

# **LECTURE NOTES**

## **INTERNATIONAL FINANCIAL MANAGEMENT**

**MBA IV SEMESTER**

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## UNIT-I

### INTRODUCTION TO INTERNATIONAL FINANCE MANAGEMENT (IFM)

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 An Overview of International Finance Management (IFM)**

International financial management is also known as ‘international finance’.

**International finance** is the set of relations for the creation and using of funds (assets), needed for foreign economic activity of international companies and countries. **Assets** in the financial aspect are considered not just as money, but money as the capital, i.e. the value that brings added value (profit). **Capital** is the movement, the constant change of forms in the cycle that passes through three stages: the monetary, the productive, and the commodity. So, finance is the monetary capital, money flow, serving the circulation of capital. If money is the universal equivalent, whereby primarily labor costs are measured, finance is the economic tool.

The **definition of international finance** is the combination of monetary relations that develop in process of economic agreements - trade, foreign exchange, investment - between residents of the country and residents of foreign countries.

Financial management is mainly concerned with how to optimally make various corporate financial decisions, such as those pertaining to investment, capital structure, dividend policy, and working capital management, with a view to achieving a set of given corporate objectives.

When a firm operates in the domestic market, both for procuring inputs as well as selling its output, it needs to deal only in the domestic currency. When companies try to increase their international trade and establish operations in foreign countries, they start dealing with people and firms in various nations. On this regards, as different nations have different currencies, dealing with the currencies becomes a problem-variability in exchange rates have a profound effect on the cost, sales and profits of the firm.

Globalization of the financial markets results in increased opportunities and risks on account of overseas borrowing and investments by the firm.

#### **1.1.1 TRANSFER PRICING**

It is determination of exchange price when different business units within a firm exchange the products and services

**Definition:** As per section 92 (1) of the Income Tax Act, 1961 – Income from an international transaction shall be computed having regard to the Arm’s length Price (correct market price). Commercial transactions between the different parts of the multinational groups may not be subject to the same market forces shaping relations between the two independent firms. One party transfers to another, goods or services, for a price. That price is known as “transfer price”.

#### **Uses of Transfer Pricing**

When product is transferred between profit centers or investment centers within a decentralized firm, transfer prices are necessary to calculate divisional profits, which then affect divisional performance

evaluation. The objective is to achieve goal congruence, in which divisional managers will want to transfer product-when doing so maximizes consolidated corporate profits, and at least one manager will refuse the transfer when transferring product is not the profit-maximizing strategy for the company. When multinational firms transfer product across international borders, transfer prices are relevant in the calculation of income taxes, and are sometimes relevant in connection with other international trade and regulatory issues.

Transfer pricing is

- the process of setting transfer prices between associated enterprises or related parties where at least one of the related parties is a non-resident.
- the price at which an enterprise transfers goods and services, intangible and intangible assets, services or lending/ borrowing money to associated enterprises.
- generally decided prior to entering the transaction and they are audited/ reviewed by the auditor after the year finalization.

### **Transfer Pricing in Multinational Companies**

Internal auditors play key roles in multinational corporations, including providing valuable input regarding effectiveness of business operations. They can help multinational corporations by assessing the effectiveness of corporate policies regarding international transfer pricing. International transfer pricing is a major issue for multinational corporations, as transfer pricing is a key element in corporate taxation strategies. Effective transfer pricing policies are very important to sustaining effective global business operations. Transfer pricing, if done correctly, can improve the overall success and value of an international company.

The creation of foreign subsidiaries and bases of operation for cross border flow of products, services, trademarks, funding and technology have a significant impact on the issue of transfer pricing in international business. The transfer pricing problem for multinationals is of great significance. There are different income tax rates in different countries. So, it becomes desirable from the view point of overall corporate strategy to show higher profits in low-tax countries and lower profits in high-tax countries. One way to do so is through transfer prices.

The resale price method begins with the price at which a product is resold to an independent enterprise (IE) by an associate enterprise.

Ex: X sold to AE at Rs. 1000 (profit: 300). AE sold to an IE at Rs. 2000 (profit of Rs. 500 for relevant IE). Arms length price = 2000 - 500 = 1500.

### **Methods of Transfer Pricing**

Variable Cost Method Transfer price = variable cost of selling unit + markup

Full Cost Method Transfer price = Variable Cost + allocated fixed cost

Market Price Method Transfer price = current price for the selling unit's in the market

Negotiated Price Method

### **Strategic Factors of Transfer Pricing**

- International Transfer Pricing Consideration
- Tax Rate- minimize taxes locally as well internationally
- Exchange Rate
- Custom Charges Risk of expropriation
- Currency Restriction

- Strategic relationship
- Assist bayside division to grow
- Gain entrance in the new country
- Supplier's quality or name

### **1.1.1.1 Reason for growth in international business**

International business has growth dramatically in recent years because of strategic imperatives and environmental changes.

Strategic imperatives include the need to leverage core competencies, acquire resources, seek new markets, and match the actions of rivals. Although strategic imperatives indicate why firms wish to internationalize their operations, significant changes in the political and technical environment have facilitated the explosive growth in international business activity that has since World War 2. The growth of the internet and other information technologies is likely to redefine global competition and ways of doing international business.

There are many reasons why international business is growing at such a rapid pace. Below are some of those reasons:

#### **Saturation of Domestic Markets**

In most of the countries due to continuous production of similar products over the years has led to the saturation of domestic markets. For example in Japan, 95% of people have all types of electronic appliances and there is no growth of organization there, as a result they have to look out for new markets overseas.

#### **Opportunities in Foreign Markets**

As domestic markets in some countries have saturated, there are many developing countries where these markets are blooming. Organizations have great opportunities to boost their sales and profits by selling their products in these markets. Also countries that are attaining economic growth are demanding new goods and services at unprecedented levels.

#### **Availability of Low Cost Labor**

When we compare labor cost in developed countries with respect to developing countries they are very high. As a result, organizations find it cheaper to shift production in these countries. This leads to lower production cost for the organization and increased profits.

#### **Competitive Reasons**

Either to stem the increased presence of foreign companies in their own domestic markets or to counter the expansion of their domestic markets, more and more organizations are expanding their operations abroad. International companies are using overseas market entry as a counter measure to increase competition.

#### **Increased Demands**

Consumers in counties that did not have the purchasing power to acquire high-quality products are now purchasing them due to improved economic conditions

#### **Diversification**

To counter cyclical patterns of business in different parts of the world, most of the companies expand and diversify their business, to attain profitability and uncover new markets. This is one of the reasons why international business is developing at a rapid pace.

### **Reduction of Trade Barriers**

Most of the developing economies are now relaxing their trade barriers and opening doors to foreign multinationals and allowing their companies to set-up their organizations abroad. This has stimulated cross border trade between countries and opened markets that were previously unavailable for international companies.

### **Development of communications and Technology**

Over last few years there has been a tremendous development in communication and technology, which has enabled everyone to know about demands, products and services offered in other part of the world. Adding to this is the reducing cost of transport and improved efficiency has also led to expansion of business.

### **Consumer Pressure**

Innovations in transport and communication has led to development of more aware consumer. This has led to consumers demanding new and better goods and services. The pressure has led to companies researching, merging or entering into new zones.

### **Global Competition**

More companies operate internationally because

- New products quickly become known globally
- Companies can produce in different countries
- Domestic companies, competitors, suppliers have become international

As international companies venture into foreign markets, these companies will need managers and other persons who understand and are exposed to the concepts and practices that govern international companies. Therefore the study of international business may be essential to work in global environment.

#### **1.1.1.2 Practical considerations in Transfer Pricing**

Transfer pricing is used to “window-dress” the profits of certain divisions of a multinational firm so as to reduce the borrowing costs.

For the long-term survival of a multinational firm, it is important that interdivisional profitability is measured accurately. This record of profitability of different divisions is valuable in allocating overall spending on capital projects and in sharing other corporate resources.

For correct profitability, the firm should be sure that interdivisional transfer prices are the prices that would have been paid had the transactions been with independent companies, so-called ‘arm’s length process’.

This is particularly difficult in the international allocation of items such as research and consulting services or head quarters overhead; there is rarely a market price for research or other services of corporate head quarters.

Profit allocations will usually be according to the distribution of corporate sales, with the sales valued at the “correct” exchange rate.

### **1.2 Importance of IFM**

All the major economic functions-consumption, production and investment-are highly globalized. Hence it is essential for financial managers to fully understand vital international dimensions of financial management. Proper management of international finances can help the organization in achieving same efficiency and effectiveness in all markets. Hence without IFM, sustaining in the market can be difficult.

## **Six aspects provide importance to IFM**

- i) Specialization of some goods and services
- ii) Opening of new economies
- iii) Globalization of firms
- iv) Emergence of new form of business
- v) Growth of world trade
- vi) Development process of Nations

## **1.3 Nature and Scope Of International Financial Management**

International finance-the finance function of a multinational firm has two functions-treasury and control. The treasurer is responsible for financial planning analysis, fund acquisition, investment financing, cash management, investment decision and risk management. Controller deals with the functions related to external reporting, tax planning and management, management information system, financial and management accounting, budget planning and control, and accounts receivables etc.

Multinational finance is multidisciplinary in nature. While an understanding of economic theories and principles is necessary to estimate and model financial decisions, financial accounting and management accounting help in decision making in financial management at multinational level.

Because of changing nature of environment at international level, the knowledge of latest changes in forex rates, volatility in capital market, interest rate fluctuations, macro level changes, micro level economic indicators, savings, consumption pattern, interest preference, investment behavior of investors, export and import trends, competition, banking sector performance, inflationary trends, demand and supply conditions etc. is required by the practitioners of international financial management.

### **Nature of the financial Management**

- IFM is concerned with financial decisions taken in international business.
- IFM is an extension of corporate finance at international level.
- IFM set the standard for international tax planning and international accounting
- IFM includes management of exchange rate risk.

Scope of the financial Management:

- IFM includes working capital management of multinational enterprises.

**Scope of IFM** includes

- Foreign exchange markets, international accounting, exchange rate risk management etc.
- It also includes management of finance functions of international business.
- IFM sorts out the issues relating to FDI and foreign portfolio investment.
- It manages various risks such as inflation risk, interest rate risks, credit risk and exchange rate risk.
- It manages the changes in the foreign exchange market.
- It deals with balance of payments in global transactions of nations.

- Investment and financing across the nations widen the scope of IFM to international accounting standards.
- It widens the scope of tax laws and taxation strategy of both parent country and host country.
- It helps in taking decisions related to international business.

#### **1.4 International Financial Management Different From Financial Management At Domestic Level**

The important distinguishing features of international finance from domestic financial management are discussed below:

##### **1.4.1 Foreign exchange risk**

An understanding of foreign exchange risk is essential for managers and investors in the modern 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.

Thus, changes in the exchange rates of foreign currencies results in foreign exchange risks.

##### **1.4.2 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. The other country may seize assets of the company without any reimbursements by utilizing their sovereign right, and some countries may restrict currency remittances to the parent company. 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.

Example: In 1992, Enron Development Corporation, a subsidiary of a Houston based Energy Company, signed a contract to build India's longest power plant. Unfortunately, the project got cancelled in 1995 by the politicians in Maharashtra who argued that India did not require the power plant. The company had spent nearly \$ 300 million on the project. The Enron episode highlights the problems involved in enforcing contracts in foreign countries.

Thus, political risk associated with international operations is generally greater than that associated with domestic operations and is generally more complicated.

### **1.4.3 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.

### **1.4.4 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 dealing with these market imperfections, they also offer managers of international firms abundant opportunities.

### **1.4.5 Tax and Legal system**

Tax and legal system varies from one country to another country and this leads to complexity in their financial implications and hence give rise to tax and legal risks.

### **1.4.6 Inflation**

Inflation rate differs from country to country. Higher inflation rates in few countries denote inflation risks.

## **1.5 Major turmoil influencing International financial Market**

Frictions on International financial market can be in the form of

### **1.5.1 Government controls**

With the help of different controlling procedures, government tries to control international financial flows like maintaining the multiple exchange rates, taxes on international flows and constructs on outflow of funds. These slower the pace of international/foreign investment flows

### **1.5.2 Different tax laws**

Capital gains, interest income, dividend and other financial transactions reduce the post tax returns and thus restrict the scope of international portfolio investment.

### **1.5.3 Implicit and explicit transaction costs**

Trading fees/commission, bid ask spread is a form of Implicit and explicit transaction which affects the International financial market. The transactions costs is less in developed countries compared to newly market economies/countries. Transactions costs per unit decreases when the size of transaction is large. However, small investors are not benefited from this strategy.

## **1.6 INTERNATIONAL BUSINESS METHODS**

The four types of international businesses are:

1. Exporting
2. Licensing
3. Franchising
4. Foreign Direct Investment (FDI)



### **1.6.1 Exporting**

Exporting is often the first choice when manufacturers decide to expand abroad. Exporting means selling abroad, either directly to target customers or indirectly by retaining foreign sales agents or/and distributors. Either case, going abroad through exporting has minimal impact on the firm's human resource management because only a few, if at all, of its employees are expected to be posted abroad.

Exporting is the practice of shipping goods from the domestic country to a foreign country. This term export is derived from the conceptual meaning as to ship the goods and services out of the port of a country. In national accounts "exports" consist of transactions in goods and services (sales, barter, gifts or grants) from residents to non-residents.

The seller of such goods and services is referred to as an "exporter" who is based in the country of export whereas the overseas based buyer is referred to as an "importer". An export's counterpart is an import. In international trade, exporting refers to selling goods and services produced in the home country to other markets. Export of commercial quantities of goods normally requires the involvement of customs authorities in both the country of export and the country of import. Data on international trade in goods is mostly obtained through declarations to customs services. If a country applies the general trade system, all goods entering or leaving the country are recorded.

### **1.6.2 Licensing**

Licensing is another way to expand one's operations internationally. In case of international licensing, there is an agreement whereby a firm, called licensor, grants a foreign firm the right to use intangible (intellectual) property for a specific period of time, usually in return for a royalty. Licensing of intellectual property such as patents, copyrights, manufacturing processes, or trade names abound across the nations. The Indian basmati (rice) is one such example.

When considering strategic entry into an international market, licensing is a low-risk and relatively fast foreign market entry tactic.

Compared to the other potential entry models for foreign market entry, licensing is relatively low risk in terms of time, resources, and capital requirements.

Advantages of licensing include localization through a foreign partner, adherence to strict international business regulations, lower costs, and the ability to move quickly.

Disadvantages to this entry mode include loss of control, potential quality assurance issues in the foreign market, and lower returns due to lower risk.

When deciding to license abroad, careful due diligence should be done to ensure that the licensee is a strong investment for the licensor and vice versa.

A 'licensor' in a licensing relationship is the owner of the produce, service, brand or technology being licensed. And a 'licensee' is the buyer of the produce, service, brand or technology being licensed.

A licensor (i.e. the firm with the technology or brand) can provide their products, services, brand and/or technology to a licensee via an agreement. This agreement will describe the terms of the strategic alliance, allowing the licensor affordable and low risk entry to a foreign market while the licensee can gain access to the competitive advantages and unique assets of another firm. This is potentially a strong win-win arrangement for both parties, and is a relatively common practice in international business.

Example: Due to food import regulations in Japan, the licensor in a company involved in energy health drinks cannot sell the product at local wholesalers or retailers. In order to circumvent this strategic barrier, the licensor finds a local sports drink manufacturer to license their recipe to. In exchange, the licensee

sells the product locally under a local brand name and kicks back 15% of the overall revenues to the licensor.

Licenses are signed for a variety of time periods. Depending on the investment needed to enter the market, the foreign licenses may insist on a longer licensing period to pay on the initial investment. The license will make all necessary capital investment such as machinery inventory and so on and market the products in the assigned sales territories, which may consist of one or more countries. Licensing arrangements are subjected to negotiations and tend to vary considerably from company to company and from industry to industry.

### **The Pros and Cons**

Before deciding to use licensing as an entry strategy, it's important to understand in which situations licensing is best suited.

#### **Advantages**

Licensing affords new international entrants with a number of advantages:

Licensing is a rapid entry strategy, allowing almost instant access to the market with the right partners lined up.

Licensing is low risk in terms of assets and capital investment. The licensee will provide the majority of the infrastructure in most situations.

Localization is a complex issue legally, and licensing is a clean solution to most legal barriers to entry. Cultural and linguistic barriers are also significant challenges for international entries. Licensing provides critical resources in this regard, as the licensee has local contacts, mastery of local language, and a deep understanding of the local market.

#### **Disadvantages**

While the low-cost entry and natural localization are definite advantages, licensing also comes with some opportunity costs:

Loss of control is a serious disadvantage in a licensing situation in regards to quality control. Particularly relevant is the licensing of a brand name, as any quality control issue on behalf of the licensee will impact the licensor's parent brand.

Depending on an international partner also creates inherent risks regarding the success of that firm. Just like investing in an organization in the stock market, licensing requires due diligence regarding which organization to partner with.

Lower revenues due to relying on an external party are also a key disadvantage to this model. (Lower risk, lower returns.)

### **1.6.3 Franchising**

Franchising is closely related to licensing and is a special form of it. Franchising is an option in which a parent company grants another company/firm the right to do business in a prescribed manner. A 'franchisee' is a holder of a franchise; a person who is granted a franchise. And a 'franchiser' is a person who grants franchises.

Franchising differs from licensing in the sense that it usually requires the franchisee to follow much stricter guidelines in running the business than does licensing. Further, licensing tends to be confined to manufacturers, whereas franchising is more popular with service firms such as restaurants, hotels and rental services.

Franchisee will take the majority of the risk in opening a new location (e.g. capital investments while gaining the advantage of an already established brand name and operational process. In exchange, the

franchisee will pay a certain percentage of the profits of the venture back to the franchiser. The franchiser will also often provide training, advertising, and assistance with products.

Franchising business is very important to companies here and abroad. At present, the prominent examples of the franchise agreements in India are Pepsi Food Ltd., Coca-Cola, Wimpey's Domino, McDonald, and Nirula. In USA, one in 12 business establishments is a franchise.

Franchising enables organizations a low cost and localized strategy to expanding to international markets, while offering local entrepreneurs the opportunity to run an established business.

A franchise agreement is defined as the franchiser granting an entrepreneur or local company (the franchisee) access to its brand, trademarks, and products.

Franchising is designed to enable large organizations rapid access to new markets with relatively low barriers to entry.

**Advantages of franchising** (for the franchiser) include low costs of entry, a localized workforce (culturally and linguistically), and a high speed method of market entry.

**Disadvantages of franchising** (for the franchiser) include loss of some organizational and brand control, as well as relatively lower returns than other strategic entry models (with lower risk).

### **Lower Barriers to Entry**

Franchising is a particularly useful practice when approaching international markets. For the franchiser, international expansion can be both complex and expensive, particularly when the purchase of land and building of facilities is necessary. With legal, cultural, linguistics, and logistical barriers to entry in various global markets, the franchising model offers a simpler, cleaner solution that can be implemented relatively quickly.

### **Localization**

Franchising also allows for localization of the brand, products, and distribution systems. This localization can cater to local tastes and language through empowering locals to own, manage, and employ the business. This high level of integration into the new location can create significant advantages compared to other entry models, with much lower risk.

### **Speed**

It is also worth noting that franchising is a very efficient, low cost and quickly implemented expansionary strategy. Franchising requires very little capital investment on behalf of the parent company, and the time and effort of building the stores are similar outsources to the franchisee. As a result, franchising can be a way to rapidly expand both domestically and globally.

### **Downsides to Franchising**

Franchising has some weaknesses as well, from a strategic point of view. Most importantly, organizations (the franchisers) lose a great deal of control. Quality assurance and protection of the brand is much more difficult when ownership of the franchise is external to the organization itself. Choosing partners wisely and equipping them with the tools necessary for high levels of quality and alignment with the brand values is critical (e.g., training, equipment, quality control, adequate resources).

It is also of importance to keep the risk/return ratio in mind. While the risk of franchising is much lower in terms of capital investment, so too is the returns derived from operations (depending on the franchising agreement in place). While it is a faster and cheaper mode of entry, it ultimately results in a profit share between the franchiser and the franchisee.

#### **1.6.4 Foreign Direct Investment (FDI)**

Exporting, licensing and franchising make companies get them only so far in international business. Companies aspiring to take full advantage of opportunities offered by foreign markets decide to make a substantial direct investment of their own funds in another country. This is popularly known as Foreign Direct Investment (FDI).

FDI is practiced by companies in order to benefit from cheaper labor costs, tax exemptions, and other privileges in that foreign country. FDI is the flow of investments from one company to production in a foreign nation, with the purpose of lowering labor costs and gaining tax incentives. FDI can help the economic situations of developing countries, as well as facilitate progressive internal policy reforms.

A major contributing factor to increasing FDI flow was internal policy reform relating to trade openness and participation in international trade agreements and institutions.

Foreign direct investment (FDI) is investment into production in a country by a company located in another country, either by buying a company in the target country or by expanding operations of an existing business in that country.

FDI is done for many reasons including to take advantage of cheaper wages in the country, special investment privileges, such as tax exemptions, offered by the country as an incentive to gain tariff-free access to the markets of the country or the region. FDI is in contrast to portfolio investment which is a passive investment in the securities of another country, such as stocks and bonds.

Increase in the inward flow of FDI is a best choice for developing countries. However, identifying the conditions that best attract such investment flow is difficult, since foreign investment varies greatly across countries and over time. Knowing what has influenced these decisions and the resulting trends in outcomes can be helpful for governments, non-governmental organizations, businesses, and private donors looking to invest in developing countries.

Foreign direct investment refers to operations in one country that are controlled by entities in a foreign country. In a sense, this FDI means building new facilities in other country. In India, a foreign direct investment means acquiring control by more than 74% of the operation. This limit was 50% till the financial year 2001-2002.

There are two forms of direct foreign investment: joint ventures and wholly-owned subsidiaries. A joint venture is defined as “the participation of two or more companies jointly in an enterprise in which each party contributes assets, owns the entity to some degree, and shares risk”. In contrast, a wholly-owned subsidiary is owned 100% by the foreign firm.

#### **1.6.5 Joint venture**

Joint venture is a business agreement in which parties agree to develop a new entity and new assets by contributing equity. They exercise control over the enterprise and consequently share revenues, expenses and assets.

When two or more persons come together to form a partnership for the purpose of carrying out a project, this is called a joint venture. In this scenario, both parties are equally invested in the project in terms of money, time and effort to build on the original concept. While joint ventures are generally small projects, major corporations use this method to diversify. A joint venture can ensure the success of smaller projects for those that are just starting in the business world or for established corporations. Since the cost of starting new projects is generally high, a joint venture allows both parties to share the burden of the project as well as the resulting profits.

Since money is involved in a joint venture, it is necessary to have a strategic plan in place. In short, both parties must be committed to focusing on the future of the partnership rather than just the immediate returns. Ultimately, short term and long term successes are both important. To achieve this success, honesty, integrity and communication within the joint venture are necessary.

A consortium JV (also known as a cooperative agreement) is formed when one party seeks technological expertise, franchise and brand-use agreements, management contracts, and rental agreements for one-time contracts. The JV is dissolved when that goal is reached. Some major joint ventures include Dow Corning, Miller Coors, Sony Ericsson, Penske Truck Leasing, Norampac, and Owens-Corning.

## **1.7 Recent Changes and Challenges in IFM**

### **1.7.1 Challenges in IFM**

Financial management of a company is a complex process, involving its own methods and procedures. It is made even more complex because of the globalization taking place, which is making the world's financial and commodity markets more and more integrated. The integration is both across countries as well as markets. Not only the markets, but even the companies are becoming international in their operations and approach.

Managers of international firms have to understand the environment in which they function if they are to achieve their objective in maximizing the value of their firms, or the rate of return from foreign operations. The environment consists of:

The international financial system, which consists of two segments: the official part represented by the accepted code of behavior by governments comprising the international monetary system, and the private part, which consists of international banks and other multinational financial institutions that participate in the international money and capital markets.

The foreign exchange market, which consists of multinational banks, foreign exchange dealers, and organized exchanges where currency futures are regularly traded.

The foreign country's environment, consisting of such aspects as the political and socioeconomic systems and people's cultural values and aspirations. Understanding of the host country's environment is crucial for successful operation and essential for the assessment of the political risk.

The multinational financial manager has to realize that the presence of his firm in a number of countries and the diversity of its operations present challenges as well as opportunities. The challenges are the unique risks and variables the manager has to contend with which his or her domestic counterpart does not have to worry about. One of these challenges, for example, is the multiplicity and complexity of the taxation systems, which impact the MNC's operations and profitability. But this same challenge presents the manager with opportunities to reduce the firm's overall tax burden, through transfer of funds from high- to low-tax affiliates and by using tax havens.

The financing function is another challenge, due to the multiplicity of sources of funds or avenues of investment available to the financial manager. The manager has to worry about the foreign exchange and political risks in positioning funds and in mobilizing cash resources. This diversity of financial sources enables the MNC at the same time to reduce its cost of capital and maximize the return on its excess cash resources, compared to firms that raise and invest funds in one capital market.

### **1.7.2 Recent changes in IFM**

Emergence of Euro market in 1960's the major cause for development and growth of IFM. This market resulted in

- A series of parallel money markets free from regulations
- led to internationalization of banking business and
- Emergence of innovative funding techniques and securities.

International financial markets have undergone rapid and extensive changes in the recent past.

