^{(r-q)^T}$$

$S = 400$

$r = 0.06$

$q = 0.01$

$T = 0.25$

$$F = 400\ e^{(0.06 - 0.01)\ 0.25}$$

$$= 400\ e^{(0.05)\ (0.25)}$$

$$= 400\ e^{0.0125}$$

$$= 405.\ 03$$

9. The current spot price of NIFTY is `1500. The stock underlying this index provides an yield of 3% p.a. The continuously compounding rate of interest is 6%. What will be the price of a 4 months Nifty?

Sol :

Future price of a Nifty $= S \times e^{(r-q)t}$

$$= 1500 \times e^{(0.06 - 0.03)4/12}$$

$$= 1500 \times e^{0.03 \times 0.333}$$

$$= 1500 \times e^{0.00999}$$

$$= 1500 \times 1.0100$$

$$= `1515$$

10. An investor purchases a sensex futures at 4400 in a market lot size of 100 futures. On the maturity date, the sensex is 4500. Find out his profit or loss for one lot of futures. Determine his position, if the sensex is 4450 on the maturity date.

Sol :

The investor has purchased the sensex futures at 4400. On the maturity date, the sensex and the futures, both would converge to the same level. As the sensex on the settlement date is 4500, the futures will also be 4500. So, profit or gain to the investor will be.

Profit = (4500 – 4400) × 100

= `100 × 100

= `10,000

If the sensex is found to be at 4450 on the settlement date, then the loss to the investor is would be,

Loss = (4400 – 4450) × 100

= –50 × 100

Loss = ` 5000

(Sign indicate negativity)

11. An investor buys a NIFTY futures contract for' 1,50,000 (lot size 100 futures). On the settlement date, the NIFTY closes at 1275. Find out the gain or loss. If he pays `500 as brokerage fee, what would be his position if he has sold the futures contract?

Sol :

Total value of Nifty futures contract is ` 1,50,000 and the lot is 100, so the Nifty futures on the transaction date is,

$$\Rightarrow \frac{15,00,000}{100} = 1500$$

On the settlement date, the Nifty is at 1275. So, it has reduced by 225 points. The loss to the investor.

Loss = (1500 – 1275) × 100 + 500

Loss = ` 23000

If in case he sells the futures contract then his profit will be,

= (1500 – 1275) × 100 + 500

Profit = ` 23000

The investor has to pay brokerage fee in both the situations, i.e., ` 500.

12. The stock value of GMR industries in spot market is `350 and 3 months option contract is of `350. The price of the option is 12 percent share. At what price the option will be at-the- money, out-of-money and in-the-money if the option is both call as well as put option?

Sol :

Option strike price = `350 per share

Premium price = `12 per share

Call Option

(i) At-the-money = 350 + 12 = `362 per share

(ii) In-the-money = If the spot price higher than `362 per share

(iii) Out-of-money = If the spot prices lower than `362 per share.

Put Option

(i) At-the-money = 350 – 12 = `338 per share

(ii) In-the-money = If the spot prices lower than `338 per share

(iii) Out-of-money = If the spot prices greater than `338 per share.

13. The share of A ltd. company is priced at 40, put options with a strike price of `150 are priced at `25.

(a) Calculate the intrinsic value of options.

(b) What is the time value of options?

(c) If the share price falls to `80, what would be the gain/loss for the holder and writer of the options?

Sol :

(a) The intrinsic value is

= Strike price – Stock price

= `150 – `140 = `10

(b) Time value = Premium – Intrinsic value

= `25 – `10 = `15

(c) Net profit = `60 – `25 = `35 [140 – 80]

= 60

(i) The option writer will be paying `140 for share worth `80. This loss of 60 is balanced by the premium of `25.

(ii) Net loss = 60 – 25 = 35. So, profit to the buyer is same as the loss to a writer (option-seller).

14. Assume that a call option gives a purchase offer of a Euro for `23 while it is quoted at `23.45 in the market and premium paid for call option is `2.00. Calculate the time value and intrinsic value of the currency option.

Sol :

Spot price `/∈ = `23.45

Strike price `/∈ = `23

(i) Intrinsic value = Strike price – Spot price

= ` 23.45 – ` 23 = ` 0.45 per Euro

(ii) Time value

= ` 2 × (23.45 – 23)

= 2 × 0.45

= ` 0.9 per Euro.

15. Assume today's settlement price on a CME EUR futures contract is $1.3140/EUR. You have a short position in one contract. Your performance bond account currently has a balance of $1,700. The next three days' settlement prices are $1.3126, $1.3133, and $ 1.3049. Calculate the changes in the performance bond account from daily making-to-market and the balance of the performance bond account after the third day.

Sol: **(May.-19)**

Given,

Initial Euro Price = $ 1.3140/EUR

Initial bond account value =1,700

CME Euro Future Contract size = 1,25,000 EUR (Assumed value)

Day-1

Settlement price for day 1 = $ 1.3126

Profit = (1.3140- 1.3126) × 1,25,000

= $175

Bond Account value = 1700 + 175

= $1,875

Day-2

Settlement price for day 2 = $ 1.3133

Profit = (1.3126- 1.3133) × 1,25,000

= – $ 87.5

Bond Account value = 1875 – 87.5

= $ 1787.5

Day-3

Settlement price = $ 1.3049

Profit = (1.3133 – 1.3049) × 1,25,000

= $ 1050

Bond Account value = 1787.5 + 1050

= $ 2837.5

3.8 Overview of the Other Markets

Q17. What are international money markets? State the features of international money market.

Ans :

Meaning

Every country consists of financial markets, which acts as a mediator between the investments and the borrowings. Money market refers to the market where the maturity period of investments and borrowings is for short period of time. The period is not less than 365 days or a year. The mode of borrowing is either direct or indirect (indirect way is through commercial paper or certificate of deposits).

Based on period of maturity, money market is divided as call money market and term money market.

In call money market the maturity period is only for 14 days. In term money market, maturity period is more than 15 days but less than one year.

Features

1. Safe and Efficient

International money markets are featured as efficient and safe, as it is regulated by various regulators (regulatory bodies).

2. Expertise

Another main feature is expertise in providing financial information to the participants. This feature is fulfilled by the institutions, which are part of these markets.

3. Currencies

Financial institutions, which are part of this market provides the ultimate receivers i.e., corporate financiers with different currencies.

4. IBOR

IBOR refers to the Inter Bank Offer Rate. In these markets, banks are also major participants and lend each other. Thus, IBOR is considered as the interest rate on short-term borrowings, which is offered by banks to lend loans to each other banks.

5. IBID

IBID, stands for Inter Bank Bid rate. This is the rate where banks take or accept loans from each other.

It is the rate calculated on an average basis, at a particular time in a particular period.

Q18. Define international capital market. State the features of international capital market.

Ans :

Meaning

International capital markets are for lending and borrowing money or claims in various currencies in various currencies in demand outside the country of origin.

International capital markets are represented by Euro-bond or Asian -bond market, which reflect the lending or borrowings at the long-end of the liquidityspectrum of five years and above. International capital markets have grown in the sixties.

Features

(i) Deals In Long Term Investment

Capital market is a market for trading of long term securities. It provides long term investment avenues to the investors. Borrowers can raise fund for a long period from the capital market. Here borrowing and lending is for a period which is more than one year. Long term financial instruments like shares, bonds, and debentures are traded in the capital market.

(ii) Bring Together Borrowers And Lender

It acts as mediators between the borrowers and lenders of money. It links the person having surplus funds with the one who is the deficit of money. Capital market directs people having savings to different productive investment avenues. This help in providing long term funds to borrowers by attracting large investments from peoples.

(iii) Regulated By Government

Capital market works as per the regulation of government. There is a body named SEBI set up by the government who looks and regulate the functioning of the capital market. SEBI (Securities Exchange Board of India) controls and monitors the functioning of capital markets to protect the interest of its investors. It aims at avoiding any speculative and malpractices in the capital market.

(iv) Utilizes Intermediaries

There are several intermediaries who are connected with the capital market to facilitate its functioning. Intermediaries are termed as important work organs of capital market. Different intermediaries involved with capital market are Broker, sub-brokers, underwriters, collection bankers etc. These intermediaries interact with customers and communicate all important information between the capital market and customers.

(v) Determines Capital Formation Rate

Capital market reflect the rate of capital growth in the economy. Capital market circulates the funds among different sectors of the economy. It provides the huge fund required for large infrastructural developments in the economy by attracting investments from the public. Different business corporations depend on capital markets for raising funds for their processes. This way it accelerates the rate of capital formation in the economy.

(vi) Provides Liquidity

Capital market is a highly liquid market as the instruments traded in the capital market are easily convertible into cash. Investors can whenever they require can converts their investments into cash by selling their instruments over the market. It provides an all-time market for the peoples looking for investments and one looking for borrowing money.

(vii) Variety Of Instruments

There are varieties of instruments which are traded in the Capital market. There is a lot of options available for both investors and borrowers hence providing greater flexibility to both. A person according to his risk-taking ability and convenience can take any of the avenues available for investment and borrowing. High leveraged company can go for equity option for raising funds. Whereas low leveraged company can go for debenture and bond option.

(viii) Includes Primary Market And Secondary Market

Capital market includes two markets within it: Primary market and secondary market. Primary market is a market concerned with the issue of new securities. Here securities are issued for the first time. Secondary market is a market for old and existing securities. Securities already traded in the primary market are issued in the secondary market.

Q19. What are the differences between International Money Market and Capital Market ?

Ans :

S.No.	Particulars	International Money Market	International Capital Market
1.	Tenure	The period of tenure is short i.e., more than 14 days but less than 365 days, (short-term	The period of tenure is long i.e., more than 365 days, (long-term funds), funds).
2.	Purpose	The purpose of this market is to fulfil the day-to-day business requirements, working capital, working capital, industrial requirements and government.	The main purpose of this market is to fulfil capital requirement of business, industries and government.
3.	Instruments	The instruments through which transactions occurs are bills of exchange, treasury bills, commercial papers, certificate of deposits etc.	The instruments used for transaction are shares, debentures, government bonds etc.
4.	Mode of transaction	Transactional mode is telephonic.	Transactional mode is stock exchange,
5.	Amount	Amount transacted is in large sum i.e., commercial papers or certificate of deposits transacted is minimum	Amount transacted is in small sum i.e., debentures issued are of face value ` 100 and shares face value is `10. ` 25 lakhs.
6.	Participants participants.	Commercial banks and central bank are the companies are the major participants.	Development banks and insurance
7.	Secondary market.	Money market does not have secondary market.	Secondary market is present in capital market
8.	Intermediaries	Transactions takes place directly without any intermediaries.	Transactions takes indirectly i.e., through authorised dealers.

3.8.1 Euro Currency Market

Q20. Define Euro Currency Market. State the characteristics of Euro Currency Market.

(OR)

What is meant by Euro Currency Market?

Ans : **(Sep.-20, Dec.-19)**

Meaning

The Eurocurrency market consists of banks (called Eurobanks) that accept deposits and make loans in foreign currencies. A Eurocurrency is a freely convertible currency deposited in a bank located in a country which is not the native country of the currency. The deposit can be placed in a foreign bank or in the foreign branch of a domestic US bank.

In the Eurocurrency market, investors hold short-term claims on commercial banks which intermediate to transform these deposits into long-term claims on final borrowers.

The Eurocurrency market is dominated by US $ or the Eurodollar. Occasionally, during weak dollar periods (latter part of 1970s and 1980s), the EuroSwiss franc and the EuroDM markets increased in importance. The Eurodollar market originated post WWII in France and England thanks to the fear of Soviet Bloc countries that dollar deposits held in the US may be attached by US citizens with claims against communist governments.

Definition

A Eurocurrency is essentially a currency borrowed and lent outside the domestic money market for that currency and therefore out with the direct regulatory control of the domestic central bank. A dollar borrowed or lent inside the US and subject to reserve requirements imposed by the Federal Reserve is a domestic money market transaction. A dollar borrowed or lent outside the US is a Eurodollar (the transaction does not have to take place in Europe). Following the lead set by the dollar, international markets later developed in Euromarks and Euroyen.

The Eurocurrency markets are primarily wholesale markets in which the main participants are international corporations, institutional investors, commercial banks and global investment banks. In London the main players include the major American, German and Swiss banks, names such as Citigroup, Deutsche Bank and Union Bank of Switzerland.

Most Eurocurrency money market deals are term deposits and loans with a maturity of one year or less, with the majority of deals around the three to six-month maturity range. Money dealers at the major banks stand ready to quote their offer (lending) rates and bid (borrowing) rates for a range of Eurocurrencies and a range of maturities from overnight out to one year and beyond.

Characteristics

The various characteristics of the Eurocurrency tarket are :

1. It is a large international money market relatively free from government regulation and interference, i.e., the market is essentially unregulated.
2. The deposits in the Eurocurrency market are primarily for short-term. This sometimes leads to problems about managing risk, since most Eurocurrency loans are for longer periods of times.
3. Transaction, in this market are generally very largewith government, public sector organisations tending to borrow most of the funds. This makes the market a wholesale rather than a retail market. Also, approxi-mately 80% of the Eurodollar market is interbank, which means that the transactions take place between banks.
4. The Eurocurrency market exists for savings and time deposits rather than demand deposits.
5. The Eurocurrency market is mainly a Eurodollar market. Generally, the Eurocurrency borrowing rate depends on the credit worthiness of the customer and is large enough to cover various costs as also build reserves against possible losses. Traditionally, loans are made at a certain percentage above the London Inter Bank Offered Rate (LIBOR), which is the interest rate banks charge one

another on loans of Eurocurrencies. Most loans are made on variable rate terms and the rate fixing period could be one month, three months or six months. Because of the variable nature of the interest rates, the maturities can extend into the future.

Q21. Explain the instruments of Euro Currency Market.

Ans :

Eurocurrency transactions usually take the form of deposits, which can be expressed in a variety of instruments :

1. Fixed Rate Time Deposits (FIDS)

To date, these account for the bulk of the market, largely an interbank lending market, with placements the major instrument. These time deposits bear a maximum tenor of seven years.

2. Eurodollar Certificates of Deposit

A eurodollar CD is a negotiable receipt for dollars deposited outside the United States. Note that neither fixed rate TDs or eurodollar CDs is really a slight item. Although banks borrow eurodollars for overnight purposes, most transactions involve some element of time.

The volume of negotiable euro CDs outstanding has risen impressively since their introduction in 1966. On average, the yield on fixed rate three-month euro CDs is near 30 basis points below the three-month time deposit at LIBOR rate. Eurodollar CDs have an active secondary market.

3. Tranche Certificates of Deposit

These are large eurodollar CD issues that are purposely marketed in portions to satisfy a larger investor base. Multimillion-dollar CDs are offered to individual investors in $10,000 units. All elements of the multimillion-dollar issue remain the same for the tranche issue.

4. Floating Rate Instruments

These are broken down into two components. The first component is the Floating Rate Certificate of Deposit (FRCD). The second is the Floating Rate Note (FRN). Both of these instruments are negotiable bearer paper that places the risk entirely on the coupon rather than the principal value.

In each of these two cases, the coupon or interest rate is reset periodically, concurrent with the maturity of the instrument. Typical yield rates on FRCDs are from $^1/2$ percent to $^1/4$ percent over LIBOR (that is, six-month LIBOR). The distinction between FRNs and FRCDs is primarily found in their corresponding maturities. FRCDs range in maturity upto five years, FRNs have a maximum tenor of 20 years. Due to their long-term tenure, FRNs are considered a part of the capital markets.

Q22. What are the reasons for growth of Euro Currency Market ?

Ans :

The following are the important factors that contributed to the growth of the Eurodollar market at different stages and times :

1. The Suez Crisis: The restrictions placed upon sterling credit facilities for financing trade which did not touch the British shores during the Suez Crisis in 1957 provided a stimulus for the growth of the Eurodollar Market. The British banks, in search of an alternative way to meet the demand for credit on the part of the traders in this sphere, easily found a good substitute in dollars. There was already available a pool of US dollars, held by residents outside the US.

2. Relaxation of Exchange Controls and Resumption of Currency Convertibility: The general relaxation of exchange control, the stability in the exchange market and the resumption of currency convertibility in Western Europe in 1958 provided an added impetus to the growth of the Eurodollar market. In a convertible currency system, some countries are as a rule in surplus and others in deficit. The money market in the surplus country being liquid, short-term funds flow to the Euromarket, attracted by the higher rate of interest.

On the other hand, credit flows from the Euromarket to the deficit countries where the

money market is right. The relaxation of exchange controls not only enabled the holder of dollar claims to retain them rather than surrending the mighty God called dollar to the exchange control authorities, but also increases the demand for US dollars as they could be freely converted into domestic currency to finance domestic economic activity.

3. **Political Factor:** The cold war between the United States and the communist countries also contributed to the growth of the Euromarket. Due to the fear of blocking or seizure of deposits by the US in the event of hostilities, the Russian and East European banks sought to place their dollar balances with European banks, especially British and French, rather than with banks in the United States.

4. **Balance of Payments Deficits of the US:** The large and persistent deficit in the balance of payments of the US meant an increasing flow of the US dollar to those countries who had surplus with the US. The US has had a deficit in international payments every year since 1950, except in 1957. Since 1958 the deficits assumed alarming proportions. This is one of the most important factors responsible for the rapid growth of the Eurodollar market.

5. **Innovative Banking:** The advent of innovative banking, spearheaded by the American banks in Europe and the willingness of the banks in the market to operate on a narrow 'spread' also encouraged the growth of the Euromarket.

6. **Supply of Petrodollars:** The flow of petrodollars, facilitated by the tremendous increase in the OPEC's oil revenue following the hikes in the oil price since 1973, has been a significant source of growth of the Eurodollar market.

7. **Participants:** Participants in the Euro-currency business include governments, international organizations, central banks, commercial banks, corporations, especially multinational corporations, traders, individuals etc.

Q23. Explain the advantages of Euro Currency Market.

Ans :

Following are the advantages of euro-currency market are :

1. It has provided global 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 elasticity in adjusting their cash and liquidity positions.
4. It has enabled importers and exporters to obtain credit for financing trade at cheaper charge than otherwise available.
5. It has helped in plummet the profit margins between deposit rates and lending rates.
6. It has promoted international monetary cooperation.
7. It is a major source of short-term loans to finance corporate working capital needs and foreign trade.
8. Euro-currency markets are becoming a major source of long-term investment capital for MNCs.

Q24. What are the reasons for the existence of the euro dollar market.

Ans : **(Sep.-20)**

Following are the reasons/factors which have contributed to the existence of eurodollar market,

1. Cold War

As a result of cold war between the United states and the USSR, many countries like Soviet Union and the European block communist countries decided to convert their dollar deposits from America to euro banks with the fear that USA may seize their deposits.

2. Flow of US Aid

In post war period, United States was considered as most powerful nation. So, huge

amount of US dollars were transferred to euro banks for the purpose of rehabilitation of Europe for economic and military purposes.

3. BOP Deficits in the USA

Huge and continuous deficits in BOP of USA resulted in outflow of US dollars to the euro banks in those countries which possess surplus of it.

4. Regulations of US Federal Reserve System

The reason behind existence of euro dollars is regulations made by the Board of Governors of the US Federal Reserve System which restricts banks to pay high interest on deposits. Hence, short term dollar deposits were attracted towards european banks and converted into euro dollars.

5. Imposition of Taxes

American lending was discouraged by series of measures taken by Kennedy and Johnson administration. Interest equalization tax was imposed on purchase of foreign securities and monetary policy was tighten to control inflationary pressures. As a result, US banks borrowed huge amount from euro dollar market in order to meet the shortage of dollars in USA.

3.8.2 Euro Credit Market

Q25. Define Euro Credit Market. What are the characteristics of Euro Credit Market.

Ans :

Meaning

Euro credit market is the market where financial banking institutions provide banking services denominated in foreign currencies. They may accept deposits and provide loans. Loans provided in this market are medium-term loans, unlike loans made in the Eurocurrency market.

Euro credits are provided mostly with out any collateral security but the emphasis is on the credit rating of the borrower. In view of the difficulties experienced in enforcing securities the lending is made on strength of the standing of the borrower in the market. Loans of one year or longer extended by banks to MNCs or government agencies in Europe are commonly called Eurocredits or Eurocredit loans. These loans are provided in the so called Eurocredit market. The loans can be denominated in dollars or many other currencies and commonly have a maturity of 5 years.

Characteristics

1. A major part (more than 80 %) of the Euro debts is made in US dollars.
2. The second (but far behind) is Pound Sterling followed by Deutsch mark, Japanese yen, Swiss franc and others.
3. Most of the syndicated debts are of the order of $50 million. As far as the upper limits are concerned, amounts involved are of as high magnitude as $5 billion and more. In 1990, Euro tunnel borrowed $6.8 billion.
4. On an average, maturity periods are of about five years (in some cases it is about 20 years). The reimbursement of the loan may take place in one go (bullet) or in several installments.
5. The interest rate on Euro debt is calculated with respect to a rate of reference, increased by a margin (or spread).
6. The rates are available and generally renewable (roll over credit) every six months, fixed with reference to LIBOR.
7. The LIBOR is the rate of money market applicable to short-term credits among the banks of London. The reference rate can equally be PIBOR at Paris and FIBOR at Frankfurt, etc. It is revised regularly.
8. The margin depends on the supply and demand of the capital as also on the degree of the risk of these credits and the rating of borrowers. Financial institutions are in vigorous competition.
9. There is an active secondary market of Euro debts. Numerous techniques allow banks to sell their titles in this market.

Q26. Explain the Mechanism of Euro-Credit Market.

Ans :

In Euro-credit market, bankers lend loans to both local and foreign firms. The lending process of medium term syndicate loans to the firms/MNEs initiate when a borrower approaches, the major or leading Euro-bank. The borrowing firm should initiate the process by taking approval from the lead manager to finance their firm. It is characterised by the following features,

1. Lead manager is responsible for the collection and disbursement of funds from various co-managers or associated banks. Some of these banks, act as underwriters and charge specific syndicate or underwriting fee for their contribution.
2. The borrowing firm should enter into a negotiation agreement with the lead manager enclosing the terms, rate of interest, maturity of loans and so on.
3. Lead manager is required to circulate and inform the terms and conditions of the agreement among all the participating banks so as to make them aware of the syndicated loan amount and the credit worthiness of the borrower to repay it.

Each of the banks involved in syndicate loan has a separate assessment system to assess the performance of the borrower and the risks associated with it. The loan will be provided to the borrower only after gaining approval from all the participating banks. They also enter into an agreement regarding specifying the loan amount, its maturity date, costs associated with loan and so on.

After taking the consent from all the participants including lead manager, co-manager, underwriters and borrower, borrowing firms obtain the required finance from the banks. Euro banks need to consider the following aspects while providing the loans to the firms.

1. Evaluation of Risk Involved

Generally, international transactions are exposed to three different types of risks,

a) Corporate risk which arises as a result of the solvency of private firms.

b) Sovereign risk as a result of the solvency of foreign firms in local markets (or) as a result of the liquidation of the public corporates.

c) Currency risk regarding the fluctuations in the values of currencies among the operating/ transacting countries.

Euro banks need to evaluate all these risks both domestically as well as globally.

2. Terms

While providing credit loans, both lenders and borrowers should agree upon the following terms of an agreement which includes,

a) The maturity period of the loan

b) The rate of interest to be paid by the borrower

c) The grace period, and

d) The repayment schedules.

3. It is necessary to consider the changes relating to the relationships and the contribution among the different parties involved in the lending agreement including lead managers, co-managers, and underwriters or agents.
4. Banks need to consider the legal provisions and requirements before providing the loans.
5. Special emphasis needs to be laid down on the impact of banks on the debt servicing and the refinancing and restructuring activities of the borrowing firm.
6. The corporate strategy, philosophy and practices followed by the firms and banks as per the recent changes occurring in the economic and political environment.

Q27. Explain the different types of euro credit loans.

Ans :

1. Fixed Rate or Medium-term Loans

Medium term loans are provided to the firms based on a fixed and predetermined rate of interest. The interest rates are found to be fixed and are based on the market conditions.

2. Roll Over Loans

Roll over loans are commonly used loans in Euro credit market. In these loans, banks issue funds to the firms by collecting fixed short-term deposits from the investors. Both borrower and lender should enter into a negotiation agreement for repaying the loan on an agreed interest rate at the time of renewal at regular intervals of time which usually ranges between three to six months. The lending rate in Euro credit market is determined by considering the LIBOR (London Interbank Offer Rate) and the margin charged by the lender based on the credit worthiness of the firms (X%). It is given by the formula LIBOR + X%. Unlike medium-term loans, roll over loans provide multi currency options i.e., loans can be denominated not only in Euro currency but also in other currencies.

3. Stand by Credits

Like overdrafts, Euro banks provide standby credit loans to the firms based on an agreed rate of interest. They also charges specific fee for those funds which have not been drawn by the bankers.

The rate of interest in Euro credit market depends on the factors affecting the supply and demand of currency which include,

(a) Domestic interest rates

(b) Domestic monetary policy and reserve require ments

(c) Country and government regulations of the home

(d) The relative strength, of the foreign exchange markets.

3.8.3 Euro Bond Market

Q28. Define Euro Bond Market. State the features of Euro Bond Market.

Ans :

The bonds which are sold in all the countries except the country of the currency which is denominating the bonds called as Euro-bonds. The Euro-bond market was developed due to the Interest Equalization Tax (IET) which was lended by U.S government to prevent U.S investors from investing in foreign securities.

Euro-bonds gained popularity as a source for attracting funds but in some portion as they circumvent registration requirements. Some of the U.S-based MNCs that issue Euro-bonds are McDonalds and Walt Disney and non-U.S firms which considered Euro-bond market as a source of funds are Guinness, Nestle and Volkswagen. Newly developed firms depend on Euro-bond market for financing their progress.

Euro-bonds are denominated in several currencies. Usually, 70 to 75 percent of Euro-bonds are denominated in U.S dollar and euro will be probably used in future significantly. The popularity of specific currencies in the Euro-bond market fluctuates as the interest rates for every currency and credit conditions fluctuates constantly.

Features

Euro-bonds have many different features which are as follows,

1. Euro-bonds are sold outside the boundaries of the country in whose currency they are denominated.
2. It is a type of bearer bond which is not registered and payable to any person who holds it.
3. Ownership records are not maintained for Euro-bonds.
4. Usually, coupons of Euro-bonds are paid annually.
5. They are sold by big and reputed multinational firms.

6. An international syndicate of investment banks offers Euro-bonds to the investors of different countries.

7. Some Euro-bonds have a clause of conversion which allows them to convert into a specific number of shares of common stock. As, the Euro-bond market is not situated in any one specific country, it is usually self-governed by the association of international bond dealers. It is not necessary for the issues to fulfill the SEC requirements for selling a Euro-bond security.

Q29. Explain different types of Euro Bond Market.

Ans :

There is no single international bond market as such. The international bond market is divided into three separate types of bond markets:

1. Domestic Bonds

The market for domestic bonds is a part of the international bond market. Domestic bonds are brought out on a local basis and domestic borrowers are responsible for issuing the local bonds. Domestic bonds are normally designated in the local currency.

2. Foreign Bonds

The foreign bond market is that in which bonds are brought out by foreign borrowers. The foreign bonds are normally designated in the local currency. The local market authorities look after the issuing and selling of foreign bonds.

The foreign bonds are traded in the foreign bond markets which constituted a significant portion of the international bond market until a few decades ago. Some defining characteristics of the foreign bond markets are :

- Issuers are normally governments and private sector utilities such as the railway companies
- It was standard practice to underwrite as well as organize underwriting risk
- Issues were pledged by the retail investors and the institutional investors
- The structure of a foreign bond at that time is similar to the present day foreign bonds
- Continental private banks and old merchant houses in London connected the investors and the issuers.

3. Eurobonds

Eurobonds differ from the others in that they are not sold in any particular national bond market. Eurobonds are issued by a group of multinational banks. If a Eurobond is designated in any currency, it would be sold outside the country which uses that currency. For example if a Eurobond is denominated in the United States dollar, it would not be sold in the United States.

Q30. What are the different stages involved in the issue of international bonds?

Ans :

The issue of international bonds involves three stages which are as follows,

Stage 1

The issuer can be a firm or government which may not have an idea about the international financial market. It may also be difficult for the issuer to carry out all the formalities. Thus, a lead manager is approached which may be commercial bank or investment bank. This lead manager is selected by the issuer on the basis of the reports published by the various agencies regarding the performances of the investment banks in the field of lead managing. The lead manager which is selected takes the assistance from the co-managers though most of the work is done by itself. The lead manager guides and informs the issuer about the main characteristics of the issue. The timing, maturity, price, size of the issue and about the buyer's capability.

After receiving the lead manager's advice, prospects and various related documents will be prepared by the issuer. The accountant, auditor and legal counsel of the issuer develops the issue as per the firm's financial requirement and regulatory provisions of the country. In some situations, the

lead manager's advise is obtained for matching the issue with the indicators existing in the international financial market. A certain amount of fees will be charged by the lead manager for providing the advice. This fee is called as the management fee. The issuer will then obtain the approval from the regulatory authorities and introduces the issue.

Stage 2

After the launch of the Issue, the second stage starts. In this stage, the investor observes the issuer's credit rating and the person underwriting the issue. Due to this reason, the lead manager along with the co-managers assets in the credit rating of the issuer through a reputed institution of the credit rating. It also acts as an underwriter and charges the fee for underwriting.

Stage 3

After the completion of the process of underwriting, the third stage starts. This stage involves the selling of bonds. The lead manager operates as a selling group for which it charges commission at different rates.

Usually, the investors are the individuals or institutions like firm's, investment trust and banks. These institutions with the help of their buying agents purchases the bond frequently. The main task of these institutions is to safeguard the investor's interest. There are various listing institutions which engages the bonds for the secondary marketing. Basically, the secondary market is a over-the-counter market for international bonds.

Q31. Explain the developments of international bond markets.

(OR)

List out the developments made in international bond market.

Ans :

1. Convertible bonds or bonds with warrants are circulated. Convertible bonds authorise the holder to convert them into common stock of issuing company in a particular conversion ratio.
2. Because of the changing interest rates in the present scenario, majority of the international bonds are issued as floating rate notes.
3. For attracting the investors who are interested in hedging the exchange risk, multiple currency bonds and currency cocktails are designed. Multiple currency bonds authorize the owner to seek payment of interest and principle in particular currencies whose exchange parities are set at the beginning. With this, owner get an option to seek the payment in currency which has increased the most (or) the currency value which has diminished rarely.

Q32. Explain the advantages of Euro-Bond Market.

Ans :

The Euro-bond markets possess a number of advantages for borrowers as well as investors. These advantages are explained below :

1. **Advantages to the Borrower:** There are a number of advantages which the bond market provides to the borrowers. Some of the advantages of the bond market are :
   - i) The size and depth of the market are large enough that it has the capacity to absorb large and frequent issues.
   - ii) The Euro-bond market has a freedom and flexibility not found in domestic markets. The issuing techniques make it possible to bypass restrictions such as requirements of official authorization, queuing arrangements, formal disclosure, exchange listing obligations and so forth, which govern the issue of securities by domestic as well as foreign borrowers in the individual national markets. All the financial institutions involved in Euro-bond issues are subject to atleast one national jurisdiction. National authorities can, and sometimes do make their influence felt, especially when their own currency is used to denominate the issue.
   - iii) The costs of issue of Euro-bonds are relatively low around 2.5 per cent of the face value of the issue.
   - iv) Interest costs on dollar Euro-bonds are competitive in most financial markets.

Multinationals have been able to raise funds at a slightly lower cost in the Euro-bond market.

v) Maturities in the Euro-bonds market are suited to long-term funding requirements. Maturities may reach thirty years, but fifteen-year Euro-bonds are most common. In the medium-term range, five to ten-year Euro-bonds run into competition with medium-term Euro-dollar loans. But the longer maturities provide the assurance of funds availability at a known rate.

vi) A key feature of the Euro-bond market is the development of a sound institutional framework for underwriting, distribution, and placing of securities.

2. **Advantage of the Euro-Bonds to the Investors :** There are a number of special characteristics of the Euro-bond market which make it particularly attractive to investors. These include the following:

i) Euro-bonds are issued in such a form that interest can be paid free of income tax or withholding taxes of the borrowing countries. Also, the bonds are issued in bearer form and held outside the country of the investor, enabling the investor to evade domestic income tax. But some countries' exchange control regulations which limit an investor's ability to purchase Euro-bonds.

ii) Issuers of Euro-bonds have, on the whole, an excellent reputation for credit-worthiness. Most of the borrowers, either government, international organization, or a large multinational company, have first-class reputation.

iii) A special advantage to borrowers as well as lenders is provided by convertible Euro-bonds. Holders of convertible debentures are given an option to exchange their bonds at a fixed price and within in specified period for the stock of the parent company of the financing subsidiary. A bond with a warrant gives the bondholder an option to buy a certain number of shares of common stock at a stated price. The more the price of the underlying stock rises, the more valuable the warrant becomes. Since warrants are usually detachable, the bondholder may retain the bond but sell the warrants.

3.8.4 International Stock Market

Q33. What is an International Stock Market? Write about issues of stock in foriegn markets and issues of foreign stock in US markets.

Ans :

Meaning

Usually the firms issue stocks in local markets in order to raise funds. In the same way even MNCs can issue stocks in different foreign countries in which they are operating in order to raise long term fund. Such an, issuance mainly helps in creating image and gaining recognition in the international markets.

Issue

(i) Issue of Stock in Foreign Markets

The primary objective behind the issue of shares of U.S firms in foreign markets is to create a global image for their firms. The stiff competition among different new issue markets helps in increasing the efficiency of new Issues. MNC's may wish to issue their stock in that foreign country which helps it in gaining the desirable cash flows. Most of the U.S based MNC's are successfully issuing their shares in international markets which helps the non U.S investor to easily use them in the U.S markets. MNC's are supposed to be listed on the foreign stock exchange and also denominated in their local currency in order to attract the foreign investors it facilitates the foreign investors, to sell their purchased stock in the local market or secondary market.

Example

An US based MNC sued shares to Indian investors denominated in rupees, with this Indian investors can sell their shares in the local/secondary market.

The use of single currency (Euro) across all the European countries facilitated US and other

European based MNCs to easily issue shares in all European markets. This avoids the need for MNCs to borrow local currency from the local banks.

(ii) Issue of Foreign Stock in U.S Markets

Most of the non-U.S based firms or foreign firms are likely to issue their shares in U.S market as it is considered as relatively largest market and can digest large amount of shares. However, in order to issue shares in US market foreign firms needs large amount of funds. The issuance of foreign stock in U.S markets is called Yankee stock offerings. The main objective of Yankee offerings is to expand and diversify their shareholder range and to reduce the fluctuations in prices of shares. In these stock operations investment banks of U.S acts as "underwriters" who usually charges a commission of 7% of the stock value.

Due to privatisation the control of public sector undertakings in Latin America and Europe are being handed over to US shareholders. As it is not possible for local stock markets to handle the large size business they have offered the stock to US investors in order to raise finance. In order to offer stock in US market by foreign firms, they need to follow the depository rules of US market or securities exchange commission guidelines.

American Depository Receipts (ADRs)

Foreign stocks can be traded directly on a national stock market, but most often they are traded in the form of depository receipts. For example, Yankee stock issues often trade on the U.S exchanges as American Depository Receipts (ADRs).

An ADR is a receipt representing a number of foreign shares that are deposited in a US bank. The bank serves as the transfer agent for the ADRs, which are traded on the listed exchanges in the United States or in the OTC market.

The first ADRs began trading in 1927 as means of eliminating some of the risks, delays, inconveniences and expenses of trading the actual shares.

The ADR market has grown significantly over the years, and at mid-year 1999 there were 1,405 ADR programs, representing over $306 billion of equity in companies from at least 69 countries traded on US exchanges.

Similarly, on the London Stock Exchange, Global Depository Receipts, allow foreign firms to trade and Singapore Depository Receipts trade on the Singapore Stock Exchange.

ADRs offer the U.S investor many advantages over trading directly in the underlying stock on the foreign exchange. Non-US investors can also invest in ADRs, and frequently do so rather than investing in the underlying stock because of the investment advantages. These advantages include the following.

1. ADRs are denominated in dollars, trade on a US stock exchange, and can be purchased through the investor's regular broker. By contrast, trading in the underlying shares would likely require the investor to, setup an account with a broker from the country where the company issuing the stock was located, make a currency exchange, and arrange for the shipment of the stock certificates or the establishment of a custodial account.
2. Dividends received on the underlying shares are collected and converted to dollars by the custodian and paid to the ADR investor, whereas investment in the underlying shares requires the investor to collect the foreign dividends and make a currency conversion.

Moreover, tax treaties between the United States and some countries lower the dividend tax rate paid by nonresident investors. Consequently, US investors in the underlying shares need to file a form to get a refund on the tax difference withheld. ADR investors, however, receive the full dollar equivalent dividend, less only the applicable taxes.

3. ADR trades clear in three business days as do US equities, whereas settlement practices for the underlying stock vary in foreign countries.
4. ADR price quotes are in US dollars.
5. ADRs are registered securities that provide for the protection to of ownership rights, whereas most underlying stocks are bearer securities.
6. An ADR investment can be terminated by trading the receipt to another investor on the exchange on which it is traded, or it can be returned to the bank depository for cash.

7. ADRs frequently represent a multiple of the underlying shares, rather than a one-for-one correspondence, to allow the ADR to trade in a price range customary for U.S investors. A single ADR may represent more or less than one underlying share, depending on the per share value.

Q34. Define Security Market. Explain the various international stock market.

Ans :

Meaning

The securities market refers to the market for equity debt and derivatives. The debt market is further classified into three types i.e., the government securities market, the corporate debt market and the money market. The derivative markets are also further classified into two types namely the options market and the futures market.

Securities market is the market which influences the modern life greatly. The terms "Dalai Street", "the gilt edged market" and "the Nifty", are indefinite on unclear to understand but still they are being used by the people to refer the sensex or the securities market.

Examples of securities market at work are i.e., the activities which takes place under securities market are as follows,

"Sensex falls by 400 points with in a day after a turbulent day's trading. The Reserve Bank of India has decreased the repo rate by 30 basics points". "The Government of India increases 2500 crore rupees by issuing bonds with a maturity period of 15 years".

In US the Equities are traded in three major markets which are follows,

i) The New York Stock Exchange (NYSE)

ii) The American Stock Exchange (AMEX)

iii) The NASDAQ Stock Exchange (NASDAQ)

(i) New York Stock Exchange (NYSE)

It is one of the oldest and most famous secondary market in the United States. It is considered as one of the most effectively controlled stock exchange in the world which also has the ability to function during unisis.

The NYSE is a not-for-profit organisation which has member firms who own seats and only these member firms can buy and sell securities on the trading floor.

NYSE outlines certain lending requirements which the firms must fulfill for listing their securities at the NYSE.

(ii) American Stock Exchange (AMEX)

The AMEX is the second national organised exchange whose procedures are similar to the procedures of NYSE. However, when compared NYSE, AMEX is smaller whose membership is limited only upto 807 regular members the listing requirements of AMEX are less complicated on strict when compared to the NYSE. At presently, AMEX trades nearly 135 NASDAQ-listed stocks.

(iii) The NASDAQ Stock Market

The NASDAQ stock market is a competitive dealer market which consists of network of dealers or market makers who creates market and are ready to buy and sell securities at specified prices.

In this market, the dealers are involved in the transaction and acts as an intermediary and the securities are purchased from the and sold to them. They will earn profits by the spread on difference between the two prices.

The actively traded stocks which are not traded at the NYSE or AMEX are a part of NASDAQ stock market (NASDAQ). NASDAQ was initially introduced by the NASD (The National Association of Security Dealers) which is a self-governing body of brokers and dealers. Presently, NASDAQ is a privately owned corporation by its share-holders.

(iv) Over-the-Counter Stocks

Over-the-counter securities means the securities which are not listed and traded at an organised exchange on market. They are unusually traded at the over counter markets. It is an over-the-counter market. It does not denote a particular place or floor where dealers assemble and transact foreign currencies. Rather, it is a network of banks,

brokers and dealers spread across the various financial centres of the world. The market relies more on communication network and that is why transactions are based normally on spoken and followed by written communication.

(v) Electronic Communications Networks (ECN's)

Conventional form of Trading equity securities through agency auction markets have been replaced by fully computerized NASDAQ market. Because of the modern changes of Electronic Communication Networks {ECN's} have a clear impact on the functioning of the conventional markets like NASDAQ and the NYSE.

An ECN is a computerized trading network for institutions and large traders. Electronic Communication Network matches the buying and selling orders obtained from the subscribers and customers. After matching these orders, they can be transferred to brokerage firms for the trading of securities.

(vi) Dow Jones Industrial Average (DJIA)

The Dow Jones Industrial Average (DJIA) is one of the widely used indexes. It involves only the prices of 30 actively traded blue-chip stocks which includes the reputed companies like American express, AT&T, Caterpillar, Citigroups, Coca-Cola, Walt-Mart and Walt Disney. The average is computed by summing up the closing prices of the 30 stocks and dividing it by a number used for adjusting splits, spin offs and dividends.

(vii) Standard and Poor's 500 Index

The famous standard and Poor's (S&P) 500 Index highlights the fluctuation of prices of 500 stocks of well established, large organisations. It comprises the stocks of 400 industrial firms, 40 financial institutions, 40 public utilities and 20 transportation companies. The index is greatly influenced by the companies who hold the highest market value.

(viii) NASDAQ Composite Index

The NASDAQ composite index takes into consideration nearly all the U.S stocks that were traded in the Over-The-Counter (OTC) market in the automated quotations system which are taken care by the national association of securities dealers.

(ix) Russell 3000 Index

On the basis of the total market capitalization, the Russell 3000 Index evaluates the performance of 3000 largest U.S companies.

(x) Wilshire 5000 Index

The Wilshire 5000 Index reflects the aggregate market value of nearly 6000 plus U.S headquartered stocks which are traded on major exchanges.

Q35. Explain the methods for the Valuation of Stocks in International Market.

Ans :

The trading of stocks and bonds in international markets hold a drastic influence on the operations of the MNCs. Its influence can be studied as follows,

1. Trading of stocks in foreign markets affect the levels of interest rates, thereby influencing the cost of debt of the MNCs.
2. It affects the demand for the stock of MNCs which leads to the determination of the cost of equity of MNCs.
3. Helps the MNCs to trade the securities in the international markets.

Even though, the trading of stocks in international markets have grown tremendously overtime but has been exposed to risks associated with high transaction and information costs.

These risks can be reduced to a great extent by accurately valuing the stocks in international markets. For valuing the international stocks, investors make use of the following methods,

1. Dividend Discount Model

Basically, this model is employed by the investors for valuing the stocks so as to incorporate the fluctuations in the exchange rates. The profits

generated from the trading of stocks in U.S markets are distributed among the shareholders as the dividends in the currency in which they are dominated.

Thus, the cash flows obtained by the investor is calculated by multiplying the amount of dividend with that of the value of the foreign currency. This model uses the "dividend" as the basis for the valuation of international stocks because the value of the dividend can be accurately forecasted by the investors than the value of the foreign currency.

Cash flows = Rate of dividend denominated in foreign currency × Expected value of the foreign currency

2. Price-earnings Method

In this method, the foreign stocks are valued by considering the expected earnings for share of the firm and the price earnings multiplier. The price-earnings multiplier is calculated based on the firm's exposures and structure.

Value of foreign stocks = Expected earnings per share x Price-earnings multiplier

Limitations

Even though, it is widely used by the foreign investors, it is associated with certain limitations. Some of them include,

(i) If the industry is a combination of only few firms, then the price earnings multiplier undergoes frequent changes thereby arising frequent changes in the value of foreign stocks.

(ii) Price earnings multiplier needs to be selected based on the accounting rules and tax brackets of the specific country in which it is operating. Both accounting procedures and taxes are highly dynamic which needs frequent adjustments for determining the value of foreign stocks.

(iii) If the value of the stock is estimated by considering the denomination of local currency then even the impact of exchange rate needs to be considered.

3. Other Methods

Some of the investors uses different methods before selecting a specific set of foreign stocks.

Example

Sometimes, investor uses forecasting techniques for estimating the macroeconomic conditions of the firm. Based on their results, he/she is able to identify those countries which may be experiencing poor macro economic conditions in future. After forecasting, he/she uses the dividend discount model and the price-earnings method for estimating the value of the stocks of specific firms belonging to the prospective countries.

The perceptions of the investor may vary relating to the nature of the investor i.e., for some investor, a stock may appear to be undervalued, whereas for others the same stock may be overvalued. Such differences in the perceptions of investor arises as a result of the following reasons,

(i) Required Rate of Return

Some of the investors use the present value or discounting factor for the generation of future cash flows. Even, the dividend discount model uses this approach for the valuation of international stocks, whereas the others may not employ it. As, the discounting factor substantially varies from one country to other, then the value of the stock also undergoes variations.

(ii) Exchange Rate Risk

The degree to which the investor is exposed to the exchange rate risk depends on the value of the home currency. For example, the cash flows of the Indian investor investing in U.S stocks are exposed to high levels of risk as the U.S dollar has appreciated against the Indian Rupee. Thus, the denominated value of the currency varies overtime leading to the variation in the value of the stocks.

(iii) Taxes

The tax effects of dividends and capital gains are highly specific to a particular country and changes over time.

The country's tax rate is inversely proportional to the retention rate of the cash flows of the foreign investors i.e., the higher the country's tax rates, the greater would be the proportion of the pre tax cash flows of the investors. If the investor operates in the low-tax countries, then he may be valuing the stocks at a higher rate than those operating at high tax rates.

Q36. Distinguish between Indian stock market and International stock market.

