

# Khandelwal Vaish Girls Institute of Technology

## Internal Examination 2017 - 18 International Financial Management MBA Semester III Question Paper & Answer Key

MM: 30

Time : 02:30 hours

1. Describe the recent trends in international financial management. What are the challenges in international financial management? (4)

Ans. **Recent Trends in International Financial Management:**

International Financial Management has undergone vast changes in international trade and global finance markets. International trade is increasingly recognized as a vital engine for economic development.

### **World Trade Scenario**

As per IMF's World Economic Outlook October, 2011, world trade recorded its largest ever annual increase in 2010, as merchandise exports surged 14.4 percent. The volume of world trade in 2011 is expected to slowdown to 7.5 percent compared to the 12.8 percent achieved in 2010. Growth in the volume of world trade is expected to decline in 2012 to 5.8 percent as per IMF projections.

The IMF has moderated its growth projections of world output to 4 percent in 2012. The advanced economies are expected to grow at 1.9 per cent in 2012 while the emerging and developing economics to grow at 6.1 per cent. The projected growth rates in different countries are expected to determine the markets for exports. As per WTO's International Trade Statistics, 2010, in merchandise trade, India is the 20<sup>th</sup> largest exporter in the world with a share of 1.4 percent and the 13<sup>th</sup> largest importer with a share of 2.1 percent in 2010.

The year 2011 has been a difficult year with Japan facing a major earthquake and tsunami, the swelling of unrest in the Middle East oil producing countries, the slowing down of U.S. economy and the Euro area facing major financial turbulence. The current global economic slowdown has its epicenter in the Euro-region but the contagion is being witnessed in all major economies of the world. As a result, India's short-term growth prospects have also been impacted.

### **India's Trade Performance**

India's merchandise exports reached a level of U.S. \$ 251.14 billion during 2010-11 registering a growth of 40.49 percent as compared to a negative growth of 3.53 percent during the previous year. India's export sector has exhibited remarkable resilience and dynamism in the recent year. Despite the recent setback faced by India's export sector due to global slowdown, merchandise exports recorded a compound annual growth rate

of 20.0 percent from 2004-05 to 2010-11. India's trade performance can be studied as follows:

- 1. Exports:** Exports recorded a growth of 40.49 percent during April-March 2010-11. The government has set an export target of U.S. \$300 billion for 2011-12. With merchandise exports reaching US \$217.66 billion in 2011-12, the export target of 300 US \$ billion is expected to be achieved.
- 2. Imports:** Cumulative value of imports during 2011-12 was U.S. \$350.94 billion as against U.S. \$269.18 billion during the corresponding period of the previous year registering a growth of 30.4 percent in \$ terms. Oil imports were valued at U.S. \$105.6 billion during 2011-12 which was 40.39 percent higher than oil imports valued U.S. \$75.2 billion in the corresponding period of previous year. Non-oil imports were valued at U.S. \$245.35 billion during 2011-12 which was 26.49 percent higher than non oil imports of U.S. \$194.0 billion in previous year.
- 3. Trade Balance:** The trade deficit in 2011-12 was estimated at U.S. \$133.27 billion which was higher than the deficit of U.S. \$96.21 billion during 2010-11.
- 4. Strategy for Doubling Exports:** Global economic outlook is a major determinant of export performance of any country. Export growth cannot, therefore, be viewed in isolation from economic outlook in the world economy. Keeping in view the urgency of managing the growing trade deficit and uncertain global economic scenari, Department of Commerce, in May 2011 finalised a strategy paper for doubling merchandise exports in three years from U.S. \$246.00 billion 2010-11 to U.S. \$500 billion in 2013-14. Exports were envisaged to increase at compounded average growth of 26.7 percent per annum.
- 5. Plantation Crops :** Exports of plantation crops during 2011-12 increased by 39.29 percent in U.S. \$ terms compared with the corresponding period of the previous year. Export of coffee registered a growth of 77.50 percent, the value increased for U.S. \$313.53 million to U.S. \$ 556.52 million. Export of tea also increased by 9.34 percent.
- 6. Agriculture and Allied Products :** Agriculture and allied products as a group include cereals pulses, tobacco, spices, nuts and seeds, oil meals, guar gum meals, castor oil, shellac, sugar and molasses, processed food, meat and meat products etc. During 2011-12 exports of commodities under this group registered a growth of 62.90 percent with the value of exports increasing from U.S. \$ 8165.03 million in the previous year of U.S. \$13300.63 million the current year.
- 7. Ores and Minerals :** Exports of ores and minerals were estimated at US \$ 4700.29 million during 2011-12 registering a negative growth of 8.32 percent over the same period of the previous year. Sub groups, viz., processed minerals and iron ore has recorded a negative growth of 17.22 percent and 23.29 percent. Coal registered a

growth of 35.76 percent and other ores and minerals 78.37 percent respectively. Mica has registered a growth of 5.74 percent.