- Dramatic events in global financial markets, including the Asian crisis, the Russian crisis, and the near-collapse of Long Term Capital Management (LTCM), in 2008, in US and other European countries which was a highly leveraged hedge fund with enormous trading positions.
- Remarkable developments in stock prices around the world, and in particular in stocks in the telecommunications and internet sectors. Many of these so-called "tech. stocks", which experienced sharp price increases in late 1999 and early 2000.
- After 1980's the pace of change has become too fast. This period saw emergence of new financial instruments, securities, methods of settlement and persons involved in the market. Development of information and communication technology furthered the change process

### **1.7.2.1 Emergence of Euro market**

In 1960's this is the major cause for development and growth of IFM

This market resulted in

- A series of parallel money markets free from regulations.
- led to internationalization of banking business and
- emergence of innovative funding techniques and securities

### **1.7.2.2 Introduction of Floating Exchange Rate**

Introduced in 1973, another important change, which resulted in volatility. This increased risk in exchange rates to both borrowers and lenders. To manage risk new institutions and products emerged like futures, swaps, options etc. Reduction in the traditional income of banks like interest, commission brokerage etc. compelled them to introduce new products and services, which often the banks themselves cannot understand

### **1.7.2.3 Integration among the different financial markets**

Is another remarkable change taken place in 1980's is the integration among the different financial markets in different countries. Integration resulted in

- Reducing the gap between local, regional, national and offshore financial markets led to the creation of a unified, globalised financial markets
- Increasing the rate of growth of financial systems than that of production
- Establishment of branches of banks and financial institutions of developed and industrial countries in other countries
- Establishment of branch banks in different countries and permission to tap the national financial markets
- Integration among the financial markets of industrialized countries like US, Japan and Europe
- Resulted in reducing the gap between the financial markets of different advanced countries

#### **1.7.2.4 Functional unification**

Different kinds of financial institutions serve different kinds of financial services. Financial institutions were divided as commercial banks, investment banks, EXIM banks etc.

Recently these functional specializations became unimportant and financial institutions started to render wide range of services instead of specializing one or two tasks.

Thus recently, there is a spatial and functional integration

#### **Major reasons for these changes are**

- Liberalization in cross boarder financial transaction
- Deregulation within the financial system of the major industrialized nations

Major liberalization steps include:

- Lifting exchange controls in UK, France and Japan (other nations like US, Germany, Switzerland etc, which were already liberalized)
- Removal of tax on interest paid for non-resident
- Opening up of domestic financial markets to foreign borrowers
- Allowing domestic borrowers to borrow from foreign markets

#### **1.7.2.5 Liberalization and Deregulation**

This helped portfolio investors to invest their funds in a wide range of assets over different parts of the world, on their own risk, on their own estimates.

This helped the borrower in borrowing funds economically from different parts of the world at competitive level, minimizing all costs.

Competition in international financial markets resulted in efficient and effective operations.

Emergence of international financial markets stock markets etc., resulted reducing the importance of national markets. Another remarkable change was in the field of securitization and disintermediation.

Competition resulted financial service industry also.

Borrowers began to borrow directly by issuing new variety of securities like depository receipt etc. The importance of intermediaries reduced and resulted in disintermediation.

Underwriting commission, brokerage etc reduced and the hegemony of US financial institutions also reduced.

One aspect of this securitization process has been the increase in corporate bond issue, which has also coincided with a diminishing supply of government bonds in many countries, particularly in the United States.

#### **1.7.2.6 Emergence and development derivative markets**

Is another interesting development. Rapid advances in technology, financial engineering, and risk management are major reasons.

These helped to enhance both the supply of and the demand for more complex and sophisticated derivatives products.

Increased use of derivatives to adjust exposure to risk in financial markets has also contributed to the rise in speculation in securities.

The leveraged nature of derivative instruments increased risks to individual investors.

Derivatives also provide scope for a more efficient allocation of risks in the economy, which is beneficial for the functioning of financial markets, and hence enhances the conditions for economic growth.

### **1.7.2.7 Launch of Euro**

Euro launched in 1st January 1999 was a historic event. 11 national currencies were converted into one single currency overnight. This marked the start of a period of profound change in Europe's financial settings. The successful launch of the euro, resulted in the creation of a stable, prosperous and peaceful Europe, and boosted the integration of financial markets in the euro area. This process of integration in European financial markets coincided with the trend towards globalization

#### **Matters of Concern**

Liberalization and globalization still continue imposing more and more changes and creating more and more challenges

Still some countries and governments indirectly control the flow capital through taxes and other kinds of regulations

Excessive speculation, hoarding and profiteering in the international financial market is rampant

Greedy nature of operations have resulted in the collapse several well-known financial institutions and several such institutions have to be rescued by the government

#### **Conclusion**

Unprecedented development in international financial markets

Due to the liberalization of markets, rapid technological progress and major advances in telecommunications

This has opened new vistas for investment and financing opportunities for businesses and people around the world, and easier access to global financial markets for individuals and corporations

This has led to a more efficient allocation of capital, paving way to economic growth and prosperity.

### **1.8 Theories of International Business**

International trade is the exchange of capital, goods, and services across international borders or territories. International trade has existed throughout history (for example Uttarapatha, Silk Road, Amber Road, salt roads), its economic, social, and political importance has been on the rise in recent centuries.

To understand the pattern in international trade, different trade theories are postulated. Some famous trade theories are:

1. Mercantilism
2. Absolute Advantage Theory
3. Comparative Advantage Theory
4. Hecksher-Ohlin Factor endowment theory
5. Product Life Cycle Theory
6. New Trade Theory
7. 7.10/2/2016 Porter's Diamond Theory for competitive advantage.

#### **1.8.1 Theory of Mercantilism:**

Mercantilism is an economic theory that advocates government regulation of international trade to generate wealth and strengthen national power. Merchants and the government work together to reduce the trade deficit and create a surplus. It funds corporate, military, and national growth. Mercantilism is a form of economic nationalism. It advocates trade policies that protect domestic industries.

In mercantilism, the government strengthens the private owners of the factors of production. The four factors are entrepreneurship, capital goods, natural resources, and labor. It establishes monopolies, grants tax-free status, and grants pensions to favored industries. It imposes tariffs on imports. It also prohibits



the emigration of skilled labor, capital, and tools. It doesn't allow anything that could help foreign companies.

In return, businesses funnel the riches from foreign expansion back to their governments. Its taxes pay for increase national growth and political power.

### History

Mercantilism was the dominant theory in Europe between 1500 and 1800. Countries wanted to export more than they imported. In return, they received gold. It powered the evolution of nation-states out of the ashes of feudalism. Holland, France, Spain, and England competed on the economic and military fronts. These countries created skilled labor forces and armed forces.

The advent of industrialization and capitalism set the stage for mercantilism. They strengthened the need for a self-governing nation to protect business rights. Merchants supported national governments to help them beat foreign competitors.

Mercantilism depended upon colonialism. The government would use military power to conquer foreign lands. Businesses would exploit the natural and human resources. The profits fueled further expansion benefiting both the merchants and the nation.

Mercantilism also worked hand-in-hand with the gold standard. Countries paid each other in gold for exports. The nations with the most gold were the richest. They could hire mercenaries and explorers to expand their empires. They also funded wars against other nations who wanted to exploit them. As a result, all countries wanted a trade surplus rather than a deficit.

Mercantilism relied upon shipping. Control of the world's waterways was vital to national interests. Countries developed strong merchant marines. They imposed high port taxes on foreign ships. England required all trade to be carried out in its vessels.

### **Mercantilism-Criticisms**

Mercantilism is a philosophy of a zero sum game.

Mercantilism which stresses government regulation.

Mercantilism leads to tit for tat policies high tariffs on imports leads to retaliation.

### The End of Mercantilism

Democracy and free trade destroyed mercantilism in the late 1700s. American and French revolutions formalized large nations ruled by democracy. They endorsed capitalism.

Adam Smith ended mercantilism with his 1776 publication of "The Wealth of Nations." He argued that foreign trade strengthens the economies of both countries. Each country specializes in what it produces best, giving it a comparative advantage. He also explained that a government which put business ahead of its people would not last. Smith's laissez-faire capitalism coincided with the rise of democracy in the United States and Europe.

In 1791, mercantilism was breaking down, but free trade hadn't yet developed. Most countries still regulated free trade to enhance domestic growth. U.S. Treasury Secretary Alexander Hamilton was a proponent of mercantilism. He advocated government subsidies to protect infant industries necessary to the national interest. The industries needed government support until they were strong enough to defend themselves. Hamilton also proposed tariffs to reduce competition in those areas.

### The Rise of Neomercantilism

World War II's devastation scared Allied nations into desiring global cooperation. They created the World Bank, the United Nations, and the World Trade Organization. They saw mercantilism as dangerous and globalization as its salvation.

But other nations didn't agree. The Soviet Union and China continued to promote a form of mercantilism. The main difference was that most of their businesses were state-owned. Over time, they sold many state-owned companies to private owners. This shift made those countries even more mercantilist.

Neomercantilism fit in well with their communist governments. They relied on a centrally-planned command economy. It allowed them to regulate foreign trade. They also controlled their balance of payments and foreign reserves. Their leaders selected which industries to promote. They engaged in currency wars to give their exports lower pricing power. For example, China bought U.S. Treasuries to fuel its trade with the United States. As a result, China became the largest foreign owner of U.S. debt. China and Russia planned for rapid economic growth. With enough financial strength, they would increase their political power on the world stage.

### **Drawbacks of Mercantilism theory or Neo-Mercantilism theory**

1. Mercantilism weakens a country
2. Restrictions on free trade decreases country's wealth
3. Overlooks other factors such as natural resources, manpower and its skill level, capital etc.
4. Restrictive Policies promoting exports and restrict imports creating trade barriers
5. Colonial Exploitation

## **1.8.2 Global Strategic Rivalry Theory**

Global strategic rivalry theory developed by Paul Krugman & Kelvin Lancaster in 1980 to examine the impact on trade flows arising from global strategic rivalry between MNCs. According to this theory, a firm has to develop a competitive strategy to sustain in the global competition.

According to the theory, a new firm needs to optimize a few factors that will guide the brand in overcoming all the barriers to achievement and gaining a significant appreciation in that international market. In all these factors, a methodical study and timed developmental steps are essential. Whereas, having the total ownership rights of rational properties is also essential. In addition, the beginning of exceptional and helpful methods for industrialized as well as scheming the entrance to a raw substance will also come helpful in the way.

### **1.8.2.1 Owning intellectual property**

Intellectual property laws confer a bundle of exclusive rights in relation to the particular form or manner in which ideas or information are expressed or manifested, and not in relation to the ideas or concepts themselves. It is done by brand name, trademark, patent/copy right, unique formula etc.

Ex-Unique formula of Coca-cola

### **1.8.2.2 Investing in R&D**

It is the process of gaining competitive advantage by R&D techniques. Ex-Boeing is the most successful airplane industry cause it does huge amount of research for its competitors by its R&D department

### **1.8.2.3 Achieving economic of scale or scope**

At the time of international trade, the production increased. For this reason cost per unit reduces and new sector/scope is being created for investment therefore, various sized and typed product can be produced.

### **1.8.2.4 Exploiting the experience or learning curve**

Sometime competitive advantage can be gain by injecting the experience. Very often firms recruit experienced people for their need.

It focuses, however, on planned decisions that firms implement as they participate globally. These decisions influence both international trade and international investment. Global Rivalry Theory describes numerous ways in which Multinational Enterprises can develop a competitive advantage over its

competitors. Some of the ways are by ownership or patenting of rational property rights, channeling money into research and development, the exceptional procedure of the experience curve and development of their business to international business or economics. Once again, the major aim here is for turnover maximization for those companies and the social and environmental aspects are not addressed.

### **1.8.3 Theory Of Absolute Cost Advantage**

Adam Smith propounded the theory of absolute cost advantage as the basis of foreign trade; under such circumstances an exchange of goods will take place only if each of the two countries can produce one commodity at an absolutely lower production cost than the other country.

Smith argued that it was impossible for all nations to become rich simultaneously by following mercantilism because the export of one nation is another nation's import and instead stated that all nations would gain simultaneously if they practiced free trade and specialized in accordance with their absolute advantage. Smith also stated that the wealth of nations depends upon the goods and services available to their citizens, rather than their gold reserves. While there are possible gains from trade with absolute advantage, the gains may not be mutually beneficial. Comparative advantage focuses on the range of possible mutually beneficial exchanges.

#### **Absolute Advantage Theory: Assumptions**

1. Trade is between two countries
2. Only two commodities are traded
3. Free Trade exists between the countries
4. The only element of cost of production is labour

#### **Important points of theory**

1. Theory is based upon principle of division of labour.
2. Free Trade among countries can increase a country's wealth
3. Free Trade enables a country to provide a variety of goods and services to its people by specializing in the production of some goods and services and importing others.
4. Every country should specialize in producing those products at cost less than that of other countries and exchange these products with other products produced cheaply by others.
5. When one country produces a product at a lower cost and another country produces another product at lower cost, both can exchange required quantity and can enjoy benefits of absolute cost advantage.

Suppose, there are two countries I & II and two commodities A and B. For example, country I can produce a unit of commodity (A) with 10 and a unit of commodity (B) with 20 labour units, and that in country II, the production of a unit of (A) costs 20 and a unit of (B) 10 labour units. Now country I has absolute cost advantage in tin- production of (A) and it will confine itself to the production of (A) and country II in the production of (B). Exactly the same would happen if I and II were two regions of one country. We speak of an absolute- differences in costs because each country can produce one commodity at an absolutely lower cost than the other. Thus, in such a situation, a division of labour between them must lead to an increase in total output.

#### **Absolute Cost Advantage**

1. Specialization: Specialization of labour leads to higher productivity and allows to achieve less labour cost per unit of output.
2. Suitability : Suitability of the skills of labour of the country in producing certain products

3. Economies of Scale: It helps to reduce the labour cost per unit of output

#### **Natural Advantage**

1. Natural Resources
2. Climatic Conditions

Example: A. India - Production of Rice, wheat, sweet mangoes, grapes, Tea, Coconuts, Cashew nuts, cotton, etc.

B. Sri Lanka - Production of Tea & Rubber

C. USA - Production of wheat

#### **Aquired Advantage**

1. Technology
2. Skills

Example: Japan - Advantages in steel production through imports of steel & coal England - Production of Textiles France - Production of Wine

#### **Absolute Advantage Theory: Significance**

1. More quantity of both products
2. Increased standard of living for both countries
3. Increased production efficiency
4. Increase in global efficiency and effectiveness
5. Maximization of global productivity and other resources productivity

#### **Absolute Advantage Theory: Limitations**

- No absolute advantages for many countries
- Country size varies
- Country by country differences in specializations
- Deals with labour only and neglects other factors of production
- Neglected Transport cost
- Theory is based on an assumption that Exchange rates are stable and fixed.
- It also assumes that labor can switch between products easily and they will work with same efficiency which in reality cannot happen.

## 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: Fundamentals, Accounting Components

Balance of payments (**BoP**) accounts are an accounting record of all monetary transactions between a country and the rest of the world. These transactions include payments for the country's exports and imports of goods, services, financial capital, and financial transfers.

The Bop is a collection of accounts conventionally grouped into three main categories with subdivisions in each. The three main categories are: (a) **The Current Account:** Under this are included imports and exports of goods and services and uni-lateral transfers of goods and services. (b) **The Capital Account:** Under this are grouped transactions leading to changes in foreign financial assets and liabilities of the country. (c) **The Reserve Account:** In principle this is no different from the capital account in as much as it also relates to financial assets and liabilities. However, in this category only "reserve assets" are included.

**The IMF definition:** The International Monetary Fund (IMF) use a particular set of definitions for the BOP accounts, which is also used by the Organization for Economic Cooperation and Development (OECD), and the United Nations System of National Accounts (SNA). The main difference in the IMF's terminology is that it uses the term "financial account" to capture transactions that would under alternative definitions be recorded in the capital account. The IMF uses the term capital account to designate a subset of transactions that, according to other usage, form a small part of the overall capital account.[6] The IMF separates these transactions out to form an additional top level division of the BOP accounts. Expressed with the IMF definition, the BOP identity can be written:

Current account financial account capital account balancing item=0.

The IMF uses the term current account with the same meaning as that used by other organizations, although it has its own names for its three leading subdivisions, which are:

The goods and services account (the overall trade balance)

The primary income account (factor income such as from loans and investments)

The secondary income account (transfer payments)

#### 2.1.1 Current account of balance of Payment

##### 2.1.1.1 Current Account transactions

The Current accounts records the transaction in merchandise and invisibles with the rest of the world. Merchandise covers imports and exports and invisibles include travel transportation insurance, investment and other services. The current account mainly consists of 4 types of transactions.

- i) Exports and imports of goods: Exports of goods are credits (+) to the current account. Imports of goods are debits (-) to the current account.

- ii) Exports and imports of services: Exports of services are credits (+) to the current account. Imports of services are debits (-) to the current account.

### **Interest payments on international investments**

Interest, dividends and other income received on U.S. assets held abroad are credits (+). Interest, dividends and payments made on foreign assets held in the U.S. are debits (-). Since 1994, the U.S. has run a net debit in the investment income account: more payments are made to foreigners than foreigners make to U.S. investors.

### **Current transfers**

Remittances by Americans working abroad, pensions paid by foreign countries to their citizens living in the U.S., aid offered by foreigners to the U.S. count as credits (+).

Remittances by foreigners working in the U.S., pensions paid by the United States to its citizens living abroad, aid offered to foreigners by the U.S. count as debits (-) As expected the U.S. runs a deficit in current transfers.

The sum of these components is known as the current account balance. A negative number is called a current account deficit and a positive number called a current account surplus. As expected, given that it runs a surplus only in the services component of the current account, the U.S. runs a substantial current account deficit.

## **2.1.2 Capital account of Balance of payment**

In the case of the capital account an increase (decrease) in the country foreign financial assets are debit (credit) whereas any increase (decrease) in the country foreign financial liabilities are credits (debits). The transaction under the Capital account is classified as:

- Foreign Investment
- Loans
- Banking Capital
- Rupee debt services
- Other debt capital

Loans include the concessional loans received by the government' or public sector bodies , long term loan and medium term borrowings from the commercial capital market in the form of loans Bond issue and short term credits. Disbursement received by Indian resident entities is the credit Items while payment and loans made by the Indians are the credit items

All inflow of the foreign capital comes credit item of the Balance of payment/Banking capital covers the changes in the foreign assets and liabilities of commercial banks whether privately owned or the comparative and government owned. An decrease in assets and increase in liability is a credit item. The item Rupee debt services defined as the cost of meeting inters payments and regular contractual repayments of the principal of a loan along with the any administrate charges in rupee by India.

## **2.1.3 Factors affecting the components of BOP account**

Exports of goods and services affected by following factors

- The prevailing rate of domestic currency
- Inflation rate
- Income of foreigners
- World price of the commodity

- Trade barriers.

### **Imports of Goods and services**

- Level of Domestic Income
- International prices
- Inflation rate
- Value of Domestic Currency
- Trade Barriers

## **2.1 Factors affecting the international financial Market**

- i) **Cost of Labor:** Firms in countries where labor costs are low commonly have an advantage when competing globally, especially in labor intensive industries
- ii) **Inflation:** Current account decreases if inflation increases relative to trade partners.
- iii) **National Income:** Current account decreases if national income increases relative to other countries.
- iv) **Government Policies:** can increase imports through:
  - v) **Restrictions on imports**
  - vi) **Subsidies for exporters**
    - Lack of Restriction on piracy
    - Environmental restrictions
    - Labor laws
    - Tax breaks
    - Country security laws
  - vii) **Exchange Rates:** current account decreases if currency appreciates relative to other currencies.

### **2.1.1 Impact of Government Policies:**

- i) **Restrictions on Imports:** Taxes (tariffs) on imported goods increase prices and limit consumption. Quotas limit the volume of imports.
- ii) **Subsidies for Exporters:** Government subsidies help firms produce at a lower cost than their global competitors.
- iii) **Restrictions on Piracy:** A government can affect international trade flows by its lack of restrictions on piracy.
- iv) **Environmental Restrictions:** Environmental restrictions impose higher costs on local firms, placing them at a global disadvantage compared to firms in other countries that are not subject to the same restrictions.
- v) **Labor Laws:** countries with more restrictive laws will incur higher expenses for labor, other factors being equal.
- vi) **Business Laws:** Firms in countries with more restrictive bribery laws may not be able to compete globally in some situations.
- vii) **Tax Breaks:** Though not necessarily a subsidy, but still a form of government financial support that might benefit many firms that exports products.
- viii) **Country Security Laws:** Governments may impose certain restrictions when national security is a concern, which can affect on trade.

### **2.1.2 Impact of Exchange Rates**

Effect of exchange rate on balance of trade deficit:

When a home currency is exchanged for a foreign currency to buy foreign goods, then the home currency faces downward pressure, leading to increased foreign demand for the country's products. On the other way, Exchange rates will not automatically correct any international trade balances when other forces are at work.

## **2.2 Agencies that facilitate international flows**

### **2.2.1 International Monetary fund**

The IMF is an organization of 183 member countries. Established in 1946, it aims

- to promote international monetary cooperation and exchange stability;
- to foster economic growth and high levels of employment; and
- to provide temporary financial assistance to help ease imbalances of payments.
- promote cooperation among countries on international monetary issues,
- promote stability in exchange rates
- provide temporary funds to member countries attempting to correct imbalances of international payments
- promote free mobility of capital funds across countries
- Promote free trade.

Its operations involve surveillance, and financial and technical assistance. In particular, its *compensatory financing facility* attempts to reduce the impact of export instability on country economies. The IM F uses a *quota* system, and its unit of account is the *SDR (special drawing right)*. It is clear from these objectives that the IMF's goals encourage increased internationalization of business

### **2.2.2 World Bank Group**

- Established in 1944, the Group assists development with the primary focus of helping the poorest people and the poorest countries.
- It has 183 member countries, and is composed of five organizations - IBRD, IDA, IFC, MIGA and ICSID.

### **2.2.3 IBRD: International Bank for Reconstruction and Development**

- Better known as the World Bank, the IBRD provides loans and development assistance to middle-income countries and creditworthy poorer countries.
- In particular, its *structural adjustment loans* are intended to enhance a country's long-term economic growth.
- The IBRD is not a profit-maximizing organization. Nevertheless, it has earned a net income every year since 1948.
- It may spread its funds by entering into *cofinancing agreements* with official aid agencies, export credit agencies, as well as commercial banks.

### **2.2.4 IDA: International Development Association**

- IDA was set up in 1960 as an agency that lends to the very poor developing nations on highly concessional terms.
- IDA lends only to those countries that lack the financial ability to borrow from IBRD.
- IBRD and IDA are run on the same lines, sharing the same staff, headquarters and project evaluation standards.



### **2.2.5 IFC: International Finance Corporation**

The IFC was set up in 1956 to promote sustainable private sector investment in developing countries, by

- financing private sector projects;
- helping to mobilize financing in the international financial markets; and
- Providing advice and technical assistance to businesses and governments.

### **2.2.6 MIGA: Multilateral Investment Guarantee Agency**

The MIGA was created in 1988 to promote FDI in emerging economies, by

- offering political risk insurance to investors and lenders; and
- Helping developing countries attract and retain private investment.

### **2.2.7 ICSID: International Centre for Settlement of Investment Disputes**

The ICSID was created in 1966 to facilitate the settlement of investment disputes between governments and foreign investors, thereby helping to promote increased flows of international investment.

### **2.2.8 World Trade Organization (WTO)**

- Created in 1995, the WTO is the successor to the General Agreement on Tariffs and Trade (GATT).
- It deals with the global rules of trade between nations to ensure that trade flows smoothly, predictably and freely.
- At the heart of the WTO's *multilateral trading system* are its trade agreements.

#### **Its functions include:**

- administering WTO trade agreements;
- serving as a forum for trade negotiations;
- handling trade disputes;
- monitoring national trading policies;
- providing technical assistance and training for developing countries; and
- Cooperating with other international groups.

### **2.2.9 Bank for International Settlements (BIS)**

- Set up in 1930, the BIS is an international organization that fosters cooperation among central banks and other agencies in pursuit of monetary and financial stability.
- It is the “central banks’ central bank” and “lender of last resort.”

The BIS functions as:

- a forum for international monetary and financial cooperation;
- a bank for central banks;
- a center for monetary and economic research; and
- an agent or trustee in connection with international financial operations.

### **2.2.10 Regional Development Agencies**

Agencies with more regional objectives relating to economic development include

- the Inter-American Development Bank;
- the Asian Development Bank;
- the African Development Bank; and
- the European Bank for Reconstruction and Development.

## **2.3 Indian Bop trends**

**Balance of Payment in India:** India's balance of payment position was quite unfavorable during the time of country's entry into liberalized trade regime. Two decades of economic reforms and free trade opened several opportunities that, of course, reflected in the balance of payments performance of the country.

### **2.3.1 International Monetary System: Evolution and gold standard**

#### **International Monetary System: An Overview**

International monetary system is defined as a set of procedures, mechanisms, processes, institutions to establish that rate at which exchange rate is determined in respect to other currency. To understand the complex procedure of international trading practices, it is pertinent to have a look at the historical perspective of the financial and monetary system.

The whole story of monetary and financial system revolves around 'Exchange Rate' i.e. the rate at which currency is exchanged among different countries for settlement of payments arising from trading of goods and services. To have an understanding of historical perspectives of international monetary system, firstly one must have a knowledge of exchange rate regimes. Various exchange rate regimes found from 1880 to till date at the international level are described briefly as follows:

#### **Monetary System Before First World War: (1880-1914 Era of Gold Standard)**

The oldest system of exchange rate was known as "Gold Species Standard" in which actual currency contained a fixed content of gold. The other version called "Gold Bullion Standard", where the basis of money remained fixed gold but the authorities were ready to convert, at a fixed rate, the paper currency issued by them into paper currency of another country which is operating in Gold. The exchange rate between pair of two currencies was determined by respective exchange rates against 'Gold' which was called 'Mint Parity'. Three rules were followed with respect to this conversion:

- The authorities must fix some once-for-all conversion rate of paper money issued by them into gold.
- There must be free flow of Gold between countries on Gold Standard.
- The money supply should be tied with the amount of Gold reserves kept by authorities. The gold standard was very rigid and during 'great depression' (1929-32) it vanished completely. In modern times some economists and policy makers advocate this standard to continue because of its ability to control excessive money supply.