Ans : **(Dec.-19)**

S. No.	Criteria for differentiation	Indian Stock Market		New York Stock Exchange (NYSE)
		BSE	NSE	
1.	**Market capitalization**	BSE is ranked as 11th in terms of market capitalization.	NSE is ranked as 12thin terms of market capitalization.	NYSE is ranked as 1st in terms of market capitalization.
2.	**Circuit breakers**	The circuit breakers are applicable at 3 stages of the index movement i.e, at 10%, 15% and 20%	The circuit breakers are applicable at 3 stages of the index movement i.e, at 10%, 15% and 20%	The circuit breakers are applicable at 7%, 13% and 20%.
3.	**Trading halt**	The trading halt is triggered by the circuits breaker in national equity and equity derivative markets.	The trading halt is triggered by the circuit breakers in national equity and equity derivative markets.	The trading halt is triggered by the circuit breakers in NYSE for 15 minutes before 3:25 p.m
4.	**Floating shares**	The number of floating shares available for trading are 25%	The number of floating shares available for trading are 25%	The number of floating shares available for trading are 5,000 shareholders for foreign issuers.
5.	**Lock-in (or) Lock-up requirement**	The lock-up requirement for BSE is 3 years from the date and of allotment of shares.	The lock-up requirement for NSE is 3 years from the date of allotment of shares.	The lock-up requirement for NYSE is 6 months which depends on the requirement of the underwriters.

Short Question and Answers

1. What is Foreign Exchange Market ?

Ans :

Meaning

The foreign exchange market is over a counter (OTC) global marketplace that determines the exchange rate for currencies around the world. This foreign exchange market is also known as Forex, FX, or even the currency market. The participants engaged in this market are able to buy, sell, exchange, and speculate on the currencies.

These foreign exchange markets are consisting of banks, forex dealers, commercial companies, central banks, investment management firms, hedge funds, retail forex dealers, and investors. In our prevailing section, we will widen our discussion on the 'Foreign Exchange Market'.

Definitions

(i) **According to Paul Einzig,** "The foreign exchange market is the system in which the conversion of one national currency in to another takes place with transferring money from one country to another."

(ii) **According to Kindleberger,** "It is place where foreign moneys are bought and sold."

The foreign exchange market, also known as the forex, FX, or currency market, involves the trading of one currency for another. Prior to 1996 the market was confined to large corporate banks and international corporations. However it has since opened up to include all traders and speculators.

2. What are the functions of foreign exchange market?

Ans :

The various functions of the Foreign Exchange Market are as follows:

(i) **Transfer Function:** The basic and the most obvious function of the foreign exchange market is to transfer the funds or the foreign currencies from one country to another for settling their payments. The market basically converts one's currency to another.

(ii) **Credit Function:** The forex provides short-term credit to the importers in order to facilitate the smooth flow of goods and services from various countries. The importer can use his own credit to finance foreign purchases.

(iii) **Hedging Function:** The third function of a foreign exchange market is to hedge the foreign exchange risks. The parties in the foreign exchange are often afraid of the fluctuations in the exchange rates, which means the price of one currency in terms of another currency. This might result in a gain or loss to the party concerned.

3. Write about various Foreign Exchange Quotations.

Ans :

A foreign exchange quotation is also called as foreign exchange quote refers to a statement of willingness for buying or selling of currency at a given price and time. It refers to the price of one currency being expressed in another.

Generally, foreign exchange quotations are expressed as domestic currency price paid for a foreign currency. Some times, compared with many foreign currencies. Since it is not followed globally a standardised system of quoting introduced by inter-banking markets.

1. Inter-bank Quotations

Inter-bank quote is the quote given by one bank to another bank. In foreign exchange transactions, U.S dollar is widely used currency.

There are two ways of stating foreign exchange quotations. They are,

(i) Foreign currency price of one dollar (European quote).

(ii) Dollar price of a unit of foreign currency (American quote).

In the world, mostly foreign currencies are expressed in units of their currency to buy one dollar.

For example, exchange rate between U.S dollar and Swiss Franc is S.F 1.600/$ read as 16000 Swiss Francs per dollar.

Which means 1.6000 Swiss francs is paid to buy one U.S dollar. This is expressed in European terms, since foreign currency termed as of one U.S dollar.

The second method which is expressed as $0.6250/ SF, read as $0.6250 dollars per Swiss Franc which means 0.6250 U.S dollars paid to get one Swiss Franc. This is called American terms, since U.S dollar expressed as one unit of foreign currency.

Inter-bank quotations are mostly expressed in European terms.

Even though Japanese terms and Asian terms are used but European terms is popular and used world wide since 1978. This is also the year when telecommunications were introduced in trading.

2. Direct and Indirect Quotations

Taking home or foreign currencies as base, quotations are divided into two types. They are,

(a) Direct quotation

(b) Indirect quotation.

4. Bid and Ask Quotations.

Ans :

Interbank quotations are expressed as BID and ASK.

Bid refers to the price at which dealer is ready to purchase one currency for other or the rate at which a bank is ready to buy a currency is called "BID rate".

Ask refers to the price at which dealer is ready to sell one currency for another or the rate at which a bank is ready to sell a currency is called as ask rate. The difference between bid and ask rate is called as "spread rate". Bid rate is always lower than the ASK rate.

Bid and ask is used by dealers to make profits, as they buy (Bid) at one currency which has one value and sell(Ask) at another currency. In foreign exchange markets, bid and ask are treated as complex transactions.

5. Define arbitrage.

Ans :

The term arbitrage refers to the purchase of a currency by speculators in the monetary centre where it is cheaper for immediate resale in the monetary centre where it is more expensive so as to make a profit. The process of arbitrage helps in keeping the exchange rate between any two currencies the same in different monetary centres.

However, as arbitrage continues, the exchange rate between the two currencies trends to get equalised in the two monetary centres. What actually happens is that the sale of pounds in London increases the supply of pounds there, thus resulting in a decrease in the dollar price of pounds in London. In New York, arbitrage increases the demand for pounds in New York thereby increasing the dollar price of pounds in New York. This process continues till the dollar prices become equal in the two countries so that arbitrage does not remain profitable now.

6. What is speculation in forward market?

Ans :

Speculation is a process of attempting to generate profits by trading on assumptions expectations of the prices in the future. In forward markets the transactions are being settled on the basis of the determined rate and settlement date in an agreement at the time of transaction.

The speculator in forward market usually goes for speculation of the forwards expecting that the expected spot price and the present forward price would differ from each other in the future for the same date.

The success of a dealer depends on the relative position of the future spot price and the current forward rate but not on the direction of the movement of the spot rate.

Example 1:

If the US bank buy $2,000,000 in forward market with a maturity period of 3 months at an exchange rate of `40.00/$ from Indian bank. After 3 months US bank will receive an amount of $2,000,000 by paying `8,00,00,000/- to Indian bank. If US bank at the same time decides to sell $2,000,000 to Indian bank in spot market at a rate of ` 42.00/$ it would then receive ? 8,40,00,000 from the Indian bank. Thus, by doing this the US bank would be able to earn a profit of ` 40,00,000.

It is not possible for a speculator to determine ROI from the forward transactions on the basis of the profits.

Example 2:

If US bank is willing to sell the forward dollars before its maturity period i.e., before 3 months at the prevailing rate and buy the dollars exactly after 3 months at the same rate then the profit or loss of US bank will basically depend upon the rate at which it sells the dollar to the Indian bank.

Unlike the spot speculations the forward speculator does not take into consideration the interest rates. Thus, in forward markets the speculators first invest their liquid money in the local money markets in order to avoid the risks generated in spot against forward transactions. Though it is receiving a profit of ` 40,00,000 in this transaction. It need to deposit it in the financial institutions where it has a liability to pay in order to fulfill the trade.

7. What is an option?

Ans :

Meaning

An option is the right but, not the obligation to buy or sell something on a specified date at a specified price. In the securities market, an option is a contract between two parties to buy or sell specified number of shares, at a later date, for an agreed price. Three parties are involved in the option trading, i.e., the option seller, buyer, and the broker.

1. The option seller or writer is a person who grants someone else the option to buy or sell. He receives a premium on its price.
2. The option buyer pays a price to the option writer to induce him to write the option.
3. The securities broker acts as an agent to find the option buyer and seller and receives a commission or fee for it.

There are two types of options, namely, call option and put option. A call option is a contract giving the right to buy the shares. Whereas the put option is a contract giving the right to sell the shares.

Option contracts can be traded either over the counter or in an organized exchange. The options contract is also a valuable instrument in minimizing risk.

Cross-currency options were permitted by the RBI in January 1994 and options contracts between the Indian rupee and foreign currency was recently in the year 2003.

8. Define Euro Currency Market.

Ans :

Meaning

The Eurocurrency market consists of banks (called Eurobanks) that accept deposits and make loans in foreign currencies. A Eurocurrency is a freely convertible currency deposited in a bank located in a country which is not the native country of the currency. The deposit can be placed in a foreign bank or in the foreign branch of a domestic US bank.

In the Eurocurrency market, investors hold short-term claims on commercial banks which intermediate to transform these deposits into long-term claims on final borrowers.

The Eurocurrency market is dominated by US $ or the Eurodollar. Occasionally, during weak dollar periods (latter part of 1970s and 1980s), the EuroSwiss franc and the EuroDM markets increased in importance. The Eurodollar market originated post WWII in France and England thanks to the fear of Soviet Bloc countries that dollar deposits held in the US may be attached by US citizens with claims against communist governments.

Definition

A Eurocurrency is essentially a currency borrowed and lent outside the domestic money market for that currency and therefore out with the direct regulatory control of the domestic central bank. A dollar borrowed or lent inside the US and subject to reserve requirements imposed by the Federal Reserve is a domestic money market transaction. A dollar borrowed or lent outside the US is a Eurodollar (the transaction does not have to take place in Europe). Following the lead set by the dollar, international markets later developed in Euromarks and Euroyen.

The Eurocurrency markets are primarily wholesale markets in which the main participants are international corporations, institutional investors, commercial banks and global investment banks. In London the main players include the major American, German and Swiss banks, names such as Citigroup, Deutsche Bank and Union Bank of Switzerland.

9. Characteristics to Euro Currency Market.

Ans :

The various characteristics of the Eurocurrency tarket are :

1. It is a large international money market relatively free from government regulation and interference, i.e., the market is essentially unregulated.
2. The deposits in the Eurocurrency market are primarily for short-term. This sometimes leads to problems about managing risk, since most Eurocurrency loans are for longer periods of times.
3. Transaction, in this market are generally very largewith government, public sector organisations tending to borrow most of the funds. This makes the market a wholesale rather than a retail market. Also, approximately 80% of the Eurodollar market is interbank, which means that the transactions take place between banks.
4. The Eurocurrency market exists for savings and time deposits rather than demand deposits.
5. The Eurocurrency market is mainly a Eurodollar market. Generally, the Eurocurrency borrowing rate depends on the credit worthiness of the customer and is large enough to cover various costs as also build reserves against possible losses. Traditionally, loans are made at a certain percentage above the London Inter Bank Offered Rate (LIBOR), which is the interest rate banks charge one another on loans of Eurocurrencies. Most loans are made on variable rate terms and the rate fixing period could be one month, three months or six months. Because of the variable nature of the interest rates, the maturities can extend into the future.

10. Explain the advantages of Euro Currency Market.

Ans :

Following are the advantages of euro-currency market are :

1. It has provided global 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 elasticity in adjusting their cash and liquidity positions.
4. It has enabled importers and exporters to obtain credit for financing trade at cheaper charge than otherwise available.
5. It has helped in plummet the profit margins between deposit rates and lending rates.
6. It has promoted international monetary cooperation.
7. It is a major source of short-term loans to finance corporate working capital needs and foreign trade.
8. Euro-currency markets are becoming a major source of long-term investment capital for MNCs.

11. Define Euro Credit Market.

Ans :

Meaning

Euro credit market is the market where financial banking institutions provide banking services denominated in foreign currencies. They may accept deposits and provide loans. Loans provided in this market are medium-term loans, unlike loans made in the Eurocurrency market.

Euro credits are provided mostly with out any collateral security but the emphasis is on the credit rating of the borrower. In view of the difficulties experienced in enforcing securities the lending is made on strength of the standing of the borrower in the market. Loans of one year or longer extended by banks to MNCs or government agencies in Europe are commonly called Eurocredits or Eurocredit loans. These loans are provided in the so called Eurocredit market. The loans can be denominated in dollars or many other currencies and commonly have a maturity of 5 years.

12. Define Euro Bond Market.

Ans :

The bonds which are sold in all the countries except the country of the currency which is denominating the bonds called as Euro-bonds. The Euro-bond market was developed due to the Interest Equalization Tax (IET) which was lended by U.S government to prevent U.S investors from investing in foreign securities.

Euro-bonds gained popularity as a source for attracting funds but in some portion as they circumvent registration requirements. Some of the U.S-based MNCs that issue Euro-bonds are McDonalds and Walt Disney and non-U.S firms which considered Euro-bond market as a source of funds are Guinness, Nestle and Volkswagen. Newly developed firms depend on Euro-bond market for financing their progress.

Euro-bonds are denominated in several currencies. Usually, 70 to 75 percent of Euro-bonds are denominated in U.S dollar and euro will be probably used in future significantly. The popularity of specific currencies in the Euro-bond market fluctuates as the interest rates for every currency and credit conditions fluctuates constantly.

13. What is an International Stock Market?

Ans :

Meaning

Usually the firms issue stocks in local markets in order to raise funds. In the same way even MNCs can issue stocks in different foreign countries in which they are operating in order to raise long term fund. Such an, issuance mainly helps in creating image and gaining recognition in the international markets.

14. Define Security Market.

Ans :

Meaning

The securities market refers to the market for equity debt and derivatives. The debt market is further classified into three types i.e., the govern-ment securities market, the corporate debt market and the money market. The derivative markets are also further classified into two types namely the options market and the futures market.

Securities market is the market which influences the modern life greatly. The terms "Dalai Street", "the gilt edged market" and "the Nifty", are indefinite on unclear to understand but still they are being used by the people to refer the sensex or the securities market.

Examples of securities market at work are i.e., the activities which takes place under securities market are as follows,

"Sensex falls by 400 points with in a day after a turbulent day's trading. The Reserve Bank of India has decreased the repo rate by 30 basics points". "The Government of India increases 2500 crore rupees by issuing bonds with a maturity period of 15 years".

15. What are the different exchanging methods based on euro based transactions?

Ans :

Euro currency markets involves interbank lending and borrowing like European bank loans and European bonds. European banks loans may have fixed interest rates or variable interest rates for short term, mid-term and long term duration. European bonds are issued by national government or a business company in bond market of another country which are priced in foreign currency.

The, transactions carried out in Euro currency markets have two forms. In one form, one party among two parties involved is resident whereas other party is non-resident. This type of transaction is known as onshore transaction. In second form, both the parties involved in a transaction are non-residents and these kind of transaction is known as on offshore transaction.

Offshore transactions are further classified into two different types i.e., location of actual transaction and recording of the transaction are same in one type, whereas these locations are different in second type.

Exercise Problems

1. A company expects cash flow from its new project to the extent of $ 5,000; $ 6,500 and $ 6,000 respectively during the first three years of its operation. However, due to changes in exchange rate/ inflation rate, the cash flow is affected and it will change to $ 4,000, $ 5,800 and $ 5,200. Find the magnitude of the possible real operating exposure during the initial year of operation assuming a discount rate of 10 per cent.

[Ans: Real operating exposure = $ 2,088.64]

2. Calculate the 3-month forward rate, if spot rate is ? 46/US $; interest rate in India and the USA is respectively 6 percent and 3 per cent.

[Ans: Forward rate = ` 46.34/US $]

3. The US inflation rate is expected to average about 4 percent annually, while the Indian rate of inflation is expected to average about 12 percent annually. If the current spot rate for the rupee is $ 0.0285, what is the expected spot rate in two years?

[Ans: Spot rate = $ 0.0245]

4. Lee's U.S's Japanese subsidiary, Lee Japan, has exposed assets of ¥ 8.5 billion and exposed liabilities of ¥ 7.5 billion. During the year, the yen appreciates from ¥ 135/$ to ¥105/$.

(a) Calculate Lee Japan's net translation exposure at the beginning of the year in yen and in dollars?

(b) Calculate Lee Japan's translation gain or loss from the change in the yen's value.

[Ans: (a) Translation exposure = $ 7.407 million (b) Potential Gain = $ 2116402.116]

UNIT IV

(a) **Exchange Rates:** Measuring exchange rate movements, Factors influencing exchange rates. Government influence on exchange rates - exchange rate systems. Managing Foreign exchange Risk. International arbitrage and interest rate parity.

(b) Relationship between inflation, interest rates and exchange rates - Purchasing Power Parity - International Fisher Effect - Fisher Effect - Interest Rate parity, Expectations theory.

4.1 EXCHANGE RATES

Q1. Define exchange rate.

(OR)

Describe briefly about exchange rate.

Ans : **(Sep.-20)**

Meaning

The exchange rates also known as the foreign-exchange rate, forex rate or FX rate) between two currencies specify how much one currency is worth in terms of the other. It is the value of a foreign nation's currency in terms of the home nation's currency. The spot exchange rate refers to the current exchange rate. The forward exchange rate refers to an exchange rate that is quoted and traded today but for delivery and payment on a specific future date.

Example :

An exchange rate of 91 Japanese yen (JPY, ¥) to the United States dollar (USD, $) means that JPY 91 is worth the same as USD 1. The foreign exchange market is one of the largest markets in the world. By some estimates, about 3.2 trillion USD worth of currency changes hands every day.

Fluctuations in Exchange Rates

A market based exchange rate will change whenever the values of either of the two component currencies change. A currency will tend to become more valuable whenever demand for it is greater than the available supply. It will become less valuable whenever demand is less than available supply (this does not mean people no longer want money, it just means they prefer holding their wealth in some other form, possibly another currency).

Increased demand for a currency is due to either an increased transaction demand for money or an increased speculative demand for money. The transaction demand for money is highly correlated to the country's level of business activity, gross domestic product (GDP), and employment levels. The more people there are unemployed, the less the public as a whole will spend on goods and services. Central banks typically have little difficulty adjusting the available money supply to accommodate changes in the demand for money due to business transactions.

The speculative demand for money is much harder for a central bank to accommodate but they try to do this by adjusting interest rates. An investor may choose to buy a currency if the return (that is the interest rate) is high enough.

The higher a country's interest rates, the greater the demand for that currency. It has been argued that currency speculation can undermine real economic growth, in particular since large currency speculators may deliberately create downward pressure on a currency by shorting in order to force that central bank to sell their currency to keep it stable (once this happens, the speculator can buy the currency back from the bank at a lower price, close out their position, and thereby take a profit).

4.2 MEASURING EXCHANGE RATE MOVEMENTS

Q2. How exchange rate movements are measured ?

Ans : **(Dec.-19)**

Exchange rate movements affect an MNC's value because they can affect the amount of cash inflows received from exporting or from a subsidiary

and the amount of cash outflows needed to pay for imports. An exchange rate measures the value of one currency in units of another currency. As economic conditions change, exchange rates can change substantially.

A decline in a currency's value is often referred to as depreciation. When the British pound depreciates against the U.S. dollar, this means that the U.S. dollar is strengthening relative to the pound. The increase in a currency value is often referred to as appreciation. When a foreign currency's spot rates at two specific points in time are compared, the spot rate at the more recent date is denoted as S and the spot rate at the earlier date is denoted as S_{t-1}. The percentage change in the value of the foreign currency is computed as follows :

Percent Δ in foreign currency value

$$= \frac{S - S_{t-1}}{S_{t-1}}$$

A positive percentage change indicates that the foreign currency has appreciated, while a negative percentage change indicates that it has depreciated. The values of some currencies have changed as much as 5 percent over a 24-hour period.

On some days, most foreign currencies appreciate against the dollar, although by different degrees. On other days, most currencies depreciate against the dollar, but by different degrees. There are also days when some currencies appreciate while others depreciate against the dollar; the media describe this scenario by stating that "the dollar was mixed in trading."

Foreign exchange rate movements tend to be larger for longer time horizons. Thus, if yearly exchange rate data were assessed, the movements would be more volatile for each currency then what is shown here, but the euro's movements would still be more volatile. If daily exchange rate movements were assessed, the movements would be less volatile for each currency than what is shown here, but the euro's movement would still be more volatile.

A review of daily exchange rate movements is important to an MNC that will need to obtain a foreign currency in a few days and wants to assess the possible degree of movement over that period.

A review of annual exchange movements would be more appropriate for an MNC that conducts foreign trade every year and wants to assess the possible degree of movements on a yearly basis. Many MNCs review exchange rates based on short-term and long-term horizons because they expect to engage in international transactions in the near future and in the distant future.

4.3 Factors Influencing Exchange Rates

Q3. Explain the various factors influencing exchange rates ?

(OR)

What are the factors influencing exchange rates.

(OR)

Discuss the Factors Influencing Exchange Rates in detail.

Ans : **(Sep.-20)**

The most important factors that influence exchange rates are discussed below :

1. Interest Rates

An important factor for movement in exchange rates in recent years is interest rates, i.e. interest differential between major currencies. In this respect the growing integration of financial markets of major countries, the revolution in telecommunication facilities, the growth of specialized asset managing agencies, the deregulation of financial markets by major countries, the emergence of foreign trading as profit centres and the tremendous scope for bandwagon and squaring effects on the rates, etc. have accelerated the potential for exchange rate volatility.

Kenya intrinsically has a very weak economy but the rates offered within the country have always been very high. To illustrate this point

the treasury bill rate in September 1998 was as high as 23%. High interest rates attract speculative capital moves so the announcements made by the Federal Reserve on interest rates are usually eagerly awaited – an increase in the same will cause an inflow of foreign currency and the strengthening of the US dollar.

However, suggests Fisher, this proposition cannot be thought of isolation of inflation, as much as inflation negates the return on capital to be received. If the interest rate is 10 per cent and the rate of inflation is 10 per cent, the real return on capital would be zero. This is because the gain in the form of interest is cancelled out by the loss on account of inflation. In fact, since it was Irving Fisher who decomposed nominal interest into two parts- the real interest rate and the expected rate of inflation, the relationship between these two elements is known as the Fisher effect.

The Fisher effect states that whenever an investor thinks of an investor, he is interested in a particular nominal interest rate which covers both the expected in a particular nominal interest rate.

Mathematically, it can be expressed as

$$1 + r = (1 + a)(1 + I)$$

where

r = nominal interest rate,

a = real interest rate, and

I = expected rate of inflation.

Suppose the required real interest rate is 4 per cent and the expected rate of inflation is 10 per cent, the required nominal interest rate will be:

$$1.04 \times 1.10 - 1 = 14.4\%$$

Suppose, the interest rate in the USA is 4 per cent and the inflation rate in India is 10 per cent higher than in the USA. A US investor will be tempted to invest in India only when the nominal interest in India is more than 14.4 per cent.

Flow of Funds on the Current and Capital Accounts

A country with current deficit experiences a depreciation of its currency. It is because there is demand for foreign currency to make payment for imports. On the contrary, a current account surplus country possesses a large supply of foreign exchange with the result that the country experiences and appreciation of its currency.

An apposite example of current account deficit country is the USA whose trade deficit was one of the important causes for depreciation in dollar during the post-2002 years. On the other hand, the currency of Japan and Switzerland appreciated in view of surplus current account. However, the current account alone is not responsible for this state of affairs. Capital account flows help change the situation. Larger inflow on the capital account leads to an appreciation of the currency.

2. Impact of Inflation

It is normally the inflation rate differential between the two countries that influences the exchange rate between the two currencies. The inflation rate finds a nice explanation in the Purchasing Power Parity (PPP) theory. This theory suggests that at any given time, the rate of exchange between two currencies is determined by their purchasing power. If *e* is the exchange rate and P_A and P_B are the purchasing power of two currencies, A and B, the equation can be written as

$$e = \frac{P_A}{P_B}$$

Prior to 1914, the purchasing power of a unit of a currency was reckoned in terms of gold. The principle applies even today, but now it is reckoned in terms of gold. The principle applies even today, but now it is reckoned in terms of tradable commodities. As a corollary, a country experiencing higher inflation will experience a corresponding depreciation of

its currency, while a country with a lower inflation rate will experience an appreciation in the value of its currency. In fact, this theory is based one the theory of one price in which domestic price of any good equals its foreign price quoted in the same currency.

If the exchange rate is Rs.2/US $, the price of a particular commodity, if it is Rs.100 in India, must be US $ 50 in the USA. In other words.

US $ price of a commodity × price of US $ = Re. price of the commodity

If inflation in one country causes a temporary deviation from the equilibrium, arbitrageurs will begin operation and, as a result, equilibrium will be restored through changes in the exchange rate. Suppose the price of a commodity soars in India to Rs.125, the arbitrageurs will buy that commodity in the USA and sell it in India to earn a profit of Rs.25. This will go on till the exchange rate moves to Rs.2.5/US $ and the profit potential of arbitrage is eliminated.

3. Combined Effect of Interest Rate and Inflation

The International Fisher Effect is a generalized version of the Fisher effect. International Fisher Effect suggests that interest rate differential is equal to the inflation rate differential. It may be recalled that the PPP theory and Fisher's closed proposition. It may be recalled that the PPP theory suggests that exchange rate is determined by the inflation rate differentials, while the later states that the nominal interest rate is higher in a country with higher inflation rate combining these two propositions, the International Fisher effect states that the interest rate differential shall equal the inflation rate differential. It can be written as

$$\left(\frac{1+r_A}{1+r_B}\right)=\left(\frac{1+I_A}{1+I_B}\right)$$

The rationale behind this proposition is that an investor likes to hold assets denominated in currencies expected to depreciate only when the interest rate on those assets is high enough to compensate the loss on account of depreciating exchange rate. As a corollary, an investor holds assets denominated in currencies expected to appreciate even at a lower rate of interest because the expected capital gain on account of exchange rate appreciation will make up the loss on yield on account of low interest.

The equality between interest rate differential and inflation rate differential can be explained with the help of the following example. Suppose, India is expecting 8 per cent inflation rate during the next one year as compared to 3 per cent inflation rate in the USA. If the exchange rate in the beginning of the year is Rs. 40/US $, the value of the rupee will fall vis-a vis the US dollar at the end of the period to:

Rs. 40(1.08/1.03) = Rs. 41.94/US $

Suppose further that at the beginning of the period, interest rate in India is 7 percent as against 4 percent in the USA. At the end of the period, interest rate in India will rise to an extent that will equate approximately the inflation rate differential. In order to find out the change in interest rate, the following equation may be applied :

$$\frac{e_t}{e_0} = 1 + r_{IND}/1 + r_{USA}$$

Basing on the above equation, we have

$$41.94/40 = (1 + r_{IND})/1.04$$

or $$1 + r_{IND} = 1.09$$

$$r_{IND} = 0.09 \text{ or } 9\%$$

If the rate of interest in India rises to 9 percent, the interest rate differential between the two countries will be : 1.09/1.04 or 4.81 percent which will be approximately equal to the inflation rate differential which is 1.08/1.03 or 4.85 percent.

4. Political and Psychological Factors

Political or psychological factors are believed to have an influence on exchange rates. Many currencies have a tradition of behaving

in a particular way such as Swiss francs which are known as a refuge or safe haven currency while the dollar moves (either up or down) whenever there is a political crisis anywhere in the world. Exchange rates can also fluctuate if there is a change in government. Some time back, India's foreign exchange rating was downgraded because of political instability and consequently, the external value of the rupee fell. Wars and other external factors also affect the exchange rate.

5. Government's Monetary and Fiscal Policies

Governments, through their monetary and fiscal policies affect international trade, the trade balance and the supply and demand for a currency. Increasing the supply of money raises prices and makes imports attractive. Fiscal surpluses will slow economic growth and this will reduce demand for imports and encourage exports. The effectiveness of the policy depends on the price and income elasticities of demand for the particular goods. High price elasticity of demand means the volume of a good is sensitive to a change in price.

Monetary and fiscal policy support the currency through a reduction in inflation. These also affect exchange rate through the capital account. Net capital inflows supply direct support for the exchange rate. Central governments control monetary supply and they are expected to ensure that the government's monetary policy is followed. To this extent they could increase or decrease money supply.

4.4 Government Influence on Exchange Rates

Q4. Discuss the government influences on exchange rates ?

Ans :

The responsibility of foreign exchange regulation and foreign currency market has been assigned to the RBI, by the government of India. Maintaining external value of rupee is one of the major central bank function performed by the RBI. The custody of foreign exchange reserves and the sole agency of exchange controls administration is with the RBI. Deals related to foreign exchange and foreign securities in India and all the receipts and payments made in and out of India require general or special permission from the RBI.

The transactions which have international financial implications are generally controlled by the RBI and the government. Such transactions may also include the following important items, although most of them have been either liberalized or withdrawn as the result of economic reforms of 1991.

i) Foreign exchange dealings or purchase and sale and balances are maintained in foreign centres by the residents.

ii) Method for converting the income earned from export of goods and services.

iii) Non-residents payments or paying off for imports and other activities to non residents in their accounts in India.

iv) Acquiring and holding of foreign securities and exchange of securities between Indian residents and non-residents.

v) Foreign travel that may or may not involve foreign exchange.

vi) Exporting and importing of currency, cheques, traveller's cheques and financial instruments such as securities, gold, etc.

vii) Foreign firms and companies trading, commercial and industrial activities carried out in India and foreign residents acquiring of business or holding of shares in Indian firms, companies or persons.

viii) Appointing the foreign nationals or companies or non-residents as agents or technical and management advisors in India.

ix) Employment, profession etc., taken by a foreign national or non-resident in India.

x) A foreign national or company acquiring, holding or disposing off an immovable property in India.

xi) An Indian national or company acquiring, holding or disposing off an immovable property outside India.

The RBI administrates control with the help of Authorized Dealers (A.Ds) and money-changers.

(i) Authorized Dealers (A.Ds)

The registered commercial and co-operative banks authorized to deal in foreign exchange by the RBI are known as the authorized dealers. The exchange controls manual and the other notifications issued by the RBI, specify the regulations as per FERA. The ADs are permitted to deal in foreign currencies and can open and maintain accounts in foreign currencies. They are also permitted to maintain national currency accounts for the non-residents.

The Foreign Exchange Dealer's Association (FEDA) of AD's determines the rate for sterling against rupee. The buying and selling rate of the RBI serves as its basis. The AD's can freely quote their price on the basis of cross rates too.

The AD's act as agents of RBI and analyze the public applications. The rules and regulations of exchange control are also implemented by the AD's. Under section 74 of FERA it is mandatory for the ADs to comply with the RBI's general or special directions and instructions.

(ii) Money Changers

Money changers refers to those parties authorized by the RBI to deal in foreign currencies and coins. Some money changers are restricted only to purchase foreign currencies and coins whereas, others are allowed to do both purchase and sell. The RBI has granted licenses to some firms and hotels, etc., to act as money changers.

Q5. Explain the various reasons for government intervention.

Ans :

Each country has a central bank that may intervene in the foreign exchange markets to control its currency's value. In the United States, for example, the central bank is the Federal Reserve System (the Fed). Central banks have other duties besides intervening in the foreign exchange market. In particular, they attempt to control the growth of the money supply in their respective countries in a way that will favorably affect economic conditions.

Reasons for Government Intervention

The degree to which the home currency is controlled, or "managed", varies among central banks. Central banks commonly manage exchange rates for three reasons :

1. To smooth exchange rate movements
2. To establish implicit exchange rate boundaries
3. To respond to temporary disturbances

1. Smooth Exchange Rate Movements : If a central bank is concerned that its economy will be affected by abrupt movements in its home currency's value, it may attempt to smooth the currency movements over time. Its actions may keep business cycles less volatile.

The central bank may also encourage international trade by reducing exchange rate uncertainty. Furthermore, smoothing currency movements may reduce fears in the financial markets and speculative activity that could cause a major decline in a currency's value.

2. Establish Implicit Exchange Rate Boundaries : Some central banks attempt to maintain their home currency rates within some unofficial, or implicit, boundaries. Analysts are commonly quoted as forecasting that a currency will not fall below or rise above a particular benchmark value because the central bank would intervene to prevent that. The Federal Reserve periodically intervenes to reverse the U.S. dollar's upward or downward momentum.

3. Respond to Temporary Disturbances : In some cases, a central bank may intervene to insulate a currency's value from a temporary disturbance. In fact, the stated objective of the Fed's intervention policy is to counter disorderly market conditions.

Q6. Explain the role of RBI on exchange rates.

Ans :

- The exchange control guidelines have been liberalized by Reserve Bank of India from June 9, 1999. The remittances have been granted more freedom.

- The RBI also granted general permission for several transactions. Casual gifts of $1000 per year have been permitted to be remitted by the ADs.
- Post parcel imports of $250 without a parcel receipt have been permitted to be remitted by the ADs. Remittances towards import of drawings and designs received by e-mail or fax are allowed to be remitted by the ADs.
- Commission on exports upto a limit of 12.5 percent have been permitted to be remitted by the ADs.
- The foreign embassies, missions and diplomats have been permitted to open accounts with any AD status bank. Remittances of shipping companies can be done by the ADs.
- EX1M bank is allowed to directly receive, consider and approve a project of export proposal having a value of 100 crores.
- ADs are allowed remittances by recognized international, national and state level organization. The sponsorship money increased from $ 25,000 to $ 100.000.
- The Indian residents were allowed to hold international credit cards prior to condition that the liabilities arising from it are borne by the credit card issuing organization.
- The ADs and money changers when applying for basic travel quota, were not required to submit basic particulars.
- The permission to issue shares or convertible debentures upto 100 percent of paid up capital to NRIs, PIO and OCBs was granted to domestic ATOs.

4.5 EXCHANGE RATE SYSTEMS

Q7. Discuss the types of exchange rate systems ?

(OR)

Describe the exchange rate systems used by various governments.

Ans : **(May-19)**

Exchange rate systems can be classified according to the degree by which exchange rates are controlled by the government.

Exchange rate systems normally fall into the following categories :

(i) Fixed exchange rate system.

(ii) Flexible exchange rate system.

(iii) Crawling peg exchange rate system.

(iv) Managed float

(i) Fixed Exchange Rate System

Different kinds of exchange rate systems have been tried by different countries in the world. Of them, the two extreme types are the fixed and flexible rate systems. In between, there have been the systems of "crawling peg", "mixed flexible and fixed rates", "target zone", "managed or pegged or dirty float" and "free or clean float".

Under the fixed exchange rate system of the gold standard or gold-exchange standard or dollar exchange standard or IMF (Bretton Woods) standard, the governments are committed to maintain the stated or official par values of their currencies, allowing the deviation of currency value from the par value only within a fixed or an agreed upon percentage, say, one percent on either side of the par value.

The CB intervenes in the FEM to maintain the par value and if it could not be maintained, the exchange rate is officially devalued or revalued. The ER is not used as a tool for correcting imbalances in the BOP.

Advantages

Fixed exchange rate system had the following merits or advantages :

1) **Stability**: It ensures stability, in the international money market/exchange market. Day- to-day fluctuations are avoided. It helps formulation of long-term economic policies, particularly relating to exports and imports.

2) **Encourages International Trade** : Fixed exchange rate system implies low risk and low uncertainty of future payments. It encourages international trade.

3) **Co-ordination of Macroeconomic Policies** : Fixed exchange rate helps co-ordination of macroeconomic policies across different countries of the world. Long-term economic polities can be drawn in the area of international trade and bilateral trade agreements.

4) **Reduction of Incentives** : The uncertainty of exchange rate fluctuations can therefore reduce the incentive for firms to invest in export capacity. Some Japanese firms have said that" the UK's reluctance to join the Euro and provide a stable exchange rates maker the UK a less desirable place to invest. Governments who allow their exchange rate to devalue may cause inflationary pressures to occur. This is because AD increases, import prices increase and firms have less incentive to cut costs.

5) **Increase in Exchange Rate** : A rapid appreciation in the exchange rate will badly effect manufacturing firms who export, this may also cause a worsening of the current account.

6) **Providing Greater Certainty** : Fixed rates provide greater certainty for exporters and importers and under normally circumstances there is less speculative activity - although this depends on whether the dealers in the foreign exchange markets regard a given fixed exchange rate as appropriate and credible. Sterling came under intensive speculative attack in the autumn of 1992 because the markets perceived it to be overvalued and ripe for a devaluation.

7) **Maintaining Strong Discipline and Low Inflation** : Fixed exchange rates can exert a strong discipline on domestic firms and employees to keep their costs under control in order to remain competitive in international markets. This helps the government maintain low inflation which in the long run should bring interest rates down and stimulate increased trade and investment.

Limitations

1) **Huge International Reserves** : Fixed exchange rate system is often supported with huge international reserves of gold. This is because different currencies are directly or indirectly convertible into gold.

2) **Restricted Movement of Capital** : Fixed exchange rate (owing to huge back-up of international reserves) restricts the movements of capital across different parts of the world. Accordingly, international growth process suffers.

3) **Discourages Venture Capital** : Fixed exchange rate discourages venture capital in the international money market. Implying that foreign exchange fails to develop as a commodity of trade. International money market is restricted largely to international payments of exports and imports.

4) **Reigidity in Resource Allocation** : Fixed exchange rate is by and large a rigid exchange rate. It imparts rigidity to the allocation of resources particularly in the area of international trade.

5) **Curbing Competitive Market Forces** : If we believe in the virtues of a competitive market, we should opt for a flexible and not a fixed rate. This is because a fixed rate regime is the one in which competitive market forces are not allowed to operate freely. In particular, a policy of exchange convertibility and free international trade imply that fixed exchange is a baseless policy.

6) **Choice of Rate** : There is no objective method of estimating the most appropriate fixed rate of exchange and adopt it. Its estimation would involve a number of factors including those prevailing in international markets and policies adopted by other countries. Whether or not the rate chosen is optimum can be judged only by first adopting it and then studying its impact on the economy.

7) **Transient Nature** : There is no rate which is optimum for all times to come. The very dynamism of modern economies means that exchange rates should also be adjusted in response to the changing situation.

(ii) Flexible Exchange Rate System

Flexible rate of exchange is that rate which is determined by the demand for and supply of different currencies in the foreign exchange market. In other words, it is determined by the market forces, like the price of any other commodity. The market where foreign currencies are demanded and supplied is called foreign exchange market. It can therefore express as,

$$R = f(D, S)$$

Here,

R = Exchange rate,

D = Demand for different currencies in the international market,

S = Supply of different currencies in the international market.

The exchange rate at which demand for foreign currency is equal to its supply is called Par Rate of Exchange and it constitutes the Normal Rate or Equilibrium Rate. It is flexible rate because it tends to change in accordance with changes in the supply and demand for different currencies in the foreign exchange market.

Advantages

Following are the principal merits or advantages of flexible exchange rate system :

1) **No Need for International Reserves** : Flexible exchange rate system is not to be supported with international reserves. Because member countries (in the flexible exchange rate system) are no longer floating 'convertible' currencies.

2) **Optimum Resource Allocation** : Flexible exchange rate system enhances efficiency in resource allocation. Accordingly, allocation of resources in the area of international trade, tends to become optimum.

3) **International Capital Movement** : Flexible exchange rate system enhances movement of capital across different countries of the world. This is due to the fact that member countries are no longer required to keep huge international reserves.

4) **Venture Capital** : Flexible exchange rate promotes venture capital in the foreign exchange market. Trading in international currencies itself becomes an important economic activity.

Limitations

But merits of flexible exchange rate system are not without its demerits. Following points may be noted in this regard :

1) **Instability**: It causes instability in the international money market. Exchange rate tends to fluctuate like price of good in the commodity market.

2) **International Trade**: Instability in the foreign exchange market causes instability in the area of international trade. It becomes difficult to draw long-period policies of exports and imports.

3) **Macroeconomic Policies**: While fixed exchange rate helps coordination of macroeconomic policies, flexible exchange rate makes it a difficult proposition. Day-to-day fluctuation in exchange rate makes bilateral trade agreements a difficult exercise.

(iii) Crawling Peg Exchange Rate System

The proposal that official intervention in foreign exchange markets should take the form of limiting the rate of change of exchange rates, as opposed to setting any particular level. A 'crawling peg' could take several forms, among them the following. The authorities could pre- announce a trend rate of movement in par exchange rates by small regular changes in the same direction.

For example $\frac{1}{2}$ percent a month. They could retain discretion to change par rates in either, direction by up to a low limit, for example 1 pep cent a month. Alternatively, they could announce that the par rate would be continually adjusted to be equal to the average of market rates over some period of past.

Example : Period as a year.

In all the cases it is assumed that market rate would be held within fixed limits around the par rates by intervention in the market.

Advantages

1) The system potentially avoids the economic instability associated with the infrequent but discrete adjustment which characterize the fixed exchange rate.

2) They reduce uncertainty due to volatility characterizing floating exchange rate.

Limitations

Sometimes it is difficult to realize in practice the above advantages if crawling pegged exchange rate system generating substantial currency flows in anticipation of exchange rate realignment. There flows might prompt monetary authorities to accelerate their currency realignments, therefore creating an erratic .adjustment process and exposing market operators to unsystematic economic costs.

(iv) Managed float

The exchange rate system which is prevailing in present scenario is between fixed and freely floating. It reflects the freely floating system wherein exchange rates can change on daily basis without any official boundaries. It is like a fixed rate system in which government can interfere to restrict currencies from moving far in specific direction. This kind of system is referred as a managed float or dirty floats.

4.6 MANAGING FOREIGN EXCHANGE RISK

Q8. Define Foreign Exchange Risk. Explain the types of Foreign Exchange Risks.

(OR)

What are the Risks related to Foreign Exchange Market.

(OR)

What are the different types of Foreign Exchange exposure? Briefly explain them.

Ans : **(May-19, Imp.)**

Usually foreign exchange risk and exposure are used interchangeably. In fact, these two terms are different. The foreign exchange risk relates to the variability of domestic currency value of foreign currency denominated assets and liabilities and foreign exchange exposure relates the sensitivity of foreign currency denominated assets and liabilities to the unanticipated movements in exchange rate.

According to Michael Adler and **Bernard Dumas exposure** is defined as "the sensitivity of changes in the real domestic currency value of assets, liabilities or operating income due to unanticipated change in exchange rates" Thus as per the definition :

1) Exposure is a measure of the sensitivity of domestic currency values of foreign currency denominated assets or liabilities, i.e. it measures the extent to which the value of something in terms of domestic currency is changed due to the unanticipated change in exchange rate.

2) Exposure concerns the real change in the value of assets, liabilities or operating income, i.e. inflation adjusted value.

3) Since balance-sheet is a stock concept and income statement is a flow concept, therefore exposure exist on both the stock and flow items such as assets, liabilities and operating income.

4) The exposure exist on domestic as well as foreign assets because unanticipated change in exchange rate can affect the value of both the domestic and foreign assets and liabilities, and

5) The items on balance-sheet and income statement are exposed due to unanticipated change in exchange rate because anticipated changes are already incorporated in the prices of assets and liabilities.

Foreign Exchange Risk

Foreign exchange risk is the variability of domestic currency values of assets, liabilities or incomes due to unanticipated change in exchange rate. This is measured by the variance of the values, i.e., Var (V), where 'V' is the value of the assets or liability and Var = variance = (standard deviation)

Foreign exchange risk is the possibility of a gain or loss to a firm' that occurs due to unanticipated changes in exchange rate. For

example, if an Indian firm imports goods and pays in foreign currency (say dollars), its outflow is in dollars, thus it is exposed to foreign exchange risk. If the value of the foreign currency rises (i.e., the dollar appreciates,), the Indian firm has to pay more domestic currency to get the required amount of foreign currency.

Foreign exchange risks, therefore, posses one of the greatest challenges to a multinational company. These risks arise because multinational corporations operate in multiple currencies. In fact, many times firms who have a diversified portfolio find that the negative effect of exchange rate changes on one currency are offset by gains in others i.e. exchange risk diversifiable.

Types

There are mainly three types of Exposure :

1. **Transaction Exposure :** This exposure refers to the extent to which the future value of firm's domestic cash flow is affected by exchange rate fluctuations. It arises from the possibility of incurring foreign exchange gains or losses on transaction already entered into and denominated in a foreign currency.

   The degree of transaction exposure depends on the extent to which a firm's transactions are in foreign currency. For example, the transaction in exposure will be more if the firm has more transactions in foreign currency.

   Example :

   Suppose there is an Indian importer of a machine, who is to pay for imports after the receipt of the machine in India. This takes about thirty days to reach the Indian sea shore from the place of its export (place of origin of exports). In these thirty days, the exchange rate changes thereby hurting the interest of the importer.

   Suppose the machine is priced at $100,000 and if at the time of contract the exchange rate is $ 1 = Rs.35.00, the importer has to pay export Rs. 35.00 × 100,000 = Rs. 35,00,000. Now if in the next thirty days, after which the machine is to arrive and the payment is required to be made, the exchange rate moves to $1 = Rs.37.00, the importer will have to pay an extra amount of Rs. 2,00,000 (Rs.37.00 × 35.00) × 1,00,000 extra because the exchange rate has moved adversely from $1 = Rs.35.00 to $1 = Rs.37.00 With this change is exchange rate i.e., the change in the price of dollar, the importer has incurred a local of Rs. 2,00,000 although; the price of the machine in terms of dollars has remained the same i.e., $ 100,000.

2) **Translation Exposure:** Translation exposure, also known as Accounting exposure, arises because MNCs may wish to translate financial statements of foreign affiliates into their home currency in order to prepare consolidated financial statements or to compare financial results. As investors all over the world are interested in home currency values, the foreign currency balance sheet and income statement are restated in the parent country's reporting currency.

   For example, foreign affiliated of US companies must restate the franc, sterling or mark statements into US dollars so that the foreign values can be added to the parent US dollar denominated balance sheet and income statement. The accounting process is called 'translation'

   Translation exposure measures the effect of an exchange rate change on published financial statements of a firm. Assets and liabilities that are translated at the current exchange rate are considered to be exposed as the balance sheet will be affected by fluctuations in currency values over time; those translated at a historical exchange rate will be regarded as not exposed as they will not be affected by exchange rate fluctuation. So, the difference between exposed assets and exposed liabilities is called translation exposure.