- 8. Gems and Jewellery:** The export of gems and jewellery during 2011-12 increased to US \$ 27664.09 million from US \$ 16770.33 million during the corresponding period of last year showing a growth of 64.96 percent.
- 9. Chemicals and Related Products:** During the period 2011-12, the value of exports of Chemicals and Allied products increased to US \$ 21977.24 million from US \$ 16276.94 million during the same period of the previous year registering a growth of 35.02 percent. Rubber, glass and other products, residual chemicals and allied products, basic chemicals, pharmaceuticals and cosmetics and plastic and linoleum have also registered a positive growth.
- 10. Engineering goods:** Items under this grouped consist of machinery, iron and steel and other engineering items. Exports from this sector during the period 2011-12 stood at US \$ 36694.23 million compared with US @ 27098.96 million during the same period of the previous year, registering a growth of 35.41 percent.
- 11. Electronic Goods:** During the period 2011-12 exports of electronic goods as a group was estimated at US \$ 5024.92 million compared with US \$ 4299.36 million during the corresponding period of last year, registering a growth of 16.88 percent.
- 12. Textiles:** During the period 2011-12, the value of textiles exports was estimated at US \$ 15101.96 million compared with US \$ 11987.38 million in the corresponding period of the previous year, recording a growth of 25.98 percent.
- 13. Handicrafts and Carpets:** Exports of handicrafts declined to US \$ 101.67 million during 2011-12, from US \$ 128.24 million during the corresponding period of the previous year registering a negative growth of 20.72 percent. Export of carpets decreased to US \$ 439.66 million from US \$ 536.98 million during the same period last year registering a negative growth of 18.12 percent.
- 14. Petroleum Products:** Export of petroleum products increased to US \$ 34667.02 million during 2011-12, as compared with US \$ 21135.13 million during the same period of last year recording a growth of 64.03 percent.
- 15. Cotton Raw Including Waste:** There was a growth in the exports of Cotton Raw including waste by 178.63 percent from US \$ 389.52 million in 2010-11 to US \$ 1085.30 million during 2011-12.
- 16. Imports by Principal Commodities:** Imports of the top five commodities during the period 2011-12 registered a share of 62.8% mainly due to significant imports of petroleum, gold, electronic goods, pearls, precious and semi- precious stones and machinery except electrical and electronics.

## Challenges in International Financial Management

- 1) Interrelationships between relevant environmental variables and corporate responses.
- 2) Adapt finance function to firm's own strategic posture.
- 3) To take in stride past failures and mistakes.
- 4) To design specific solutions
- 5) Knowledge of macro – economic environment
- 6) Culture
- 7) Technology

### 2. Explain the international monetary fund in brief. (4)

Ans. The International Monetary Fund was conceived in July 1944 during the United Nations Monetary and Financial Conference. The representatives of 45 governments met in the Mount Washington Hotel in the area of Bretton Woods, New Hampshire, United States, with the delegates to the conference agreeing on a framework for international economic cooperation. The IMF was formally organized on December 27, 1945, when the first 29 countries signed its Articles of Agreement. The statutory purposes of the IMF today are the same as when they were formulated in 1943.

The International Monetary Fund was created with a goal to stabilize exchange rates and assist the re-construction of the world's international payment system. Countries contributed to a pool which could be borrowed from, on a temporary basis, by countries with payment imbalances. The IMF was important when it was first created because it helped the world to stabilize the economic system. The IMF is still important because it works to improve the economies of its member countries.

### Objectives of International Monetary Fund

- 1) **To promote international monetary cooperation** through a permanent institution that provides the machinery for consultation and collaboration on international monetary problems.
- 2) **To facilitate the expansion and balanced growth of international trade**, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.
- 3) **To promote exchange stability**, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciations.
- 4) **To assist in the establishment of a multilateral system of payment** in respect to current transaction between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade.
- 5) **To give confidence to members by the fund's** resources available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity.

- 6) **To shorten the duration and lessen the degree of disequilibrium** in the international balance of payments of members.