### **2.3.2 The Gold Exchange Standard (1925-1931)**

With the failure of gold standard during First World War, a much refined form of exchange regime was initiated in 1925 in which US and England could hold gold reserve and other nations could hold both gold and dollars/sterling as reserves. In 1931, England took its foot back which resulted in abolition of this regime.

Also to maintain trade competitiveness, the countries started devaluing their currencies in order to increase exports and demotivate imports. This was termed as "beggar-thy-neighbour" policy. This practice led to great depression which was a threat to war ravaged world after the second world war. Allied nations held a conference in New Hampshire, the outcome of which gave birth to two new institutions namely the International Monetary Fund (IMF) and the World Bank, (WB) and the system was known as Bretton Woods System which prevailed during (1946-1971) (Bretton Woods, the place in New Hampshire, where more than 40 nations met to hold a conference).

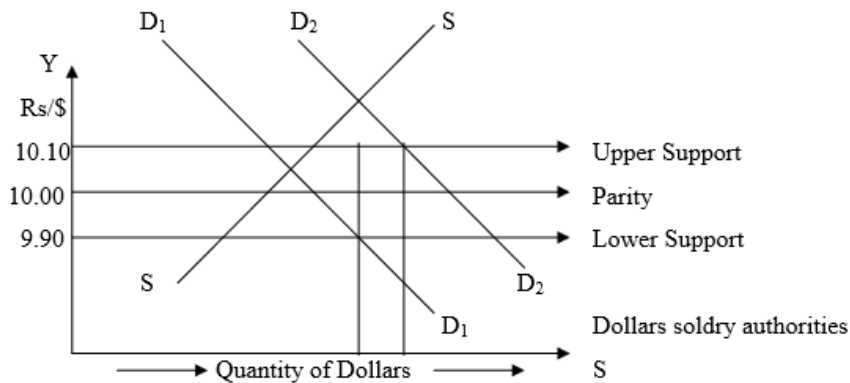
### 2.3.3 The Bretton Woods Era (1946 to 1971)

To streamline and revamp the war ravaged world economy & monetary system, allied powers held a conference in 'Bretton Woods', which gave birth to two super institutions - IMF and the WB. In Bretton Woods modified form of Gold Exchange Standard was set up with the following characteristics :

- One US dollar conversion rate was fixed by the USA as one dollar = 35 ounce of Gold
- Other members agreed to fix the parities of their currencies vis-à-vis dollar with respect to permissible central parity with one per cent ( $\pm 1\%$ ) fluctuation on either side. In case of crossing the limits, the authorities were free hand to intervene to bring back the exchange rate within limits.

The mechanism of Bretton Woods can be understood with the help of the following illustration:

Suppose there is a supply curve SS and demand curve DD for Dollars. On Y-axis, let us draw price of Dollar with respect to Rupees (See fig.)



#### Relationship between exchange rate and demand/supply of currency

Suppose Indian residents start demanding American goods & services. Naturally demand of US Dollar will rise. And suppose US residents develop an interest in buying goods and services from India, it will increase supply of dollars from America.

Assume a parity rate of exchange is Rs. 10.00 per dollar. The  $\pm 1\%$  limits are therefore Rs. 10.10 (Upper support and Rs. 9.90 lower support).

As long as the demand and supply curve intersect within the permissible range; Indian authorities will not intervene.

Suppose demand curve shifts towards right due to a shift in preference of Indians towards buying American goods and the market determined exchange rate would fall outside the band, in this situation, Indian authorities will intervene and buy rupees and supply dollars to bring back the demand curve within permissible band. The vice-versa can also happen.

There can be two consequences of this intervention. Firstly, the domestic money supply, price and G.N.P. etc. can be effected. Secondly, excessive supply of dollars from reserves may lead to exhaustion or depletion of forex reserves, there by preventing all possibilities to borrow dollars from other countries or IMF.

During Bretton Woods regime American dollar became international money while other countries needed to hold dollar reserves. US could buy goods and services from her own money. The confidence of countries in US dollars started shaking in 1960s with chronological events which were political and economic and on August 15, 1971 American abandoned their commitment to convert dollars into gold at

fixed price of \$35 per ounce, the currencies went on float rather than fixed. Though "Smithsonian Agreement" also failed to resolve the crisis yet by 1973, the world moved to a system of floating rates. (Note : Smithsonian Agreement made an attempt to resurrect the system by increasing the price of gold and widening the band of permissible variations around the central parity).

#### **Post Bretton Woods Period (1971-1991)**

Two major events took place in 1973-74 when oil prices were quadrupled by the Organisational of Petroleum Exporting Countries (OPEC). The result was seen in expended oils bills, inflation and economic dislocation; thereby the monetary policies of the countries were being overhauled. From 1977 to 1985, US dollar observed fluctuations in the oil prices which imposed on the countries to adopt a much flexible regime i.e. a hybrid between fixed and floating regimes. A group of European Nations entered into European Monetary System (EMS) which was an arrangement of pegging their currencies within themselves.

#### **2.3.4 Flexible exchange rate regime**

The flexible exchange rate regime that replaced the Bretton Woods system was ratified by the Jamaica Agreement. Following a spectacular rise and fall of the US dollar in the 1980s, major industrial countries agreed to cooperate to achieve greater exchange rate stability. The Louvre Accord of 1987 marked the inception of the managed-float system under which the G-7 countries would jointly intervene in the foreign exchange market to correct over- or undervaluation of currencies. On January 1, 1999, eleven European countries including France and Germany adopted a common currency called the euro. The advent of a single European currency, which may eventually rival the US dollar as a global vehicle currency, will have major implications for the European as well as world economy.

Flexible exchange rate regimes were rare before the late twentieth century. Prior to World War II, governments used to purchase and sell foreign and domestic currency in order to maintain a desirable exchange rate, especially in accordance with each country's trade policy. After a few experiences with flexible exchange rates during the 1920s, most countries came back to the gold standard. In 1930, before a new wave of flexible rate regimes started, prior to the war, over 50 countries were on the gold standard. However, most countries would abandon it just before World War II started.

In 1944, with the war almost over, international policy coordination was starting to make sense in everybody's mind. Along with other international organisations created during those years, the Bretton Woods agreement was signed, putting in place a new pegging system: currencies were pegged to the dollar, which in turn was pegged to gold. It was not until 1973, when Bretton Woods completely collapsed, that countries started to implement flexible exchange rate regimes.

Flexible exchange rates can be defined as *exchange rates* determined by global *supply and demand* of currency. In other words, they are prices of foreign exchange determined by the market, that can rapidly change due to supply and demand, and are not pegged nor controlled by central banks. The opposite scenario, where central banks intervene in the market with purchases and sales of foreign and domestic currency in order to keep the exchange rate within limits, also known as bands, is called *fixed exchange rate*.

Within this pure definition of flexible exchange rate, we can find two types of flexible exchange rates: *pure floating regimes* and *managed floating regimes*. On the one hand, pure floating regimes exist when, in a flexible exchange rate regime, there are absolutely no official purchases or sales of currency. On the other hand, managed (also called dirty) floating regimes, are those flexible exchange rate regimes where at least some official intervention happens.

### **2.3.5 Evaluation of floating rates**

As per the Proponents of Floating regime :

This system would reduce Economic volatility and facilitates free trade. Floating rates offset the differences in inflation rates so that other elements such as : wages, employment, output etc., need not be adjusted. Earlier experience revealed that the fixed rates did not efficiently work for longer periods

**Criticism:** Critics state that the system leads to uncertainty which discourages free trade. Floating system encourages speculation.

**As Per Imf Survey On Floating Regime:** Exchange rate volatility since early 1970s does not impede world trade. Instead world exports increased for 8 years. The statement of critics that uncertainty in the exchange rates, drives the investors in to speculation, is also not valid. Actually, fixed exchange system is having more chances of promoting speculation. Both fixed and floating regime has the same fault of speculation. But fixed regime is having more fault than floating regime. Keeping in view inflationary trends, a no. of economists have called for a return to fixed regime. Although history never offers a convincing model for a system that will lead to long term exchange rate stability, it points out 2 (two) basic requirement: Credible system-System must have price stability build into its very core. Without price stability the system will not be credible

### **2.3.6 The Current Exchange Rate Arrangements**

At present IMF (International Monetary Fund) categories different exchange rate mechanism as follows:

#### **2.3.6.1 Exchange arrangement with no separate legal tender**

The members of a currency union share a common currency. Economic and Monetary Unit (EMU) who have adopted common currency and countries which have adopted currency of other country. As of 1999, 37 IMF member countries had this sort of exchange rate regime.

#### **2.3.6.2 Currency Board Agreement**

In this regime, there is a legislative commitment to exchange domestic currency against a specified currency at a fixed rate. As of 1999, eight members had adopted this regime.

#### **2.3.6.3 Conventional fixed peg arrangement**

This regime is equivalent to Bretton Woods in the sense that a country pegs its currency to another, or to a basket of currencies with a band variation not exceeding  $\pm 1\%$  around the central parity. Upto 1999, thirty countries had pegged their currencies to a single currency while fourteen countries to a basket of currencies.

#### **2.3.6.4 Pegged Exchange Rates Within Horizontal Bands**

In this regime, the variation around a central parity is permitted within a wider band. It is a middle way between a fixed peg and floating peg. Upto 1999, eight countries had this regime.

#### **2.3.6.5 Crawling Peg**

Here also a currency is pegged to another currency or a basket of currencies but the peg is adjusted periodically which may be pre-announced or discretion based or well specified criterion. Sixty countries had this type of regime in 1999.

#### **2.3.6.6 Crawling bands**

The currency is maintained within a certain margins around a central parity which 'crawls' in response to certain indicators. Upto 1999, nine countries enjoyed this regime.

### **2.3.6.7 Managed float**

In this regime, central bank interferes in the foreign exchange market by buying and selling foreign currencies against home currencies without any commitment or pronouncement. Twenty five countries have this regime as in 1999.

### **2.3.6.8 Independently floating**

Here exchange rate is determined by market forces and central bank only act as a catalyst to prevent excessive supply of foreign exchange and not to drive it to a particular level. Including India, in 1999, forty eight countries had this regime.

Now-a-days a wide variety of arrangements exist and countries adopt the monetary system according to their own whims and fancies. That's why some analysts are calling is a monetary "non-system".

### **2.3.7 Economic And Monetary Union**

Economic and Monetary Union (EMU) represents a major step in the integration of EU economies. It involves the coordination of economic and fiscal policies, a common monetary policy, and a common currency, the euro. The European Monetary System (EMS) was the pioneer of Economic and Monetary Union(EMU), which led to the establishment of the Euro. It was a way of creating an area of currency stability throughout the European Community by encouraging countries to co-ordinate their monetary policies. The decision to form an Economic and Monetary Union was taken by the European Council in the Dutch city of Maastricht in December 1991. The Treaty of Maastricht laid down a set of criteria' to be met by member states if they were to qualify for the EMU. Its main criteria was Curbing inflation, Cutting interest rates, Reducing budget deficits to a maximum of 3% of' GDP, Limiting public borrowing, Stabilizing the currency's exchange rate. The Maastricht Treaty laid down the three-stage process(First stage (1st Jul 1990) Second stage(1st Jan 1994) Third stage(1st Jan 1999)) in which EMU was established.

#### **Stage One Of EMU**

- Complete freedom for capital transactions
- Increased co-operation between central banks
- Free use of the ECU (European Currency Unit)
- Improvement of economic convergence

#### **Second Stage Of EMU**

- Establishment of the European Monetary Institute' (EMI)
- Ban on the granting of central bank credit
- Increased co-ordination of monetary policies
- Strengthening of economic convergence
- Process leading to the independence of the national central banks to be completed at the latest by the date of establishment of the European System of Central Banks;

#### **Third Stage Of EMU**

- Irrevocable fixing of conversion rates
- Introduction of the euro
- Conduct of the single monetary policy by the European System of Central Banks
- Entry into effect of the intra-EU exchange rate mechanism (ERM II)
- Entry into force of the Stability and Growth Pact

The management of Economic and Monetary Union involves many actors with different responsibilities. As well as the governments and central banks of the Member States, the Council, the European Commission, the European Parliament and the European Central Bank all have roles to fulfill. The management of EMU involves three main areas of macroeconomic policy-making: monetary policy, fiscal policy and economic policy coordination.

## **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**

Foreign exchange market is the market in which foreign currencies are bought and sold. The buyers and sellers include individuals, firms, foreign exchange brokers, commercial banks and the central bank. Like any other market, foreign exchange market is a system in which the transactions are not confined to only one or few foreign currencies. There are a large number of foreign currencies which are traded, converted and exchanged in the foreign exchange market.

The foreign exchange market assists international trade and investment by enabling currency conversion. For example, it permits a business in the United States to import goods from the European Union member states especially Euro zone members and pay Euros, even though its income is in United States dollars. The foreign exchange market (forex, FX, or currency market) is a form of exchange for the global decentralized trading of international currencies.

#### **Characteristics of foreign exchange market**

- Electronic market
- Geographical Dispersal
- Transfer of purchasing power
- Intermediary Volume
- Provision of credit
- Minimizing Risk.

#### **3.2 Functions of Foreign Exchange Market**

Foreign exchange market performs the following three functions

##### **3.2.1 Transfer Function**

The basic function of the foreign exchange market is to facilitate the conversion of one currency into another, i.e., to accomplish transfers of purchasing power between two countries. This transfer of purchasing power is affected through a variety of credit instruments, such as telegraphic transfers, bank draft and foreign bills. In performing the transfer function, the foreign exchange market carries out payments internationally by clearing debts in both directions simultaneously, analogous to domestic clearings.

##### **3.2.2 Credit Function**

It provides credit for foreign trade. Bills of exchange, with maturity period of three months, are generally used for international payments. Credit is required for this period in order to enable the importer to take possession of goods, sell them and obtain money to pay off the bill.



### 3.2.3 Hedging Function

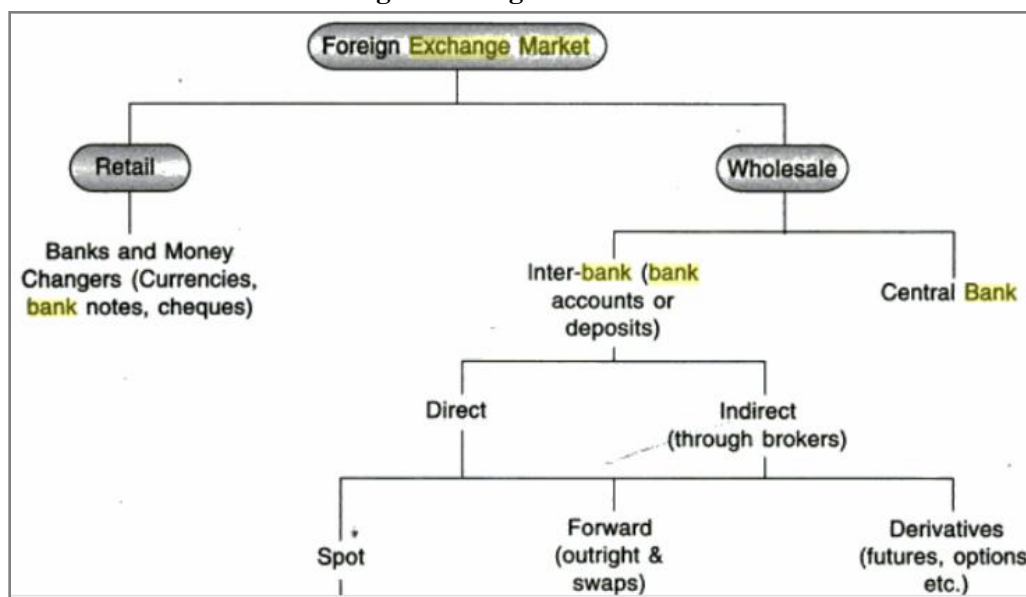
A third function of the foreign exchange market is to hedge foreign exchange risks. Hedging means the avoidance of a foreign exchange risk. In a free exchange market when exchange rate, i. e., the price of one currency in terms of another currency, change, there may be a gain or loss to the party concerned. Under this condition, a person or a firm undertakes a great exchange risk if there are huge amounts of net claims or net liabilities which are to be met in foreign money. Exchange risk as such should be avoided or reduced. For this the exchange market provides facilities for hedging anticipated or actual claims or liabilities through forward contracts in exchange. A forward contract which is normally for three months is a contract to buy or sell foreign exchange against another currency at some fixed date in the future at a price agreed upon now. No money passes at the time of the contract. But the contract makes it possible to ignore any likely changes in exchange rate. The existence of a forward market thus makes it possible to hedge an exchange position. Foreign bills of exchange, telegraphic transfer, bank draft, letter of credit, etc., are the important foreign exchange instruments used in the foreign exchange market to carry out its functions.

### Minimizing Foreign Exchange Risk

The foreign exchange market provides "hedging" facilities for transferring foreign exchange risk to someone else.

Thus, the foreign exchange market is merely a part of the money market in the financial centers. It is a place where foreign moneys are bought and sold. The buyers and sellers of claim on foreign money and the intermediaries together constitute a foreign exchange market. It is not restricted to any given country or a geographical area. Thus, the foreign exchange market is the market for a national currency (foreign money) anywhere in the world, as the financial centers of the world are united in a single market. There is a wide variety of dealers in the foreign exchange market. The most important among them are the banks. Banks dealing in foreign exchange have branches with substantial balances in different countries. Through their branches and correspondents, the services of such banks, usually called "Exchange Banks," are available all over the world.

### 3.3 Structure of the Foreign Exchange Market



### **3.3.1 Retail Market**

Transactions are exchange of current, bank draft, bank notes ordinary and traveller's cheques etc. Retail banking consists of a large number of small customers who consume personal banking and small business services. Retail banking is largely intra-bank: the bank itself.

### **3.3.2 Wholesale markets**

The wholesale market comprises of commercial banks and investment banks. This is broadly classified as inter-bank market and central bank market.

Wholesale banking typically involves a small number of very large customers such as large corporate and governments, Wholesale banking is largely interbank: banks use the inter-bank markets to borrow from or lend to other banks, to participate in large bond issues, and to engage in syndicated lending.

#### **3.3.2.1 Inter-bank**

The interbank network consists of a global network of financial institutions that trade currencies between each other to manage exchange rate and interest rate risk. The largest participants in this network are private banks.

Most transactions within the interbank network are for a short duration, anywhere between overnight to six months. The interbank market is not regulated.

##### **a) Spot market**

Spot market refers to the transactions involving sale and purchase of currencies for immediate delivery. In practice, it may take one or two days to settle transactions. Transactions are affected at prevailing rate of exchange at that point of time and delivery of foreign exchange is affected instantly. The exchange rate that prevails in the spot market for foreign exchange is called Spot Rate.

##### **b) Forward Market**

A market in which foreign exchange is bought and sold for future delivery is known as Forward Market. It deals with transactions (sale and purchase of foreign exchange) which are contracted today but implemented sometimes in future. Exchange rate that prevails in a forward contract for purchase or sale of foreign exchange is called Forward Rate. Thus, forward rate is the rate at which a future contract for foreign currency is made.

##### **c) Derivatives**

Within the fields of trading and finance, a derivative is considered to be an instrument used for investment via a contract. Its value is "derived" from (or based upon) that of another asset, typically referred to as the underlying asset or simply "the underlying." In other words, a derivative contract is an agreement that allows for the possibility to purchase or sell some other type of financial instrument or non-financial asset. Common types of derivative contracts include options, forwards, futures and swaps.

- **Future Market:** Standardized forward contracts are called futures contracts and traded on a futures exchange. A futures contract (more colloquially, futures) is a standardized contract between two parties to buy or sell a specified asset of standardized quantity and quality for a price agreed upon today (the futures price or strike price) with delivery and payment occurring at a specified future date.
- **Option Market:** A currency option gives an investor the right, but not the obligation, to buy or sell a quantity of currency at a pre-established price on or before the date that the option expires. The right to sell a currency is known as a "call option" and the right to buy is known as a "put option." Options can be understood as a type of insurance where buyers or sellers can take advantage of more favourable prices should market conditions change after the option is purchased.

- **Swap Market:** The idea of a swap by definition normally refers to a simple exchange of property or assets between parties. A currency swap also involves the conditions determining the relative value of the assets involved. That includes the exchange rate value of each currency and the interest rate environment of the countries that have issued them. A foreign exchange swap, forex swap, or FX swap is a simultaneous purchase and sale of identical amounts of one currency for another with two different value dates (normally spot to forward).

### **3.3.2.2 Central Bank**

National central banks play an important role in the foreign exchange markets. They try to control the money supply, inflation, and/or interest rates and often have official or unofficial target rates for their currencies. They can use their often substantial foreign exchange reserves to stabilize the market. They work as the lender of the last resort and the custodian of foreign exchange of the country. The central bank has the power to regulate and control the foreign exchange market so as to assure that it works in the orderly fashion. One of the major functions of the central bank is to prevent the aggressive fluctuations in the foreign exchange market, if necessary, by direct intervention. Intervention in the form of selling the currency when it is overvalued and buying it when it tends to be undervalued.

The *commercial banks* are the second most important organ of the foreign exchange market. The banks dealing in foreign exchange play a role of “*market makers*”, in the sense that they quote on a daily basis the foreign exchange rates for buying and selling of the foreign currencies. Also, they function as clearing houses, thereby helping in wiping out the difference between the demand for and the supply of currencies. These banks buy the currencies from the brokers and sell it to the buyers.

The *foreign exchange brokers* function as a link between the central bank and the commercial banks and also between the actual buyers and commercial banks. They are the major source of market information. These are the persons who do not themselves buy the foreign currency, but rather strike a deal between the buyer and the seller on a commission basis.

## **3.4 Market participates of foreign exchange Market**

The foreign exchange market assists international trade and investment by enabling currency conversion. For example, it permits a business in the United States to import goods from the European Union member states especially Euro zone members and pay Euros, even though its income is in United States dollars. The foreign exchange market (forex, FX, or currency market) is a form of exchange for the global decentralized trading of international currencies.

The Market Participants are discussed in brief below:

### **3.4.1 Commercial Bank**

A commercial bank (or business bank) is a type of financial institution and intermediary. It is a bank that lends money and provides transactional, savings, and money market accounts and that accepts time deposit in order to facilitate international trade and development, commercial banks convert and trade foreign currencies. When a company is doing business in another country it may be paid in the currency of that country. While some of these revenues will be used to pay workers in that country and for administrative expense such as office rent, utilities and supplies, the company may need to purchase goods from a neighboring country in that country's currency, or convert cash to its native currency for return to the home office.

### **3.4.2 Central bank**

National central banks play an important role in the foreign exchange markets. They try to control the money supply, inflation, and/or interest rates and often have official or unofficial target rates for their currencies. They can use their often substantial foreign exchange reserves to stabilize the market.

### **3.4.3 Foreign exchange fixing**

Foreign exchange fixing is the daily monetary exchange rate fixed by the national bank of each country. The idea is that central banks use the fixing time and exchange rate to evaluate behavior of their currency. Fixing exchange rates reflects the real value of equilibrium in the market. Banks, dealers and traders use fixing rates as a trend indicator.

### **3.4.4 Hedge funds as speculators**

About 70% to 90% of the foreign exchange transactions are speculative. In other words, the person or institution that bought or sold the currency has no plan to actually take delivery of the currency in the end; rather, they were solely speculating on the movement of that particular currency. Hedge funds have gained a reputation for aggressive currency speculation since 1996. They control billions of dollars of equity and may borrow billions more, and thus may overwhelm intervention by central banks to support almost any currency, if the economic fundamentals are in the hedge funds' favor.

### **3.4.5 Investment management firms**

Investment management is the professional management of various securities (shares, bonds and other securities) and assets (e.g., real estate) in order to meet specified investment goals for the benefit of the investors. These firms (who typically manage large accounts on behalf of customers such as pension funds and endowments) use the foreign exchange market to facilitate transactions in foreign securities

### **3.4.6 Retail foreign exchange traders**

One of the most important tools required to perform a foreign exchange transaction is the trading platform providing retail traders and brokers with accurate currency quotes. Retail foreign exchange trading is a small segment of the large foreign exchange market.

## **3.5 Market rate Quotations-currency rate fluctuation**

A currency pair is the quotation of the relative value of a currency unit against the unit of another currency in the foreign exchange market. The quotation EUR/USD 1.2500 means that 1 Euro is exchanged for 1.2500 US dollars.

Quotes using a country's home currency as the price currency (e.g., EUR 0.735342 = USD 1.00 in the euro zone) are known as direct quotation or price quotation (from that country's perspective)[4] and are used by most countries. Quotes using a country's home currency as the unit currency (e.g., EUR 1.00 = USD 1.35991 in the euro zone) are known as indirect quotation or quantity quotation and are used in British newspapers and are also common in Australia, New Zealand and the euro zone.

### **Fluctuation in the exchange rate**

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).

### **3.6 Types of transactions & settlements in FOREX Market**

The Foreign Exchange Transactions refers to the sale and purchase of foreign currencies. Simply, the foreign exchange transaction is an agreement of exchange of currencies of one country for another at an agreed exchange rate on a definite date.

#### **3.6.1 Spot Transaction**

The spot transaction is when the buyer and seller of different currencies settle their payments within the two days of the deal. It is the fastest way to exchange the currencies. Here, the currencies are exchanged over a two-day period, which means no contract is signed between the countries. The exchange rate at which the currencies are exchanged is called the Spot Exchange Rate. This rate is often the prevailing exchange rate. The market in which the spot sale and purchase of currencies is facilitated is called as a Spot Market.

#### **3.6.2 Forward Transaction**

A forward transaction is a future transaction where the buyer and seller enter into an agreement of sale and purchase of currency after 90 days of the deal at a fixed exchange rate on a definite date in the future. The rate at which the currency is exchanged is called a 'Forward Exchange Rate'. The market in which the deals for the sale and purchase of currency at some future date are made is called a 'Forward Market'.

