1

FUNDAMENTALS OF INTERNATIONAL FINANCE

Unit Structure :

1.0 OBJECTIVES

- To study and understand International Finance.
- To understand the Balance of Payment and Balance of Trade and their Implications.
- To study the determinants of Demand and Supply of Currency.
- To understand the exchange rate and factors affecting it.
- To understand the Deficit in Current account.

1.1 INTRODUCTION TO INTERNATIONAL FINANCE

International finance, often known as international monetary economics, has become a crucial component of any study of international economics in a world where consumption, production, investment, and capital markets are all globalised. The study of monetary interactions between two or more countries is known as international finance. Foreign direct investment and currency exchange rates are two topics that international finance primarily examines.

The significance of international finance has grown as a result of increased globalisation. Instead of narrowly focusing on individual markets, international finance deals with the economic interactions between several

different countries. Large organisations like the International Finance Corp. (IFC) and the National Bureau of Economic Study perform research on international finance (NBER). The U.S. Federal Reserve also maintains a section that studies policies relevant to capital movement, international trade, and the growth of global markets.

1.2 BALANCE OF PAYMENT

Formally speaking, the balance of payments is the double-entry bookkeeping-presented statistical account of a nation's foreign transactions during a specific time period. Import and export of commodities and services as well as overseas investments in companies, bank accounts, bonds, stocks, and real estate are a few examples of international transactions. Due to the fact that the balance of payments is recorded over a specific amount of time (i.e., a quarter or a year).

In the U.S. balance of payments, transactions that result in a receipt from foreigners are often recorded as credits with a positive sign, whereas transactions that result in payments to foreigners are typically recorded as debits with a negative sign. The sale of American goods and services abroad, as well as goodwill, financial claims, and real assets, all result in credit entries in the country's balance of payments. Contrarily, debit entries result from purchases made by the United States of products and services from abroad, goodwill, financial claims, and real assets.Additionally, while debit inputs increase the supply of money, credit entries increase the demand for them. Keep in mind that the supply (demand) of dollars and foreign exchange are correlated. Every credit in the account is balanced by a corresponding debit, and vice versa, because the balance of payments is displayed as a system of double-entry bookkeeping.

The balance of payments contains a wide range of accounts since it keeps track of all international transactions a nation makes over a specific time period. However, the following three major categories can be used to classify a nation's international transactions:

1. The current account.
2. The capital account.
3. The official reserve account.

The capital account includes all purchases and sales of assets including stocks, bonds, bank accounts, real estate, and enterprises, whereas the current account only includes the export and import of goods and services. Contrarily, all transactions involving purchases and sales of foreign reserve assets, such as dollars, foreign currencies, gold, and Special Drawing Rights (SDRs), are covered by the official reserve account.

Credit (+) (Receipts)	Debits (-) (Payments)
1. Current Account	
Exports Goods; Services; Transfer Payments	**Imports** Goods; Services; Transfer Payments
2. Capital Account	
a) Borrowings from foreign countries b) DI by foreign countries	a) Lending to foreign countries b) DI to foreign countries
3. Official Settlement Account	
Increase in foreign official holdings	Increase in official reserves of gold and foreign currencies
Errors and Ommissions	

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CURRENT ACCOUNT:

All transactions relating to products, services, main and secondary incomes are included in the current account.

- **Goods:**

It includes general merchandise (items that residents export to or import from nonresidents), goods for processing (items that residents export or import across borders to be processed elsewhere before being re-imported or exported), repairs on goods (items that residents provide to or receive from nonresidents on ships, aircraft, etc.), goods procured in ports by carriers (items like fuel, provisions, stores, and supplies that residents or nonresident carriers transport through ports), repairs on goods (items that residents provide (exports and imports of all gold not held as reserve assets by the authorities). Both imports and exports are recorded using the fob (free on board) method, which values goods at the exporting nation's border.The difference between the two, known as the goods balance, is recorded as credits for export receipts and debits for import payments. When the balance is in excess, export revenues exceed import expenses (credits exceed debits), and the resulting difference shows up as a positive or zero sign in the balance of payments. Contrarily, the difference shows up with a negative sign when the balance is in deficit (credits <debits).

- **Services:**

It includes travel (goods and services bought by nonresident visitors for personal and business purposes during their stays of less than a year in a country), transportation (services like freight, passenger transportation by

all modes of transportation, and other distributive and auxiliary services that are performed by residents for nonresidents and vice versa), and other services (service transactions with nonresidents not covered under transportation or travel, such as communication services, construction services, insurance or financial services). Regarding commodities, credits represent export receipts, debits represent import expenses, and the difference (Net) represents the service balance's surplus (+) or deficit (-). Trade balance is frequently used to refer to the total of the balances on products and services.

- **Primary income:**

It displays the revenue flows between residents and non-residents in exchange for lending labour, money, or other non-produced nonfinancial assets for a short period of time to another business. It consists of employee compensation (wages, salaries, and additional benefits, such as social contributions and private insurance policies or pension funds), investment income (dividends, withdrawals from quasi-corporation income, reinvested earnings, interest, and investment income attributable to policyholders in insurance, standardised guarantees, and pension funds), and other primary income (rents, taxes and subsidies on products and production).

- **Secondary Income:**

It displays recent transfers between residents and non-residents that are not capital transfers and do not result in any direct economic benefit. It consists of transfers from the government (current taxes on wealth and income, social contributions and benefits, current international cooperation, various current transfers, etc.) and transfers from other industries (workers remittances, insurance premiums, claims on non-life insurance, and other transfers such as fines and penalties, gifts and donations, etc.).

For commodities and services, non-residents inflows are treated as credit entries, outflows as debit entries, and the discrepancy is what determines whether the income balance is in surplus or deficit. The current account of the balance of payments, which displays the number of credits and debits in the goods, services, and income accounts, is produced by computing the subtotal up to the secondary income account. The current account balance (Net) is in surplus when the total of exports and income receivable exceeds the total of imports and income payable; it is in deficit when the total of imports and income payable exceeds the total of exports and income receivable.

CAPITAL ACCOUNT:

The capital account displays credit and debit entries for capital transfers between residents and non-residents as well as non-produced nonfinancial assets.

- **Non-produced, non-financial assets:**

It refers to transfers of ownership of natural resources (land, minerals, forestry, water, fishing, air space, and electromagnetic spectrum); licences, leasing agreements, and other contracts (intangibles like marketable operating leases, permissions to use natural resources without being recorded as outright ownership of those resources, permissions to engage in specific activities, such as some government permits, and entitlements to certain benefits); and licences, leasing agreements, and other agreements.

- **Capital transfers:**

It refers to debt forgiveness, transfers of monies associated with the purchase or sale of fixed assets, and transfers of ownership of fixed assets. General government (capital taxes, debt forgiveness, investment awards, and other capital transfers) and other sectors are the two sectorial components that make up capital transfers (migrant transfers, debt forgiveness and other transfers).

Net Lending/Borrowing:

The net lending (surplus) or net borrowing (deficit) by the country compiling the account with the rest of the world is indicated by the total of the balances on the current and capital accounts. The amount of financial assets that are available for lending or required for borrowing to support all transactions with non-residents is reflected in the balance item net lending/borrowing, which is why it is reported. Though in reality the equivalence is hard to achieve, conceptually it is equal to the financial account's net balance.

Financial Account:

All transactions involving external financial assets and liabilities are tracked in the financial account. It is organised around five accounts, each of which is unique based on the kinds of financial assets and liabilities that were used in the transaction.

1) Direct investment:

It entails cross-border investments and is frequently linked to long-lasting partnerships when inhabitants of one nation have significant control or influence over the management of a company with operations in another. Proof of such relationship is the direct or indirect possession of 10% or more of the voting rights. Shares, other equities, reinvested earnings, and debt instruments all fall under the category of direct investment depending on the instrument used.

2) Portfolio investment:

It covers transactions involving debt and equity securities that aren't covered by direct investment between residents and non-residents. The categories of shares, investment fund shares, debt securities (short or long

term), and resident sector and counterparty sector are used to categorise portfolio investments.

3) Financial Derivatives:

It includes financial products that are linked to other financial instruments and allow for the trading of certain financial risks on financial markets. Options, futures, swaps, forward foreign exchange contracts, and credit derivatives transactions and positions are tracked under this category.

4) Other Investment:

Other than direct investment, portfolio investment, financial derivatives, and reserve assets, it involves positions and transactions. It includes cash and deposits, loans, insurance, pension plans, and standardised guarantees. It also includes trade credit and advances, other accounts receivable and payable, and SDR allocations (SDR holdings are included in reserve assets).

5) Reserve account:

It consists of external assets that the monetary authorities may easily access and manage for financing the balance of payments, for intervening in exchange markets to influence currency exchange rates, and for other relevant objectives (such as maintaining confidence in the currency and the economy, and serving as a basis for foreign borrowing). In addition to financial derivatives and other claims, they also comprise holdings of special drawing rights (SDRs), foreign currency and deposits, IMF reserves, securities (including debt and equity securities), special drawing rights (SDRs), and monetary gold (loans and other financial instruments).

Errors and Omissions:

Errors and omissions in the production of balance-of-payments statements led to the creation of this item. It is obtained by subtracting the identical item obtained by adding the current and capital accounts, also known as net lending/net borrowing, from the financial account's net balance.Since a surplus of credits over debits in the current and capital accounts results in a balancing net acquisition of financial assets or reduction of liabilities that is shown in the financial account, the net lending or net borrowing derived from these accounts should, in theory, be equal to the overall balance on the financial account, it follows that a positive value of (net) errors and omissions signals that credit entries have been overlooked.

1.3 DETERMINANTS OF DEMAND FOR AND SUPPLY OF CURRENCY

The demand for money, which is determined by trade, has an impact on these relative valuations. A country's currency will be in great demand if its exports exceed its imports since more people will want to buy its products. According to supply and demand economics, prices increase and the value of the currency increases when demand is high.

On the other hand, if a nation imports more than it exports, there will be less of a demand for its currency, which will result in lower pricing. Currency experiences depreciation, or value loss.

Example:

Imagine that the sole item available is candy bars, and that South Africa imports more candy bars from the United States than it does from that country. As a result, it must spend more money than was sold in rand. The demand for dollars exceeds the demand for rands in South Africa.

As a result, the value of the rand decreases. In this case, we'll assume that the rand may weaken to 15 against the dollar. Currently, an American receives 15 rand for every $1 sold. A South African must sell 15 rand in order to purchase $1.

1.4 EXCHANGE RATE

The price of the domestic currency in relation to another currency is known as the exchange rate. Comparing different currencies to demonstrate their relative values is the goal of international exchange. The rate at which one currency is exchanged for another or the price of one currency expressed in terms of another currency are two other definitions of exchange rate. There are two types of exchange rates: fixed and variable. The country's central bank sets the fixed exchange rate, while the dynamics of market demand and supply set the floating rate.The majority of exchange rates are characterised as floating and fluctuate in response to market supply and demand. Some exchange rates are set or linked to the value of the currency of a particular nation. Exchange rate fluctuations have an impact on businesses by altering the cost of supplies imported from other nations and the demand for their goods among clients abroad.

FACTORS AFFECTING EXCHANGE RATE:

Exchange rates are influenced by many things. Many of these elements have to do with how the two nations' trading relations. Keep in mind that exchange rates are based on a comparison of the currencies of two different nations. Some of the main factors affecting the exchange rate between two countries include the ones listed below. The relative relevance of these factors is up for question, just like it is with many other aspects of economics, therefore take note that they are not listed in any particular order.

Source: https:// i.pinimg.c om/originals/ 7f/92/3c/7f923c89d7666d2fec8bf a8aba3df1cc.jpg

1) DIFFERENTIALS IN INFLATION :

A nation with a historically low inflation rate typically has a growing currency value as its purchasing power rises in relation to other currencies. Japan, Germany, and Switzerland were among the nations with low inflation in the second half of the 20th century; the United States and Canada only subsequently attained this level of low inflation. The currencies of those nations with higher inflation often depreciate relative to those of their trading partners. Higher interest rates are typically accompanied by this as well.

2) DIFFERENTIALS IN INTEREST RATES :

Exchange rates, inflation, and interest rates all have a close relationship. Central banks control inflation and exchange rates through adjusting interest rates, which has an effect on both inflation and the value of currencies. An economy with higher interest rates provides lenders with a larger return compared to other nations. As a result, higher interest rates draw in foreign investment and drive up the value of the currency. However, the effect of higher interest rates is lessened if inflation in the nation is significantly higher than in other nations or if other factors contribute to the depreciation of the currency. Lower interest rates tend to cause exchange rates to rise, which is the opposite of the link that obtains for decreasing interest rates.

3) CURRENT ACCOUNT DEFICITS :

The balance of trade between a country and its trading partners, which includes all payments for goods, services, interest, and dividends, is known as the current account. A negative current account balance indicates that a nation borrows money from abroad to cover the deficit, indicating that it spends more on international trade than it brings in. In other words, the nation needs more foreign currency than it generates through export sales, and it produces more of it than foreigners are willing to pay for it. As local goods and services become affordable enough for foreign customers and foreign assets become too expensive to produce revenue for domestic interests, the country's exchange rate declines as a result of the excessive demand for foreign money.

4) PUBLIC DEBT :

Large-scale deficit financing will be used by nations to pay for public projects and governmental spending. While this activity boosts the domestic economy, international investors are less likely to invest in countries with huge public deficits and debts. The cause? A large debt promotes inflation, and if inflation is strong, the loan will eventually be serviced and repaid with real dollars that are less expensive. In the worst case, a government may issue currency to partially pay off a big debt, but expanding the money supply invariably results in inflation.

Additionally, a government must increase the number of securities available for sale to foreigners in order to lower the price of those assets if it is unable to finance its deficit through domestic methods (selling domestic bonds, expanding the money supply). Finally, if foreign investors think the nation might default on its debts, a high debt may worry them. If there is a high chance of default, foreigners will be less eager to purchase securities denominated in that currency. Because of this, the country's debt rating—as established, for instance, by Moody's or Standard & Poor's—is a significant factor in determining its exchange rate.

5) TERMS OF TRADE :

The terms of trade, which compare export prices to import prices, has an impact on current accounts and the balance of payments. A country's terms of trade have improved favourably if the price of its exports rises at a faster rate than the price of its imports. Growing terms of commerce indicate increased demand for the nation's exports. In turn, this leads to a rise in export earnings, which raises the value of the local currency and increases demand for it. The value of the currency will fall in comparison to its trade partners if the price of exports increases at a slower rate than the price of imports.

6) STRONG ECONOMIC PERFORMANCE :

Foreign investors invariably look for stable nations with robust economies to place their money in. A nation with such favourable characteristics will entice capital away from others thought to carry greater political and economic risk. For instance, political unrest can result in a decline in the value of a currency and a capital flight to currencies in more stable nations.

1.5 CURRENT ACCOUNT DEFICIT

A country's commerce is measured by its current account deficit, which occurs when the value of the goods and services it purchases exceeds the value of the exports. Despite making up a relatively tiny portion of the total current account, net income, including dividends and interest, and transfers, such foreign aid, are included in the current account. Similar to the capital account, the current account is a part of a country's balance of payments and represents the country's overseas transactions (BOP).

A country that has a current account deficit is one that imports more than it exports. Developed nations typically have deficits, whereas emerging economies frequently have surpluses. An economy may benefit from a current account deficit if external debt is utilized to fund profitable investments.

By raising the value of its exports in comparison to the value of its imports, a nation can reduce its existing debt. It can impose import limitations, such as tariffs or quotas, or it can put a focus on policies that encourage export, including import substitution, industrialization, or policies that increase the global competitiveness of indigenous enterprises. The nation can also utilize monetary policy to lower export costs by devaluing the domestic currency to increase its value in relation to other currencies.

Although having a current account deficit does not necessarily mean a country is spending beyond its means, it can indicate that it is. A nation can maintain financial stability while having a current account deficit if it uses external debt to fund investments that offer higher returns than the debt's interest rate. However, if a nation's existing debt levels cannot be paid off with its projected future earnings, it risks becoming bankrupt.

Negative net sales overseas reflect a current account deficit. While developed nations like the United States frequently have deficits, emerging economies frequently have current account surpluses. Poor nations frequently have current account deficits.

Real Example of Current Account Deficits:

Current account fluctuations are mostly influenced by market dynamics. The deficit fluctuates even in nations that deliberately run deficits. For

instance, the UK experienced a reduction in its current deficit following the 2016 Brexit vote outcomes.

Because it is a nation that relies on high levels of debt to finance its excessive imports, the United Kingdom has historically had a deficit. Commodities make up a sizable amount of the nation's exports, and falling commodity prices have reduced earnings for domestic businesses. As a result of this decline, the UK's current account deficit grows because less income is coming back into the country.

Market dynamics mostly impact current account volatility. Even in countries that purposefully run deficits, the deficit varies. For instance, the UK's current deficit decreased as a result of the 2016 Brexit vote results.

The United Kingdom has historically had a deficit because it is a nation that relies on high levels of debt to support its excessive imports. Large portions of the country's exports are made up of commodities, and declining commodity prices have decreased profits for domestic enterprises. Because less money is going back into the UK as a result of this drop, the current account deficit widens.

1.6 BALANCE OF TRADE

The difference in the monetary value of a country's imports and exports over a specific time period is referred to as the balance of trade (BOT), sometimes known as the trade balance. A surplus in trade is shown by a positive trade balance, whilst a deficit in trade is indicated by a negative trade balance. The BOT is crucial in figuring out a nation's current account.

The following equation can be used to determine the trade balance:

BALANCE OF TRADE = VALUE OF EXPORTS – VALUE OF IMPORTS

Where:

Value of exports is the value of goods and services that are sold to buyers in other countries.

Value of imports is the value of goods and services that are bought from sellers in other countries.

Contrary to popular belief, a strong or fragile economy is not necessarily indicated by a positive or negative trade balance. Among other factors, the nations involved, the trade policy decisions made, the length of the positive or negative BOT, and the magnitude of the trade deficit determine whether a BOT is advantageous for an economy. In conclusion, the BOT figure by itself does not give a good indication of how well an economy is doing. Most economists concur that neither trade deficits nor surpluses are fundamentally "good" or "bad" for the economy.

- A **positive balance** occurs when **exports > imports** and is referred to as a trade surplus.
- A **negative trade balance** occurs when **exports < imports** and is referred to as a trade deficit.

IMPLICATIONS OF BALANCE OF TRADE ON EXCHANGE RATES:

Through its impact on foreign exchange supply and demand, the trade balance affects currency exchange rates. There is comparatively higher supply or demand for a country's currency when its trade balance does not net to zero, that is, when exports do not equal imports. This affects that currency's value on the global market. Exchange rates are expressed as relative values, describing the cost of one currency in terms of another. One American dollar, for instance, can be equivalent to 11 South African rand. In other terms, a South African would purchase $1 for every 11 rand sold by an American company or individual trading dollars for rand.