   Translation exposure = Exposed Assets – Exposed Liabilities

   The key difference between transaction and translation exposure that the former has impact on cash flows while the latter has no direct effect on cash flows. (This is true only if there are no tax effects arising out of translation gains and losses.)

3) **Economic Exposure :** Economic exposure refers to the degree to which a firm's present value of future cash flows can be influence by exchange rates fluctuations. Economic exposure is a more managerial concept than an accounting concept. A company can have an economic an exposure to say Pound/ Rupee rates even if it does not have any transaction or translation exposure in the British currency. This situation would arise when the company's competitors are using British imports. If the Pound weakens, the company losses its competitiveness (or vice versa if the Pound becomes strong). Thus economic exposure to an exchange rate is the risk that a variation in the rate will affect the company's competitive position in the market and hence its profits.

Further, economic exposure affects the profitability of the company over a longer time span than transaction or translation exposure. Under the Indian exchange control, economic exposure cannot be hedged while both transaction and translation exposure can be hedged.

Q9. How to manage foreign exchange risks? Explain them with recent experiences in the market.

Ans : **(Dec.-19)**

Foreign exchange risk/exposure is categorized into three risks, they are transaction risk/ exposure, translation risk/exposure and operating risk/exposure. The techniques used to manage the three types of foreign exchange risk are as follows,

1. Managing Transaction Risk/Exposure

Transaction risk/exposure can be managed using hedging techniques and operating techniques.

(a) Operating Techniques: The operating techniques to manage transaction risk/ exposure are,

(i) Leads and Lags: Lead means advancing the timing of receipt or payment of foreign currency before it is due. Lag means postponing the timing of receipt or payment of foreign currency before its due date.

(ii) Exporter Netting: It involves creating exposures in normal course of business, which offset the existing exposure. The exposures may be so created in the same currency as the existing exposures or in any other currency but the effect should be such that any movement in exchange rates which results in a loss on the original exposure must result in a gain on the new exposure.

(iii) Currency of Invoicing: In exposure management, the pricing policy adopted is of two kinds, namely price variation and the currency of invoicing. In invoicing of transactions, exposure can be eliminated by invoicing all receivables and payables in the domestic currency. It acts as a hedging tool wherein all exports are invoiced in hard currency and imports are invoiced in weak currency. This strategy is referred to as "aggressive strategy".

(b) Hedging Techniques: The hedging techniques to manage transaction risk/ exposure are,

(i) Forwards Hedges: A firm covers itself against a transaction exposure by entering into a forward contact, a mechanism through which the exchange rate is fixed in advance for purchase or sale or foreign currency at a future date.

(ii) Futures Hedge: The second way to hedge transaction exposure is through futures. Futures are specialized contracts to buy or sell a standard quantity of a currency at a specified future date and at a fixed price.

(iii) Options: Options can prove to be a useful and flexible tool for hedging transaction exposure. An option is an agreement between two parties in which one grants to the other the right to buy (call option) or sell (put option) a currency at a given price during a specified period of time and assumes the obligation to sell or buy it.

(iv) Money Market Hedge: Money markets can also be used for hedging foreign currency receivables or payables. This hedge involves taking a money market position to cover a future payable or receivable position.

(v) Swaps: A swap is a contract or an agreement between two parties to exchange future cash flows. In swap, one party gives consent to exchange his set of agreed cash flows with the predetermined set of cash flows to the other party. The parties in a swaps contract that agree to exchange flows are termed as counter parties of the swaps.

Recent Experiences While Managing Foreign Exchange Risk in the Market

Many researches concluded that managing of risk will reduce company's foreign exchange exposure. There are several benefits available for multinatiqnal companies while managing foreign exchange risk.

1. Impact of exchange rate movements on profit margins is reduced.
2. Enhance the level of predicting future cash flows.
3. Facilitates in pricing products which are sold in export markets.

4.6.1 Transaction Exposure

Q10. What is Transaction Exposure? How to manage Transaction Exposure.

(OR)

Briefly explain about various techniques of handling Transaction Exposure.

(OR)

Discuss the methods of managing transaction exposure.

(OR)

Briefly explain the technique available to manage the transaction exposure to reduce foreign exchange risk.

Ans : **(Imp.)**

Meaning

The transaction exposure that is concerned with the impact of changes in exchange rate on present cash flows. Transaction exposure emerges mainly on account of export and import of commodities on open account, borrowing and lending in a foreign currency and intra- firm flows in an international company.

1. Forward Market Hedge

In a Forward Market Hedge, a company that is long in a foreign currency will sell the foreign currency forward, whereas a company that is short in a foreign currency will buy the currency forward. In this way, the company can fix the dollar value of future foreign currency cash flow.

If funds to fulfill the forward contract are available on hand or are due to be received by the business, the hedge is considered "covered," "perfect or "square" because no residual foreign exchange risk exists. Funds on hand or to be received are matched by funds to be paid.

In situations where funds to fulfill the contract are not available but have to be purchased in the spot market at some future date, such a hedge is considered to be "open" or "uncovered". It involves considerable risk as the hedger purchases foreign exchange at an uncertain future spot rate in order to fulfill the forward contract.

In a forward market hedge, a net liability (asset) position is covered by an asset (liability) in the forward market. To illustrate the mechanism of the forward market hedge, consider the case of an Indian firm which has a liability of $100,000 payable in 60 days to an American supplier on account of credit purchases.

The firm may employ the following steps to cover its liability position :

Step 1 : Enter into a forward contract to purchase $100,000 in 60 days from a foreign exchange, dealer. The 60-day forward contract rate is, say, Rs. 41.90 per dollar.

Step 2 : On the sixtieth day the dealer Rs. 4,190,000 ($100,000 x Rs. 41.90).

By using such a mechanism, the Indian firm can eliminate the exchange risk in dollars because of its assets position in the forward dollars. To cover a net asset position in the foreign currency a reverse process has to be followed. To illustrate this process, consider an Indian firm which is expecting a payment of $100,000 due in 60 days, on account of credit sale, from an American customer. The firm can take the following steps to cover its asset position :

Step 1 : Enter into a forward contract with a foreign exchange dealer to sell $100,000 in 60 days. The 60-day forward rate is, say. Rs. 41.85.

Step 2 : On the sixth collect $100,000 from the American customer, deliver the same to the dealer and collect Rs. 4,185,000.

The forward market hedge is a relatively simple and- convenient arrangement. It merely involves getting a forward quotation from a foreign exchange dealer and advising him to do the needful. Of course, the dealer will charge a commission for performing the transaction.

2. Money Market

A money market hedge involves simultaneous borrowing and lending activities in two different currencies to lock in the domestic currency value of a future foreign currency value of future foreign currency cash flow. By doing this, the firm knows its total cost in advance in the form of principal and interest it needs to repay in the domestic markets.

For example, a firm has a dollar payable after three months. It can borrow in the domestic currency now, convert it at the spot rate into dollars, invest these dollars in the money market and use the proceeds to pay the payable after three months.

Option market hedge in the circumstances, the firm is uncertain when hedge foreign currency cash flow or out flow will materialized. An options-market hedge involves the purchasing a call option or put option to cover exchange risk.

i) A call option allows MNCs to cover currency risks for accounts payables.

ii) A put option allows MNCs to cover currency risks for accounts receivable!

iii) An options market hedge protects MNCs from adverse exchange rate movements, but also allows MNCs to benefit from favorable exchange rate movements.

3. Options Market Hedge

In many circumstances, the firm is uncertain whether the hedged foreign currency cash inflow or outflow will materialise. Currency options obviate this problem.

There are two kinds of options.

A put option gives the buyer the right, but not the obligation, to sell a specified number of foreign currency units to the option seller at a fixed price up to the option's expiration date.

Alternatively, a call option is the right, but not the obligation, to buy a foreign currency at a specified price, upto the expiration date.

A call option is valuable, for example, when a firm has offered to buy a foreign asset, such as another firm, at a fixed foreign currency price but is uncertain whether its bid will be accepted.

The general rules to follow when choosing between currency options and forward contracts for hedging purposes are summarised as follows:

i. When the quantity of a foreign currency cash outflow is known, buy the currency forward, when the quantity is unknown, buy a call option on the currency.

ii. When the quantity of a foreign currency cash inflow is known, sell the currency forward, when the quantity is unknown, buy a put option on the currency.

iii. When the quantity of foreign currency cash flow is partially known and partially uncertain, use a forward contract to hedge the known portion and an option to hedge the maximum value of the uncertain remainder.

4. Exposure Netting

When a firm has a portfolio of currency positions, i.e., both receivables and payments in different currencies, it is unnecessary to hedge every position if the adverse effects of exchange rate movements in some cases are likely to be offset by the favourable movements in other cases.

Exposure netting involves offsetting exposures in one currency with exposures in the same or another currency, where exchange rates are expected to move in such a way that losses (gains) on the first exposed position should be offset by gains (losses) on the second currency exposure. This portfolio approach to hedging recognizes 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. The assumption underlying exposure netting is that the net gain or loss on the entire currency exposure portfolio is what matters, rather than the gain or loss on any individual monetary unit.

In practice, exposure netting involves one of three possibilities :

i) A firm can offset a long position in a currency with a short position in the same currency.

ii) If the exchange rate movements of two currencies are positively correlated (for example, the Swiss franc and Deutsche mark), then the firm can offset a long position in one currency with a short position in the other.

iii) If the currency movements are negatively correlated, then short (or long) positions can be used to offset each other.

Q11. Explain the accounting treatment of transaction exposure.

(OR)

Some of the foreign exchange transactions are treated at current rates while others at historical rates. Elaborate.

Ans :

1. Assets and liabilities are recorded at the rate on the date of purchase of the asset or incurred liability.

2. Items settled during the current accounting period are recorded at the rate which is prevailing on the date of settlement which results into the exchange gains/losses. The treatment for these gains/losses depends on the nature of the items i.e., whether it is a gain/loss.

   If it loss, it is shown in income immediately. If it is gain, it is shown in current and future income.

3. The items which are not settled during the accounting period are recorded at the historical rate or closing rate in the balance sheet.

4. The exchange loss arising out of providing depreciation on the adjusted purchased at home but financed out of foreign currency is adjusted to the cost of the asset and the assert is recorded at that adjusted value.

PROBLEMS

1. Akira Corporation, a US based company has transaction exposure on £ 1000000 payable to a British supplier in 60 days. The 60 day forward rate, the current spot rate, and details relevant to an option contract are given below. Advise the company on whether to let the transaction exposure go unhedged, and if not, which hedging device to choose.

Current spot rate = $ 1.7550/E

60 day forward rate = $ 1.7545/£

Strike price of call option = $ 1.7542/E

Call premium = $ 0.0001/E

Expected spot rate 60. days from now = $ 1.7544/E.

Sol :

Given that,

£ 10,00,000 payable to British supplier in 60 days.

60 days forward rate = $ 1.7545/£

Current spot rate = $ 1.7550/£

Strike price of call option = $ 1.7542/£

Call premium = $ 0.0001/£

Expected spot rate = $ 1.7544/£

$$\% \text{ Premium} = \frac{\text{Forward rate} - \text{Expected spot rate}}{\text{Spot rate}} \times \frac{12}{n} \times 100$$

$$= \frac{1.7545 - 1.7544}{1.7544} \times \frac{12}{2} \times 100$$

$$= 0.03419\% \text{ p.a}$$

Premium payable = Purchase cost x Current Spot rate x % Premium

= 10,00,000 × 1.7550 × 0.03419 = 60003.45

If spot rate for 60 days is $ 1.7544

In this case the exporter will not excuse his option.

Since, strike price is 1.7542 which is less than spot rate.

Net amount receivable = 10,00,000 x 1.7542 + 60003.45 = 1,814,203.45.

2. An Indian importer purchased a machine at 1 million dollar. The exchange rate at the time of contract is ` 45,000/$. The machine takes about 30 days to reach the Indian Seashore from the place of its export. In the next 30 days rupee is likely to depreciate to ` 46.50/$. Calculate the transactions exposure of the importer.

Sol :

Cost of machine = $ 10,00,000

Post-devaluation payment = 46,50,000 (10,00,000 × 46.50) Pre-devaluation payment

= 45,00,000 (10,00,000 × 45)

Potential loss = 15000

∴ The importer is facing a transaction exposure of Rs. 150,000.

3. A French firm has shipped goods to an US importer under a letter of credit arrangement which calls for payment at the end of 90 days the invoice is for $ 1,24,000. Presently the exchange rate is FFr 5.70/$ if the FFr were strengthened by 5% by the end of 90 days. What would be the transaction gain or loss in FFr, if it were to weaken by 5% what would happen?

Sol :

Value of goods shipped = $ 1,24,000 (account receivable) The exporter is the French company.

Situation 1

When FFr appreciates by 5%

The exchange rate after depreciation will be,

5.7 - 5% = 5.415

$5.7 \times \frac{5}{100} = 0.285$

5.7 – 0.285 = 5.425

Particulars	FFr (A/R)
Pre-appreciation rate	
[FFr 5.70 × 1,24,000]	7,06,800
Post appreciation rate	
[FFr 5.415 × $ 1,24,000]	6,71,460
Transaction loss	35,340

If strengthening of FFr is less than 5%, transaction loss will get minimized proportionately if strengthening of FFr is more than 5% transaction loss will get maximized proportionately.

Situation 2

When FFr appreciated by 5%

$$5.70 \times \frac{5}{100} = 0.285$$

In this case exchange rate will be 5.70 + 0.285 = 5.985.

Particulars	FFr (A/R)
Post depreciated rate	
[FFr 5.985 × $ 124000]	7,42,140
Pre-depreciated rate [FFr 5.70 × $ 124000]	7,06,800
Transaction gain	35,340

If depreciation of FFr is more than 5%, then exporting firm transaction gain will get maximized proportionately if depreciation of FFr is less than 5%, then exporting firm transaction gain will get minimized proportionately from its receivables.

If home currency appreciates there will be transaction loss to exporting country.

4. Find out the transaction gain or loss on the basis of the following data pertaining to India's foreign trade.

Particulars	US $ (in millions)	Japanese Yen (in millions)	British (In millions)
Imports	**1250**	**650**	**800**
Exports	**1100**	**625**	**850**
Pre-charge Exchange Rate	**Rs. 45/$**	**Re. 0.40/¥**	**Rs. 70/£**
Pre-charge Exchange Rate	**Rs. 47/$**	**Re. 0.41/¥**	**Rs. 68/£**

Sol :

Transaction Gain (or) Loss

With US $: Exports – Imports = 1100 – 1250 = 150 (A)

Pre exchange rate = 150 × 45 = 6750 $

Post exchange rate = 150 × 47 = 7050 $

Transaction loss = 300 $

In Japanese yen : The net gain/loss will be :

(650 – 625) = 25 → Net outflow

Pre exchange rate = 25 × 0.40 = 10

Post exchange rate = 25 × 0.41 = 10.25

Transaction loss = 0.25 £

British £

Net inflow = 850 – 800 = 50

Pre-exchange rate = 70 × 50 = 3500 £

Post exchange rate = 70 × 68 = 4760 £

Transaction gain = 1260 £

5. An Indian company has entered into a purchase contract for a Sugar Cane Crushing machine for US $ 10,00,000. The exchange rate at the time of contract was Rs. 70.000/$. The machine takes 30 days to reach India by sea. By the time it reaches the Indian Port, the exchange rate is likely to go up to Rs. 74.000/$. Calculate the transaction exposure of the Indian Company.

Sol :

Cost of sugarcane crushing machine = $ 10,00,000

Post-devaluation payment = ` 7,40,00,000 (10,00,000 × 74)

Pre-devaluation payment = ` 7,00,00,000 (10,00,000 × 70)

Potential loss = ` 40,00,000 *i.e.,* (7,40,00,000 – 7,00,00,000)

∴ The Indian company is facing a transaction exposure of ` 40,00,000.

6. Bright Research Institute of USA sold a super computer to the Shine Pharma in Germany on credit and invoiced €10 million payable in six months. Currently, the six-months forward exchange rate is $1.10/€ and the foreign exchange advisor for Bright Research predicts that the spot rate is likely to be $1.05/€ in six months.

(a) What is the expected gain/loss from the forward hedging?

(b) If you were the financial manager of Bright Research, would you recommend hedging this euro receivable? Why or why not?

(c) Suppose the foreign exchange advisor predicts that the future spot rate will be the same as the forward exchange rate quoted today. Would you recommend hedging in this case? Why or why not?

(d) If Bright Research sells forward €5 million at the given forward rate and the balance is sold at the expected spot rate of $1.05/€, what will be the total USD value of the receivable?

Sol :

Given, Invoice amount = €10 million

$\Rightarrow$ $10,000,000.

Present forward exchange rate = $ 1.10/ €

Spot rate = $ 1.05/ €

(a) Expected gain = $ 10,000,000 ($1.10 – $ 1.05)

= $ 10,000,000 ($0.05)

= $ 5,00,000

(b) Being a financial manager of Bright Research, I would recommend hedging because it can increase the expected dollar receipt by $5,00,000 and also eliminate the exchange risk.

(c) I would recommend hedging even if future spot rate is same as forward exchange rate because I eliminate risk without sacrificing dollar receipt.

(d) Forward € 5 million sold at forward rate i.e., $ 1.10/ €

Balance i.e., € 5 million sold at spot rate of $1.05/ €

Value of total USD of receivable = (5,00,000 × 1.10) + (5,00,000 x 1.05)

= $(5,50,000 + 5,25,000)

= $10,75,000.

4.6.2 Accounting Exposure / Translation Exposure

Q12. What is Accounting Exposure?

(OR)

Describe various accounting principles of Translation Exposure.

(OR)

Explain the various methods of Translation Exposure measure.

Ans : **(Imp.)**

Translation exposure, which is also known as accounting exposure, emerges on account of consolidation of financial statements of different units of a multinational firm. The parent company is normally interested in maximising its overall profitability and to make it possible to ascertain overall profitability, it consolidates the financial statements of its subsidiaries with its own. The other objective of consolidation of financial statements is to evaluate the comparative performance of different subsidiaries.

The objective of consolidation, it is done through translating the items of the financial statements of subsidiaries denominated in different currencies into the domestic currency of the parent company. When the currency of any of the host countries changes its value, its translated value in the domestic currency of the parent company changes as does the picture of the consolidated statement.

Accounting Treatment of Translation Exposure

There are two basic methods for translation of foreign subsidiary financial statements. They are,

1. Current rate method
2. Temporal method

1. Current Rate Method

In this method, current exchange rate is used to treat the items. The items are as follows,

a) Assets and Liabilities

Current exchange rates must be considered while recording assets and liabilities.

b) Income Statement Items

Costs and depreciation charged on tangible fixed assets should be translated using the exchange rate on the date of purchase of the asset.

c) Dividends

Dividends are translated by using the exchange rate prevailing at the time of payment.

d) Equity Items

Stocks are paid in capital accounts must be recorded at their historical rates while calculating net income (consolidated), adjusted gains/loss must be shown as a separate equity reserve account which is termed as "cumulative translation adjustment".

2. Temporal Method

Under this method, specific assets and liabilities are translated at the rate of exchange prevailing with the timing of the creation of the item. This method assumes that some of individual line item assets are restated/shown regularly to reflect market value. The category of line items includes,

a) Monetary Assets and Liabilities

Monetary items such as cash, accounts receivables, long-term receivables, monetary liabilities and long- term debt are translated at current exchange rate.

b) Non-monetary Items

Non-monetary items (i.e., non-monetary assets and liabilities) are translated at the exchange rate that was prevailing at the time of valuation in past (historical rates).

c) Income Statement Items

Income statement items are translated at the average exchange rate for the period. But exceptionally some items as depreciation and cost of goods sold are translated at their historical rate as they are directly associated with non-monetary assets or liabilities.

d) Distribution of Dividends

Dividends paid are translated at the exchange rate on the date of payment.

e) Equity Items

Common stock and paid in capital accounts are translated at historical rates. Whereas the earnings retained by the firm at the end of the year is actually the collection of retained earnings of beginning year plus or minus income or loss occurring for that year.

Retained earnings (X years) = Retained earnings of beginning period + Income (X years)

(or)

= Retained earnings beginning period - Loss (X years)

Under this method, gains/losses resulting from translation adjustments are carried directly to current consolidated income, not to equity reserves.

If the transaction was settled in the accounting period in which it has occurred, the exchange rate is shown as an income or expense in the parent firm's profit and loss account in the period during which it occurs.

Q13. What are the differences between Transaction Exposure and Translation Exposure?

(OR)

Compare and contrast Transaction Exposure and Translation Exposure.

(OR)

Distinguish between Transaction Exposure and Translation Exposure.

Ans : **(Imp.)**

Sl. No.	Transaction Exposure	Sl. No.	Translation Exposure
1.	The transaction exposure refers to the alterations which are being made in the existing cash flow of an organisation due to changes in the exchange rate.	1.	The translation exposure refers to the mismatch between the translated value of assets and liabilities that has taken place due to the changes in exchange rate.
2.	It usually takes place due to import and export of commodities on open account, lending and borrowing in foreign currency and flows of intrafirms in foreign firm.	2.	It usually takes place due to the consolidation of financial statements of various units of an MNC.
3.	If there is a commitment to pay foreign currency or possibility to receive foreign currency at a future date, then any movement in the exchange rate will effect the domestic value of the transaction.	3.	The extent to which financial statements are exposed to exchange rate fluctuation is known as translation exposure. But this exposure does not affect the profit and loss account, as it affects the balance sheets.
4.	Transaction exposures includes the fluctuations in the exchange rate on present cash flows.	4.	Translation exposure includes the consolidation of financial statement by the parent firm in order to assess the profitability and performance of the firms.
5.	It includes current cash flows	5.	It does not include any cash flow.
6.	The losses that occurs due to transaction exposure, helps in reducing the taxable income in the same year when it is obtained.	6.	The losses that takes place due to translation exposure are usually not the cash losses and hence they are not being deducted from the taxable income.
7.	Its main objective is to measure the alterations in the value of outstanding financial obligation that are incurred before the exchange rates changes.	7.	Its main objective is to prepare the consolidated statements which are of great use to the firm as well as to its management.
8.	Transaction risk exposure are related with the way the asset and liability value appears in the financial accounts.	8.	The translation risk and exposure is concerned with the assets and liabilities values at the time of its liquidation.

Q14. Discuss Accounting standards for translation exposure in India.

Ans :

The accounting standard 11 is applicable for translating the financial statements of foreign operations. The currency in which a firm presents its financial statements is not mentioned by this statement but usually the firm utilizes the currency of the country where it is being located. In case if a different currency is being used, the criteria for utilizing that currency is required by the statement and in case of any alterations in the reporting currency, its disclosure is needed.

The statement includes the use of the following terms along with their meanings,

1. **Closing Rate:** It is the exchange rate at the balance sheet date.
2. **Average Rate:** It refers to the mean of the exchange rates in force during a particular time period.
3. **Exchange Rate:** It is the ratio for the exchange of two currencies.
4. **Foreign Currency:** It refers to a currency except the reporting currency of a firm.
5. **Exchange Difference:** It is the variation (difference) that results out from reporting the similar number of units of foreign currency at various exchange rates in the reporting currency.
6. **Fair Value:** It refers to the amount for which an asset can be exchanged or a liability can be settled down between agreed parties in the arms length transaction.
7. **Foreign Exchange Contract:** It means an agreement which is used for exchanging various currencies at a forward rate.
8. **Foreign Operation:** It refers to a subsidiary, joint venture, associate or branch of the reporting firm whose activities are based in a country apart from the reporting country enterprise.
9. **Forward Rate:** The forward rate is the particular exchange rate for exchanging the two different currencies at a pre-determined future date.
10. **Monetary Items:** It refers to the money that is held and the assets and liabilities which are to be received or paid in fixed amount of money.
11. **Integral Foreign Operation:** It is a foreign operation. The activities of this foreign operation acts as an integral part of the reporting firm.
12. **Non-integral Foreign Operations:** The activities of this foreign operation is not an integral foreign operations.
13. **Net Investment:** It is referred to the share of reporting enterprise in a non-integral foreign operation.
14. **Reporting Currency:** It refers to the currency that is utilized in the presentation of financial statements.

4.6.3 Operating Exposure

Q15. Define Operating Exposure? What are the determinants of Operating Exposure.

(OR)

Explain the concept of operating exposure.

Ans :

Meaning

Real operating exposure arises when changes in exchange rate, together with rates of inflation, alter the amount and risk element of a company's future revenue and cost stream. The word, "real" denotes the concept of real exchange rate which means nominal exchange rate adjusted for inflation. The word, "operating" is used because we are concerned with the operating cash flow a change in which causes change in the value of the firm.

The measurement of real operating exposure is not very easy, in so far as the measurement of inflation rate differential in the years to come is not easy, especially when the countries are experiencing a highly volatile rate of inflation. However, if inflation rate differential is forecast correctly, real operating exposure can be estimated

Determinants

It is not possible to ascertain the operating exposure with the help of the accounting statements of the firm. There are two determinants through which operating exposure of the firm can be identified i.e.,

- The structure of the markets and
- The ability of firm to reduce the effect of exchange rate changes.

Usually, firm whose cost or price is sensitive to exchange rate changes involves greater degree of operating exposure. The firm does not have higher, operating exposure in case, if both cost and price are sensitive or insensitive to exchange rate changes. Along with market structure, the ability of firm to stabilize cash flows with respect to exchange rate changes also helps in determining the operating exposure.

In other words, flexibility of the firm with respect to production locations, sourcing and financial hedging strategy is an essential determinant of its operating exposure to exchange risk. The firms facing exchange rate changes may make use of any one of the following pricing strategies as follows,

- The cost shock is completely transferred to the selling prices.
- The cost shock is absorbed completely so that selling prices are not changed or remains the same.
- Combination of the above two strategies.

Q16. How to measure Economic exposure?

Ans :

Currency risk or uncertainty highlights the random changes that takes place in exchange rates but it is not the same as currency exposure which evaluates "what is at risk". In some situations, the firm does not face any exposure at all, even though exchange rates keep on changing randomly. When asset of the company is sensitive to the exchange rate changes then the company would be exposed to greater currency risk and if in case the asset is insensitive to the exchange rate changes then it implies that the company needs to hedge against the exchange risk.

Exposure to currency risk can be calculated accurately by the sensitivities of,

1. The expected home currency values of the firm's assets in future.
2. The operating cash flows of the firm to random changes in exchange rates.

For instance, let us take an example of asset exposure wherein dollar inflation is assumed to be non-random. From US's point of view firm which owns an asset in Britain, the exposure would be calculated by the coefficient (C) in regressing the dollar value (V) of the British asset on the dollar/pound exchange rate (E_x).

$$V = a + C \times E_x + e$$

Where,

a = Regression constant

e = Random error term with mean zero.

$$E(e) = 0,\ V = E_x\ P * d$$

Where,

P^1 = Local currency price of the asset.

From the above equation, it is clear that the regression coefficient (C) helps in calculating the sensitivity of the dollar value of the asset (V) to exchange rate (is). The dollar value of an asset is independent only when regression coefficient is zero i.e., C = 0 which results no exposure.

Depending on the above analysis, exposure can be referred as regression coefficient. The exposure coefficient (C) can be statistically represented as,

$$C = \frac{Cov(V,\ E_x)}{Var(E_x)}$$

Where,

Cov(V, E_x) = Covariance between dollar value of the asset and the exchange rate.

Var(E_x) = Variance of exchange rate

Depending on the regression equation, the variability of the dollar value of the asset Var(V) is divided into separate parts i.e., exchange rate- related and residual.

$$\boxed{Var(V) = C^2 Var(E_x) + Var(e)}$$

C^2 Var(E_x) represents the portion of the variability of the dollar value of the asset which is effected by random changes in the exchange rate. Whereas, Var(e) indicates the residual part of the dollar value variability which is not effected by the exchange rate changes. The uncertainty relating to future dollar value of the asset is associated with exchange rate uncertainty. The variability of the dollar value of the asset can be eliminated by hedging exchange exposure.

Q17. State the instruments for minimizing operating risk.

Ans :

The following are the instruments that could be used for managing operating risk,

1. Low Cost Production Sites

The low cost production site can be a major instrument for minimizing operating risk. At times when the home currency is expected to be strong the companies may plan to shift their production units to those foreign countries where the operating cost is low, so as to keep their production cost low. The companies select only those foreign countries which have undervalued currency or low cost factors of production.

2. Flexible Sourcing Policy

The firms can even use a flexible sourcing policy for minimizing the operating risk. With the help of such a flexible sourcing policy, the firm is able to continue the production in the home country itself by sourcing the factors of production from countries where the cost prices were found to be low.

3. Market Diversification

This is also one of the major instrument for minimizing the intensity of operating risk. Here, the firm can minimize the exchange rate risk of one country by diversifying its sales to another country. This enables the firm to stabilize its operating cash flow, since the exchange rates fluctuate on a regular basis. Example, Sony electronics are selling LCD TV's in Switzerland and United kingdom. The sales in Switzerland suffer a setback due to the appreciation of dollar against Swiss francs but increased sale sin UK as a result of depreciation of dollar against pond minimizes the operating risk.

4. Research and Development efforts and Product Differentiation

The continuous R & D efforts enable the firm to face tough competition and minimizes the operating risk. Continuous and successful R & D efforts leads to improved productivity or the introduction of a new and distinct product. Such products prove to be effective in facing the competition and keep the firms in the business.

5. Financial Hedging

This tools minimizes operating risk by stabilizing the cash flows of a firm. The financial hedging enables firms to lend or borrow foreign currencies for long period of time or the firms can be hedged against the operating risk by using the currency forward or options contract. The financial contracts prove to be very much helpful to the firms as the real changes in exchange rate directly affects the firm's position.

PROBLEMS

7. A US parent company has a single wholly owned subsidiary in France. It has monetary assets of 100 million FFr and monetary liability of 50 million FFr. The exchange rate declines from 4 FFr/$ to 5 FFr/$. Calculate net exposure and potential exchange loss.

Sol :

Calculation of Net Exposure

		FFr
	Monetary assets	100 million
(-)	Monetary liability	50 million
	Net exposure	50 million
	Pre devaluation value of 50 million worth assets [50 ÷ 4]	$ 12.5 million
(-)	Post devaluation value [50 ÷ 5]	$10 million
	Potential loss	$ 2.5 million

8. A French subsidiary of a US firm is expected to earn an operating profit of 35 million FFr after taxes and its depreciation change is estimated at 5 million FFr. The exchange rate is expected to decrease from 4 FFr/S at present to FFr 5/$. Calculate operating exposure and potential gain and loss.

Sol :

		FFr
	PAT (Profit after Tax)	35 million
	(+) depreciation	5 million
	Operating Exposure	40 million
	Pre-devaluation value = (40 ÷ 4)	$10.00
(-)	Post-devaluation value = (40 ÷ 5)	$ 8.00
	Potential loss	$ 2.00

9. A company expects cash flow from its new project to the extent of $ 5,000; $ 6,500 and $ 6,000 respectively during the first three years of its operation. However, due to changes in exchange rate/inflation rate, the cash flow is affected and it will change to $ 4,000, $ 5,800 and $ 5,200. Find the magnitude of the possible real operating exposure during the initial year of operation assuming a discount rate of 10 per cent.

Sol :

Original expectation of cash flow = $ 5,000/1.10 + 6,500/1.21 + 6,000/1.331 = $ 14,425.23 Cash flow expectation after inflation rate/exchange rate changes = 4,000/1.10 + 5,800/1.21 + 5,200/ 1.331 = $ 12,336.59

Size of real operating exposure = $ 14,425.23 – 12,336.59 = $ 2,088.64.

4.7 INTERNATIONAL ARBITRAGE

Q18. What do you mean by International Arbitrage ? Explain the different forms of International Arbitrage.

Ans : **(Imp.)**

Arbitrage is the act of simultaneously buying a currency in one market and selling it in another to make a profit by taking advantage of price or exchange rate differences in the markets. If the arbitrage operations are confined to two markets only, they will be known as "two-point" arbitrage. If they extend to three or more markets, they are known as "three-point" or "multi-point" arbitrage.

Forms of International Arbitrage

In others words, arbitrage refers to the purchase of a currency in that financial center where it is cheaper for immediate resale in another center where it is relatively expensive so as to make a profit out of this two-step deal.

(a) Locational Arbitrage

Commercial banks providing foreign exchange services will normally quote about the same rates on currencies, therefore shopping around for better quotes may not result in an advantage.

If demand and supply conditions for different banks for a particular currency differ, in that case the banks may quote different prices for the same currency and market forces will force realignment of the prices so that the price offered by banks for the currency become equal. Suppose the banks are offering the following price for $:

Bank ABC		Bank XYZ	
Bid	**Ask**	**Bid**	**Ask**
Rs. 35.60/$	Rs. 35.65/$	Rs. 35.67/$	Rs. 35.70/$

It is clear from the above quotes that one can buy$ from bank ABC and sell this to bank XYZ. Thus as a matter of rule: "if ask price of one quote is less than the bid price of another quote then the spatial arbitrage is possible".

Gains from Locational Arbitrage

Your gain from locational arbitrage is based on the amount of money that you use to capitalize on the exchange rate discrepancy, along with the size of the discrepancy.

Your gain may appear to be small relative to your investment of $10,000. However, consider that you did not have to tie up your funds. Your round-trip transaction could take place over a telecommunications network within a matter of seconds. Also, if you could use a larger sum of money for the transaction, your gains would be large. Finally, you could continue to repeat your round-trip transactions until North Bank's ask price is no longer less than South Bank's bid price.

This example is not intended to suggest that you can pay for your education through part-time locational arbitrage. As mention earlier, foreign exchange dealers compare quotes from banks on computer terminals, which immediately signal any opportunity to employ locational arbitrage.

Realignment due to Locational Arbitrage

Quoted prices will react to the locational arbitrage strategy used by you and other foreign exchange market participants.

The concept of locational arbitrage is relevant in that it explains why exchange rate quotations among banks at different locations normally will not differ by a significant amount. This applies not only to banks on the same street or within the same city but to all banks across the world.

Technology allows banks to be electronically connected to foreign exchange quotations at any time. Thus, banks can ensure that their quotes are in line with those of other banks. They can also immediately detect any discrepancies among quotations as soon as they occur, and capitalize on those discrepancies. Thus, technology enables more consistent prices among banks and reduces the likelihood of significant discrepancies in foreign exchange quotations.

(b) Triangular Arbitrage

Occasionally, prices of one currency can very from one market to another. A currency may be cheaper in New York than it is in London. If such a situation arises, it provides an opportunity for market participants to buy the currency in New York and sell it in London.

This activity is known as triangular arbitrage, or inter-market arbitrage. Whether such arbitrage is possible is indicated by comparing a currency's actual price in one market and its price in another market, using cross-rate quotations. There are several steps an arbitrageur must take to profit from such an opportunity.

For eg, assume that the following exchange rates are quoted in the inter-bank market :

New York : £/US$ = £ 1.8300

€/US$ = €1.2700

Paris : £/€ = £1.42

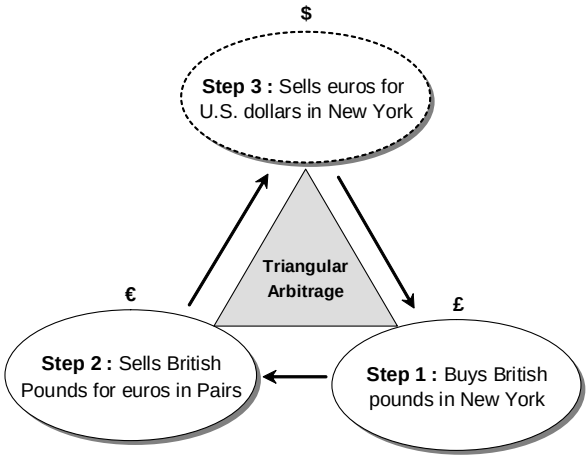


Fig. : Triangular Arbitrage

The euro and the pound sterling are quoted against the U.S. dollar in New York and against each other in Paris, but we can also compute the exchange rate of the euro against the pound in the New York market through the mechanism of cross rates :

$$\frac{£1.83}{1.27} = £1.44$$

It is evident that the two rates for pounds in terms of euros in New York and Paris are not the same. It would be profitable, therefore, to buy pounds in New York and sell them in Paris. Thus, a U.S. arbitrageur can get 185,000 in the New York market for US $ 100,000 and then sell these in Paris for 128,873. The euros can then are sold in the New York market and bring US$101,474.99. The arbitrageur can make a clean profit of US $1,474.99 without incurring any risk.

Realignment due to Triangular Arbitrage

The realignment that results from the triangular arbitrage activity is summarized in the second column of the Table below. The realignment will likely occur quickly to prevent continued benefits from triangular arbitrage. The discrepancies assumed here are unlikely

to occur within a single bank. More likely, triangular arbitrage would require three transactions at three separate banks.

Sl. No.	Activity	Impact
1.	Participants use dollars to purchase pounds	Bank increases its ask price of pounds with respect to the dollar.
2.	Participants use pounds to purchase Malaysian ringgit.	Bank reduces its bid price of the British pound with respect to the ringgit that is, it reduces the number of ringgit to be exchanged per pound received.
3.	Participants use Malaysian ringgit to purchase U.S. dollars.	Bank reduces its bid price of ringgit with respect to the dollar.

Table : Impact of Triangular Arbitrage

If any two of these three exchange rates are known, the exchange rate of the third pair can be determined. When the actual cross exchange rate differs from the appropriate cross exchange rate, the exchange rates of the currencies are not in equilibrium. Triangular arbitrage would force the exchange rates back into equilibrium.

Like locational arbitrage, triangular arbitrage is a strategy that few of us can ever take advantage of because the computer technology available to foreign exchange dealers can easily detect misalignments in cross exchange rates. The point of this discussion is that triangular arbitrage will ensure that cross exchange rates are usually aligned correctly. If cross exchange rates are not properly aligned, triangular arbitrage will take place until the rates are aligned correctly.

(c) Covered Interest Arbitrage

The forward rate of a currency for a specified future date is determined by the interaction of demand for the contract (forward purchases) versus the supply (forward sales). Forward rates are quoted for some widely traded currencies in the Wall Street Journal. Financial institutions that offer foreign exchange services set the forward rates, but these rates are driven by the market forces (demand and supply conditions). In some cases, the forward rate may be priced at a level that allows investors to engage in arbitrage. Their actions will affect the volume of orders for forward purchases or forward sales of a particular currency, which in turn will affect the equilibrium forward rate. Arbitrage will continue until the rate is aligned where it should be, and at that point arbitrage will no longer be feasible.

Covered interest arbitrage is the process of capitalizing on the interest rate differential between two countries while covering your exchange rate risk with a forward contract. The logic of the term covered interest arbitrage becomes clear when it is broken into two parts : "interest arbitrage" refers to the process of capitalizing on the difference between interest rates between two countries; "covered" refers to hedging your position against exchange rate risk.

Covered interest arbitrage is sometimes interpreted to mean that the funds to be invested are borrowed locally. In this case, the investors are not typing up any of their own funds. In another interpretation, however, the investors use their own funds. In this case, the term arbitrage is loosely defined since there is a positive dollar amount invested over a period of time.

Realignment due to Covered Interest Arbitrage

As with the other forms of arbitrage, market forces resulting from covered interest arbitrage will cause a market realignment. As many investors capitalize on covered interest arbitrage, there is

upward pressure on the spot rate and downward pressure on the 90-day forward rate. Once the forward rate has a discount from the spot rate that is about equal to the interest rate advantage, covered interest arbitrage will no longer be feasible. Since the interest rate advantage of the British interest rate over the U.S. interest rate is two percent, the arbitrage will no longer be feasible once the forward rate of the pound exhibits a discount of about two percent.

PROBLEM

10. Suppose that the current spot exchange rate is € 0.80/$ and the three months forward exchange rate is € 0.7813/$. The three-month interest rate is 5.6 percent per annum the United States and 5.40 percent per annum in France. Assume that you can both up to $ 1,000,000 or € 800,00.

(a) Show how to realize a certain profit via covered interest arbi-trage, assuming want to realize profit in terms of U.S. dollars. Also determine the size of your arbitrage profit.

(b) Assume that you want to realize profit in terms of euros. Show the covered arbitrage process and determine the arbitrage profit in euros.

Sol : **(May-19)**

Note:

There is print mistake in QP instead of € 800,000 it is wrongly printed as € 800,00.

Given market data is as follows,

S = €0.80/$ = $ 1.25/€

F = €0.7813/$ = $ 1.2799/€

$i_{\$} = 5.6/4 = 1.4\%$ $i_{€} = 5.4/4 = 1.35\%$

If IRP holds, then both the sides of following equation will be equal.

$$(1+i_{\$}) = (1+i_{€}) = (1 + i_{€})(F/S)$$

$$1 + 0.014 = (1+0.0135)\ (1.2799/1.25)$$

$$1.014 = (1.0135)\ (1.02392)$$

1.014 < 1.0377, it is clear that IRP does not hold, so there exists an arbitrage opportunity.

(a) Procedure

(i) Borrow $ 1,000,000 ; Repayment with interest at 1.4% will be $ 1,014,000.

(ii) Buy Euro 800,000 spot for $ 1,000,000

(iii) Invest in France, then maturity value will be;

800.000 × 1.35% = 10800 800,000 + 10800 = 810,800

Maturity value = Euro 810,800

(iv) Sell Euro 810,800 at forward rate i.e., e 0.7813/$

810,800 + 0.7813 = $ 1,037,757 Arbitrage profit will be $ 1,037,757 - $ 1,014,000

= $ 23,757

(b) Procedure

Follow same procedure as bit (a) only step (iv) is different i.e.,

Buy $ 1,014,000 at forward rate i.e., $ 1.2799/e

1.014.000 – 1.2799 = Euro 792,2496

Arbitrage profit will be euro 810,800 – Euro 792,249

= Euro 18,551

4.8 Relationship between Inflation, Interest Rates and Exchange Rates

Q19. Explain the relationship between inflation, interest rates, and exchange rates.

Ans : **(Dec.-19, Imp.)**

Interest and inflation are key to investing decisions, since they have a direct impact on the investment yield. When prices rise, the same unit of a currency is able to buy less. A sustained deterioration in the purchasing power of money is called inflation. Investors aim to preserve the value of their money by opting for investments that generate yields higher than the rate of inflation. In most developed economies, banks try to keep the interest rates on savings accounts equal to the inflation rate. However, when the inflation rate rises, companies or governments issuing debt instruments would need to lure investors with a higher interest rate.

Inflation is an autonomous occurrence that is impacted by money supply in an economy. Central governments use the interest rate to control money supply and, consequently, the inflation rate. When interest rates are high, it becomes more expensive to borrow money and savings become attractive. When interest rates are low, banks are able to lend more, resulting in an increased supply of money.

Alteration in the rate of interest can be used to control inflation by controlling the supply of money in the following ways :

- A high interest rate influences spending patterns and shifts consumers and businesses from borrowing to saving mode. This influences money supply.
- A rise in interest rates boosts the return on savings in building societies and banks. Low interest rates encourage investments in shares. Thus, the rate of interest can impact the holding of particular assets.
- A rise in the interest rate in a particular country fuels the inflow of funds. Investors with funds in other countries now see investment in this country as a more profitable option than before.

Inflation rates and interest rates can have a significant impact on exchange rates and therefore can influence the value of MNCs. Following are some of the theories which explain the relationship between inflation rates, interest rates and exchange rates :

1. Purchasing power parity
2. Interest Rate Parity
3. International Fisher Effect..

4.8.1 Purchasing Power Parity

Q20. Explain briefly about purchasing power parity (PPP).

(OR)

What is Purchasing Power Parity? How is inflation being measured by Purchasing Power Parity

Ans : **(May.-19, Imp.)**

The purchasing power parity (PPP) theory uses the long-term equilibrium exchange rate of two currencies to equalize their purchasing power. Developed by Gustav Cassel in 1920, it is based on the law of one price: the theory states that, in ideally efficient markets, identical goods should have only one price.

This purchasing power exchange rate equalizes the purchasing power of different currencies in their home countries for a given basket of goods. Using a PPP basis is arguably more useful when comparing differences in living standards on the whole between nations because PPP takes into account the relative cost of living and the inflation rates of different countries, rather than just a nominal gross domestic product (GDP) comparison. The best-known and most-used purchasing power parity exchange rate is the Geary-Khamis dollar (the "international dollar").

PPP exchange rates (the "real exchange rate") fluctuations are mostly due to market exchange rates movements. Aside from this volatility, consistent deviations of the market and PPP exchange rates are observed, for example (market exchange rate) prices of non-traded goods and services are usually lower where incomes are lower. (A U.S. dollar exchanged and spent in India will buy more haircuts than a dollar spent in the United States).

PPP takes into account this lower cost of living and adjusts for it as though all income was spent locally. In other words, PPP is the amount of a certain basket of basic goods which can be bought in the given country with the money it produces. There can be marked differences between PPP and market exchange rates.

Purchasing power parity theory was developed after the break down of the gold standard post World War I. The equilibrium rate of foreign exchange between two inconvertible currencies in determined by the ratio between their purchasing powers. Before the First World War, all the major countries of Europe were on the gold standard.

The rate of exchange used to be governed by gold points. But after the I World War, all the countries abandoned the gold standard and adopted inconvertible paper currency standards in its place. The rate of foreign exchange tends to be stabilized at a point at which there is equality between the respective purchasing powers of the 2 countries.

The change in the purchasing power of currency will be reflected in the exchange rate.

Equilibrium Exchange Rate (ER) = Er X Pd / Pf

Where;

ER = Equilibrium Exchange Rate

Er = Exchange Rate in the Reference period

Pd = Domestic Price Index

Pf = Foreign currencies price index.

The purchasing power parity (PPP) theory uses relative general price changes as a proxy for prices of internationally traded goods and applying the equation.

$$\text{Change in \$ price of £} = \frac{\text{Change in \$ price level}}{\text{Change in £ price level}}$$

Thus if inflation is 8% p.a in the USA and 12% p.a in the UK, than applying ppp theory we would expect the pound sterling to fall against the dollar by :

$$\frac{(0.08 - 0.12)}{1.12} = 3.6\% \text{ p.a}$$

Difference in Expected inflation

$$\frac{P\$ - P£}{1 + P£}$$

P% = US price level, P£ = UK price level.