**Future Transaction:** The future transactions are also the forward transactions and deals with the contracts in the same manner as that of normal forward transactions. But however, the transactions made in a future contract differ from the transaction made in the forward contract on the following grounds:

- The forward contracts can be customized on the client's request, while the future contracts are standardized such as the features, date, and the size of the contracts is standardized.
- The future contracts can only be traded on the organized exchanges, while the forward contracts can be traded anywhere depending on the client's convenience.
- No margin is required in case of the forward contracts, while the margins are required of all the participants and an initial margin is kept as collateral so as to establish the future position.

#### **3.6.3 Swap Transactions**

The Swap Transactions involve a simultaneous borrowing and lending of two different currencies between two investors. Here one investor borrows the currency and lends another currency to the second investor. The obligation to repay the currencies is used as collateral, and the amount is repaid at a forward rate. The swap contracts allow the investors to utilize the funds in the currency held by him/her to pay off the obligations denominated in a different currency without suffering a foreign exchange risk.

**Option Transactions:** The foreign exchange option gives an investor the right, but not the obligation to exchange the currency in one denomination to another at an agreed exchange rate on a pre-defined date. An option to buy the currency is called as a 'Call Option' while the option to sell the currency is called as a 'Put Option'.

Thus, the Foreign exchange transaction involves the conversion of a currency of one country into the currency of another country for the settlement of payments.

#### **3.6.4 Settlement dates**

Settlement date, as the name implies refers to the date on which the transaction is settled by the transferor of deposits, with reference to foreign exchange transactions. In a Spot exchange transaction, though the word "Spot" implies "immediate", it usually takes two business days for the transaction to get settled.

Though the spot rate is the rate of the day on which the transaction has taken place, the execution of the transaction occurs within a maximum of two working days. But in certain cases of countries currencies, the settlement may take place the very next business day, an example being currency settlement between

US Dollars and Canadian Dollars. There are two aspects involved in settlement dates: the settlement location and dealing location. Settlement location refers to the country in which the transaction has to be settled or paid and dealing location refers to the country in which the bank dealing with the foreign exchange transaction is located.

Forward exchange rates are applicable for the delivery of foreign exchange at some future date, which may be specified. There are two options in forward exchange transactions. Let us assume that Emirates in UAE is purchasing aircrafts from the United States. Obviously, the settlement has to be made in US dollars. Suppose if the agreement between the two countries is to settle the payment after 2 months time, there are now two options available for Emirates, UAE: one, to remain silent now and after 2 months period, buy the US Dollars at the spot market at the then prevailing spot rate and settle the payment to the United States. In this case, the settlement date will be as per the Spot Exchange transaction. Secondly, the country can buy US dollars at the forward exchange market at the agreed prevailing forward exchange rate, which would be valid for settlement after two months period, irrespective of the spot rate prevailing at the time of settlement after two months. The second option avoids uncertainty and risk and the settlement takes place at the maturity of the forward exchange contract.

### **3.7 Exchange rate quotations**

These can be quoted in two ways-**Direct** quotation and **Indirect** quotation. Direct quotation is when the one unit of foreign currency is expressed in terms of domestic currency. Similarly, the indirect quotation is when one unit of domestic currency is expressed in terms of foreign currency.

Since the US dollar (USD) is the most dominant currency, usually, the exchange rates are expressed against the US dollar. However, the exchange rates can also be quoted against other countries' currency, which is called as cross currency.

Now, a lower exchange rate in a direct quote implies that the domestic currency is appreciating in value. Whereas, a lower exchange rate in an indirect quote indicates that the domestic currency is depreciating in value as it is worth a smaller amount of foreign currency

### **3.8 Currency futures and options markets**

#### **3.8.1 Exchange-traded derivative**

option, the arithmetic average of the Exchange-traded derivative contract are standardized derivative contracts such as futures and options contracts that are transacted on an organized futures exchange. They are standardized and require payment of an initial deposit or margin settled through a house. Since the contracts are standardized, accurate pricing models are often available. To understand which derivative is being traded a standardized naming convention has been developed by the exchanges, that shows the expiry month and strike price using special letter codes.

#### **3.8.2 Over the Counter derivatives**

**Over the Counter (OTC)** derivatives are traded between two parties (bilateral negotiation) without going through an exchange or any other intermediaries. OTC is the term used to refer stocks that trade via dealer network and not any centralized exchange. These are also known as unlisted stocks where the securities are traded by broker-dealers through direct negotiations.

#### **3.8.3 Options**

Currency option (also known as a forex option) is a contract that gives the buyer the right, but not the obligation, to buy or sell a certain currency at a specified exchange rate on or before a specified date. For this right, a premium is paid to the seller.

Currency options are one of the most common ways for corporations, individuals or financial institutions to hedge against adverse movements in exchange rates.

- **Call options** provide the holder the right (but not the obligation) to purchase an underlying asset at a specified price (the strike price), for a certain period of time. If the stock fails to meet the strike price before the expiration date, the option expires and becomes worthless. Investors buy calls when they think the share price of the underlying security will rise or sell a call if they think it will fall. Selling an option is also referred to as "writing" an option.
- **Put options** give the holder the right to sell an underlying asset at a specified price (the strike price). The seller (or writer) of the put option is obligated to buy the stock at the strike price. Put options can be exercised at any time before the option expires. Investors buy puts if they think the share price of the underlying stock will fall, or sell one if they think it will rise. Put buyers - those who hold a "long" - put are either speculative buyers looking for leverage or "insurance" buyers who want to protect their long positions in a stock for the period of time covered by the option.
- **American option** is a version of an options contract that allows holders to exercise the option rights at any time before and including the day of expiration. An American style option allows investors to capture profit as soon as the stock price moves favorably.
- **European Option** is a version of an options contract that limits execution to its expiration date. In other words, if the underlying security such as a stock has moved in price an investor would not be able to exercise the option early and take delivery of or sell the shares. Instead, the call or put action will only take place on the date of option maturity.
- **Asian option** (also known as average price option) is an option whose payoff is determined with respect to the (arithmetic or geometric) average price of the underlying asset over the term of the option.
- While the payoff of a standard (American and European) option depends on the price of the underlying asset at a specific point of time i.e. the exercise date, the payoff of an Asian option depends on the average price of the underlying asset that prevailed over a period of time i.e. the term of the option.
- There are two types of Asian options with respect to the method of averaging: in arithmetic Asian price of the underlying is used in payoff calculations; while in geometric Asian options, geometric average is used.
- Asian options have relatively low volatility due to the averaging mechanism. They are used by traders who are exposed to the underlying asset over a period of time such as consumers and suppliers of commodities, etc.

### **3.8.4 Swaps**

#### **Interest Rate Swaps**

In an interest rate swap, the parties exchange cash flows based on a notional principal amount (this amount is not actually exchanged) in order to hedge against interest rate risk or to speculate. For example, imagine ABC Co. has just issued \$1 million in five-year bonds with a variable annual interest rate defined as the London Interbank Offered Rate (LIBOR) plus 1.3% (or 130 basis points). Also, assume that LIBOR is at 2.5% and ABC management is anxious about an interest rate rise.

#### **Commodity Swaps**

Commodity swaps involve the exchange of a floating commodity price, such as the Brent Crude oil spot price, for a set price over an agreed-upon period. As this example suggests, commodity swaps most commonly involve crude oil.

### **Currency Swaps**

In a currency swap, the parties exchange interest and principal payments on debt denominated in different currencies. Unlike an interest rate swap, the principal is not a notional amount, but it is exchanged along with interest obligations. Currency swaps can take place between countries. For example, China has used swaps with Argentina, helping the latter stabilize its foreign reserves. The U.S. Federal Reserve engaged in an aggressive swap strategy with European central banks during the 2010 European financial crisis to stabilize the euro, which was falling in value due to the Greek debt crisis.

### **Debt-Equity Swaps**

A debt-equity swap involves the exchange of debt for equity – in the case of a publicly-traded company, this would mean bonds for stocks. It is a way for companies to refinance their debt or reallocate their capital structure.

### **Total Return Swaps**

In a total return swap, the total return from an asset is exchanged for a fixed interest rate. This gives the party paying the fixed-rate exposure to the underlying asset—a stock or an index. For example, an investor could pay a fixed rate to one party in return for the capital appreciation plus dividend payments of a pool of stocks.

### **Credit Default Swap (CDS)**

A credit default swap (CDS) consists of an agreement by one party to pay the lost principal and interest of a loan to the CDS buyer if a borrower defaults on a loan. Excessive leverage and poor risk management in the CDS market were primary causes of the 2008 financial crisis.

## **3.9 Features of Futures Contracts-Foreign Exchange**

This article throws light upon the six major features of futures contracts. The features are: **1. Organized Exchanges** **2. Standardization** **3. Clearing House** **4. Margins** **5. Marking to Market** **6. Actual Delivery is Rare.**

### **3.9.1 Organized Exchanges**

Unlike forward contracts which are traded in an over-the-counter market, futures are traded on organized exchanges with a designated physical location where trading takes place. This provides a ready, liquid market in which futures can be bought and sold at any time like in a stock market.

### **3.9.2 Standardization**

In the case of forward currency contracts, the amount of commodity to be delivered and the maturity date are negotiated between the buyer and seller and can be tailor-made to buyer's requirements. In a futures contract, both these are standardized by the exchange on which the contract is traded. thus, for instance, one futures contract in pound sterling on the International Monetary Market (IMM), a financial futures exchange in the US, (part of the Chicago Board of Trade or CBT), calls for delivery of 62,500 British Pounds and contracts are always traded in whole numbers, i.e., you cannot buy or sell fractional contracts. A three-month sterling deposit on the London International Financial Futures Exchange (LIFFE) has March, June, September, December delivery cycle.

The exchange also specifies the minimum size of price movement (called the “tick”) and, in some cases, may also impose a ceiling on the maximum price change within a day. In the case of commodity futures, the commodity in question is also standardized for quality in addition to quantity in a single contract.



### **3.9.3 Clearing House**

The exchange acts as a clearing house to all contracts struck on the trading floor. For instance, a contract is struck between A and B. Upon entering into the records of the exchange, this is immediately replaced by two contracts, one between A and the clearing house and another between B and the clearing house.

In other words, the exchange interposes itself in every contract and deal, where it is a buyer to every seller and a seller to every buyer. The advantage of this is that A and B do not have to undertake any exercise to investigate each other's creditworthiness. It also guarantees the financial integrity of the market. The exchange enforces delivery for contracts held until maturity and protects itself from default risk by imposing margin requirements on traders and enforcing this through a system called "marking to market".

### **3.9.4 Margins**

Like all exchanges, only members are allowed to trade in futures contracts on the exchange. Others can use the services of the members as brokers to use this instrument. Thus, an exchange member can trade on his own account as well as on behalf of a client. A subset of the members is the "clearing members" or members of the clearing house and non-clearing members must clear all their transactions through a clearing member.

The exchange requires that a margin must be deposited with the clearing house by a member who enters into a futures contract. The amount of the margin is generally between 2.5% to 10% of the value of the contract but can vary. A member acting on behalf of a client, in turn, requires a margin from the client. The margin can be in the form of cash or securities like treasury bills or bank letters of credit.

### **3.9.5 Marking to Market**

The exchange uses a system called marking to market where, at the end of each trading session, all outstanding contracts are reprised at the settlement price of that trading session. This would mean that some participants would make a loss while others would stand to gain. The exchange adjusts this by debiting the margin accounts of those members who made a loss and crediting the accounts of those members who have gained. This feature of futures trading creates an important difference between forward contracts and futures. In a forward contract, gains or losses arise only on maturity. There are no intermediate cash flows.

Whereas, in a futures contract, even though the gains and losses are the same, the time profile of the accruals is different. In other words, the total gains or loss over the entire period is broken up into a daily series of gains and losses, which clearly has a different present value.

### **3.9.6 Actual Delivery is Rare**

In most forward contracts, the commodity is actually delivered by the seller and is accepted by the buyer. Forward contracts are entered into for acquiring or disposing off a commodity in the future for a gain at a price known today.

In contrast to this, in most futures markets, actual delivery takes place in less than one per cent of the contracts traded. Futures are used as a device to hedge against price risk and as a way of betting against price movements rather than a means of physical acquisition of the underlying asset. To achieve this, most of the contracts entered into are nullified by a matching contract in the opposite direction before maturity of the first.

### 3.10 Forward Contract Vs Future Contract

BASIS FOR COMPARISON	FORWARD CONTRACT	FUTURES CONTRACT
Meaning	Forward Contract is an agreement between parties to buy and sell the underlying asset at a specified date and agreed rate in future.	A contract in which the parties agree to exchange the asset for cash at a fixed price and at a future specified date, is known as future contract.
What is it?	It is a tailor made contract.	It is a standardized contract.
Traded on	Over the counter, i.e. there is no secondary market.	Organized stock exchange.
Settlement	On maturity date.	On a daily basis.
Risk	High	Low
Default	As they are private agreement, the chances of default are relatively high.	No such probability.
Size of contract	Depends on the contract terms.	Fixed
Collateral	Not required	Initial margin required.
Maturity	As per the terms of contract.	Predetermined date
Regulation	Self regulated	By stock exchange
Liquidity	Low	High

### 3.11 Over view of the other markets

#### 3.11.1 The International Money Market

The international money market is a market where international currency transactions between numerous central banks of countries are carried on. The transactions are mainly carried out using gold or in US dollar as a base. The basic operations of the international money market include the money borrowed or lent by the governments or the large financial institutions.

The international money market is governed by the transnational monetary transaction policies of various nations' currencies. The international money market's major responsibility is to handle the currency trading between the countries. This process of trading a country's currency with another one is also known as forex trading.

Unlike share markets, the international money market sees very large funds transfer. The players of the market are not individuals; they are very big financial institutions. The international money market investments are less risky and consequently, the returns obtained from the investments are less too. The best and most popular investment method in the international money market is via money market mutual funds or treasury bills.

#### Features of International Money Market

- It is a wholesale market, as the transaction volume is large.
- Trading takes place over the telephone, after which written confirmation is done by way of e-mails.
- Participants include banks, mutual funds, investment institutions and Central Banks.
- There is an impersonal relationship between the participants in the money market, and so, pure competition exists.
- Money market operations focus on a particular area, which serves a region or an area. On the basis of the market size and needs, the area may differ.

- There are five major segments of money market which are Certificate of Deposits (CD), Commercial Paper, Swaps, Repo and Government treasury securities.

### **Functions of Money Market**

The three basic functions of money market are

- It provides a balancing tool for equating the demand for and supply of short term funds.
- It provides a centre for the intervention of central bank, for controlling liquidity and general interest rate level.
- It provides a proper reach to the suppliers and users of the short term funds, to fulfill their requirements, at a reasonable market clearing price.

Money market plays a vital role in equating the short term liquidity imbalances within the country.

Indeed, with the help of this market, the central bank controls liquidity and interest rates level in the country.

### **3.11.2 Euro currency market**

Europeans wished to hold their assets outside their own country or in currencies which is not locally denominated. These investors were driven by the twin concerns of avoiding taxes in their own country and protecting themselves against falling values of domestic currency. Dollar denominated, Euro bonds were designed to address these issues.

These bonds were in bearer forms. Hence, there was no ownership and no tax withheld. The term Euro is used because the transactions originated in the Europe, mainly London. But later on expanded fast to the countries like Honk Kong and Singapore in the far East-at present more than half of the transactions in the Euro markets take place outside the Europe.

Thus, it is evident that the term 'Eurodollar' is a misnomer. 'Foreign Currency Market' would be the appropriate term to describe this expanding market. The term 'Eurodollar' came to be used because the market had its origin and earlier developments with dollar transactions in the European money markets. Despite the emergence of other currencies and the expansion of the market to other areas, Europe and the dollar still hold the key to the market. Today, the term Eurocurrency market is in popular use.

Now, the 'Eurodollar Market' consists of Asian dollar market, Rio dollar market, Euro-yen market, etc., as well as Euro-sterling, Euro-Swiss francs, Euro-French francs, Euro- Deutsche marks, and so on. In short, in these markets, the commercial banks accept interest bearing deposits denominated in a currency other than the currency of the country in which they operate and they re-lend these funds either in the same currency or in the currency of the country in which they operate or in the currency of a third country.

Its Annual Report in 1966, the Bank for International Settlements (BIS) described the Eurodollar phenomenon as "The acquisition of dollars by banks located outside the United States, mostly through the taking of deposits, but also to some extent by swapping other currencies into dollars, and the re-lending of these dollars, often after re-depositing with other banks, to non-bank borrowers anywhere in the world."

#### **The Important Characteristics of the Eurocurrency market are the following:**

##### **i) It is an International Market and it is under no National Control:**

The Eurocurrency market has emerged as the most important channel for mobilizing and deploying funds on an international scale. By its very nature, the Eurodollar market is outside the direct control of any national monetary policy. "It is aptly said that the dollar deposits in London are outside United States control because they are in London and outside British control because they are in dollars." The growth of the market owes a great deal to the fact that it is outside the control of any national authority.

### **ii) It is a Short-Term Money Market:**

The deposits in this market range in maturity from one day to several months and interest are paid on all of them. Although some Eurodollar deposits have a maturity of over one year, Eurodollar deposits are predominantly a short-term instrument. The Eurodollar market is viewed in most discussions more as a credit market- a market in dollar bank loans-and as an important accessory to the Eurobond market.

### **iii) The Eurodollar Loans are Generally for Short Periods:**

Three months or less, Eurobonds being employed for longer-term loans. The Eurobonds developed out of the Eurodollar market to provide longer-term loans than was usual with Eurodollars. A consortium of banks and issuing houses usually issues these bonds.

### **3.11.3 Euro credit market**

Euro credit helps the flow of capital between countries and the financing of investments at home and abroad. A major function of banks is matching surplus units (who deposit at the bank) with deficit units (who borrow from the bank). Being able to do this internationally, both across borders and across currencies improves both liquidity and efficiency in the markets for financing.

Banks may also engage in syndicated loans in the euro credit market, where a loan is made by a group (syndicate) of banks. Syndicated loans reduce the risk of borrower default for each individual bank loaning funds and are often found where the size of the loan is too big for one bank to do by itself. Often, the banks in a syndicate will be headquartered in different countries but lending in one currency-an example of how the euro credit market can work to improve the flow of funds internationally.

### **3.11.4 Euro bond market**

A Eurobond is debt instrument that's denominated in a currency other than the home currency of the country or market in which it is issued. Eurobonds are frequently grouped together by the currency in which they are denominated, such as eurodollar or Euro-yen bonds. Since Eurobonds are issued in an external currency, they're often called external bonds. Eurobonds are important because they help organizations raise capital while having the flexibility to issue them in another currency.

Issue of Eurobonds is usually handled by an international syndicate of financial institutions on behalf of the borrower, one of which may underwrite the bond, thus guaranteeing the purchase of the entire issue.

A foreign bond may define as an international bond sold by a foreign borrower but denominated in the currency of the country in which it is placed. It underwrites and sells by a national underwriting syndicate in the lending country. Thus, a US company might float a bond issue in the London capital market, underwritten by a British syndicate and denominated in sterling.

The bond issue would sell to investors in the UK capital market, where it would quote and traded. Foreign bonds issued outside the USA call Yankee bonds, while foreign bonds issued in Japan are called Samurai bonds. Canadian entities are the major floaters of foreign bonds in the USA.

#### **Types Of Eurobonds:**

There are three types of Eurobonds, of which two are international bonds. A domestic bond is a bond issue in a country by a resident of that country.

There are several different types of Eurobonds.

- i. **Straight Bond:** Bond is one having a specified interest coupon and a specified maturity date. Straight bonds may issue with a floating rate of interest. Such bonds may have their interest rate fixed at six-month intervals of a stated margin over the LIBOR for deposits in the currency of the bond. So, in the case of a Eurodollar bond, the interest rate may base upon LIBOR for Eurodollar deposits.

- ii. **Convertible Eurobond:** The Eurobond is a bond having a specified interest coupon and maturity date. But, it includes an option for the hold to convert its bonds into an equity share of the company at a conversion price set at the time of issue.
- iii. **Medium-term Eurobond:** Medium-term **Euro notes** are shorter-term Eurobonds with maturities ranging from three to eight years. Their issuing procedure is less formal than for large bonds. Interest rates on Euro notes can fix or variable. Medium-term Euro-notes are similar to medium-term roll-over Eurodollar credits. The difference is that in the **Eurodollar market** lenders hold a claim on a bank and not directly on the borrower.

#### **Characteristics of Euro bonds or Features of Eurobonds**

The following characteristics of euro bonds below are

- i. **Straight bonds:** the fixed interest rate at periodic intervals, usually annually.
- ii. **Floating-rate notes (FRNs):** rollover pricing payment usually six months interest stated in terms of a spread over some reference rate.
- iii. **Zero-coupon bonds:** discount securities, sold either at a fraction of face value and redeemed at face value, or sold at face value and redeemed at a premium.
- iv. **Convertible bonds:** can exchange for some other type of asset: stock, gold, oil, other bonds.
- v. **Mortgage-backed Eurobonds:** backed by a pool of mortgages, or other bonds Institutions which would otherwise exclude from Eurobond market can get access.
- vi. **Dual-currency bonds:** purchased in one currency, coupon or principal paid in a second currency.
- vii. The following Eurobonds features are:
  - The issuing technique takes the form of a placing rather than formal issuing; this avoids national regulations on new issues.
  - Eurobonds place simultaneously in many countries through syndicates of underwriting banks.
  - Unlike foreign bonds, Eurobonds sale in countries other than that of the currency of denomination; thus dollar-denominated Eurobonds sale outside the U.S.A.
  - The interest on Eurobonds is not subject to withholding tax.

#### **3.11.5 International stock market**

The stock market refers to the collection of markets and exchanges where regular activities of buying, selling, and issuance of shares of publicly-held companies take place. Such financial activities are conducted through institutionalized formal exchanges or over-the-counter (OTC) marketplaces which operate under a defined set of regulations. There can be multiple stock trading venues in a country or a region which allow transactions in stocks and other forms of securities.

While both terms - stock market and stock exchange - are used interchangeably, the latter term is generally a subset of the former. Trading in the stock market, means buying and selling shares/equities on one (or more) of the stock exchange(s) that are part of the overall stock market. The leading stock exchanges in the U.S. include the New York Stock Exchange (NYSE), Nasdaq, the Better Alternative Trading System (BATS) and the Chicago Board Options Exchange (CBOE). These leading national exchanges, along with several other exchanges operating in the country, form the stock market of the U.S. Though it is called a stock market or equity market and is primarily known for trading stocks/equities, other financial securities-like exchange traded funds (ETF), corporate bonds and derivatives based on stocks, commodities, currencies, and bonds - are also traded in the stock markets.

#### **Functions of a Stock Market**

A stock market primarily serves the following functions:

- i. **Fair Dealing in Securities Transactions:** Depending on the standard rules of demand and supply, the stock exchange needs to ensure that all interested market participants have instant access to data for all buy and sell orders thereby helping in the fair and transparent pricing of securities. Additionally, it should also perform efficient matching of appropriate buy and sell orders.  
For example, there may be three buyers who have placed orders for buying Microsoft shares at \$100, \$105 and \$110, and there may be four sellers who are willing to sell Microsoft shares at \$110, \$112, \$115 and \$120. The exchange (through their computer operated automated trading systems) needs to ensure that the best buy and best sell are matched, which in this case is at \$110 for the given quantity of trade.
- ii. **Efficient Price Discovery:** Stock markets need to support an efficient mechanism for price discovery, which refers to the act of deciding the proper price of a security and is usually performed by assessing market supply and demand and other factors associated with the transactions.  
Say, a U.S.-based software company is trading at a price of \$100 and has a market capitalization of \$5 billion. A news item comes in that the EU regulator has imposed a fine of \$2 billion on the company which essentially means that 40 percent of the company's value may be wiped out. While the stock market may have imposed a trading price range of \$90 and \$110 on the company's share price, it should efficiently change the permissible trading price limit to accommodate for the possible changes in the share price, else shareholders may struggle to trade at a fair price.
- iii. **Liquidity Maintenance:** While getting the number of buyers and sellers for a particular financial security are out of control for the stock market, it needs to ensure that whosoever is qualified and willing to trade gets instant access to place orders which should get executed at the fair price.
- iv. **Security and Validity of Transactions:** While more participants are important for efficient working of a market, the same market needs to ensure that all participants are verified and remain compliant with the necessary rules and regulations, leaving no room for default by any of the parties. Additionally, it should ensure that all associated entities operating in the market must also adhere to the rules, and work within the legal framework given by the regulator.
- v. **Support All Eligible Types of Participants:** A marketplace is made by a variety of participants, which include market makers, investors, traders, speculators, and hedgers. All these participants operate in the stock market with different roles and functions. For instance, an investor may buy stocks and hold them for long term spanning many years, while a trader may enter and exit a position within seconds. A market maker provides necessary liquidity in the market, while a hedger may like to trade in derivatives for mitigating the risk involved in investments. The stock market should ensure that all such participants are able to operate seamlessly fulfilling their desired roles to ensure the market continues to operate efficiently.
- vi. **Investor Protection:** Along with wealthy and institutional investors, a very large number of small investors are also served by the stock market for their small amount of investments. These investors may have limited financial knowledge, and may not be fully aware of the pitfalls of investing in stocks and other listed instruments. The stock exchange must implement necessary measures to offer the necessary protection to such investors to shield them from financial loss and ensure customer trust.

For instance, a stock exchange may categorize stocks in various segments depending on their risk profiles and allow limited or no trading by common investors in high-risk stocks. Derivatives, which have been described by Warren Buffett as financial weapons of mass destruction, are not for everyone as one may lose much more than they bet for. Exchanges often impose restrictions to prevent individuals with limited income and knowledge from getting into risky bets of derivatives.

vii. **Balanced Regulation:** Listed companies are largely regulated and their dealings are monitored by market regulators, like the Securities and Exchange Commission (SEC) of the U.S. Additionally, exchanges also mandate certain requirements-like, timely filing of quarterly financial reports and instant reporting of any relevant developments - to ensure all market participants become aware of corporate happenings. Failure to adhere to the regulations can lead to suspension of trading by the exchanges and other disciplinary measures.

viii. **Regulating the Stock Market**

A local financial regulator or competent monetary authority or institute is assigned the task of regulating the stock market of a country. The Securities and Exchange Commission (SEC) is the regulatory body charged with overseeing the U.S. stock markets. The SEC is a federal agency that works independently of the government and political pressure. The mission of the SEC is stated as: "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation."