1.7 SUMMARY

1. International finance is the study of monetary interactions that transpire between two or more countries.

2. The balance of payments can be formally defined as the statistical record of a country's international transactions over a certain period of time presented in the form of double-entry bookkeeping.
3. The current account includes all transactions that pertain to goods, services, and primary and secondary incomes (or income and current transfers).

4. The capital account shows credit and debit entries for non-produced nonfinancial assets and capital transfers between residents and nonresidents.

5. Exchange Rate is defined as the price of the domestic currency with respect to another currency. The purpose of foreign exchange is to compare one currency with another for showing their relative values.

6. The current account deficit is a measurement of a country's trade where the value of the goods and services it imports exceeds the value of the products it exports.

7. The balance of trade (BOT), also known as the trade balance, refers to the difference between the monetary value of a country's imports and exports over a given time period.

1.8 QUESTIONS

1. Explain the various components of Balance of Payment?
2. Explain how Demand and Supply of Currency works?
3. Define Exchange Rate? What are the factors affecting Exchange Rate?
4. Discuss the problem of Current Account Deficit in detail with some real-world examples.
5. What is Balance of Trade? Explain its implications on Exchange Rate?
6. Short Notes:
   i. Current Account
   ii. Capital Account
7. Multiple Choice Questions:
   a) _____ is the study of monetary interactions that transpire between two or more countries. (International Finance, International HRM, International Economics)
   b) The _____ can be formally defined as the statistical record of a country's international transactions over a certain period of time presented in the form of double-entry bookkeeping. (Balance of Trade, Balance of Payment, Balance of Accounting)
   c) The _____ account includes all transactions that pertain to goods, services, and primary and secondary incomes (or income and current transfers). (Current, Capital, Financial)
   d) The _____ account shows credit and debit entries for non-produced nonfinancial assets and capital transfers between residents and nonresidents. (Current, Capital, Financial)
   e) _____ is defined as the price of the domestic currency with respect to another currency. The purpose of foreign exchange is to compare one currency with another for showing their relative values. (Financial Rate, Exchange Rate, Foreign Rate)
   f) The _____ is a measurement of a country's trade where the value of the goods and services it imports exceeds the value of the products it exports. (Capital Account Deficit, Current Account Deficit, Financial Account Deficit)

g) The _____, also known as the trade balance, refers to the difference between the monetary value of a country's imports and exports over a given time period. (Balance of Payment, Balance of Trade, Balance of Account)

1.9 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol.S.Eun and Bruce.G.Resnick
- PrakashGApte,InternationalFinance:ABusinessPerspective
- Moosa, International Finance:AnAnalyticApproach
- JeffMadura,InternationalFinancialManagement
- Siddaiah, International FinancialManagement:AnAnalyticFramework
- https://www.investopedia.com
- https://corporatefinanceinstitute.com

2

INTERNATIONAL ECONOMICS

Unit Structure :

2.0 OBJECTIVES

- To understand the Globalization and its impact.
- To understand how Socialism and Communism works.
- To understand Protected Economies and its implications.
- To understand different International Grants.
- To understand the Structure and Role of IMF.

2.1 INTRODUCTION

The economic activity of numerous countries and their effects are the subject of international economics. In other words, the study of international economics focuses on the economic relationships between nations and how these have an impact on global economic activity. It examines political and economic concerns pertaining to commerce and finance on a global scale.

International influences that affect domestic economic circumstances and determine international trade relations are the subject of the study of international economics. In other words, it investigates the impact of economic interdependence on national economies. International economics covers a wide range of topics, including globalization, trade

benefits, trade patterns, balance of payments, and foreign direct investment. International economics also discusses production, commerce, and investment between nations.

One of the most crucial ideas for nations today is international economics. The study of international economics has significantly advanced throughout time thanks to several theoretical, empirical, and descriptive contributions. Economic activity between nations generally differs from activity within states. Due to numerous constraints put in place by governments, for instance, the factors of production are less mobile between nations. The study of internal economics covers the effects of various governmental limitations on production, commerce, consumption, and income distribution. As a result, studying international economics, a branch of economics, is crucial.

2.2 GLOBALISATION

In recent decades, the term "globalisation" rose to prominence as a catchphrase for characterising commercial operations, and it seems likely that it will remain so throughout the current century. The integration of a country's economy with the global economy is referred to as globalisation. It has a variety of facets. It is the end result of a variety of tactics aimed at changing the world in order to make it more interdependent and integrated. It entails the development of networks and initiatives that break through social, economic, and geographic barriers. Globalization aims to create connections between events such that those happening far away can influence those happening in India. Or to put it another way,globalisation is the method of interaction and union among people, corporations, and governments universally.

Characteristics of Globalisation:

The idea has made it possible for businesses to achieve economies of scale in both production and distribution. Additionally, it has promoted outsourcing and technology transfer between businesses and nations, increasing their dependent on one another. Following is a list of the main traits of globalisation:

1. **Free Trade -** With little interference, globalisation has improved international commerce volumes. The rationale is that governments do not tinker with every last detail of commercial transactions. Countries that have embraced globalisation have seen large increases in their Gross Domestic Product (GDP), which has led to greater wealth. Additionally, it has led to improved government cooperation, which enhances commerce even more.

2. **Liberalization -** The improvement in the business environment for firms is one of the fundamental aspects of globalisation. It has aided business owners in establishing operations and conducting transactions both domestically and abroad. Due to globalisation, there are far less restrictions on businesses, allowing for increased international trade. Governments are compelled to give industries more concessions as a

result of trade restrictions that are flexible. Globalization and liberalisation are mutually reliant.

3. **Increase in Employment -** Both direct and indirect jobs are produced by all industries. Additionally, when output rises, employment grows as well. Companies can expand their manufacturing capacity and establish businesses in many countries thanks to globalisation. Additionally, it promotes employment prospects in the nations where these businesses have established operations.

4. **Increased connectivity between nations -** Countries trading relationships with one another have improved thanks to globalisation. It has boosted communication between customers and companies. A country's economy and residents' level of living are both boosted by improved connection.

5. **Interdependence -** Countries are now more dependent on one another as a result of globalisation. Businesses have the chance to make their goods using cheaper raw materials that are imported. Additionally, they are permitted to export to nations where there is a greater market for their finished products. It has aided in lowering trade barriers and fostering general economic development.

6. **Cultural Exchange -** People-to-people interactions have improved, which has promoted the blending of cultural practises and customs. With other nations, it has made it possible for people to exchange ideas, attitudes, and values. The effects of globalisation have reduced community isolation. For instance, some American restaurants have spread to other regions of the globe. Similar to how foreign cuisine is now easily accessible in the United States.

7. **Urbanisation** - The expansion of urban centres is one effect of globalisation. A place becomes a hub of economic activity when numerous foreign and local businesses establish operations there. The employees of those businesses require housing, transportation, retail space, and other facilities close to their places of employment. Urban centres are constructed within and around industrial areas as a result of globalisation.

8. **Standard of Living** -The economy is growing, and there are more job prospects, so individuals have more money in their pockets. Due to better career chances, they also have a wider range of options. It is one of the primary causes of globalization's ability to raise the standard of living for an increasing number of people.

9. **Production Cost** -Companies are free to locate their operations in places with cheap manufacturing costs in a globalised world. It has become crucial to have access to cheap land, labour, and raw resources. Therefore, it makes sense for businesses to locate where these resources are available in large quantities and at lower prices. It gives them an advantage over their competitors by reducing expenses and raising profit margins.

10. **Outsourcing -** The ability for businesses to hire outside contractors to handle particular tasks is one of the hallmarks of globalisation. They use this action to lower internal costs, boost service quality, or both. For many nations with abundant human resources who want to create jobs, outsourcing is a blessing. As a result of this strategy, nations like India and the Philippines have benefited greatly.

Types of Globalization:

- **Political Globalization -** The degree of political globalisation in this sort of globalisation is influenced by the number of participating nations. The global economy is not fully politically globalised if political interactions between nations are not convenient or advantageous.
- **Social Globalization -** Social globalisation is a result of information and idea exchange across nations. Regardless of physical distance or geopolitical or geophysical differences, societies can form interactions with one another.
- **Economic Globalization -** Economic globalisation rises when economies are linked through trade and business. There are currently relatively few countries with independent economies that don't rely on external factors. Therefore, compared to other forms of globalisation, economic globalisation is typically more prevalent.

Effects of Globalization on India:

One of the nations that had tremendous success following the start and execution of globalisation is India. The country is seeing a huge increase in foreign investment in the corporate, retail, and scientific sectors. Additionally, it had a significant impact on social, financial, cultural, and political spheres. Due to advancements in information technology and transportation, there has been a surge in globalisation recently. Global trade, doctrines, and culture are all growing as global synergies get better.

Globalisation in the Indian Economy:

Indian society is undergoing significant change as a result of urbanisation and globalisation. The fundamental structure of the economy has been directly shaped by economic policy. Government-created and -managed economic policies were crucial in determining the levels of societal savings, employment, income, and investments. One of the most significant effects of globalisation on Indian society is cross-country culture. Cultural, social, political, and economic components of the nation have all undergone major transformation as a result. The primary component, however, that transforms a nation's economy into a global economy is economic unification.

Impact of Globalisation:

Globalization has had a significant impact on all aspects of life, including individuals, groups, and institutions. Everyone, both locally and globally, has experienced the effects of globalisation in both their personal lives and in society. There are many ways that one can experience the effects of globalisation in their daily lives.

Globalization has a constant impact on people, affecting their choices in everything from their cars to the clothes they wear to the music they listen to. Numerous global factors have such minor effects on people's everyday lives that they are difficult to render. It influences what they want to buy and consume, and it has an impact on their general standard of living. Additionally, whether you're talking about intercity, interstate, or even worldwide travel, it influences their decisions about where to travel and how to travel. Everything in all of our lives is now significantly simpler than it was even a few years ago thanks to globalisation.

Communities are a different category on which the effects of globalisation are felt. Local, regional, and global communities are all significantly impacted by globalisation. It also covers how organisations, companies, and economies are affected by globalisation. Today's marketplace offers an enormous, at times astounding range of goods. Globalization is essential for boosting the economy since it generates a huge marketplace for both buyers and sellers. People who are a part of the community are impacted by globalisation in every way, including where they live, who they work for, and how they travel. It alters how regional cultures evolve all over the world.

We must keep in mind that globalisation affects more than just the movement of products and services that are available to customers and are circulating in the economy. There is such a thing as intellectual globalisation, where progressive principles that are sometimes labelled as "Western" values are also exchanged. In fact, this goes both ways; as the world develops, traditional, conservative ideals are gradually supplanted by more modern ones. On the other side, a number of Western civilizations are also growing closer to those of the East, particularly in regards to sustainability and traditional sustainable Eastern practices.

Importance of Globalization:

One of the enduring themes that is continually undergoing change and evolution is globalisation. Like anything else, globalisation has both advantages and disadvantages. These two forces are powerless to halt the globalisation that is sweeping the globe.

It is altering how societies, corporations, and individuals communicate with one another. People from different nations come together as a result of globalisation to trade, exchange cultures, and rely on one another for survival.

Globalization and related topics have gained attention recently, particularly since 1991 in India, as the globe is becoming more and more dependent on international collaboration. The globe is currently experiencing a number of approaching crises, ranging from political to environmental to diplomatic, and resolving them will need a level of international cooperation that can only be attained through global interconnection, or globalisation.

We must consider globalisation in light of the fact that worldly togetherness is increasingly the norm as well as the fact that our wants and needs are spreading globally, particularly due to the fear of missing out. Indians frequently go to other parts of the world in search of better jobs and lives; this is one of the draws of globalisation. It is crucial because it gives us hope by illuminating the potential rather than forcing us to accept the limitations of the present.

Advantages of Globalisation:

Globalization is a process with many benefits. It is a procedure that greatly aids in the growth and development of a country. Here are a few advantages of globalisation:

1. **Employment** - The number of employment available has expanded as a result of the creation of special economic zones. The establishment of export processing facilities around the world has contributed to the employment of thousands of people. By outsourcing workers, the multinational corporations in the west have given individuals opportunities for employment.

2. **Compensation** - In comparison to domestic enterprises, there has been an increase in the level and amount of payment. The fundamental cause of this is because domestic enterprises, often known as home companies, are less skilled and knowledgeable than global corporations. The management structure of the companies is changing as a result of increased compensation.

3. **Standard of Living** - The standard of living of people has changed as a result of globalisation. People's levels of life have increased due to differences in consumer behaviour. As a result, corporate growth and evolution have improved people's quality of life.

4. **Increased Investment** - Cross-border investments have increased as a result of globalisation. Companies have invested and established branches in numerous nations throughout the world as a result. The welfare of both countries has improved as a result of the growth in cross-border investment.

5. **Development of Infrastructure** - The infrastructure of nations has been improved by technological innovation. The nations are gaining general development thanks to technology.

6. **Foreign Exchange Reserves** - The worldwide financial flows have a steady flow of capital thanks to globalisation. This capital inflow assists nations in increasing their foreign exchange reserves.

Disadvantages of Globalisation:

It is untrue that globalisation will continue to benefit us. It has many different effects on us. Therefore, it also has some drawbacks. Which are:

1. **Increasing Inequality** - Due to increased specialisation and trade, globalisation may result in greater inequality around the world. Trade and specialisation increase per capita income, but they can also lead to relative poverty. We shall use an example to show this. The United States is home to every dominating MNC in the globe. All of these businesses procure labour at lower costs from emerging or underdeveloped nations to assemble or manufacture their products. Africa, China, and India are excellent examples of this. These nations have higher employment rates, although they lag behind more industrialised nations. Once more, businesses that travel to these nations in search of cheap labour also deprive the residents of those nations, i.e. Americans, of employment. Therefore, it would seem that relative poverty is also developing in industrialised nations.

2. **Increasing Unemployment Rate** - Globalization may result in higher unemployment. Globalization calls for more affordable, higher-skilled jobs. However, nations with relatively weak institutions are unable to produce highly competent employees. As a result, the nations' unemployment rates are rising. When numerous international businesses make significant investments in emerging nations, they hire workers from those nations. Sometimes, their salaries are significantly lower than those of other wealthy nations. Additionally, there is very little demand for these workers in wealthy nations. Additionally, they face the possibility of losing their jobs as a result of the global economic crisis.

3. **Trade Imbalance** - The value ratio between a nation's exports and imports of goods and services is known as the trade balance. Any country can now trade with any other nation due to globalisation. Because of this, emerging nations are occasionally more reliant on rich nations for the import of commodities despite having lower export capacities than import. There has been a trade imbalance. The value disparity between a country's imports and exports of goods and services is what is meant by a trade imbalance. Trade imbalances are another name for it. Competitors of wealthy countries may cause trade imbalances to worsen.

4. **Environmental Degradation** - As a result of globalisation, industrialization is accelerating. Economic growth is accelerated by industrialization, but the environment is also harmed. Globalization destroys the environment and hurts us terribly. Let's use an example to try to understand. The largest soft drink manufacturer in the world is

Coca-Cola. This corporation uses a significant amount of water to produce soft drinks. A Coca-Cola bottle factory in Uttar Pradesh, a state in northern India, was shut down by government order due to excessive water use, according to local farmers. Although groundwater is scarce in North India, extensive use of it for an MNC's purposes is detrimental to local agriculture.

5. **Loss of Culture** - The previous culture and tradition of the people have vanished because everything today is beautifully constructed and technologically advanced. Most individuals prefer to live in the modern world over living in the ways of the past.

6. **Health Problems** - There are numerous diseases that emerged throughout the era of globalisation. The majority of health problems are severe.

7. **Economic Exploitation** - Developed countries take advantage of less developed nations as a result of globalisation. Developed nations may make superior products by utilising current technology. Because of this, developing nations cannot compete with developed nations. In addition, developing nations are increasingly turning to developing nations as their markets. Furthermore, in the guise of globalisation, the wealthy nations are engaging in robbery and exploitation.

2.3 SOCIALISM

In a socialist society, each member of the community receives an equal portion of the numerous resources that are produced, distributed, and traded. A democratic type of government can offer this kind of ownership. Another example of socialism is a cooperative society in which each individual owns a portion of the resources shared by the group.

Socialism is an economic system in which the general public, as opposed to the private sector, owns the resources. Socialism emphasises that centralised planning and shared public ownership of resources result in a more equitable distribution of commodities and services and a more just society.

Socialism is based on the idea that all production-related equipment, tools, factories, and resources should be owned by the general population. In a strictly socialist society, the central government makes all decisions on investments and production.

Socialism envisions a shared ownership and management among the entire population, in contrast to the notion of capitalism, in which private businesses/individuals own and control the production (assets & operations) and pay salaries to the people who work for them.

Socialism is the idea that all activities inside a nation should be under the control of the government as a whole. Similar to this, a socialist economy

is one in which the government controls all aspects of the economy, and the financial structure that supports it is referred to as a socialist financial system. The socialist economy is defined in a variety of ways by academics. However, the idea of socialism refers to giving someone the power to oversee and manage all economic activity in order to guarantee national equality. This concept was first presented by Karl Marx in his "communist manifesto."

Features of Socialist Economy:

1. **Ownership Should be Collective** - The basic characteristic of socialism explains why the government, and not any individual, is the owner of all products of industry.

2. **Equality** - The goal of socialism is to bring about economic equality. With the help of socialist ideals, class, caste, and skin colour will all be eradicated.

3. **Planning** - Given its authority, the government sets objectives and creates the required plans to carry them out. It promotes economic expansion.

4. **Competition** - Competition has no place in a socialist society compared to one that is capitalist. It appears that a single business's success might be shared by the entire nation.

5. **Positive Power** - The government should be used favourably because it is essential to all operations including decision-making, financial matters, policies, and production. There should be no abuse by the government.

6. **Work and Wages** - To establish and uphold transparency in socialism, the government should assign tasks based on each person's aptitude and pay them in accordance with their requirements.

7. **Social Welfare** - To promote social wellbeing is socialism's central goal. It alludes to how society has developed, especially for the poor. There shouldn't be a distinction between classes.

8. **Absence of Marketers** - There would be no room for marketing or advertising sales if the government played nothing but the same tune. The occupancy will be higher if there are fewer options available.

9. **Income Distribution** - The gap between the rich and the poor will disappear if all residents have fair income distribution. Hospitals, schools, and other services are accessible to all citizens on an equal basis.

Examples of Socialist Economy:

The nations that can comprehend a socialist economy and incorporate it into their systems are held up as socialist economy role models. Many nations adhere to the concepts of integrated economies. While some states

practise capitalism, socialist regimes are rigidly adhered to in nations like Norway, Sweden, Denmark, Iceland, and Finland. These nations are wholly socialist.

Examples of socialist economies can be found in these five Nordic nations. According to their labour and contribution, they divide the money equally. They believe that in order to make the most use of savings, health and education are more important topics. The best feature is that common people participate in making decisions.

Types of Socialism:

There are various varieties of socialism. Each type concentrates on different facets of socialism.