#### **Functions / Role of International Monetary Fund**

- a. Regulates exchange rate practices and the international payments.
- b. Offers medium – term loans to the national monetary authorities.
- c. Provides a forum for international cooperation.
- d. Provides technical assistance and training.
- e. Strengthening the international monetary system.
- f. Increasing the global supply of international reserves.
- g. Mobilizing external financing.

#### **Advantages of International Monetary Fund**

- a. Establishment of a monetary reserve fund.
- b. Setting up a multilateral trade and payments system.
- c. Improvement in short term disequilibrium in balance of payments.
- d. Stability of foreign exchange rates.
- e. Check in competitive currency devaluation.
- f. No interference in domestic economic affairs.

#### **Disadvantages of International Monetary Fund**

- a. Inability to remove exchange controls.
- b. No solution of the liquidity problem.
- c. No elimination of multiple exchange rates.
- d. Fixation of unscientific quotas.
- e. No provision for automatic revaluation of currencies.
- f. No success in securing exchange stability.
- g. Discriminatory treatment.

3. **Explain foreign portfolio investment? Discuss its factors and modes.** (3)

Ans. **Meaning of foreign portfolio investment**

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

Foreign portfolio investments allow investors to further diversify their assets by moving away from a domestic only portfolio. This type of portfolio can carry increased risk due to potential economic instability stemming from emerging markets, but can also bring increased stability through investments in industrialized and more stable markets.

#### **Factors affecting foreign portfolio investment**

- **Tax rates on interest or dividends:** Investors normally prefer to invest in a country where the taxes on interest or dividend income from investments are relatively low.

Investors assess their potential after tax earnings from investments in foreign securities.

- **Interest rates:** Portfolio investment can also be affected by interest rates. Money tends to flow to countries with high interest rates, as long as the local currencies are not expected to weaken.
- **Exchange rates:** When investors invest in a security in a foreign country, their return is affected by:
  - The change in the value of the security.
  - The change in the value of the currency in which the security is denominated.

If a country's home currency is expected to strengthen, foreign investors may be willing to invest in the country's securities to benefit from the currency movement.

Conversely, if a country's home currency is expected to weaken, foreign investors may decide to purchase securities in other countries.

### **Modes of foreign portfolio investment:**

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 FPM. 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, 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 for you if –

- You have additional funds to invest.
- You seek income, growth potential, or a combination of the two.
- You don't mind locking your investment for five years, ideally longer.
- You are ready to take some risk with your money.
- You are a taxpayer of basic, higher, or additional-rate category.

#### ➤ **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.

4. **Discuss the factors affecting BOP. Explain the significance of BOPs.** (4)

**Ans. Meaning of Balance of Payments (BOP):**

The balance of payments is a statement of all transactions made between entities in one country and the rest of the world over a defined period of time, such as a quarter or a year.

The balance of payments (BOP), also known as balance of international payments, summarizes all transactions that a country's individuals, companies and government bodies complete with individuals, companies and government bodies outside the country. These transactions consist of imports and exports of goods, services and capital, as well as transfer payments such as foreign aid and remittances.

A country's balance of payments and its net international investment position together constitute its international accounts.

**Factors affecting balance of payment:**

- i. **Cost of production:** The cost of production in the exporting economy vis – a vis those in importing economy.
- ii. **Demand and supply:** The demand and supply trend defines the cost of domestic products to be sold in the international market.
- iii. **Cost and availability:** The cost and availability of raw materials, intermediate goods and other inputs.
- iv. **Exchange rate movements:** The value of a country's currency regarding other currencies is called the exchange rate. Changes in a country's exchange rate brought about by market forces or actions by national government or government of other countries will influence a country's current account balance. An appreciation in a country's exchange rate vis-a-vis another country's currency, other things being equal, is likely to lead to a decline in the country's exports and increase in imports.
- v. **Domestic business:** Sound domestic policies are required to boost production and international trade. Some countries like the US provide subsidies to local manufactures for exported goods and services.
- vi. **Inflation:** If a country's inflation rate increases relative to the other countries with which it trades, its current account would be expected to decline. Due to higher prices at home, consumers and corporations within the country are most likely to

purchase more goods and services overseas (due to high local inflation), while the country's exports to other countries will fall.