PPP theory, itself an approximation since it uses the general price level as a proxy for the price level of internationally traded goods, suggesting that the charges in the spot rate of exchange may be estimated by reference to expected inflation differentials. When looking at Post Exchange rate movements, the hypothesis might be tested reference to actual price level changes.

$$\boxed{\text{Expected difference in inflation rates } \frac{P\$ - P£}{1 + P£}} = \boxed{\text{Expected change in spot rate } \frac{S_t - S_0}{S_0}}$$

S_t = Expected spot \$/£ Exchange rate at "t" times

S_0 = Spot rate \$/£ Exchange rate.

PROBLEMS

11. If the price of a basket of goods in France is FFr 30.00 and the same goods cost \$11.00 in U.S. then what should be the spot exchange rate for FFr/\$. = 2.3, then explain the function of arbitragers.

Sol :

Accounting to PPP theorem,

The spot exchange rate,

$$S_0(\text{FFr}/\$) = \frac{\text{Price of basket of goods in France}}{\text{Price of basket of goods in U.S.}}$$

$$\therefore \quad S_0(\text{FFr}/\$) = \frac{30.00}{11.00} = 2.73$$

If S_0(FFr/\$) = 2.30, then \$ is overvalued against FFr, Hence, arbitragers will buy in France and sell in U.S. which will came the price in France for \$ to go up and push down its price in U.S. until PPP equilibrium is attained.

12. The price of a basket of goods in media is Rs.100 and the spot exchange rate between Australian $ and Indian Rs. is 28. Calculate the cost of same basket of goods in Australia.

Sol :

According to PPP theorem,

S_0(Rs/Aus $)

$$= \frac{\text{Price of basket of goods in India}}{\text{Price of basket of goods in Australia}}$$

$$28 = \frac{100}{\text{Price of basket of goods in Australia}}$$

$\therefore$ Price of basket of goods in Australia.

$$= \frac{100}{28} = 3.57$$

i.e., Aus $ 3.57.

13. Assume over a period of two years, the U.S. price index moves from 110 to 125 and the Japanese price index moves from 105 to 110. The spot exchange rate is U.S. $1 = v112. What would be the spot exchange rate in 2 years ?

Sol :

Change in inflation rate in U.S. $= (1+r_v)^2$

$$(1+r_\$)^2 = \frac{125}{110}$$

Change in inflation rate in Japan $= (1+r_¥)^2$

$$(1+r_¥)^2 = \frac{110}{105}$$

Therefore, exchange rate in 2 years would be,

$$S_2 = (¥/\$) = S_0(¥/\$)\left[\frac{(1+r_¥)^2}{(1+r_\$)^2}\right]$$

$$= 112\left[\frac{110}{105}+\frac{125}{110}\right]$$

$$= 112\left[\frac{110}{105}+\frac{110}{125}\right]$$

$$= 112\ [0.9219]$$

$$= 103.25$$

$\therefore$ $\$_1$ = ¥103.25.

14. The current U.S. price level is 112 while the German price level is at 107, relative to base price levels of 100. If the initial value of DM was $0.48, find the current value of DM, if PP is to exist. Asia find the percentage change in DM.

Sol :

According to PPP,

$$S_0(\$/DM) = S_t(\$/DM)\left[\frac{\text{Price level in U.S.}}{\text{Price level in Germany}}\right]$$

$$= 0.48 \times \frac{112}{107} = 0.5024$$

$\therefore$ $DM_1 = 0.5024$

Percentage change in

$$DM = \frac{0.5024-0.48}{0.48}\times 100$$

$$= 4.67\%$$

$\therefore$ DM appreciated by 4.67% against $ during the period.

15. If the current spot rate is £1 = FRF 12.50, what is the expected spot rate in two years ? Given that the inflation rate in Britain is expected to the 4% per year and the inflation rate in France is expected to be 6% per year.

Sol :

According to PPP,

$$S_2(FFr/£) = S_0(FFr/£)\left[\frac{1+p_{FFr}}{1+1+p_£}\right]^2$$

$$= 12.5\left(\frac{1.06}{1.04}\right)^2$$

$$= 12.99$$

The expected spot rate in 2 years would be,

$£_1$ = FRF 12.99.

16. The U.S. and Germany are running annual inflation rates at 5% and 3% respectively. The initial exchange rate was DM1 = $0.75. Find the value of DM in 3 years, in PPP were to exist.

Sol :

According to PPP,

$$S_3(\$/DM) = 0.75\left(\frac{1.05}{1.03}\right)^3$$

$$S_3(\$/DM) = 0.75(1.0594) = 0.7946$$

$\therefore$ The exchange rate in 3 years would be DM1 = $0.7946.

17. In 1890, the inflation rate in Nether lands was 2.3% P.A. while that in Australia was 7.7%. During the year, the exchange rate fall from 1.70 guilders per Aus $ to 1.45 Did PPP hold good ?

Sol :

Given that,

For PPP to exist

Aus $1 = Fls 1.70

Example rate differential = Inflation rate differential

ERD = IRD

$$\therefore \quad IRD = \frac{PFLS - P\,AUS\,\$}{1 + P\,AUS\,\$}$$

$$= \frac{0.023 - 0.077}{1 + 0.077}$$

IRD = – 0.05

$$ERD = \frac{1.45 - 1.70}{1.70}$$

= – 0.15

As ERD $\neq$ IRD, So PPP does not hold good. when AUS$ was supposed to fall by 5% it actually felt by 15%.

4.8.2 The Interest Rate Parity

Q21. Explain the theory of interest rate parity.

Ans :

The PPP gives the equilibrium conditions in the commodity market. Its equivalent in the financial markets is a theory called the Interest Rate Parity (IRP) or the covered interest parity condition.

According to this theory the cost of money (i.e. the cost of borrowing money or the rate of return on financial investments) when adjusted for the cost of covering foreign exchange risk, is equal across different currencies.

This is so, because in the absence of any transaction costs, taxes and capital controls (i.e., restrictions on international investments and financing) investors and borrowers will tend to transact in those currencies which provide them the most attractive prices. Besides, the arbitrageurs will always be on the lookout for an opportunity to make riskless profits.

The results effects on the demand and supply would drive the value of currencies towards equalization. This is the value of currencies towards equalization. This process is explained in detail in the following sections.

Just like the price of commodities across different countries influence the buyer's and seller's decision as to where they should transact, the ruling interest rate on financial assets denominated in different currencies affect investor's and borrower's decision regarding the market they would like to transact in.

Investor's Decision

Any individual or corporate is unlikely to have fully matched income and expenditures in each and every period, while there are periods where the current expenditure is more than the current income giving rise to a requirement to borrow, there are also periods where the opposite holds true giving rise to a chance to invest.

These periods of surplus or shortfall may range from a few days to a few years. Suppose a corporate has surplus funds for a period of one year. It could either invest them in securities denominated in the domestic currency or in securities denominated in any other currency.

The returns it will earn if it invests in securities denominated in a foreign currency will depend on two factors - the interest rate on those securities and the change in the value of the relevant currency.

Suppose the currency in which the company's investments are denominated depreciates during the period of the investment. In that case, the gain by way of interest earned will stand eroded by the loss on conversion to the domestic currency. With the exchange rates being flexible, there is always the risk of exchange rates moving unfavorably.

Since an investment in securities denominated in the domestic currency does not face any exchange risk, the same risk will have to be removed from other investments as well, in order to make their returns comparable.

The investor can do this by entering into a forward contract for the relevant maturity.

By taking the forward rate into consideration, the investor will be able to know the total returns that can be earned on securities denominated in different currencies, which will enable him to invest where his returns are maximised.

Borrower's Decision

When the need to borrow money arises, the borrower has two options to borrow either in the domestic currency or in foreign currency. Again, his decision will be based on the cost of domestic currency borrowing as compared to the covered cost of foreign borrowing.

Q22. What are the limitations of covered interest arbitrage?

Ans :

In some instances covered interest arbitrage holds goods relatively to IRP. But covered interest arbitrage is also not appropriate as it has certain limitations regarding the characteristics of foreign investment such as,

i) Transaction costs

ii) Political risk

iii) Differential tax laws.

i) Transaction Costs

Transaction costs are also accounted while determining the potential of IRP and covered interest arbitrage. In order to consider CIA and to determine the impact of transaction costs, investors need to maintain the forward rate premium and interest rates far away from the interest rate parity line (IRP line). After considering the transaction costs incurred the area below the IRP line in figure below represents the potential of CIA through which investors can gain profits by investing in home country. If the points lie above the IRP line it represents the potential of CIA which benefits the foreign investors in home country. However, the points on the IRP line represents the rate at which CIA (does not hold good) is not appropriate.

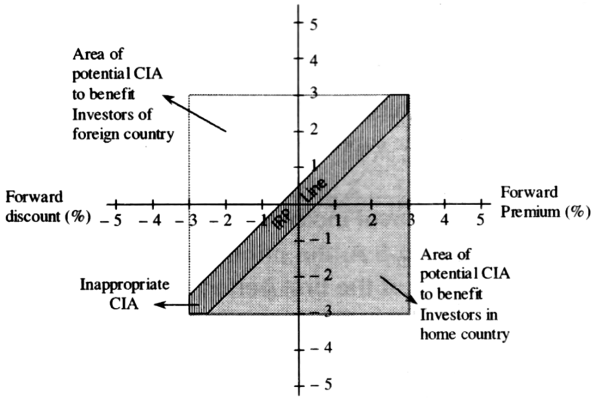


Fig. : Potential for CIA After Considering Transaction Costs

ii) Political Risk

Foreign investment still involve in political risk even though covered interest arbitrage attained after accounting the transaction costs is potential for generating profits to investors. The investors in foreign countries will not assure the reconversion of funds even there is a chance for investors to reconvert their funds. The reasons for the restriction are,

i) Crisis in foreign countries

ii) Government regulation in currency exchange

iii) Risk in foreign investment.

The investors are willing to accept the low interest rate from the investment in home country instead of going for CIA where it yields slightly high profits compared to 1RR.

iii) Differential Tax Laws

It is necessary for investors to consider the tax laws of the country in which they are going to invest, as the tax laws differ from one country to other. It is profitable for investors to consider the before tax returns in covered interest arbitrage.

PROBLEMS

18. Some prices in international money market are as follows,

Sport rate : $ 0.60 = DM 1

1 - year forward : $ 0.63 = DM 1

Annual interest rate on 1-year DM = 6.5 percent

Annual interest rate on 1-year $ = 8.5 percent

Find out if there exists a possibility of arbitrage gain.

Sol :

Exchange rate differential $\frac{S_1 - S_0}{S_0} \times \frac{12}{n} \times 100$

Given,

1 - year forward = $ 0.63

$\Rightarrow \quad \frac{0.63 - 0.60}{0.60} \times 1 \times 100$

$\Rightarrow \quad \frac{0.03}{0.60} \times 1 \times 100$

$\Rightarrow$ 0.05 × 1 × 100 $\Rightarrow$ 5%

Interest rate differential = 8.5 – 6.5 = 2%

Since ERD > IRD there is scope for arbitrage.

Since, the interest rate differentials are smaller than the forward premium, it will be profitable for an investor if he invests in Deutchmarks whose annualized interest rate is lower than Canadian Dollar (Can $).

19. Given the following data :

Spot rate : ` 35.0020 = $1

6-month forward rate : ` 35.9010 = $1

Annualized interest rate on 6-months rupee : 12 percent

Annualized interest rate on 6-month dollar : 7 percent

Work out the arbitrage possibilities.

Sol :

Exchange rate differential = $\frac{S_1 - S_0}{S_0} \times \frac{12}{n} \times 100$

Given that,

6-month forward = ` 35.9010

$$= \frac{35.9010 - 35.0020}{35.0020} \times \frac{12}{6} \times 100$$

$$= \frac{0.899}{35.0020} \times 2 \times 100$$

$$= 5.1368$$

Interest rate differential = 7 – 12 = – 5%

Since, ERO > IRD, there is scope for arbitrage.

Since, the interest rate differential are smaller than forward premium, it will be profitable for an investor if he invests in rupees whose annualized interest rate is lower than dollars.

20. Exchange rates, Can $0,665 per DM (spot)

Can $0,670 per DM (3-months)

Interest rates, DM 7% P.A Can $9% P.A

Calculate the arbitrage gain possible from the above data.

Sol :

i) In this case, DM is at a premium against Can $

Exchange rate differential,

$$= \frac{S_1 - S_0}{S_0} \times \frac{12}{n} \times 100$$

$$= \frac{0.670 - 0.665}{0.665} \times \frac{12}{3} \times 100 = 3.01\%$$

Interest rate differential,

$$= 9 - 7 = 2\%$$

ii) ERD' IRD, So scope for arbitrage

Since the interest rate differentials smaller than the premium, it will be profitable to place money in Deutchmarks the currency whose 3-months interest is lower.

4.8.3 International Fisher Effect (IFE)

Q23. Explain briefly about International fisher effect.

Ans : **(Imp.)**

The International Fisher Effect is the international counterpart of the Fisher Effect. It can be seen as a combination of the generalized version of the Fisher Effect and the relative version of the Purchasing Power Parity.

The generalized version of the Fisher Effect states that the real interest rates across countries will be equal due to the possibility of arbitrage. If the real rate is equal between different countries, it follows that the differences in their observed nominal rates must arise from differences in expected inflation. The relative version of the Purchasing Power Parity implies that inflation differential will be offset by exchange rate changes.

Recall previous equations we get :

$$\frac{(S_{t+1} - S_t)}{S_t} = \frac{(i_{h,t} - i_{f,t})}{(1 + i_{f,t})} \quad \text{and}$$

$$\frac{(1 + r_{h,t})}{(1 + r_{f,t})} = \frac{(1 + E(i_{h,t}))}{(1 + E(i_{f,t}))}$$

By combining these two equations we get the International fisher relation :

$$\frac{(S_{t+1} - S_t)}{S_t} = \frac{(r_{h,t} - r_{f,t})}{(1 + r_{f,t})}$$

The International Fisher Effect proposes that the changes in the spot rate of exchange between two currencies will be equal to the differences in their nominal interest rates. For example, a rise in the Swedish inflation rate relatively to the US will cause a depreciation of the Swedish krona relative to the US dollar (i.e. PPP). The nominal interest rate in Sweden will also rise relative to the US nominal interest rate (i.e. Fisher Effect).

The adjustment of exchange rate to nominal inter est differentials between countries can come about either directly through flow of capital across international money markets, or through some sort of activity between the goods and money markets, some real cross-border investment activity or change in trade patterns in the goods market, that all in all still indirectly ensure nominal interest differentials are still, on average, offset by exchange rate changes.

Investors speculating on the future spot rate interested in making a profit would move capital from countries with low interest rates to countries with high interest rates. This movement of capital would ultimately cause a movement in the exchange rate, eliminating all profit opportunities. The movement in the exchange rate should on average offset the nominal interest differential.

From this follows that the nominal interest rate differential is an unbiased predictor of future changes in the spot exchange rate. However, nominal interest differentials should not be seen as a particularly accurate predictor of future changes in spot rate of exchange, it just means that prediction errors tend to cancel out over time.

The purchase of a foreign asset is not just an investment in a security that pays a given rate of interest; it is also an investment in a foreign currency, where the return depends on the appreciation or depreciation of the exchange rate.

The International Fisher Effect says that the return on a foreign investment will be offset by an exchange rate change. Consequently, an investor that consistently purchases foreign assets will on average earn a similar return as if investing in purely domestic assets.

If the foreign nominal interest rate, r_f is relatively small can equation (4) be approximated by following equation

$$r_h - r_f = \frac{(S_{t+1} - S_t)}{S_t} \quad \text{... ...(5)}$$

We get this approximation of the International Fisher Effect by subtracting 1 from both sides of equation(4). Equation (5) is sometimes called uncovered interest parity. "Uncovered" refers to the fact that the future spot rate, S_{t+1} is not known with certainty at time t. Equation (5) is shown graphically in figure below.

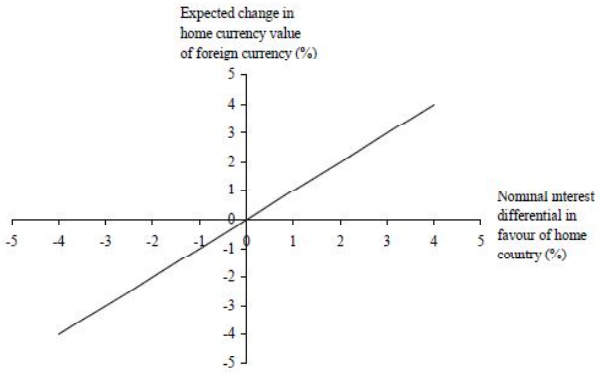


Fig. : The International Fisher Effect

The vertical axis in figure above shows the expected change in home currency value of the foreign currency and the horizontal axis shows the nominal interest rate differential between the same two currencies for the same time period. If $r_h > r_f$ we can expect an appreciation of the foreign currency and if $r_h < r_f$ we can expect a deprecation of the foreign currency.

The parity line shows all points for which $r_h - r_f = \frac{(S_{t+1} - S_t)}{S_t}$ and consequently shows all equilibrium points.

Q24. What is the rationale for the existence of the international fisher effect?

Ans : **(Sep.-20)**

International Fisher effect is one of the major theories in international finance. In order to explain exchange rate fluctuations, interest rate is useful according to this theory. It also explains that real-rate of return and inflation are parts of nominal risk-free interest rate. If international investors require same return, in such situation differences in interest rates result in differences in inflation.

This theory does not believe in the matter that higher interest rates, attract investments, which will result in pressure on currencies.

Rationale

The rationale for existence of international fisher effect can be understood from following points:

1. A country with higher interest rate will have higher inflation rate which depreciate the value of currency in country with higher interest rate.
2. It is also useful to estimate spot and future currency movements depending on current and future nominal interest rates.
3. It proposes that value of a currency will get adjusted with respect to differences in interest rates between two countries.

Q25. Distinguish between IRP, PPE and IFE.

Ans :

The following table compares three related theories of international finance namely,

i) Interest Rate Parity (IRP)

ii) Purchasing Power Parity (PPP) and

iii) International Fisher Effect (IFE).

All the three theories are related to the determination of exchange rates. Yet, they differ in their implications.

The theory of IRP implies for causes on why the forward rate differs from spot rate on the degree of difference that should exist.

This relates to a specific point in time conversely PPP theory and IFE theory focus on how a spot rate will change over time.

While PPP theory suggests that the spot rate will change in accordance with inflation differentials, IFE theory suggests that it will change in accordance with interest rate differential.

Comparison of IRP, IPP and IFE Theory

Theory	Key Variables	Theory	Summary of Theory
Interest Rate Parity (IRP)	Forward rate premium (or discount)	Interest differential	The forward rate of one currency with respect to another will contain a premium (or discount) that is determined by the differential in interest rates between the two countries. As a result, covered interest arbitrage will provide a return that is no higher than a domestic return.
Purchasing Power Parity (PPP)	Percentage change in spot exchange rate.	Interest rate differential	The spot rate of one currency with respect to another will change in reaction to the differential in inflation rates between the two countries consequently, the purchasing power for consumers when purchasing goods in their own country will be similar to their purchasing power when importing goods from the foreign country.
International Fisher effect (IFE)	Percentage change in exchange rate	Interest rate differential	The spot rate of one currency with respect to another with the differential in interest rates between the two countries. Consequently, the return on unconcerned foreign money market securities will have an average he no higher that the return of domestic money market securities from the perspective of investors in the home country.

PROBLEMS

21. In July, the one year interest rate is 4% on Swiss France and 13% on U.S. dollar.

a) If the current exchange rate is SFr1 = $0.83, what is the expectual future exchange rate in one year ?

b) If a change in expectations regarding future U.S. inflation causes the expectual future spot rate to rise to $0.70. What should happen to U.S. interest ratio ?

Sol :

a) According to the international Fisher effect, the spot exchange rate expected in one year equals to,

$$S_1(\$/SFr) = S_0(\$/SFr)\left[\frac{1+F\$}{1+FSFr}\right] = 0.63 \times \left[\frac{1+0.13}{1+0.04}\right]$$

$$SFT = 0.63(1.0865) = \$0.6845$$

b) According to International Fisher effect, U.S. interest rate would be;

$$\frac{S_1(\$/SFr)}{S_0(\$/SFr)} = \frac{1+i_\$}{1+i_{SFr}}$$

$$\frac{0.70}{0.63} = \frac{1+i_\$}{1+0.04}$$

$$0.63(1+i_\$) = 0.70(1.04)$$

$$1 + i_\$ = \frac{0.728}{0.63}$$

$$i_\$ = 1.16 - 1 = 0.16$$

Therefore, interest rates in U.S. would change to 16%.

22. In July, the one year interest rate is 12%, on British pounds and 9% on U.S. dollars,

a) If the current exchange rate is $1.83 = £1, what is the expected future exchange rate in one year ?

b) Suppose a change in expectations regarding future U.S. inflation causes the expected future spot rate to declare to $1.52 = £1. What should happen to the U.S. interest rate ?

Sol :

a) According to the international fisher effect, the spot exchange rate expected in one year equals to,

$$S_1(\$/£_1) = S_0(\$/£)\left[\frac{1+i_\$}{1+i_£}\right]$$

$$= 1.63 \times \left[\frac{1+0.09}{1+0.12}\right]$$

$$= 1.63 = 0.9732$$

$$£ = \$\ 1.586.3$$

b) According to international Fisher effect U.S. interest rate could be,

$$\frac{S_1(£/\$)}{S_0(\$/£)} = \frac{1+i_\$}{1+i_£}$$

$$\frac{1.52}{1.63} = \frac{1+i_\$}{1+0.12}$$

$$\Rightarrow \quad 1.52(1.12) = 1.63(1+i_\$)$$

$$\Rightarrow \quad 1.7024 = 1.63(1+i_\$)$$

$$\Rightarrow \quad 1+i_\$ = \frac{1.7024}{1.63} = 1.04$$

$$\Rightarrow \quad i_\$ = 1.04 - 1$$

$$i_\$ = 0.04 = 4\%.$$

23. a) Calculate Rs./lira rate at the end of the year.

b) Assuming Fisher's equation holds good and that the Indian Italian financial markets are perfectly interpreted, if the real interest in Italy is 5% P.A. and the Italian rates are as above. Calculate normal interest rate in India and Italy.

Sol :

a) Rs./Lira

$$\frac{FR - SR}{SR} = \frac{P_{RS} - P_{lit}}{1+P_{lit}}$$

$$\frac{FR-10}{10} = \frac{0.10-0.01}{1+0.01}$$

$$FR = 10.891$$

b) According the IFE,

$$\frac{P_{RS} - P_{lit}}{1+P_{lit}} = \frac{i_{RS} - i_{lit}}{1+i_{lit}}$$

$$\frac{0.10-0.01}{1.01} = \frac{i_{Rs} - 0.05}{1+0.05}$$

$$\frac{0.10-0.01}{1.01} = \frac{i_{Rs} - 0.05}{1+0.05}$$

$$i_{RS} = 14.36\%$$

Calculation of normal interest rates in India

$$r_{RS} = [(1 + P_{RS})(1+i_{RS})] - 1$$

$$= [(1 + 0.10)(1+0.1436)] - 1$$

$= [(1.10)\ (1.1436)] - 1$

$= 1.2580 - 1$

$= 0.2580$ or 25.8%

In Italy,

$r_{lit} = [(1+0.01)(1+0.05)] - 1$

$= [(1.01)(1.05)] - 1$

$= 1.0605 - 1$

$r_{lit} = 0.0605$ or 6.05%.

24. Find the exchange rates after one year using the following data.

Spot rate 1£ = Rs. 72.3456

Interest rates in U.K. and India during a year are expected to be 2.75% and 5% respectively.

Sol :

According to the International fisher's effect, the spot exchange rate after one year equals to,

$$S_1(Re/£) = S_0(Re/£)\left[\frac{1+i_{Rs}}{1+i_{£}}\right]$$

$$= 72.3456 \times \left[\frac{1+0.05}{1+0.0275}\right]$$

$= 72.3456 \times 1.021898$

= Rs. 73.9298.

4.9 EXPECTATION THEORY

Q26. Explain briefly about Expectation Theory.

(OR)

What do you understand by Expectation theory.

Ans : **(Imp.)**

In expectation theory, the long term rates should be an average of present short term rates and also be an average of future short term rates.

This theory specifies that there exists evenly balanced amount between long term rate of interest and an average returns of short-term rates.

This expectation theory states that, today's rates and future expected rates have a connection and after ascertaining under the hypothesis, this theory concludes that "investors may anticipate identical return by not considering the option of investment". The yield curve for expectation hypothesis will be flat.

${}_tR_n \rightarrow$ Securities current known yield at time 7' with 'n' periods to maturity

${}_{t+1}r_n \rightarrow$ The yield that is likely to prevail an year from today at time 7+1' for 'w' periods (i.e., the forward rates).

The 3 years bond rate should be a geometric average of the current 1 year rate (i.e., and the expected forward rates for subsequent 2 years.

Equation

${}_tR_3 \rightarrow [(1+ {}_tR_1)\ (1 + {}_{r+1}1_r)]^{1/3} - 1.0$

${}_tR_3 \rightarrow$ Rate on 3 year bond

$(1+{}_tR_1) \rightarrow$ Known rate on a current 1 year bond

$(1+{}_{r+1}r_1) \rightarrow$ Expected rate on a bond with 1 year to maturity beginning 1 year from the current year.

$(1+{}_{r+2}r_2) \rightarrow$ Expected rate on a bond with 1 year to maturity beginning 2 years from the current year.

Short Question and Answers

1. Define exchange rate.

Ans :

Meaning

The exchange rates also known as the foreign-exchange rate, forex rate or FX rate) between two currencies specify how much one currency is worth in terms of the other. It is the value of a foreign nation's currency in terms of the home nation's currency. The spot exchange rate refers to the current exchange rate. The forward exchange rate refers to an exchange rate that is quoted and traded today but for delivery and payment on a specific future date.

Example

An exchange rate of 91 Japanese yen (JPY, ¥) to the United States dollar (USD, $) means that JPY 91 is worth the same as USD 1. The foreign exchange market is one of the largest markets in the world. By some estimates, about 3.2 trillion USD worth of currency changes hands every day.

Fluctuations in Exchange Rates

A market based exchange rate will change whenever the values of either of the two component currencies change. A currency will tend to become more valuable whenever demand for it is greater than the available supply. It will become less valuable whenever demand is less than available supply (this does not mean people no longer want money, it just means they prefer holding their wealth in some other form, possibly another currency).

Increased demand for a currency is due to either an increased transaction demand for money or an increased speculative demand for money. The transaction demand for money is highly correlated to the country's level of business activity, gross domestic product (GDP), and employment levels. The more people there are unemployed, the less the public as a whole will spend on goods and services. Central banks typically have little difficulty adjusting the available money supply to accommodate changes in the demand for money due to business transactions.

2. Fixed Exchange Rate System

Ans :

Different kinds of exchange rate systems have been tried by different countries in the world. Of them, the two extreme types are the fixed and flexible rate systems. In between, there have been the systems of "crawling peg", "mixed flexible and fixed rates", "target zone", "managed or pegged or dirty float" and "free or clean float".

Under the fixed exchange rate system of the gold standard or gold-exchange standard or dollar exchange standard or IMF (Bretton Woods) standard, the governments are committed to maintain the stated or official par values of their currencies, allowing the deviation of currency value from the par value only within a fixed or an agreed upon percentage, say, one percent on either side of the par value.

The CB intervenes in the FEM to maintain the par value and if it could not be maintained, the exchange rate is officially devalued or revalued. The ER is not used as a tool for correcting imbalances in the BOP.

Advantages

Fixed exchange rate system had the following merits or advantages :

i) **Stability**: It ensures stability, in the international money market/exchange market. Day-to-day fluctuations are avoided. It helps formulation of long-term economic policies, particularly relating to exports and imports.

ii) **Encourages International Trade** : Fixed exchange rate system implies low risk and low uncertainty of future payments. It encourages international trade.

iii) **Co-ordination of Macroeconomic Policies** : Fixed exchange rate helps co-ordination of macroeconomic policies across different countries of the world. Long-term economic polities can be drawn in the area of international trade and bilateral trade agreements.

iv) **Reduction of Incentives** : The uncertainty of exchange rate fluctuations can therefore reduce the incentive for firms to invest in export capacity. Some Japanese firms have said that" the UK's reluctance to join the Euro and provide a stable exchange rates maker the UK a less desirable place to invest. Governments who allow their exchange rate to devalue may cause inflationary pressures to occur. This is because AD increases, import prices increase and firms have less incentive to cut costs.

3. Flexible Exchange Rate System

Ans :

Flexible rate of exchange is that rate which is determined by the demand for and supply of different currencies in the foreign exchange market. In other words, it is determined by the market forces, like the price of any other commodity. The market where foreign currencies are demanded and supplied is called foreign exchange market. It can therefore express as,

R = f(D, S)

Here,

R = Exchange rate,

D = Demand for different currencies in the international market,

S = Supply of different currencies in the international market.

The exchange rate at which demand for foreign currency is equal to its supply is called Par Rate of Exchange and it constitutes the Normal Rate or Equilibrium Rate. It is flexible rate because it tends to change in accordance with changes in the supply and demand for different currencies in the foreign exchange market.

Advantages

Following are the principal merits or advantages of flexible exchange rate system :

i) **No Need for International Reserves** : Flexible exchange rate system is not to be supported with international reserves. Because member countries (in the flexible exchange rate system) are no longer floating 'convertible' currencies.

ii) **Optimum Resource Allocation** : Flexible exchange rate system enhances efficiency in resource allocation. Accordingly, allocation of resources in the area of international trade, tends to become optimum.

iii) **International Capital Movement** : Flexible exchange rate system enhances movement of capital across different countries of the world. This is due to the fact that member countries are no longer required to keep huge international reserves.

4. Crawling Peg Exchange Rate System

Ans :

The proposal that official intervention in foreign exchange markets should take the form of limiting the rate of change of exchange rates, as opposed to setting any particular level. A 'crawling peg' could take several forms, among them the following. The authorities could pre- announce a trend rate of movement in par exchange rates by small regular changes in the same direction.

For example $\frac{1}{2}$ percent a month. They could retain discretion to change par rates in either, direction by up to a low limit, for example 1 pep cent a month. Alternatively, they could announce that the par rate would be continually adjusted to be equal to the average of market rates over some period of past.

Example : Period as a year.

In all the cases it is assumed that market rate would be held within fixed limits around the par rates by intervention in the market.

Advantages

1) The system potentially avoids the economic instability associated with the infrequent but discrete adjustment which characterize the fixed exchange rate.

2) They reduce uncertainty due to volatility characterizing floating exchange rate.

Limitations

Sometimes it is difficult to realize in practice the above advantages if crawling pegged exchange rate system generating substantial currency flows in

anticipation of exchange rate realignment. There flows might prompt monetary authorities to accelerate their currency realignments, therefore creating an erratic .adjustment process and exposing market operators to unsystematic economic costs.

5. Define Foreign Exchange Risk.

Ans :

Usually foreign exchange risk and exposure are used interchangeably. In fact, these two terms are different. The foreign exchange risk relates to the variability of domestic currency value of foreign currency denominated assets and liabilities and foreign exchange exposure relates the sensitivity of foreign currency denominated assets and liabilities to the unanticipated movements in exchange rate.

According to Michael Adler and **Bernard Dumas exposure** is defined as "the sensitivity of changes in the real domestic currency value of assets, liabilities or operating income due to unanticipated change in exchange rates" Thus as per the definition :

i) Exposure is a measure of the sensitivity of domestic currency values of foreign currency denominated assets or liabilities, i.e. it measures the extent to which the value of something in terms of domestic currency is changed due to the unanticipated change in exchange rate.

ii) Exposure concerns the real change in the value of assets, liabilities or operating income, i.e. inflation adjusted value.

iii) Since balance-sheet is a stock concept and income statement is a flow concept, therefore exposure exist on both the stock and flow items such as assets, liabilities and operating income.

6. Transaction Exposure

Ans :

This exposure refers to the extent to which the future value of firm's domestic cash flow is affected by exchange rate fluctuations. It arises from the possibility of incurring foreign exchange gains or losses on transaction already entered into and denominated in a foreign currency.

The degree of transaction exposure depends on the extent to which a firm's transactions are in foreign currency. For example, the transaction in exposure will be more if the firm has more transactions in foreign currency.

Example

Suppose there is an Indian importer of a machine, who is to pay for imports after the receipt of the machine in India. This takes about thirty days to reach the Indian sea shore from the place of its export (place of origin of exports). In these thirty days, the exchange rate changes thereby hurting the interest of the importer.

Suppose the machine is priced at $100,000 and if at the time of contract the exchange rate is $ 1 = Rs.35.00, the importer has to pay exporte Rs. 35.00 × 100,000 = Rs. 35,00,000. Now if in the next thirty days, after which the machine is to arrive and the payment is required to be made, the exchange rate moves to $1 = Rs.37.00, the importer will have to pay an extra amount of Rs. 2,00,000 (Rs.37.00 × 35.00) × 1,00,000 extra because the exchange rate has moved adversely from $1 = Rs.35.00 to $1 = Rs.37.00 With this change is exchange rate i.e., the change in the price of dollar, the importer has incurred a local of Rs. 2,00,000 although; the price of the machine in terms of dollars has remained the same i.e., $ 100,000.

7. Translation Exposure

Ans :

Translation expos-ure, also known as Accounting exposure, arises because MNCs may wish to translate financial statements of foreign affiliates into their home currency in order to prepare consolidated financial statements or to compare financial results. As investors all over the world are interested in home currency values, the foreign currency balance sheet and income statement are restated in the parent country's reporting currency.

For example, foreign affiliated of US companies must restate the franc, sterling or mark statements into US dollars so that the foreign values can be added to the parent US dollar denominated balance sheet and income statement. The accounting process is called 'translation'

Translation exposure measures the effect of an exchange rate change on published financial statements of a firm. Assets and liabilities that are translated at the current exchange rate are considered to be exposed as the balance sheet will be affected by fluctuations in currency values over time; those translated at a historical exchange rate will be regarded as not exposed as they will not be affected by exchange rate fluctuation. So, the difference between exposed assets and exposed liabilities is called translation exposure.

Translation exposure = Exposed Assets – Exposed Liabilities

The key difference between transaction and translation exposure that the former has impact on cash flows while the latter has no direct effect on cash flows. (This is true only if there are no tax effects arising out of translation gains and losses.)

8. Economic Exposure

Ans :

Economic exposure refers to the degree to which a firm's present value of future cash flows can be influence by exchange rates fluctuations. Economic exposure is a more managerial concept than an accounting concept. A company can have an economic an exposure to say Pound/Rupee rates even if it does not have any transaction or translation exposure in the British currency. This situation would arise when the company's competitors are using British imports. If the Pound weakens, the company losses its competitiveness (or vice versa if the Pound becomes strong). Thus economic exposure to an exchange rate is the risk that a variation in the rate will affect the company's competitive position in the market and hence its profits.

Further, economic exposure affects the profitability of the company over a longer time span than transaction or translation exposure. Under the Indian exchange control, economic exposure cannot be hedged while both transaction and translation exposure can be hedged.

9. Compare and contrast Transaction Exposure and Translation Exposure.

Ans :

Sl. No.	Transaction Exposure	Sl. No.	Translation Exposure
1.	The transaction exposure refers to the alterations which are being made in the existing cash flow of an organisation due to changes in the exchange rate.	1.	The translation exposure refers to the mismatch between the translated value of assets and liabilities that has taken place due to the changes in exchange rate.
2.	It usually takes place due to import and export of commodities on open account, lending and borrowing in foreign currency and flows of intrafirms in foreign firm.	2.	It usually takes place due to the consolidation of financial statements of various units of an MNC.
3.	If there is a commitment to pay foreign currency or possibility to receive foreign currency at a future date, then any movement in the exchange rate will effect the domestic value of the transaction.	3.	The extent to which financial statements are exposed to exchange rate fluctuation is known as translation exposure. But this exposure does not affect the profit and loss account, as it affects the balance sheets.

10. International Arbitrage ?

Ans :

Arbitrage is the act of simultaneously buying a currency in one market and selling it in another to make a profit by taking advantage of price or exchange rate differences in the markets. If the arbitrage operations are confined to two markets only, they will be known as "two-point" arbitrage. If they extend to three or more markets, they are known as "three-point" or "multi-point" arbitrage.

Forms of International Arbitrage

In others words, arbitrage refers to the purchase of a currency in that financial center where it is cheaper for immediate resale in another center where it is relatively expensive so as to make a profit out of this two-step deal.

(a) Locational Arbitrage: Commercial banks providing foreign exchange services will normally quote about the same rates on currencies, therefore shopping around for better quotes may not result in an advantage.

If demand and supply conditions for different banks for a particular currency differ, in that case the banks may quote different prices for the same currency and market forces will force realignment of the prices so that the price offered by banks for the currency become equal.

(b) Triangular Arbitrage: Occasionally, prices of one currency can very from one market to another. A currency may be cheaper in New York than it is in London. If such a situation arises, it provides an opportunity for market participants to buy the currency in New York and sell it in London.

(c) Covered Interest Arbitrage: The forward rate of a currency for a specified future date is determined by the interaction of demand for the contract (forward purchases) versus the supply (forward sales). Forward rates are quoted for some widely traded currencies in the Wall Street Journal. Financial institutions that offer foreign exchange services set the forward rates, but these rates are driven by the market forces (demand and supply conditions). In some cases, the forward rate may be priced at a level that allows investors to engage in arbitrage.

11. International fisher effect.

Ans :

The International Fisher Effect is the international counterpart of the Fisher Effect. It can be seen as a combination of the generalized version of the Fisher Effect and the relative version of the Purchasing Power Parity.

The generalized version of the Fisher Effect states that the real interest rates across countries will be equal due to the possibility of arbitrage. If the real rate is equal between different countries, it follows that the differences in their observed nominal rates must arise from differences in expected inflation. The relative version of the Purchasing Power Parity implies that inflation differential will be offset by exchange rate changes.

Recall previous equations we get :

$$\frac{(S_{t+1} - S_t)}{S_t} = \frac{(i_{h,t} - i_{f,t})}{(1 + i_{f,t})} \text{ and}$$

$$\frac{(1 + r_{h,t})}{(1 + r_{f,t})} = \frac{(1 + E(i_{h,t}))}{(1 + E(i_{f,t}))}$$

By combining these two equations we get the International fisher relation :

$$\frac{(S_{t+1} - S_t)}{S_t} = \frac{(r_{h,t} - r_{f,t})}{(1 + r_{f,t})}$$

12. How exchange rate movements are measured ?

Ans :

Exchange rate movements affect an MNC's value because they can affect the amount of cash inflows received from exporting or from a subsidiary and the amount of cash outflows needed to pay for imports. An exchange rate measures the value of one currency in units of another currency. As economic conditions change, exchange rates can change substantially.

A decline in a currency's value is often referred to as depreciation. When the British pound depreciates against the U.S. dollar, this means that the U.S. dollar is strengthening relative to the pound. The increase in a currency value is often referred to as appreciation. When a foreign currency's spot rates at two specific points in time are compared, the spot rate at the more recent date is denoted as

S and the spot rate at the earlier date is denoted as S_{t-1}. The percentage change in the value of the foreign currency is computed as follows:

Percent Δ in foreign currency value

$$= \frac{S - S_{t-1}}{S_{t-1}}$$

A positive percentage change indicates that the foreign currency has appreciated, while a negative percentage change indicates that it has depreciated. The values of some currencies have changed as much as 5 percent over a 24-hour period.

On some days, most foreign currencies appreciate against the dollar, although by different degrees. On other days, most currencies depreciate against the dollar, but by different degrees. There are also days when some currencies appreciate while others depreciate against the dollar; the media describe this scenario by stating that "the dollar was mixed in trading."

13. Explain briefly about purchasing power parity (PPP).

Ans :

The purchasing power parity (PPP) theory uses the long-term equilibrium exchange rate of two currencies to equalize their purchasing power. Developed by Gustav Cassel in 1920, it is based on the law of one price: the theory states that, in ideally efficient markets, identical goods should have only one price.

This purchasing power exchange rate equalizes the purchasing power of different currencies in their home countries for a given basket of goods. Using a PPP basis is arguably more useful when comparing differences in living standards on the whole between nations because PPP takes into account the relative cost of living and the inflation rates of different countries, rather than just a nominal gross domestic product (GDP) comparison. The best-known and most-used purchasing power parity exchange rate is the Geary-Khamis dollar (the "international dollar").

PPP exchange rates (the "real exchange rate") fluctuations are mostly due to market exchange rates movements. Aside from this volatility, consistent deviations of the market and PPP exchange rates are observed, for example (market exchange rate) prices of non-traded goods and services are usually lower where incomes are lower. (A U.S. dollar exchanged and spent in India will buy more haircuts than a dollar spent in the United States).

PPP takes into account this lower cost of living and adjusts for it as though all income was spent locally. In other words, PPP is the amount of a certain basket of basic goods which can be bought in the given country with the money it produces. There can be marked differences between PPP and market exchange rates.

Purchasing power parity theory was developed after the break down of the gold standard post World War I. The equilibrium rate of foreign exchange between two inconvertible currencies in determined by the ratio between their purchasing powers. Before the First World War, all the major countries of Europe were on the gold standard.

The rate of exchange used to be governed by gold points. But after the I World War, all the countries abandoned the gold standard and adopted inconvertible paper currency standards in its place. The rate of foreign exchange tends to be stabilized at a point at which there is equality between the respective purchasing powers of the 2 countries.

The change in the purchasing power of currency will be reflected in the exchange rate.

Equilibrium Exchange Rate (ER)

= Er X Pd / Pf

Where;

ER = Equilibrium Exchange Rate

Er = Exchange Rate in the Reference period

Pd = Domestic Price Index

Pf = Foreign currencies price index.

The purchasing power parity (PPP) theory uses relative general price changes as a proxy for prices of internationally traded goods and applying the equation.

Change in $ price of

$$£ = \frac{\text{Change in \$ price level}}{\text{Change in £ price level}}$$

Exercise Problems

1. Find out the amount of profit out of covered interest arbitrage, if interest rate in India and the USA is respectively 9 percent and 4.50 percent and the 6-month forward and spot exchange rates are respectively ` 45.00 $ and ` 45.20 $.

   [Ans: Arbitrageur profit = $ 22.50]

2. A company expects cash flow from its new project to the extent of $ 5,000; $ 6,500 and $ 6,000 respectively during the first three years of its operation. However, due to changes in exchange rate/ inflation rate, the cash flow is affected and it will change to $ 4,000, $ 5,800 and $ 5,200. Find the magnitude of the possible real operating exposure during the initial year of operation assuming a discount rate of 10 per cent.

   [Ans: Real operating exposure = $ 2,088.64]

3. Calculate the 3-month forward rate, if spot rate is ` 46/US $; interest rate in India and the USA is respectively 6 percent and 3 per cent.

   [Ans: Forward rate = ` 46.34/US $]

4. The US inflation rate is expected to average about 4 percent annually, while the Indian rate of inflation is expected to average about 12 percent annually. If the current spot rate for the rupee is $ 0.0285, what is the expected spot rate in two years?

   [Ans: Spot rate = $ 0.0245].

UNIT V

ASSET–LIABILITY MANAGEMENT :

Foreign Direct Investment, International Capital Budgeting, International Capital structure and cost of capital. International Portfolio Management.

INTERNATIONAL FINANCING :

Equity, Bond financing, parallel loans - International Cash management, accounts receivable management, inventory management. Payment methods of international trade, trade finance methods, Export – Import bank of India, recent amendments in EXIM policy, regulations and guidelines.

5.1 Asset Liability Management

Q1. Define Asset Liability Management.

Ans :

Meaning

Asset liability management is the process through which an association handles its financial risks that may come with changes in interest rate and which in turn would affect the liquidity scenario.

Banks and other financial associations supply services which present them to different kinds of risks. We have three types of risks credit risk, interest risk, and liquidity risk. So, asset liability management is an approach or a step that assures banks and other financial institutions with protection that helps them manage these risks efficiently.

The model of asset liability management helps to measure, examine and monitor risks. It ensures appropriate strategies for their management. Thus, it is suitable for institutions like banks, finance companies, leasing companies, insurance companies, and other financing bodies.

Asset liability management is an initial step to be taken towards the long term strategic planning. This can also be considered as an outlining function for an intermediate term.

In particular, liability management also refers to the activities of purchasing money through cumulative deposits, federal funds and commercial papers so that the funds lead to profitable loan opportunities. But when there is an increase of volatility in interest rates, there is major recession damaging multiple economies. Banks begin to focus more on the management of both sides of the balance sheet that is assets as well as liabilities.

5.2 Foreign Direct Investment

Q2. Define Foreign Direct Investment. Explain the various motives for Foreign Direct Investment.

(OR)

What is Foreign Direct Investment. State for the various motives for foreign Direct Investment.

Ans : **(Dec.-19, Imp.)**

Foreign Direct Investment (FDI) is investment made by a transnational corporation to increase its international business. When firms become multinational, they undertake FDI. It generally involves the establishment of new production facilities in foreign countries to earn extra returns. The foreign investment decision results from a complex interaction of factors that differ in many ways from that governing the domestic investment decision. Foreign investment is generally motivated by a complex set of strategic, behavioural and economic and financial considerations. The evaluation process of foreign investments is generally longer, more costly, less accurate and involves more political and foreign exchange risks. Businesses and governments are motivated to engage in FDI to

(i) Expand markets by selling abroad; and

(ii) Acquire foreign resources (e.g., raw materials, knowledge, production efficiency, etc). In addition, governments may also be motivated to gain political advantage.