- **Democratic Socialism :** In this system, an elected committee can control the created items. They will organise the distribution of government-provided consumer products.
- **Revolutionary Socialism :** Although it need not be violent, the revolution should be against capitalism.
- **Libertarian Socialism :** People should be free of race, ethnicity, and religion, and they should also have equal access to economic, social, and political opportunities.
- **Fabian Socialism :** In the 19th century, the British government employed this entirely nonviolent strategy. Through peace, they acclimatise to socialism.
- **Utopian Socialism :** Equality is its central tenet. High scale industrialization will be prioritised.
- **Christian Socialism :** Socialism promotes the same kind of brotherhood that is implied in Christian teachings.
- **Green Socialism :** Another form of socialism is known as "green socialism," which places a strong emphasis on enhancing natural resources. so that there will never be a food shortage and that there will always be peace in the nation.
- **Market Socialism :** In this kind of socialism, the workers take control of production, allowing them to sell goods at fair rates and divide profits equally with no room for feigning demand.

Advantages of Socialism:

1. Economic Equality -

Socialism creates a society that is more economically equal. There are lesser secret taxes applied than in a capitalist system. Additionally, the public's income distribution is essentially equal, which lessens the differences.

2. Raised Public Wellbeing Standards -

The socialist countries typically feature a wide range of programmes to enhance public welfare, including free healthcare, affordable private Medicare, and less expensive transportation. The general population will significantly benefit from this.

3. No exploitation of workers -

In a socialist society, the general populace owns the resources, which are managed by a central government. Therefore, firms do not aim to maximise profits. The general populace will all receive a just reward for the effort they have completed.

4. Improved Labour Productivity -

Socialism was centred on getting the work from the workers by paying them fairly, as well as by giving them good tools, access to healthcare, and other advantages. This will boost employee motivation, which boosts productivity.

5. A Free Market That Is Well-Regulated -

The socialist system incorporates a free market that is well-regulated by the government. Instead of just focused on maximising profits, it enables enterprises to operate in the general public's best interests. By doing this, many possible unfavourable scenarios where enterprises might negatively impact the general public in many ways will be avoided.

6. Lower Level of Poverty in the Society -

In contrast to capitalism, the socialist system redistributes the entire social budget. The welfare system is fully integrated within the communist framework. Everyone will receive enough money to cover their fundamental requirements. The certainty that everyone will have access to necessities lowers the incidence of poverty in society.

Disadvantages of Socialism:

1. Less drive for business operations -

Individuals are not given the chance to own property under socialism. As a result, there won't be much drive behind business operations. Since there won't be much of a difference in their earnings, there will be very little incentive for everyone, from management to entry-level employees, to carry out corporate operations successfully.

2. There are more unions in businesses -

Socialism encourages the formation of unions in the workplace. The employees should feel some pressure and dedication to manage the company successfully. The operations of the firm could be disrupted by unions, resulting in a conflict between management and the employees. The entire country's economy may suffer as a result of this.

3. **A lack of creativity -**

Since socialist enterprises are not profit-driven, they do not encourage entrepreneurship. Thus, there is very little private investment in the country. Innovation won't attract much funding or interest.

4. **A decrease in the labour force -**

A strong welfare state is a characteristic of socialist societies. The drawback of this is that because of the welfare advantages they receive, people won't be inspired to give back to society. Due to people choosing to remain at home rather than seek a job, the labour force may be diminished as a result of this cause.

5. **Increased Public Spending -**

Socialism encourages the use of public funds to enhance social welfare. More government spending as a result will have an impact on the country's reserves. The government might not have enough reserves in the event of a calamity or pandemic to adequately handle such a trying time. Additionally, this will have an impact on how local and international commerce and spending are balanced.

6. **Additional Regulated Sectors -**

Regulations and government involvement are more prevalent in the industries. This will be a drawback because judgements on how to balance government laws with running a profitable firm may be contentious. Greater government involvement could backfire on the sector as a whole.

2.4 COMMUNISM

Communism emphasises that the general populace, not specific people, owns all money and assets. Communal business control and public property ownership (such as transportation, power, energy, mines, mills, and industrial facilities), including ownership of natural resources, are the core tenets of this ideology, which seeks to replace profit-based corporations and private property ownership.

Communism is an ideology that holds that the common people should control the means of production in a society through state or government administration. Its main concern is a society where everyone in the general public enjoys economic equality. There will be divisions between the working class and wealthy societies under communism. This idea contends that public ownership of the production control, as opposed to private ownership, is the best way to accomplish this. Karl Marx's views serve as the foundation for the concept of communism. The socialism-related ideology is also present in communism.

Characteristics of Communism:

1. **No Private Properties** - In a communist society, private property does not exist. Through state or government authority, the general public

owns all the properties. Depending on what they require, each person receives a portion.

2. **Effective state and federal institutions** - Since these organisations should be in charge of all facets of economic output, communism might be seen as having a powerful central government and state administration. Additionally, the public should receive an equal distribution of the output/services (food, transportation, energy, housing, medical care, and education) to meet their basic needs.

3. **Society Has No Classes** - There are no distinctions between the rich and the poor in communism. In contrast to capitalism, where there is an owner class and a labour class, communism does not have multiple classes.

4. **The Bloody Revolution** - In order to establish a communist state, the working class rises up against society's upper class in a bloody revolution.

5. **Resources Under Common Public Ownership** - According to the communist ideology, the community as a whole share in the advantages of all resources that are publicly owned and managed by the state.

6. **Opposed to Democracy** - Democracy is predicated on the notion that for there to be a market based on commerce, private enterprises must enter it. Contrarily, communist ideology rejects privatisation.

Types of Communism:

1. Marxism-Leninism -

The concept of Marxism-Leninism centres on how class society developed and the causes of the conflicts between these classes. The conflict between various economic classes is what defines society the most. Marxism-Leninism holds that capitalism creates inequality and class segregation in society, and that it will inevitably give way to socialism and finally communism.

2. Anarcho-communism -

Anarcho-communism is a speculative philosophical viewpoint that emphasises the complete abolition of the State, its institutions, and the laws. This philosophy is predicated on the idea that the general populace may live absolutely free of the constraints imposed by the State.

3. Austro-Marxism -

This ideology is a subset of communism that emphasises group production. This worldview is opposed to undesirable power and hierarchy rather than just the state or government. Between moderate democracy and Marxism-Leninism, this ideology occupies a midway position.

4. Marxism(Scientific Communism) -

Marxism, commonly referred to as Scientific Communism, emphasises the conflicts that exist between the working class and capitalists. This is an ideology or philosophy that Karl Marx and Friedrich Engels created. Marxism is a way of looking at the world and an analytical ideology. It examines how capitalism affects employment, production, and economic growth as well as how the exploitation of workers by capitalists can lead to conflict between these classes.

5. Council Communism -

Workers will ultimately battle against capitalism to overthrow it and construct an administrative communist society, which will be the workers' councils, according to the council communism model, which is founded on working-class struggle. Directly democratic councils are established by the workers as the fundamental components of the revolution in both workplaces and communities. In accordance with this theory, the worker's council is an association of the working class that governs itself as opposed to being governed by a single body.

6. Eurocommunism -

This theory, which gained traction in the early 19th century, placed more emphasis on persuading people to embrace socialism than on committing damaging or coercive revolutionary deeds. This concept gives the example of running a communist society on a different piece of land. The high level of living in this society will persuade others to join.

Examples of Communism:

Several nations previously practised communism. But at the moment, North Korea, China, Vietnam, Cuba, Laos, and these are the nations that adhere to the communist worldview. However, these nations do not adhere to the communist theory in its entirety; however, some aspects of it are still practised.

Advantages of Communism:

1. Monopolies in Business Are Prohibited -

In countries with a communist organisational system, the government runs everything. The government chooses which enterprises should be launched and how much money should be invested. This will outlaw unfavourable market circumstances like monopolies. There won't be a single or small number of enterprises who control the market and raise prices as they choose, harming the general populace.

2. The country's economy is Centrally Coordinated -

Through a central government administration, the whole economy is planned in communist countries. This means that the development of infrastructure, such as roads, services, and transportation, can be carefully

planned by this administration to meet a long-term objective. The government can consider all the factors and develop a long-term sustainable strategy for the whole economy of the country because everything is planned centrally.

3. Less Disparities and Levels in Society -

The common public controls the means of production in a communist framework through state or government administration. As a result, there is no or less private ownership of the firms, and all members of the general public are less different from one another. No such social employment categories as "white collar" or "blue collar" exist.

4. All Participants Begin at the Same Levels -

Some people will start out rich and some people will start out poor in a democratic or capitalist society. This makes those people's lives easier or harder because it's a gift from their family. The disparities between the lower wealthy groups' income, money, and property would make life for them very difficult. However, communism is built on the idea that everyone should have the same opportunity to live a happy life for themselves and that there should be no such thing as differences.

5. Good Public Welfare -

The governments of communist countries take a variety of measures to enhance public welfare. For transportation, healthcare, and education, they provide free or inexpensive services. Even the most impoverished individuals canhave a life with quality well-being due to these.

Disadvantages of Communism:

1. People have less financial freedom -

Communist regimes do not permit private ownership of firms, in contrast to capitalist or democratic societies. While the general populace will all have roughly the same degree of wealth, there will be no financial freedom for them. A skilled person cannot establish a new firm or innovate in order to increase their income.

2. Ignore the Customer's Needs -

The real demands of the consumer might not be taken into consideration in a communist state. The notion of needing only the bare necessities for survival might exist, which might prevent the items from truly meeting the wants of the final customer.

3. Not Enough Innovation -

Communism does not support private enterprise. Therefore, there is little private investment in the country. Any invention or study in the world needs to start with a certain amount of money, and the end product needs to be profitable enough to cover the initial investment. But in communist countries, this kind of novel scientific work is uncommon.

4. Might Lead to Dictatorship -

In a communist society, the state or government controls all of the output. In a dictatorship, the state or government might not act in the interests of the general populace.

5. Government spending too much -

Communism encourages increased government spending on social welfare. The government won't be able to adequately manage this challenging moment if it increases spending without retaining reserves and if a calamity or pandemic strikes.

6. Lower Motivation for Business Operations - Lower Efficiency -

Businesses cannot be privately owned under communism. There won't be much drive for corporate operations. Since there won't be much of a difference in the rewards they receive, there won't be as much incentive for higher-level workers to conduct business operations successfully.

2.5 PROTECTED ECONOMIES

Government policies that limit international commerce in order to support home sectors are referred to as protectionism or protected economies. However, they can also be introduced due to safety or quality concerns. Protectionist policies are typically implemented to increase economic activity within a home economy. The act of adopting protective trade policies is known as protectionism. By enacting tariffs or other trade restrictions, a protectionist trade policy enables a nation's government to support domestic producers and so increase domestic production of products and services. Through tariffs, quotas, subsidies, standards, etc., economies can be safeguarded.

2.6 INTERNATIONAL GRANTS

The World Bank, the IMF, the WHO, and other international organisations offer a variety of international grants. Every foreign grant is unique in terms of the contract, scope, recipient countries, etc.

2.7 INTERNATIONAL MONETARY FUND (IMF)

The 190 nations that make up the International Monetary Fund (IMF) strive for sustainable growth and prosperity. In order to boost productivity, job creation, and economic well-being, it accomplishes this by supporting economic policies that encourage monetary cooperation and financial stability. The member nations of the IMF are in charge of it and are responsible to them. The IMF has three crucial responsibilities: advancing global monetary cooperation, promoting trade and economic growth, and discouraging unfavourable policies. IMF member nations collaborate with one another and with other international organisations to carry out these missions.

A structured international monetary system was to be developed at the United Nations Monetary and Financial Conference, which was convened in July 1944 in Bretton Woods, New Hampshire. This conference led to the creation of the International Monetary Fund (IMF). According to its charter, the IMF's main goals are to:

(1) encourage international monetary cooperation among nations,

(2) encourage exchange rate stability,

(3) Encourage the free movement of capital funds between nations;

(4) encourage free commerce; and

(5) offer interim cash to member countries trying to remedy international payment imbalances.

These goals make it obvious that the IMF wants to promote more business globalisation.

A Board of Governors from each of the 185 member nations oversees the IMF and is made up of financial officials (such as the president of the central bank). Additionally, it includes an executive board made up of 24 executive directors that represent the participating nations. This board, which has its headquarters in Washington, D.C., meets at least three times a week to go over current problems. The IMF's compensatory finance facility (CFF), which aims to lessen the effects of export uncertainty on national economies, is one of its main responsibilities. Despite being accessible to all IMF members, this tool is primarily used by developing nations. A nation experiencing financial difficulties as a result of decreased export revenues must prove that the decrease is temporary and beyond its control.

It must also be eager to cooperate with the IMF in order to find a solution. Each IMF member nation is given a quota based on a number of variables that represent that nation's economic situation. Members must pay this designated quota. Depending on its specific quota, each member has a different maximum amount that can be borrowed from the IMF. Special drawing rights (SDRs), which are used as a unit of account and distributed to members of the IMF to bolster their foreign exchange reserves, are used to measure the financing provided by the IMF. The value of the SDR varies in line with that of the major currencies.

The IMF actively participated in efforts to lessen the negative consequences of the Asian crisis. It gave money to several Asian nations in 1997 and 1998 in exchange for their commitments to take particular measures aimed at boosting the economies of those nations.

Funding Dilemma of the IMF :

Usually, in order to obtain IMF funding, a country must adhere to the IMF's set of economic reforms. The IMF makes an effort to guarantee that the nation makes proper use of the money in this way. However, some nations seek money without implementing the IMF's suggested economic reforms. As an illustration, the IMF might demand that a government cut its budget deficit before providing assistance. Some governments have not carried out the IMF-required reforms.

IMF Funding during the Credit Crisis:

The IMF spent $100 billion in 2008 to support developing nations that were severely impacted by the economic crisis with short-term loans for temporary liquidity. These resources made up half of the IMF's overall assets. For Hungary and Ukraine, the IMF coordinated credit packages of $25 billion and $16 billion, respectively. In addition, it gave money to various other nations in Eastern Europe, as well as to South Korea, Mexico, and Brazil. Eastern European governments had taken out loans from European banks, and had they defaulted on those debts, greater issues might have arisen for the lending banks.

2.8 SUMMARY

- International Economics: International economics refers to a study of international forces that influence the domestic conditions of an economy and shape the economic relationship between countries.
- Globalisation: The term globalisation refers to the integration of the economy of the nation with the world economy.
- Socialism: Socialismrefers to the concept of giving ownership to the government as a whole, regarding all activities of that particular country.
- Communism: Communism is an ideology that believes the means of production in a society should belong to the common public via state/government administration.

2.9 QUESTIONS

1) Explain International Economics.
2) What is Globalisation? Explain its Features.
3) What is Globalisation? Explain its Advantages and Disadvantages.
4) Short Note on Types of Globalisation.
5) What is Socialism? Explain its Features and Examples.
6) What is Communalism? Explain various types of Communalism.
7) Write a short note on IMF.

8) Fill in the Blanks:

a) _____ refers to a study of international forces that influence the domestic conditions of an economy and shape the economic relationship between countries.

b) The term _____ refers to the integration of the economy of the nation with the world economy.

c) _____ refers to the concept of giving ownership to the government as a whole, regarding all activities of that particular country.

d) _____ is an ideology that believes the means of production in a society should belong to the common public via state/government administration.

2.10 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol.S.Eun and Bruce.G.Resnick
- PrakashGApte,InternationalFinance:ABusinessPerspective
- Moosa, International Finance:AnAnalyticApproach
- JeffMadura,InternationalFinancialManagement
- Siddaiah, International FinancialManagement:AnAnalyticFramework
- www.economicsdiscussion.net
- www.vedantu.com
- www.schoolofpoliticalscience.com
- www.corporatefinanceinstitute.com
- www.learnbusinessconcepts.com

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3

INTERNATIONAL MONETARY SYSTEM INPUTS

Unit Structure :

3.0 OBJECTIVES

- To understand the International Monetary System.
- To understand the Classical Gold Standard.
- To know about the Bretton Wood System.
- To understand the mechanism of SDRs.
- To understand the distinguish between Fixed and Floating Rate System.
- To know about European Monetary System.

3.1 INTRODUCTION

The broad financial environment in which multinational firms and foreign investors operate is defined by the international monetary system. Since the fixed exchange rate system was abandoned in 1973, the exchange rates between important currencies, including the US dollar, British pound, Swiss franc, and Japanese yen, have fluctuated. As a result, businesses

today operate in a market where fluctuations in exchange rates may negatively impact their ability to compete. Due to this circumstance, many businesses must carefully assess and manage their exposure to exchange risk.

Similar issues with fluctuating exchange rates affecting portfolio performance are faced by foreign investors. However, as we shall cover shortly, a lot of European nations have chosen a single currency known as the euro, making intra-European commerce and investment significantly less vulnerable to exchange risk. Due to the complexity of the international monetary arrangements, managers must have a thorough understanding of the structure and operation of the system in order to make astute financial decisions.

The institutional setting for making international payments, accommodating capital transfers, and setting currency exchange rates is known as the international monetary system. Regarding exchange rates, foreign payments, and the movement of capital, a complex web of agreements, laws, organizations, methods, and policies exists. The fundamental business and political conditions that underlie the global economy have changed over time, and they will continue to do so in the future. As a result, the international monetary system has developed and will continue to do so.

We shall examine the past of the global monetary system and consider its possibilities for the future in this chapter. Additionally, we will contrast fixed versus flexible exchange rate systems in order to better understand alternate exchange rate systems. Understanding the dynamic nature of global monetary ecosystems is crucial for savvy financial management.

The development of the global monetary system can be divided into numerous main phases. The following is a summary of these phases:

1. Bimetallism: Before 1875.

2. Classical gold standard: 1875–1914.

3. Interwar period: 1915–1944.

4. Bretton Woods System: 1945–1972

5. The Flexible Exchange Rate Regime: 1973–Present

3.2 BARTER SYSTEM

Before the invention of the monetary system, the barter system, a form of commerce, predominated in the world for centuries. In this arrangement, exchanges of commodities and services take place. This indicates that the parties directly exchange their goods on the basis of comparable assessments of price and goods without the need of any financial intermediaries.

Examples of Barter System:

1. Mangoes are exchanged for Oranges.
2. Tea is exchanged for Salt.
3. Shoes are exchanged for clothes.

Features of Barter System:

- **Mutual Benefit :** In the past, before money was created, when civilization was less advanced. The barter system served as a traditional means of obtaining what people need by providing them with another good or service that meets their needs. The barter system helps all parties involved in this way.
- **Reciprocal :** In a barter system, the exchange is reciprocal, meaning it is negotiated so that the participant receives the good they need in lieu of the good they are giving up in exchange.
- **Lack of Money :** In this kind of trading, there is no money exchanged. When there was no cash in the economy and no other form of payment was available, the barter system was used.
- **Informal Presence :** At the moment, the barter system only functions as an unofficial transaction method.
- **Bilateral or Multilateral Trade :** Trade may occur between two parties or among several parties who are each competent to provide the other with a good or service.