**Stock Market Participants**

Along with long-term investors and short term traders, there are many different types of players associated with the stock market. Each has a unique role, but many of the roles are intertwined and depend on each other to make the market run effectively.

**Stockbrokers**, also known as registered representatives in the U.S., are the licensed professionals who buy and sell securities on behalf of investors. The brokers act as intermediaries between the stock exchanges and the investors by buying and selling stocks on the investors' behalf. An account with a retail broker is needed to gain access to the markets.

**Portfolio managers** are professionals who invest portfolios, or collections of securities, for clients. These managers get recommendations from analysts and make the buy or sell decisions for the portfolio. Mutual fund companies, hedge funds, and pension plans use portfolio managers to make decisions and set the investment strategies for the money they hold.

**Investment bankers** represent companies in various capacities, such as private companies that want to go public via an IPO or companies that are involved in pending mergers and acquisitions. They take care of the listing process in compliance with the regulatory requirements of the stock market.

**Custodian and depot service providers**, which are institution holding customers' securities for safekeeping so as to minimize the risk of their theft or loss, also operate in sync with the exchange to transfer shares to/from the respective accounts of transacting parties based on trading on the stock market.

**Competition for Stock Markets**

While individual stock exchanges compete against each other to get maximum transaction volume, they are facing threat on two fronts.

**Dark Pools:** Dark pools, which are private exchanges or forums for securities trading and operate within private groups, are posing a challenge to public stock markets. Though their legal validity is subject to local regulations, they are gaining popularity as participants save big on transaction fees.

**Block chain Ventures:** Amid rising popularity of block chains, many crypto exchanges have emerged. Such exchanges are venues for trading crypto currencies and derivatives associated with that asset class. Though their popularity remains limited, they pose a threat to the traditional stock market model by automating a bulk of the work done by various stock market participants and by offering zero- to low-cost services.

### **Significance of the Stock Market**

The stock market is one of the most vital components of a free-market economy.

It allows companies to raise money by offering stock shares and corporate bonds. It lets common investors participate in the financial achievements of the companies, make profits through capital gains, and earn money through dividends, although losses are also possible. While institutional investors and professional money managers do enjoy some privileges owing to their deep pockets, better knowledge and higher risk taking abilities, the stock market attempts to offer a level playing field to common individuals.

The stock market works as a platform through which savings and investments of individuals are channelized into the productive investment proposals. In the long term, it helps in capital formation & economic growth for the country.



## UNIT-IV

### 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.

Relationship between inflation, interest rates and exchange rates, purchasing power parity, international Fisher effect, Fisher effect, interest rate parity, expectations theory.

#### 4.1 Measuring Exchange rate movements

##### 4.1.1 Gold standard

With the failure of gold standard during First World War, a much refined form of exchange regime was initiated in 1925 in which US and England could hold gold reserve and other nations could hold both gold and dollars/sterling as reserves. In 1931, England took its foot back which resulted in abolition of this regime.

Also to maintain trade competitiveness, the countries started devaluing their currencies in order to increase exports and demotivate imports. This practice led to great depression which was a threat to war ravaged world after the Second World War. Allied nations held a conference in New Hampshire, the outcome of which gave birth to two new institutions namely the International Monetary Fund (IMF) and the World Bank, (WB) and the system was known as Bretton Woods System which prevailed during (1946-1971) (Bretton Woods, the place in New Hampshire, where more than 40 nations met to hold a conference).

##### 4.1.2 The Bretton Woods Era (1946 to 1971)

To streamline and revamp the war ravaged world economy & monetary system, allied powers held a conference in 'Bretton Woods', which gave birth to two super institutions - IMF and the WB. In Bretton Woods modified form of Gold Exchange Standard was set up with the following characteristics:

- One US dollar conversion rate was fixed by the USA as one dollar = 35 ounce of Gold
- Other members agreed to fix the parities of their currencies vis-à-vis dollar with respect to permissible central parity with one per cent ( $\pm 1\%$ ) fluctuation on either side. In case of crossing the limits, the authorities were free hand to intervene to bring back the exchange rate within limits.

##### 4.1.3 Purchasing Power parity

According to the Purchasing Power Parity theory, the exchange rate is nothing but the ratio of prices between two countries. Since A has had a relatively greater rise in prices, A's currency depreciates, will fall, and a new exchange rate will get established.

The monetary theory states that there is a direct connection between relative changes in money supply in two countries and the exchange rate between both countries, provided there are no transportation costs in moving goods between both countries.

##### 4.1.4 Floating rate system

A floating exchange rate occurs when governments allow the exchange rate to be determined by market forces and there is no attempt to influence the exchange rate. A floating exchange rate contrasts with a

fixed exchange rate. A situation where the government try to keep the exchange rate within a certain target against other currencies.

#### **4.2 Factors influencing Exchange rates**

Foreign Exchange rate (ForEx rate) is one of the most important means through which a country's relative level of economic health is determined. A country's foreign exchange rate provides a window to its economic stability, which is why it is constantly watched and analyzed. While sending or receiving money from overseas, there's a need to keep a keen eye on the currency exchange rates.

The exchange rate is defined as "the rate at which one country's currency may be converted into another." It may fluctuate daily with the changing market forces of supply and demand of currencies from one country to another. For these reasons; when sending or receiving money internationally, it is important to understand what determines exchange rates.

##### **i) Inflation Rates**

Changes in market inflation cause changes in currency exchange rates. A country with a lower inflation rate than another's will see an appreciation in the value of its currency. The prices of goods and services increase at a slower rate where the inflation is low. A country with a consistently lower inflation rate exhibits a rising currency value while a country with higher inflation typically sees depreciation in its currency and is usually accompanied by higher interest rates

##### **ii) Interest Rates**

Changes in interest rate affect currency value and dollar exchange rate. Forex rates, interest rates, and inflation are all correlated. Increases in interest rates cause a country's currency to appreciate because higher interest rates provide higher rates to lenders, thereby attracting more foreign capital, which causes a rise in exchange rates

##### **iii) Country's Current Account / Balance of Payments**

A country's current account reflects balance of trade and earnings on foreign investment. It consists of total number of transactions including its exports, imports, debt, etc. A deficit in current account due to spending more of its currency on importing products than it is earning through sale of exports causes depreciation. Balance of payments fluctuates exchange rate of its domestic currency.

##### **iv) Government Debt**

Government debt is public debt or national debt owned by the central government. A country with government debt is less likely to acquire foreign capital, leading to inflation. Foreign investors will sell their bonds in the open market if the market predicts government debt within a certain country. As a result, a decrease in the value of its exchange rate will follow.

##### **v) Terms of Trade**

Related to current accounts and balance of payments, the terms of trade is the ratio of export prices to import prices. A country's terms of trade improves if its exports prices raise at a greater rate than its imports prices. This results in higher revenue, which causes a higher demand for the country's currency and an increase in its currency's value. This results in an appreciation of exchange rate.

##### **vi) Political Stability & Performance**

A country's political state and economic performance can affect its currency strength. A country with less risk for political turmoil is more attractive to foreign investors, as a result, drawing investment away from other countries with more political and economic stability. Increase in foreign capital, in turn, leads to an appreciation in the value of its domestic currency. A country with sound financial and trade policy does

not give any room for uncertainty in value of its currency. But, a country prone to political confusions may see depreciation in exchange rates.

#### **vii) Recession**

When a country experiences a recession, its interest rates are likely to fall, decreasing its chances to acquire foreign capital. As a result, its currency weakens in comparison to that of other countries, therefore lowering the exchange rate.

#### **viii) Speculation**

If a country's currency value is expected to rise, investors will demand more of that currency in order to make a profit in the near future. As a result, the value of the currency will rise due to the increase in demand. With this increase in currency value comes a rise in the exchange rate as well. All of these factors determine the foreign exchange rate fluctuations. If you send or receive money frequently, being up-to-date on these factors will help you better evaluate the optimal time for international money transfer. To avoid any potential falls in currency exchange rates, opt for a locked-in exchange rate service, which will guarantee that your currency is exchanged at the same rate despite any factors that influence an unfavorable fluctuation.

### **4.3 Government influence on exchange rates**

The Foreign Exchange Regulation Act (FERA), 1973 was replaced by the market friendly Foreign Exchange Management Act (FEMA), 1999. The Reserve Bank delegated powers to authorized dealers (ADs) to release foreign exchange for a variety of purposes. In pursuance of the Sodhani Committee's recommendations, the Clearing Corporation of India Limited (CCIL) was set up in 2001. To further the participatory process in a more holistic manner by taking into account all segments of the financial markets, the ambit of the Technical Advisory Committee (TAC) on Money and Securities Markets set up by the Reserve Bank in 1999 was expanded in 2004 to include foreign exchange markets and the Committee was rechristened as TAC on Money, Government Securities and Foreign Exchange Markets. Increase in Instruments in the Foreign Exchange Market. The rupee-foreign currency swap market was allowed.

Additional hedging instruments such as foreign currency-rupee options, cross-currency options, interest rate swaps (IRS) and currency swaps, caps/ collars and forward rate agreements (FRAs) were introduced.

#### **Liberalization Measures**

Authorized dealers were permitted to initiate trading positions, borrow and invest in overseas market, subject to certain specifications and ratification by respective banks' Boards. Banks were also permitted to (i) fix net overnight position limits and gap limits (with the Reserve Bank formally approving the limits); (ii) determine the interest rates (subject to a ceiling) and maturity period of FCNR(B) deposits with exemption of inter-bank borrowings from statutory preemptions; and (iii) use derivative products for asset liability management.

Participants in the foreign exchange market, including exporters, Indians investing abroad, and FIIs were permitted to avail forward cover and enter into swap transactions without any limit, subject to genuine underlying exposure. FIIs and NRIs were permitted to trade in exchange traded derivative contracts, subject to certain conditions.

The Reserve Bank has been taking initiatives in putting in public domain all data relating to foreign exchange market transactions and operations. The Reserve Bank disseminates:

(a) daily reference rate which is an indicative rate for market observers through its website,

(b) data on exchange rates of rupee against some major currencies and foreign exchange reserves on a weekly basis in the Weekly Statistical Supplement (WSS), and

(c) data on purchases and sales of foreign currency by the Reserve Bank in its Monthly Bulletin. The Reserve Bank has already achieved full disclosure of information pertaining to international reserves and foreign currency liquidity position under the Special Data Dissemination Standards (SDDS) of the IMF.

#### **4.4 Types of Exchange Rate Systems**

There are three broad exchange rate systems

- currency board,
- fixed exchange rate and
- floating rate exchange rate.

A fourth can be added when a country does not have its own currency and merely adopts another country's currency.

The fixed exchange rate has three variants and the floating exchange rate has two variants. This consists of

(i) rigid peg with a horizontal band, (ii) crawling peg and (iii) crawling band.

##### **4.4.1 Variants of a Fixed Exchange Rate System**

###### **4.4.1.1 Rigid Peg with a Horizontal Band**

It is an exchange rate system under which the exchange rate fluctuation is maintained by the central bank within a range that may be specified (Iceland) or not specified (Croatia). The specified band may be one-sided (+7% in Vietnam), a narrow range (+ 2.25% in Denmark) or a broad range (+ 77.5% in Libya).

###### **4.4.1.2 Crawling Peg**

The par value of the domestic currency is set with reference to a selected foreign currency (or precious metal or currency basket) and is reset at intervals, according to pre-set criteria such as change in inflation rate. The central bank decides the new par value based on the average exchange rate over the previous few weeks or months in the foreign exchange market. The biggest advantage of the crawling peg is its responsiveness to the market value of the domestic currency.

###### **4.4.1.3 Crawling Band**

The domestic currency is on a crawling peg which is maintained within a range (band).

##### **4.4.2 Floating Exchange Rate**

This consists of

(i) managed float and (ii) free float.

When a country has its own currency as legal tender, it can choose between the three broad types of exchange rate systems. Within the fixed exchange rate, a country can choose a rigid peg or a crawling peg. Again within each peg, it can choose to have a horizontal band within which its exchange rate would be permitted to fluctuate. Within the floating exchange rate system, a country can choose a free float or a managed float. The main source of the exchange rate system followed by any country is the IMF's Annual Report on exchange rate arrangements. Many countries declare that they follow a particular exchange rate system, but may follow another system in practice:

###### **i. Exchange Arrangements with No Separate Legal Tender**

A few countries (such as Micronesia and San Marino) select another country's currency as legal tender. This is called Dollarization, since the selected foreign currency is usually the US dollar.

## **ii. Currency Board**

The central bank of the country promises to convert domestic currency (on demand and at any point in time) for a predetermined number of units of a specific foreign currency. In order to fulfill this promise, the central bank has to hold foreign exchange reserves in the selected foreign currency. Usually a government decides to adopt a currency board when the holders of domestic currency lose confidence in it as a medium of exchange, triggered by rampant inflation, unbridled government debt (resulting in fiscal deficits) and recession.

The first currency board was set up in Mauritius in 1849. Hong Kong has had a currency board since 1983 when its currency was linked to the US dollar. Argentina chose the currency board in 1991 and Bosnia in 1997. Argentina's currency board promised to convert each peso into one US dollar. The Central Bank held only 66% of the peso as dollar reserves, when it should have held 100% (given the 1:1 peso/dollar currency board arrangement). In 2001, Argentina defaulted in repayment of its external debt and confidence in the Argentine peso plunged. There was a run on the banking system, and the government abandoned the currency board.

### **Variants of a Floating Exchange Rate System**

#### **i) Managed Float**

A floating exchange rate (or exchange rate) is the opposite of the fixed exchange rate. Market forces determine the value of the domestic currency against a selected foreign currency. A managed float (or dirty float) is a floating exchange rate in which the monetary authorities influence the exchange rate (through direct or indirect intervention without specifying the target exchange rate. India is on a managed float.

#### **ii) Free Float or Clean Float**

Here, the exchange rate is purely determined by market forces (demand and supply of the currency).

#### **Flexible Exchange Rate System-Advantages**

1. It permits quicker adjustments in the exchange rate to changes in macro-economic factors such as changes in inflation rate, growth rate, and interest rates.
2. There is less likelihood of currency overvaluation. So the country's growth prospects are brighter.

#### **Disadvantages**

1. Exchange rate risk is high due to greater volatility in the short- and long-term. This makes exchange rate forecasting extremely important as well as extremely difficult.
2. There is a tendency for capital inflows through foreign portfolio investment, or 'hot money'.
3. Imports and overseas debt repayment are adversely affected by depreciation of domestic currency.

#### **Determination of Floating Exchange Rates**

There are four theories that explain how floating exchange rates are set. The first theory (the demand and supply theory) is called a flow theory because it studies how the demand for and supply of a domestic currency over a period of time results in a particular level for the exchange rate. The other three theories (the monetary theory, the asset price theory, and the portfolio balance theory) are called stock theories, since they study the amount of currency available at a certain time-the stock of currency-and peoples' willingness to hold the currency. They are also called modern theories of exchange rate determination.

#### **4.4.3 Fixed Exchange Rate**

It is also called the pegged exchange rate. The par value of the domestic currency is set with reference to a selected foreign currency (or precious metal or currency basket). The exchange rate fluctuates with a range (usually +1% of the par value).

The domestic currency's par value is fixed by the monetary authorities against any of the following:

- a. A precious metal (gold in the gold standard)
- b. A single currency, which can be an artificial currency (such as the SDR), or an existing currency (such as the US dollar or the pound sterling). When a single currency is chosen, in some cases colonial legacy determines the choice-most former French colonies chose the French franc, while former British colonies tended to choose the pound sterling. Sometimes, a fixed exchange rate is adapted to arrest the steep fall in value of the domestic currency. In September 1998, the Malaysian monetary authorities announced a rigid peg of 3.8 ringgit/USD after the Ringgit plunged by 60% against the US dollar.
- c. A currency basket as in the case of the Indian rupee in 1975; the Indian rupee was de-linked from the pound and linked to a basket of currencies. The central bank may keep the currencies in the basket a secret, or make the currency In 2005, China pegged its yuan to a currency basket whose composition and weights are undisclosed.

#### **Fixed Exchange Rate System-Advantages**

1. There is stability in exchange rate and exchange rate risk is nil.
2. Capital inflows through foreign direct investment are higher because there is no exchange rate volatility. FDI is a 'desirable' capital inflow due to its stable and long- term nature.
3. Inflation rates tend to be lower and therefore real interest rates (nominal interest rates adjusted for inflation) are higher.

#### **Disadvantages:**

1. The exchange rate does not reflect macro-economic changes. The entire foreign exchange entering and leaving the country has to be converted at the fixed exchange rate.
2. Punitive action for contravening rules.

In a fixed exchange rate regime, the entire institutional infrastructure is geared towards identifying evasion of foreign exchange controls and imposing penal punishments. A fixed exchange rate creates a flourishing parallel market for foreign exchange in which the 'true' value of the domestic currency is determined by market forces. This is because the par value of the domestic currency is very often at variance with what the exchange rate would be if left to the vagaries of supply and demand.

Very often countries fix a separate par value for exports and a separate one for imports. This is done to boost its exports and deter imports. This merely increase the draconian system needed to monitor foreign currency inflows and outflows.

#### **The problems with a fixed exchange rate are described below**

1. The possibility of overvaluation of the domestic currency is quite high. Suppose the rupee is on a fixed exchange rate of Rs. 40/\$ instead of Rs. 43/\$ when left to market forces. So, instead of 1\$ being able to buy Rs. 43 worth of goods, it can buy only Rs. 40 worth of goods). This would hurt the competitiveness of India's exports and therefore hamper its growth prospects.
2. When the country on a fixed exchange rate is seen consistently to have trade surpluses, it generates a lot of ill will, and a perception that the trade surpluses are the result of currency manipulation of keeping the exchange rate artificially high (or low as the case may be). Consider the hypothetical example below. If the Chinese yuan should have an exchange rate of yuan 5.60/\$ but is instead kept at yuan 7.00/\$, Chinese exports have extremely competitive prices in world markets, and China has a trade surplus.

#### **4.4.4 De Facto and De Jure Exchange Rate Systems**

A de facto exchange rate is the one that a country actually follows. A de jure exchange rate system is the one that the country claims to follow. Both systems need not always be the same. China's de facto system was the fixed rate but it insisted that its de jure system was a managed float. The IMF conducts surveys of

exchange rate systems around the world. The surveys take into account both the de facto and de jure systems for each country.

#### **4.5 Fixed versus Floating Exchange Rate**

To know which exchange rate system is the best, the objectives of the monetary authorities in a country have to be studied.

**There are three possible objectives:**

- i. Maintain stable exchange rates
- ii. Allow mobility of capital
- iii. Have control over monetary policy.

With a floating exchange rate, the last two objectives can be attained but there will be exchange rate volatility. With a fixed exchange rate, the first two objectives can be attained but there will be no control over the monetary policy. In other words, irrespective of whether the fixed rate or the floating exchange rate is selected, only two of the three objectives can be attained. Thus, the three objectives are called the impossible trinity. In practice, countries can and do fine-tune their exchange rate systems, and need not choose either extreme.

##### **4.5.1 Differences between Flexible and Fixed Exchange Rate System**

Some countries (Canada, USA) consistently follow a particular exchange rate while others (Argentina, Russia) shift from one exchange rate to another. Canada has followed a flexible exchange rate since 1971, Hong Kong has had a currency board since 1983 and Argentina moved from a flexible exchange rate to a currency board in 1991. India moved from a fixed exchange rate to a partially floating rate in 1993 and a full float in 1994.

There has been a gradual shift from fixed exchange rate (and its variants) to flexible exchange rate. While a majority of developing countries had a fixed exchange rate in 1975, less than half had a fixed exchange rate 20 years later. Economists advocate a fixed exchange rate when an economy is affected by shifts in the demand for money that can affect price levels.

They advocate a flexible exchange rate when an economy is affected by changes in demand for products. A country that makes a successful transition from a fixed to a floating rate has a deep foreign exchange market, a well thought out policy of intervention by the central bank, and effective mechanisms to manage exchange rate risks.

The pegged exchange rate was popular in the early 1990s among countries that were making the transition to becoming market economies. Countries moved away from the hard peg towards the crawling peg. The efficacy of a particular exchange rate system is a function of each country's unique economic circumstances, stage of development, strength of the financial system, and the degree of autonomy enjoyed by its monetary authority. No single exchange rate system has been an unqualified success across countries in terms of improvement in growth rates or financial stability.

The fixed exchange rate did not accelerate growth rates in countries that adopted it, nor did it protect them from currency crises. The same is true of the floating exchange rate. On the other hand, the central banks of many developing countries fear the impact a floating exchange rate would have through a sharp appreciation or depreciation of their currency on their exports and imports, as well as their capacity to repay overseas debt.

#### **4.6 Exchange Rate Systems in Selected Emerging Markets (1980-2010)**

The Brazilian real-The crawling peg was replaced by a floating exchange rate in 1990.

The Hong Kong dollar-It is on a currency board.

The Indonesian rupiah-The managed float was replaced by a floating exchange rate in 1997.

The Malaysian ringgit-The currency peg to a currency basket was replaced by a fixed exchange rate in 1998.

The Phillipine peso-It is on a floating exchange rate.

The Singapore dollar-The currency peg to a currency basket was replaced by a fixed exchange rate in 1985.

The Thai baht-It is on a managed float.

### **Theory Supply and Demand:**

This theory states that the exchange rate is the intersection of the supply of domestic currency (shown as the supply curve) and its demand (shown as the demand curve). The supply of domestic currency is determined by imports and the demand is determined by exports.

### **Monetary Theory:**

This theory links money supply and prices to the exchange rate. An increase in money supply leads to an increase in prices (inflation). According to the monetary theory, the exchange rate is the ratio of prices in two countries, so an increase in price causes the exchange rate to be reset. Consider two countries A and B. When the money supply in each country rises, the prices in each country rise. If the growth of money supply in A is greater than the growth of money supply in B, then A experiences a higher inflation rate than B.

According to the Purchasing Power Parity theory, the exchange rate is nothing but the ratio of prices between two countries. Since A has had a relatively greater rise in prices, A's currency depreciates, will fall, and a new exchange rate will get established.

The monetary theory states that there is a direct connection between relative changes in money supply in two countries and the exchange rate between both countries, provided there are no transportation costs in moving goods between both countries.

### **Asset Price Theory:**

The theory states that currency is an asset just as real estate or securities or gold. The desire to hold a particular type of asset is driven by the perception of the asset's future value. If the value is likely to rise, people will want to buy the asset now and sell it at a higher price so as to make a profit. Conversely, if they think the asset's value will drop, all those holding the asset now will start selling the asset fearing a greater decline in price in the near future. Therefore, the asset's current attractiveness is a function of what the market believes its value is going to be in future. In other words, future expectations decide current buy/sell decisions.

This is true even for currency. If the market believes that the domestic currency is going to rise in value, everyone will start buying it. If the current exchange rate is Rs. 43/\$, and the expectation is that the rupee will appreciate over the next six months. Participants will start purchasing the rupee and this will drive up demand. Because demand rises, the rupee will appreciate against the dollar, and the exchange rate will settle at Rs. 42/\$.

If on the other hand, the market expects the rupee to depreciate, there will be selling pressure and the rupee will depreciate, probably settling at Rs. 44/\$. At any point in time, the current exchange rate contains market expectations of the future value of the domestic currency.

### **Portfolio Balance Theory:**

The portfolio balance theory connects money supply, supply and demand for domestic securities, demand for foreign securities, and the exchange rate.



**Its assumptions are:**

- i. Investors can hold only two types of assets—currency and bonds (domestic bonds issued in domestic currency and foreign bonds issued in foreign currency).
- ii. Investors in two countries have identical asset preferences.
- iii. When the wealth of investors in either country increases, they would prefer to hold more of the asset that they already hold in excess.

Investors in two countries prefer to hold more of bonds in the country where wealth (value of the portfolio) is higher when translated into domestic currency. This is called the preferred habitat version of the portfolio balance theory. Changes in money supply affect wealth which in turn, has an impact on the exchange rate. Open market operations bring about changes in money supply.

When a central bank conducts open market operations by buying domestic currency-denominated government bonds, money supply increases and the domestic currency declines in value (depreciates) against the selected foreign currency and the exchange rate changes. When the central bank buys government bonds their supply decreases. But since the domestic currency has depreciated, the domestic currency value of foreign currency-denominated bonds rises. This makes investors prefer foreign bonds to domestic bonds, and the demand for domestic bonds decreases.

#### **4.7 Foreign exchange risk**

**Foreign exchange risk** refers to the losses that an international financial transaction may incur due to currency fluctuations. Also known as currency risk, FX risk and exchange-rate risk, it describes the possibility that an investment's value may decrease due to changes in the relative value of the involved currencies. Investors may experience jurisdiction risk in the form of foreign exchange risk.

##### **Understanding Foreign Exchange Risk**

Foreign exchange risk arises when a company engages in financial transactions denominated in a currency other than the currency where that company is based. Any appreciation / depreciation of the base currency or the depreciation / appreciation of the denominated currency will affect the cash flows emanating from that transaction. Foreign exchange risk can also affect investors, who trade in international markets, and businesses engaged in the import / export of products or services to multiple countries.

The proceeds of a closed trade, whether its a profit or loss, will be denominated in the foreign currency and will need to be converted back to the investor's base currency. Fluctuations in the exchange rate could adversely affect this conversion resulting in a lower than expected amount.