The IMF defines foreign investment as FDI when the investor holds 10% or more of the equity of an enterprise. Foreign investment has been a major factor in stimulating economic growth and

development in recent times. The contribution that multinational corporations can make as agents of growth, structural change and international integration has made FDI a coveted tool of economic development. Foreign Direct Investment (FDI) is one of the most important sources of capital. FDI links the host economy with the global markets and fosters economic growth.

Motives

MNCs commonly consider direct foreign investment because it can improve their profitability and enhance shareholder wealth. They are normally focused on investing in real assets such as machinery or buildings that can support operations, rather than financial assets. The direct foreign investment decisions of MNCs normally involve foreign real assets and not foreign financial assets. When MNCs review various foreign investment opportunities, they must consider whether the opportunity is compatible with their operations. In most cases, MNCs engage in DFI because they are interested in boosting revenues, reducing costs, or both.

A) Revenue-Related Motives

The following are typical motives of MNCs that are attempting to boost revenues:

- **Attract new sources of demand**

  A corporation often reaches a stage when growth is limited in its home country, possibly because of intense competition. Even if it faces little competition, its market share in its home country may already be near its potential peak. Thus, the firm may consider foreign markets where there is potential demand. Many developing countries, such as Argentina, Chile, Mexico, Hungary, and China, have been perceived as attractive sources of new demand. Many MNCs have penetrated these countries since barriers have been removed. Because the consumers in some countries have historically been restricted from purchasing goods produced by firms outside their countries, the markets for some goods are not well established and offer much potential for penetration by MNCs.

- **Enter profitable markets**

  If other corporations in the industry have proved that superior earnings can be realized in other markets, an MNC may also decide to sell in those markets. It may plan to undercut the prevailing, excessively high prices. A common problem with this strategy is that previously established sellers in a new market may prevent a new competitor from taking away their business by lowering their prices just when the new competitor attempts to break into this market.

- **Exploit monopolistic advantages**

  Firms may become internationalized if they possess resources or skills not available to competing firms. If a firm possesses advanced technology and has exploited this advantage successfully in local markets, the firm may attempt to exploit it internationally as well. In fact, the firm may have a more distinct advantage in markets that have less advanced technology.

- **React to trade restrictions**

  In some cases, MNCs use DFI as a defensive rather than an aggressive strategy. Specifically, MNCs may pursue DFI to circumvent trade barriers.

- **Diversify internationally**

  Since economies of countries do not prove perfectly in tandem over time, net cash flow from sales of products across countries should be more stable than comparable sales of the products in a single country. By diversifying sales (and possibly even production) internationally, a firm can make its net cash flows less volatile. Thus, the possibility of a liquidity deficiency is less likely. In addition, the firm may enjoy a lower cost of capital as shareholders and creditors perceive the MNCs risk to be lower as a result of more stable cash flows.

B) Cost-Related Motives

MNCs also engage in DFI in an effort to reduce costs. The following are typical motives of MNCs that are trying to cut costs:

- **Fully benefit from economies of scale**

  A corporation that attempts to sell its primary product in new markets may increase its earnings and shareholder wealth due to economies of scale (lower average cost per unit resulting from increased production). Firms that utilize much machinery are most likely to benefit from economies of scale.

- **Use foreign factors of production**

  Labor and land costs can vary dramatically among countries. MNCs often attempt to set up production in locations where land and labor are cheap. Due to market imperfections such as imperfect information, relocation transaction costs, and barriers to industry entry, specific labor costs do not necessarily become equal among markets. Thus, it is worthwhile for MNCs to survey markets to determine whether they can benefit from cheaper costs by producing in those markets.

- **Use foreign raw materials**

  Due to transportation costs, a corporation may attempt to avoid importing raw materials from a given country, especially when it plans to sell the finished product back to consumers in that country. Under such circumstances, a more feasible solution may be to develop the product in the country where the raw materials are located.

- **Use foreign technology**

  Corporations are increasingly establishing overseas plants or acquiring existing overseas plants to learn the technology of foreign countries. This technology is then used to improve their own production processes and increase production efficiency at all subsidiary plants around the world.

- **React to exchange rate movements**

  When a firm perceives that a foreign currency is undervalued, the firm may consider DFI in that country, as the initial outlay should be relatively low.

Q3. Explain the factors determinants of Foreign Direct Investment.

Ans :

The volume of FDI in a country depends on the following factors :

1. Rate of Return on the Underlying Project

The differential rate of return hypothesis represent one of the first attempts to explain FDI flows. This hypothesis postulates that capital flows from countries with low rates of return to countries with high rates of return move in a process that eventually leads to the equality of ex ante real rates of return.

2. Return and Risk

When the assumption of risk neutrality is relaxed, risk become another variable upon which the FDI decision is made. If this proposition is accepted, then the differential rates of return hypothesis become inadequate, in which case we resort to the diversification (or portfolio) hypothesis to explain FDI.

3. Natural Resources

Availability of natural resources in the host country is a major determinant of FDI. Most foreign investors seek on adequate, reliable and economical source of minerals and other materials. FDI tends to flow in countries which are rich in resources but lack capital, technical skills and infrastructure required for the exploitation of natural resources. Though their relative importance has declined, the availability of natural resources still continues to be an important determinant of FDI.

4. Availability of Cheap Labour

The availability of low cost unskilled labour has been a major course of FDI in countries like china and India. Low cost labour together with availability of cheap raw materials enables foreign investors to minimize costs of production and thereby increase profits.

5. Market Size

The volume of FDI in a host country depends on its market size. This hypothesis is particularly valid for the case of the market of a particular country has grown to a level warranting the exploitation of economies of scale, this country becomes a potential target for EDI inflows.

6. Socio-Economic Conditions

Size of the population, infrastructural facilities and income level of a country influence direct foreign investment.

7. Political Situation

Political stability, legal framework, judicial system, relations with other countries and other political factors influence movements of capital from one country to another.

8. Need for Internalization

According to the internalization hypothesis, FDI arises from efforts by firms to replace market transactions with internal transactions. For example, if there are problems associated with buying oil products on the market, a firm may decide to buy a foreign refinery. These problems arise from imperfections and failure of markets for intermediate goods, including human capital, knowledge, marketing and management expertise.

9. International Immobility of Factors of Production

According to location hypothesis, FDI exists because of the international immobility of some factors of production such as labor and natural resources. This immobility leads to location-related differences the costs or factors of production.

10. Strategic and Long-Term Factors: Some strategic and long-term factors have been put forward to explain FDI. These factors include the following :

i) The desire on the part of the investor to defend existing foreign markets and foreign investments against competitors.

ii) The desire to gain and maintain a foothold in a protected market or to gain and maintain a source of supply that may prove useful in the long-run.

iii) The need to develop and sustain a parent-subsidiary relationship.

iv) The desire to induce the host country into a long commitment to a particular type of technology.

v) The advantage of complementing another type of investment.

vi) The economies of new product development.

Competition for market shares among oligopolists and the concern for strengthening bargaining positions.

Q4. What are the various theories of FDI ?

Ans :

1. MacDougall-Kemp Hypothesis

FDI moves from a capital-abundant economy to a capital-scarce one till the marginal productivity of capital is equal in both the countries. One of the earliest theories was developed by MacDougall (1958), subsequently elaborated by Kemp (1964).

Assuming a two-country model-one being the investing country and the other the host country, and the price of capital being equal to its marginal productivity, they explain that when capital moves freely form one country to another, its marginal productivity tends to equalize between the two countries. This leads to improvement in efficiency in the use of resources which leads ultimately to an increase in welfare.

2. Industrial Organization Theory

An MNC with superior technology moves to different countries to supply innovated product making in turn ample gains. Market imperfections arise in many cases, such as product differentiation, marketing skills, proprietary technology, managerial skills, better access to capital economies of scale and government-imposed market distortions, etc.

Such advantages confer on the MNCs an edge over their competitors in foreign locations and thus help compensate the additional cost of operating in an unfamiliar environment.

One of the earliest theories based on the assumptions of the imperfect market was propounded by Hymer (1976). To Hymer, a multinational firm is a typical oligopolistic firm that possesses some sort of superiority and that looks for control in an imperfect market with a view to maximizing profits.

Despite the fact that the international firm is posted disadvantageously in a foreign host country where it does not have intimate knowledge of language, culture, legal system and consumers' preference, it possesses certain specific advantages that outweigh the disadvantages.

3. Location-specific Theory

FDI moves to a country with abundant raw material and cheap labour force. Hood and Young (1979) stress the locational factors. They argue that since real wage cost varies among countries, firms with low-cost technology moves to low-wage countries. Again, in some countries, trade barriers are created to restrict import. The MNCs invest in such countries to start manufacturing there and so evade the trade barriers. Sometimes the availability of cheap and abundant raw material encourages the MNCs to invest in a particular country.

4. Product Cycle Theory

Raymond Vernon's theory is known as the product cycle theory. Vernon feels that most of the products follow a life cycle that is divided into three stages :

(a) The first stage is known as the " innovation" stage. In order to compete with the other firms and to have a lead in the market, the firm innovates a product through research and development. The product is manu factured in the home country primarily to meet the domestic demand, but a portion of the output is also exported to other developed countries. The quality of the product, and not the price, forms the basis of demand because the demand is price-inelastic at this stage.

(b) The second stage is known as "maturing product" stage. At this stage, demand for the new product in other developed countries grows substantially and so it turns price-elastic. Rival firms in the host country itself begin to appear at this stage to supply similar products at a lower price owing to lower distribution cost, whereas the product of the innovator involves the transportation cost and tariff which are imposed by the importing government.

Thus in order to compete with the rival firms, the innovator decides to set up a production unit in the host country itself that would eliminate the transportation cost and tariff. This leads to inter-nationalization of production.

(c) At the final or "standardized product" stage, when the product is standardized and the production techniques are no longer the exclusive possession of the innovating firm, rival firms from the home country itself or from some other developed country present stiff competition.

The product cycle theory explains very clearly the early post-Second World War expansion of US firms in other countries but with changes in international environment. Different stages of the product life cycle did not follow necessarily in the same way. Vernon (1979) himself has pointed out this limitation in his later writing that in the second stage itself, the firms are found moving to the developing world to reap the advantages of cheap labour.

5. Internalization Approach

Buckley and Casson (1976) too assume market imperfection, but imperfection, in their view, is related to the transaction cost that is involved in the intra-firm transfer of

intermediate products such as knowledge or expertise. In an international firm, technology developed at one unit is passed on to other units normally free of charge. This means that the transaction cost in respect of intra-firm transfer of technology is almost zero, whereas such costs in respect of technology transfer to other firms are usually exorbitantly high putting those firms in a disadvantageous position.

The internalization theory, says Rugman (1986), is a general theory explaining EDI and so lacks empirical content. However, in a subsequent study, he feels that with a precise specification of some additional conditions, successful testing is possible. Buckley (1988) himself is suspicious of the very limitation, but he is hopeful of getting satisfactory results from a rigorous and precise test.

6. Currency-based Approaches

The currency-base theories are normally theories based on the imperfect foreign exchange and capital market. One such theory developed by Aliber (1971) postulates that internationalization of firms can best be explained in terms of the relative strength of different currencies. Firms from strong-currency countries move out to weak-currency countries.

In a weak-currency country, the income stream is fraught with greater exchange risk. As a result, the income of a strong-currency country firm is capitalized at a higher rate. In other words, such a firm is able to acquire a large segment of income generation in the weak-currency country's corporate sector.

7. Politico-economic Theories

The politico-economic theories concentrate on political risk. Political stability in the host countries leads to foreign investment therein (Fatehi -Sedah and Safizedah, 1989). Similarly, political instability in the home country encourages investment in foreign countries (Tallman, 1988). However, Schneider and Frey (1985) believe that the theory underlying the political determinants of FDI is less well-developed than those involving economic determinants. The political factors are only additive ones influencing foreign investment.

Q5. What are the benefits and costs of FDI ?

Ans :

During FDI, the cash flows moves from one country to another benefiting both home country as well as the host country. Thus, every MNC needs to evaluate both the benefits and the costs associated with the home and the host country.

Benefits

(A) Benefits of the Host Country

1. Availability of Scarce Factors of Production

Sometimes, local-labour force are unable to perform a particular task / job because of the lack of appropriate skills, then foreign labour force who are possessing multi-skills as a results of FDI will be given that particular task.

Raw material availability as well as advanced technology is beneficial to the host country on account of foreign investors. Host country is benefited with FDI inflows as it becomes for it to get accession to research and development of an investing country. Hence, FDI provides scarce factors of production to the host country which helps it in achieving the balance along the factors of production which inturn reads to the growth in the economic development.

Foreign investors invest capital which is added to the domestic capital of the country.

2. Improvement in the Balance of Payments

Balance-of-Payments of the host country improves as a result of FDI, because capital invested by foreign investors will be credited to the capital account as well as current account. The balance of Payment of the host country could be achieved by either increasing the exports or import substitutions.

This result to increase exports or to produce the items or products which were previously imported with the use of advanced technology i.e., international standard quality at lesser cost. Exports can be increased by making use of famous, well- known brand names by the foreign.

3. Building of Economic and Social Infra-structure

Host country by providing support system helps in bringing rapid industrialization with the help of investment made by the foreign investors in various sections like economic infrastructure, social infrastructure, financial markets and the marketing system. Even though, if the foreign investors do not invest in such sections, their existence in the country generates multiple results which automatically improves the support system.

4. Fostering of Economic Linkages

Generally, foreign industries have both forward and backward linkages/connection.

Input supplying industries is improved by creating a demand for different inputs, greater employment opportunities and increase the employed labour force as a result increases the demand and industrial production in the host country.

Variety of quality goods are available at competitive prices which enables the host country to develop the standard of living of consumers also trains the labour personnel to improve their skills an abilities which originates trained/ skilled man power in the country.

5. Strengthening of Government Budget

Foreign Industries/companies reduces the modern of National budget since they act as a source of revenue for the government by paying Income tax as well as the tariff on their imports.

They also minimizes the governmental expenditure requirements by substituting government investment activities.

(B) Benefits to the Home Country

FDI is beneficial to the home country in the following perspectives,

When investor invest in specific raw material then it facilitates the consistent supply of raw materials to the host country. When there is an increase in exports of the subsidiary company by the parent company then the parent company gets dividend, royalty, technical service fees and other payments from the subsidiary company as a result the improved balance-of -payments would be witnessed by the home country.

When parent company enters in the new financial markets by investing abroad or in foreign countries then the home country is beneficial as it generates revenue by charging tax-on-dividends and other earnings of the parent company. Government of the home country impose tariffs on imports made by the parent company from its foreign subsidiary located which also acts as an important source of revenue for them.

Finally, FDI acts as a means for providing the foreign-aid which enables to improve political and friendly relations between the home country and the host country.

Costs

(A) Cost to the Host Country

As a result of FDI, there is inflow of foreign investment by foreign investors which affects the balance- of-payments. On the other hand, outflows to the home country due to the imports, payments of dividend, technical service fees, royalty so on this declines the balance of payments.

As the technology is supplied by the parent company to its foreign subsidiary, the host country has to depends on the home country for the receipt of advanced technology. Sometimes this may not be suitable for the local environment then the host country has to suffer huge losses.

Domestic industrialists are unable to compete with foreign investors who are strong and powerful this results in decline in the growth of domestic industries, then the consumers are dependent on foreign companies who charges higher prices for their products as a result of oligopolist position in the market. Such a situation leads to the development of inflationary prices.

These foreign firms generate foreign culture both in the industrial setup and in the society, which is so strong and powerful imposing threats on the functioning of the government.

(B) Cost to the Home Country

By making investments in the foreign country. Home country incurs comparatively less cost. Foreign investments takes away capital, skilled personnel, managerial professionals from the home country. Even it hampers home country interest.

MNC's whose objective is to generate establish operations in different countries. MNC's may use different measures without considering the interest of the host country, then it results in tussle between the host country government and home country government which influences bilateral relations between them.

Q6. Briefly discuss the global trends in FDI in the last five years and comment upon your results.

Ans : **(Sep.-20)**

Table 1 and table 2 shows the FDI equity inflows in different countries and different sectors for the last 5 years.

Analysis of Country Wise Amout in Rupees Crores in (US $ Million)

Rank	Country	2015-16 (April-March)	2016-17 (April-March)	2017-18 (April-March)	2018-19 (APril-March)	2019-20 (April - December)	Total Inflow (2015-2020)
1.	UAE	985	675	1050	898	264	3872
2.	France	598	614	511	406	459	2588
3.	U.K	898	1483	847	1351	1148	5727
4.	Mauritius	8355	15,728	15,941	8084	7456	55,564
5.	Japan	2614	4709	1633	2965	2807	14,728
6.	Netherlands	2643	3367	2800	3870	3531	16,211
7.	USA	4192	2379	2095	3139	2793	14,598
8.	Singapore	13,692	8711	12,180	16,228	11,652	62,463
9.	Germany	986	1069	1124	886	366	4431
10.	Cyprus	508	604	417	296	238	2063
Total FDI inflow from all countries		**35,471**	**39,339**	**38,598**	**38,123**	**30,714**	**1,82,245**

Table -1 : Share of Top Investing countries FDI Equity Inflows (Financial Year)

Analysis of Sector Wise (Amount in Rupees Crores in US $ Million)

Rank	Sector	2015-16 (April-March)	2016-17 (April-March)	2017-18 (April-March)	2018-19 (APril-March)	2019-20 (April - December)	Total Inflow (2015-2020)
1.	Service sector	6889	8684	6709	9158	6521	37,961
2.	Computer Software & Hardware	5904	3652	6153	6415	6349	28,473
3.	Telecommunications	1324	5564	6212	2668	4291	20,059
4.	Trading	3845	2338	4348	4462	3520	18,513
5.	Construction Development : Townships, Housing, built up infrastructure and construction development projects	113	105	540	213	326	1297
6.	Automobile industry	2527	1609	2090	2623	2506	11,355
7.	Chemical (other than fertilizers)	1470	1393	1308	1981	860	7012
8.	Drugs & Pharmaceuticals	754	857	1010	266	414	3301
9.	Construction (Infrastructure activities)	4511	1861	2730	2258	1351	12,711
10.	Power	869	1113	1621	1106	337	5046

Table - 2 : Sector Attracting Highest FDI Equity Inflows

Interpretation

As per the latest data released by the Department of Policy and Promotion (DIPP), the total FDT inflows from April 2019 to December 2020 is approx US $ 36.7 billion. In country wise analysis, Mauritius occupy the first position from 2015-2020 and contributed approx US $ 55.56 billion to FDI inflows for the last 5 years. Financial and non financial sector that are part of the service sector is the highest contributor from the 2015-2020, it has contributed approx US $ 37.96 billion to FDI inflows for the last 5 years.

FDI in India mainly come from service sector, which reflect the growth and comparative advantage of service sector in global trade market. Since liberalization, most of the major investments come from IT

sector and thus increase global trade opportunities for India. Apart from IT sector, service sectors like insurance, finance, real estate, etc contributed their large share in FDI flow in recent years.

FDI flows to India during different periods of time by the funds from foreign portfolio. FDI flows in India were more volatile with respect to domestic and international sentiments. The international investment flows from foreign portfolio were due to lower long-term returns in advanced economics. In addition strong financial sector, good macro-economic fundamentals, deep and liquid capital market and improved corporate sector helps India with better returns. There was significant increase in FIIs.

However, it is also observed from data that overall FDI is increasing from 2015 to 2018 but in 2019 there is slight decrease and that continued in 2020. When sector wise data is observed, it is clear that all sectors increased till April-17 to March -18 but after that there is gradual fall in their share of FDI.

Q7. What are the barriers to FDI ?

(OR)

State the various barriers to FDI.

Ans :

1. Restrictive FDI regime

The FDI regime in India is still quite restrictive. As a consequence, with regard to cross border ventures, India ranks 57th in the GCR 1999. Foreign ownership of between 51 and 100 percent of equity still requires a long procedure of governmental approval. In our view, there does not seem to be any justification for continuing with this rule.

2. Lack of clear cut and transparent sectoral policies for FDI

Expeditious translation of approved FDI into actual investment would require more transparent sectoral policies, and a drastic reduction in time-consuming red-tapism.

3. High tariff rates by international standards

India's tariff rates are still among the highest in the world, and continue to block India's attractiveness as an export platform for labor-intensive manufacturing production. On tariffs and quotas, India is ranked 52nd in the 1999 GCR, and on average tariff rate, India is ranked 59th out of 59 countries being ranked.

4. Lack of decision-making authority with the state governments

The reform process so far has mainly concentrated at the central level. India has yet to free up its state governments sufficiently so that they can add much greater dynamism to the reforms. In most key infrastructure areas, the central government remains in control, or at least with veto over state actions. Greater freedom to the states will help foster greater competition among themselves.

5. Limited scale of export processing zones

The very modest contributions of India's export processing zones to attracting FDI and overall export development call for a revision of policy. India's export processing zones have lacked dynamism because of several reasons, such as their relatively limited scale.

6. No liberalization in exit barriers

While the reforms implemented so far have helped remove the entry barriers, the liberalization of exit barriers has yet to take place

7. Stringent labor laws

Large firms in India are not allowed to retrench or layoff any workers, or close down the unit without the permission of the state government. Most importantly, the continuing barrier to the dismissal of unwanted workers in Indian establishments with 100 or more employees paralyzes firms in hiring new workers. Labor intensive manufacturing exports require competitive and flexible enterprises that can vary their employment according to changes in market demand and changes in technology, so India remains an unattractive base for such production in part because of the continuing obstacles to flexible management of the labor force.

5.3 INTERNATIONAL CAPITAL BUDGETING

Q8. Explain about Capital Budgeting in International Scenario and Enumerate the steps involved in Capital Budget decisions.

Ans :

Capital budgeting evaluates the investment decisions related to assets. The "capital" in capital budgeting refers to the investment of resources in assets, while the budgeting refers to the analysis and assessment of cash inflows and outflows related to the proposed capital investment over a specified period of time. Objectives of capital budgeting is to

(1) Determine whether or not a proposed capital investment will be a profitable one over the specified time period, and.

(2) to select between investment alternatives. Capital budgeting at the international level addresses the issues related to.

(i) Exchange rate fluctuations capital market segmentation.

(ii) International financing arrangement of capital and related to cost of capital.

(iii) International taxation.

(iv) Country risk (or) political risk etc.

Steps

1. The global organization/multinational company's capital budgeting decision starts by preparing a business plan which is communicated to all subsidiary companies.
2. The top level managers and operating managers of different subsidiaries are connected with each other through a channel of communication.
3. Local managers must have information regarding the headquarters of global/ multinational company in long term.
4. The parent organization must create a vision statement to show the future plans of organization.
5. After this, the capital expenditure projects which are supporting the company to achieve its business objectives are proposed by the local managers, which means the projects should be reasonable both strategically and financially.
6. Hence, it requires general instructions on new capital expenditures proposal to both subsidiaries and top management.
7. Corporate diplomacy is required as subsidiary does not perform effectively being a servant to parent company. The subsidiaries are interested in being independent companies with right to exhibit interest of a multinational company in a region/area or product line.
8. Hence, the future of the subsidiary company is determined by capital budgeting, so the parent company must not consider a subsidiary to be unconcerned with the capital budgeting process.

Q9. Explain the various inputs for capital budgeting in International Scenario.

Ans :

Since the project is conceived by the parent as an investment opportunity abroad, therefore we will consider capital budgeting in parent's perspective. For evaluation of the project, the cash flows are required to be estimated irrespective of the term of project, the MNCs need the forecasts on following economic and financial variables related to the project.

1. Initial Investment

A project's initial investment is not only equal to the investment required to start the project but also the working capital required to meet the variable cost and to run the project. Working capital is needed until the revenue generated from the project is sufficient to cope with working capital requirement. The parent's initial investment will also indicate the sourcing of funds.

2. Consumer Demand for the Product

Projections of consumer demand is very important for determining cash flows. It is very difficult to forecast the demand in a foreign country for the product which is either being

introduced newly or will be competing with the existing product. In the first case, the market has to be created for the product where as in the later; share for itself has to be carved out. However, there is a lot of uncertainty associated with such forecasts.

3. Price of the Product / Service

Forecasting the price of the product which already has the competitive product may be looked as the basis of forecasting. However, for a new product, the pricing is done on the basis of cost of production and the segment of the population for which the good has been produced. Experimenting with such prices can finally reach a suitable price forecast.

4. Cost of the Product

The cost of the product has two components :

(a) Fixed costs

The forecasts on these two types of costs are also to be developed because the project usually conceived and prepared earlier than it actually is initiated and the projects have time lags. These costs may also be dependent on price of imports. Therefore forecast on the price of import content should also be made.

(b) Variable cost

Like the price estimate variable forecasts can be developed from assessing prevailing comparative costs from variable inputs such as labor energy and raw material. It is possible to forecast variable costs quite accurately.

Fixed costs may be easier to predict as compared to the variable cost because normally it is not sensitive to the charges in demand for fixed factors.

5. Life of the Project

In the case of some projects, the life of the project can be assigned, while in other cases it may not be possible in the case of the definite life time of the project capital budgeting decision making is easier. But one subject of MNC's capital budgeting is that, MNCs does not have complete control over the life time of the project and it may be terminated any time due to political reasons.

6. Salvage Value

The salvage value in the case of most of the projects is difficult to predict. Its value depends on several factors including the attitude of the host government.

7. Transfer Restriction

There may be restrictions on the transfer of earnings from subsidiary to the parent. The restriction may encourage the MNC to spend locally so that there is no huge transfer of funds. This makes the project viable for the subsidiary and unavailable for the parent.

8. Tax Laws

If the parent country does not tax the foreign earnings because it provides incentive to foreign earnings, the cash flows may increase. In capital budgeting, the tax effects must be accounted for.

9. Exchange Rate Variations

The cash flows from international project may vary because of exchange rate variation. The exchange rate variations are difficult to forecast. However, the short run positions can be hedged but usually the projects have longer time horizons. Moreover, it is difficult to know the exact amount of cash flow to be hedged.

10. Required Rate of Return

Once the relevant cash flows of the proposed project are estimated, these can be discounted at the required rate of return which differs from the MNC's cost of capital because of additional risk involved in the launching of the new project at a foreign location.

Q10. What are the different techniques under International Capital Budgeting?

Ans : **(May-19)**

The different techniques under International Capital Budgeting are as follows :

1. Net Present Value Method

NPV is the most popular method and is defined as the present value of future cash discounted at an appropriate rate minus the initial net cash outlay for the projects. The discount unrate used here is known as the cost of capital. The decision criteria is to accept projects with i positive NPV and reject projects which have a negative NPV.

The NPV can be defined as follows :

$$NPV = -I_0 + \sum^{n}_{t=1} \frac{CF_t}{(I+k)^t}$$

Where I_0 = initial cash investment

CF_i = expected after-tax cash flows in year t.

k = the weighted average cost of capital

n = the life span of the project.

The NPV of a project is the present value of all cash inflows, including those at the end of the project's life, minus the present value of all cash outflows.

The decision criteria is to accept a project if NPV $\geq$ o and to reject if NPV < o.

IRR is calculated by solving for r in the following equation.

$$\sum^{n}_{t=1} \frac{CF_t}{(I+k)^n} - Io = o$$

where r is the internal rate of return of the project.

The IRR method finds the discount rate which equates the present value of the cash flows generated by the project with the initial investment or the rate which would equate the present value of all cash flows to zero.

2. Adjusted Present Value (APV)

A DCF technique that can be adapted to the unique aspect of evaluating foreign projects is the .adjusted present value approach (APV). The APV format allows different components of the project's cash flow to be discounted separately. This allows the required flexibility, to be accommodated in the analysis of the foreign project. The APV approach uses different discount rates for different segments of the total cash flows depending upon the degree of certainty attached with each cash flow. In addition, the APV format helps the analyst to test the basic viability of the foreign project before accounting for all the complexities. If the project is acceptable in this scenario, no further evaluation based on accounting for other cash flows is done. If not, then an additional evaluation is done taking into account the other complexities. As mentioned earlier, foreign projects face a number of complexities not encountered in domestic capital budgeting, for example, the issue of remittance, foreign exchange regulation, lost exports, restriction on transfer of cash flows, blocked funds, etc.

The APV model is a value additivity approach to capital budgeting, i.e., each cash flow as a source of value is considered individually. Also, in the APV approach each cash flow is discounted at a rate of discount consistent with the risk inherent in that cash flow. In equation form the APV approach can be written as :

$$APV = I_0 + \frac{x_t}{(1+k^*)^t} \sum^{n}_{t=1} \frac{T_t}{(1+i_d)^t}$$

$$\sum^{n}_{t=1} + \frac{S_t}{(1+i_d)^t}$$

Where the term I_0 = Present value of investment outlay

$\frac{x_t}{(1+k^*)^t}$ = Present value of operating cash flows

$\frac{T_t}{(1+i_d)^t}$ = Present value of interest tax shields

$\frac{S_t}{(1+i_d)^t}$ = Present value of interest subsidies

The various symbols denote

T_t = Tax savings in year t due to the financial mix adopted

S_t = Before-tax value of interest subsidies (on the home currency) in year t due to project specific financing

= Before-tax cost of dollar debt (home currency)

The last two terms in the APV equation are discounted at the before-tax cost of dollar debt to reflect the relative certain value of the cash flows due to tax savings and interest servings.

3. Internal Rate of Return

The internal rate of return is also one of the capital budgeting technique that identifies the time value of money. This method is also known as yield method, discounted rate of return and trial and error yield method. It is that rate of return which equates the present value of cash inflows to the present value of cash outflows. The hit and trial method is used in internal rate of return method to discount the cash flows of the project as discount rate is not known. The internal rate of return is calculated with the help of the following formula,

$$C = \frac{A_1}{(1+r)^1} + \frac{A_2}{(1+r)^2} + \frac{A_3}{(1+r)^3} + ... + \frac{A_n}{(1+r)^n}$$

Where,

C - Initial outlay at time zero

r - Rate of discount of internal rate of return

A_1, A_2 ....A_n - Future net cash flows at different periods

n - Number of years.

Steps

The internal rate of return method involves following steps,

1. Calculate the future cash inflows before depreciation but after tax
2. Calculate fake payback period by dividing the initial investment by average cash flows.

$$\text{Fake pay back period} = \frac{\text{Initial investment}}{\text{Average cash flows}}$$

3. Identify the discounting factor from present value annuity table and calculate NPV with that percentage.
4. If NPV is positive take a higher rate and if NPV is negative take a lower rate and once again calculate NPV.

5. After getting one positive NPV and one negative NPV, use interpolation to calculate actual IRR. Actual IRR can be calculated by using the following formula,

$$\text{Lower Rate} + \frac{\text{Present Value at Lower Rate - Cash Outflow}}{\text{PV at Lower Rate - PV at Higher Rate}} \times \text{Difference in the Rates}$$

A particular project is accepted when IRR is more than cost of capital and if IRR of the project is less than cost of capital it is rejected.

4. Profitability Index

The profitability index method is one of the discounted cash flow method for evaluating the investment proposals. As profitability index is an alteration of net present value method it explains the relationship between present value of cash inflows and present value of cash outflows. It is also termed as Benefit - Cost ratio (B/C) or 'Desirability factor'. Profitability index can be calculated as,

$$\text{Profitability index} = \frac{\text{Present value of cash inflows}}{\text{Present value of cash outflows}}$$

$$\text{PI} = \frac{\text{Present value of cash inflows}}{\text{Initial cash outlay}}$$

Profitability index for net present values of inflows is calculated as,

$$\text{PI(Net)} = \frac{\text{NPV (Net present value)}}{\text{Initial cash outlay}}$$

When profitability index is more than one the proposal is accepted. In case profitability index is less than one then the proposal is rejected. The mutually exclusive projects under this method are ranked based on their profitability index, project with high profitability index are ranked first.

PROBLEMS

1. An American MNC, is contemplating to set a manufacturing plant in India, which involves an investment outlay of ` 50 millions. An additional working capital requirements amount to be ` 5 million. The incremental CFATs are expected to the ` 17 million for 5 years. The fifth year is expected to generate an additional cash flow of ` 5 million account of sale of plant and release of working capital. The recent exchange rate is ` 46 per $. The exchange rates for the relevant 5 years period of project will be as follows :

Year	Exchange rate ($)
1	36
2	37.08
3	38.1924
4	39.3382
5	40.5183

Assume that the US MNC has not exporting the product to India. The required rate of return is 10% ?

Sol. :

a) i) Calculation of incremental cash outflows :

Cost of plant	–	` 50,000,000
(+) Working capital	–	` 5,000,000
	–	` 55,000,000

COF in terms $= \frac{55,000,000}{36} =$ $ 15,27,778

b) ii) Calculation of US $ equivalent CFATs in years 1-5

Year	CFAT	ER (`/%)	$ Equivalent
1	1,70,00,000	36	4,72,222
2	1,70,00,000	37.08	4,58,468
3	1,70,00,000	38.1924	4,45,115
4	1,70,00,000	39.3382	4,32,150
5	1,70,00,000	40.5183	7,89,767

iii) Calculation of NPV

Year	CFAT	PV Factor @ 10%	Total PVC
1	4,72,222	0.909	4,29,250
2	4,58,468	0.826	3,78,694
3	4,45,115	0.751	3,34,281
4	4,32,150	0.683	2,95,158
5	7,89,767	0.621	4,90,464
			19,27,847

NPV Inflow	=	19,27,847
(–) Outflow	=	15,27,778
		4,00,069

2. Calculate NPV for the given project.

Year	0	1	2	3	4	5
(A) Cash flows	200	35	80	90	75	20
(B) Cash flows	200	18	10	10	40	35

The company anticipates the cost of capital of 12%. Rank the project according to it ?

Sol :

Calculation of NPV for Project A

Year	CFAT	PV. factor @ 12%	PV CFAT
1	35	0.893	31.255
2	80	0.797	63.76
3	90	0.712	64.08
4	75	0.636	47.7
5	20	0.567	11.34
			218.135

NPV = Inflow = 218.135

(–) Outflow = 200.000

18.135

Calculation of NPV for Project B

Year	CFAT	PV. factor @ 12%	PV CFAT
1	8	0.893	16.074
2	10	0.797	7.97
3	10	0.712	7.12
4	40	0.636	25.44
5	35	0.567	19.845
			76.444

NPV = Inflow = 76.444

(–) Outflow = 200.000

– 123.556

3. A project cost Rs. 2,500/- and is expected to generate cash inflows of Rs. 900, 800, 700, 600 and 500 respectively for 5 years. The opportunity cost of capital may be assumed to be 10% calculate NPV for the given project.

Sol :

Initial cost = 2,500

Year	CFAT	PV factor @ 10%	PV. CFAT
1	900	0.909	818.1
2	800	0.826	660.8
3	700	0.751	525.7
4	600	0.683	409.8
5	500	0.621	310.5
			2,724.9

NPV = Inflow = 2724.9

(–) Outflow = 2500.0

224.9

4. ABC Ltd. is considering a project in USA which will involve an initial investment of US $ 1,10,000. The project will have 5 years of life. Current spot exchange rate is ` 48 per US $.

The risk free rate is US is 8% and the same in India is 12%. Cash inflow from the project is as follows :

Year	Cash inflow
1	**US $ 20,00,000**
2	**US $ 25,00,000**
3	**US $ 30,00,000**
4	**US $ 40,00,000**
5	**US $ 50,00,000**

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

Sol:

(1 + 0.12)(1 + Risk Premium) = (1 + 0.14)

Or, 1 + Risk Premium = 1.14/1.12 = 1.0179

Therefore, Risk adjusted dollar rate is = 1.0179 × 1.08

= 1.099 – 1 = 0.099

Calculation of NPV

Year	Cash flow (Million) US $	PV Factor at 9.9%	P.V.
1	2.00	0.910	1.820
2	2.50	0.828	2.070
3	3.00	0.753	2.259
4	4.00	0.686	2.744
5	5.00	0.624	3.120
			12.013
		Less : Investment	11.000
		NPV	1.013

Therefore, Rupee NPV of the project is = ` (48 × 1.013) Million

= ` 48.624 Million.

5.4 INTERNATIONAL CAPITAL STRUCTURE AND COST OF CAPITAL

Q11. Define International Capital Structure. Explain the determinants of Inter- national Capital Structure.

Ans : **(Imp.)**

A MNCs capital structure decision involves the choice of debt versus equity financing within all of its subsidiaries. Thus, its overall capital structure is essentially a combination of all its subsidiaries' capital structures. MNCs recognize the trade-off between using debt and using equity for financing their operations.

The advantages of using debt as opposed to equity vary with corporate characteristics specific to each MNC and specific to the countries where the MNC has established subsidiaries.

Determinants of International Capital Structure

The MNCs operate in economies where diverse regulations exist for the mobilization of resources by companies. These regulations may be discriminatory for MNCs. Therefore the question of target capital structure has to be analyzed in the light of these regulations. There may be following types of situations existing in various economies which are the important determinants of capital structure of MNCs :

1. When a country does not allow the MNCs having headquarters elsewhere to list their stock on its local stock exchange, under these conditions, MNCs would decide to borrow funds through debt instruments such as bonds and so it may deviate from the target capital structure. In the process, the overall cost of capital may rise. The dependence on debt may be reduced if the host country allows the listing of stocks at the local stock exchange.
2. In the second situation, when the country allows the listing of stock at the local stock exchange then in that case the nature of the project will decide the financing pattern. If the project is not generating net cash flows for some years, say five years or more, then the equity financing is more appropriate. Because in the case, one can avoid net cash out flows by not paying dividends in the initial years of operation.

3. If a country is facing political turmoil, the use of local banks will be more appropriate, because these banks may be able to prevent MNCs operations in that country form being affected by the political conditions.

Q12. Describe the characteristics of international capital structure.

Ans : **(Imp.)**

MNC's capital structure decision deals with the decisions regarding the capital structures of all its subsidiaries where there is an option to select either debt or equity financing for its subsidiaries. MNCs can use debt financing or equity financing according to the corporate characteristics particularly in countries where the subsidiaries of MNCs are operating. Thus, MNCs capital structure decisions are mainly influenced by two characteristics.

A) Influence of corporate characteristics

B) Influence of country characteristics

A) Influence of Corporate Characteristics

Most common firm-specific characteristics have a great impact on MNCs capital structure which can be dealt in detail as follows.

1. MNCs Credit Risk

MNCs that have lower credit risk have more access to credit. Any factors that influence credit risk can affect a MNCs choice of using debt versus equity.

2. Stability of MNCs Cash Flows

MNCs with more stable cash flows can handle more debt because there is a constant stream of cash inflows to cover periodic interest payments. Conversely, MNCs with erratic cash flows may prefer less debt because they are not assured of generating enough cash in each period to make larger interest payments on debt.

MNCs that are diversified across several countries may have more stable cash flows since the conditions in any single country should not have a major impact on their cash flows. Consequently, these MNCs may be able to handle a more debt-intensive capital structure.

3. MNCs Guarantees on Debt

If the parent backs the debt of its subsidiary, the subsidiary's borrowing capacity might be increased. Therefore, the subsidiary might need less equity financing. At the same time, however, the parent's borrowing capacity might be reduced, as creditors will be less willing to provide funds to the parent if those funds might be needed to rescue the subsidiary.

4. MNC's Access to Retained Earnings

Highly profitable MNCs may be able to finance most of their investment with retained earnings and therefore use an equity-intensive capital structure. Conversely, MNCs that have small levels of retained earnings may rely on debt financing.

Growth-oriented MNCs are less able to finance their expansion with retained earnings and tend to rely on debt financing. MNCs with less growth need less new financing and may rely on retaining earnings (equity) rather than debt.

5. MNCs Agency Problems

If a subsidiary in a foreign country cannot easily be monitored by investors from the parent's country, agency costs are higher. To maximize the firm's stock price, the parent may induce the subsidiary to issue stock rather than debt in the local market so that its managers there will be monitored. In this case, the foreign subsidiary is referred to as "partially owned" rather than "wholly owned" by the MNCs parent. This strategy can affect the MNCs capital

structure. It may be feasible when the MNCs parent can enhance the subsidiary's managers by allowing them partial ownership.

B) Influence of Country Characteristics

In addition to characteristics unique to each MNC, the characteristics unique to each host country can influence the MNCs choice of debt versus equity financing and therefore influence the MNCs capital structure. Specific country characteristics that can influence an MNCs choice of equity versus debt financing are described here.

1. Stock Restrictions in Host Countries
2. Interest Rates in Host Countries
3. Strength of Host Country Currencies
4. Country Risk in Host Countries
5. Tax Laws in Host Countries.

Q13. Define cost of capital ? How does a cost of capital of MNC's differs from domestic firm ?

Ans :

Introduction

The cost of capital is a term used in the field of financial investment to refer to the cost of a company's funds (both debt and equity), or, from an investor's point of view "the shareholder's required return on a portfolio of all the company's existing securities". It is used to evaluate new projects of a company as it is the minimum return that investors expect for providing capital to the company, thus setting a benchmark that a new project has to meet.

Cost of Capital of MNC's Vs. Domestic Firms

The cost of capital for an MNC may differ from that of a fully established domestic firm on account of the characteristics of MNCs that differentiate them from domestic firms. These differences include the following :

1. Size of the Firm

Firms that operate internationally are usually much bigger in size than firms which operate only in the domestic market. Firms that operate internationally generally borrow substantial amounts of funds and by virtue of their size, they are generally in a position to reduce the various transaction and brokerage costs and also get preferential treatment from creditors.

This helps them to reduce their cost of capital compared to domestic firms.

2. Foreign Exchange Risk

An exceptionally volatile exchange rate or one that always depreciates, is not conductive to attracting long-term foreign investors. Such a MNCs cash flow would have wide fluctuations and the capability of the corporation to make various fixed term commitments like interest would get reduced.

This may force the shareholders and creditors to demand a higher return which, in turn, increases the MNC's cost of capital. A firm more exposed to exchange rate fluctuations would have a wider spread of possible cash flows in future periods. Thus, exposure to exchange rate fluctuations could lead to a higher cost of capital.

3. Access to International Capital Markets

The fact that MNCs can normally access the international capital market helps them to attract funds at a lower cost than the domestic firms. In a global context, since the funds are not completely mobile, the cost of funds varies among markets. Also, the subsidiary can obtain local funds at a lower rate than the parent if the prevailing interest rates in the host country are relatively low.

This form of financing helps to lower the cost of capital and will generally not increase the MNCs exposure to exchange rate risk.

4. International Diversification Effect

If a firm's cash inflows come from sources all over the world, there might be more stability in them. MNCs like Nike, Coca-Cola, Microsoft, Intel, Proctor and Gamble, British Airways, etc., have cash inflows coming from sources all over the world.

5. Political Risk

Political risk can be accounted for in the cost of capital calculations by adding an arbitrary risk premium to the domestic cost of capital for a project of comparable risk. As political risk is likely to be higher in the later years of a project, cash flows in later years tend to get reduced. Thus political risk impacts the cost of capital of the MNC by moving it upwards as compared to a domestic firm.

6. Country Risk

Country risk represents the potentially adverse impact of a country's environment on the MNCs cash flows. If the country risk level of a particular country beings to increase, the M1MC may consider divesting its subsidiaries located there. Several risk characteristics of a country may significantly affect the cash flows of the MNC and the MNC should be concerned about the degree of impact likely for each.

If the country risk is high and it has invested a high percentage of its assets in such a country, then its probability of bankruptcy is higher. In a situation of high country risk, the cost of capital will also tend to be high.

7. Tax Concessions

MNCs generally choose countries where the tax laws' are favorable for them as their net income in substantially influenced by the tax laws in the locations where they operate, In some cases, the MNC may be able to lower its cost of capital by availing of the various tax advantages not available to a purely domestic firm.

Q14. Explain the measurement of cost of capital.

Ans :

We now discuss the concept of the cost of capital, and the adjustments in its that are required for international capital budgeting decision.

1. Average Cost of Capital

Average cost of capital represents the weighted average of the cost of equity and the cost of debt. As an equation, the average cost of capital,

$$k = k_d(1 - t)W_d + k_eW_e \quad ...(1)$$

where k_d is the cost of debt, k_e is the cost of equity, W is the relative weight of different forms of capital in the capital structure and t is the tax rate.

2. Cost of Debt

Interest is the cost of debt adjusted for taxes because interest is tax-deductible and is debited in the income statement before tax is calculated. Tax-adjusted cost of debt,

k_d = interest/principal x (1 – t) ...(2)

The cost of new debt differs from the cost of existing debt as the former includes the floating cost. The cost of new debt if

k_d (new) = [I {(P – NP)/n}/{(P NP)/2}] x (1 – t) ...(3)

where I is the interest, P is the principal, NP is the net proceeds after floatation cost and n is the maturity.