Limitations of Barter System:

Though barter exchange is simple and immediate, it has certain limitations also, which are discussed hereunder:

1. **Mutual Coincidence of Wants :** This is among the most frequent issues people in barter exchange encounter. Mutual coincidence, sometimes known as double coincidence, refers to the idea that if one party wants to trade a certain good with another, the latter party need not also be open to trading the good that the first party is seeking. Therefore, two people's desires must be compatible. For instance: Let's say Mr. Y wants a pair of shoes and is willing to pay for them with 5 kg of wheat. In that situation, he needs to find someone who needs 5 kg of wheat and is willing to exchange it for a pair of shoes.
2. **Lack of a Common Measure of Value :** Another significant problem in barter trading is the absence of a Common Measure of Value. People therefore find it challenging to assess the genuine and accurate value of the commodity in the absence of any universal unit of measurement. The commodity is therefore only measured in terms of the commodity.As an illustration, a fruit vendor and a carpenter would like to trade fruits against the chair. They must therefore decide what

the ratio of the two items that are to be exchanged should be, i.e. how many dozens of fruits must be swapped for one chair. In essence, they are individual transactions, and as there is no standard unit of measurement, the exchange can only be done arbitrarily.

3. **Divisibility of Goods :** Certain goods cannot be divided into minor components without losing some of their actual value. The major time this issue occurs is when livestock is the traded good. Different commodities have different values. For instance, a person who wants to trade his horse for 5 kg of rice. Assume that 100 kg of rice is equivalent to 1 horse. He would be unable to separate the horse into parts to obtain the rice in this situation. Additionally, he will lose if he uses the horse against 5 kilograms of rice. As a result, it makes the barter system awkward.

4. **Difficult in Storing Value :** Value is only capable of being kept in the form of commodities, such as food grains, livestock, fruits, and vegetables, which is impossible owing to perishability, quality deterioration, lack of storage space, and costs associated with items. For instance: Let's say someone helps out another individual in exchange for 1 quintal of wheat and 4 goats. All of the wheat he had been given was eaten by the goats. And eventually, a sickness caused the goats to pass away. Storage in the form of goods is therefore completely impossible.

5. **Lack of Specialization :** In the past, when the barter system was used often throughout the nation, people tended to be self-sufficient, or we could say they were a jack of all trades. Consequently, there wasn't any specialisation. Consider this scenario: Suppose a person produces everything he requires, such as wheat, rice, pulses, cotton, etc., solely for his own consumption. As a result, there is little interaction between people, which inhibits economic progress.

6. **Difficulty in Transportation :** Transportation is difficult or impossible when products and services are exchanged for one another. For instance: Imagine that a farmer and a carpenter who are located kilometres apart wish to trade furniture for food grains. If so, both of them will need to carry their goods from one location to another.

3.3 BIMETALLISMAND : BEFORE 1875

Prior to the 1870s, many nations practised bimetallism, or a double standard in which free coinage for both gold and silver was maintained. Bimetallism, for instance, persisted in Great Britain until 1816 (after the end of the Napoleonic Wars), when Parliament passed a legislation that kept free coinage of gold alone and did away with free coinage of silver. Bimetallism was made lawful in the United States by the Coinage Act of 1792, and it persisted there until 1873, when Congress removed the silver dollar from the list of coins that had to be struck. On the other hand, from the time of the French Revolution until 1878, France introduced and

continued its bimetallism. Other nations that met the silver level included China, India, Germany, and Holland.

In the sense that both gold and silver were accepted as forms of payment internationally and that the value of each currency was based on either its gold or silver content, the pre-1870 global monetary system can be described as "bimetallic." For instance, around 1870, the amount of gold in the two currencies determined the exchange rate between the British pound, which was fully on a gold standard, and the French franc, which was formally on a bimetallic standard.

On the other hand, the silver content of the respective currencies influenced the exchange rate between the franc and the German mark, which were both pegged to the silver standard. The pound's and the mark's exchange rate relative to the franc dictated their respective exchange rates. It is also important to keep in mind that during the years 1848–1879, prominent nations like the United States, Russia, and Austria–Hungary occasionally had irredeemable currencies due to numerous wars and political upheavals. The international monetary system was not entirely systematic until the 1870s, one may say.

Gresham's law, a well-knownphenomenon, was frequently observed in nations that used the bimetallic standard. Only the plentiful metal was used as money since the exchange rate between the two metals was set in stone, excluding additional scarce metal from circulation. Gresham's law states that "bad" (excessive) money drives out "good" (poverty-scarce) money. For instance, when gold from recently discovered mines in Australia and California flooded the market in the 1850s, the price fell and gold was overvalued under the official French ratio, which made a gold franc equal to a silver franc that was 1512 times as heavy. The franc effectively became into a gold coin as a result.

Future payment challenges: Since payments must be described in terms of products and services, it might be challenging to enter into contracts involving future payments in the absence of a reliable unit of measurement. However, there is a chance that there will be disagreements on the good's quality, its specific type, or its changing worth. For instance, two parties agreed that the latter would receive 10 kg of rice in exchange for the services done by the former after a year. In the future, rice's worth and quality could alter. Deferred payment is therefore completely impossible.

3.4 CLASSICAL GOLD STANDARD : 1875-1914

Gold has long been a favourite of mankind as a means of trading and a way of storing wealth; it was widely used by many different civilizations. "Gold comprises treasure, and he who possesses it has all he needs in this world," stated Christopher Columbus once. However, it wasn't until 1821 in Great Britain that the Bank of England's notes became completely redeemable for gold that the first full-fledged gold standard was formed.

As was indicated earlier, France officially embraced the gold standard in 1878 after operating on it informally since the 1850s.

In 1875, the newly established German empire, which would later receive a hefty war indemnity from France, switched to the gold standard and stopped issuing free silver coins. Russia and Japan embraced the gold standard in 1897, followed by the United States in 1879. The worldwide gold standard was a historical fact from 1875 and 1914, roughly speaking. When World War I started in 1914, the majority of the world's nations sold their gold. Thus, the traditional gold standard functioned as an international monetary system for almost 40 years. Because of Britain's strong economy and dominant position in global trade, London during this time became the epicentre of the global financial system.

When gold alone is guaranteed unrestricted coinage in the majority of significant nations, when gold and national currencies are convertible in both directions at a stable rate, and when all major countries are part of an international gold standard, then this standard is said to exist.The unfettered import and export of gold. Banknotes must be backed by a minimum declared ratio of gold reserves in order to ensure unlimited convertibility into gold. Additionally, as gold enters and exits the nation, the domestic money stock should change.

Between 1875 and 1914, the aforementioned requirements were largely accomplished. Under the gold standard, the amount of gold in any two currencies will dictate how much they are worth to each other. Let's say, for instance, that one ounce of gold costs 12 francs, and the pound is tied to gold at six pounds per ounce. Therefore, the pound should be worth two francs in relation to the franc. The exchange rate between the two currencies will stay steady to the extent that the pound and the franc are tied to gold at the current values. The exchange rates between the currencies of such important nations as Great Britain, France, Germany, and the United States did not fluctuate significantly at all during that time.For instance, the dollar-sterling exchange rate was restricted to the $4.84 to $4.90 range per pound. Under the traditional gold standard, extremely stable exchange rates created a setting that was favourable for international trade and investment.

Cross-border gold flows will automatically rectify exchange rate misalignment under the gold standard. International payment imbalances will be automatically adjusted under the gold standard. Imagine a scenario in which France imported more from Great Britain than the former imported from the latter. Under the gold standard, this kind of trade imbalance will not continue. A net movement of gold in the other direction will accompany the net export from Great Britain to France. The price of gold will decrease in France as a result of this international trade from France to Great Britain, while increasing in Great Britain.

(Recall that under the gold standard, the domestic money stock is expected to change depending on whether gold is entering or leaving the nation.) Exports from the United Kingdom will decline as a result of the shift in

the relative price level, while exports from France would increase. As a result, Great Britain's initial net export will gradually vanish. The price-specie-flow mechanism, which is credited to Scottish philosopher David Hume, is the name of this corrective mechanism.

The gold standard still retains enthusiastic proponents in academic, commercial, and political circles who see it as the best protection against price inflation despite having long since been abolished. Gold is naturally scarce, and no one has the power to arbitrarily increase its supply. As a result, if gold is the only base used to create domestic money, inflation cannot be brought on by an excessive money supply. Additionally, if gold were the only form of international payment, the flow of gold would automatically control the balance of payments between nations. No nation is allowed to have a consistent trade surplus or deficit. The gold standard, however, has some significant drawbacks.

First off, the availability of freshly produced gold is so constrained that a deficiency in monetary reserves might substantially impede the expansion of international trade and investment. There may be deflationary pressures on the global economy. Second, the government may stop using the gold standard if it deems it politically necessary to pursue goals at home that conflict with doing so. In other words, there is no mechanism inherent in the global gold standard to compel each big nation to play by the rules. Due to these factors, it is unlikely that the traditional gold standard will be reinstated in the near future.

3.5 BRETTONWOOD SYSTEM : 1945–1972

At Bretton Woods, New Hampshire, delegates from 44 countries met in July 1944 to plan the postwar global monetary system. The Bretton Woods system's basic document, the Articles of Agreement of the International Monetary Fund (IMF), was finally drafted and signed by representatives after protracted negotiations and deliberations. The majority of nations subsequently signed the accord, allowing the IMF to be established in 1945. The IMF was in charge of imposing a defined set of guidelines for the conduct of international monetary policies. The International Bank for Reconstruction and Development (IBRD), popularly known as the World Bank, was also established by delegates. Its main function was to finance certain development initiatives.

Representatives were concerned with how to overcome the lack of clear rules of the game that plagued the interwar years as well as how to stop the resurgence of economic nationalism with disastrous "beggar-thy-neighbor" policies when developing the Bretton Woods system. John Maynard Keynes and the British delegation advocated a global clearing union that would produce the "bancor," a global reserve asset.

Countries would accept payments in bancor without restriction to settle international transactions. Additionally, they would be permitted to purchase bancor utilizing the clearing union's overdraft options. The American delegates, led by Harry Dexter White, on the other side,

advocated a currency pool to which members would contribute and from which they may borrow to get through temporary balance-of-payments deficits. Both delegates wanted stable currency rates without reinstituting a global gold standard. The IMF's Articles of Agreement substantially adopted the American idea.

The only currency that was fully convertible to gold during the Bretton Woods system was the US dollar; other currencies were not immediately convertible to gold. Both U.S. dollars and gold were retained by nations for use as a global medium of exchange. The Bretton Woods system might be characterized as a dollar-based gold exchange standard as a result of these accords. The majority of a nation's reserves are held in the form of money from another nation that truly adheres to the gold standard.

3.6 SPECIAL DRAWING RIGHTS (SDRs)

An artificial international reserve known as the SDR was established by the IMF in 1970 to somewhat relieve the strain on the dollar as the primary reserve currency. The SDR, a basket currency made up of significant individual currencies, was allocated to IMF members so they could conduct business with one another or with the IMF. Countries might utilise the SDR in place of gold and foreign money to make international payments. The SDR was initially intended to represent the weighted average of 16 currencies from those nations with export shares greater than 1%. Each currency's proportion holding in the SDR was roughly corresponding to its share of global exports.

The SDR was significantly simplified in 1981, though, when it was reduced to only five main currencies: the US dollar, German mark, Japanese yen, British pound, and French franc. The relative weight of each currency is revised on a regular basis to reflect the volume of reserves held by IMF members in various currencies as well as the relative importance of each nation in the global commerce in goods and services. **Currently, the SDR is composed of four major currencies—the U.S. dollar (41.9 percent weight), euro (37.4 percent), British pound (11.3 percent), and Japanese yen (9.4 percent).**

In addition to serving as a reserve asset, the SDR also serves as a unit of account in cross-border transactions. The SDR's value tends to be more stable than the value of any one of the currencies it consists of since it is a "portfolio" of currencies. Under conditions of fluctuating exchange rates, the SDR's portfolio character makes it a desirable denomination currency for international commercial and financial engagements.

SMITHSONIAN AGREEMENT:

The Group of Ten, a group of 10 major nations, convened in December 1971 at the Smithsonian Institution in Washington, D.C., in an effort to maintain the Bretton Woods system. They came to an agreement known as the Smithsonian Agreement, which saw the price of gold hiked to $38 per ounce, each of the other participating nations' currencies revalued by up to

10% against the dollar, and the range of movement that was permitted for exchange rates was increased from 1% to 2.25 % in either direction.

Before it was attacked once more, the Smithsonian Agreement had only been in place for a little over a year. It is obvious that the dollar's depreciation was insufficient to bring about stability. The dollar faced intense selling pressure in February 1973, which once more prompted central banks all around the world to purchase the currency. Gold's ounce price was increased from $38 to $42 per ounce. By allowing European and Japanese currencies to float in March 1973, the Bretton Woods system had completely collapsed. Since then, the exchange rates between important currencies including the dollar, mark (later replaced by the euro), pound, and yen have fluctuated.

3.7 FIXED EXCHANGE RATE SYSTEM

A fixed exchange rate system, commonly referred to as a pegged exchange rate, is one in which the government and central bank make an effort to maintain the currency's set value in relation to the value of other currencies. The flexibility of the currency rate (if any) is allowed under this system, subject to IMF (International Monetary Fund) agreement, but only to a limited level.

The Reserve Bank of India, India's highest bank, announces the official price of its currency in reserve currency when the exchange rate is set. Following rate determination, the RBI commits to buying and selling foreign currency while delaying individual purchases and transactions. The exchange rate is modified by the central bank (if necessary).

A fixed rate, often known as a pegged rate, is the official exchange rate set and maintained by the government (central bank). A predetermined price will be compared to a significant world currency (usually the U.S. dollar, but also other major currencies such as the euro, the yen, or a basket of currencies). The central bank purchases and sells its own currency on the foreign exchange market in exchange for the currency to which it is tied in order to maintain the local exchange rate.

The central bank will need to make sure that it can supply the market with dollars if, for instance, it is judged that the value of one unit of local currency is equal to $3 in the United States. The central bank must retain a significant number of foreign reserves in order to keep the rate steady.

This is a set aside sum of foreign currency that the central bank has on hand and can employ to inject (or absorb) extra money into the market. This guarantees a suitable money supply, suitable market fluctuations (inflation/deflation), and eventually a suitable exchange rate. The official exchange rate may also be modified by the central bank if needed.

3.8 THE FLEXIBLE/FLOATING EXCHANGE RATE REGIME : 1973–PRESENT

A floating exchange rate, as contrast to a fixed rate, is decided by the private market using supply and demand. Given that any disparities in supply and demand will be immediately adjusted in the market, a floating rate is frequently referred to as "self-correcting."

Flexible or floating exchange rates refer to monetary systems where the exchange rate is determined by supply and demand. The market demand and supply for a country's currency are determined by its economic situation.

In this system, the value of each currency in relation to other currencies is established by the market, therefore the larger the demand for a given currency, the higher the exchange rate; conversely, the lower the demand, the lower the value of the currency in relation to other currencies. As a result, neither the government nor the central bank have any influence over the exchange rate.

Consider the following streamlined model: if a currency is in low demand, its value will drop, increasing the cost of imports while increasing demand for local products and services. More jobs will be created as a result, which will cause the market to automatically correct itself. A floating exchange rate is one that fluctuates frequently. When it is important to maintain stability and prevent inflation in a floating regime, the central bank may also step in to help; however, this happens less frequently.

Without a known or predicted trend, a floating exchange rate is mostly decided by the market. In particular, unless it is obvious that the exchange rate's stability is not the consequence of official efforts, exchange rates that meet the statistical criteria for a stable or crawl-like arrangement will be labelled as such. Intervention in the foreign exchange market, whether direct or indirect, can slow the rate of change and stop unwarranted volatility in the exchange rate, but policies that aim for a set exchange rate level are incompatible with floating. Brazil, Korea, Turkey, and India are a few examples.

COMPARISON BETWEEN FIXED EXCHANGE RATE AND FLEXIBLE EXCHANGE RATE:

BASIS FOR COMPARISON	FIXED EXCHANGE RATE	FLEXIBLE EXCHANGE RATE
Meaning	Fixed exchange rate refers to a rate which the government sets and maintains at the same level.	Flexible exchange rate is a rate that variate according to the market forces.

Determined by	Government or central bank	Demand and Supply forces
Changes in currency price	Devaluation and Revaluation	Depreciation and Appreciation
Speculation	Takes place when there is rumour about change in government policy.	Very common
Self-adjusting mechanism	Operates through variation in supply of money, domestic interest rate and price.	Operates to remove external instability by change in forex rate.

3.9 EUROPEAN MONETARY SYSTEM:

The Smithsonian Agreement, which was signed in December 1971, changed the plus or minus 1 percent to plus or minus 2.25 percent range for exchange rate changes. However, members of the European Economic Community (EEC) chose a more constrained range for their currencies—61.125 percent. The snake was the name given to the European version of the (quasi-) fixed exchange rate system that emerged as the Bretton Woods system began to falter. The EEC currencies moved closely together within a larger band that was open to other currencies like the dollar, hence the name "snake."The EEC governments chose the snake because they believed that encouraging intra-EEC trade and furthering economic integration required stable exchange rates among EEC members. The European Monetary System (EMS) took the place of the snake arrangement in 1979. The EMS was initially introduced in March 1979 after being first proposed by German Chancellor Helmut Schmidt. Among its main goals are:

1. To build in Europe a "zone of monetary stability."
2. To coordinate exchange rate policies with respect to the currencies outside the EMS.
3. To prepare for the eventual creation of the European Monetary Union.

On a political level, the EMS represented a Franco-German effort to hasten the process of economic and political unity in Europe. With the exception of the UK and Greece, all EEC members joined the EMS. The European Currency Unit and the Exchange Rate Mechanism are the EMS's two primary tools.

The European Currency Unit (ECU) is a "basket" currency created by weighing the currencies of the European Union's member nations (EU). The weights are determined by the relative GNP and intra-EU trade shares

of each currency. The ECU functions as the EMS's accounting unit and is crucial to how the exchange rate system operates.

The method by which EMS member nations collectively manage their exchange rates is known as the Exchange Rate Mechanism (ERM). The "parity grid" system, which establishes par values between ERM currencies, is the foundation of the ERM. By initially establishing the par values of EMS currencies in terms of the ECU, the par values in the parity grid are computed.

A currency could only depart from the parities with other currencies by a maximum of 2.25 percent when the EMS was first introduced in 1979, with the exception of the Italian Lira, which could stray by a maximum of 6 percent. However, the range was expanded to a maximum of plus or minus 15% in September 1993. The central banks of both nations must interfere in the foreign exchange markets to keep the market exchange rate within the band when a currency is at either its lower or upper bound. The member nations contribute gold and foreign reserves to a credit fund, to which the central banks can borrow, allowing them to interfere in the exchange markets.