An import/export business exposes itself to foreign exchange risk by having account payables and receivables affected by currency exchange rates. This risk originates when a contract between two parties specifies exact prices for goods or services, as well as delivery dates. If a currency's value fluctuates between when the contract is signed and the delivery date, it could cause a loss for one of the parties.

##### **4.7.1 Types Of Foreign Exchange Risk**

There are three types of foreign exchange risk:

**Transaction risk:** This is the risk that a company faces when it's buying a product from a company located in another country. The price of the product will be denominated in the selling company's currency. If the selling company's currency were to appreciate versus the buying company's currency then the company doing the buying will have to make a larger payment in its base currency to meet the contracted price.

**Translation risk:** A parent company owning a subsidiary in another country could face losses when the subsidiary's financial statements, which will be denominated in that country's currency, have to be translated back to the parent company's currency.

**Economic risk:** Also called forecast risk, refers to when a company's market value is continuously impacted by an unavoidable exposure to currency fluctuations.

Companies that are subject to FX risk can implement hedging strategies to mitigate that risk. This usually involves forward contracts, options, and other exotic financial products and, if done properly, can protect the company from unwanted foreign exchange moves.

#### **4.7.2 Capital risk management-Different types**

Sometimes referred to as investment risk, capital market risk is a term that refers to one of the risks associated with investing. Capital markets such as the stock, bond, foreign currency and derivatives markets are considered risky because of the constantly changing prices of the securities that are traded. In other words, security prices are volatile. Securities prices are not influenced just by their fundamentals, but also by broader market influences such as economic news, political developments, currency movements, or even "black-swan" unexpected events such as a massive earthquake, tsunami or general market panic. While debatable, some consider price volatility to be a proxy for risk. The risk of financial loss associated with either choosing to or being forced to sell a security when prices have declined is what is meant by **capital market risk**.

##### **Types of Capital risk**

###### **i. Market risk**

Market risk is the possibility of an investor experiencing losses due to factors that affect the overall performance of the financial markets in which he or she is involved. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against in other ways.

###### **ii. Industry risk**

Industry Risk refers to the impact that the state's industrial policy can have on the performance of a specific industry.

###### **iii. Regulatory Risk**

Regulatory risk is the risk that a change in regulations or legislation will affect a security, [company](#), or industry. Companies must abide by regulations set by governing bodies that oversee their industry. Therefore, any change in regulations can cause a rippling effect across an industry.

Regulations can increase costs of operations, introduce legal and administrative hurdles, and sometimes even restrict a company from doing business.

###### **iv. Business Risk**

Business risk can be defined as uncertainties or unexpected events, which are beyond control. In simple words, we can say business risk means a chance of incurring losses or less profit than expected. These factors cannot be controlled by the businessmen and these can result in a decline in profit or can also lead to a loss.

Business risk is the possibilities a company will have lower than anticipated profits or experience a loss rather than taking a profit. Business risk is influenced by numerous factors, including sales volume, per-unit price, input costs, competition, and the overall economic climate and government regulations.

###### **v. Interest rate risk**

Interest rate risk is the danger that the value of a bond or other fixed-income investment will suffer as the result of a change in interest rates. Investors can reduce interest rate risk by buying bonds that mature at different dates. They also may allay the risk by hedging fixed-income investments with interest rate swaps and other instruments.

A long-term bond generally offers a maturity risk premium in the form of a higher built-in rate of return to compensate for the added risk of interest rate changes over time.

#### **vi. Liquidity Risk**

Liquidity risk is the **risk** that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert a security or hard asset to cash without a loss of capital and/or income in the process

#### **vii. Product Risk**

**Product risk** is the **risk** that you may not actually be able to deliver the **product** to **market** within the resources (time, money) that you have available to you. And if you do deliver the **product**, the **risk** is also in that the **product** may not work exactly as well as hoped or promised or envisioned.

Types of product market risks are:

1. Credit/Default risk
2. Basis risk
3. Settlement risk
4. Currency risk
5. Foreign exchange risk
6. Commodity risk

##### **i. Credit/Default risk**

A **credit risk** is the **risk** of **default** on a debt that may arise from a borrower failing to make required payments. In the first resort, the **risk** is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial.

Default risk can be gauged using standard measurement tools, including FICO scores for consumer credit, and credit ratings for corporate and government debt issues. Credit ratings for debt issues are provided by nationally recognized statistical rating organizations (NRSROs), such as Standard & Poor's (S&P), Moody's, and Fitch Ratings.

Default risk can change as a result of broader economic changes or changes in a company's financial situation. Economic recession can impact the revenues and earnings of many companies, influencing their ability to make interest payments on debt and, ultimately, repay the debt itself. Companies may face factors such as increased competition and lower pricing power, resulting in a similar financial impact. Entities need to generate sufficient net income and cash flow to mitigate default risk.

##### **ii. Basis risk**

**Basis risk** is the financial **risk** that offsetting investments in a hedging strategy will not experience price changes in entirely opposite directions from each other.

##### **iii. Settlement risk**

Settlement risk-also often called **delivery risk** - is the risk that one party will fail to deliver the terms of a contract with another party at the time of settlement. Settlement risk can also be the risk associated with **default**, along with any timing differences in a settlement between the two parties. Default risk can also be associated with principal risk.

##### **iv. Currency risk**

Currency Risk, sometimes referred to as exchange rate risk, is the possibility that currency depreciation will negatively affect the value of one's assets, investments, and their related interest and dividend payment streams, especially those securities denominated in foreign currency.

**v. Foreign exchange risk**

**Foreign exchange risk** refers to the losses that an international financial transaction may incur due to **currency** fluctuations. **Foreign exchange risk** can also affect investors, who trade in international markets, and businesses engaged in the import / export of products or services to multiple countries. They are classified into three types:

- Transaction risks
- Translation risks
- Economic risks

**vi. Commodity risk**

**Commodity risk** refers to the uncertainties of future market values and of the size of the future income, caused by the fluctuation in the prices of **commodities**. These **commodities** may be grains, metals, gas, electricity etc.

Commodity price risk to buyers stems from unexpected increases in commodity prices, which can reduce a buyer's **profit margin** and make budgeting difficult. For example, automobile manufacturers face commodity price risk because they use commodities like steel and rubber to produce cars.

In the first half of 2016, steel prices jumped 36%, while natural rubber prices rebounded by 25% after declining for more than three years. This led many Wall Street financial analysts to conclude that auto manufacturers and auto parts makers could see a negative impact on their profit margins.

#### **4.8 International arbitrage and interest rate parity**

Arbitrage can be defined as capitalizing on a discrepancy in quoted prices. The funds invested are not tied up and no risk is involved. In response to the imbalance in demand and supply resulting from arbitrage activity, prices will realign very quickly, such that no further risk-free profits can be made.

Locational arbitrage is the process of buying a currency at the location where it is priced cheap and immediately selling it at another location where it is priced higher. Locational arbitrage is possible when a bank's buying price (bid) is higher than another bank's selling price (ask) for the same currency.

Triangular Arbitrage in which currency transactions are conducted in the spot market to capitalize on a discrepancy in the cross exchange rate between two currencies. This is possible, if quoted cross exchange rate differs from the appropriate cross exchange rate.

When the exchange rates of the currencies are not in equilibrium, triangular arbitrage will force them back into equilibrium.

Covered Interest Arbitrage is the process of capitalizing on the interest rate differential between two countries, while covering for exchange rate risk. Covered interest arbitrage tends to force a relationship between forward rate premiums and interest rate differentials.

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.

#### **Interest Rate Parity (IRP)**

Sometimes market forces cause the forward rate to differ from the spot rate by an amount that is sufficient to offset the interest rate differential between the two currencies. Then, covered interest arbitrage is no longer feasible, and the equilibrium state achieved is referred to as interest rate parity (IRP).

When IRP exists, it does not mean that both local and foreign investors will earn the same returns. What it means is that investors cannot use covered interest arbitrage to achieve higher returns than those achievable in their respective home countries.

#### **4.9 Relation between inflation, interest rates and exchange rates**

While exchange rates can be subject to myriad factors in intraday trading—from market sentiment, breaking economic news, and cross-border trade and investment flows—inflation and interest rate policy are often important indicators for exchange rate trends—they can help traders gain an idea of what is likely to be a profitable trade for foreign exchange positions taken over longer periods.

Inflation is commonly thought of as the pace at which prices increase in a given economy and determines the "worth" of money in relation to goods and services offered. If more money is perceived to be circulating at a given time, suppliers of goods and services typically react by adjusting their prices upward, meaning less can be purchased with a given unit of currency. Conversely, if the offer of money by consumers appears to be scarce, suppliers often react by lowering prices to attract buyers, meaning inflation will decelerate and money in that economy will gain relative value.

##### **Measures of Inflation**

Inflation is normally measured by governments using groups of price levels for goods in varying sectors known as price indices. These include measures such as a producer price index (PPI), which measures wholesale inflation, and a consumer price index (CPI), which measures inflation for consumers. Governments and central banks frequently use these indices to help determine their economic measures through instruments such as inflation-targeting strategies.

Inflation in the economies of currencies being traded is an important factor to consider because it affects the relative value of those currencies internationally and because it can determine future policy adjustments by governments and central banks.

##### **Interest Rates**

Through use of monetary policy, national central banks attempt to adjust their base **interest rates** and available banking money reserves to control the rate of lending by banks within their economies. The theory is that when there is more, or cheaper, money perceived to be available in the economy through bank loans and other types of credit, consumers and businesses will spend more, sellers of goods and services will adjust prices upward, and inflation can accelerate.

Conversely, when there is less, or more expensive, money available, consumers and businesses will restrict their spending, prices will fall, and inflation will decelerate. Thus, if central banks want to curb inflation, they will raise interest rates; and if they want to induce spending and economic activity, they will lower interest rates.

##### **Interest Rate Parity**

While directly related to inflation control policy, interest rates are also considered to have their own particular relevance for foreign exchange trading because of what is known as interest rate parity. This theory posits that the real interest rates (interest rates less inflation) across borders tend to move toward equilibrium, and that currencies in economies with higher interest rates tend to weaken over time.

However, where capital is allowed to move freely across borders, investors will seek to put their money in countries where they can get the highest returns. Thus, if one country has a higher interest rate than another, money will tend to flow to the country with the higher interest rate, causing that country's weaker currency to once again appreciate over time. When the currency has risen to an equilibrium price level

where its cost is no longer offset by gains from its higher interest rate, it reaches interest rate parity and further investment flows from abroad come to a halt.

Currency traders, then, hope to predict future exchange rate movements by paying attention to the relative levels of inflation in the countries of their target currency pairs in addition to where each country is in its monetary policy cycle, and the size and pace of currency flows moving into and out of each country.

#### 4.10 Purchasing Power Parity Theory

Under the theory of Purchasing Power Parity, the change in the exchange rate between two countries' currencies is determined by the change in their relative price levels locally that are affected by inflation. It is generally agreed that this theory mostly holds true over the long run, but economists have found that it can suffer distortions over the short term because of trade and investment barriers, local taxation, and other factors.

As a result of this relationship, one can expect the currencies of countries with higher inflation rates to weaken over time versus their peers, whereas currencies of countries with lower inflation rates tend to strengthen. In economies with weak production of local goods and services, the depreciation of the local currency can at times even be accelerated by the "pass-through effect" of importing foreign goods with relatively higher prices.

When a country's inflation rate rises relative to that of another country, decreased exports and increased imports depress the high-inflation country's currency because of worsening trade and current account balances. Purchasing Power Parity (PPP) theory attempts to quantify this inflation-exchange rate relationship.

##### Interpretations of PPP

- The absolute form of PPP is an extension of the law of one price. It suggests that the prices of the same products in different countries should be equal when measured in a common currency.
- The relative form of PPP accounts for market distortions like transportation costs, labor costs, tariffs, taxes, and quotas. It states that the rate of price changes should be similar.

##### Rationale behind PPP Theory

Suppose U.S. inflation > U.K. inflation.

⇒ U.S. imports from U.K.

↑ U.S. exports to U.K., and U.S. current account ↓

Downward pressure (depreciation) is placed on the \$. This shift in consumption and the \$'s depreciation will continue until

in the U.S.:  $\text{price}_{\text{U.K. goods}} \geq \text{price}_{\text{U.S. goods}}$  and

in the U.K.:  $\text{price}_{\text{U.S. goods}} \leq \text{price}_{\text{U.K. goods}}$

##### Derivation of PPP

Assume that PPP holds. Over time, as inflation occurs exchange rates adjusts to maintain PPP:  $P_{h1} \rightarrow P_{h0} (1 + I_h)$

Where  $P_{h1}$  = home country's price index, year-1 end

$I_h$  = home country's inflation rate for the year

$P_{f1} \rightarrow P_{f0} (1 + I_f)(1 + e_f)$  where

$P_f$  = foreign country's price index

$I_f$  = foreign country's inflation rate

$e_f$  = foreign currency's % in value

If PPP holds ⇒  $P_{h1} = P_{f1}$  and  $P_{h0} (1 + I_h) = P_{f0} (1 + I_f) (1 + e_f)$

Solving for  $e_f = (1 + I_h) / (1 + I_f) - 1$

$I_h > I_f \Rightarrow e_f > 0$  i.e. foreign currency appreciates

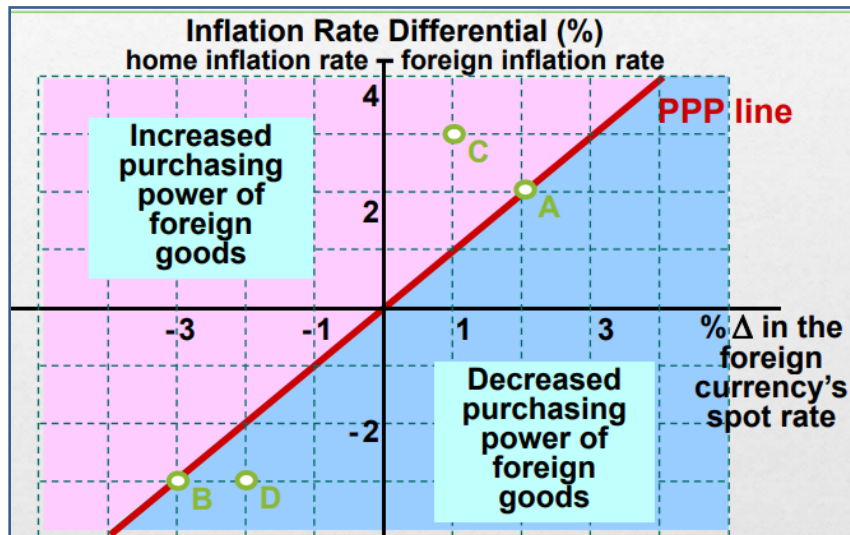
$I_h < I_f \Rightarrow e_f < 0$  i.e. foreign currency depreciates

Example: Suppose  $I_{U.S.} = 9\%$  and  $I_{U.K.} = 5\%$  .

Then  $e_{\text{£}} = \{ (1 + 0.09) / (1 + 0.05) \} - 1 = 3.81\%$

When the inflation differential is small, the PPP relationship can be simplified as  $e_f \cong I_h - I_f$

### Graphic Analysis of Purchasing Power Parity



### Testing the PPP Theory

#### Conceptual Test

Plot actual inflation differentials and spot exchange rate changes for two or more countries on a graph.

If the points deviate significantly from the PPP line over time, then PPP does not hold.

#### Statistical Test

Apply regression analysis to historical exchange rates and inflation differentials:

$$e_f = a_0 + a_1 [ (1 + I_h) / (1 + I_f) - 1 ] + \mu$$

Then apply t-tests to the regression coefficients (Test for  $a_0 = 0$  and  $a_1 = 1$ .) .If any coefficient differs significantly from what was expected, PPP does not hold.

Empirical studies indicate that the relationship between inflation differentials and exchange rates is not perfect even in the long run. However, the use of inflation differentials to forecast long-run movements in exchange rates is supported. A limitation in the tests is that the choice of the base period will affect the result.

PPP does not occur consistently due to confounding effects, a lack of substitutes for some traded goods.

Exchange rates are also affected by differences in inflation, interest rates, income levels, government controls and expectations of future rates.

PPP can be tested by assessing a “real” exchange rate over time (e.g., crawling pegs). The real exchange rate is the actual exchange rate adjusted for inflationary effects in the two countries of concern. If the real exchange rate follows a random walk, it cannot be viewed as being a constant in the long run. Then PPP does not hold.

#### 4.11 International Fisher Effect (IFE)

According to the Fisher Effect, nominal risk-free interest rates contain a real rate of return and anticipated inflation  $i_n = i_r + \text{inflation}$

If all investors require the same real return on assets of similar risk and maturity, then differentials in interest rates may be due to differentials in expected inflation.

The International Fisher Effect (IFE) theory suggests that currencies with higher interest rates will depreciate because the higher nominal rates reflect higher expected inflation.

Hence, investors hoping to capitalize on a higher foreign interest rate should earn a return no higher than what they would have earned domestically

According to the IFE,  $E(r_f)$ , the expected effective return on a foreign money market investment, should equal  $r_h$ , the effective return on a domestic investment.

$$r_f = (1 + i_f)(1 + e_f) - 1$$

$i_f$  = interest rate in the foreign country  $e_f$  = % change in the foreign currency's value

$r_h = i_h$  = interest rate in the home country

$$\text{Setting } r_f = r_h : (1 + i_f)(1 + e_f) - 1 = i_h$$

$$\text{Solving for } e_f : e_f = [(1 + i_h) / (1 + i_f)] - 1$$

$i_h > i_f \Rightarrow e_f > 0$  i.e. foreign currency appreciate

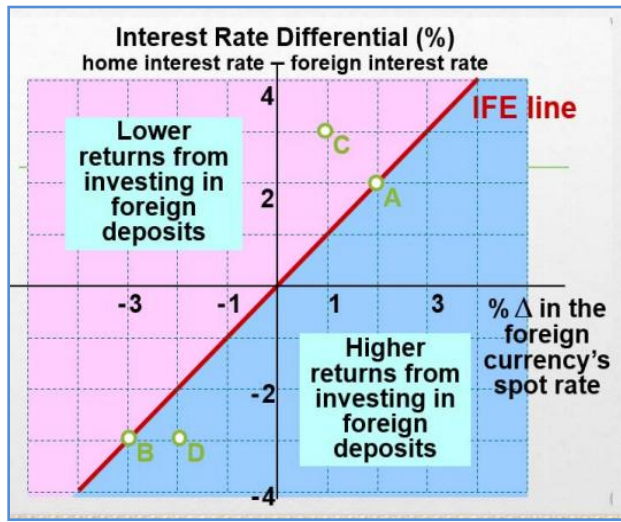
$i_h < i_f \Rightarrow e_f < 0$  i.e. foreign currency depreciates

Example: Suppose  $i_{U.S.} = 11\%$  and  $i_{U.K.} = 12\%$ . Then  $e_{U.K.} = [(1 + .11) / (1 + .12)] - 1 = -(.89)\%$ .

This will make  $r_f = r_h$

When the interest rate differential is small, the IFE relationship can be simplified as  $e_f \approx i_h - i_f$

If the British rate on 6-month deposits were 2% above the U.S. interest rate, the £ should depreciate by approximately 2% over 6 months. Then U.S. investors would earn about the same return on British deposits as they would on U.S. deposits.



If actual interest rates and exchange rate changes are plotted over time on a graph, we can see whether the points are evenly scattered on both sides of the IFE line. Empirical studies indicate that the IFE theory holds during some time frames. However, there is also evidence that it does not hold consistently

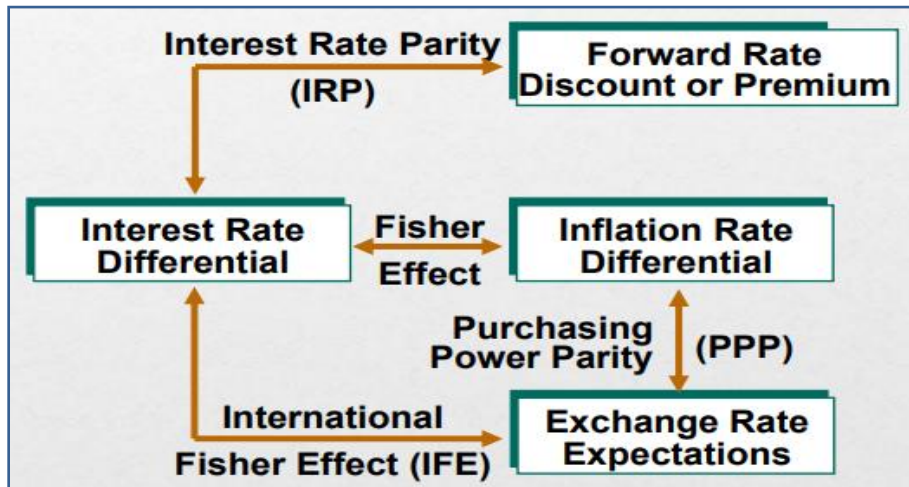
To test the IFE statistically, apply regression analysis to historical exchange rates and nominal interest rate differentials:  $e_f = a_0 + a_1 [(1 + i_h) / (1 + i_f) - 1] + \mu$ .



Then apply t-tests to the regression coefficients. (Test for  $a_0 = 0$  and  $a_1 = 1$ .) IFE does not hold if any coefficient differs significantly from what was expected.

Since the IFE is based on PPP, it will not hold when PPP does not hold. • In particular, if there are factors other than inflation that affect exchange rates, exchange rates may not adjust in accordance with the inflation differential.

### Comparison of the IRP, PPP, and IFE Theories



<p><b>Interest rate parity</b>            Forward rate premium <math>p</math>            Interest rate differential <math>i_h - i_f</math></p>	$p = \frac{(1 + i_h)}{(1 + i_f)} - 1 \cong i_h - i_f$
<p><b>Purchasing power parity</b>            % <math>\Delta</math> in spot exchange rate <math>e_f</math>            Inflation rate differential <math>I_h - I_f</math></p>	$e_f = \frac{(1 + I_h)}{(1 + I_f)} - 1 \cong I_h - I_f$
<p><b>International Fisher effect</b>            % <math>\Delta</math> in spot exchange rate <math>e_f</math>            Interest rate differential <math>i_h - i_f</math></p>	$e_f = \frac{(1 + i_h)}{(1 + i_f)} - 1 \cong i_h - i_f$

### 4.12 Expectations theory

Expectations theory attempts to predict what short-term interest rates will be in the future based on current long-term interest rates. The theory suggests that an investor earns the same amount of interest by investing in two consecutive one-year bond investments versus investing in one two-year bond today. The theory is also known as the "unbiased expectations theory."

#### Understanding Expectations Theory

The expectations theory aims to help investors make decisions based upon a forecast of future interest rates. The theory uses long-term rates, typically from government bonds, to forecast the rate for short-term bonds. In theory, long-term rates can be used to indicate where rates of short-term bonds will trade in the future.

#### Example of Calculating Expectations Theory

In this example, the investor is earning an equivalent return to the Let's say that the present bond market provides investors with a two-year bond that pays an interest rate of 20% while a one-year bond pays an interest rate of 18%. The expectations theory can be used to forecast the interest rate of a future one-year bond.

The first step of the calculation is to add one to the two-year bond's interest rate. The result is 1.2.

The next step is to square the result or  $(1.2 * 1.2 = 1.44)$ .

Divide the result by the current one-year interest rate and add one or  $((1.44 / 1.18) + 1 = 1.22)$ .

To calculate the forecast one-year bond interest rate for the following year, subtract one from the result or  $(1.22 - 1 = 0.22$  or 22%).

present interest rate of a two-year bond. If the investor chooses to invest in a one-year bond at 18% the bond yield for the following year's bond would need to increase to 22% for this investment to be advantageous.

## 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 and import bank of India, and recent amendments in EXIM policy, regulations and guidelines.

#### 5.1 Foreign Direct Investment

A foreign direct investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country. Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets in a foreign company. However, FDIs are distinguished from portfolio investments in which an investor merely purchases equities of foreign-based companies.

Foreign direct investments are commonly made in open economies that offer a skilled workforce and above-average growth prospects for the investor, as opposed to tightly regulated economies. Foreign direct investment frequently involves more than just a capital investment. It may include provisions of management or technology as well. The key feature of foreign direct investment is that it establishes either effective control of or at least substantial influence over the decision-making of a foreign business.

##### 5.1.1 Types of Foreign Direct Investment

1. **FDI:** It is the investment done by a company or organization which practices all the tasks and activities done at the investing company, back at its own country of operation. Therefore, basically such investors are from the same industry where investments are done but operating in two different countries. For e.g., a car manufacture in Australia invests in a car manufacturing company of India.
2. **Vertical FDI:** The industry of the investor and the company where investments are done are related to each other. This type of FDI is further classified as:
  - a) **Forward Vertical FDI:** In such investments, foreign investments are done in organizations which can take the products forward towards the customers. For e.g., a car manufacturing company in Australia invests in a wholesale Car Dealer company in India.
  - b) **Backward Vertical FDI:** In such investments, foreign investments are done in an organization which is involved in sourcing of products for the particular industry. For e.g., the car manufacturer of Australia invests in a tyre manufacturing plant in India.
  - c) **Conglomerate FDI:** Such investments are done to gain control in unrelated business segments and industries in a foreign land. For e.g., the car manufacturer of Australia invests in a consumer durable good manufacturer in India. Here the investing company ideally manages two challenges, first being gaining operational control in a foreign land, and the second being starting operations in a new industry segment.
  - d) **Greenfield Entry:** In this special type of FDI, the investing company refers to an investing organization starting assembling from scratch just like Honda did in United Kingdom
  - e) **Foreign Takeover:** This type of FDI takes the form of a foreign merger

## **5.2 Theories Of FDI**

### **5.2.1 Mac Dougall -Kemp Hypothesis**

FDI moves from capital abundant economy to capital scarce economy till the marginal production is equal in both countries. This leads to improvement in efficiency in utilization of resources in which leads to ultimate increase in welfare. According to this theory, foreign direct investment is a result of differences in capital abundance between economies. This theory was developed by MacDougal (1958) and was later elaborated by Kemp (1964)

### **5.2.2 Industrial Organization Theory**

According to this theory, MNC with superior technology moves to different countries to supply innovated products making in turn ample gains. Krugman (1989) points out that it was technological advantage possessed by European countries which led to massive investment in USA .According to this theory, technological superiority is the main driving force for foreign direct investment rather that capital abundance.