Example : If annual interest charges amount to $ 5,000, the cost of $ 100,000 ten- year debt with a tax rate of 50 percent will be :

5,000/100,000 x (1 – 0.50) = 2.5%

If it is a new debt and the floatation cost is $ 2,000, the cost of debt will be

[5,000 + {(100,000 – 98,000)/10}/{(100,000 + 98,000)/2}] x (1 – 0.50) = 2.63%

When a debt instrument is issued at a premium or discount, the net proceeds differ from the face value and the same procedure is used that is used in case of new debt. Suppose a ten-year bond having a face value of $ 100 is sold at $ 90 with a coupon of 5 percent. The cost of debt with a 50 percent tax rate will be :

[5 + {(100 – 90)/10}/{(100 + 90)/2}] x (1 – 0.50) = 3.15%

Again, if the company raises debt from another country's financial market, the cost of debt will be inclusive of the changes in the exchange rate. For example, suppose an Indian company raises debt from the US dollar market at an interest rate of 6.0 percent. But if dollar appreciates by 3.0 percent, the cost of debt in terms of rupee will be higher than 6.0 percent. It will be :

(1 + 0.06) (1 + ..03) – 1 = 0.0918 = 9.18%

3. Cost of Equity Shares

Dividend is the cost of equity shares. The computation of the cost of equity shares is not so easy as there is no fixed contractual obligation for the payment of dividend to equity shareholders. Sometimes the cost is based on the historical rate of return, but the problem with this method is that it does not embrace the expectations about future performance of the firm. The usual practice is to rely on the current value of shares. The price of equity share P, is equal to the present value of expected dividend D given the risk-adjusted rate Ke required by the investors. To arrive at the cost of equity shares, the normal practice is to divide the expected amount of dividend at the year-end by the current value of shares. In equation form,

$$k_e = D/P_0 \quad \ldots(4)$$

But since the investors expect growing rate of dividend per share, growth factor g is added to Eqn. (1). Then

$$k_e = (D/P_0) + g \quad \ldots(5)$$

Example : If dividend in the past has grown at 5 percent per annum and the firm expects to pay dividend at $ 4 per share at the year end, the cost of equity share with a current price of $ 50 will be :

(4/50) + 0.05 = 13%

As far as the cost of new share is concerned, it is computed after adjustment of floatation cost. This means that the floatation cost is deducted from the market price of the share. Suppose, the floatation cost is $ 5 per share, then the cost of equity share will be :

4/(50 – 5) + 0.05 = 13.89%

There is one more method for computing the cost of equity shares. It is based on the security market line where Beta is used as a measure of risk. Under this method, the cost of equity share,

$$k_e = k_r + (k_m - k_r)b_e \quad \ldots(6)$$

where

k_r is the riskless rate of interest,

k_m is the expected rate of return (average) on the portfolio of all securities in the market, and b_e is the product of the standard deviation of the return on the equity share in question SD_e, and their correlation with the market, correm divided by the standard deviation of the rate of return on the market portfolio, SD_m.

The estimate of b is made from the past rates of return since historical b is often close to real or true b. If b is equal to 1, it means that the risk contained in the equity shares is equal to that found in the total portfolio in the market. A higher b shows share risk higher than in the total portfolio in the market. Similarly, riskless rate is equal to the rates found in class-one securities. The average market rate is close to the historical average rate of return in a large sample of securities.

Example : If k_r is 10%, k_m is 15%, and b is 0.8, then

$k_e = 0.10 + (0.15 - 0.10) \times 0.8 = 0.14 = 14\%$

4. Cost of Retained Earnings

Funds for investment come normally from the retained earnings. In case of domestic investment, the cost of such funds is not calculated separately because the market price of shares, which determines the cost of equity, embodies also the influence of retrained earnings. But in case of international investment, cost of retained earning is calculated separately because the earnings repatriated by the subsidiary to the parent company are subject to tax. Thus, the normal practice is to make tax adjustments in the cost of retained earnings. The after-tax cost of retained earnings

$$K_s = K_e(1 - t) \quad ...(7)$$

If the retained earnings involve transfer cost when they move from the parent to subsidiary, Eqn (7) will be written as

$$K_s = K_e(1 - t)(1 - C) \quad ...(8)$$

where C = transfer cost

Example :

An American subsidiary operating in India has 15.0 percent as cost of equity. The repatriation of retained earnings causes an incremental tax of 20.0 percent. The transfer cost in remittance is expected to be 2.0 percent. The cost of retained earnings will be:

$0.15(1 - .20)(1 - 0.02) = 0.1176 = 11.76\%$

5. Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is a common topic in the financial management examination. This rate, also called the discount rate, is used in evaluating whether a project is feasible or not in the net present value (NPV) analysis, or in assessing the value of an asset.

WACC is calculated as follows :

$$WACC = E/V \times R_e + D/V \times R_d \times (1 - \text{tax rate})$$

WACC is the proportional average of each category of capital inside a firm – common shares, preferred shares, bonds and any other long-term debt

where : R_e = cost of equity

R_d = cost of debt

E = market value of the firm's equity

D = market value of the firm's debt

V = E + D = firm value

E/V = percentage of financing that is equity

D/V = percentage of financing that is debt

WACC is simply a replica of the basic accounting equation: Asset = Debt + Equity.

WACC focuses on the items on the right hand side of this equation.

(Most companies do not have preferred shares. For simplicity, we only use common shares and bonds in our illustrations.)

A firm derives its assets by either raising debt or equity (or both). There are costs associated

with raising capital and WACC is an average figure used to indicate the cost of financing a company's asset base.

In determining WACC, the firm's equity value, debt value and hence firm value needs to be derived. This part is definitely not too difficult. You also need to find the cost of the equity and the cost of the debt.

6. Average and Marginal Cost of Capital

When a firm sets up a subsidiary and makes additional investment for this purpose and if the relative weight of different forms of capital and their cost remain constant even in respect of additional capital raised, the average and the marginal cost of capital are the same. But since these two variables change with raising of additional capital, marginal cost of capital is different from average cost of capital. Thus, while setting up a subsidiary, this factor needs to be considered, especially when the sources and the cost of capital change.

PROBLEMS

5. A company has the following capital structure.

Particulars	Rs.
12% Debentures	**26,00,000**
8% preferred stock	**20,000**
Share premium	**1,00,000**
Equity stock (5,00,000 shares of Rs. 50 each)	**25,00,000**

The equity stock is currently selling at Rs 60 per share and is expected to get the dividend of Rs. 4 stock holders anticipate that the equity stock divided will grow at a rate of 6% per annum in the near future. The company has a tax rate of 60%. From the above information you are required to calculate the cost of capital of the company.

Sol :

i) Cost of Debentures

$$K_d = \frac{I}{NP}\ (I - t)$$

Where,

I = Interest

NP = Net proceeds

t = Tax rate

$$I = 26,00,000 \times \frac{12}{100} = 3,12,000$$

$$\therefore \quad K_d = \frac{3,12,000}{26,00,000}(1 - 0.6) = 0.12 \times 0.4$$

$$= 0.048 \times 100 = 4.8\%$$

ii) Cost of Preference Capital

$$K_P = \frac{D}{NP} = 100$$

Where,

D = Annual preference dividend

NP = Net proceeds of preference shares

= 1,00,000 + 20,000

= 1,20,000

K_p = Cost of preference capital

D = 20,000 x 8% = 1,600

$\therefore$ D = 1600

$$K_P = \left[\frac{1600}{20,000+100,000} \times 100\right]$$

$$K_P = \frac{1600}{1,20,000} \times 100 = 1.33\%$$

iii) Cost of Equity Capital

$$K_P = \frac{D_1}{MP} + g$$

$$\therefore K_P = \frac{D_0(1+g)}{MP} + g$$

Where,

K_e = Cost of equity

g = Growth rate = 6%

MP = Market price = 60

D = Dividend rate = 4

$$K_e = \frac{D_0(1+g)}{MP} + g$$

$$K_e = \frac{4(1+0.06)}{60} + 6\% = 7.06 + 6\% = 13.06\%$$

Source of Funds	Amount (lakh) (i)	Proportion (i) S = (ii)	After Tax Cost of Capital (iii)	WACC (ii) x (iii)
Equity capital	25	25/51.2 = 0.488	13.06%	6.37%
Debentures	26	26/51.2 = 0.508	4.8%	2.44%
8% preference stock (S)	0.2	0.2/51.2 = 0.0039	1.33%	0.0052%
	51.2			8.815%

6. XYZ limited is in a tax bracket of 33%. For the following specific instruments, you are required to find the after-tax cost of capital,

i) The face value of a perpetual bond is Rs. 1000. If it carries a coupon of 9%. Find the post-tax cost of debt.

ii) The par value of a bond is Rs. 1,000. The coupon is 10% and the company issued it at Rs. 945. The floatation cost incurred is 3% and the bond's life is 8 years. Find the after-tax cost of debt.

iii) A preference share is sold for Rs. 100 today and is to be redeemed after four years at Rs. 118. The preference dividend is 11%. Find the cost of preference for the company.

iv) The equity shares of the company are currently traded at Rs. 126 per share. The latest dividend paid was Rs. 11 per share. If the dividend of the company are expected to grow at 7.5 percent. What would be the cost of equity for the firm ?

Sol :

Given that,

i) $K_i = \frac{90}{1000} = 0.09$

After tax $K_d = K_t (1 - t)$

$= 0.09 (1 - 0.33) \times 100$

$= 6.03\%$

ii) After tax cost of bond is,

$I = 100, P_n = 1000, P_0 = 945$

$$K_i = \frac{I + (P_n - P_0)/n}{(P_n + P_0)/2} = \frac{100 + (1000 - 945)/8}{(1000 + 945)/2}$$

$$= \frac{106.875}{972.5} = 0.1099 \text{ or } 10.99\%$$

$K_d = 10.99 (1 - 0.33)$

$= 7.36\%$

Note: Floatation costs should be adjusted to the projects cash flows,

iii) $P_0 = 100$

I – 11% of face value = 12.98 ($\therefore$ 11% of 118 = 12.98)

F = 118

n = 4

Cost of preference is,

$$K_P = \frac{I + \frac{(F - P_0)}{n}}{\frac{F + P_0}{2}} = \frac{12.98 + \frac{(118 - 100)}{4}}{\frac{118 + 100}{2}}$$

$$= \frac{17.48}{109} = 0.1604 \quad (\therefore \ 0.1604 \times 100 = 16.04\%)$$

$= 16.04\%$

iv) Cost of equity is,

$$K_0 = \frac{D_1}{MP} + g = \frac{D_0(1+g)}{MP} + g$$

D_0 = 11

g = 0.075

MP = 126

$$= \frac{11(1.075)}{126} + 0.078$$

= 0.094 + 0.075

= 0.169 or 16.9%

7. The book-values and market-values of various sources of capital for a firm along with their costs (percentage) are given below,

Source of finance	Book-values Rs.	Market-values Rs.	Cost (Percentage)
Equity share capital	**6,00,000**	**9,00,000**	**16**
Retained earnings	**2,00,000**	**3,00,000**	**16**
Preference capital	**3,00,000**	**3,80,000**	**11**
Debt	**5,50,000**	**6,25,000**	**9**

Using the above information, you are required to,

i) Find WACC based on book-value weights and

ii) Find WACC based on market-value weights assuming a tax rate of 33% for the company.

Sol :

i) Computation of WACC (Book-value weights)

Source of Capital (1)	Amount (2)	Weight (3)	After Tax Cost (4)	Weighted Cost of Capital (5) = (3) x (4)
Equity share capital	6,00,000	0.363	16	5.808
Retained earnings	2,00,000	0.121	16	1.936
Preference share	3,00,000	0.182	11	2.002
capital Debentures	5,50,000	0.333	9	2.997
Total	**16,50,000**			**12.743**

Weighted Average cost of capital = 12.74%

Note: Calculation of weight

$\frac{6,00,000}{16,50,000} = 0.363$ $\frac{3,00,000}{16,50,000} = 0.182$

$\frac{2,00,000}{16,50,000} = 0.121$ $\frac{5,50,000}{16,50,000} = 0.333$

ii) Computation of weighted average cost of capital

Computation of WACC Market-value weights

Source of Capital (1)	Amount (2)	Weight (3)	After Tax Cost (4)	Weighted Cost of Capital (5) = (3) x (4)
Equity share capital	9,00,000	0.408	10.72	4.373
Retained earnings	3,00,000	0.136	10.72	1.458
Preference share	3,80,000	0.172	7.37	1.268
Capital Debentures	6,25,000	0.283	6.03	1.706
	22,05,000			**8.805**

5.5 INTERNATIONAL PORTFOLIO MANAGEMENT

Q15. Define International Portfolio Management. What are the factors affecting International Portfolio.

Ans :

Meaning

Global Portfolio Management, also known as International Portfolio Management or Foreign Portfolio Management, refers to grouping of investment assets from international or foreign markets rather than from the domestic ones. The asset grouping in GPM mainly focuses on securities. The most common examples of Global Portfolio Management are -

- Share purchase of a foreign company
- Buying bonds that are issued by a foreign government
- Acquiring assets in a foreign firm

Factors Affecting Global Portfolio Investment

Global Portfolio Management (GPM) requires an acute understanding of the market in which investment is to be made. The major financial factors of the foreign country are the factors affecting GPM. The following are the most important factors that influence GPM decisions.

(i) Tax Rates

Tax rates on dividends and interest earned is a major influencer of GPM. Investors usually choose to invest in a country where the applied taxes on the interest earned or dividend acquired is low. Investors normally calculate the potential after-tax earnings they will secure from an investment made in foreign securities.

(ii) Interest Rates

High interest rates are always a big attraction for investors. Money usually flows to countries that have high interest rates. However, the local currencies must not weaken for long-term as well.

(iii) Exchange Rates

When investors invest in securities in an international country, their return is mostly affected by -

- The apparent change in the value of the security.
- The fluctuations in the value of currency in which security is managed.

Investors usually shift their investment when the value of currency in a nation they invest weakens more than anticipated.

Q16. What are the objectives of International Portfolio Management?

Ans : **(Imp.)**

The objective of portfolio management is to invest in is securities in such a way that one maximizes returns and minimizes risks in order to achieve one's investment objective.

A good portfolio should have multiple objectives and achieve a sound balance among them. Any one objective should not be given undue importance at the cost of others.

1. Stable Current Return

Once investment safety is guaranteed, the portfolio should yield a steady current income. The current returns should at least match the opportunity cost of the funds of the investor. What we are referring to here current income by way of interest of dividends, not capital gains.

2. Marketability

A good portfolio consists of investment, which can be marketed without difficulty. If there are too many unlisted or inactive shares in your portfolio, you will face problems in encasing them, and switching from one investment to another. It is desirable to invest in companies listed on major stock exchanges, which are actively traded.

3. Tax Planning

Since taxation is an important variable in total planning, a good portfolio should enable its owner to enjoy a favorable tax shelter. The portfolio should be developed considering not only income tax, but capital gains tax, and gift tax, as well. What a good portfolio aims at is tax planning, not tax evasion or tax avoidance.

4. Appreciation in the value of capital

A good portfolio should appreciate in value in order to protect the investor from any erosion in purchasing power due to inflation. In other words, a balanced portfolio must consist of certain investments, which tend to appreciate in real value after adjusting for inflation.

5. Liquidity

The portfolio should ensure that there are enough funds available at short notice to take care of the investor's liquidity requirements. It is desirable to keep a line of credit from a bank for use in case it becomes necessary to participate in right issues, or for any other personal needs.

6. Safety of the investment

The first important objective of a portfolio, no matter who owns it, is to ensure that the investment is absolutely safe. Other considerations like income, growth, etc., only come into the picture after the safety of your investment is ensured.

Q17. Explain the structure of Investment Portfolio.

Ans : **(Imp.)**

At the heart of the investment management industry are the managers who invest and divest client investments. A certified company investment advisor should conduct an assessment of each client's individual needs and risk profile. The advisor then recommends appropriate investments.

1. Asset allocation

The different asset class definitions are widely debated, but four common divisions are stocks, bonds, real-estate and commodities. The exercise of allocating funds among these assets (and among individual securities within each asset class) is what investment management firms are paid for. Asset classes exhibit different market dynamics, and different interaction effects; thus, the allocation of money among asset classes will have a significant effect on the performance of the fund.

Some research suggests that allocation among asset classes has more predictive power than the choice of individual holdings in determining portfolio return. Arguably, the skill of a successful investment manager resides in constructing the asset allocation, and separately the individual holdings, so as to outperform certain benchmarks (e.g., the peer group of competing funds, bond and stock indices).

2. Long-term returns

It is important to look at the evidence on the long-term returns to different assets, and to holding period returns (the returns that accrue on average over different lengths of investment). For example, over very long holding periods (eg. 10+ years) in most countries, equities have generated higher returns than bonds, and bonds have generated higher returns than cash. According to financial theory, this is because equities are riskier (more volatile) than bonds which are themselves more risky than cash.

3. Diversification

Against the background of the asset allocation, fund managers consider the degree of diversification that makes sense for a given client (given its risk preferences) and construct a list of planned holdings accordingly. The list will indicate what percentage of the fund should be invested in each particular stock or bond. The theory of portfolio diversification was originated by Markowitz (and many others) and effective diversification requires management of the correlation between the asset returns and the liability returns, issues internal to the portfolio (individual holdings volatility), and cross-correlations between the returns.

Q18. State the drawbacks of international portfolio management.

Ans :

Global Portfolio Management has its share of drawbacks too. The most important ones are listed below.

(i) Unfavorable Exchange Rate Movement

Investors are unable to ignore the probability of exchange rate changes in a foreign country. This is beyond the control of the investors. These changes greatly influence the total value of foreign portfolio and the earnings from the investment. The weakening of currency reduces the value of securities as well.

(ii) Frictions in International Financial Market

There may be various kinds of market frictions in a foreign economy. These frictions may result from Governmental control, changing tax laws, and explicit or implicit transaction costs. The fact is governments actively seek to administer international financial flows. To do this, they use different forms of control mechanisms such as taxes on international flows of FDI and applied restrictions on the outflow of funds.

(iii) Manipulation of Security Prices

Government and powerful brokers can influence the security prices. Governments can heavily influence the prices by modifying their monetary and fiscal policies. Moreover, public sector institutions and banks swallow a big share of securities traded on stock exchanges.

(iv) Unequal Access to Information

Wide cross-cultural differences may be a barrier to GPM. It is difficult to disseminate and acquire the information by the international investors beforehand. If information is tough to obtain, it is difficult to act rationally and in a prudent manner.

Q19. Explain the procedure for Measuring Total Return for Foreign Portfolio Investment

Ans :

Investors are able to attain specified rate of return on their foreign investment rather than domestic investment so as to minimize risk involved in it, this strategy of diversifying investments whether portfolio holdings or securities is usually termed as "International Diversification".

Investors can also diversify portfolio holdings domestically as it is diversified internationally in order to minimize risk. Investors minimizes portfolio risk by investing in those securities that are less correlated in the portfolio then the risk associated with the portfolio is also less.

Different factors influencing security returns such as economic, political, psychological factors are comparatively less correlated among different countries compared to individual country. Thus, a special dimension of international diversification is 'portfolio risk diversification'.

Comparatively low degree of correlations is helpful for the investors to minimize more amount of portfolio risk when diversified internationally instead of domestically. International correlation structure is found to be more important to increase returns from international diversification by reducing risk to a greater extent.

Measurement of Returns

Probability Concept

Finance manager cannot actually predict about the future returns obtained from the investment made but we does it on the basis of probabilities. "Probability" means chance of occurrence of various outcomes or happening of an event from various outcomes.

For instance, by seeing the cloudy weather there exists 70 percent chances for rain and 30 percent chances for not raining on a particular day. Then the probability for raining is 70 percent and probability for not raining is 30 percent, the total probability here is equal to 100 percent or 1. Thus, the desire outcome derived from related probabilities is called as 'probability distributions'.

Probability distribution is of two types,

1. Discrete Probability Distribution

Deals with finite/limited number of outcomes.

2. Continuous Probability Distribution

Deals with infinite/unlimited number of outcome.

Discrete probability distribution is commonly used for practical applications because, it is easy to use as it consists of finite number of elements. Continuous probability distribution is used for most realistic description of outcome.

Expected Return From an Individual Investment

Expected return refers to the mean of probability distribution and is represented in the equation as 'probability weighted average of outcome' then the expected return.

$$\bar{B} = P_1B_1 + P_2B_2 + P_3B_3 + ... + P_xB_x$$

However, its simplified equation is,

$$\bar{B} = \sum_{x=0}^{n} P_xB_x$$

Expected Returns from International Investment

Exchange rate change has an influence on the evaluation of expected returns under international investment. Thus, the determination of foreign security returns with respect to home-country's currency is as follows,

$$1 + R_{RC} = [1 + (T_1 - T_0 + I) / T_0] \times (1 + r)$$

Where,

T_1 = Host country's currency value of security during time period 0, zero 't_0'

T_0 = Host country's currency value of security during the time period 0 t_1

I = Income from the dividend/interest

r = Changes in the exchange rate.

PROBLEMS

8. Find the expected return.

a) when there is 30 percent probability for an outcome of $500

b) 50 percent probability for an outcome of $700 and

c) 10 percent probability for an outcome of $800.

Sol :

$\bar{B} = P_i B_] + P_2 B_2 + P_3$ [Note: $P_{\{} = 30\%$, $P_2 = 50\%$, $P_3 = 10\%$, $B_1 = \$500$, $B_2 = \$700$, $B_3 = \$800$] = [0.3 x 500] + [0.5 x 700] + [0.1 x 800]

$\bar{B}$ = $ 580

9. Calculate the returns in terms of home country currency when the present value of security with respect to host country's currency is $ 200 and increases after two years to $ 210. Interest rate in the current year is $10 and dollar appreciates by 5 percent.

Sol :

Given that,

T_1 = $ 210

T_0 = $ 200

I = $ 10

r = 0.05 [exchange rate changes]

R_{HC} = ?

Calculation of Returns in Terms of Home Country's Currency

R_{HC} = [{ 1 + (210 - 200 + 10) /200} x [1 + 0.05}] – 1

= 0.155 = 15.5%

$\therefore R_{hc}$ = 15.5%

Portfolio Return

Weighted average of the expected return from different securities involved in the portfolio is referred as "Portfolio Return". The portfolio return in two security portfolio model is calculated as,

$$T_P = T_R H_R + T_S H_S$$

Here,

T = Return

H = Relative share of investment

R and S = Two securities.

10. Indian investor invests in two bonds namely US bonds & Euro bonds. He invests in US bonds with a face value of $20,000 having $ 1000 as interest and market price for bonds was $21,000 during the year. He invests in Euro bonds with a face value of $ 40,000 having $ 2000 as interest and market price for bonds was $40,500 in that year. Euro is depreciated by 3 percent in this duration, find out the portfolio return.

Sol :

Formula

$$R_{HC} = [[1 + (T_1 - T_n + 1) / T_0 + 1) / T_0] \times (1 + r) - 1]$$

T_1 = $21,000 and $40,500

T_0 = $20,000 and $40,000

I = $1000 and $2000

r = 0.03 and 0.02

a) [{1 + ((21,000 - 20,000) + 1000)/20,000} x (1 + 0.02) - 1] x 0.25

= 0.03050

b) [{1 + (40,500 - 40.000 + 2000)/40,000} x (1 + 0.03)- 1] x 0.75

= 0.07078

Portfolio return (T_P) = $T_R H_R + T_S H_S$

= 0.03050 + 0.07078 = 0.10128

= 0.10128 x 100 = 10.13%

5.6 INTERNATIONAL FINANCING

Q20. What is International Financing ? Explain the forms of International Financing ?

Ans :

The act of providing funds for business activities, making purchases or investing. Financial institutions and banks are in the business of financing as they provide capital to businesses, consumers and investors to help them achieve their goals.

There is a large variety of financing techniques that businesses and consumers can use to receive financing; these techniques range from IPOs to bank loans. The use of financing is vital in any economic system as it allows consumers to purchase products out of their immediate reach, like houses, and businesses to finance large investment projects.

Forms

A) Long Term Financing

B) Short- Term Financing

A) Long Term Financing

A business requires funds to purchase fixed assets like land and building, plant and machinery, furniture etc. These assets may be regarded as the foundation of a business. The capital required for these assets is called fixed capital. A part of the working capital is also of a permanent nature. Funds required for this part of the working capital and for fixed capital is called long term finance.

Purpose of Long Term Finance. Long term finance is required for the following purposes :

1. To Finance fixed assets

Business requires fixed assets like machines, Building, furniture etc. Finance required to buy these assets is for a long period, because such assets can be used for a long period and are not for resale.

2. To finance the permanent part of working capital

Business is a continuing activity. It must have a certain amount of working capital which would be needed again and again. This part of working capital is of a fixed or permanent nature. This requirement is also met from long term funds.

3. To finance growth and expansion of business

Expansion of business requires investment of a huge amount of capital permanently or for a long period.

B) Short-term Financing

Short term financing is essentially to provide capital deficit businesses funds for a short term period of a year or less. These funds are usually for businesses to run their day-to-day operations including payment of wages to employees, inventory ordering and supplies

An example of short tern financing could be when a firm places an order for raw materials, it pays with finance and anticipates to recoup this finance by selling these goods over the period of a year.

In contrast long-term financing decisions are involved when a firm purchases a special machine that will reduce operating costs over, say, the next five years.

Short term borrowing should be used for working capital requirements for day to day operations of a business. Industries with seasonal peaks and troughs and those engaged in international trade will be heavy users of short term borrowing finance.

Short-Term Loans

Small businesses most often need short-term loans instead of long-term debt financing. Most term loans, classified as short-term, usually have a maturity of one year or less. They must be repaid to the lender within one year. Most short-term loans are often repaid much more quickly than that, often within 90-120 days. Term loans with short maturities can help you meet an immediate need for financing without requiring you to make a long term commitment.

Q21. Explain the factors determining long-term financial requirements.

Ans :

The amount required to meet the long term capital needs of a company depend upon many factors. These are :

a) Nature of Business

The nature and character of a business determines the amount of fixed capital. A manufacturing company requires land,

building, machines etc. So it has to invest a large amount of capital for a long period. But a trading concern dealing in, say, washing machines will require a smaller amount of long term fund because it does not have to buy building or machines.

b) Nature of goods produced

If a business is engaged in manufacturing small and simple articles it will require a smaller amount of fixed capital as compared to one manufacturing heavy machines or heavy consumer items like cars, refrigerators etc. which will require more fixed capital.

c) Technology used

In heavy industries like steel the fixed capital investment is larger than in the case of a business producing plastic jars using simple technology or producing goods using labour intensive technique.

Q22. Explain the Sources of Long term Finance.

Ans :

The main sources of long term finance are as follows :

1. Shares

These are issued to the general public.

These may be of two types :

i) Equity and

ii) Preference.

The holders of shares are the owners of the business.

2. Debentures

These are also issued to the general public. The holders of debentures are the creditors of the company.

3. Public Deposits

General public also like to deposit their savings with a popular and well established company which can pay interest periodically and pay-back the deposit when due.

4. Retained earnings

The company may not distribute the whole of its profits among its shareholders. It may retain a part of the profits and utilize it as capital.

5. Term loans from banks

Many industrial development banks, cooperative banks and commercial banks grant medium term loans for a period of three to five years.

6. Loan from financial institutions

There are many specialized financial institutions established by the Central and State governments which give long term loans at reasonable rate of interest. Some of these institutions are: Industrial Finance Corporation of India (IFCI), Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Unit Trust of India (UTI), State Finance Corporations etc.

Q23. Explain the methods of Short Term financing sources.

Ans :

There are many methods for which a firm can seek short terms financing some of these include:

1. Overdrafts

An overdraft occurs when some one withdraws from a bank account and they exceed the available balance. In this situation a person is said to be “overdrawn”.

2. Short-term loans

Short-term loans can have maturations of as little as 90-120 days or as long as one to three years, depending on the purpose of the loan. In general, banks require very specific repayment plans for their short-term loans.

For instance, if you took out a loan to even out your cash flow until your customers paid you, the lender would expect you to repay the loan as soon as you receive your money. In the case of short-term loans for inventory purposes, you would pay off your debt when you sell your inventory.

3. Bills of exchange

An unconditional order issued by a person or business which directs the recipient to pay a fixed sum of money to a third party at a future date. The future date may be either fixed or negotiable. A bill of exchange must be in writing and signed and dated also called draft.

4. Promissory notes/commercial paper

Commercial paper is an unsecured promissory note with a fixed maturity of 1 to 270 days. Commercial Paper is a money-market security issued (sold) by large banks and corporations to get money to meet short term debt obligations (for example, payroll), and is only backed by an issuing bank or corporation's promise to pay the face amount on the maturity date specified on the note.

Since it is not backed by collateral, only firms with excellent credit ratings from a recognized rating agency will be able to sell their commercial paper at a reasonable price. Commercial paper is usually sold at a discount from face value, and carries higher interest repayment rates than bonds.

5. Inventory loan

Inventory loan financing (also known as "Flooring") is the leveraging of inventory using the value of the financed equipment or stock as collateral for the loan. Lenders want to make sure their loans are secure, so this method will improve the chances of getting financed drastically.

Inventory loan financing is a method commonly used when a distributor or reseller needs additional credit and payment terms longer than 30 days in order to maintain a complete stock of inventory for immediate customer availability. Lenders and savvy business people realize that running out of inventory will do nothing, but drive customers away from a business. That is why more and more lenders are willing to allow a business to use their current stock of inventory as collateral for future loans.

6. Letters of credit

Letters of credit are often used in international transactions to ensure that payment will be received. Due to the nature of international dealings including factors such as distance, differing laws in each country and difficulty in knowing each party personally, the use of letters of credit has become a very important aspect of international trade. The bank also acts on behalf of the buyer (holder of letter of credit) by ensuring that the supplier will not be paid until the bank receives a confirmation that the goods have been shipped.

7. Factoring

Factoring is a financial transaction whereby a business job sells its accounts receivable (i.e., invoices) to a third party (called a factor) at a discount in exchange for immediate money with which to finance continued business. Factoring differs from a bank loan in three main ways.

First, the emphasis is on the value of the receivables (essentially a financial asset), not the firm's credit worthiness. Secondly, factoring is not a loan – it is the purchase of a financial asset (the receivable). Finally, a bank loan involves two parties whereas factoring involves three.

Q24. Define ADR and GDR. Explain the process of issuing ADR's and GDR's.

Ans : **(Sep.-20)**

American Depositary Receipt

An American depositary receipt (ADR) is a negotiable certificate issued by a U.S. depositary bank representing a specified number of shares - often one share - of a foreign company's stock. The ADR trades on U.S. stock markets as any domestic shares would.

ADRs offer U.S. investors a way to purchase stock in overseas companies that would not be available otherwise. Foreign firms also benefit, as ADRs enable them to attract American investors and capital without the hassle and expense of listing on U.S. stock exchanges.

Process

- The domestic company, already listed in its local stock exchange, sells its shares in bulk to a U.S. bank to get itself listed on U.S. exchange.
- The U.S. bank accepts the shares of the issuing company. The bank keeps the shares in its security and issues certificates (ADRs) to the interested investors through the exchange.
- Investors set the price of the ADRs through bidding process in U.S. dollars. The buying and selling in ADR shares by the investors is possible only after the major U.S. stock exchange lists the bank certificates for trading.
- The U.S. stock exchange is regulated by Securities Exchange Commission, which keeps a check on necessary compliances that need to be complied by the foreign company.

Global Depositary Receipt

A global depositary receipt (GDR) is a bank certificate issued in more than one country for shares in a foreign company. GDRs list shares in two or more markets, most frequently the U.S. market and the Euromarkets, with one fungible security.

GDRs are most commonly used when the issuer is raising capital in the local market as well as in the international and US markets, either through private placement or public stock offerings. A global depositary receipt (GDR) is very similar to an American depositary receipt (ADR), except an ADR only lists shares of a foreign country in the U.S. markets.

Following are the simple steps of issuing GDRs :

1st Step

To find the Depository bank

Depository bank has only right to issue the GDRs. So, it is necessary to find depository bank in USA and other European countries.

2nd Step

Issue the Shares to Depository bank

Shares can not issued to foreign investors. But shares are issued to depository bank and depository bank will accept the shares of Indian companies as the custodian of foreign investors.

3rd Step

Deposit the fees

For issuing GDRs, either investors or Company has to deposit the fees for issuing the certificate named global depository receipt.

4th Step

Issue of GDRs and Record

Depository bank has right to issue one GDR certificate for 2 to 10 shares. The issue of GDRs to those investors who will pay the amount of shares of Indian companies. After this, it will be assumed that USA or other foreign countries' investors have acquired the shares of Indian companies. Indian company gets money of shares through depository banks. On the other side, foreign investors' name registered and they will get dividend through this bank in USA Dollar. Not only Indian companies but many other developing countries' companies are using same procedure for getting fund through GDRs. This year, a Kuwaiti investment company successfully issued shares in the form of Global Depository Receipts (GDRs) to foreign investors. After issuing GDRs, these shares can deal in any foreign stock exchange and GDRs will be one of the security type in stock exchange list of stocks.

Q25. What are the differences between ADR and GDR ?

Ans :

S.No.	ADR	S.No.	GDR
1.	American depository receipt (ADR) is compulsory for non-us companies to trade in stock market of USA.	1.	Global depository receipt (GDR) is compulsory for foreign company to access in any other country's share market for dealing in stock.
2.	ADRs can get from level 1 to level III.	2.	GDRs are already equal to high preference receipt of level II and level III.
3.	ADRs up to level -I need to accept only general condition of SEC of USA.	3.	GDRs can only be issued under rule 144 A after accepting strict rules of SEC of USA.
4.	ADR is only negotiable in USA.	4.	GDR is negotiable instrument all over the world
5.	Investors of USA can buy AD Rs from New york stock exchange (NYSE) or NASDAQ	5.	Investors of UK can buy GDRs from London stock exchange and luxemberg stock exchange and invest in Indian companies without any extra responsibilities

5.6.1Equity Financing

Q26. Define Equity Financing. Explain the factors affecting Equity Financing.

Ans :

Equity financing is money acquired from the small business owners themselves or from other investors. Stockholders purchasing shares in a corporation, for instance, create equity financing, as do angel investors who provide funding. Small business owners may invest their own funds into their businesses, funds gleaned from inheritance, savings, or even the sale of personal assets which then serves as equity financing for the business.

The equity, or ownership position, that investors receive in exchange for their funds usually takes the form of stock in the company. In contrast to debt financing, which includes loans and other forms of credit, equity financing does not involve a direct obligation to repay the funds. Instead, equity investors become part-owners and partners in the business, and thus are able to exercise some degree of control over how it is run.

Since creditors are usually paid before owners in the event of business failure, equity investors accept more risk than debt financiers. As a result, they also expect to earn a higher return on their investment. But because the only way for equity investors to recover their investment is to sell the stock at a higher value later, they are generally committed to furthering the long-term success and profitability of the company. In fact, many equity investors in start up ventures and very young companies also provide managerial assistance to the entrepreneurs.

Factors

The following are the factors affecting international equity returns,

1. Macro-economic variables which affects the entire environment of the economy wherein the company which issues the security carry outs its business.
2. Changes in the exchange rates of the currency of the country which issues the stock and the currency of the other countries in which customers, suppliers and investors of the company stay.

3. Industrial structure of the country is which the company carry out its operations.

1. Macroeconomic Factors

Solvik in the year 1984 analyzed the impact of exchange rate changes, differentials in interest rate, the level of domestic interest rate and changes in the domestic inflation expectations and concluded that international monetary variables has a less impact on equity returns when compared to domestic variables.

One more study was conducted by Asprem in the year 1983. According to this study, the changes in industrial production, employment, imports level of interest rates and inflation measure showed only a small proportion of the change of equity returns for ten European countries. But it has been observed that relatively more variation was shown by international market index.

Thus, these two studies examined the impact of different macroeconomic variables on international equity returns.

2. Exchange Rates

Eun and Resnick in the year 1988 observed that the cross-correlations between the important stock markets and exchange market is comparatively less, but positive.

This signifies that exchange rate changes increases the movements in the stock markets of the prescribed country and other countries at the same time.

An another study which was conducted by Adler and Simon in 1986 analyzed how sample of foreign equity and bond index returns affects the exchange rate changes.

This study revealed that exchange rate changes represented a significant part of the variability of foreign bond indexes when compared to foreign equity indexes. But these foreign equity market was more subjected to exchange rate changes when compared to foreign bond market. This study recommended that it may be advantageous to hedge protect foreign stock investment over exchange rate uncertainty.

3. Industrial Structure

Many different studies were conducted on the correlation structure of national equity markets.

One of the study conducted by Roll in 1992. found that, industrial structure of the country is a significant aspect which describes a major part of the correlation structure of international equity index returns. It also states that huge portion of stock market variability is dealt with industry factors instead of exchange rate changes.

Q27. Explain the advantages and dis-advantages of equity financing.

Ans :

Advantages

1. No repayment

The major advantage of taking the route of equity to raise funds for the business is that the promoter is not bound to repay any amount. The investor buys a portion of the company, and gets the proportionate share of the profits or loss, as the case may be. Investors wishing to exit will have to sell their shares to someone else, and the company is not bound to repay the investment. This in sharp contrast to taking the debt route to finance investment, where the promoter will have to repay the amount and interest in fixed monthly installments, irrespective of whether the investment has borne fruit or not.

2. Immunity

Since investors share profits and loss, equity financing protects the company during times of economic downturn and limits the promoter's loss. A public listed company is a separate entity distinct from its promoter, and the promoter receives payment paid for the effort put in just as all other employees receive salaries, and shares the profit or loss, just like all other investors.

3. Good credit ratings

The involvement of many investors or a high equity base improves the credit rating of the company, for this gives the impression of a venture backed by many investors, and having sufficient funds to compensate debtors if things go bad.

4. Better performance

The presence of ever-watching investors keeps the management of the company on their toes to perform at their best.

5. Better corporate governance

The law requires public listed companies to maintain impeccable records, hold regular general body and director meetings, audit their accounts, and follow other standard practices. This increases the quality of corporate governance and instills professionalism.

6. Easy exit

Raising money through equity by listing in the stock exchange makes it easy for the promoter to off-load his holdings to any other interested investor and quit the company without closing down the business. Similarly, any investor can recoup his or her investment at will, unlike fixed term debts.

Disadvantages

1. Loss of decision making powers

While raising equity is a good way to exit the business, it becomes difficult for the interested promoter to retain control of the business. All shareholders of an enterprise have a say in electing the director board, including the CEO, and all major investments require the approval of a majority of the shareholders. The shareholders have the right to question the management regarding any aspect of the company.

2. Loss of control

If the promoter does not match the investments made by other investors, there is a chance of other investors acquiring more than 51 percent of the company shares and taking control of the company, forcing the promoter out.

3. Regulatory compliance

The strict adherence to rules and regulations, holding of meetings, filing reports and the like increase the standards of corporate governance but also takes up valuable time, energy, and resources that could be best spend in improving the company core process.

4. Higher outgo

While profit and loss sharing protects the company during bad economic times and difficult cash flow periods, it also leads to a higher outgo to the investors during good economic times. The profit sharing in is proportion to the investment made by each investor, including the promoter, and the promoter would have to forego of a much higher amount when compared to repayment of bank loan with interest.

5. Life long obligation

Taking in investors is a permanent obligation, and the investors have a right to stay put and take their cut of profits forever. This is in contrary to debt financing when all obligations end when the loan plus interest is repaid in full.

5.6.2 Bond Financing

Q28. Explain the concept of Bond Financing.

Ans :

Bond financing is borrowing for a specific tenure. Bonds are issued with the purpose of raising money. Potential investors buy bonds and there is a particular mature value or face value of these bonds.

Many bonds are issued through the process of underwriting. During the process of underwriting, one or many banks, create a syndicate and buy an entire issue of the bond from an issuer. Then the bonds are again resold to the investors.

Bond financing is a loan in the form of security. While financing a bond, a bond issuer is basically the borrower as it borrows money from the market. Bonds are debt instruments and bond

financing is done by a large number of issuers across the globe. There are certain strict regulations to financing bonds.

Bond issuers can be categorized into categories as follows:

1. Supernational agencies

Issue super-national bonds by agencies like European Investment Bank.

2. National Governments

Often govern-ments issue bonds in their own currency of transaction. Governments also issue sovereign bonds in foreign currencies.

3. Sub-sovereign, provincial, state or local authorities or local municipalities

Across United States bonds issued by state and local governments are called Municipal bonds.

4. Government sponsored entities

Different government sponsored entities follow the path of bond financing.

5. Corporate bonds or bonds issued by companies

Bond financing by different companies.

6. Special purpose vehicles

There are companies established with an aim of accumulating asset backed securities.

While bond financing, the issuing authority specifies about the following :

1. Principal amount or face amount

The amount invested by an investor in a particular bond.

2. Issue price

The price at which the bond is offered.

3. Maturity date

The date in which the issuer repays the specified maturity amount.

4. Coupon and coupon dates

Coupon resembles the interest rate and coupon date is the date when the issuer provide interest to the investor.

5. Rate of interest

Bonds can be of fixed and floating rates of interest. Covenants or indenture : Documents that highlight rights of the bondholders.

Several types of bond financing have attained overwhelming success. The number of bondholders grows daily across the globe.

Q29. Explain the forms/types of bonds.

Ans :

1) Straight Bonds

These bonds have fixed maturities and carry a fixed rate of interest. Straight bonds are in paid by amortization or in a lump sum at the maturity date. The amortization method refers to the retirement of a long term debt by making a of equal periodic payments.

These periodic payments include both interest and principal. Alternatively, a borrower may retire his or her bonds by reducing the face value of the bonds at maturity. Under this method, a fund interest on the fact value of the bonds is paid at regular interest.

Fixed-rate bonds are technically unrecured, debenture bonds, because almost all of them are not incured by any specific property of the borrower. Because of this, debenture bondholders become general creditors in the event of default they look to the nature of the borrower's assets, its earning power and its general credit strength.

2) Floating-rate Notes

These notes are frequently called floating-rate bonds. The rate of return on these notes is adjusted as regular intervals, usually every 6 months, to reflect changes in short-term market rates. Because one of their main objectives is to provide dollar capital for non-US banks, more floating-rate notes are issued in dollars.

Like other international bonds, floating-rate notes are issued in denominations of $1,000 cash. They usually carry a margin of 1/4 percent above the LIBOR and this margin is normally adjusted every 6 months. The link between the rate is return on floating-rate

notes and LIBOR rates is intended to protect the investor against capital loss.

3) Convertible Bonds

Bonds of this type are convertible into parent common stock. The conversion price is usually fixed at a certain premium above the market price of the common stock on the date of the bond issue. Investors are free to convert their fixed-income securities into common stock at any time before the conversion privilege expires the borrowing company is obliged to issue new stock for the purpose.

The convertible provision is designed to increase the marketability of fixed-rate Eurobonds. Convertible bonds provide investors with a steady income and in opportunity to participate in rising stock prices. Thus, their interest rates have been 1.5 to 2 percent below those on fixed-rate bonds. Because international investors are inflation-conscious, they prefer convertible bonds, which maintain the purchasing power of money.

4) Bonds with Warrants

Some international bonds are issued with warrants. A warrant is an option to buy a stated number of common shares at a stated price during a prescribed period. Warrants pay tax dividends, have no voting rights and become worthless at expiration unless the price of the common stock exceeds the exercise price. Convertible Eurobonds do not bring in additional funds. When they are converted, common stock increases and the convertible securities are retired. When warrants are exercised, common stock and cash increase simultaneously.

5) Euro Convertible Bonds

Bonds that give the holders of Euro bonds to have the instruments converted into a wide variety of options such as the call option for the issuer and the put option for the investor, which makes redemption easy are called 'Euro-convertible bonds'. A Euro-convertible bond essentially resembles the Indian convertible debenture but comes with numerous options attached.

Similarly, a Euro-convertible bond is an easier instrument to market than equity. This is because it gives the investor an option to retain his investment as a pure debt instrument in the event of the price of the equity share falling below the conversion price or where the investor is not to sure about the prospects of the company.

6) Currency Option Bonds

The holders of currency option bonds are allowed to receive their interest income in the currency of their option from among two or three predetermined currencies at a predetermined exchange rate. The original bond contract contains the currencies of choice and the exchange rates. The currency option enhances the exchange guarantee for the investor."

Thus, the investor will make some gain if all currencies included in the contract do not depreciate against the desired currency.

7) Currency Cocktail Bonds

Bonds denominated in a standard "currency basket" of several different currencies are called currency cocktail bonds. A number of these bonds have been developed to minimize or hedge foreign-exchange risk associated with single-currency bonds. Some popular forms of such bonds include special drawing rights and euros.

The currency diversification provided by these bonds can be replicated by individual investors. Thus, currency cocktail bonds have never gained wide acceptance with Euro market borrowers.

8) Other Bonds

A major portion of other bonds consists of zero-coupon bonds, which provide all of the cash payment (interest and principal) when they mature. These bonds do nor pay periodic interest, but are sold at a deep discount from their face value. The return to the investor is the excess of the face value over the market price.

Zero-coupon bonds have several advantages over conventional bonds. First, there is immediate cash inflow to the issuing company but no periodic interest to pay. Second, a big tax advantage exim for the issuing company, because any discount from the maturity value may be amortized for tax purposes by the company over the life of the bond.

Q30. Explain the advantages of Bond Financing.

Ans :

Advantages

1. Fixed Interest Rate

Most banks only offer adjustable rate loans that can expose your organization to substantially increased loan payments if interest rates rise. With bond financing, your interest rate is fixed for the term of the loan. Budgeting is simplified by knowing interest and principal payments are fixed for the entire term of the loan. Concern about rising interest rates is eliminated.

2. Long-term Loan, Fully Amortized

Many bank loans are for only three to five years, with a large balloon payment due at the end of the term. This means you must refinance your loan at a later date. If the financial position of your organization has changed at the time, or if interest rates have risen, you might not be able to refinance. Why expose your organization to this risk?

Most bond issues are fully amortized over a five-to 20-year period, depending on your needs. Level debt service aids in budgeting, and ensures that the loan can eventually be retired without the hassle of refinancing every three to five years.

3. Open-Ended Mortgage

If you need more money, most banks will require you to refinance your old loan. This could mean higher market interest rates, and certainly new loan fees for refinancing your existing loan.

With bond financing, the mortgage documents allow your organization to borrow additional sums at later dates without disturbing the original loan or adding financing costs to previous loans. This is especially important for growing organizations that anticipate needing future funds for expansion.

4. Liberal Prepayment Provisions

Many banks have prepayment penalties written into their commercial loan contracts. This can make it unattractive to use excess cash to pay down your loan. Under the bond program, prepayment of any amount of principal with unborrowed funds is allowed without penalty.

You can lower the effective interest rate on your loan by specifying prepayment of the longer-term bonds, which pay higher interest rates than the shorter-term bonds. Then, you may also lower your normal loan payments accordingly.

They do have some limitations on prepayment of bonds with funds borrowed specifically for refinancing during the first three years of the loan. This gives some assurance to the bondholders that they will have their investment for a reasonable duration.

5. Larger Projects

Many banks are reluctant to lend money to nonprofit institutions, especially for multimillion dollar projects. Banks can also require personal guaranties from individuals associated with your organization. Furthermore, banks operate under regulatory guidelines, which usually require the borrower to pledge large amounts of collateral with respect to the loan size.