The EMS underwent a number of realignments as a result of the members' waning commitment to coordinating their economic policies. For instance, the value of the Italian lira was reduced by 6% in July 1985 and then by 3.7 % in January 1990. Italy and the U.K. left the ERM in September 1992 as a result of the large capital inflows into Germany being caused by high German interest rates. After the unification of Germany in October 1990, the German government faced large budget deficits that were not covered by monetary policy.

The U.K. and Italy were unwilling to raise their interest rates (which was required to preserve their exchange rates) because of concern for rising unemployment, and Germany refused to cut its interest rates out of concern for inflation. But in an endeavor to join the European Monetary Union, Italy returned to the ERM in December 1996. But the United Kingdom is still not a member of the EMU.

Members of the European Union convened in Maastricht (Netherlands) in December 1991 and signed the Maastricht Treaty despite the ongoing turmoil in the EMS. The agreement stated that by January 1, 1999, the EMS would permanently fix exchange rates between the member currencies. After that, a unified European currency would be introduced to replace separate national currencies. The issuance of common currency and the formulation of monetary policy in the euro zone would be the sole purview of the European Central Bank, which would have its headquarters in Frankfurt, Germany.

Then, the national central banks of many nations would operate very similarly to the regional member banks of the American Federal Reserve System. The member nations of the European Monetary System decided to closely coordinate their fiscal, monetary, and exchange rate policies in order to create economic convergence and prepare the way for the

European Monetary Union (EMU). Particularly, each member nation should work to:

i) maintain total public indebtedness below 60% of GDP,

ii) maintain government budget deficits to GDP ratios around 3%,

iii) attain high levels of price stability, and

iv) keep its currency within the ERM's permitted exchange rate bands. In nations like the Czech Republic, Hungary, and Poland that may eventually join the EMU, "convergence" is currently the in-thing.

3.10 SUMMARY

- International Monetary System: The international monetary system is the institutional framework that regulates international payments, capital transfers, and the setting of exchange values between different currencies. Regarding exchange rates, foreign payments, and the movement of capital, a complex web of agreements, laws, organisations, methods, and policies exists.

- The development of the global monetary system took place in five stages:

a. Bimetallism
b. the traditional gold standard;
c. the interwar years,
d. The Bretton Woods system;
e. exchange rate regime with flexibility.

- The traditional gold standard was in use from 1875 to 1914. Under the gold standard, the amount of gold in two currencies influences their relative exchange rates. The price-specie-flow mechanism automatically corrects balance-of-payments imbalance. Dedicated proponents of the gold standard still hold the view that it offers a strong defence against price inflation. However, because there is a finite supply of monetary gold, the global economy can experience deflationary pressure under the gold standard.

- In 1944, representatives from 44 countries gathered in Bretton Woods, New Hampshire, and adopted a new international monetary system to prevent the recurrence of economic nationalism without defined "rules of the game" as was seen during the interwar period. Each nation established a par value in reference to the U.S. dollar, which was completely convertible to gold, under the Bretton Woods arrangement. Countries used gold and foreign exchange, particularly the US dollar, as international payment methods. The Bretton Woods system was created to conserve gold and preserve stable currency rates. The final breakdown of the Bretton Woods system in 1973 was mostly caused by internal inflation in the United States and the ongoing balance of payments deficit.

- Flexible or floating exchange rate: A monetary system in which the exchange rate is determined by supply and demand is referred to as flexible or floating exchange rate.

- Fixed Exchange Rate: A fixed exchange rate system, sometimes referred to as a pegged exchange rate, is one in which the government and central bank make an effort to maintain the value of the national currency fixed in relation to the value of foreign currencies.

- To create a "zone of monetary stability" in Europe, the EEC nations established the European Monetary System (EMS) in 1979. The European Currency Unit (ECU) and the Exchange Rate Mechanism are the EMS's two primary tools (ERM). The EMS's accounting unit is the ECU, a basket currency made up of the currencies of its members. The process by which EMS members jointly manage their exchange rates is known as the ERM. The member nations are expected to maintain the parity grid on which the ERM is based.

3.11 QUESTIONS

(i) Discuss the advantages and disadvantages of the gold standard.

(ii) What were the main objectives of the Bretton Woods system?

(iii) Comment on the proposition that the Bretton Woods system was programmed to an eventual demise.

(iv) Explain how special drawing rights (SDRs) are constructed. Also, discuss the circumstances under which the SDRs were created.

(v) Explain the arrangements and workings of the European Monetary System (EMS).

(vi) There are arguments for and against the alternative exchange rate regimes.

a. List the advantages of the flexible exchange rate regime.

b. Criticize the flexible exchange rate regime from the viewpoint of the proponents of the fixed exchange rate regime.

(vii) Distinguish between Fixed and Floating Exchange Rate System.

(viii) Blanks:

- A monetary system, wherein the exchange rate is set according to the demand and supply forces, is known as _____ exchange rate.

- An exchange rate regime, also known as the pegged exchange rate, wherein the government and central bank attempts to keep the value of the currency is fixed against the value of other currencies, is called _____ exchange rate.

3.12 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- Jeff Madura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Frame work
- www.businessjargons.com
- www.investopedia.com
- www.keydifferences.com

4

FOREIGN EXCHANGE MARKETS

Unit Structure :

4.0 OBJECTIVES

- To understand about Foreign Exchange Markets works.
- To understand Exchange rate quotations.
- To know about Direct and Indirect rates.
- To understand cash, tom, spot and forward.
- To understand Arbitrage, Speculationand Trading
- To understand the Interest Rate Parity and Purchasing Power Parity.
- To understand how calculation of Swap points works.

4.1 INTRODUCTION

The market where exchange rates are decided upon is the foreign exchange, or forex (FX) market. A price, particularly the cost of one currency relative to another, is called an exchange rate. It is the system that links different world currencies together in the global economy. There are two popular ways to say it. One represents the exchange rate as the cost of foreign currency in terms of domestic currency, or the quantity of domestic currency required to buy one unit of a foreign currency, also known as the price quotation system or direct quotation.

The alternative, also referred to as the volume quotation system or indirect quotation, expresses the exchange rate as the cost of local currency in terms of foreign currency, or as the quantity of foreign money needed to buy one unit of local currency. Keep in mind that an indirect quotation simply reverses the meaning of a similar direct citation.

4.2 EXCHANGE RATE QUOTATIONS

There are two different ways to quote exchange rates: directly and indirectly. When one unit of foreign money is stated in terms of domestic currency, this is known as a direct quotation. Similar to an explicit quote, an indirect quotation occurs when one unit of local currency is expressed in terms of another.

4.3 DIRECT AND INDIRECT RATES

The price at which one currency will be exchanged for another currency is known as the exchange rate in the world of finance. Both direct and indirect quotes of the exchange rate are acceptable. When the cost of one unit of foreign currency is stated in terms of the local currency, the quote is considered to be direct.

When the price of one unit of domestic currency is given in terms of foreign currency, the quote is indirect. Since the US dollar (USD) is the most widely used currency, it is typically against which exchange rates are presented. Now, a lower exchange rate in a direct quote suggests that the value of the national currency is increasing. In contrast, a lower exchange rate in an indirect quote suggests that the value of the home currency is declining since less foreign currency is equivalent to the domestic currency.

4.4 CROSS CURRENCY RATES AND ITS CALCULATION

A cross rate is an exchange rate used when two currencies are being exchanged that are both being valued against a different currency. The U.S. dollar is the currency that is typically used to determine the values of the pair being exchanged in foreign exchange markets. The value of the US dollar is always 1, since it is the base currency. A cross-currency pair trade actually involves two transactions. The trader starts by exchanging

one currency for its value in dollars. After that, the US dollars are converted into another currency.

The U.S. dollar is utilised to determine the value of each of the two currencies being traded in the aforementioned transaction. As an illustration, if you were figuring out the cross rate of the British pound and the euro, you would first find out that on June 6, 2022, the British pound was worth 1.25 to one U.S. dollar and the euro was worth 1.07 to one U.S. dollar.

By definition, a cross rate is any exchange between any two currencies that aren't those of the nation where the quote was published. In actuality, a cross rate is any currency exchange in which neither of the currencies is the U.S. dollar. The euro and the Japanese yen are among the most popular cross-currency combinations.

The phrase "cross rate" is used by foreign exchange (forex) traders to describe price quotes between any two currencies in which neither is the U.S. dollar. Major currency pairs see the majority of FX transactions. In other words, the American dollar is one of the currencies being exchanged. For instance, if you see the currency pair USD/CAD quoted at 1.28 on a financial news website, it indicates the current exchange rate between the two currencies. A currency pair or transaction that excludes the currency of the party initiating the transaction is also referred to as a cross rate.

4.5 VEHICLE CURRENCY

In the past, a single currency that was used for international trade in goods and assets dominated the global economy. The American dollar has served this purpose recently. The U.S. dollar serves as a "vehicle currency" in that agents in non-dollar economies frequently use it as a medium of exchange rather than conducting direct bilateral trade between their own currencies.

When there are exchange fees associated with transactions, a vehicle currency is preferred. The model of a vehicle currency's dynamic general equilibrium is created. We examine the type of efficiency improvements brought about by a vehicle currency and demonstrate how they rely on the total number of currencies in use, the size of the economy of the vehicle currency, and the monetary policy employed by the government of the vehicle currency. In a system of numerous independent currencies, we discover that a vehicle currency may result in considerable welfare advantages. However, these benefits are asymmetrically biased in favour of citizens of the nation using the vehicle money. Natural boundaries are imposed on a country's monetary policy by the existence of a vehicle currency.

4.6 SPREADS AND ITS CALCULATION

A forex spread is simply how a broker earns money without taking a commission on a transaction; it is the difference between the bid (sell) price and the ask (buy) price of a currency pair. It's crucial for new traders to comprehend how forex spreads operate, how to calculate them, and why they even exist. Simply subtracting the ask and bid values of a currency pair will give you the spread when calculating a forex spread. Here are some instances using well-known currency pairs:

- If you are trading the EUR/USD at 1.1051/1.1053, the spread is: 1.1053-1.1051=0.0002 or 2 pips.
- If you are trading the EUR/GBP or bid price 1.1036/1.1039 ask price. The spread is 1.1039 - 1.1036 = 3 pips.

Whether they be major, minor, or exotic currency pairs, this calculation is applicable to all of them.

Keep in mind that you will be charged the entire spread when you open a trade when trading forex, which is the reason why trades always open in the negative because the spread was charged immediately.

4.7 SETTLEMENTS-CASH, TOM, SPOT AND FORWARD

CASH :

When an option or futures contract is exercised or expires, the value of the stock or commodity that underlies it is paid in cash.

An underlying security or commodity that can be bought or sold upon exercise (defined by a price) or expiration serves as the basis for the valuation of options and futures contracts (determined by a date). Ownership of the stock or tangible good is rarely a problem for the parties under these transactions. Because of this, the majority of holders opt to settle in cash, satisfying the contract with the difference between the underlying asset's current spot value and the amount stipulated in the contract (could be a gain or a loss).

Consider a scenario where a contract expires and the market spot price of the underlying stock X is $100. This will serve as an example of a cash settlement for a put options contract. The contract's price is set at $75. According to the contract's provisions, the holder is required to make the purchase at a cost that is $25 more than the contract's stated price ($100 market - $75 contract = $25). The contract holder will suffer a $25 loss if they settle their claim in cash.

Let's imagine a contract expires with the underlying asset's spot market price for oranges at $100 to demonstrate a cash settlement utilising a put futures contract. The contract specifies a fee of $150. The holder is required to buy the oranges in accordance with the contract's conditions.

The contract holder accepts a cash settlement of $50 ($150 contract - $100 market) rather than a specific number of oranges.

With the declared aim and intention of gaining from a positive spread in the contract/market price upon execution or expiration of the contract, investors typically acquire derivatives contracts for options and commodities. The de facto fulfilment of a contract's requirements in this regard is represented by the cash settlement of such contracts (whether a gain or loss) rather than the receipt or delivery of securities or goods.

TOM :

In a short-term foreign exchange (forex) transaction called tomorrow next (tom next), a currency is simultaneously bought and sold over the course of two different business days: tomorrow (on one business day) and the day after that (two business days from today). The purpose of a tom next transaction is to let investors and traders keep their positions open without being compelled to accept physical delivery. Although this word is not frequently used there, tom next trades are equally significant in the markets for commodities derivatives.

In the currency markets, rolling over a position to postpone delivery is referred to as "tomorrow next." To avoid taking delivery and holding onto the currency at the same time, a trader might roll over their position to the following and subsequent (i.e., two days later) business days. A broker's STIR or currency desk can handle a tom next transaction.

Delivery occurs in the majority of currency exchanges two days (T+2) following the transaction date. The majority of currency traders do not intend to take delivery of the currency; thus, they need their positions to be "rolled over" everyday, which leads to the emergence of tom-next trades. This simultaneous transaction is an FX swap, and the recipient will either pay a fee or receive a premium depending on the currency they hold. Due to the interest rate difference, traders and investors that possess high-yielding currencies will be able to roll it over at a more advantageous rate (minimum). The cost of carry is the name given to this difference.

Dealers in the interbank market have an impact on the real tom-next trades. The trader will either "buy and sell" or "sell and buy" the currency they are rolling over, depending on the direction of their transaction. The forwards trading desk or the STIR (short-term interest rate) team typically handle a tom-next transaction.

Instance of Tom Next: On the day of expiration, a trader is long on the EUR/USD pair, which is priced at $1.53 (1 euro equals 1.53 US dollars). The trader issues a tom-next command to hold onto the pair indefinitely. Assume that the pair's swap interest rates fall between 0.010 and 0.015. The trader is presented with an interest rate of 0.010 at the conclusion of the trading day, following the purchase and sale of shares. The following day, the trader's position's new price is $1.52.

SPOT:

The price paid for immediate delivery of a currency is referred to as the spot, or current, exchange rate. Except in specific circumstances, such a banknote exchange, "instant delivery" often refers to the settlement of a foreign exchange contract within two working days. In order to buy and sell foreign currencies, corporations, non-financial government entities, and private individuals participate in the spot market, which is made up of financial institutions (such as commercial and investment banks, pension funds, hedge funds, money market funds, insurance companies, and financial government entities).

In 2013, the daily volume of spot contracts was $1.759 trillion (38% of total turnover), according to the BIS (2013) Triennial Survey. Only 19% of daily spot transactions involved non-financial customers; the majority of spot trading took place between financial organisations. This market is renowned for its frenetic pace and the enormous sums of money that are exchanged in reaction to minute changes in price quotations at breakneck speeds. The price of a currency on the spot market is determined by supply and demand for foreign exchange, just as in any other market.

FORWARD:

The rate set today for delivery of a currency at a future time is known as the forward exchange rate. Although the rate is negotiated and agreed upon at the time of contract formation, delivery and payment are postponed until maturity. For value periods of one month (30 days), two months (60 days), three months (90 days), six months (180 days), nine months (270 days), and twelve months, banks commonly provide forward rates (360 days). Actual contracts, however, can be negotiated for durations up to 5 or 10 years.

A forward rate is an interest rate that will be used in a future financial transaction. To establish the future interest rate that compares the total return of a longer-term investment with a strategy of rolling over a shorter-term investment, forward rates are computed from the spot rate and are adjusted for the cost of carry. The rate set for a future financial obligation, such as the interest rate on a loan payment, may also be referred to by this word. The investor might sign a contract allowing them to reinvest money six months from now at the current forward rate in order to reduce reinvestment risks. Immediately advance by six months.The investor could use the forward rate agreement to invest the money from the matured t-bill at the more advantageous forward rate if the market spot rate for a fresh six-month investment is lower. The investor could cancel the forward rate agreement and make a new six-month investment at the current market rate of interest if the spot rate is high enough.

Hedging, arbitrage, and speculation are the three primary types of activity that the forward exchange market is useful for. Hedging is the process of protecting oneself from the potential future swings in the spot exchange rate. By purchasing (selling) the requisite amount of foreign currency in the forward market, an importer (exporter) who must make (is to receive)

a payment in foreign currency at a specific future date can protect themselves against the exchange rate risk. He is therefore aware of the exact amount he will pay (get) in native currency because the conversion rate is currently fixed.

The practise of profiting from interest-rate and price differences in the forward and spot markets is known as arbitrage and speculation. For instance, a trader will purchase a currency in the forward market if he thinks it will increase in value in the future. He'll sell the currency on the open market to profit when the contract expires (if he got it right). As we demonstrate below, similar issues apply to arbitraging. In any event, there are other methods of carrying out these tasks without using forward contracts. Using the spot market is an additional option. Thus, the question of which market is the better alternative automatically arises.

4.8 ARBITRAGE, SPECULATION AND TRADING

Investors are constantly doing their best to profit from the market. After all, isn't that the core of trading? Investors, whether they are individuals or institutions, utilise a financial plan that is specifically designed for them and that is successful. The risks involved in arbitrage and speculation are significantly different from one another.

Traders utilise financial tactics like speculation and arbitrage to boost their earnings. However, there are significant differences in how each tactic is applied. A trader typically engages in speculation by taking on a foreign exchange position in the anticipation of a positive shift in currency rates. For instance, a trader might initiate a long position on a currency (purchase it now) with the hope of making money off of a potential increase (i.e., sell the currency at a higher price in the future). The trader may close the position with a profit if the value of the currency increases.

On the other hand, if the value of the currency drops, the trade can be abandoned at a loss. A speculator is said to be bullish if they believe that a currency will increase in value in the future. On the other side, if speculators anticipate that the currency will decline, they may open a short position (also known as selling short, or simply selling the currency now in hopes of getting it again at a cheaper rate in the future). The position will be lucrative if the currency falls. The trade might be closed at a loss if the currency increases. A speculator is said to be bearish if they believe that a currency will decline in value in the future. Therefore, speculation is a form of financial strategy that carries a high level of risk.

Contrarily, arbitrage is a risk-free trading approach that enables traders to profit on price differences that are present simultaneously in various marketplaces and across multiple currencies. Spatial arbitrage, which exploits price differences between geographically distinct marketplaces, is the most basic type of arbitrage in the FX market. The traders would benefit from buying euros in London and simultaneously selling them in New York if, for instance, the dollar-euro exchange rate quoted in New York was $1.101/e1 but $1.085/e1 in London. This would allow the

traders to make a risk-free profit of 1.6 cents on each euro bought and sold. Due to this activity, the euro will strengthen in London and weaken in New York, creating an arbitrage-free equilibrium where the two rates are equal.

To sum up, arbitrage is a pretty frequent strategy used by hedge funds and institutional investors, and it has a relatively low risk. This kind of approach entails holding a sizeable position in a security that is traded at a variety of prices in two different markets. In order to profit from the price differential, the investor will purchase it for a cheap price on one market and sell it for a slightly higher price on another. Due to the nature of this method, tiny, individual investors don't typically employ it.

On the other hand, speculation might be. This technique may not be dependent on market dynamics and does not require a substantial investment foundation. Any sort of security, including real estate, can be used, and it is predicated on assumptions. While arbitrage has a relatively low risk, speculation has a higher potential for profit or loss.