### **5.2.3 Currency Based Approaches**

A firm moves from strong currency country to weak currency country. Aliber (1971) postulates that firms from strong currency countries move out to weak currency countries. Froot and Stain (1989) holds that, depreciation in real value of currency of a country lowers the wealth of a domestic residents visa avis the wealth of the foreign residents, thus being cheaper for foreign firms to acquire assets in such countries. Therefore, foreign direct investments will move from countries with strong currencies to those with weak or depreciating currencies.

### **5.2.4 Location-Specific Theory**

Hood and Young (1979) stress on the location factor. According to them, FDI moves to a countries with abundant raw materials and cheap labor force. Since real wage cost varies among countries, firms with low-cost technology move to low wage countries. Abundance of raw materials and cheap labor force are the main factors for FDI. Countries with cheap labor and abundant raw material will tend to attract FDI.

### **5.2.5 Product Cycle Theory**

FDI takes place only when the product in question achieves specific stage in its life cycle-introduction, growth, maturity and decline stage. At maturity stage, the demand for new product in developed countries grow substantially and rival firms begin to emerge producing similar products at lower price. So in order to compete with rivals, innovators decide to set up production in the host country so as to beat up the cost of transportation and tariffs.

### **5.2.6 Political-Economic Theories**

They concentrate on the political risks. Political stability in the host country leads to FDI(Fatehi-Sedah and Safizeha 1989).Similarly, political instability in the home country encourages FDI in other countries(Tallman 1988).

## **5.3 Strategy for FDI**

### **5.3.1 Firm-Specific Strategy**

It means offering new kind of product or differentiated product. When product innovation fails to work, a firm may adopt product differentiation strategy. This is done through putting trade mark on the product or branding. Sometimes a firm may adopt different brands for different markets to make them suitable for local markets. Bata for example, operates in 92 countries under the same trade mark, while Uniliver's low - leather fabric washing product is marketed is market under five different brands in Western Europe.

### **5.3.2 Cost-Economic Strategy**

This strategy is done through lowering cost by moving the firm to the places where there are cheap factors of production (eg. labour and raw materials).The cheapness of these factors of production reduces the cost of production and maintains an edge over other firm

### **5.3.3 Joint Venture with a Rival Firm**

Sometimes when a rival firm in a host country is so powerful that it is not easy for MNC to compete, the later prefer to join hands with the host country firm for a joint venture agreement and the MNC is able to operate the host country market.

### **5.3.4 Investment Mode Strategy**

This strategy depends on the move of investment favored by the host country. It depends also on the political and economic environment of the host country. If the host government does not favor a particular mode, an investing company cannot adopt it even if it is the most suitable.

## **5.4 Costs And Benefits Of FDI**

A cost-benefit analysis is a process by which business decisions are analyzed. The benefits of a given situation or business related action are summed, and then the costs associated with taking that action are subtracted. •

Prior to erecting a new plant or taking on a new project, prudent managers conduct a cost-benefit analysis as a means of evaluating all the potential costs and revenues that may be generated if the project is completed. The outcome of the analysis will determine whether the project is financially feasible or if another project should be pursued.

Cost and benefits of FDI can be classified as two

- Cost and Benefits of the Host Country
- Cost and Benefits of the investing MNC

### **a) Benefits of Host Country**

#### **➤ Improving the balance of payments**

Inward investment will usually help a country's balance of payments situation. The investment itself will be a direct flow of capital into the country and the investment is also likely to result in import substitution and export promotion. Export promotion comes due to the multinational using their production facility as a basis for exporting, while import substitution means that products previously imported may now be bought domestically.

#### **➤ Providing employment**

FDI will usually result in employment benefits for the host country as most employees will be locally recruited. These benefits may be relatively greater given that governments will usually try to attract firms to areas where there is relatively high unemployment or a good labour supply

#### **➤ Source of tax revenue**

Profits of multinationals will be subject to local taxes in most cases, which will provide a valuable source of revenue for the domestic government.

#### **➤ Technology transfer**

Multinationals will bring with them technology and production methods that are probably new to the host country and a lot can therefore be learnt from these techniques. Workers will be trained to use the new technology and production techniques and domestic firms will see the benefits of the new technology.

This process is known as technology transfer

- Building of economic and social infrastructure.

- Strengthening of the government budget. Stimulation of national economy
- The presence of one multinational may improve the reputation of the host country and other large corporations may follow suite and locate as well

#### **Costs of the Host Country**

- Cultural and political interference.
- Unhealthy competition to Domestic players
- Over utilization of local resources (both natural and human resources)
- Violation of human rights (child labor eg. the case of NIKE in Vietnam, APPLE in China etc)
- Threat to indigenous technology.
- Threat to local products.

#### **b) Benefits of Investing MNCs**

##### **• Access to markets**

FDI can be an effective way for you to enter into a foreign market. Some countries may extremely limit foreign company access to their domestic markets. Acquiring or starting a business in the market is a means for you to gain access

##### **• Access to resources**

FDI is also an effective way for you to acquire important natural resources, such as precious metals and fossil fuels. Oil companies, for example, often make tremendous FDIs to develop oil fields.

##### **• Reduces cost of production**

FDI is a means for you to reduce your cost of production if the labor market is cheaper and the regulations are less restrictive in the target foreign market. For example, it's a well-known fact that the shoe and clothing industries have been able to drastically reduce their costs of production by moving operations to developing countries.

- Its also likely that Investors may get investment incentives, promotion, social amenities.

#### **Costs to Investing MNCs**

- **Risk from Political Changes.** Because political issues in other countries can instantly change, foreign direct

Investment is very risky. Plus, most of the risk factors that you are going to experience are extremely high.

- **Hindrance to Domestic Investment.** As it focuses its resources elsewhere other than the investor's home

Country, foreign direct investment can sometimes hinder domestic investment

- **Economic Non-Viability.** Considering that foreign direct investments may be capital-intensive from the point of view of the investor, it can sometimes be very risky or economically non-viable.

- measured in terms of cash flows. The estimation of the cash inflows and cash outflows mainly depends on future uncertainties. The risk associated with each project must be carefully analyzed and sufficient provision must be made for covering the different types of risks. **Expropriation.** Remember that political changes can also lead to expropriation, which is a scenario where the government will have control over your property and assets. Investment abroad takes away employment opportunities of the people in the home country.

## 5.5 International capital budgeting

The process through which different projects are evaluated is known as capital budgeting. Capital budgeting is defined “as the firm’s formal process for the acquisition and investment of capital. It involves firm’s decisions to invest its current funds for addition, disposition, modification and replacement of fixed assets”.

“Capital budgeting is long term planning for making and financing proposed capital outlays”

“Capital budgeting consists in planning development of available capital for the purpose of maximizing the long term profitability of the concern”- Lynch

.The main features of capital budgeting are

- a. potentially large anticipated benefits
- b. a relatively high degree of risk
- c. relatively long time period between the initial outlay and the anticipated return.

### Significance of capital budgeting

- The success and failure of business mainly depends on how the available resources are being utilized.
- It’s a main tool of financial management.
- All types of capital budgeting decisions are exposed to risk and uncertainty.
- They are irreversible in nature
- Capital rationing gives sufficient scope for the financial manager to evaluate different proposals and only viable
- project must be taken up for investments.
- Capital budgeting offers effective control on cost of capital expenditure projects. It helps the management to avoid
- over investment and under investments.

**Capital budgeting process** involves the following

**i) Project generation:** Generating the proposals for investment is the first step.

- The investment proposal may fall into one of the following categories:
- Proposals to add new product to the product line,
- proposals to expand production capacity in existing lines
- proposals to reduce the costs of the output of the existing products without altering the scale of operation.

No standard administrative procedure can be laid down for approving the investment proposal. The screening and selection procedures are different from firm to firm

**ii) Project Evaluation:** It involves two steps

**Estimation of benefits and costs:** the benefits and costs are

Once the proposal for capital expenditure is finalized, it is the duty of the finance manager to explore the different alternatives available for acquiring the funds. He has to prepare capital budget. Sufficient care must be taken to reduce the average cost of funds. He has to prepare periodical reports and must seek prior permission from the top management. Systematic procedure should be developed to review the performance of projects during their lifetime and after completion.

The follow up, comparison of actual performance with original estimates not only ensures better forecasting but also helps in sharpening the techniques for improving future forecasts.

**Selection of appropriate criteria to judge the desirability of the project:** It must be consistent with the firm's objective of maximizing its market value. The technique of time value of money may come as a handy tool in evaluation such proposals.

### 5.5.1 Factors influencing capital budgeting

- Availability of funds
- Structure of capital
- Taxation policy
- Government policy
- Lending policies of financial institutions
- Immediate need of the project
- Earnings
- Capital return
- Economical value of the project
- Working capital
- Accounting practice
- Trend of earnings

### 5.5.2 Methods of capital budgeting

#### Traditional methods

- Payback period
- Accounting rate of return method

#### Discounted cash flow methods

- Net present value method
- Profitability index method
- Internal rate of return method (IRR)

#### Merits of IRR

It considers the time value of money. Calculation of cost of capital is not a prerequisite for adopting IRR. IRR attempts to find the maximum rate of interest at which funds invested in the project could be repaid out of the cash inflows arising from the project. It is not in conflict with the concept of maximizing the welfare of the equity shareholders.

It considers cash inflows throughout the life of the project.

#### Cons

- Computation of IRR is tedious and difficult to understand
- Both NPV and IRR assume that the cash inflows can be reinvested at the discounting rate in the new projects. However, reinvestment of funds at the cut off rate is more appropriate than at the IRR.
- IT may give results inconsistent with NPV method.
- This is especially true in case of mutually exclusive project

#### Step 1: Calculation of cash outflow

Cost of project/asset	xxxx
Transportation/installation charges	xxxx
Working capital	xxxx
xxxx Cash outflow	xxxx

#### Step 2: Calculation of cash inflow

Sales	xxxxx
Less: Cash expenses	xxxxx



PBDT	XXXX
Less: Depreciation	XXXX
PBT	XXXX
Less: Tax	XXXX
PAT	XXXX
Add: Depreciation	XXXX
Cash inflow p.a	XXXX

## 5.6 International capital structure and cost of capital

The **capital structure** is the particular combination of debt and equity used by a company to finance its overall operations and growth. Debt comes in the form of bond issues or loans, while equity may come in the form of common stock, preferred stock, or retained earnings. Short-term debt such as working capital requirements is also considered to be part of the capital structure.

Many major firms throughout the world have begun to internationalize their capital structure by raising funds from foreign as well as domestic sources. As a result, these corporations are becoming multinational not only in the scope of their business activities but also in their capital structure.

By internationalizing its corporate ownership structure, a firm can generally increase its share price and lower its cost of capital. This trend reflects the ongoing liberalization and deregulation of international financial markets that make them accessible for many firms.

**Cost of capital** is the required return necessary to make a capital budgeting project, such as building a new factory, worthwhile. When analysts and investors discuss the cost of capital, they typically mean the weighted average of a firm's cost of debt and cost of equity blended together.

The cost of capital metric is used by companies internally to judge whether a capital project is worth the expenditure of resources, and by investors who use it to determine whether an investment is worth the risk compared to the return. The cost of capital depends on the mode of financing used. It refers to the cost of equity if the business is financed solely through equity, or to the cost of debt if it is financed solely through debt.

Many companies use a combination of debt and equity to finance their businesses and, for such companies, the overall cost of capital is derived from the weighted average cost of all capital sources, widely known as the weighted average cost of capital (WACC).

## 5.7 International Portfolio Management

An international portfolio is a grouping of investment assets that focuses on securities from foreign markets rather than domestic ones. An international portfolio is designed to give the investor exposure to growth in emerging and developed markets and provide diversification.

Diversification is a risk management strategy that mixes a wide variety of investments within a portfolio. A diversified portfolio contains a mix of distinct asset types and investment vehicles in an attempt at limiting exposure to any single asset or risk. The rationale behind this technique is that a portfolio constructed of different kinds of assets will, on average, yield higher long-term returns and lower the risk of any individual holding or security.

The art of selecting the right investment policy for the individuals in terms of minimum risk and maximum return is called as portfolio management.

Portfolio management refers to managing an individual's investments in the form of bonds, shares, cash, mutual funds etc so that he earns the maximum profits within the stipulated time frame.

Portfolio management refers to managing money of an individual under the expert guidance of portfolio managers.

In a layman's language, the art of managing an individual's investment is called as portfolio management.

### **Need for Portfolio Management**

- Portfolio management presents the best investment plan to the individuals as per their income, budget, age and ability to undertake risks.
- Portfolio management minimizes the risks involved in investing and also increases the chance of making profits.
- Portfolio managers understand the client's financial needs and suggest the best and unique investment policy for them with minimum risks involved.
- Portfolio management enables the portfolio managers to provide customized investment solutions to clients as per their needs and requirements.

### **Types of Portfolio Management**

Portfolio Management is further of the following types:

- **Active Portfolio Management:** As the name suggests, in an active portfolio management service, the portfolio managers are actively involved in buying and selling of securities to ensure maximum profits to individuals.
- **Passive Portfolio Management:** In a passive portfolio management, the portfolio manager deals with a fixed portfolio designed to match the current market scenario.
- **Discretionary Portfolio management services:** In Discretionary portfolio management services, an individual authorizes a portfolio manager to take care of his financial needs on his behalf. The individual issues money to the portfolio manager who in turn takes care of all his investment needs, paper work, documentation, filing and so on. In discretionary portfolio management, the portfolio manager has full rights to take decisions on his client's behalf.
- **Non-Discretionary Portfolio management services:** In non discretionary portfolio management services, the portfolio manager can merely advise the client what is good and bad for him but the client reserves full right to take his own decisions.

### **Modes of Global Portfolio Management**

Foreign securities or depository receipts can be bought directly from a particular country's stock exchange. Two concepts are important here which can be categorized as Portfolio Equity and Portfolio Bonds. These are supposed to be the best modes of GPM. A brief explanation is provided hereunder.

#### **Portfolio Equity**

Portfolio equity includes net inflows from equity securities other than those recorded as direct investment and including shares, stocks, depository receipts (American or global), and direct purchases of shares in local stock markets by foreign investors.

#### **Portfolio Bonds**

Bonds are normally medium to long-term investments. Investment in Portfolio Bond might be appropriate if

One have additional funds to invest.

One seek income, growth potential, or a combination of the two.

#### **Global Mutual Funds**

Global mutual funds can be a preferred mode if the Investor wants to buy the shares of an internationally diversified mutual fund. In fact, it is helpful if there are open-ended mutual funds available for investment.

## **Closed-end Country Funds**

Closed-end funds invest in international securities against the portfolio. This is helpful because the interest rates may be higher, making it more profitable to earn money in that particular country. It is an indirect way of investing in a global economy. However, in such investments, the investor does not have ample scope for reaping the benefits of diversification, because the systematic risks are not reducible to that extent.

## **Drawbacks of Global Portfolio Management**

Global Portfolio Management has its share of drawbacks too. The most important ones are listed below.

- **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.
- **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.
- **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.
- **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.

## **5.8 International financing:**

### **5.8.1 Equity financing**

**Equity financing** is the process of raising capital through the sale of shares. Companies raise money because they might have a short-term need to pay bills or they might have a long-term goal and require funds to invest in their growth. By selling shares, they sell ownership in their company in return for cash, like stock financing.

Equity financing comes from many sources; for example, an entrepreneur's friends and family, investors, or an initial public offering (IPO). Industry giants such as Google and Facebook raised billions in capital through IPOs.

**Equity risk** is "the financial risk involved in holding equity in a particular investment". Equity risk often refers to equity in companies through the purchase of stocks, and does not commonly refer to the risk in paying into real estate or building equity in properties.

The measure of risk used in the equity markets is typically the standard deviation of a security's price over a number of periods. The standard deviation will delineate the normal fluctuations one can expect in that particular security above and below the mean, or average. However, since most investors would not consider fluctuations above the average return as "risk", some economists prefer other means of measuring it.

## 5.8.2 Bond financing

**Bond financing** is a type of long-term borrowing that state and local governments frequently use to raise money, primarily for long-lived infrastructure assets. They obtain this money by selling **bonds** to investors. In exchange, they promise to repay this money, with interest, according to specified schedules.

### **International bonds**

International bonds are debt instruments that are issued by a non-domestic company in order to raise money from international investors and are usually denominated in the currency of the issuing country with the primary objective to attract more investors on a large scale.

### **Types of International Bonds**

1) Foreign bonds and Euro bonds 2) Global bonds 3) Straight Bonds 4) Floating-rate Bond 5) Floating-rate Bonds 6) Convertible bonds 7) Cocktail bonds

#### **i) Foreign bonds and Euro bonds**

**Foreign Bond** is a bond where foreign company issues bond denominated in the currency denomination of the foreign country. For example, an US company issues bond and raises capital in Japan denominated in Japanese Yen. In other words, the Japanese investors are not exposed to foreign exchange risk while investing in a foreign bond. At this junction it is important to understand that a Japanese company may also issue bond and raise capital in Japan denominated in Japanese Yen. But bonds issued by the Japanese company are termed as 'Domestic Bond'. In case of a foreign bond, the bond issuer is from a foreign country. An Indian company issuing USD bond in any country belonging to Middle East region is an example of foreign bond.

In **Euro bond**, a foreign company issues a bond denominated in a currency which is not the home currency of the investors. For example, an US company issues bond and raises capital in Japan denominated in US Dollar. This will be an example Euro Bond. If the US company issues bond in Pound sterling in Japan, it will also be considered as Euro Bond. In the earlier case, it would be considered as a Euro Dollar Bond while in the later case, it would be known as Euro Sterling Bond. Historical development of Eurobond market is attributed to the unfavorable tax regime in USA during 1960s. This forced companies to issue USD denominated bond outside USA. The First Eurobond was done in 1963.

#### **ii) Global bonds**

Though very few companies have issued these bonds. In a global bond issue, the issuer offers the bonds to investors of many countries at one go. Normally these bonds are denominated in multiple currencies. Global bonds are normally issued by large multinational or transnational companies or as sovereign bonds. Global bonds can have following differences among issuer, denomination and the country in which it is being issued:

- Issuer (Issuing company's nationality)
- What is the denomination of bonds (currency) and for which country this currency is local?
- The country in which it is being issued

An example would be an Australian Bank (A) issuing a GBP Bond (B's currency) in London (B's country) and in Japan (C).

These bonds are large

- Possess high ratings
- Issued for simultaneous placement in various nations
- Traded in various regions on the basis of home market

Global bonds are sometimes also called Eurobonds but they have additional features. A Eurobond is an international bond that is issued and traded in countries other than the country in which the bond's

currency or value is denominated. These bonds are issued in a currency that is not the domestic currency of the issuer.

### **iii) Straight Bonds**

A straight bond is a bond that pays interest at regular intervals, and at maturity pays back the principal that was originally invested. A straight bond has no special features compared to other bonds with embedded options. U.S. Treasury bonds issued by the government are examples of straight bonds. A straight bond is also called a plain vanilla bond or a bullet bond.

The features of a straight bond include constant coupon payments, face value or par value, purchase value, and a fixed maturity date. A straight bondholder expects to receive periodic interest payments, known as coupons, on the bond until the bond matures. At maturity date, the principal investment is repaid to the investor. The return on principal depends on the price that the bond was purchased for. If the bond was purchased at par, the bondholder receives the par value at maturity. If the bond was purchased at a premium to par, the investor will receive a par amount less than his or her initial capital investment. Finally, a bond acquired at a discount to par means that the investor's repayment at maturity will be higher than his or her initial investment.

#### **Types of straight bond**

##### **a) Bullet-redemption bond**

A bullet bond is a debt instrument whose entire principal value is paid all at once on the maturity date, as opposed to amortizing the bond over its lifetime. Bullet bonds cannot be redeemed early by an issuer, which means they are non-callable.

##### **b) Rising coupon bond**

A bond with interest coupons that change to preset levels on specific dates. More specifically, the bond pays a given coupon for a specific period of time, and then its coupon is stepped up in regular periods until maturity. For instance, a bond may pay 6% interest for the next five years, and thereafter interest payment increases by an additional 2% every next five years until the bond matures. Typically, issuers embed rising-coupon bonds with call options which give them the right to redeem the bonds at par on the date the coupon is set to step up.

This bond is also known as a dual-coupon bond, a stepped-coupon bond, or a step-up coupon bond.

##### **c) Zero-coupon bond**

A zero-coupon bond is a debt security that does not pay interest but instead trades at a deep discount, rendering a profit at maturity, when the bond is redeemed for its full face value.

Some bonds are issued as zero-coupon instruments from the start, while others bonds transform into zero-coupon instruments after a financial institution strips them of their coupons, and repackages them as zero-coupon bonds. Because they offer the entire payment at maturity, zero-coupon bonds tend to fluctuate in price, much more so than coupon bonds.

A zero-coupon bond is also known as an accrual bond.

##### **d) Bonds with currency option**

The investor possesses the right for receiving the payments in a currency except the currency of issue

##### **e) Bull and bear bonds**

A bull bond is a term used to refer to a bond that is likely to increase in value in a bull market. Most bonds tend to increase in value when interest rates decline, but bull bonds refer to types of bonds that do especially well in this environment. A bull bond is a specific type of bond that performs well in a bull market. The bull bond increases as interest rates decline, which distinguishes it from many other types of bonds, most of which tend to increase in price when interest rates are rising.

A bull market is a financial market marked by optimism and investor confidence. The term bull market, associated with trading in the stock market, can also apply to anything traded, such as bonds, currencies, and commodities.

#### **4) Floating-rate Bonds**

- Floating rate bonds pay coupon based on some reference interest rate, such as LIBOR.
- Unlike coupon bonds, floating rate notes do not carry a fixed nominal interest rate.
- The coupon payments are linked to the movement in a reference interest rate (frequently money market rates, such as the LIBOR) to which they are adjusted at specific intervals, typically on each coupon date for the next coupon period.
- The coupon of a floating rate bond is frequently defined as the sum of the reference interest rate and a spread of x basis points.
- Floating rate bonds may be viewed as zero coupon bonds with a face value equaling the sum of the forthcoming coupon payment and the principal because their regular interest rate adjustments guarantee interest payments in line with market conditions

A floating rate note (FRN) is a debt instrument whose coupon rate is tied to a benchmark rate such as LIBOR or the US Treasury Bill rate. Thus, the coupon rate on a floating rate note is variable. It is typically composed of a variable benchmark rate + a fixed spread.

The rate is adjusted monthly or quarterly in relation to the benchmark. The maturity period of FRN's vary but are typically in the range of two to five years.

FRN's are issued by governments, as well as private companies and financial institutions. The notes are typically traded over-the-counter.

#### **Example of a Floating Rate Note**

A bank might issue the following floating rate note:

Principal: \$1,000

Interest Rate: Federal Funds Rate +0.25

Reset Period: Three months

Maturity: Five years

This note would have a face value of \$1,000. In five years the note will mature and will repay that principal. During that five years the note will have an interest rate set at the Federal Reserve's interest rate plus 0.25. For example, if the Federal Reserve rate was 2.5%, this note would bear an interest of 2.75%.

Every three months, timed to the quarterly Federal Reserve meeting, the note will update its interest rate. If the Federal Reserve rate has changed, this note will update its interest rate to match. For example, say at the board's next meeting the Federal Reserve rate falls to 2%. This floating rate note, at its next reset date, would take on an interest rate of 2.25%.

FRNs are present in various forms:

#### **a) Perpetual FRNs**

A floating-rate note (FRN) whose principal never matures, i.e., it doesn't have a redemption payment and only makes perpetual coupon payments, which are reset periodically on a fixing date by reference to a benchmark rate such as 3- or 6-month LIBOR. This instrument delivers floating-rate cash flows as long as the issuer remains in business (virtually, forever). The coupon is reset and paid on a periodic basis by adding a specific spread to the reference rate.

Perpetual FRNs are conventionally relied upon by financial institutions, such as banks, as a source of primary capital. In other words, although perpetual FRNs are essentially debt instruments, the perpetual

feature bestows on them the nature of equity. In general, perpetual FRNs are classified by financial institutions as equity or quasi-equity.

A perpetual FRN is also referred to as a perpetual floater.

**b) Minimax FRNs**

A floating-rate note (FRN) which has a minimum and a maximum interest rate, i.e., an embedded collar. This collar has the effect of limiting the reference rate to minimum and maximum values so that the holder can confine fluctuations in the reference rate to a specific range (a lower and an upper boundary).

A mini-max FRN is also known as a mini-max floater or a collared FRN.

**c) Drop Lock FRNs(Flip-flop FRN**

A floating-rate note (FRN) which has a rate trigger allowing the interest to convert to a specified fixed rate for the remaining life of the underlying debt instrument should the floating rate reaches or drops below a pre-determined level on an interest fixing (resetting) date or on a number of consecutive fixing dates. For example, a drop-lock feature may be added to a loan so that the lender can convert the floating rate to a fixed rate if the benchmark index hits a specified floor. A drop-lock FRN is also referred to as a drop-lock floater.

**d) Flip-flop FRN**

A floating-rate note (FRN) that gives the bondholder the right to convert a note with a long maturity date or no maturity (no redemption date) into a note with a short maturity date. Furthermore, the bondholder has the right to convert back into the original note before the short-dated note reaches maturity. The short-dated note typically pays a lower spread over its floating rate (LIBOR) than the the long-dated note, but this is compensated for in the possibility of receiving principal repayment by the bondholder much earlier. A flip-flop FRN is also known as a flip-flop floater.