- vii. **National Income:** If the national income of a country rises by a higher percentage than those of other nations, its current account is expected to decline, other things being same. As the real income level (adjusted for inflation) rises, so does consumption of goods. A percentage of that increase in consumption of goods will most likely reflect an increase in demand for the foreign nation goods.
- viii. **Government Restrictions:** If a country's government imposes a particular type of tax (often referred to as a tariff tax) on imported goods from foreign countries, the prices of foreign goods to consumers effectively increases. An increase in prices of imported goods relative to goods produced at domestic country will discourage imports and is expected to increase its current account balance. In addition to tariffs, a government may reduce its imports by enforcing a quota, or a maximum limit on imports.

### **Significance of Balance of Payments:**

The balance of payments data is important to a lot of users. Investment managers, government policymakers, the central bank, businessmen, etc. all make use of the BOP data to make important decisions. The BOP data is affected by vital macroeconomic variables such as exchange rate, price levels, interest rates, employment, and GDP.

Monetary and fiscal policies are formed in a way to achieve very specific objectives, which generally exert a significant impact on the balance of payments. Policies can be formed with the objectives to induce or curb foreign inflows or outflows.

Businesses use BOP to analyze the market potential of a country, especially in the short term. A country with a large trade deficit is not as likely to import as much as a country with a trade surplus. If there is a large trade deficit, the government may adopt a policy of trade restrictions such as quote or tariffs.

Businesses need BOP data to anticipate changes in host country's economic policies driven by BOP events. BOP data may be important for the following reasons:

- BOP indicates a country's financial position vis-à-vis foreign countries, thereby a country's ability to buy foreign goods or services.
- BOP is important indicator of pressure on a country's exchange rate, and thus on the potential of a firm trading with or investing in that country to experience foreign exchange gains or losses. Changes in BOP may presage the impositions of foreign exchange controls.
- BOP data helps in knowing the changes in a country's BOP may also signal imposition (or removal) of controls over payments, dividends, and interest, license fees, royalty fees, or other cash disbursements to foreign firms or investors.



- BOP data helps to forecast a country's market potential, especially in the short-run. A country experiencing a serious BOP deficit is not likely to import as much as it would if it were running a surplus.
- BOP data can also signal increased riskiness of lending to particular country and it also helps to in the formulation of trade and fiscal policies.

**5. Elaborate the hedging of transaction exposure. (3)**

Ans. Transaction Exposure Hedging:

Although currency exchange rate risks can never be completely eliminated, the exposures can be successfully managed by well structured hedging strategies. The company has at its disposal the financial and non financial, derivative and non derivative, external and internal hedging techniques. Before any of the transaction hedging techniques is used, transaction exposure should be correctly identified through sequential balancing of the cash flows according to currencies and maturities. This is called netting. Accounting data is crucial to the determination of company's transaction exposure. Nevertheless, accounting data may not be sufficient as it does not include all the information regarding future transactions. The transaction exposure in a particular moment in time includes all the present and future open positions derived by sequential netting. So, prospective managerial information on future transactions should be supplemented to the retrospective accounting information.

Three approaches to avoid losses from the transaction exposure exist:

1. Accounts receivable and accounts payable can be agreed and settled in domestic currency.
2. Hedging with financial derivatives (forwards, futures, options, swaps, and other).
3. Natural hedge with non derivative financial instruments i.e. entering in a simultaneous import/export and borrowing/lending activity. In this case a transaction exposure is being offset by a contrary translation exposure.

Transaction exposure is the sensitivity of the firm's realized domestic cash flow from changes in exchange rates. It refers to the extent to which each of individual international FOREX transactions will either require a greater than normal or lesser than normal amount of local currency to be converted to the foreign currency in which the transaction is denominated to facilitate settling of the same.

Three methods of hedging transaction exposure are:

**1. Forward Market Hedge**

This strategy exclusively utilizes forward contracts. A forward contract is a financial contract to sell/buy a foreign currency at a certain period in the future at a predetermined price. A long forward contract is a contract to buy a foreign currency at a certain date at a prefixed price while a short forward contract is a contract to sell a foreign currency at a certain date at a prefixed price.

Thus one drawback of forward market hedging is that in as much as it shields a firm from incurring losses in instances of actual unfavorable future exchange rates, it also curtails upside potential because the hedging firm will be obliged to honor the forward contract at the predetermined forward contract exchange rate although the actual exchange rate might be more favorable to it.

## **2. Options Market Hedge**

This strategy utilizes options. Options are derivatives (derivatives are financial instruments whose value is derived from the value of another instrument) which give their holder the right but not the obligation to buy/sell foreign currency at preset prices (called the Exercise Price). A call option on a foreign currency is the right but not the obligation to buy a foreign currency at the Exercise price while a put option is the right but not the obligation to sell the foreign currency at the Exercise Price.