4.9 INTEREST RATE PARITY AND PURCHASING POWERPARITY

INTEREST RATE PARITY:

The purchasing-power parity criteria only addresses arbitrage in markets for commodities and services; it makes no mention of arbitrage in global financial markets. An important parallel condition that emphasises the significance of interest rates occurs for these markets. It relates to arbitrage in global financial markets and is known as the interest parity conditions. This condition essentially states that interest yields on comparable financial instruments should be the same worldwide when assessed in a common currency. If this were not the case, money would tend to move from one nation to another until there was no preference for investing domestically or internationally.

According to the interest rate parity (IRP) theory, the difference in interest rates between two nations is equal to the difference between the forward and spot exchange rates. The basic formula governing the correlation between interest rates and exchange rates is known as interest rate parity. Interest rate parity's fundamental tenet is that hedged returns from investments in various currencies should be the same regardless of the interest rates associated with those investments. Forex traders look for arbitrage possibilities using parity.

By linking interest rates, spot exchange rates, and foreign exchange rates, interest rate parity (IRP) plays a crucial role in the foreign exchange markets. IRP is the key formula that controls how interest rates and currency exchange rates interact. IRP's fundamental tenet is that hedged returns from investments in various currencies should be the same regardless of the interest rates associated with those investments. The idea of no-arbitrage in the foreign exchange markets is known as IRP (the

simultaneous purchase and sale of an asset to profit from a difference in the price). Investors cannot buy a currency at a lower cost than the current exchange rate and then buy another currency from a nation with a higher interest rate.

The formula for IRP is:

$F0=S0\times(1+ic/1+ib)$

where:

F0 = Forward Rate

S0 = Spot Rate

Ic = Interest rate in country c

Ib = Interest rate in country b

THE PURCHASING POWER PARITY PRINCIPLE :

The purchasing-power parity (PPP) condition, which applies to markets for both commodities and services, is concerned with the long-term link between exchange rates and price levels. PPP's philosophical roots can be traced back to David Ricardo, while it is commonly believed that Gustav Casellis wrote about it in the 1920s. The fundamental idea is that once the price of the commodity is measured in the same currency, arbitrage forces will cause the price of the good to equalise worldwide. As a result, the theory shows how the law of one price can be used. This law merely states that identical goods supplied in different markets will have the same price when expressed in terms in the existence of competitive global marketplaces and in the absence of transportation costs and other trade barriers.

Macroeconomic experts frequently use the purchasing power parity (PPP) statistic to compare the currencies of various nations using a "basket of goods" method. When a basket of items is priced the same in both nations while accounting for exchange rates, two currencies are said to be in equilibrium, or to be at par. Economists can compare economic production and living standards across nations thanks to purchasing power parity (PPP). In order to account for PPP, some nations modify their GDP estimates.

The relative version of PPP is calculated with the following formula:

$S=P2/P1$

where:

S= Exchange rate of currency 1 to currency 2

P1= Cost of good X in currency 1

P2= Cost of good X in currency 2

The World Bank publishes a report every few years that compares the productivity and growth of various nations in PPP and US dollars. Weights based on PPP measurements are used by the International Monetary Fund (IMF) and Organization for Economic Cooperation and Development (OECD) to forecast the future and suggest economic policies. Financial markets may experience an immediate short-term impact as a result of the suggested economic reforms.

PPP is also used by certain forex traders to identify either overvalued or undervalued currencies. The survey's PPP numbers can be used by investors who own foreign company stock or bonds to forecast how exchange rate movements would affect a nation's GDP and, in turn, their investment.

4.10 COVERED INTEREST RATE PARITY IN ARBITRAGE

A theoretical situation when the connection between interest rates and the spot and future values of two countries is in equilibrium is known as covered interest rate parity. Due to the covered interest rate parity condition, forward contracts cannot be used for the common practise of interest rate arbitrage between nations. According to the covered interest rate parity condition, there is an equilibrium between two countries' interest rates and their spot and forward currency values. No possibility of arbitrage via future contracts is assumed. When forward and anticipated spot rates are equal, covered and uncovered interest rate parity is also equal.

The Formula for Covered Interest Rate Parity is:

$(1 + id) = F/S * (1 + if)$

Id=The interest rate in the domestic currency or the base currency

If=The interest rate in the foreign currency or the quoted currencyS=The current spot exchange rate

F=The forward foreign exchange rate

A no-arbitrage requirement that might be applied in the foreign exchange markets to establish the future foreign exchange rate is covered interest rate parity. Additionally, it stipulates that investors may cover their exposure to unanticipated foreign exchange risk or exchange rate swings (with forward contracts). As a result, it is argued that the foreign exchange risk is mitigated. Parity in interest rates may exist for a while, but that does not guarantee that it will continue. Currency and interest rates fluctuate over time.

4.11 BORROWING AND INVESTMENT DECISIONS

Many factors, like interest rates, markets, etc., influence borrowing and investing decisions, but they also vary from company to company and investor to investor.

4.12 CALCULATION OF FORWARD RATES THROUGH USE OF FORWARD SCHEDULES

Already covered in Forward Exchange Rate in this Chapter itself. Kindly refer to that section of this Chapter.

4.13 ANNUALIZED FORWARD MARGIN

The difference between the spot pricing and the forward rate for a specific commodity or currency is reflected in the forward margin, also known as the forward spread. Depending on whether the forward rate is higher or lower than the spot rate, the difference between the two rates can either represent a premium or a discount. The difference between the forward rate and the spot rate, or, in the case of a discount rate, the spot rate and the forward rate, is known as the forward margin.

The expenditures involved in securing a price for a future date are represented by the forward margin, which can be high, small, negative, or positive. Depending on how far away the delivery date is, the forward margin will change; for example, a one-year future will be priced differently than a 30-day forward. The forward margin, also known as the forward points, is frequently expressed in basis points. The forward rate is the result of adding or subtracting the forward points from the spot rate.

4.14 CALCULATION OF SWAP POINTS

A simultaneous exchange of identical amounts of one currency for another with two separate value dates is known as a currency swap, or FX swap (normally spot to forward).

The term "swap points" refers to the difference in pips between the forward rate and the spot rate for a certain currency pair. The calculation of these points makes use of the economic idea of interest rate parity. According to this hypothesis, regardless of how much money is invested in different currencies' interest rates, the hedged returns should be equivalent.By taking into account the net cost or advantage associated with lending one currency and borrowing another against it throughout the time frame covered by the spot value date and the forward delivery date, forward traders can use this theory to calculate the forex swap points for any particular delivery date.

The value of 0.05 GBP would be accumulated to a trader's account if they open a 1 lot transaction on the EURUSD and hold a Sell transaction overnight. On the other side, the trader's account would be charged 3.79 GBP if they hold a Buy transaction overnight. The accruals and costs vary

according to the financial instrument the trader is interested in, and many traders use methods centred on keeping positions open overnight to get the largest accruals. Such techniques frequently leverage the USDTRY, USDMXN, and EURAUD markets.

The majority of indices also don't add any accruals or charges to the open positions of the traders. The calculation below can be used to accomplish this:

Swap point rate x Pip value

4.15 SUMMARY

- **Direct Quote :** When the price of one unit of foreign currency is stated in terms of the local currency, the quote is considered direct.
- **Indirect Quote :** When the price of one unit of domestic currency is stated in terms of foreign currency, the quote is considered indirect.
- **Cross Rate :** A cross rate is an exchange rate used to compare the value of two currencies against one another.
- **Cash Settlement :** Upon exercise or expiration of an option or futures contract, a cash settlement is a payment made in cash for the value of the stock or commodity that underlies the contract.
- **TOM :** Tomorrow next (tom next) is a short-term foreign exchange (forex) transaction in which a currency is simultaneously purchased and sold over two different working days, namely tomorrow (in one working day) and the day after that (two business days from today).
- **Spot :** The price paid for immediate delivery of a currency is known as the spot rate, sometimes known as the current exchange rate.
- **Forward :** The rate set today for delivery of a currency at a future time is known as the forward exchange rate. Although the rate is negotiated and agreed upon at the time of contract formation, delivery and payment are postponed until maturity.

4.16 QUESTIONS

1. Distinguish between Direct and Indirect Exchange Rate Quote.
2. What are Cross Currency Rates? Explain with example.
3. Short Notes on:
4. Cash
5. TOM
6. Spot
7. Forward
8. Speculation
9. Arbitrage
10. Explain the Interest Rate Parity.
11. Explain the Purchasing Power Parity.

4.17 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol.S.Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- Jeff Madura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.toppr.com
- www.investopedia.com
- www.thetradingbible.com
- www.investinganswers.com
- www.xtb.com

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5

EUROCURRENCY MARKETS

Unit Structure :

5.0 OBJECTIVES

- To study the Origin and Reasons for Growth of Euro Currency markets.
- To study Characteristics and Components of Euro Currency markets.
- To understand Euro Currency Deposits.
- To study Off Shore banking.
- To understand how tax havens works.

5.1 INTRODUCTION

The introduction of the euro in January 1999 is unquestionably a historic event, especially in light of the fact that no European currency has been in use since the fall of the Roman Empire. Gaius Diocletianus, the Roman emperor from A.D. 286 to 301, reorganized coinage and instituted a common currency for the entire realm. The introduction of the euro also signifies the first occasion when independent sovereign nations have consciously given up their monetary sovereignty to promote economic unification. Therefore, the euro is a historically unique experiment whose results will have broad ramifications. For instance, both the euro and the dollar will rule the world of international banking if the experiment is successful. Additionally, the political unionization of Europe may receive a strong boost from the success of the euro.

The market for Euro money is the foreign exchange market for currencies that are accepted as legal tender. The euro currency market is used by banks, multinational corporations, mutual funds, and hedge funds. They seek to stay away from the common regulatory requirements, tax laws, and interest rate ceilings seen in domestic banking. The term "Euro currency" is a generalisation of the Eurodollar and is not to be confused with the euro, the official currency of the EU. Not just in Europe, but also in many other financial hubs throughout the world, there is a demand for Euro money.

The Marshall Plan's massive outflow of dollars to rebuild Europe after World War II gave rise to the eurocurrency market. Because banks required a dollar-deposit market outside of the USA, the market first emerged in London. Even if they are stored outside of Europe, dollars held outside of the United States are referred to as Eurodollars. In markets like Singapore or the Cayman Islands, they are able to hold them. When other currencies trade outside of their native markets, like the British pound and the Japanese yen, they are included in the eurocurrency market. The largest market is still for Eurodollars.

5.2 ORIGIN AND REASONS FOR GROWTH OF EUROCURRENCY MARKETS, THEIR CHARACTERISTICS AND COMPONENTS

ORIGIN OF EURO CURRENCY MARKETS:

The European Union's history of ever-deepening integration, which started in earnest with the establishment of the European Economic Community in 1958, should be seen as the source of the euro. In order to maintain a European zone of monetary stability, the European Monetary System (EMS) was established in 1979; members were obligated to limit changes in their currency exchange rates. A draught Treaty on the European Union was adopted by the Maastricht European Council in 1991, and it stipulated that a unified European currency would be implemented by 1999.

The European Monetary Union (EMU) was established on January 1, 1999, with the introduction of the euro. The European Currency Unit (ECU), which served as the forerunner to the euro, is a logical extension of the EMS. In fact, a one-to-one conversion of ECU contracts to euro contracts was mandated by EU legislation. Each national currency of the euro-11 countries was permanently linked to the euro at a conversion rate as of January 1, 1999 as soon as the currency was introduced. Euro banknotes and coins entered circulation on January 1, 2002, replacing the gradually withdrawn national bills and coins.

National currencies lost their legal tender status on July 1, 2002, becoming the euro the only legal tender in the nations that make up the euro zone. The European Central Bank (ECB), with its headquarters in Frankfurt, Germany, now oversees monetary policy for the nations that make up the euro zone. The ECB's principal goal is to preserve price stability. In order to prevent the ECB from being overly influenced by political pressure

from any member countries or institutions, its independence is legally maintained.

The German Bundesbank, which was very successful in ensuring price stability in Germany, is largely the model that the ECB is based on. "Price stability" was described by Willem (Wim) Duisenberg, the first president of the ECB and former head of the Dutch National Bank, as an annual inflation rate of "less than but near to 2 percent."

REASONS FOR GROWTH OF EURO CURRENCY MARKETS:

1. Regulation "Q" of the Federal Reserve Act, which placed a cap on the interest rates that US banks could provide on deposits, was one of the factors that helped this industry expand. Consequently, European banks could by providing higher interest rates, you can entice deposits in US dollars.

2. Federal Reserve Act Regulation "M," which required reserves to be kept against deposits taken by US banks. Due to the widening of the disparity between deposit and lending rates, this raised the cost of deposits for banks in the USA. European banks took advantage of this feature because they were exempt from reserve requirements for deposits made in euros.

3. The mandate that all US banks must insure any deposits they receive from the general public. Because the Euro-Currency market is unregulated, Eurobanks were not required to guarantee Euro-Currency deposits. This diminished a fee for deposits.

4. The US monetary authority's introduction of the Interest Equalization Tax in 1963 increased the effective cost of borrowing in the US for non-resident firms. Due to the fact that Euro-banks were exempt from the "Interest Equalization Tax," they turned to the offshore market for their funding requirements.

5. In 1965, the US implemented the Voluntary Restraint Program, under which US borrowing for supporting foreign enterprises was constrained. Loans to foreign borrowers were discouraged from being made by US institutions. In 1968, statutory limits on overseas direct investments took the place of the guidelines.Effectively, US multinationals were now forced to borrow money from overseas sources as wellmarket for their global endeavours.

6. People who are not US citizens have unequal cash flows in USD. They obtain USD through exports to the US and require it to cover the cost of US imports. Both times, there is a conversion into or out of native currency. The deposited such entitieswhen necessary, they withdrew their export revenues from Euro-banks to pay for imports. Such entities could now preserve their foreign currency holdings without paying conversion fees or exchange rate risk, earning the higher deposit rates offered by the euro-currency market, and having the ease of doing business with nearby banks.

CHARACTERISTICS OF EUROCURRENCY MARKETS:

1. It is an international market and it is under no national control: It has come up as the most important channel for mobilizing and deploying funds on an international scale.
2. It is a short term money market:
3. Eurodollar markets are the time-deposit market. The deposits here have a maturity period ranging one day to several months. Eurodollar is the short-term deposit. It is a wholesale market:
   - It is so because Eurodollar is the currency that is dealt in only large units.
   - Size of individual transaction is usually above $1million.

Source: https://image.slidesharecdn.com/eurocurrencymarket-110224231901-phpapp022-120331114722-phpapp 02/95/ eurocurrency market-110224231901phpapp02-2-3-728.jpg?cb=1333196432

COMPONENTS OF CEUROCURRENCY MARKETS:

- The most significant route for raising and allocating capital globally has emerged as the eurocurrency market. By definition, no nation's monetary policy has direct influence over the Eurodollar market. It is appropriately stated that because they are in London and are denominated in dollars, the dollar deposits there are neither under American or British authority. The market's expansion is greatly owed to the fact that no governmental body has any control over it.

- Interest is paid on all of the deposits in this market, which range in maturity from one day to several months. Eurodollar deposits are primarily a short-term instrument, despite the fact that some of them have a maturity of over a year. Most analyses of the Eurodollar market treat it primarily as a credit market—a market for dollar bank loans—and as a crucial complement to the Eurobond market.

- Eurobonds are used for loans with terms of three months or longer. Out of the Eurodollar market, Eurobonds were created to offer longer-term loans than were typically available with Eurodollars. These bonds are typically issued by a group of banks and issuing organizations.

5.3 EUROCURRENCY DEPOSITS

A foreign currency deposit into a bank that participates in the European financial system is known as a euro deposit. These banks use the euro, a single European currency, to conduct business. An external investor effectively puts euros when they deposit foreign currency into one of these institutions. The account holder may anticipate earning income at the floating interest rate set by the European Central Bank by depositing money into a bank account in Europe (ECB).

Money placed in a European account is known as a euro deposit. These deposits enable individuals from other countries to invest in euros and earn interest at a rate established by the European Central Bank (ECB). Since 2014, the ECB has offered negative rates for reserves. To pass along the costs, large banks have begun charging clients for euro deposits. A foreign national or business may use a euro deposit as a means of protecting their funds in the event that the value of their home currency falls significantly. Minimums can be set by banks for these overseas deposits. Customers have historically received large interest payments from European banks for "parking" their money in these accounts. This technique encourages big businesses and rich clients to keep a larger sum of money in these European Accounts.

The European Central Bank (ECB), on the other hand, for the first time cut interest rates to levels below zero in 2014. Since then, the rate has continuously decreased till it is now at a minus 0.5% as of November 27, 2020, which is the lowest rate ever. Negative interest rates on deposits had to be imposed due to the lower interest rate. Many foreign banks provide money to the ECB. These foreign banks essentially started paying to lodge money at the ECB after negative interest rates were introduced by the ECB. Negative interest rates cost the banks money, therefore many of them decided to pass those expenses on to their clients.

EUROCURRENCY LOANS :

A loan with a currency other than the lending bank's home currency is referred to as a eurocredit. The idea is closely related to that of "eurocurrency," which is any currency that is kept or exchanged outside of its nation of issuance. A loan provided by a U.S. bank that is not denominated in USD is an example of a Eurodollar, which is a dollar deposit held or traded outside of the United States.

A eurocurrency can currently be held or a eurocredit loan made wherever in the globe that local banking regulations permit. The "euro-" prefix in the phrase arose because historically such currencies were held, and loans made, in Europe.

Due to its simplicity of conversion and lack of domestic trading constraints, the eurocurrency market is a significant source of funding for international trade. Similar banks participate in both the eurocurrency and eurocredit markets, but the loans offered on the eurocredit market are often bigger and have longer terms. The eurocredit market has been able

to grow dramatically as the global financial system has become more linked and deregulated over the past few decades, with many nations first removing capital controls before allowing foreign banks to participate in domestic banking sectors.

Due to its simplicity of conversion and lack of domestic trading constraints, the eurocurrency market is a significant source of funding for international trade. Similar banks participate in both the eurocurrency and eurocredit markets, but the loans offered on the eurocredit market are often bigger and have longer terms. The eurocredit market has been able to grow dramatically as the global financial system has become more linked and deregulated over the past few decades, with many nations first removing capital controls before allowing foreign banks to participate in domestic banking sectors.

Eurocredit supports both domestic and international investment finance as well as the movement of capital across nations. Matching surplus units (who deposit money at the bank) with deficit units is a key responsibility of banks (who borrow from the bank). The ability to do this internationally, across national boundaries and between different currencies, increases the liquidity and efficiency of the finance markets. In the eurocredit market, banks may also participate in syndicated loans, in which a loan is made by a collection (syndicate) of banks. Syndicated loans are frequently used when the loan amount is too large for one bank to handle on its own and lower the risk of borrower default for each individual bank lending money.The fact that the banks in a syndicate frequently have different nationalities while lending in the same currency is an illustration of how the eurocredit market might help to increase the flow of money across borders.