The loan size to collateral value ratio is an extremely liberal 70% to 75% (many banks are at 50%). This means the project of your dreams can be within reach, without personal guaranties to help secure the financing.

5.6.3 Parallel Loans

Q31. Write in detail about Parallel Loans?

Ans :

An arrangement in which two companies in different countries borrow offsetting amounts in each other's currency and each repays it at a specific

future date in its domestic currency. Such a loan, often between a company and its foreign subsidiary, eliminates the risk of loss from exchange rate fluctuations.

A parallel loan is often known as a back-to-back loan or credit swap loan. Under this arrangement, the amount of the loan moves within the country but it serves the purpose of a cross-border loan. At the same time, such loans are not exposed to the changes in exchanges rate because the funds do not move across the national border.

Structure

Suppose a US parent company has a subsidiary in India. At the same time, an Indian parent company has a subsidiary in the USA. Suppose further that the US parent company has to lend US $1000 to its subsidiary in India for a specific period. The Indian parent company too has to lend to its subsidiary in the USA a similar amount for the same maturity. If the funds move between the two countries and if the exchange rate changes, transaction exposure will result.

To avoid this exposure, the Indian parent company will lend the above amount converted into rupees at the spot exchange rate to the US subsidiary. Simultaneously, the US parent company will lend similar amount in terms of US dollars to the Indian subsidiary. At the expiry of the specified period, the two loans will be repaid to the respective lenders. Figure below shows how the transactions take place under the back-to-back loan arrangement.

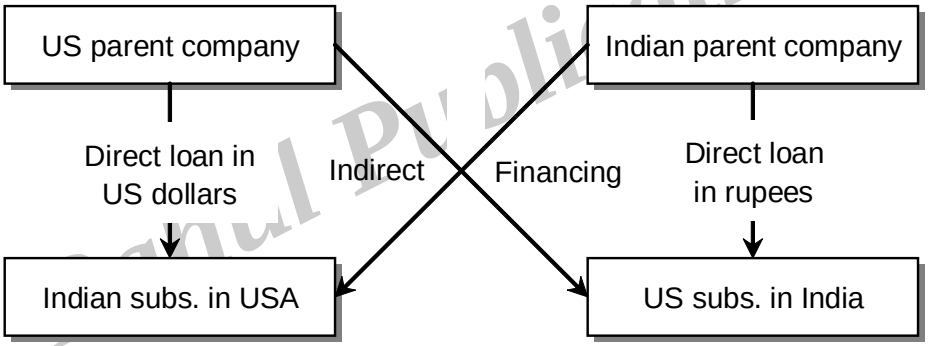


Fig. : Creation of Back-to-Back Loan.

This is no doubt an efficacious technique of hedging the transaction exposure, but it is difficult to find a firm that has to lend a similar amount for a similar maturity. If such a firm, known as a counter-party, is located, it cannot be guaranteed that the counter-party would repay the loan within the specified period. If it fails to make repayments, counter-party risk would emerge. It is this particular limitation with the parallel loan that has made the currency swap popular.

Currency Swaps

Under this arrangement, two borrowers exchange the currency of borrowing with each other through a swap dealer. A currency swap is different from the interest-rate swap sofar as it involves two different currencies. This is the reason that the two currencies are exchanged in the beginning; again, at maturity, the two currencies are re-exchanged.

The exchange of currencies is necessitated by the fact that one counter-party is able to borrow a particular currency at a lower interest rate than the other counter-party is able to borrow.

Q32. Explain the advantages and disadvantages of parallel loan.

Ans :

Advantages

1) The parallel loan helps for an arrangement in which two companies in different countries borrow currency each other within a period of time.
2) Parallel loan helps to circumvent foreign exchange control and help to avoid bank spread on borrowing.
3) It help to identify the reason of investing by a banker which is necessary to put together a deal.
4) It avoids both the parent companies and their subordinates the need to ensure and enter the foreign exchange market to pay back the loan.

Disadvantages

Parallel co-financing are obviously liable to occur in the coordination between the donors and the potential confusion caused by the use of different tendering and procurement rules! Probably for these reasons parallel co-financing does not seem to be prominent in the minds of those involved in the Commission, but this is not a reason to eliminate it as a possibility.

i) It is difficult to find counter-parties with matching needs.
ii) One party is still obligated to comply with such an agreement even if another party fails to do so.
iii) Such loans customarily show up on the books of the participating parties.

5.7 International Cash Management

Q33. What is International Cash management? Discuss the objectives of International Cash management.

Ans : **(Imp.)**

Meaning

International cash management means optimization of cash flows and the investment of excess cash. Since firms operate in multinational financial environment, therefore cash management is very complex, because of different legal environment prevailing in various countries in respect of cross border cash transfers. In addition, the exchange rate fluctuations affect the values of these cross border transfers.

Objectives

The basic objectives of cash management are two-fold :

1. Meeting the Payment Schedule

In the normal course of business firms have to make payments of cash on a continuous and regular basis to suppliers of goods, employees and so on. At the same time, there is a constant inflow of cash through collections from debtors. A basic objective of cash management is to meet the payment schedule, i.e., to have sufficient cash to meet the cash disbursement needs of a firm. The importance of sufficient cash to meet the payment schedule can hardly be over-emphasized. The advantages of adequate cash are:

i) It prevents insolvency or bankruptcy arising out of the inability of a firm to meet its obligations
ii) The relationship with the bank is not strained;
iii) It helps in fostering good relations with trade creditors and suppliers of raw materials, as prompt payment may help their own cash management;
iv) A trade discount can be availed of if payment is made within the due date;
v) It leads to a strong credit rating which enables the firm to purchase goods on favourable terms and to maintain its line of credit with banks and other resources of credit;
vi) To take advantage of favourable business opportunities that may be available periodically;
vii) Finally, the firm can meet unanticipated cash expenditure with a minimum of

strain during emergencies, such as strikes, fires or a new marketing campaign by competitors. Keeping large cash balances, however, implies a high cost; the advantages of prompt payment of cash can well be realized by sufficient and not excessive cash.

2. Minimizing Funds Committed to Cash Balances

The second objective of cash management is to minimize cash balances. In minimizing the cash balances two conflicting aspects have to be reconciled. A high level of cash balances will, as shown above, ensure prompt payment together with all the advantages. But it also implies that large funds will remain idle, as cash is a non-earning asset and the firm will have to forego profits. A low level of cash balances, on the other hand, may mean failure to meet the payment schedule. The aim of cash management should be to have an optimal amount of cash balances.

Q34. A multinational firm can use Bilateral Netting and multilateral netting to effectively manage its foreign currency cash flows. Explain with suitable examples.

Ans :

Netting agreements are usually bilateral (take place between two parties) or multilateral (exist among several parties). The two types of netting are:

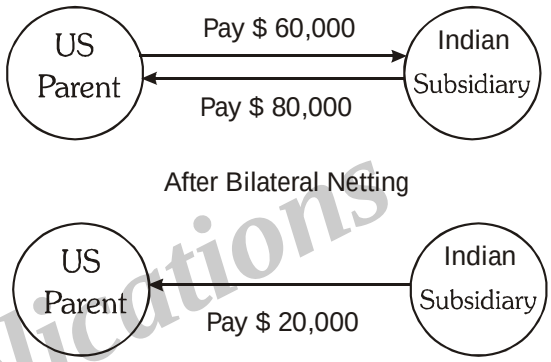
1. Bilateral Netting System
2. Multilateral Netting System.

1. Bilateral Netting System

It involves an agreement which takes place between two parties in order to exchange only the net difference which has to be repaid by each other. The main aim of this system is to decrease the credit and settlement risk. A master contract is being signed by the two parties mentioning the types of netting and even the existing and the future contracts which are going to be affected. It is generally used in over the trade counter derivatives markets and involve the transactions/ operations that exist between the parent and a subsidiary or between two subsidiary companies.

Example

The US parent company and Indian subsidiary have to receive net $80,000 and $60,000 from one another. Hence, in bilateral netting system only one payment is made i.e., Indian subsidiary pays an amount of $20,000 to US parent company. This can be understood from the following figure:



From the figure we can observe that the bilateral netting decreases the number of foreign exchange transactions and even the costs relating to foreign exchange conversion.

Anyhow, the bilateral netting is not much used, if there is more difficulty in exchanging between the parent and many subsidiaries then multilateral netting system is used by the MNCs.

2. Multilateral Netting System

It is an agreement between multiple counter parties. Under this system, each subsidiary acquires all its inter affiliate receipts against all its payments. Eventhough, it is very difficult to exchange money between parent and subsidiaries under this system, but it results in a significant savings in exchange and transfer costs. Multilateral netting system to be effective requires services of a centralized communication system and discipline in the subsidiaries involved. Generally, this system is required to ascertain net cash flow positions of each pair of subsidiaries. With the

assistance of multilateral netting system, several multinational corporations are able to prevent upto 50% or more of their subsidiaries transactions. The benefit of adopting this system is that, it can decrease the credit exposure more than bilateral netting. The disadvantage of this system is that it tries to mutualize credit risk, to avoid spreading of credit exposure across all participants.

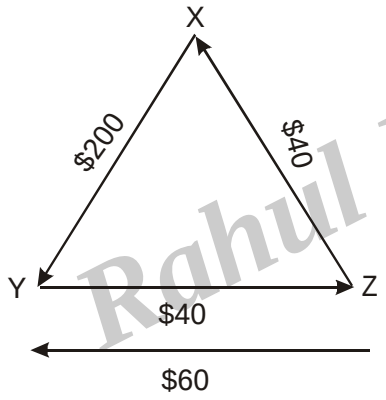
Example

In multilateral netting agreement,

X had to pay Y sum of $ 200, Y had to pay Z sum of $ 40.

Z had to pay Y sum of $ 60 and X sum of $ 40.

Without using netting contract, X had to pay $ 200, Y had to pay $ 40 and Z had to pay $100. The total amount to be paid is $ 340.



By using multilateral netting system, X can pay $160, Y need not pay any amount and Z can pay $ 60. The total credit exposure is decreased to $220.

Q35. How is cash managed at international level?

Ans :

The various techniques or ways to manage cash inflows at international level are as follows,

1. Centralized Cash Management

Centralized cash management takes place when the parent company carries out the cash management functions for its subsidiary company/host company. Centralization enables the parent firm to'have an overview of the entire range of companies functioning under it.

The subsidiary business companies have receivables and payables in various currencies. The parent company can give advise to its foreign affiliates as to decide on which currency they should take the receipts and make the payments depending upon the changes in the exchange rates time to make the hedging agreement, and monitor the inter affiliate payment timings.

2. Decentralized Cash Management

The strategic business partners or investors of a multinational company predicts, holds, invests and manages cash to meet their operational needs of transaction motive, speculative motive and precautionary motive. When the investors are granted complete authority and freedom then cash management is said to be 'Decentralized'. In decentralized cash management, an individual division (subsidiary) manages the receivables and payables along with management of exchange rate risk.

Q36. What are the motives behind holding cash?

Ans :

The motives for holding cash are as follows:

(a) Transaction Motive

A firm needs cash for making transaction in the day to day operations. The cash is needed to make purchases, pay expense, taxes, dividend etc. The cash need arise due to the fact that there is no complete synchronization between cash receipts and payments. Sometimes cash receipts exceed cash payment or vice versa.

The transaction needs of cash can be anticipated because the expected payments in near future can be estimated. The receipts in future may also be anticipated but the things do not happen as desired. If more cash is needed for payments than receipts, it may

be raised through bank overdraft. If there are more cash receipts than payments, it may be spent on marketable securities. The maturity of securities may be adjusted to the payments in future such as interest payment, dividend payment etc.

(b) Precautionary Motive

A firm is required to keep cash for meeting various contingencies. Though cash inflows and cash outflows are anticipated but there may be variations in these estimates. A firm should keep some cash for such contingencies or it should be in a position to raise finances at a short period. The cash maintained for contingency needs is not productive or it remains ideal.

Such cash may be invested in short-period or low-risk marketable securities which may provide cash as and when necessary.

(c) Speculative Motive

The speculative motive relates to holding of cash for investing in profitable opportunities as and when they arise. Such opportunities do not come in a regular manner. These opportunities cannot be scientifically predicted but only conjectures can be made about their occurrence. Such opportunities can be availed of if a firm has cash balance with it. These transactions are speculative because prices may not move in a direction in which we suppose them to move. The primary motive of a firm is not to indulge in speculative transactions but such investments may be made at times.

Q37. What are the methods of financing short term cash?

Ans :

MNCs and their subsidiaries make use of different methods to finance short term cash in order to satisfy their liquidity needs. Some of the methods of financing are as follows,

1. Short Term Notes

One of the most popularly used method of financing are issuing of short term notes or unsecured debt securities. The maturity period of short term notes are 1, 3 or 6 months.

2. Commercial Paper

Commerical paper is also issued by MNCs. It often referred as Euro commercial paper. Based on preference of issuer, maturity of commercial paper is customized.

3. Bank Loans

Bank loans which taken directly from banks is another popular source of finance. MNCs make arrangements with banks and rely on bank loan when other sources are unavailable.

5.8 ACCOUNTS RECEIVABLE MANAGEMENT

Q38. Define Receivable Management. Explain the factors determining receivable management.

Ans :

Meaning

Receivables are one of the important elements of current assets of the firm. The word receivables can be explained as 'debt owed to the firm by customers arising from sale of goods or service in the ordinary course of business'.

When payment for sale of goods or services is due then firm provides trade credit to its customers and creates accounts receivables which can be acquired in future. Receivable management is also known as trade credit management. Hence, accounts receivable express the adequate time period in which customer must make payment for goods purchased. The firms provide trade credit in order to protect the sales from the competitors and attract customers who can purchase their products at reasonable prices.

Factors

These factors affect the size of receivables either directly or indirectly.

1. Size of Credit Sales

The volume of credit sales leads to an increase or decrease in the size of receivables. If the

total sales involves greater part of credit sales then the amount of receivables will also be more.

2. Credit Policies

The size of receivables depends on the credit policies of a firm. If a firm follows a conservative credit policy, then the size of receivables will be less and if a firm follows a liberal credit policy, then the size of receivables will be high.

3. Terms of Trade

The terms of trade followed in the firm also influences the size of receivables. Receivables are interconnected with the period of credit allowed and rates of discount. If the credit period allowed to people is more then the receivables will also be high.

4. Credit Collection Efforts

The creditors must send periodical reminders to customers and should pay attention towards credit collection as it helps in reducing the size of receivables. The absence of these efforts leads to more outstanding amounts.

5. Others

Apart from the above factors, the other factors which influence the size of receivables are habits of customers, relation with profits and expansion plans.

Q39. What are the Cost and Benefits of receivable management.

Ans :

The costs and benefits related with setting of objectives of receivables management are.

1. Costs

The important costs incurred during receivables management are as follows,

i) Collection Cost

The firm need to incur costs for the purpose of collecting the payments from credit customers is known as collection costs. It also involves some additional cost in order to have credit department and to acquire knowledge about credit.

ii) Capital Cost

These are the costs incurred by the firm during the time period of sale of goods and its payment. As accounts receivable leads to blockage of firm's financial resources, so firm needs to raise additional capital to meet its obligations, such as payment to employees and suppliers of raw material.

iii) Delinquency Cost

The cost incurred by the firm when customers fail to make payment after credit period to meet its obligations. Delinquency cost involves different costs such as legal charges, other collection costs, costs incurred due to blockage of funds, cost for reminders etc.

iv) Default Cost

At last, after making all efforts if firm is unable to recover the due amount because of inability of credit customers then it is regarded as bad debts and written off. This cost is treated as default cost related to accounts receivable.

2. Benefits

Receivable management also involves some benefits that are emerged from credit sales,

i) Receivable management helps in increasing the sales of the firm by attracting new customers.

ii) Investment in receivables is mainly focused towards growth of the firm.

iii) Firms provide trade credit in order to protect its present sales from competitors.

iv) When sales of the firm increases it ultimately leads to increase in profits.

Hence, investments made in receivables consists of both benefits as well as costs. The sales, costs and profitability of the firm are highly influenced by the increase of trade credit.

Q40. What are the Factors Influencing the size of Receivables?

Ans :

i) Size of Credit Sales

The volume of credit sales is the first factor which increases or decreases the size of receivables. If a concern sells only on cash basis, as in the case of Bata Shoe Company, then there will be no receivables. The higher the part of credit sales out of total sales, figures of receivables will also be more or vice versa.

ii) Credit Policies

A firm with conservative credit policy will have a low size of receivables while a firm with liberal credit policy will be increasing this figure. The vigour with which the concern collects the receivables also affects its receivables.

If collections are prompt then even if credit is liberally extended the size of receivables will remain under control. In case receivables remain outstanding for a longer period, there is always a possibility of bad debts.

iii) Terms of Trade

The size of receivables also depends upon the terms of trade. The period of credit allowed and rates of discount given are linked with receivable. If credit period allowed is more then receivables will also be more. Sometimes trade policies of competitor have to be followed otherwise it becomes difficult to expand the sales. The trade terms once followed cannot be changed without adversely affecting sales opportunities.

iv) Expansion Plans

When a concern wants to expand its activities, it will have to enter new markets. To attract customers, it will give incentives in the form of credit facilities. The periods of credit can be reduced when the firm is able to get permanent customers.

v) Relation with Profits

The credit policy is followed with a view to increase sales. When sales increase beyond a certain level the additional costs incurred are less than the increase in revenues. It will be beneficial to increase sales beyond a point because it will bring more profits. The increase in profit will be followed by an increase in the size of receivables or vice-versa.

vi) Credit Collection Efforts

The collection of credit should be streamlined. The customers should be sent periodical reminders if they fail to pay in time. If adequate attention is not paid towards credit collection then the concern can land itself in a serious financial problem. An efficient credit collection machinery will reduce the size of receivables. If these efforts are slower then outstanding amounts will be more.

vii) Habits of Customers

The paying habits of customers also have a bearing on the size of receivable. The customers may be in the habit of delaying payments even though they are financially sound. The concern should remain in touch with such customers and should make them relate the urgency of their needs.

5.9 INVENTORY MANAGEMENT

Q41. What is Inventory Management?

Ans :

Inventory management is primarily about specifying the size and placement of stocked goods. Inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods.

The scope of inventory management also concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management,

inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods and demand forecasting.

Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment. Inventory management involves a retailer seeking to acquire and maintain a proper merchandise assortment while ordering, shipping, handling, and related costs are kept in check.

Definition of Inventory

Inventory is an idle stock of physical goods that contain economic value, and are held in various forms by an organization in its custody awaiting packing, processing, transformation, use or sale in a future point of time.

Any organization which is into production, trading, sale and service of a product will necessarily hold stock of various physical resources to aid in future consumption and sale. While inventory is a necessary evil of any such business, it may be noted that the organizations hold inventories for various reasons, which include speculative purposes, functional purposes, physical necessities etc.

Q42. Explain briefly about Costs, Risks and benefits of Holding Inventory.

Ans :

The holding of inventories is necessary for every firm but it involves some costs and risks. It also block the funds of the firm. The firm which are holding inventory must face some risks.

Costs

The costs and risks involved in holding inventories are explained below,

(i) Capital Costs

When firm maintain some amount of inventory it leads to blockage of financial resources of the firm. So, the firm has to plan for additional funds in order to meet the cost of inventories, it might be from its own resources or from outsiders. But the firm has to incur a cost in both alternatives.

(ii) Storage and Handling Costs

Firms has to incur storage and handling cost while holding inventory to have uninterrupted production. The storage costs consists of royalty of warehouse, insurance charges, etc.

Some other costs involved in holding inventories are,

(a) Material Costs

The costs related to procurement of material such as purchase of goods, transportation, handling charges, etc.

(b) Ordering Costs

The costs incurred by the firm while placing an order. When orders are less, cost involved is also less and vice versa.

(c) Carrying Costs

The costs which firm has to incur for storing the goods. Carrying costs includes storage cost, insurance cost, spoilage cost, cost of funds which are blocked in inventory, etc.

Risks

Risks involved in holding inventories are,

1. Risk of Price Decline

There is always a chance of fall in prices of inventories by the suppliers in holding inventories. The causes of fall in price of inventory may be due to competition, market supplies, etc.

2. Risk of Obsolescence

Due to advanced technological changes, fluctuations in requirements and customer's tastes the inventories becomes obsolete.

3. Risk Deterioration in Quality

The storage of inventories in warehouses may also decline the quality of the materials.

Benefits

The holding inventories have many advantageous effects on the operations of the firm. The benefits derived from holding inventory are as follows,

1. Benefits in Purchasing

When firm purchases raw material in bulk quantity in order to hold inventory, it can avail discounts, eliminates ordering costs and acquire raw material before the prices increase.

2. Benefits in Production

When firm maintains inventory of finished goods it can sell them at a higher rate in peak season and lower during the off-season. Inventory helps the firm to plan its production scheduling to avoid expenses and delays in production.

3. Benefits is Work-in-Process

Work-in-process inventory is required because production processes are not rapid and stages with higher set-up costs can be performed more effectively with accumulated work-in-process inventory.

4. Benefits in Sales

Holding inventories help the firm in increasing sales. When a firm does not maintain inventory then it is unable to meet the requirements of the customers. Hence, holding inventory is a competitive marketing tool to meet customers demand.

Q43. What are the factors influencing inventory ?

Ans :

Every company must identify the factors that effect the level of inventory. So that, company can maintain an adequate amount of inventory and invest fund- appropriately. Following are the factors which influence the level of inventory,

1. Level of Sales

The most important factor which affects the level of inventory in a company is its level of sales activity of the same company. When the sales of a company increases, the amount of inventory will also increase.

2. Length of the Production

The companies which take much time to produce a unit, it must maintain relatively large amount of inventory. So that, any order during production process can be met immediately without any delays. The amount of inventory to be maintained depends on type of industry and product.

3. Access to Raw Materials

The amount of inventory of raw material is also necessary for the company, as it is the basis for finished goods. The level of raw material inventory depends on many factors such as,

(a) It depends on lead time, which is the time period between ordering and delivery of a product.

(b) Storage capacity-availability of ware houses.

(c) Problems related to transportation.

(d) Risk of obsolescence.

(e) Physical life of raw materials.

(f) Skill of negotiating the price of raw material.

4. Life of Finished Goods

In many companies, finished products have some specific time period of life, after the expiry of that period they are as of no value. In some companies, products loose their value due to changes in fashion, technology, style and due to obsolescence.

Hence, all the above are the factors which determines the adequate amount of inventory to be maintained by the company.

Q44. Explain the various methods of inventory management.

Ans :

In order to have an effective inventory management, firms require an effective control system for inventories. An appropriate inventory control technique is useful in finding a solution to the serious problem of liquidity, increases profits and reduce working capital of the firm. Some of the important techniques and tools of inventory management and control are,

1. Economic Order Quantity (EOQ)

Economic order quantity is the amount of quantity of raw material to be purchased for production. It is an important decision of inventory management in which economic order quantity must be adequate as it involves ordering and carrying cost also. Economic order quantity is the amount of quantity of material which can be acquired at minimum costs. The ordering cost and carrying costs are considered, while evaluating the economic order quantity.

(a) Ordering Costs

Ordering costs are incurred by the firm at the time of placing an order or purchasing the materials. It depends on the number of orders placed. If orders are more, then cost also increases.

(b) Carrying Costs

Carrying costs are incurred by the firm, only when stock is maintained. It involves cost of storage, interest on investment, obsolescence, insurance, etc.

There exists an inverse relationship between ordering costs and carrying costs. When there is an increase in number of orders, the cost of ordering increases whereas, carrying cost reduces per unit.

Economic order quantity is calculated by using the following formula,

$$EOQ = \sqrt{\frac{2AO}{C}}$$

Where,

A = Annual requirement

O = Ordering cost

C = Carrying cost

2. ABC Analysis

In ABC analysis, a selective approach is adopted and materials are divided into three categories i.e., A, B and C. Items which are of 70% of value of total consumption but contribute to 10% of total quantity come under 'A' category. Similarly, items which are of 20% of value and contributes 20% of quantity are 'B' category and last category of 'C' items contribute to 70% of total quantity but they are of 10% of total value. Items in 'A' category require special attention as they yield more profits and incur huge loss in case of damage. In case of 'B' category items routine control can be exercised. Normal control can be exercised on 'C' category items.

3. VED Analysis

Usually, VED analysis is used in case of inventory of spare parts. These spare parts are classified based on their requirements, they are,

(a) Vital Spares

These are very important for production, so they must be stored adequately.

(b) Essential Spares

These are also necessary, but only minimum stock is to be maintained.

(c) Desirable Spares

It is not necessary to maintain stock of these spares every time, it can be avoided when lead time is less.

Technical staff must be held responsible for classifying the spare parts and stock of each category of spare parts.

4. Just-in-Time (JIT) Inventory Control System

Just-in-time was first introduced by Toyota Company in Japan. It mainly focuses on reducing wastage and increasing productivity. In this technique, raw materials are purchased just before producing the product. JIT control system implies that firm must maintain only minimum level of inventory and depend on suppliers to provide material at the time of need. It reduces storage cost and investment in inventory.

5. Lead Time

Firm must identify the lead time in order to maintain adequate amount of inventory. Lead time is the time period between placement of order and its fulfillment. Lead

time and the level of inventory are directly related to each other. If lead time is more, then firm must maintain large amount of inventory, so that any order during lead time can be met easily. Firm must try to reduce the lead time as it ultimately reduces the level of inventory. Lead time involves administrative lead time and producers lead time.

6. HML Analysis

In order to maintain an effective control over inventory, it is classified as HML. It indicates High (H), Medium (M) or Low (L) valued items depending on their price and consumption.

7. SDE Analysis

In this analysis, materials are classified as. Scarce which are stocked adequately irrespective of its cost. Difficult which are also stocked in optimum quantity, and Easily available materials are not stocked.

8. SOS Analysis

In this analysis, materials are classified as Seasonal and Off-seasonal. The items which are seasonal are stored for rest of the year, and off-seasonal items are not stored as they are available in all seasons.

9. Inventory Turnover Ratio

In order to minimize investments in inventory and to verify the usage of inventory is effective or not, firms use inventory turnover ratio. It is also known as stock velocity. The inventory turnover ratio is calculated with the help of the following formula,

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

PROBLEMS

11. Two components X and Y are used in the manufacture of a product :

(i) Minimum Level : X = 260, Y= 200

(ii) Reorder Quantity : X = 500 units, Y = 600 units

(iii) Reorder Level : X = 550 units, Y = 400 units

(iv) Normal Usage of Inventory : X = 50 units/week, Y = 50 units/week.

Find

(a) Average Stock Levels and

(b) Lead Time for both Components X and Y.

Sol :

(a) $\text{Average Stock Level} = \text{Minimum Level} + \left[\frac{\text{Reorder Quantity}}{2}\right]$

$$X = 260 + \frac{500}{2} = 510$$

$$Y = 200 + \frac{600}{2} = 500$$

(b) Lead Time = $\frac{\text{Reorder Level}}{\text{Normal Usage of Inventory}}$

$X = \frac{550}{50} = 11$

$Y = \frac{400}{50}$

5.10 Payment Methods of International Trade

Q45. Describe various Payment Methods of International Trade.

Ans :

1. Cash-in-Advance

With cash-in-advance payment terms, an exporter can avoid credit risk because payment is received before the ownership of the goods is transferred. For international sales, wire transfers and credit cards are the most commonly used cash-in-advance options available to exporters. With the advancement of the Internet, escrow services are becoming another cash-in-advance option for small export transactions. However, requiring payment in advance is the least attractive option for the buyer, because it creates unfavorable cash flow. Foreign buyers are also concerned that the goods may not be sent if payment is made in advance. Thus, exporters who insist on this payment method as their sole manner of doing business may lose to competitors who offer more attractive payment terms.

2. Letters of Credit

Letters of credit (LCs) are one of the most secure instruments available to international traders. An LC is a commitment by a bank on behalf of the buyer that payment will be made to the exporter, provided that the terms and conditions stated in the LC have been met, as verified through the presentation of all required documents. The buyer establishes credit and pays his or her bank to render this service. An LC is useful when reliable credit information about a foreign buyer is difficult to obtain, but the exporter is satisfied with the creditworthiness of the buyer's foreign bank. An LC also protects the buyer since no payment obligation arises until the goods have been shipped as promised.

3. Documentary Collections

A documentary collection (D/C) is a transaction whereby the exporter entrusts the collection of the payment for a sale to its bank (remitting bank), which sends the documents that its buyer needs to the importer's bank (collecting bank), with instructions to release the documents to the buyer for payment. Funds are received from the importer and remitted to the exporter through the banks involved in the collection in exchange for those documents. D/Cs involve using a draft that requires the importer to pay the face amount either at sight (document against payment) or on a specified date (document against acceptance). The collection letter gives instructions that specify the documents required for the transfer of title to the goods. Although banks do act as facilitators for their clients, D/Cs offer no verification process and limited recourse in the event of non-payment. D/Cs are generally less expensive than LCs.

4. Open Account

An open account transaction is a sale where the goods are shipped and delivered before payment is due, which in international sales is typically in 30, 60 or 90 days. Obviously, this is one of the most advantageous options to the importer in terms of cash flow and cost, but it is consequently one of the highest risk options for an exporter. Because of intense competition in export markets, foreign buyers often press exporters for open account terms since the extension of credit by the seller to the buyer is more common abroad. Therefore, exporters who are reluctant to extend credit may lose a sale to their competitors. Exporters can offer competitive open account terms while substantially mitigating the risk of non-payment by using one or more of the appropriate trade finance techniques covered later in this Guide. When

offering open account terms, the exporter can seek extra protection using export credit insurance.

5. Consignment

Consignment in international trade is a variation of open account in which payment is sent to the exporter only after the goods have been sold by the foreign distributor to the end customer. An international consignment transaction is based on a contractual arrangement in which the foreign distributor receives, manages, and sells the goods for the exporter who retains title to the goods until they are sold. Clearly, exporting on consignment is very risky as the exporter is not guaranteed any payment and its goods are in a foreign country in the hands of an independent distributor or agent. Consignment helps exporters become more competitive on the basis of better availability and faster delivery of goods. Selling on consignment can also help exporters reduce the direct costs of storing and managing inventory. The key to success in exporting on consignment is to partner with a reputable and trustworthy foreign distributor or a third-party logistics provider. Appropriate insurance should be in place to cover consigned goods in transit or in possession of a foreign distributor as well as to mitigate the risk of non-payment.

5.10.1 Trade Finance Methods

Q46. Elaborate different trade financing methods adopted by India.

Ans :

Trade finance is related to international trade. While a seller (the exporter) can require the purchaser (an importer) to repay for goods shipped, the purchaser (importer) may wish to reduce risk by requiring the seller to document the goods that have been shipped. Banks may assist by providing various forms of support.

For example, the importer's bank may provide a letter of credit to the exporter (or the exporter's bank) providing for payment upon presentation of certain documents, such as a bill of lading. The exporter's bank may make a loan (by advancing funds) to the exporter on the basis of the export contract.

Availability of finance enables the exporter to export more and the importers to import more. In other words, availability of finance encourages trading activities.

Different methods of trade finance include :

A) Bank Credit

B) Counter trade

C) Factoring

D) Forfeiting

A) Bank Credit

Banks are the most important source of foreign trade finances. The importers do borrow from the banks, but the exporters are the major beneficiary. The different forms of credit are :

1) Pre-shipment credit

2) Post-shipment credit

3) Medium-term credit

4) Credit under duty drawback scheme

1. Pre-shipment Credit

Pre-shipment credit provided to the exporters is meant for procuring raw material, processing and packing of goods and for some other processes till the goods are really shipped. This type of credit is also known as packing credit. It is extended normally on the strength of letter of credit but sometimes also on the strength of purchase order. It is extended in the form of a loan amount.

A separate account is maintained for each export order. Alternatively, it may be a running account, that is, a single cash credit account for all export orders. Inputs purchased out of such credits are hypothecated or pledged to the bank, although in exceptional cases, it may be a clean advance. The credit is extended not in a lump-sum amount but in stages, depending upon the need of the exporter.

Pre-shipment credit is also provided in the form of foreign currency. The purpose is to finance the import of inputs for goods to be exported. In India, it is provided to the exporters having a turnover of Rs. 100 million and above and to those manufacturers whose 25 percent of the output is committed for export. The amount of the credit is repaid out of export proceeds.

2. Post-shipment Credit

Post-shipment credit is extended by the banks after the goods have been shipped and against the submission of export documents evidencing the shipment of the goods. It is also a short-term credit. The rate of interest is lower up to 90 days, but then it increases and it is still higher beyond 180 days. The purpose of progressive interest rate is to make this credit strictly a short-term one.

There are different ways to extend post-shipment credit. When bill is drawn not under L/C, that is when transaction is not covered by L/C, credit is available through the purchase of export documents. The bank takes special precaution before granting credit in such cases. It is because there is no guarantee for payment.

If the importer refuses to pay and if the financial position of the exporter is not sound for the repayment of credit, the bank is put to loss. Even if it redirects the ship, it has to bear the additional freight and insurance charges. This is why the bank examines thoroughly the financial ratios of the importer and obtain a cover from an insurance company before extending such credits.

3. Medium-term credit

There are certain categories of export, such as engineering items, capital goods and project export, in case of which short-term finance does not meet the desired objective. It is because the importers normally withhold a part of the cost of goods/services towards guarantee of performance. Such withholding generally crosses the six-month mark and so the short-term finance is hardly of any use in these cases. It thus necessitates medium-term credit.

4. Advances under Duty Drawback Scheme

The duty drawback scheme provides that the duty paid by the exporter on the imported inputs or the excise duty paid on the goods produced for export are repaid to the exporter on the completion of the export. Since the exporter's cash is locked up during the period between the payment of duty and the completion of export, the exporter is given a cash advance by the banks for this period. Such an advance is given both at the pre-shipment stage and the post-shipment stage.

At the pre-shipment stage, it is represented by additional amount of credit over and above the FOB value of the goods. It is because the credit up to the FOB value is purely the pre-shipment or packing credit. If the bank grants additional amount over and above the FOB value, it is nothing but an advance against the duty drawback. At the post-shipment stage, it is extended by the bank when an exporter makes a claim with the bank.

B) Counter - Trade

Counter-trade is related to those foreign trade transactions in which the exporter gets the value for export not in cash form but in the form of specific commodities as per an agreement concluded between the two trading parties. In other words, one can say that under the counter-trade mechanism, imports are financed through exports.

Counter-trade is commonly known as barter, parallel trade, counter-purchase, buy-back, etc. However, their details differ to some

extent. Broadly speaking, the above-mentioned variants can be grouped as :

1. Counter-trade of purely commercial nature
   (a) Classical barter
   (b) Counter-purchase
   (c) Pre-compensation
2. Industrial counter-trade
   (a) Buy-back agreement
   (b) Framework agreement

1. (a) Classical barter

Classical barter is a simple barter and involves a once-only exchange of goods on the terms agreed upon between the buyer and the seller. The quantum, quality and the value of the goods to be exchanged are well-defined. Consequently, trade flow in one direction is fully compensated by the flow in the reverse direction.

(b) Counter-purchase

In counter-purchase, which is also known as parallel barter, there is no mention of specific goods to be exported or to be imported. Moreover, there are separate contracts for export and import. The only thing required is to balance the trade during a period of three to five years. If any gap between export value and import value remains to exist, it is met by cash payment.

(c) Pre-compensation

In case of pre-compensation, imports are paid for immediately. The amount to be paid is entered into an evidence account and it is balanced completely by the export of specific goods. If any amount remains left after balancing, it is paid in cash.

2. (a) Buy-back agreement

Buy-back agreements do not represent purely commercial transactions. Being a form of industrial counter-trade, they involve normally a larger amount corresponding to the sale of industrial equipment or turn-key plants in exchange for the products manufactured by the industrial plant. The contract period is larger ranging sometimes up to 20 years. An example of this type of counter-trade could be found in Austria's sale of oil pipeline equipment and related material to the former Soviet Union in exchange for piping oil back to Austria.

(b) Framework agreement

For framework agreements, there is a long-term bilateral clearing agreement, normally between two governments. The nature and prices of goods and the timing of shipment are decided upon in the beginning. The contract period is renewed from time to time. The difference between the export and import at the end of the contract period is paid in cash. A classic example of this types of counter-trade was found in the case of Malaysia-Mexico trade. When Malaysia in dollars.

C. Factoring

The exporter receives the payment normally after a number of days of the shipment. During this period, its export is treated as account receivables. Again, there is possibility of bad debt loss involved in the transaction. Thus, in order to avoid the bad debt loss, to avoid the collection expenses and to get immediate payment for export, the exporter sells its receivables without recourse to a bank. The process of the sale of receivables is known as factoring. Now it is the bank that has to collect the amount from the importer.

Since the bank has to bear the risk of non-payment, and at the same time, it has to pay the collection charges, it usually purchases the receivables at discount and receives a flat processing fee. It purchases only those receivables where the importer is found creditworthy. There is a network of factors in different countries, which helps in assessment

of credit risk. Suppose a bank in India likes to buy receivables from an Indian exporter, it will assess the credit risk either with the help of the correspondent factor residing in the importer's country or through its own subsidiary, if residing in that country.

Types

a) Disclosed Factoring

In disclosed factoring, client's customers are aware of the factoring agreement. Disclosed factoring is of two types :

1) Recourse Factoring

The client collects the money from the customer but is case customer don't pay the amount on maturity then the client is responsible to pay the amount to the factor. It is offered at a low rate of interest and is in very common use.

2) Non-Recourse Factoring

In non-recourse factoring, factor undertakes to collect the debts from the customer. Balance amount is paid to client at the end of the credit period or when the customer pays the factor whichever comes first. The advantage of non-recourse factoring is that continuous factoring will eliminate the need for credit and collection departments in the organization.

b) Undisclosed Factoring

In undisclosed factoring, client's customers are not notified of the factoring arrangement. In this case, client has to pay the amount to the factor irrespective of whether customer has paid or not.

Benefits

Factoring provides several benefits to the exporter :

1) By selling the accounts receivable, the exporter does not have to worry about the administrative duties involved in maintaining and monitoring an accounts receivable accounting ledger.

2) The factor assumes the credit exposure to the buyer, so the exporter does not have to maintain personnel to assess the creditworthiness of foreign buyers.

3) The sale of the receivable to the factor provides immediate payment and improves the exporter's cash flows.

D) Forfeiting

Forfeiting is a non-recourse financing originated in Switzerland during 1950s. In the beginning, it was used largely in case of trade with the east European countries, but it is now commonly used throughout the globe.

Forfeiting is similar as factoring in the sense that it is the forfeiting agency, and not the exporter, that bears the credit risk. But in many respects, forfeiting is different. Forfeiting is done usually in large and long-term transactions. When the exporter exports capital goods, the amount involved is normally big and as a result of which the importer takes a longer time to repay. What happens is that the importer writes a promissory note to the exporter for a period ranging usually from three to seven years and the exporter sells that promissory note without recourse to the bank. This sale of promissory note is known as forfeiting.

Benefits

A) Benefits of Exporter

1) 100 Percent Financing

Without recourse and not occupying exporter's credit line, i.e., to say once the exporter obtains the financed fund, he will be exempted from the responsibility to repay the debt.

2) Improved cash Flow

Receivables become current cash in flow and it is beneficial to the exporters to improve financial status and liquidation ability so as to heighten further the funds' raising capability.

3) Reduced Administration Cost

By using forfeiting, the exporter will spare from the management of the receivables. The relative costs, as a result, are reduced greatly.

4) Advance Tax Refund

Through forfeiting the exporter can make the verification of export and get tax refund in advance.

5) Risk Reduction

Forfeiting business enables the exporter to transfer various risk resulted from deferred payments, such as interest rate risk, currency risk, credit risk and political risk to the forfeiting bank.

6) Increased Trade Opportunity

With forfeiting, the export is able to grant credit to his buyers freely and thus, be more competitive in the market.

B) Benefits to Banks

Forfeiting provides the banks following benefits :

1) Banks can offer a novel product range to clients, which enable the client to gain 100% finance, as against 80-85% in case of other discounting products.
2) Bank gain fee based income.
3) Lower credit administration and credit follow-up.

Q47. What is counter trade? What are its different forms?

Ans :

Countertrade is a reciprocal form of international trade in which goods or services are exchanged for other goods or services rather than for hard currency. This type of international trade is more common in developing countries with limited foreign exchange or credit facilities. Countertrade can be classified into three broad categories: barter, counter purchase, and offset.

Types

There are several types of countertrade, including barter, counter purchase, compensation trade, switch trading, offsets and clearing agreements.

1. Barter- Barter

Possibly the simplest of the many types of counter trade, is a onetime direct and simultaneous exchange of products of equal value (i.e., one product for another). By removing money as a medium of exchange barter makes it possible for cash-tight countries to buy and sell. Although price must be considered in any counter trade, price is only implicit at best in the case of barter. For example, Chinese coal was exchanged for the construction of a seaport by the Dutch, and Polish coal was exchanged for concerts given by a Swedish band in Poland. In these cases. the agreement dealt with how many tons of coal was to be given by China and Poland rather than the actual monetary value of the construction project or concerts. It is estimated that about half of the U.S. corporations engage in some form of barter primarily within the local markets of the United States.

2. Counter purchase (Parallel Barter)

Counter purchase occurs when there are two contracts or a set of parallel cash sales agreements, each paid in cash. Unlike barter which is a single transaction with an exchange price only implied. A counter purchase involves two separate transactions-each with its own cash value. A supplier sells a facility or product at a set price and orders unrelated or non-resultant products to offset the cost to the initial buyer. Thus, the buyer pays with hard currency, whereas the supplier agrees to buy certain products within a specified period. Therefore money does not need to change hands. In effect, the practice allows the original buyer to earn back the currency. GE won a contract worth $ 300'million to build aircraft engines for Sweden's JAS

fighters for cash only after agreeing to buy Swedish industrial products over a period of time in the same amount through a counter purchase deal. Brazil exports vehicles, steel, and farm products to oil-producing countries from which it buys oil in return.

3. Compensation Trade (Buyback)

A compensation trade requires a company to provide machinery, factories, or technology and to buy products made from this machinery over an agreed-on period. Unlike counter purchase, which involves two unrelated products, the two contracts in a compensation trade are highly related. Under a separate agreement to the sale of plant or equipment, a supplier agrees to buy part of the plant's output for a number of years. For example, a Japanese company sold sewing machines to China and received payment in the form of 300,000 pairs of pajamas. Russia welcomes buyback.

4. Switch Trading

Switch trading involves a triangular rather than bilateral trade agreement. When goods, all or part, from the buying country are not easily usable or salable; it may be necessary to bring in a third party to dispose of the merchandise. The third party pays hard currency for the unwanted merchandise at a considerable discount. A hypothetical example could involve Italy having a credit of $4 million for Austria's hams, which Italy cannot use, A third-party company may decide to sell Italy some desired merchandise worth $3 million for a claim on the Austrian hams. The price differential or margin is accepted as being necessary to cover the costs of doing business this way. The company can 'then sell the acquired hams to Switzerland for Swiss francs, which are freely convertible to dollars.

5. Offset

In an offset, a foreign supplier is required to manufacture/assemble the product locally and/or purchase local components as an exchange for the right to sell its products locally. In effect, the supplier has to manufacture at a location that may not be optimal from an economic standpoint. Offsets are often found in purchases of aircraft and military equipment. One study found that more than half of the companies counter trading with the Middle East were in the defense industry and that the most common type of counter trade was offset. These companies felt that counter trade was a required element in order to enter these markets.

6. Clearing Agreement

A clearing agreement is clearing account barter with no currency transaction required. With a line of credit being established in the central banks of the two countries, the trade in this case is continuous, and the exchange of products between two governments is designed to achieve an agreed-on value or volume of trade tabulated or calculated in nonconvertible "clearing account units." For example, the former Soviet Union's rationing of hard currency limited imports and payment of copiers. Rank Xerox decided to circumvent the problem by making copiers in India for sale to the Soviets under the country's "clearing" agreement with India. The contract set forth goods, ratio of exchange, and time length for completion. Any imbalances after the end of the year were settled by credit into the next year, acceptance of unwanted goods, payment of penalty, or hard currency payment. Although nonconvertible in theory, clearing units in practice can be sold at a discount to trading specialists who use them to buy salable products.

Examples of a Countertrades

- A counter purchase refers to the sale of goods and services to a company in a foreign country by a company that promises to make a future purchase of a specific product from the same company in that country.
- A buyback is a countertrade occurs when a firm builds a manufacturing facility in a country or supplies

technology, equipment, training, or other services to the country and agrees to take a certain percentage of the plant's output as partial payment for the contract.

- An offset is a countertrade agreement in which a company offsets a hard currency purchase of an unspecified product from that nation in the future.
- Compensation trade is a form of barter in which one of the flows is partly in goods and partly in hard currency.

5.11 EXPORT – IMPORT BANK OF INDIA

Q48. What is EXIM Bank? State the objectives of EXIM Banks.

Ans : **(May-19)**

Export-Import Bank of India is the premier export finance institution of the country, set up in 1982 under the Export-Import Bank of India Act 1981.

Export-Import Bank of India has been one of the prime institutions that encourages project exports from India. The bank offers wide-ranging services for enhancing the prospect of Indian project exports. Exim Bank's Overseas Investment Finance program gives a variety of facilities for Indian reserves and acquirements overseas. The facilities consist of direct and other suitable organizations in foreign countries to enable person outside India to import from India, goods including turnkey projects, civil construction contracts and other services including consultancy services.