As we have seen, options are thus a great way to preserve the prospective gains of hedging firms from exchange rate movements while protecting against prospective detriment posed by the same.

## **3. Hedging of Contingent Exposure**

Contingent exposure pertains occurrences which are contingent on the happening of a third party event over which the hedging firm has no control but whose outcome is likely to affect the transaction exposure of the firm.

## **6. Explain currency derivative. Discuss the types of currency derivative. (4)**

Ans. A derivative is a security with a price that is dependent upon or derived from one or more underlying assets. The derivative itself is a contract between two or more parties based upon the asset or assets. Its value is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes.

Derivatives can either be traded over-the-counter (OTC) or on an exchange. OTC derivatives constitute the greater proportion of derivatives in existence and are unregulated, whereas derivatives traded on exchanges are standardized. OTC derivatives generally have greater risk for the counterparty than do standardized derivatives.

The term 'Derivatives' indicates it derives its value from some underlying i.e. it has no independent value. Underlying can be securities, stock market index, commodities, bullion, currency or anything else. From Currency Derivatives market point of view, underlying would be the Currency Exchange rate. Derivatives are unique product, which helps in hedging the portfolio against the future risk. At the same time, derivatives are used constructively for arbitrage and speculation too.

## **Types of currency derivative:**

1. **Forward Contracts:** A forward contract is an agreement between two parties – a buyer and a seller to purchase or sell something at a later date at a price agreed upon today. Forward contracts, sometimes called forward commitments, are very common in everyone life. Any type of contractual agreement that calls for the future purchase of a good or service at a price agreed upon today and without the right of cancellation is a forward contract.
2. **Future Contracts:** A futures contract is an agreement between two parties – a buyer and a seller – to buy or sell something at a future date. The contract trades on a futures exchange and is subject to a daily settlement procedure. Future contracts evolved out of forward contracts and possess many of the same characteristics. Unlike forward contracts, futures contracts trade on organized exchanges, called future markets. Future contracts also differ from forward contracts in that they are subject to a daily settlement procedure. In the daily settlement, investors who incur losses pay them every day to investors who make profits.
3. **Options Contracts:** Options are of two types – calls and puts. Calls give the buyer the right but not the obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date. Puts give the buyer the right, but not the obligation to sell a given quantity of the underlying asset at a given price on or before a given date.
4. **Swaps:** Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They can be regarded as portfolios of forward contracts. The two commonly used swaps are interest rate swaps and currency swaps.
  - **Interest rate swaps:** These involve swapping only the interest related cash flows between the parties in the same currency.
  - **Currency swaps:** These entail swapping both principal and interest between the parties, with the cash flows in one direction being in a different currency than those in the opposite direction.

## **7. Explain PPP theory. Describe the absolute and relative form of PPP theory. (4)**

Ans. Purchasing power parity (PPP) is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries.

Purchasing Power Parity (PPP) is an economic theory that compares different countries' currencies through a market "basket of goods" approach. According to this concept, two currencies are in equilibrium or at par when a market basket of goods (taking into account the exchange rate) is priced the same in both countries.

This is how the relative version of PPP is calculated:

$$S = P_1 / P_2$$

Where:

"S" represents exchange rate of currency 1 to currency 2

"P1" represents the cost of good "x" in currency 1

"P2" represents the cost of good "x" in currency 2

### Two form of PPP Theory:

1. **Absolute Purchasing Power Parity:** This concept posits that the exchange rate between two countries will be identical to the ratio of the price levels for those two countries. This concept is derived from a basic idea known as the law of one price, which states that the real price of a good must be the same across all countries. To illustrate why this makes sense, suppose that soybeans are currently priced at \$5 a bushel in the U.S., that soybeans are priced at €5.50 per bushel in Europe, and that the exchange rate is 1.10 euro's per dollar. Suppose that the price of soybeans goes up to €6.05 per bushel (a 10% increase) in Europe, while the price of soybeans in the U.S. only goes up on 5%, to \$5.25 a bushel. If there is no depreciation in the euro to offset the 5% difference, then European soybeans will not be competitive on the international market and trade flowing from the U.S. to Europe will greatly increase.

If we take weighted averages of prices for all goods within an economy, absolute purchase power parity maintains that the currency exchange rate between two countries should be identical to the ratio of the two countries' price levels.