EUROCURRENCY BONDS :

A financial instrument known as a "Eurobond" is one that is issued on a market or in a nation where the native currency is not used. The currency in which eurobonds are denominated, such as euro-dollar or euro-yen bonds, is frequently used to categorise them. Eurobonds are frequently referred to as foreign bonds because they are issued in a different currency. Eurobonds are significant because they enable businesses to raise cash while providing the option to issue them in different currencies. Eurobonds are typically issued on behalf of the borrower by a global syndicate of financial institutions, one of which may underwrite the bond and therefore guarantee the sale of the entire issuance.

A financial instrument known as a "Eurobond" is one that is issued on a market or in a nation where the native currency is not used. Eurobonds are significant because they enable businesses to raise cash while providing the option to issue them in different currencies. The term "Eurobond" simply means that the bond was issued outside of the country that issued the currency; it does not imply that the bond was issued in Europe.

Due to its great degree of flexibility, which allows issuers to select the country of issuance based on the regulatory environment, interest rates, and market depth, Eurobonds are quite popular as a financing vehicle. They are particularly appealing to investors since they typically have low face values or par values, making them inexpensive to buy in. Additionally, because of their high liquidity, Eurobonds are simple to buy and sell.

The name "Eurobond" merely refers to the fact that the bond was issued outside of the nation that established the currency; it does not imply that the bond was issued in Europe or that it was priced in the euro. A business could, for instance, issue a US dollar-denominated Eurobond in Japan.

The organization that oversaw Italy's national railroads, Autostrade, issued the initial Eurobond in 1963. A $15 million Eurobond was created by bankers in London, issued at Schiphol Airport in Amsterdam, and paid for in Luxembourg to lower taxes. It offered secure investments in dollars to investors across Europe. The spectrum of issuers includes multinational businesses, independent states, and supranational organizations.

Even while the majority of bonds have a duration of less than 10 years, a single bond offering can have a size of well over a billion dollars and have maturities ranging from five to thirty years. Eurobonds provide investors with diversification while being particularly appealing to issuers headquartered in nations without significant capital markets.

EUROCURRENCY NOTES :

The banknotes come in two series. Seven different denominations make up the first series: 5, 10, 20, 50, 100, 200, and 500 euros. The €100 and €200 were released on May 28, 2019, bringing the second series, often known as the Europa series, to a close. The 500 euro banknote was not a part of the Europa series and has been discontinued as of April 27, 2019. The Europa series of notes is gradually replacing the first series, which was first released in 2002. In the whole euro zone, all notes are accepted as legal money.

5.4 OFFSHORE BANKING

When a business or person deposits money in a bank that is not in their country of residency, this is referred to as offshore banking. Many offshore banks are actually found in onshore regions, such as Panama, Luxembourg, and Switzerland, despite the fact that the word indicates that these banks are situated on islands. The benefit of offshore banking is that monies are frequently excluded from taxes where the institutions are situated. While offshore banks usually provide more secrecy than "onshore" banks do, they also provide the same services as domestic banks.

Banks that were founded on the British Channel Islands, off the coast of northwest France, are where the phrase "offshore bank" first appeared. In order to draw in more investment, these organizations were created as tax

havens. Many countries where offshore banks are based currently do not tax deposits. Private banking is another name for offshore banking.

The same services that an onshore bank offers are also offered by an offshore bank. It is a place where savings can be deposited, and it also offers its customers investing services. To open an account, a depositor does not need to physically visit. Offshore banks commonly open accounts based on certified verification of the person's identity and assets because they are situated in locations that would require extensive travel periods. Accounts can be opened for sizable deposits through onshore intermediaries in the depositor's country of residence.

Off shore banks are frequently found in places where gains and deposits are subject to little or no taxation. They also provide a certain level of secrecy, protecting assets from being examined or seized by tax officials in the depositor's country of origin. Offshore banks are subject to less regulation because they either function as standalone financial institutions or as a component of larger firms with onshore operations in other nations. Offshore banks also provide a benefit by giving depositors who reside in nations with unstable political conditions a safe and secure location to store their assets.

TAX HAVENS :

In a politically and economically secure climate, a tax haven is a nation that gives foreign firms and individuals little to no tax liability for their bank accounts. They provide tax benefits for businesses and the very rich, and it is clear that they might be abused in nefarious tax avoidance schemes. Tax havens can be used legally by businesses and rich people to store money generated abroad while avoiding paying higher taxes in the US and other countries.

Tax havens may also be utilized unlawfully to conceal money from domestic tax authorities. This can be accomplished by the tax haven cooperating poorly with foreign tax officials. Recent years have seen an increase in the political pressure on tax havens to assist with investigations into international tax evasion.

By giving firms and the wealthy tax breaks, tax havens attract international depositors. Many countries have confidentiality rules that prevent foreign tax officials from learning about their deposits. As long as the depositor pays the taxes that the depositor's own country requires, depositing money in a tax haven is acceptable.

In general, tax havens are places where people and foreign companies that want to deposit money in their financial institutions can do so with no residency requirements and very low taxes. Corporations and individuals can hide some of their revenue from tax authorities in foreign countries thanks to a combination of loose regulations and secrecy rules.

The Tax Justice Network keeps track of the nations that it deems to be "most involved" in aiding multinational businesses in tax evasion through

the Corporate Tax Haven Index. Bermuda, the Cayman Islands, and the British Virgin Islands had the worst records as of 2021. Tax havens might be found abroad or simply in a different jurisdiction.

5.5 SUMMARY

- **Eurocurrency :** This is money that is kept on deposit by organizations or governments that do business abroad. For instance, a deposit of US dollars (USD) maintained in a British bank or a deposit of British pounds (GBP) placed in the US would both be regarded as examples of eurocurrency.
- **Euro deposits :** Money put in a European account is known as a euro deposit. These deposits enable individuals from other countries to invest in euros and earn interest at a rate established by the European Central Bank (ECB).
- **Eurocurrency Bonds :** A Eurobond is a debt instrument that is issued in a country or market but is not issued in the home currency of that country or market.
- **Offshore banking :** Offshore banking is the practice of a business or individual depositing money in a bank that is situated outside of their country of residence.
- **Tax Haven :** In a politically and economically stable climate, a tax haven is a nation that gives international corporations and individuals little to no tax responsibility for their bank deposits.

5.6 QUESTIONS

1. Explain the Origin of Eurocurrency Markets.
2. Describe the Characteristics of Eurocurrency Markets.
3. Explain the Eurocurrency loans.
4. Explain the Eurocurrency Deposits.
5. Discuss in detail Tax Haven?
6. Explain the term Eurocurrency.
7. Explain the term Offshore Banking.
8. Explain the term Tax Haven with example.
9. Explain the term Euro deposits.
10. Explain the term Euro Bonds.

11. Fill in the Blanks:

1. _____banking refers to the deposit of funds by a company or individual in a bank that is located outside their national residence.

2. A _____ is a country that offers foreign businesses and individuals minimal or no tax liability for their bank deposits in a politically and economically stable environment.

3. _____ is currency held on deposit by governments or corporations operating outside of their home market. For example, a deposit of U.S. dollars (USD) held in a British bank would be considered eurocurrency, as would a deposit of British Pounds (GBP) made in the United States.

4. _____ are funds deposited in a European account. These deposits allow foreign citizens to invest in euros, collecting on the interest rate set by the European Central Bank (ECB).

5. A _____ is a debt instrument that's denominated in a currency other than the home currency of the country or market in which it is issued.

5.7 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce. G. Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.ecb.europa.eu
- www.pocketsense.com
- www.bms.co.in
- www.benchpartner.com
- www.investopedia.com
- www.cleartax.in

6

INTERNATIONAL EQUITY MARKETS

Unit Structure :

6.0 OBJECTIVES

- To study Global Depository Receipts (GDR) and American Depository Receipts (ADR).
- To understand the Foreign Currency Convertible Bonds.
- To study Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI).
- To study Participatory Notes.

6.1 GLOBAL DEPOSITORY RECEIPTS (GDRs) AND AMERICAN DEPOSITORY RECEIPTS (ADRs)

GLOBAL DEPOSITORY RECEIPTS (GDRs):

A depositary bank will issue a financial instrument known as a global depositary receipt (GDR). It is traded on the national stock exchanges of investors' home countries and represents shares of a foreign corporation. With the aid of GDRs, a business (the issuer) can connect with investors on international capital markets. Issuers frequently use GDRs when raising money from foreign investors through private placements or initial public offerings of stock. The difference between an American depositary receipt (ADR) and a worldwide depositary receipt is that an ADR exclusively lists shares of foreign companies on U.S. marketplaces.

A tradable financial security is a global depositary receipt. It is a share-representation certificate that trades on two or more international stock markets. GDRs generally trade on American stock exchanges in addition to those in the Eurozone or Asia. The local currency of the markets where the GDRs are traded is used to determine the price of GDRs and their dividends. GDRs offer American and worldwide investors a simple way to buy foreign stocks.

An worldwide company's equity is represented by a sort of bank certificate known as a global depositary receipt. The shares that support the GDR are still held in escrow by a depositary bank or custodial organization. Global investors residing overseas can invest in the shares of an international firm using GDRs, even though those shares trade as domestic shares in the nation where the company is headquartered. Companies can raise money from investors in several nations using GDRs.

The GDRs will be issued in those investors' home nation currencies. Because GDRs are tradable certificates that may be negotiated, they can offer investors chances for arbitrage. When European investors want to trade shares of non-European businesses locally, they typically refer to GDRs as European Depositary Receipts, or EDRs. GDR transactions typically cost less than alternative methods by which investors can trade foreign securities.

EXAMPLE OF GDR:

A GDR can be used by a U.S.-based corporation to list its stock on the London and Hong Kong Stock Exchanges. With each of the foreign depositary banks, the American business engages into a depositary receipt arrangement. To their respective stock exchanges, these banks then package and issue shares. Both countries' regulatory compliance standards are adhered to in these activities.

ADVANTAGES OF GDRs:

- GDRs can potentially boost share liquidity while assisting foreign enterprises in reaching a wider and more varied audience of potential investors.
- Businesses are able to carry out a private offering effectively and affordably.
- An otherwise unknown foreign company's status or legitimacy may grow if its shares are listed on significant international markets.
- GDRs give investors the chance to diversify their investments abroad.
- Investors don't have to pay cross-border custody or safekeeping fees, and GDRs trade, clear, and settle in accordance with the investor's domestic processes and procedures.
- GDRs are more convenient and less expensive than setting up international brokerage accounts and buying stocks on foreign marketplaces.
- Any dividends and capital gains are realized by GDR holders in U.S. dollars.

DISADVANTAGES OF GDRs:

- Dividend payments are made after deducting currency translation costs and foreign taxes, which are automatically withheld by the depositary bank.
- GDRs may have considerable administrative fees.
- In order to prevent paying taxes twice on capital gains achieved, U.S. investors may need to request a credit from the Internal Revenue Service (IRS) or a refund from the foreign government's taxing body.
- The value of GDRs could change in response to actual events in the foreign country, such as a recession, financial collapse, or political upheaval.
- GDRs have the potential to have poor liquidity, making them difficult to sell. They can also have currency risk and political risk.

AMERICAN DEPOSITORY RECEIPTS (ADRs):

Although foreign equities can be traded directly on a national stock exchange, they are typically traded as depository receipts. For instance, Yankee stock issuance frequently trade as American Depository Receipts on U.S. exchanges (ADRs). An ADR is a receipt that represents a number of foreign shares that are kept on deposit with the custodian of the U.S. depository in the home market of the issuer. For the ADRs, which are traded on American listed exchanges or in the OTC market, the bank acts as the transfer agent.

The first ADRs went on the market in 1927 as a way to reduce some of the dangers, hold-ups, difficulties, and costs associated with dealing the actual shares. 396 ADRs were traded on U.S. listed exchanges as of the end of 2012.

On the American OTC market, many hundred more ADRs are traded. The Singapore Stock Exchange is also where Singapore Depository Receipts are traded. Using Global Depository Receipts (GDRs), a foreign company can cross-list at the same time on various national exchanges. The London and Luxembourg stock markets both provide GDR trading. The DR market has expanded dramatically over time; as of year-end 2012, there were 3,678 DR programs trading on international exchanges, representing issuers from 82 different nations.

Compared to transacting directly in the underlying stock on the foreign exchange, ADRs provide significant benefits for U.S. investors. ADRs are also available to non-U.S. investors, who typically choose to do so because to the investing benefits over purchasing the underlying stock.

ADVANTAGES OF ADRs:

- ADRs are available for purchase through the investor's usual broker and are traded on a U.S. stock exchange with a dollar equivalent. Contrarily, in order to trade the underlying shares, the investor would most likely need to: open an account with a broker from the nation where the stock issuer is based; conduct a currency exchange; and

make arrangements for the delivery of the stock certificates or the creation of a custodial account.

- In contrast to investments in the underlying shares, which require the investor to collect foreign dividends and do currency conversions, dividends received on the underlying shares are collected and converted to dollars by the custodian and paid to the ADR investor. Additionally, tax agreements between the United States and some nations reduce the rate of dividend tax that nonresident investors must pay. Due to this, American shareholders of the underlying shares must submit a form to request a refund of the tax difference withheld. However, ADR holders only receive the appropriate taxes and not the whole dollar equivalent dividend.

- Similar to U.S. stocks, ADR trades settle in three business days, but settlement procedures for the underlying stock differ elsewhere.

- ADR price quotes are given in USD.

- While the majority of underlying equities are bearer securities, ADRs (apart from Rule 144A issues) are registered securities that offer ownership rights protection.

- The depository receipt for an ADR investment can be traded to another investor on the U.S. stock market, or the underlying shares can be sold on a regional stock exchange. In this instance, the ADR is delivered to the bank depository for cancellation, and the buyer receives the underlying shares as a result.

- In order for the ADR to trade in a price range that is typical for American investors, ADRs usually represent a multiple of the underlying shares rather than a one-to-one correspondence. Depending on the value of the underlying shares, a single ADR may represent more or less than one underlying share.

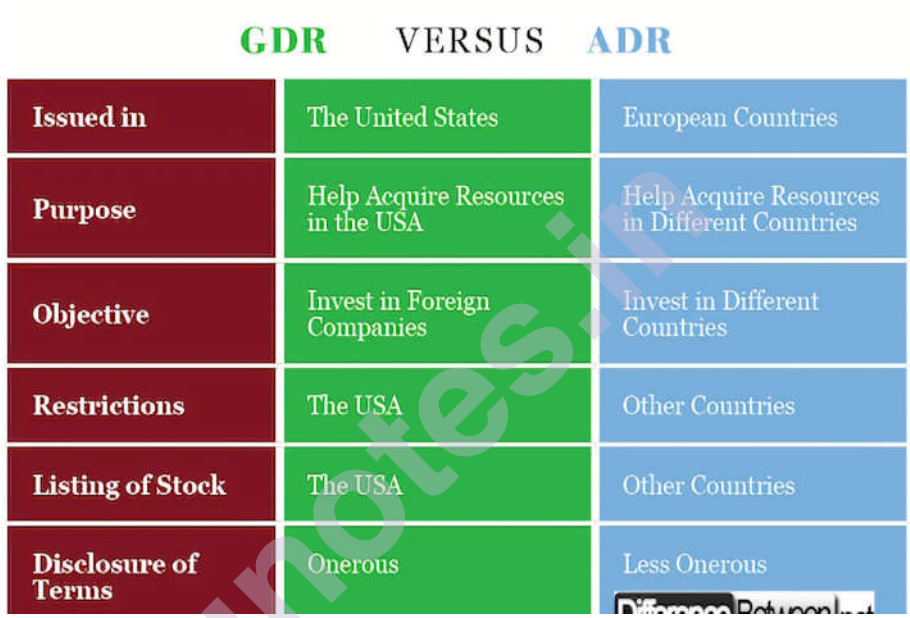
- ADR holders instruct the depository bank on how to exercise voting privileges connected to the underlying shares. Absent specific instructions from the ADR holders, the depository bank does not exercise its voting rights.

TYPES OF ADRs:

ADRs come in two varieties: Sponsored and Unsponsored.

1. At the request of the foreign firm that issued the underlying instrument, a bank will generate sponsored ADRs. The sponsoring bank frequently provides ADR investors with a range of services, including investment advice and English translations of some annual report sections. The only ADRs that can be listed on American stock exchanges are sponsored ADRs. New ADR initiatives require sponsorship.

2. Unsponsored ADRs were typically issued at the request of a U.S. investment banking business without the direct involvement of the foreign issuing corporation; some of these documents date back to before 1980 still exist. As a result, the foreign firm may not quickly or regularly furnish financial reports or investment information to the depository. The foreign company covers the depository fees for sponsored ADRs. On unsponsored ADRs, depository costs are paid by ADR holders. Unsponsored ADRs may have multiple issuing banks, with each bank's offering terms being unique. Typically, the only ADRs that trade on NASDAQ or the major stock exchanges are sponsored ADRs.



6.2 FOREIGN CURRENCY CONVERTIBLE BONDS

A convertible bond that is issued in a currency other than the issuer's home currency is known as a foreign currency convertible bond (FCCB). In other words, the issuing corporation is raising money through the sale of foreign currency. A product that combines debt and equity is known as a convertible bond. Regular principal and coupon payments are made, and while it functions like a bond, these bonds also allow the bondholder the opportunity to convert the bond into stock.

A type of bond that is issued in a currency other than the issuer's native currency is known as a foreign currency convertible bond (FCCB). With the ability to be converted into stock, convertible bonds operate as a middle ground between debt and equity financial products. Large, international corporations with locations all over the world frequently list these bonds when they need to raise cash in different currencies.

A bond is a type of debt security that offers investors income in the form of periodic interest payments known as coupons. The bond's full-face value is returned to the investors on the bond's maturity date. Convertible

bonds are a form of bond that some corporate organizations issue.A convertible bond's option to be converted into a predetermined number of shares of the issuing business is available to bondholders.

Bonds that are convertible into equity have a conversion rate that must be met. The bond won't be converted, though, if the stock price remains below the conversion price. As a result, convertible bonds enable bondholders to join in the growth of the underlying shares of the issuer. The foreign currency convertible bond is one of many different varieties of convertible bonds.

An FCCB is a convertible bond that was issued in a foreign currency, meaning that the principal repayment and periodic coupon payments will also be payable in a foreign currency. As an illustration, an American listed firm has effectively issued an FCCB when it issues a bond in India in rupees. Multinational corporations that operate internationally and are looking to raise cash in foreign currencies frequently issue foreign currency convertible bonds. Investors in FCCBs are frequently foreigners and hedge fund arbitrators. These bonds may also include put options or call options, the latter of which gives the bond issuer the right to redeem the bonds (whereby the right of redemption lies with bondholder).