1. Handling transaction where a mix of government credit and commercial credit for exports is involved.
2. Purchasing, discounting and negotiating export bills.
3. Selling or discounting export bills in international markets.
4. Discounting of export bills negotiated or purchased by a scheduled bank or financial institution notified by government, or granting loans and advances against such bills.
5. Providing refinance facilities to specified financial institutions against credits extended by them for specified exports or imports.
6. Granting loans and advances or issuing guarantees solely or jointly with a commercial bank for the import of goods and services from abroad.
7. Issuing confirmation/endorsing letters of credit on behalf of exporters in India, negotiating, collecting bills under letters of credit, opening letters of credit on behalf of importers of goods is services and negotiating documents received there under.
8. Buying and selling foreign exchange and performing such other functions of an authorized dealer as may necessary for the functions of an export- import bank.
9. Undertaking and financing research, surveys and techno-economic studies bearing on the promotion and development of international trade.
10. Providing technical, administrative and financial assistance to any exporter in India or any other person who intends to export goods from India for the promotion, management or expansion of any industry with a view to developing international trade.

Q49. What are the roles and functions of Export – Import Bank of India? Mention the financing and non-financing programmes of EXIM Bank.

(OR)

What are the functions of Export – Import Bank of India?

Ans :

Role and Functions of EXIM Bank

1) Line of Credit

Line of credit refers to the credit required by the importers and exporters to carry on with their regular business. EXIM bank provides various types of pre-shipment and post-shipment finance especially to exporters to ensure that they are able to fulfil their export orders as planned.

2) Finance for export oriented units

EXIM bank and ECGC offer special finance options to firms that engage in exports. These are usually low interest-rate loans and offer longer repayment dates. However, to avail these benefits, the firm must be an export oriented unit. i.e. it has to export all the goods it manufactures in its factory/plant.

3) Import Finance

Many firms usually import their raw material into the country and later on, they process the raw material into the finished goods and export them to other countries. EXIM bank offers finance to such firms. However, the firms have to prove that all the imported raw material has been utilized in creating the finished goods.

4) Pre-shipment Finance

EXIM Bank offers pre-shipment finance to exporters who have a guaranteed import order to fulfill. Pre-shipment finance helps the exporter to cover his variable expenses till the time he receives his payment from the importer. Usually, 3-6 months credit is provided by the exporter to the importer to make the payment. Thus, Pre-Shipment Finance helps the exporters to fulfill their export orders till the previous payments are realized.

5) Post-Shipment Finance

Post Shipment Finance is given to exporters by the EXIM upon displaying the proof that the export order has been fulfilled. The concept remains the same as pre-shipment finance. It helps the exporter to fulfill further orders till the previous payments are realized.

6. Refinance of export credit

Export credit refinancing is a scheme started by RBI to promote exports. RBI refinances the export credit given by the banks to the exporters. RBI takes quarterly report of the financing from the banks and refinances them for this, so this way bank can give export incentive to the exporter.

7. Overseas Investment Finance Programmes

EXIM Bank assists exporters who want to purchase assets overseas for the purpose of exporting. It gives long term loans at cheaper interest rates compared to commercial banks.

8. Research and Analysis

EXIM bank has a Research and Analysis department which constantly collects data from international markets and provides insights to the local traders about how to leverage the trends/indicators in the international markets for their benefit.

9. Marketing and Export Advisory Services

These services are targeted for first time exporters/importers or the exporters/ importers who are trying to enter new markets. It is essential to gain complete knowledge about the target markets otherwise even a successful product is bound to fail. Marketing and Export Advisory Services ensure that the traders have sufficient knowledge of their target market.

10. Product Liability Insurance

Product liability insurance protects against claims of personal injury or property damage caused by products sold or supplied through your business. It is designed to help protect your business by ensuring that if this happens, you don't have to pay any legal or court costs.

5.11.1 Recent Amendments in EXIM Policy

Q50. What are the amendments executed in EXIM as the part of International Trade?

(OR)

Discuss the Recent Amendments in EXIM Policy.

Ans : **(Dec.-19, May-19, Imp.)**

The EXIM policy for the year 2001-2002 was publicly introduced on 31st March, 2001 by the union commission and industry minister. The following were the significant features of the EXIM policy 2001-2002,

1. Elimination of Quantitative Restrictions

The final phase of the process of elimination of import restrictions came to an end in 2001-2002, when the new exim policy had been formulated removing the import restrictions of the remaining items (i.e., 715 items). This was found to be in proper alignment with the commitments made to the WTO.

The 715 items comprised of 342 textile products. 147 agricultural and 226 other manufactured products.

During 2001-2002, the state trading category had import of agricultural included products such as wheat, rice, maize, copra and coconut oil. Based on the commercial considerations, the import of such commodities was the responsibility only nominated state trading enterprise. Certain petroleum products such as diesel, petrol and ATF's (Aviation Turbine Fuel) import was also categorized under the state trading. Out of 715 items, 27 such items that were removed from the list of quantitative restrictions were placed in the state trading category.

The minister believed that the commonly used articles do not have any impact on the Indian market.

Anti-dumping duties and other tariff barriers were reintroduced to stop the dumping activities.

2. Agri-Export Zones (AEZs)

Agri-export zones were set-up by the exim policy so as to increase the agricultural export and give monetary returns to the farming groups. These zones were to be established in Himachal Pradesh. Jammu and Kashmir and Maharastra. The government extended its support for providing easy accession to the production exports of agricultural related products to the international markets. In order to develop the export of products to a particular area the state governments were to define product specific AEZs.

Export-Import (EXIM) Policy 2002-07

The EXPS Policy 2002-07 was announced on March 31, 2002 by Union Commerce and Industry Minister Mr. Murasoli Maran. This policy has the target to increase India's share in global trade to one percent and seeks to reorganize and strengthen the previous policies The main focus of these policies was trade liberalization openness, transparency etc.. aimed at improving international competitiveness of the economy. This policy involves several institutional, infrastructure, and fiscal measures proposed to promote exports, which are contributing towards the economic development country.

The following are the salient features of the policy,

1. Special Economic Zones (SEZs)

Offshore Banking Units (OBUs) were allowed to establish by Indian banks in special Economic Zones. These units can easily attract more foreign direct investments. These offshore banking units which are located in India but they are almost foreign branches of Indian banks. OBUs would be free from Cash Reserve Ratio (CRR). Statutory Liquidity Ratio (SLR) and would allow into SEZ units and SEZ developers to international finance at international rates. The main objective of this policy is to enable special economic zones to complete internationally.

2. Employment Oriented Measures

A number of measures have taken by the EXIM policy (2002-07) for promoting employment opportunities. The following are the some of the important measures,

(a) Agriculture

All restrictions on all agricultural products excluding some products like jute and onions was removed by EXIM policy (2002-07). The transport subsidy was provided for export of fruits, vegetables, floriculture, poultry and dairy products for developing the agriculture.

(b) Cottage Sector and Handicrafts

i) Under Market Access Initiative (MAI) an amount of ? 5 crores were issued for encouraging cottage sector exports coming under Khadi and Village Industries Commission (KVIC). Even MAI has issued funds for the handicraft units.

ii) According to Export Promotion Capital Goods (EPCG), while calculating export obligation these units need not to maintain an average level of exports.

(c) Small Scale Industry

With an aim of developing the economic and export excellence centres like Tirpura for hosiery, woollen knitwear in Ludhiana, woollen blankets in Panipat etc. In order to encourage the small-scale sectors, it is provided with following benefits.

i) In these areas, common service providers are provided with the facility of Export Promotion Capital Goods (EPCG) scheme.

ii) These units are entitled for the states of Export House at Rs. 15 crores instead of 15 crores in case of others.

(d) Textiles

All kinds of blended or mixed fabrics were allowed to the Duty Entitlement Pass Book (DEPB) rates. Such mixed fabrics has cheaper rates as compared to different constituent fabrics.

(e) Gems and Jewellery

Import of Rough diamonds were permitted on the -basis of zero custom duty.

3. Growth Oriented

(a) Strategic Package for Status Holders

The status holders are qualified for the following facility.

100 percent retention of foreign exchange in Exchange Earners Foreign Currency (EEFC) amount.

(b) Diversification of Markets

The following initiatives have been taken,

In November 1997, the focus LAC (Latin American Countries) was launched for increasing the trade activities with these countries. About 40% of increase in exports have been recorded from these countries. This was extended upto March 2003, in order to strengthen the gains of these programmes.

4. Technology Oriented

(a) Under Information Technology Agree-ment, Electronic Hardware Technology Park (EHTP) scheme has been changed to allow this sector to face zero duty regime.

(b) Chemicals and Pharmaceuticals

The formulations of all pesticides should have 65 percent of Duty Entitlement Pass Book (DEPB) rates.

(c) Projects

The imported equipments and other goods should be used for more than one year.

5. Trust Based

The following measures were undertaken in order to make the system, trust based.

(a) Penal interest rate for bona fide defaults should be reduced from 24% to 15% Insurance package from penalty realizations, eliminating and restrictions on stock for uninterrupted production process, issues of FIRC certificate instead of Bank Realization Certificate.

6. Duty Neutralization Instruments

(a) Advance License

Abolition of Duty Exemption Entitle- ment Certificate (DEEC) book, shipping bills and banking realization are the basis for redemption. Cancellation of Advance License for Annual Requirement (AAL) as problems were confronted in the process of closing the AAL. The exporters can use the advance license for any value.

(b) Duty Entitlement Pass Book (DEPB)

Exemption of value lap was permitted on 429 items to continue.

(c) Export Promotion Capital Goods (EPCG)

The export obligation period for EPCG license of worth Rs.100 crores or more had a tenure of 12 years with a 5 years temporary ban period.

5.11.2 Regulations and Guidelines

Q51. Discuss the Regulations and Guidelines relating to EXIM Bank.

Ans : **(Imp.)**

1. Signing of Documents

On behalf of EX1M bank, any officer who is empowered by chairman can sign and verify written statement, plaints, affidavits and all other documents.

2. Issue of Bonds

The bonds or debentures of EXIM bank must be issued after the signature of chairman. Signature can be printed, engraved or impressed as per the direction of EXIM bank. Signature must be valid and in clear hand writing of signatory.

5. Common Seal

Common seal of EXIM bank can be affixed to any instrument only incase of imple- mentation of a resolution of the board or management committee and in existence of two directors who must sign on instrument.

6. Balance Sheet and Profit and Loss Account

EXIM Bank's annual accounts must be prepared in the following manner or as per the notifications of central government.

(a) Balance sheet of general fund must be prepared on 31 March of every year. Profit and loss account and cash flow statement are prepared as per the regulations specified in schedule I, Schedule II and Schedule III.

(b) Balance sheet of Export Development Fund must be prepared on 31March of every year. Profit and loss account and cash flow statement are prepared as per the regulations specified in Schedule IA and Schedule IIA.

Short Question and Answers

1. Define Asset Liability Management.

Ans :

Meaning

Asset liability management is the process through which an association handles its financial risks that may come with changes in interest rate and which in turn would affect the liquidity scenario.

Banks and other financial associations supply services which present them to different kinds of risks. We have three types of risks credit risk, interest risk, and liquidity risk. So, asset liability management is an approach or a step that assures banks and other financial institutions with protection that helps them manage these risks efficiently.

The model of asset liability management helps to measure, examine and monitor risks. It ensures appropriate strategies for their management. Thus, it is suitable for institutions like banks, finance companies, leasing companies, insurance companies, and other financing bodies.

Asset liability management is an initial step to be taken towards the long term strategic planning. This can also be considered as an outlining function for an intermediate term.

In particular, liability management also refers to the activities of purchasing money through cumulative deposits, federal funds and commercial papers so that the funds lead to profitable loan opportunities. But when there is an increase of volatility in interest rates, there is major recession damaging multiple economies. Banks begin to focus more on the management of both sides of the balance sheet that is assets as well as liabilities.

2. Define Foreign Direct Investment.

Ans :

Foreign Direct Investment (FDI) is investment made by a transnational corporation to increase its international business. When firms become multinational, they undertake FDI. It generally involves the establishment of new production facilities in foreign countries to earn extra returns. The foreign investment decision results from a complex interaction of factors that differ in many ways from that governing the domestic investment decision. Foreign investment is generally motivated by a complex set of strategic, behavioural and economic and financial considerations. The evaluation process of foreign investments is generally longer, more costly, less accurate and involves more political and foreign exchange risks. Businesses and governments are motivated to engage in FDI to

(i) Expand markets by selling abroad; and

(ii) Acquire foreign resources (e.g., raw materials, knowledge, production efficiency, etc). In addition, governments may also be motivated to gain political advantage.

The IMF defines foreign investment as FDI when the investor holds 10% or more of the equity of an enterprise. Foreign investment has been a major factor in stimulating economic growth and development in recent times. The contribution that multinational corporations can make as agents of growth, structural change and international integration has made FDI a coveted tool of economic development. Foreign Direct Investment (FDI) is one of the most important sources of capital. FDI links the host economy with the global markets and fosters economic growth.

3. Explain about Capital Budgeting in International Scenario

Ans :

Capital budgeting evaluates the investment decisions related to assets. The "capital" in capital budgeting refers to the investment of resources in assets, while the budgeting refers to the analysis and assessment of cash inflows and outflows related to the proposed capital investment over a specified period of time. Objectives of capital budgeting is to

(1) Determine whether or not a proposed capital investment will be a profitable one over the specified time period, and.

(2) to select between investment alternatives. Capital budgeting at the international level addresses the issues related to.

(i) Exchange rate fluctuations capital market segmentation.

(ii) International financing arrangement of capital and related to cost of capital.

(iii) International taxation.

(iv) Country risk (or) political risk etc.

4. Define International Capital Structure.

Ans :

A MNCs capital structure decision involves the choice of debt versus equity financing within all of its subsidiaries. Thus, its overall capital structure is essentially a combination of all its subsidiaries' capital structures. MNCs recognize the trade-off between using debt and using equity for financing their operations.

The advantages of using debt as opposed to equity vary with corporate characteristics specific to each MNC and specific to the countries where the MNC has established subsidiaries.

5. Define cost of capital ?

Ans :

The cost of capital is a term used in the field of financial investment to refer to the cost of a company's funds (both debt and equity), or, from an investor's point of view "the shareholder's required return on a portfolio of all the company's existing securities". It is used to evaluate new projects of a company as it is the minimum return that investors expect for providing capital to the company, thus setting a benchmark that a new project has to meet.

6. Cost of Capital of MNC's Vs. Domestic Firms.

Ans :

The cost of capital for an MNC may differ from that of a fully established domestic firm on account of the characteristics of MNCs that differentiate them from domestic firms. These differences include the following :

1. Size of the Firm

Firms that operate internationally are usually much bigger in size than firms which operate only in the domestic market. Firms that operate internationally generally borrow substantial amounts of funds and by virtue of their size, they are generally in a position to reduce the various transaction and brokerage costs and also get preferential treatment from creditors.

This helps them to reduce their cost of capital compared to domestic firms.

2. Foreign Exchange Risk

An exceptionally volatile exchange rate or one that always depreciates, is not conductive to attracting long-term foreign investors. Such a MNCs cash flow would have wide fluctuations and the capability of the corporation to make various fixed term commitments like interest would get reduced.

This may force the shareholders and creditors to demand a higher return which, in turn, increases the MNC's cost of capital. A firm more exposed to exchange rate fluctuations would have a wider spread of possible cash flows in future periods. Thus, exposure to exchange rate fluctuations could lead to a higher cost of capital.

3. Access to International Capital Markets

The fact that MNCs can normally access the international capital market helps them to attract funds at a lower cost than the domestic firms. In a global context, since the funds are not completely mobile, the cost of funds varies among markets. Also, the subsidiary can obtain local funds at a lower rate than the parent if the prevailing interest rates in the host country are relatively low.

This form of financing helps to lower the cost of capital and will generally not increase the MNCs exposure to exchange rate risk.

4. International Diversification Effect

If a firm's cash inflows come from sources all over the world, there might be more stability in them. MNCs like Nike, Coca-Cola, Microsoft, Intel, Proctor and Gamble, British Airways, etc., have cash inflows coming from sources all over the world.

5. Political Risk

Political risk can be accounted for in the cost of capital calculations by adding an arbitrary risk premium to the domestic cost of capital for a project of comparable risk. As political risk is likely to be higher in the later years of a project, cash flows in later years tend to get reduced. Thus political risk impacts the cost of capital of the MNC by moving it upwards as compared to a domestic firm.

7. Define International Portfolio Management.

Ans :

Meaning

Global Portfolio Management, also known as International Portfolio Management or Foreign Portfolio Management, refers to grouping of investment assets from international or foreign markets rather than from the domestic ones. The asset grouping in GPM mainly focuses on securities. The most common examples of Global Portfolio Management are -

- Share purchase of a foreign company
- Buying bonds that are issued by a foreign government
- Acquiring assets in a foreign firm

Factors Affecting Global Portfolio Investment

Global Portfolio Management (GPM) requires an acute understanding of the market in which investment is to be made. The major financial factors of the foreign country are the factors affecting GPM. The following are the most important factors that influence GPM decisions.

(i) Tax Rates

Tax rates on dividends and interest earned is a major influencer of GPM. Investors usually choose to invest in a country where the applied taxes on the interest earned or dividend acquired is low. Investors normally calculate the potential after-tax earnings they will secure from an investment made in foreign securities.

(ii) Interest Rates

High interest rates are always a big attraction for investors. Money usually flows to countries that have high interest rates. However, the local currencies must not weaken for long-term as well.

(iii) Exchange Rates

When investors invest in securities in an international country, their return is mostly affected by -

- The apparent change in the value of the security.
- The fluctuations in the value of currency in which security is managed.

Investors usually shift their investment when the value of currency in a nation they invest weakens more than anticipated.

8. Objectives of International Portfolio Management?

Ans :

The objective of portfolio management is to invest in is securities in such a way that one maximizes returns and minimizes risks in order to achieve one's investment objective.

A good portfolio should have multiple objectives and achieve a sound balance among them. Any one objective should not be given undue importance at the cost of others.

1. Stable Current Return

Once investment safety is guaranteed, the portfolio should yield a steady current income. The current returns should at least match the opportunity cost of the funds of the investor. What we are referring to here current income by way of interest of dividends, not capital gains.

2. Marketability

A good portfolio consists of investment, which can be marketed without difficulty. If there are too many unlisted or inactive shares in your portfolio, you will face problems in encasing them, and switching from one investment to another. It is desirable to invest in companies listed on major stock exchanges, which are actively traded.

3. Tax Planning

Since taxation is an important variable in total planning, a good portfolio should enable its owner to enjoy a favorable tax shelter. The portfolio should be developed considering not only income tax, but capital gains tax, and gift tax, as well. What a good portfolio aims at is tax planning, not tax evasion or tax avoidance.

4. Appreciation in the value of capital

A good portfolio should appreciate in value in order to protect the investor from any erosion in purchasing power due to inflation. In other words, a balanced portfolio must consist of certain investments, which tend to appreciate in real value after adjusting for inflation.

9. What is International Financing ?

Ans :

The act of providing funds for business activities, making purchases or investing. Financial institutions and banks are in the business of financing as they provide capital to businesses, consumers and investors to help them achieve their goals.

There is a large variety of financing techniques that businesses and consumers can use to receive financing; these techniques range from IPOs to bank loans. The use of financing is vital in any economic system as it allows consumers to purchase products out of their immediate reach, like houses, and businesses to finance large investment projects.

Forms

A) Long Term Financing

B) Short- Term Financing

10. Define Equity Financing.

Ans :

Equity financing is money acquired from the small business owners themselves or from other investors. Stockholders purchasing shares in a corporation, for instance, create equity financing, as do angel investors who provide funding. Small business owners may invest their own funds into their businesses, funds gleaned from inheritance, savings, or even the sale of personal assets which then serves as equity financing for the business.

The equity, or ownership position, that investors receive in exchange for their funds usually takes the form of stock in the company. In contrast to debt financing, which includes loans and other forms of credit, equity financing does not involve a direct obligation to repay the funds. Instead, equity investors become part-owners and partners in the business, and thus are able to exercise some degree of control over how it is run.

Since creditors are usually paid before owners in the event of business failure, equity investors accept more risk than debt financiers. As a result, they also expect to earn a higher return on their investment. But because the only way for equity investors to recover their investment is to sell the stock at a higher value later, they are generally committed to furthering the long-term success and profitability of the company. In fact, many equity investors in startup ventures and very young companies also provide managerial assistance to the entrepreneurs.

11. Bond Financing.

Ans :

Bond financing is borrowing for a specific tenure. Bonds are issued with the purpose of raising money. Potential investors buy bonds and there is a particular mature value or face value of these bonds.

Many bonds are issued through the process of underwriting. During the process of underwriting, one or many banks, create a syndicate and buy an entire issue of the bond from an issuer. Then the bonds are again resold to the investors.

Bond financing is a loan in the form of security. While financing a bond, a bond issuer is basically the borrower as it borrows money from the market. Bonds are debt instruments and bond financing is done by a large number of issuers across the globe. There are certain strict regulations to financing bonds.

12. Parallel Loans.

Ans :

An arrangement in which two companies in different countries borrow offsetting amounts in each other's currency and each repays it at a specific future date in its domestic currency. Such a loan, often between a company and its foreign subsidiary, eliminates the risk of loss from exchange rate fluctuations.

A parallel loan is often known as a back-to-back loan or credit swap loan. Under this arrangement, the amount of the loan moves within the country but it serves the purpose of a cross-border loan. At the same time, such loans are not exposed to the changes in exchanges rate because the funds do not move across the national border.

13. What is International Cash manage-ment?

Ans :

International cash management means optimization of cash flows and the investment of excess cash. Since firms operate in multinational financial environment, therefore cash management is very complex, because of different legal environment prevailing in various countries in respect of cross border cash transfers. In addition, the exchange rate fluctuations affect the values of these cross border transfers.

14. Define Receivable Management.

Ans :

Meaning

Receivables are one of the important elements of current assets of the firm. The word receivables can be explained as 'debt owed to the firm by customers arising from sale of goods or service in the ordinary course of business'.

When payment for sale of goods or services is due then firm provides trade credit to its customers and creates accounts receivables which can be acquired in future. Receivable management is also known as trade credit management. Hence, accounts receivable express the adequate time period in which customer must make payment for goods purchased. The firms provide trade credit in order to protect the sales from the competitors and attract customers who can purchase their products at reasonable prices.

15. What is Inventory Management?

Ans :

Inventory management is primarily about specifying the size and placement of stocked goods. Inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods.

The scope of inventory management also concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods and demand forecasting.

Balancing these competing requirements leads to optimal inventory levels, which is an on-going process as the business needs shift and react to the wider environment. Inventory management involves a retailer seeking to acquire and maintain a proper merchandise assortment while ordering, shipping, handling, and related costs are kept in check.

16. What is EXIM Bank?

Ans :

Export-Import Bank of India is the premier export finance institution of the country, set up in 1982 under the Export-Import Bank of India Act 1981.

Export-Import Bank of India has been one of the prime institutions that encourages project exports from India. The bank offers wide-ranging services for enhancing the prospect of Indian project exports. Exim Bank's Overseas Investment Finance program gives a variety of facilities for Indian reserves and

acquirements overseas. The facilities consist of direct and other suitable organizations in foreign countries to enable person outside India to import from India, goods including turnkey projects, civil construction contracts and other services including consultancy services.

1. Handling transaction where a mix of government credit and commercial credit for exports is involved.
2. Purchasing, discounting and negotiating export bills.
3. Selling or discounting export bills in international markets.
4. Discounting of export bills negotiated or purchased by a scheduled bank or financial institution notified by government, or granting loans and advances against such bills.
5. Providing refinance facilities to specified financial institutions against credits extended by them for specified exports or imports.
6. Granting loans and advances or issuing guarantees solely or jointly with a commercial bank for the import of goods and services from abroad.

Exercise Problems

1. Calculate internal rate of return for the project 'X'. The details of the project are as under :

Initial cost				` 21,000
		Cash Inflows (Year wise)		
Year	1	2	3	4
`	4,000	6,000	8,000	10,000
Present Value Factor at 10%	0.909	0.826	0.751	0.683
Present Value Factor at 12%	0.893	0.797	0.712	0.636

[Ans : 10.843%]

2. The initial cash outlay of a project is ` 50,000 and it generates cash inflows of ` 20,000, ` 15,000, ` 25,000 and ` 10,000 in four years. Using present value index method, appraise profitability of the proposed investment assuming 10% rate of discount.

[Ans : P1 = 1.1235, NPI = 0.1235. As the PI is > 1 and NPI is positive, the proposal can be accepted.]

3. If there is 20 per cent probability for an outcome of $ 400, 60 percent probability for an outcome of $ 600, and 20 percent probability for an outcome of $ 900. Find the expected value

$\bar{A} = (0.2 \times 400) + (0.6 \times 600) + (0.2 \times 900) = \$ 620$

[Ans : $620]

4. The present value of security interms of host-country currency is $ 100 and it goes up to $102 after one year. The interest during the year is $8. Dollar appreciates by 3 percent. Calculate return in terms of home - country currency,

$R_{HC} = [(1 + (102 - 100 + 8) / 100) \times 1.03] - 1 = 0.133 = 13.3\%$

[Ans : 13.3%]

Internal Assessment (Mid Examinations)

The pattern of Mid Exams or Continuous Internal Evaluation (CIE) prescribed by the JNTU-H as per the Regulations 2019 (R19) for all the semesters is as follows,

- There would be two Mid Exams or Continuous Internal Evaluation (CIE) for each semester,
  - The **Ist Mid Term Examinations** would be conducted during the Middle of the Semester.
  - The **IInd Mid Term Examinations** during the last week of instructions.
- The Mid Exam I and II would have the same pattern of question paper which would carry **25 Marks** each and the time duration for conducting each Mid exam would be 120 min.
- The pattern of Mid Exam Question Paper would consist of two parts i.e., **Part-A** and **Part-B.**
  - **Part-A** consist of 5 compulsory questions each carries 2 marks (i.e 5 × 2 = 10 marks).
  - **Part-B** consist of 5 questions out of which 3 questions should be answered, each question carries 5 marks (i.e 5 × 3 = 15 marks).
- The average of the two Mid exams will be added with the 75 marks of External end examination which equals to 100 marks (i.e 25 + 75 = 100).

UNIT - I

Part - A

1.	What is International Financial Management ?	(Refer Unit-I, SQA-1)
2.	What are the various methods of international financial?	(Refer Unit-I, SQA-2)
3.	What are the recent changes in International Financial Management?	(Refer Unit-I, SQA-3)
4.	Define International Business.	(Refer Unit-I, SQA-5)
5.	Disadvantages of International Business.	(Refer Unit-I, SQA-6)
6.	What are multi national corporations (MNCs) and what economic roles do they play?	(Refer Unit-I, SQA-8)

Part - B

1.	Explain the importance of international financial management.	(Refer Unit-I, Q.No. 2)
2.	Explain the Nature of International Financial Management.	(Refer Unit-I, Q.No. 3)
3.	Explain the scope of international financial management.	(Refer Unit-I, Q.No. 5)
4.	How International Financial Management is different from Financial Management at Domestic Level.	(Refer Unit-I, Q.No. 7)
5.	Explain the various theories of International business.	(Refer Unit-I, Q.No. 11)

6. Explain the advantages and dis-advantages of International Business. (Refer Unit-I, Q.No. 12)
7. Explain the various challenges in IFM ? (Refer Unit-I, Q.No. 14)

UNIT - II

Part - A

1. Bretton Woods System (Refer Unit-II, SQA-2)
2. Gold standard (Refer Unit-II, SQA-3)
3. Define Balance of payment (Refer Unit-II, SQA-5)
4. Importance of Balance of Payments. (Refer Unit-II, SQA-7)
5. What is International Monetary System? (Refer Unit-II, SQA-9)
6. Advantages of Gold Standard. (Refer Unit-II, SQA-10)

Part - B

1. Explain the functions of BOP ? (Refer Unit-II, Q.No. 2)
2. Explain the importance of Balance of Payments. (Refer Unit-II, Q.No. 3)
3. Discuss about Fundamentals of BOP. (Refer Unit-II, Q.No. 4)
4. List out the recent trends of BOP in India. (Refer Unit-II, Q.No. 6)
5. Explain the factors affecting Inter- national Trade Flows. (Refer Unit-II, Q.No. 8)
6. How exchange rates are determined as per Gold standard ? (Refer Unit-II, Q.No. 12)
7. State the Advantages and Disadvantages of Gold Standard. (Refer Unit-II, Q.No. 13)
8. Describe briefly about Evaluation of Floating Rates. (Refer Unit-II, Q.No. 19)
9. Explain the factors influencing Current Exchange Rate. (Refer Unit-II, Q.No. 21)

UNIT - III

Part - A

1. What is Foreign Exchange Market ? (Refer Unit-III, SQA-1)
2. Bid and Ask Quotations. (Refer Unit-III, SQA-4)
3. Define arbitrage. (Refer Unit-III, SQA-5)
4. What is speculation in forward market? (Refer Unit-III, SQA-6)
5. What is an option? (Refer Unit-III, SQA-7)
6. Define Euro Credit Market. (Refer Unit-III, SQA-11)
7. Define Euro Bond Market. (Refer Unit-III, SQA-12)

Part - B

1. What are the functions of foreign exchange market? (Refer Unit-III, Q.No. 2)
2. Explain the structures of Foreign Exchange Market ? (Refer Unit-III, Q.No. 3)
3. Explain the various participants in Foreign Exchange Market ? (Refer Unit-III, Q.No. 4)
4. Explain briefly about speculation in the forward market. (Refer Unit-III, Q.No. 9)
5. Define future contracts. What are the features of future contract? (Refer Unit-III, Q.No. 10)
6. What are the differences between International Money Market and Capital Market ? (Refer Unit-III, Q.No. 19)
7. Define Euro Currency Market. State the characteristics of Euro Currency Market. (Refer Unit-III, Q.No. 20)
8. Define Euro Credit Market. What are the characteristics of Euro Credit Market. (Refer Unit-III, Q.No. 25)
9. Define Euro Bond Market. State the features of Euro Bond Market. (Refer Unit-III, Q.No. 28)
10. What is an International Stock Market? Write about issues of stock in foriegn markets and issues of foreign stock in US markets. (Refer Unit-III, Q.No. 33)

UNIT - IV

Part - A

1. Define exchange rate. (Refer Unit-IV, SQA-1)
2. Fixed Exchange Rate System (Refer Unit-IV, SQA-2)
3. Crawling Peg Exchange Rate System (Refer Unit-IV, SQA-4)
4. Define Foreign Exchange Risk (Refer Unit-IV, SQA-5)
5. Translation Exposure (Refer Unit-IV, SQA-7)
6. Economic Exposure (Refer Unit-IV, SQA-8)
7. International Arbitrage (Refer Unit-IV, SQA-10)
8. International fisher effect. (Refer Unit-IV, SQA-11)

Part - B

1. How exchange rate movements are measured ? (Refer Unit-IV, Q.No. 2)
2. Explain the various factors influencing exchange rates ? (Refer Unit-IV, Q.No. 3)
3. Discuss the government influences on exchange rates ? (Refer Unit-IV, Q.No. 4)
4. How to manage foreign exchange risks? Explain them with recent experiences in the market. (Refer Unit-IV, Q.No. 9)
5. Explain the accounting treatment of transaction exposure. (Refer Unit-IV, Q.No. 11)
6. What are the differences between Transaction Exposure and Translation Exposure? (Refer Unit-IV, Q.No. 13)
7. Define Operating Exposure? What are the determinants of Operating Exposure. (Refer Unit-IV, Q.No. 15)

8. Explain the theory of interest rate parity. (Refer Unit-IV, Q.No. 21)
9. Explain briefly about International fisher effect. (Refer Unit-IV, Q.No. 23)
10. Explain briefly about Expectation Theory. (Refer Unit-IV, Q.No. 26)

UNIT - V

Part - A

1. Define Asset Liability Management. (Refer Unit-V, SQA-1)
2. Define Foreign Direct Investment. (Refer Unit-V, SQA-2)
3. Define International Capital Structure. (Refer Unit-V, SQA-4)
4. Define cost of capital ? (Refer Unit-V, SQA-5)
5. Define International Portfolio Management. (Refer Unit-V, SQA-7)
6. What is International Financing ? (Refer Unit-V, SQA-9)
7. Define Equity Financing. (Refer Unit-V, SQA-10)
8. Define Receivable Management. (Refer Unit-V, SQA-14)
9. What is EXIM Bank? (Refer Unit-V, SQA-16)

Part - B

1. Define Foreign Direct Investment. Explain the various motives for Foreign Direct Investment. (Refer Unit-V, Q.No. 2)
2. What are the benefits and costs of FDI ? (Refer Unit-V, Q.No. 5)
3. Explain about Capital Budgeting in International Scenario and Enumerate the steps involved in Capital Budget decisions. (Refer Unit-V, Q.No. 8)
4. What are the different techniques under International Capital Budgeting? (Refer Unit-V, Q.No. 10)
5. Describe the characteristics of inter- national capital structure. (Refer Unit-V, Q.No.12)
6. Define cost of capital ? How does a cost of capital of MNC's differs from domestic firm ? (Refer Unit-V, Q.No. 13)
7. Define International Portfolio Management. What are the factors affecting International Portfolio. (Refer Unit-V, Q.No. 15)
8. Explain the factors determining long-term financial requirements. (Refer Unit-V, Q.No. 21)
9. Define ADR and GDR. Explain the process of issuing ADR's and GDR's. (Refer Unit-V, Q.No. 24)
10. Explain the concept of Bond Financing. (Refer Unit-V, Q.No. 28)
11. Explain the advantages and dis-advantages of parallel loan. (Refer Unit-V, Q.No. 32)
12. What are the roles and functions of Export–Import Bank of India? Mention the financing and non-financing programmes of EXIM Bank. (Refer Unit-V, Q.No. 32)
13. What are the amendments executed in EXIM as the part of International Trade? (Refer Unit-V, Q.No. 50)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

MBA IV - Semester Examination

September - 2020

R17

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 2 Hours] [Max. Marks : 75

Answer any Five Questions
All Question Carry Equal Marks

ANSWERS

1. What do you understand by International Financial Management? Explain the differences between Domestic FM and IFM. **(Unit-I, Q.No.1,7)**
2. What is meant by balance of payments? Why is it useful to examine a company's balance of payments data ? **(Unit-II, Q.No.1,3)**
3. Explain salient features of Bretton Wood's System. Discuss the reasons for its failure. **(Unit-II, Q.No.15)**
4. What is meant by Eurocurrency market ? What are the reasons for the existence of the Eurodollar market ? **(Unit-III, Q.No.20,24)**
5. Define exchange rate. Discuss the factors influencing exchange rate in detail. **(Unit-IV, Q.No.1,3)**
6. What is the rational for the existence of the international Fisher Effect ? **(Unit-IV, Q.No.24)**
7. Briefly discuss the global trends in FDI in the last five years and comment upon your results. **(Unit-V, Q.No.6)**
8. Define ADR and GDR. Explain the process of issuing ADRs and GDRs. **(Unit-V, Q.No.24)**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.B.A II - Year IV - Semester Examination **R17**

December - 2019

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 3 Hours] [Max. Marks : 75

Note : This question paper contains two Parts **A** and **B.**
Part A is compulsory which carries 25 marks. Answer **all** questions in **Part** A.
Part B consists of 5 Units. Answer any **one** full question from each unit.
Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (5 × 5 = 25 Marks)

ANSWERS

1. (a) What are the recent changes in IFM? **(Unit-I, SQA.3)**
   (b) Explain Indian BOP trends. **(Unit-II, SQA.4)**
   (c) What is Euro currency market? **(Unit-III, SQA.8)**
   (d) How to measure exchange rate movements? **(Unit-IV, SQA.12)**
   (e) What is foreign direct investment? **(Unit-V, SQA.2)**

PART - B (5 × 10 = 50 Marks)

2. Discuss the challenges in IFM. **(Unit-I, Q.No.14)**

OR

3. Explain the importance and scope of IFM. **(Unit-I, Q.No.2,5)**
4. Explain the factors affecting international trade flows. **(Unit-II, Q.No.8)**

OR

5. Discuss about Economic and Monetary Union. **(Unit-II, Q.No.22)**
6. What is the process of arbitrage and speculation in forward market? **(Unit-III, Q.No.8,9)**

OR

7. Distinguish between Indian stock Market and International Stock Market. **(Unit-III, Q.No.36)**
8. How to manage foreign exchange risk? Explain with recent experiences in the market. **(Unit-IV, Q.No.9)**

OR

9. Explain the relationships between inflation, interest rates and exchange rates. **(Unit-IV, Q.No.19)**
10. What are the objectives international portfolio management? **(Unit-V, Q.No.16)**

OR

11. Discuss the recent amendments in EXIM policy. **(Unit-V, Q.No.50)**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.B.A II - Year IV - Semester Examination

April/May - 2019

R17

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 3 Hours] [Max. Marks : 75

Note : This question paper contains two Parts **A** and **B.**
Part A is compulsory which carries 25 marks. Answer **all** questions in **Part** A.
Part B consists of 5 Units. Answer any **one** full question from each unit.
Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (5 × 5 = 25 Marks)

ANSWERS

1. (a) What are the various methods of international financial? **(Unit-I, SQA.2)**
   (b) What are the different agencies that facilitate International flow of funds? **(Unit-II, SQA.1)**
   (c) What are the different exchanging methods based on euro based transactions? **(Unit-III, SQA.15)**
   (d) What is Purchasing Power Parity? How is inflation being measured by Purchase Power Parity? **(Unit-IV, SQA.13)**
   (e) What is international portfolio management ? **(Unit-V, SQA.7)**

PART - B (5 × 10 = 50 Marks)

2. Discuss the challenges in international financial management. **(Unit-I, Q.No.14)**

OR

3. What you mean by international financial management? Explain its implications and various components. **(Unit-I, Q.No.1,2,5)**
4. (a) What are the factors affecting on International Trade flows? **(Unit-II, Q.No.8)**
   (b) Discuss briefly the role of IMF. **(Unit-II, Q.No. 9)**

OR

5. Explain the current exchange rate arrangements. How does exchange rate regime effect on International Monetary System? **(Unit-II, Q.No.20)**
6. What are the functions and structure of the Forex markets? **(Unit-III, Q.No.2,3)**

OR

7. Assume today's settlement price on a CME EUR futures contract is $ 1.3140/ EUR. You have a short position in one contract. Your performance bond account currently has a balance of $1,700. The next three days' settlement prices are $1.3126, $1.3133 and $ 1.3049. Calculate the changes in the performance bond account from daily marking-to-market and the balance, of the performance bond account after the third day. **(Unit-III, Prob.15)**

8. What are the risks related to foreign exchange market? Explain exchange rate systems. **(Unit-IV, Q.No.8,7)**

OR

9. Suppose that the current spot exchange rate is €0.80/$ and the three months forward exchange rate is €0.7813/$. The three-month interest rate is 5.6 present per annum the United States and 5.40 percent per annum in France. Assume that you can both up to $1,000,000 or €800,00.

   (a) Show how to realize a certain profit via covered interest arbitrage, assuming want to realize profit in terms of U.S. dollars. Also determine the size of your arbitrage profit.

   (b) Assume that you want to realize profit in terms of euros. Show the covered arbitrage process and determine the arbitrage profit in euros. **(Unit-IV, Prob.10)**

10. What are the different techniques under international capital budgeting ? **(Unit-V, Q.No.10)**

OR

11. What is EXIM ? What are the amendments executed in EXIM as the part of international trade ? **(Unit-V, Q.No.48,50)**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.B.A IV - Semester Examination **R19**

Model Paper - I

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 3 Hours] [Max. Marks : 75

Note : This question paper contains two Parts **A** and **B.**

Part A is compulsory which carries 25 marks. Answer **all** questions in **Part** A.

Part B consists of 5 Units. Answer any **one** full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (5 × 5 = 25 Marks)

ANSWERS

1. (a) What are multi national corporations (MNCs) and what economic roles do they play? **(Unit-I, SQA.8)**
   (b) Bretton Woods System **(Unit-II, SQA.2)**
   (c) What is speculation in forward market? **(Unit-III, SQA.6)**
   (d) Fixed Exchange Rate System **(Unit-IV, SQA.2)**
   (e) Define International Portfolio Management. **(Unit-V, SQA.7)**

Part - B (5 × 10 = 50 Marks)

2. Explain the scope of international financial management. **(Unit-I, Q.No.5)**

OR

3. Explain the recent changes in International Financial Management. **(Unit-I, Prob. 13)**
4. "Gold Standard provide price stability besides automaticity in exchange rate and BOP adjustment". Discuss. **(Unit-II, Q.No.12)**

OR

5. Explain the Current Exchange Rate Arrangements. How does exchange rates regime effect on international monetary system. **(Unit-II, Prob.20)**
6. Explain briefly about speculation in the forward market. **(Unit-III, Q.No.9)**

OR

7. The share of A ltd. company is priced at 40, put options with a strike price of `150 are priced at `25.
   (a) Calculate the intrinsic value of options.
   (b) What is the time value of options?
   (c) If the share price falls to `80, what would be the gain/loss for the holder and writer of the options? **(Unit-III, Prob. 13)**

8. What are the different types of Foreign Exchange exposure? Briefly explain them. **(Unit-IV, Q.No.8)**

OR

9. What is Transaction Exposure? How to manage Transaction Exposure. **(Unit-IV, Q.No.10)**

10. Define Foreign Direct Investment. Explain the various motives for Foreign Direct Investment. **(Unit-V, Q.No. 2)**

OR

11. Define International Capital Structure. Explain the determinants of International Capital Structure. **(Unit-V, Q.No.11)**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.B.A IV - Semester Examination **R19**

Model Paper - II

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 3 Hours] [Max. Marks : 75

Note : This question paper contains two Parts **A** and **B.**

Part A is compulsory which carries 25 marks. Answer **all** questions in **Part** A.

Part B consists of 5 Units. Answer any **one** full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (5 × 5 = 25 Marks)

ANSWERS

1. (a) Disadvantages of International Business. **(Unit-I, SQA.6)**
   (b) Define Balance of payment**.** **(Unit-II, SQA.5)**
   (c) Define Euro Currency Market. **(Unit-III, SQA.8)**
   (d) International fisher effect. **(Unit-IV, SQA.11)**
   (e) What is EXIM Bank. **(Unit-V, SQA.16)**

Part - B (5 × 10 = 50 Marks)

2. How International Financial Management is different from Financial Management at Domestic Level. **(Unit-I, Q.No.7)**

OR

3. Explain the various theories of International business. **(Unit-I, Prob.11)**

4. Prepare a BOP statement for France from the following data:

   France exports goods worth FFrs 5000

   France imports goods worth FFrs 4000

   i) Expenditure of foreign tourists in France. FFrs 2500

   ii) France makes interest and dividend payments Foreigners; FFrs 2000

   iii) A France working in USA sends a cheque to his wife in Paris FFrs 500

   iv) France telecom invests in India FFrs 4500

   v) IBM invests in France FFrs 4500

   vi) A France resident buys a German bonds : FFrs 300

   vii) A Swiss resident buys a French Bonds : FFrs 5000

   viii) France borrows FFrs 3800 for short term **(Unit-II, Prob.2)**

OR

5. Explain the various agencies which facilitate International flows. **(Unit-II, Q.No.9)**

6. What is meant by Euro Currency Market? **(Unit-III, Q.No.20)**

OR

7. Define arbitrage. Explain different forms of arbitrage process. **(Unit-III, Q.No.8)**

8. Explain the relationship between inflation, interest rates, and exchange rates. **(Unit-IV, Q.No.19)**

OR

9. A French firm has shipped goods to an US importer under a letter of credit arrangement which calls for payment at the end of 90 days the invoice is for $ 1,24,000. Presently the exchange rate is FFr 5.70/$ if the FFr were strengthened by 5% by the end of 90 days. What would be the transaction gain or loss in FFr, if it were to weaken by 5% what would happen ? **(Unit-IV, Prob.3)**

10. What is International Cash management? Discuss the objectives of International Cash management. **(Unit-V, Q.No.33)**

OR

11. Describe various Payment Methods of International Trade. **(Unit-V, Q.No.45)**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.B.A IV - Semester Examination **R19**

Model Paper - III

INTERNATIONAL FINANCIAL MANAGEMENT

Time : 3 Hours] [Max. Marks : 75

Note : This question paper contains two Parts **A** and **B.**

Part A is compulsory which carries 25 marks. Answer **all** questions in **Part** A.

Part B consists of 5 Units. Answer any **one** full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (5 × 5 = 25 Marks)

ANSWERS

1. (a) What is International Financial Management ? **(Unit-I, SQA.1)**
   (b) What is fixed exchange rate system ? **(Unit-II, SQA.12)**
   (c) Explain the advantages of Euro Currency Market. **(Unit-III, SQA.10)**
   (d) Define Foreign Exchange Risk. **(Unit-IV, SQA.5)**
   (e) Objectives of International Portfolio Management? **(Unit-V, SQA.8)**

Part - B (5 × 10 = 50 Marks)

2. What are the various methods by which international firms conduct their business ? **(Unit-I, Q.No.10)**

OR

3. What is International Financial Management ? Explain the importance of international financial management. **(Unit-I, Q.No.1,2)**
4. Discuss about Fundamentals of BOP. **(Unit-II, Q.No.4)**

OR

5. Explain the factors affecting International Trade Flows. **(Unit-II, Q.No.8)**
6. What is Foreign Exchange Market (Forex market)? Discuss the characteristics of foreign exchange market. **(Unit-III, Q.No.1)**

OR

7. What are the differences between International Money Market and Capital Market ? **(Unit-III, Q.No.19)**
8. In July, the one year interest rate is 12%, on British pounds and 9% on U.S. dollars,
   (a) If the current exchange rate is $1.83 = £1, what is the expected future exchange rate in one year ?

(b) Suppose a change in expectations regarding future U.S. inflation causes the expected future spot rate to declare to $1.52 = £1. What should happen to the U.S. interest rate ? **(Unit-IV, Prob.22)**

OR

9. Explain the various factors influencing exchange rates ? **(Unit-IV, Q.No.3)**

10. Discuss the Regulations and Guidelines relating to EXIM Bank. **(Unit-V, Q.No.51)**

OR

11. What are the different techniques under International Capital Budgeting? **(Unit-V, Q.No.10)**