This relationship can be expressed as:

$$S = P \div P^*$$

Where S is the spot exchange rate between two countries (the rate of the amount of foreign currency needed to trade for the domestic currency), P is the price index for a domestic country and P\* is the price index for a foreign country.

The following conditions must be met for this relationship to be true:

- The goods of each country must be freely tradable on the international market.
- The price index for each of the two countries must be comprised of the same basket of goods.
- All of the prices need to be indexed to the same year.

Even if the law of one price holds for each individual good across countries, differences in weighting will cause absolute purchasing power parity. Determining comparable average national price levels is actually quite difficult and is rarely attempted. Analysts usually examine changes in price levels (indexes), which are easier to calculate; this gets around some of the problems of comparability.

2. **Relative Purchasing Power Parity:** Relative purchasing power parity relates the change in two countries' expected inflation rates to the change in their exchange rates. Inflation reduces the real purchasing power of a nation's currency. If a country has an annual inflation rate of 10%, that country's currency will be able to purchase 10% less real goods at the end of one year. Relative purchasing power parity examines the relative changes in price levels between two countries and maintains that exchange rates will change to compensate for inflation differentials.

The relationship can be expressed as follows, using indirect quotes:

$$S_1 / S_0 = (1 + I_y) \div (1 + I_x)$$

Where,

$S_0$  is the spot exchange rate at the beginning of the time period (measured as the "y" country price of one unit of currency x)

$S_1$  is the spot exchange rate at the end of the time period.

$I_y$  is the expected annualized inflation rate for country y, which is considered to be the foreign country.

$I_x$  is the expected annualized inflation rate for country x, which is considered to be the domestic country.

8. **Explain the international money market. Discuss its various sources.** (4)

Ans. **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.

The international money market keeps track of the exchange rates between currency- pairs on a regular basis. Currency bands, fixed exchange rate, exchange rate regime, linked exchange rates, and floating exchange rates are the common indices that govern the international money market in a subtle manner.

## **Various sources of International Money Market:**

1. **Treasury Bills (T-Bills):** Treasury Bills are one of the safest money market instruments as they are issued by Central Government. They are zero-risk instruments, and hence returns are not that attractive. T-Bills are circulated by both primary as well as the secondary markets. They come with the maturities of 3-month, 6-month and 1-year. The Central Government issues T-Bills at a price less than their face value and the difference between the buy price and the maturity value is the interest earned by the buyer of the instrument. The buy value of the T-Bill is determined by the bidding process through auctions. At present, the Government of India issues three types of treasury bills through auctions, namely, 91-day, 182-day and 364-day.
2. **Certificate of Deposits (CDs):** Certificate of Deposit is like a promissory note issued by a bank in form of a certificate entitling the bearer to receive interest. It is similar to bank term deposit account. The certificate bears the maturity date, fixed rate of interest and the value. These certificates are available in the tenure of 3 months to 5 years. The returns on certificate of deposits are higher than T-Bills because they carry higher level of risk.
3. **Commercial Papers (CPs):** Commercial Paper is the short term unsecured promissory note issued by corporate and financial institutions at a discounted value on face value. They come with fixed maturity period ranging from 1 day to 270 days. These are issued for the purpose of financing of accounts receivables, inventories and meeting short term liabilities. The return on commercial papers is higher as compared to T-Bills so as the risk as they are less secure in comparison to these bills. It is easy to find buyers for the firms with high credit ratings. These securities are actively traded in secondary market.
4. **Repurchase Agreements (Repo):** Repurchase Agreements which are also called as Repo or Reverse Repo are short term loans that buyers and sellers agree upon for selling and repurchasing. Repo or Reverse Repo transactions can be done only between the parties approved by RBI and allowed only between RBI-approved securities such as state and central government securities, T-Bills, PSU bonds and corporate bonds. They are usually used for overnight borrowing. Repurchase agreements are sold by sellers with a promise of purchasing them back at a given price and on a given date in future. On the flip side, the buyer will also purchase the securities and other instruments with a promise of selling them back to the seller.
5. **Banker's Acceptance:** Banker's Acceptance is like a short term investment plan created by non-financial firm, backed by a guarantee from the bank. It's like a bill of exchange stating a buyer's promise to pay to the seller a certain specified amount at a certain date. And, the bank guarantees that the buyer will pay the seller at a future date. Firm with strong credit rating can draw such bill. These securities come with the maturities between 30 and 180 days and the most common term for these instruments is 90 days. Companies use these negotiable time drafts to finance imports, exports and other trade.