**e) Mismatch FRN**

A floating-rate note (FRN) in which the coupon is payable after more than one coupon period. That is the interest rate is refixed on a more times than the interest is paid. In this sense, a mismatch FRN differs from a standard FRN in that the dates of coupon rate refixes and coupon payment dates are not the same. For example, a coupon payment may be made after three consecutive monthly refixes. However, the rate will still be based on the six-month (or three-month) interest rate linked to the payment frequency. A mismatch FRN is also known as a mismatch floater.

**f) Hybrid Fixed Rate Reverse Floating Rate Notes**

A floating-rate note (FRN) that pays a high fixed rate coupon for an introductory period (first one or two years), then it pays the difference between an even higher fixed rate coupon and a floating reference rate (LIBOR). For example, this floating-rate note can be structured as follows:

Over the first two years: it pays 10%.

From the third year on, it pays: 15% - LIBOR.

Investors who expect short-term rates to fall in a future period can earn very large coupons. However, if such expectations are off-the-mark, huge losses would result.

**iv) Convertible Bonds**

Convertible bonds are corporate bonds that can be converted by the holder into the common stock of the issuing company. a convertible bond gives the holder the option to convert or exchange it for a predetermined number of shares in the issuing company. When issued, they act just like regular corporate bonds, albeit with a slightly lower interest rate.

Because convertibles can be changed into stock and, thus, benefit from a rise in the price of the underlying stock, companies offer lower yields on convertibles. If the stock performs poorly, there is no

conversion and an investor is stuck with the bond's sub-par return-below what a non-convertible corporate bond would get. As always, there is a tradeoff between risk and return.

**v) Cocktail bonds**

Composite currency bonds are denominated in a currency basket, such as SDRs or ECUs, instead of a single currency. They are frequently called currency cocktail bonds. They are typically straight fixed-rate bonds. The currency composite is a portfolio of currencies: when some currencies are depreciating others may be appreciating, thus yielding lower variability overall.

## **5.9 Parallel Loans**

Parallel loan is a four-party agreement in which two parent companies in different countries borrow money in their local currencies, then lend that money to the other's local subsidiary.

The purpose of a parallel loan is to avoid borrowing money across country lines with possible restrictions and fees. Each company can certainly go directly to the foreign exchange market (forex) to secure their funds in the proper currency, but they then would face exchange risk.

The first parallel loans were implemented in the 1970s in the United Kingdom in order to bypass taxes that were imposed to make foreign investments more expensive. Nowadays, currency swaps have mostly replaced this strategy, which is similar to a back-to-back loan.

For example, say an Indian company has a subsidiary in the United Kingdom and a U.K. firm has a subsidiary in India. Each firm's subsidiary needs the equivalent of 10 million British pounds to finance its operations and investments. Rather than each company borrowing in its home currency and then converting the funds into the other currency, the two parent firms enter into a parallel loan agreement.

The Indian company borrows 909,758,269 rupees (the equivalent of 10 million pounds) from a local bank. At the same time, the British company borrows 10 million pounds from its local bank. They each then loan the money to the other's subsidiaries, agreeing on a defined period of time and interest rate (most loans of this type come due within 10 years). At the end of the term of the loans, the money is repaid with interest, and the parent companies repay that money to their home banks. No exchange from one currency to the other was needed and, therefore, neither the two subsidiaries nor their parent firms were exposed to currency risk due to fluctuations in the rupee/pound exchange rate.

Companies might also directly make loans to each other, skipping the use of banks altogether. When the loan term ends, the company repays the loan at the fixed rate agreed upon at the beginning of the loan term, thereby ensuring against currency risk during the term of the loan.

## **5.10 International Cash Management**

**Cash** has been defined in the Government Financial Statistics (GFS) manual.<sup>2</sup> - cash on hand refers to notes, coins, and deposits held on demand by government institutional units with a bank or another financial institution. Cash equivalents are defined to be highly liquid investments that are readily convertible to cash on hand.

**Cash management** is necessary because there are mismatches between the timing of payments and the availability of cash. Even if the annual budget is balanced, with realistic revenue and expenditure estimates, in-year budget execution will not be smooth, since both the timing and seasonality of cash inflows (which depend in turn on tax and nontax flows, and timing of grant or loan disbursements) and of expenditures can result in conditions of temporary cash surpluses or temporary cash shortfalls. For example, if taxes are paid quarterly, there can be large temporary cash surpluses around the time taxes are due, and temporary deficits in other time periods



Storkey (2003) provides the following definition: “cash management is having the right amount of money in the right place and time to meet the government’s obligations in the most cost-effective way.” Other definitions emphasize active cash management of temporary cash surpluses and temporary deficits.

Modern cash management has four major **objectives**:

- To ensure that adequate cash is available to pay for expenditures when they are due. Pooling revenues in a treasury single account (TSA) facilitates this.
- To borrow only when needed and to minimize government borrowing costs.
- To maximize returns on idle cash, i.e., to avoid the accumulation of unremunerated or low yielding government deposits in the central bank or in commercial banks.
- To manage risks, by investing temporary surpluses productively, against adequate collateral. Effective cash management contributes to the smooth implementation of the operational targets of fiscal policy, the public debt management strategy, and monetary policy.

### **5.10.1 Approaches of Centralized Cash Management**

#### **a) Netting**

In a typical multinational family of companies, there are a large number of intra-corporate transactions between subsidiaries and between subsidiaries and the parent. If all the resulting cash flows are executed on a bilateral, pair wise basis, a large number of currency conversions would be involved with substantial transaction costs. With a centralized system, netting is possible whereby the **cash management center (CMC)** nets out receivables against payables, and only the net cash flows are settled among different units of the corporate family.

Payments among affiliates go back and forth, whereas only a netted amount need be transferred. For example, the German subsidiary of an MNC sells goods worth \$1 million to its Italian affiliate that in turn sells goods worth \$2 million to the German unit. The combined flows total \$3 million. On the net basis, however, the German unit need remit only \$1 million to the Italian unit. This is called bilateral netting. It is valuable, though only if subsidiaries sell back and forth to each other. But a large percentage of multinational transactions are internal – leading to a relatively large volume of inter-affiliate payments – the payoff from multilateral netting can be large, relative to the costs of such a system.

The netting center will use a matrix of payables and receivables to determine the net payer or creditor position of each affiliate at the date of clearing.

#### **b) Cash Pooling**

The CMC act not only as a netting center but also the repository of all surplus funds. Under this system, all units are asked to transfer their surplus cash to the CMC, which transfers them among the units as needed and undertakes investment of surplus funds and short-term borrowing on behalf of the entire corporate family. The CMC can in fact function as a finance company which accepts loans from individual surplus units, makes loans to deficit units and also undertakes market borrowing and investment. By denominating the intra-corporate loans in the units’ currencies, the responsibility for exposure management is entirely transferred to the finance company and the operating subsidiaries can concentrate on their main business, viz. production and selling of goods and services. Cash pooling will also reduce overall cash needs since cash requirements of individual units will not be synchronous.

#### **c) Collection and Disbursement of Funds**

Accelerating collections both within a foreign country and across borders is a key element of international cash management. Considering either national or international collections, accelerating the receipt of funds usually involves the following:

- defining and analyzing the different available payment channels,

- selecting the most efficient method (which can vary by country and customer),
- giving specific instructions regarding procedures to the firm's customers and banks.

Management of disbursements is a delicate balancing act of holding onto funds versus staying on good terms with suppliers. It requires a detailed knowledge of individual country and supplier policies, as well as the different payment instruments and banking services available around the world. A constant review on disbursements and auditing of payment instruments help international firms achieve better cash management.

### **5.11 Accounts Receivables management**

Meaning of the receivables management: The receivables out of the credit sales crunch the availability of the resources to meet the day today requirements. The acute competition requires the firm to sustain among the other competitors through more volume of credit sales and in the intention of retaining the existing customers. This requires the firm to sell more through credit sales only in order to encourage the buyers to grab the opportunities unlike the other competitors they offer in the market.

#### **Objectives of Accounts Receivables**

Achieving the growth in the volume of sales

Increasing the volume of profits

Meeting the acute competition

#### **Cost of Maintaining the Accounts Receivables**

**Capital cost:** Due to insufficient amount of working capital with reference to more volume of credit sales which drastically affects the existence of the working capital of the firm. The firm may be required to borrow which may lead to pay certain amount of interest on the borrowings. The interest which is paid by the firm due to the borrowings in order to meet the shortage of working capital is known as capital cost of receivables.

**Administrative cost:** Cost of maintaining the receivables.

**Collection cost:** Whatever the cost incurred for the collection of the receivables are known as collection cost.

**Defaulting cost:** This may arise due to defaulters and the cost is in other words as cost of bad debts and so on.

#### **Factors Affecting the Accounts Receivables**

- **Level of sales:** The volume of sales is the best indicator of accounts receivables. It differs from one firm to another.
- **Credit policies:** The credit policies are another major force of determinant in deciding the size of the accounts receivable. There are two types of credit policies viz lenient and stringent credit policies.
- **Lenient credit policy:** Enhances the volume of the accounts receivable due to liberal terms of the trade which normally encourage the buyers to buy more and more.
- **Stringent credit policy:** It curtails the motive buying the goods on credit due stiff terms of the trade put forth by the supplier unlike the earlier.
- **Terms of trade:** The terms of the trade are normally bifurcated into two categories viz credit period and cash discount
- **Credit period:** Higher the credit period will lead to more volume of receivables, on the other side that will lead to greater volume of debts from the side of buyers.
- **Cash discount:** If the discount on sales is more, that will enhance the volume of sales on the other hand that will affect the income of the enterprise.

*Management of Accounts Payable/Financing the Resources* is more important at par with the management of receivable, in order to avail the short term resources for the smooth conduct of the firm.

### **5.12 Inventory management**

Inventory management refers to the process of ordering, storing, and using a company's inventory. These include the management of raw materials, components, and finished products, as well as warehousing and processing such items.

For companies with complex supply chains and manufacturing processes, balancing the risks of inventory gluts and shortages is especially difficult. To achieve these balances, firms have developed two major methods for inventory management: just-in-time and materials requirement planning: just-in-time (JIT) and materials requirement planning (MRP).

An inventory account typically consists of four separate categories:

- Raw materials
- Work in process
- Finished goods
- Merchandise
- Raw materials

Raw materials represent various materials a company purchases for its production process. These materials must undergo significant work before a company can transform them into a finished good ready for sale.

#### **Work in process**

Works-in-process represent raw materials in the process of being transformed into a finished product.

#### **Finished goods**

Finished goods are completed products readily available for sale to a company's customers.

#### **Merchandise**

Merchandise represents finished goods a company buys from a supplier for future resale.

#### **The objectives of inventory management**

The objectives of inventory management are to provide the desired level of customer service, to allow cost-efficient operations, and to minimize the inventory investment.

#### **Customer Service**

**Customer service** is a company's ability to satisfy the needs of its customers. When we talk about customer service in inventory management, we mean whether or not a product is available for the customer when the customer wants it. In this sense, customer service measures the effectiveness of the company's inventory management. Customers can be either external or internal: any entity in the supply chain is considered a customer.

A customer service measure appropriate when customer orders vary in number of line items ordered.

### **5.13 Methods of Payment in International Trade**

To succeed in today's global marketplace and win sales against foreign competitors, exporters must offer their customers attractive sales terms supported by the appropriate payment methods. Because getting paid in full and on time is the ultimate goal for each export sale, an appropriate payment method must be chosen carefully to minimize the payment risk while also accommodating the needs of the buyer. As shown in figure 1, there are five primary methods of payment for international transactions.

New Payment Risk Diagram-To Be Created by Designer

	Least Secure	Less Secure		More Secure	Most Secure
Exporter	<b>Consignment</b>	<b>Open Account</b>	<b>Documentary Collections</b>	<b>Letters of Credit</b>	<b>Cash-in-Advance</b>
Importer	<b>Cash-in-Advance</b>	<b>Letters of Credit</b>	<b>Documentary Collections</b>	<b>Open Account</b>	<b>Consignment</b>

International trade presents a spectrum of risk, which causes uncertainty over the timing of payments between the exporter (seller) and importer (foreign buyer).

For exporters, any sale is a gift until payment is received.

Therefore, exporters want to receive payment as soon as possible, preferably as soon as an order is placed or before the goods are sent to the importer.

For importers, any payment is a donation until the goods are received.

Therefore, importers want to receive the goods as soon as possible but to delay payment as long as possible, preferably until after the goods are resold to generate enough income to pay the exporter.

### **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.

### **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.

### **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.

### **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.

### **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.

### **Letter Of Credit**

When a buyer or importer wants to purchase goods from an unknown seller or exporter. He can take assistance of bank in such buying or importing transactions.

Bank issues a LETTER OF CREDIT in addressed to the supplier or exporter after it, supplier or exporter will supply the goods to such unknown buyer or importer. A signed Invoice with Letter Of Credit is presented to the bank of buyer/importer and the payment is made to the seller/exporter directly by the bank

### **Types Of Letter Of Credit (LC)**

There are various types of letter of credit (LC) prevails in the trade transactions. In this post, we are classifying them by their purpose. They are Commercial, Export / Import, Transferable and Non-Transferable, Revocable and Irrevocable, Stand-by, Confirmed, and Unconfirmed, Revolving, Back to Back, Red Clause, Green Clause, Sight, Deferred Payment, and Direct Pay LC.

A letter of credit is an important financial tool in trade transactions. Both, domestic as well as international market, trades use the LC to facilitate the payments and the transactions. A bank or a financial institution acts as a third-party between the buyer and the seller and assures the payment of funds on the completion of certain obligations.

- **Drafts**

All letters of credit require the beneficiary to present a draft and specified documents in order to receive payment. A draft is a written order by which the party creating it, orders another party to pay money to a third party. A draft is also called a bill of exchange.

- **Bill Of Lading**

A bill of lading is a document listing and detailing all of the goods in a shipment of any kind, whether by land, sea or air. Sellers of goods print a bill of lading that details the product types, quantities, prices, weights and any other factors important to the distributor and the buyer. The seller then signs the bill of

lading and attaches it to the shipment as it is passed off to the distributor, assuming the seller uses a third-party distributor.

The shipping company can use the bill of lading to double check that all goods are accounted for. Although shippers generally cannot check the contents of containers, like boxes or pallets, they can check the number and type of containers present in the shipment.

- **commercial invoice**

Commercial Invoice is a bill for the goods shipped to the buyer. It is the accounting document for seller's claim on the buyer for goods sold to the buyer. Commercial Invoice would normally contain the following information:

- a) Names and addresses of the buyer and the seller
- b) Date of invoice, sale contract or firm order, reference number, date and etc
- c) Unit prices, if any, final sum claimed, shipment terms
- d) Settlement terms viz sight, tenor, DA/DP and etc
- e) Shipping marks and numbers
- f) Weight/quantity of the goods
- g) Name of the vessel, port of embarkation etc

#### **5.14 Trade Finance Methods**

The most popular trade financing methods are the following

##### **Accounts Receivable Financing**

It is a special type of asset-financing arrangement. In such an arrangement, a company utilizes the receivables-the money owed by the customers-as collateral in getting a finance.

##### **Factoring**

In this type of financing, the company gets an amount that is a reduced value of the total receivables owed by customers. The time-frame of the receivables exert a large influence on the amount of financing. For older receivables, the company will get less financing. It is also, sometimes, referred to as "**factoring**".

##### **Letters of Credit**

As mentioned earlier, Letters of Credit are one of the oldest methods of trade financing.

##### **Bankers Acceptance**

A banker's acceptance (BA) is a short-term debt instrument that is issued by a firm that guarantees payment by a commercial bank. BAs are used by firms as a part of the commercial transaction. These instruments are like **T-Bills** and are often used in case of money market funds.

BAs are also traded at a discount from the actual face value on the secondary market. This is an advantage because the BA is not required to be held until maturity. BAs are regular instruments that are used in international trade.

##### **Working Capital Finance**

Working capital finance is a process termed as the capital of a business and is used in its daily trading operations. It is calculated as the current assets minus the current liabilities. For many firms, this is fully made up of trade debtors (bills outstanding) and the trade creditors (the bills the firm needs to pay).

##### **Forfaiting**

Forfaiting is the purchase of the amount importers owe the exporter at a discounted value by paying cash. The forfaiter that is the buyer of the receivables then becomes the party the importer is obligated to pay the debt.

##### **Countertrade**

It is a form of international trade where goods are exchanged for other goods, in place of hard currency. Countertrade is classified into three major categories-barter, counter-purchase, and offset.

### **Barter**

is the oldest countertrade process. It involves the direct receipt and offer of goods and services having an equivalent value.

In a **counter-purchase**, the foreign seller contractually accepts to buy the goods or services obtained from the buyer's nation for a defined amount.

In an **offset** arrangement, the seller assists in marketing the products manufactured in the buying country. It may also allow a portion of the assembly of the exported products for the manufacturers to carry out in the buying country. This is often practiced in the aerospace and defense industries.

### **5.15 Export and Import Bank of India (EXIM)**

Once our economy opened up post liberalization and globalization, the import and export industry became a huge sector in our economy. Even today India is one of the largest exporters of agricultural goods. So to provide financial support to importers and exporters the government set up the EXIM Bank. Let us take a look.

The Export and Import Bank of India, popularly known as the EXIM Bank was set up in 1982. It is the principal financial institution in India for foreign and international trade. It was previously a branch of the IDBI, but as the foreign trade sector grew, it was made into an independent body.

The main function of the Export and Import Bank of India is to provide financial and other assistance to importers and exporters of the country. And it oversees and coordinates the working of other institutions that work in the import-export sector. The ultimate aim is to promote foreign trade activities in the country.

#### **More Organizations Facilitating Business**

- Government as a Business Facilitator
- RBI
- SEBI
- Competition Commission of India (CCI)
- IRDAI
- SIDBI
- NABARD
- IFCI

The management of the EXIM bank is done by a board, headed by the Managing Director. There are 17 other Directors on the board. The whole paid-up capital of the bank (100 crores currently) is subscribed by the Central Government exclusively.

#### **Functions of the EXIM Bank**

Some of the main functions of Export and Import Bank of India bank:

1. Finances import and export of goods and services from India
2. It also finances the import and export of goods and services from countries other than India.
3. It finances the import or export of machines and machinery on lease or hires purchase basis as well.
4. Provides refinancing services to banks and other financial institutes for their financing of foreign trade
5. EXIM bank will also provide financial assistance to businesses joining a joint venture in a foreign country.

6. The bank also provides technical and other assistance to importers and exporters. Depending on the country of origin there are a lot of processes and procedures involved in the import-export of goods. The EXIM bank will provide guidance and assistance in administrative matters as well.
7. Undertakes functions of a merchant bank for the importer or exporter in transactions of foreign trade.
8. Will also underwrite shares/debentures/stocks/bonds of companies engaged in foreign trade.
9. Will offer short-term loans or lines of credit to foreign banks and governments.

EXIM bank can also provide business advisory services and expert knowledge to Indian exporters in respect of multi-funded projects in foreign countries

### **Importance of the EXIM Bank**

Other than providing financial assistance, the Export and Import Bank of India bank is always looking for ways to promote the foreign trade sector in India. In the early 1990s, EXIM introduced a program in India known as the Clusters of Excellence.

The aim was to improve the quality standards of our imports and exports. It also has a tie-up with the European Bank for Reconstruction and Development. It has agreed to co-finance programs with them in eastern Europe.

In order to promote exports EXIM bank also has schemes such as production equipment finance program, export marketing finance, vendor development finance, etc.

### **5.16 Recent amendments in EXIM policy (2002-2007)**

Export Import Policy or better known as Exim Policy is a set of guidelines and instructions related to the import and export of goods. The Government of India notifies the Exim Policy for a period of five years (1997 2002) under Section 5 of the Foreign Trade (Development and Regulation Act), 1992. The current policy covers the period 2002- 2007. The Export Import Policy is updated every year on the 31st of March and the modifications, improvements and new schemes becomes effective from 1st April of every year. All types of changes or modifications related to the Exim Policy is normally announced by the Union Minister of Commerce and Industry who coordinates with the Ministry of Finance, the Directorate General of Foreign Trade and its network of regional offices.

#### **5.16.1 Highlight of Exim Policy 2002 - 07**

##### **i) Service Exports**

Duty free import facility for service sector having a minimum foreign exchange earning of Rs. 10 lakhs. The duty free entitlement shall be 10% of the average foreign exchange earned in the preceding three licensing years. However, for hotels the same shall be 5 % of the average foreign exchange earned in the preceding three licensing years. Imports of agriculture and dairy products shall not be allowed for imports against the entitlement. The entitlement and the goods imported against such entitlement shall be non transferable.

##### **ii) Status Holders**

Duty free import entitlement for status holder having incremental growth of more than 25% in FOB value of exports (in free foreign exchange). This facility shall however be available to status holder having a minimum export turnover of Rs. 25 core (in free foreign exchange).

Annual Advance Licence facility for status holder to be introduced to enable them to plan for their imports of raw material and component on an annual basis and take advantage of bulk purchase.

Status holder in STPI shall be permitted free movement of professional equipments like laptop/computer.

##### **iii) Hardware/Software**



To give a boost to electronic hardware industry, supplies of all 217 ITA1 items from EHTP units to Domestic Tariff Area (DTA) shall qualify for fulfillment of export obligation.

To promote growth of exports in embedded software, hardware shall be admissible for duty free import for testing and development purpose. Hardware up to a value of US\$ 10,000 shall be allowed to be disposed off subject to STPI certification.

100% depreciation to be available over a period of 3 years to computer and computer peripherals for units in EOU/EHTP/STP/SEZ.

#### **iv) Gem & Jewellery Sector**

Diamonds & Jewellery Dollar Account for exporters dealing in purchase /sale of diamonds and diamond studded jewellery.

Nominated agencies to accept payment in dollar for cost of import of precious metals from EEFC account of exporter.

Gem & Jewellery units in SEZ and EOUs can receive precious metal Gold/silver/platinum prior to export or post export equivalent to value of jewellery exported. This means that they can bring export proceeds in kind against the present provision of bringing in cash only.

#### **v) Removal of Quantitative Restrictions**

Import of 69 items covering animal's products, vegetables and spice antibiotics and films removed from restricted list

Export of 5 items namely paddy except basmati, cotton lintens, rare, earth, silk, cocoons, family planning device except condoms, removed from restricted list.

#### **vi) Special Economic Zones Scheme**

- a. Sales from Domestic Tariff Area (DTA) to SEZ to be treated as export. This would now entitle domestic suppliers to Duty Drawback / DEPB benefits, CST exemption and Service Tax exemption.
- b. Agriculture/Horticulture processing SEZ units will now be allowed to provide inputs and equipments to contract farmers in DTA to promote production of goods as per the requirement of importing countries.
- c. Foreign bound passengers will now be allowed to take goods from SEZs to promote trade, tourism and exports.
- d. Domestic sales by SEZ units will now be exempt from SAD.
- e. Restriction of one year period for remittance of export proceeds removed for SEZ units.
- f. Netting of export permitted for SEZ units provided it is between same exporter and importer over a period of 12 months.
- g. SEZ units permitted to take job work abroad and exports goods from there only.
- h. SEZ units can capitalize import payables.
- i. Wastage for sub contracting/exchange by gem and jewellery units in transactions between SEZ and DTA will now be allowed.
- j. Export/Import of all products through post parcel /courier by SEZ units will now be allowed.
- k. The value of capital goods imported by SEZ units will now be amortized uniformly over 10 years.
- l. SEZ units will now be allowed to sell all products including gems and jewellery through exhibition and duty free shops or shops set up abroad.
- m. Goods required for operation and maintenance of SEZ units will now be allowed duty free.

#### **vii) EOU Scheme**

Provision b,c,i,j,k and l of SEZ (Special Economic Zone) scheme , as mentioned above, apply to Export Oriented Units (EOUs) also. Besides these, the other important provisions are:

EOUs are now required to be only net positive foreign exchange earner and there will now be no export performance requirement.

Period of Utilization raw materials prescribed for EOUs increased from 1 years to 3 years.

Gems and jewellery EOUs are now being permitted sub contracting in DTA.

Gems and jewellery EOUs will now be entitled to advance domestic sales.

#### **viii) EPCG Scheme**

The Export Promotion Capital Goods (EPCG) Scheme shall allow import of capital goods for preproduction and post production facilities also.

The Export Obligation under the scheme shall be linked to the duty saved and shall be 8 times the duty saved.

To facilities upgradation of existing plant and machinery, import of spares shall be allowed under the scheme.

To promote higher value addition in export, the existing condition of imposing an additional Export Obligation of 50% for products in the higher product chain to be done away with.

Greater flexibility for fulfillment of export obligation under the scheme by allowing export of any other product manufactured by the exporter. This shall take care of the dynamics of international market.

Capital goods up to 10 years old shall also be allowed under the Scheme.

To facilitate diversification in to the software sector, existing manufacturer exporters will be allowed of fulfill export obligation arising out of import of capital goods under the scheme for setting up of software units through export of manufactured goods of the same company.

Royalty payments received from abroad and testing charges received in free foreign exchange to be counted for discharge of export obligation under EPCG Scheme.

#### **ix) DEPB Scheme**

Facility for pro visional Duty Entitlement Pass Book (DEPB) rates introduced to encourage diversification and promote export of new products.

DEPB rates rationalize in line with general reduction in Customs duty.

#### **x) DFRC Scheme**

Duty Free Replenishment Certificate (DFRC) scheme extended to deemed export to provide a boost to domestic manufacturer.

Value addition under DFRC scheme reduced from 33% to 25%.

#### **xi) Others**

- Actual user condition for import of second hand capital goods up to 10 years old dispensed with.
- Reduction in penal interest rate from 24% to 15% for all old cases of default under Exim policy
- Restriction on export of warranty spares removed.

IEC holder to furnish online return of importers/exporters made on yearly basis.

Export of free of cost goods for export promotion @ 2% of average annual exports in preceding three years subject to ceiling of Rs. 5 lakhs permitted.