A business may choose to raise capital outside of its own nation in order to access new markets for brand-new or expansionary projects. Companies typically issue FCCBs in the currencies of those nations where interest rates are typically lower than in the country of residence or where the foreign economy is more stable than the domestic economy. The coupon payments on the bond are lower for the issuer than a straight coupon-bearing plain vanilla bond, which lowers its debt-financing costs because the equity side of the bond provides value. Furthermore, a positive shift in exchange rates can lower the issuer's cost of debt, which is the interest paid on bonds.

Due to the fact that the principle must be returned at maturity, an unfavourable shift in exchange rates that weakens the local currency could result in payback cash outflows that are greater than any interest rate savings, resulting in losses for the issuer. Furthermore, when issuing bonds in a foreign currency, the issuer is subject to all political, economic, and legal risks that exist in that nation. Additionally, FCCB investors won't convert their bonds into equity if the issuer's stock price falls below the conversion price, forcing the issuer to repay the principal at maturity.

These bonds are available for purchase at stock exchanges by FCCB investors, who can choose to convert the bonds into equity or a depositary receipt at a later date. By converting the bond to equity, investors can benefit from any increase in the value of the issuer's shares. Bonds that are tied to warrants that are activated when the stock price reaches a specific level allow bondholders to profit from this appreciation.

6.3 FOREIGN DIRECT INVESTMENTS AND FOREIGN PORTFOLIO INVESTMENTS

FOREIGN DIRECT INVESTMENT (FDI):

An ownership stake in a foreign company or project is known as a foreign direct investment (FDI) and is made by a foreign investor, business, or government. Typically, the phrase refers to a corporate decision to buy a sizable portion of a foreign company or to buy it altogether in order to expand operations to a new area. The phrase is typically not used to refer to a stock purchase in a single overseas firm. FDI is a crucial component of global economic integration since it forges strong, long-lasting ties between nations' economy.

Foreign direct investments (FDIs) are sizeable, long-term investments made into a foreign enterprise by a company or a government. Investors in foreign direct investment (FDI) frequently hold controlling positions in domestic businesses or joint ventures and actively participate in their management. The investment could entail purchasing a material supply, growing a business's reach, or establishing a global presence. Over the past few years, China and the United States have been the major recipients of FDI. The top contributors to FDI outside of their own boundaries have historically been the United States and other OECD nations.

Target businesses or projects in open economies that have a trained workforce and above-average development potential for the investor are typically taken into consideration by businesses or governments seeking a foreign direct investment (FDI). The value of minimal government regulation is also common. FDI typically involves more than just capital expenditures. It might also entail the provision of management, technology, and tools. The fact that foreign direct investment develops effective control over the foreign company, or at the very least significant influence over its decision-making, is one of its key characteristics.

With more than $1.8 trillion in foreign direct investments expected to be made in 2021, the net quantities of money involved with FDI are enormous. In that year, China, Canada, Brazil, and India were the other leading FDI destinations after the United States. The United States was also in first place for FDI outflows, followed by Germany, Japan, China, and the United Kingdom.

A nation's appeal as a long-term investment destination can be determined by looking at FDI inflows as a share of its gross domestic product (GDP).In nominal terms, the Chinese economy is now smaller than the American one, however as of 2020, China's FDI as a proportion of GDP was higher than that of the US at 1.7%. FDI as a proportion of GDP is frequently substantially higher for smaller, more active economies: examples include 110% for the Cayman Islands, 109% for Hungary, and 34% for Hong Kong (also for 2020).

Opening a subsidiary or associate firm abroad, buying a controlling stake in an existing overseas business, merging with another foreign business, or forming a joint venture are all examples of ways to make foreign direct investments. According to rules established by the Organisation for Economic Co-operation and Development (OECD), a minimum 10% ownership position in a firm with a foreign basis is required for an FDI to establish a controlling interest. That description is open-ended. In some circumstances, obtaining less than 10% of the voting shares of a corporation can result in the establishment of an effective controlling stake in it.

TYPES OF FDI :

Horizontal, vertical, and conglomerate categories are frequently used to describe foreign direct investments.

- A corporation establishes the same kind of business activity in a foreign country as it does in its own with a horizontal FDI.

- In a vertical FDI, a company purchases a complementary firm in another nation, like in the case of a U.S.-based cell phone carrier purchasing a chain of phone stores in China. For instance, a US business may buy stock in a foreign firm that provides it with the raw resources it requires.

- A company invests in a foreign business that is unrelated to its primary business in a conglomerate FDI. This frequently takes the form of a joint venture because the investing business has no prior experience in the field of expertise of the foreign company.

EXAMPLES OF FDI :

Mergers, acquisitions, or joint ventures in the retail, service, logistics, or manufacturing sectors may be part of foreign direct investments. They point to a global business expansion plan. They may also encounter regulatory issues. For instance, the U.S. business Nvidia announced in 2020 that it would buy the British chip designer ARM. The U.K.'s competition authority stated in August 2021 that it will look into whether the $40 billion transaction would lessen competition in sectors that depend on semiconductor processors. The agreement was terminated in February 2022.

ADVANTAGES OF FDI:

1. **Economic boost :** The creation of jobs is one of the most important factors in a country (especially a developing country) attracting foreign direct investment. FDI boosts the manufacturing and service sectors, which boosts employment and lowers unemployment rates in the respective nation. Increased employment boosts salaries and gives the populace more purchasing power, boosting the economy as a whole.

2. **The expansion of human capital :** Human capital refers to the knowledge and survival of any worker. The education system and human capital of a nation can be improved by the diverse talents that employees acquire through diverse training and practices. It assists in educating individual resources in different fields, trades, and businesses over time.

3. **A rise in exports :** Many FDI-produced goods have international markets and are not just based on home demand. The creation of divisions that are entirely focused on exports assists FDI investors in promoting exports from other foreign nations.

4. **Advanced Capital Flow :** The capital inflow is particularly advantageous for nations with limited domestic resources and little opportunities to issue equities on the international capital market.

5. **Competitive Market :** FDI encourages the development of a competitive environment and destroys domestic trust by encouraging the entry of foreign companies into domestic markets.

DISADVANTAGES OF FDI :

1. **Domestic investment impediment :** FDI can occasionally obstruct domestic investment. Local firms in countries start to become less interested in financing their family assets as a result of FDI.

2. **Negative exchange valuations :** It is uncommon for foreign direct investments to have an adverse impact on exchange rates, favoring one nation while harming another.

3. **Higher costs :** When investors finance enterprises in other nations, they could observe higher costs compared to domestic exports. Often, more money is spent on intellectual and mechanical resources than on local workers' wages.

4. **Financial non-viability :** Although foreign direct investments may be capital-intensive from the perspective of investors, they can occasionally be extremely risky or unreliable from an economic one.

5. **Modern commercial colonialism :** Third-world nations with a colonial past are frequently concerned that foreign direct investment would lead to modern economic colonialism, exposing host nations and leaving them defenseless against persecution by multinational corporations.

FOREIGN PORTFOLIO INVESTMENT (FPI):

Securities and other financial assets held by investors in another country make up foreign portfolio investment (FPI). Depending on the turbulence of the market, it is relatively liquid but does not provide the investor direct ownership of a company's assets. FPI is one of the popular ways to invest in a foreign economy, along with foreign direct investment (FDI). For the majority of economies, both FDI and FPI are significant sources of funding.

Holding financial assets from a nation other than the investor's own is referred to as a foreign portfolio investment (FPI). Stocks, ADRs, GDRs, bonds, mutual funds, and exchange-traded funds are all examples of possible FPI holdings. FPI, along with foreign direct investment (FDI), is one of the popular ways for investors, particularly individual investors, to engage in a foreign economy. FPI, in contrast to FDI, comprises of passive ownership; investors don't have any direct influence over businesses, ownership of real estate, or ownership interests in companies.

Making and keeping a hands-off, or passive, investment in a portfolio of assets is done with the hope of getting a return. Stocks, American depositary receipts (ADRs), or global depositary receipts of companies with headquarters outside of the investor's country are examples of securities that can be included in a foreign portfolio investment. Holding also includes mutual funds or exchange traded funds (ETFs) that invest in foreign or international assets, as well as bonds or other debt issued by these businesses or foreign governments.

The likelihood of an individual investor using an FPI to invest in possibilities located outside of their home nation is high. On a larger scale, a country's foreign portfolio investment is reflected on its balance of payments as part of its capital account (BOP). The BOP calculates the amount of money that moves from one nation to another throughout a single fiscal year.

EXAMPLE OF FPI :

In terms of FPI, 2018 was an excellent year for India. The number of investment funds registered with the Securities and Exchange Board of India (SEBI) increased by more than 600, reaching 9,246 in total. The interest of international investors was sparked, in part, by a more favourable regulatory environment and the recent great performance of Indian shares.

ADVANTAGES OF FPI:

1) The emergence of such investors has resulted in a significant growth in the depth and breadth of the secondary market.

2) The Capital Market takes on an institutional quality due to the deliberate channeling of global money into local markets through research and analytical studies. Against predetermined risk parameters, these monies were transferred into different assets.

3) By increasing demand for the target companies' shares, these investments raise their PE Ratios. This enables these businesses to raise financing more affordably.

4) A channel for investment diversification, wealth protection, and at a macro level, a chance for cross-country hedging in terms of currencies, industries, and geographical locations are made available to international investors.

5) Better investor protection laws in developing nations, liberalised access to these markets, and improved macroeconomic fundamentals in emerging economies can all be credited with the rise in FPI in recent years.

6) They act as a safety net for financing the Balance of Payments deficits, assisting in the maintenance of the host entry's foreign exchange reserves.

DISADVANTAGES OF FPI :

1) Political risk is the potential for a change in the political climate, which might alter investment standards and repatriation laws.

2) Low retail involvement leads to insufficient liquidity, which causes price volatility in emerging markets, which benefit from the majority of FPI.

3) As a result of their unpredictability, these funds have a propensity to switch markets frequently. Volatility brought on by FPI inflows and outflows has a negative impact on the economy of the host nation.

4) Emerging economics tend to have depreciation prone currencies. This exposes theforeign investor to exchange rate risk on both principal and returns.

COMPARISON CHART: FDI VS FPI:

BASIS FOR COMPARISON	FDI	FPI
Meaning	FDI refers to the investment made by the foreign investors to obtain a substantial interest in the enterprise located in a different country.	When an international investor, invests in the passive holdings of an enterprise of another country, i.e. investment in the financial asset, it is known as FPI.
Role of investors	Active	Passive
Degree of control	High	Very less
Term	Long term	Short term
Management of Projects	Efficient	Comparatively less efficient.
Investment in	Physical assets	Financial assets
Entry and exit	Difficult	Relatively easy.
Results in	Transfer of funds, technology and other resources.	Capital inflows

6.4 PARTICIPATORY NOTES

Investors or hedge funds must use participatory notes, often known as P-notes or PNs, in order to purchase Indian shares without first registering with the Securities and Exchange Board of India (SEBI). P-notes are one of the investments that are categorised as offshore derivative investments (ODIs). The investors receive any dividends or capital gains generated by the securities. Because they worry that hedge funds using participation notes may produce economic instability in India's exchanges, Indian regulators generally oppose participatory notes.

The Securities and Exchange Board of India (SEBI) requires brokers and foreign institutional investors (FIIs) to register. Non-registered investors are able to invest in the Indian market thanks to participatory notes. Participatory notes, often known as P-notes or PNs, are derivative financial products with Indian assets as their base. Investing in participatory notes is popular since it keeps the investor's identity secret.

Participatory notes are foreign derivative products that have Indian shares as their underlying assets. Regulators have fewer rules for foreign institutional investors because investment is short-term in nature. These investors exchange participation notes in order to invest in the Indian stock markets and sidestep the onerous regulatory approval procedure.

Investors from foreign nations who desire to purchase Indian assets are issued the financial instruments by (FIIs). The participatory notes are issued by brokers and foreign institutional investors that have registered with the Securities and Exchange Board of India (SEBI) and invest on behalf of foreign investors. Brokers are required by the regulating body to disclose their participatory note issuance status once a month.

High-net-worth individuals, hedge funds, and other investors can purchase Indian shares through this technique without having to register with the Indian regulatory agency. They give people access to rapid cash on the Indian stock market. Investors benefit from direct registration's time, cost, and reduced scrutiny. Due to the fact that they permit foreign investment into India, these investments are also advantageous to that nation.

Participatory note trading is not under the purview of SEBI. The participation notes trade among foreign institutional investors is not documented, despite the fact that foreign institutional investors are required to register with the Indian regulatory board. Officials worry that this technique could result in the P-notes being used for unlawful purposes like money laundering.

The Special Investigation Team (SIT) wants stronger compliance standards for the selling of participatory notes because of this inability to track money. In Indian law enforcement, the SIT is a specialist squad of officers made up of people who have received training in conducting investigations into significant offences.

However, the Indian market became incredibly turbulent in the past when the government put trade limits on the notes. For instance, the government declared it was considering limiting participation note trading in October 2007. The announcement resulted in a loss of 1,744 points, or more than 8%, on the Sensex index during the day's trading.

Investor and government concerns that the P-note ban would have a negative impact on the Indian economy led to this market disturbance. This is due to the fact that greater regulation would make it harder for foreign capital to enter the market. Foreign institutional investors fuel the expansion of the Indian economy, industries, and capital markets. In the end, the government decided against regulating participatory notes.

Through a series of processes, investors can buy any Indian security they like using P-notes. An investor deposits money with a registered foreign institutional investor (FII), such HSBC or Deutsche Bank, in the U.S. or Europe. Next, the investors let the bank know which Indian security or securities they want to buy. The investor transfers money to the FII account, and the FII then issues the client participatory notes and purchases the underlying stock or equities in the appropriate amounts from the Indian market.

Any dividends, capital gains, or other payments payable to stockholders who own shares of the Indian firm may be received by the investor. Each month, the FII discloses all of its issuances to the Indian regulators; however, by law, it is not required to reveal who the real investor is.

The Securities and Exchange Board of India (SEBI) introduced participant notes in India in 2000 to give foreign investors—financial institutions and high-net-worth individuals—access to the country's financial markets without the need to first register as foreign institutional investors (FII). Overseas institutional investors (FIIs), who are local Indian investors, issue P-notes to foreign investors looking to access Indian markets. The P-notes are not traded on an exchange; instead, they are sold directly to investors.

When opening an account with a registered foreign institutional investor, foreign investors do have to go through a due diligence procedure (FII). Participatory notes are legitimate in India, but the Securities and Exchange Board of India (SEBI) has no direct authority over them. Nevertheless, SEBI has made an effort to regulate the market by imposing various restrictions on the sale of participatory notes by foreign institutional investors (FII) in India.

6.5 SUMMARY

- **GDRs :** A tradable financial security known as a global depositary receipt. It is a share-representation certificate that trades on two or more international stock markets.

- **ADRs :** An ADR is a receipt that is deposited with the custodian of the U.S. depository in the issuer's home market and represents a number of foreign shares.
- **Foreign direct investment (FDI) :** An investor, business, or government from another nation makes an ownership position in a foreign enterprise or project.
- **Foreign portfolio investment (FPI) :** Securities and other financial assets held by investors in another nation make up foreign portfolio investment (FPI).
- **Participatory notes :** Investors or hedge funds must use participatory notes, often known as P-notes or PNs, in order to participate in Indian shares without first registering with the Securities and Exchange Board of India (SEBI).

6.6 QUESTIONS

- Explain the American Depository Receipts in detail.
- Explain the Global Depository Receipts in detail.
- Explain FDI with its advantages and disadvantages.
- Explain FPI with its advantages and disadvantages.
- What are Participatory Notes?
- _____ is a tradable financial security. It is a certificate that represents shares in a foreign company and trades on two or more global stock exchanges.
- _____ is a receipt representing a number of foreign shares that remain on deposit with the U.S. depository's custodian in the issuer's home market.
- _____ is an ownership stake in a foreign company or project made by an investor, company, or government from another country.
- _____ consists of securities and other financial assets held by investors in another country.
- _____ also referred to as P-notes, or PNs, are financial instruments required by investors or hedge funds to invest in Indian securities without having to register with the Securities and Exchange Board of India (SEBI).

6.7 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce. G. Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.investopedia.com
- www.keydifference.com
- www.aplustopper.com
- www.bms.co.in

7

INTERNATIONAL DEBT MARKETS

Unit Structure :

7.0 OBJECTIVES

- To understand the International Bond Markets.
- To study the Features of Foreign Bonds.
- To study the Features of Euro Bonds.
- To understand the Risks involved in International Bonds.

7.1 INTRODUCTION

With an emphasis on the global bond market, this chapter continues the topic of global capital markets and institutions. The chapter is intended to be helpful for both foreign investors interested in international fixed-income instruments and the financial officer of an MNC looking to source fresh debt capital on the global bond market. The meanings of the terms used to define the international bond market are provided in the next section. The factors that set these market segments apart as well as the various kinds of bond instruments traded in them are further discussed in the ensuing discussion.

7.2 INTERNATIONAL BOND MARKETS

The foreign bond market increased rapidly starting in the 1980s. It currently makes up a sizable portion of the overall amount of bonds outstanding on the global bond market. Bonds that are exchanged across international borders are traded on the international bond market. They

bring together investors from various nations. International bonds are the bonds that are traded on global bond markets. These bonds are typically, but not always, issued in the issuer's own currency. In actuality, that depends on where the intended subscription is.In this case, the issuer may issue bonds with US dollars or euros as the unit of currency. Additionally, just like most other bond kinds, foreign bonds pay interest at regular intervals and return the principal to the holder when the bond matures.

Foreign bonds and Eurobonds are the two primary market groups that make up the global bond market. A foreign bond issue is a bond that is sold to investors in a national capital market by a foreign borrower and is priced in that country's currency. An illustration would be a German MNC selling bonds to American investors denominated in dollars. A bond issue with a euro denominator is one that is traded on a national capital market outside of the nation that issued the currency.

An illustration would be a Dutch borrower issuing bonds denominated in dollars to investors in the Netherlands, the United Kingdom, and Switzerland. The domestic national bond markets coexist with the markets for foreign bonds and Eurobonds, and all three market groupings engage in rivalry with one another. The sale of bonds by non-Japanese Asian issuers through Asian syndication, often with bonds valued in U.S. dollars, is known as the "Dragon bond" market. You might think of this market as a subsection of the Eurobond market.

Governments, traders, institutional investors, and individuals all participate in the global bond market. The foreign bond market has less liquidity, though, for bonds. And as a result, a significant portion of them are held by institutional investors like pension funds, mutual funds, etc. The ICMA estimates that the global bond market will be worth roughly $130 trillion in US dollars. Only 32% of the market is made up of corporate bonds. By using SSA bonds, the rest of the market is covered (government and government agencies).

Credit rating organisations rate foreign bonds but not Euro bonds when it comes to international bonds. As a result, in order to draw in investors, the company issuing the Eurobond must have a high level of confidence. Like domestic bonds of the issuing nation, foreign bonds are subject to the laws and regulations of that nation. However, there are no specific national restrictions that apply to Eurobonds.

7.3 FOREIGN BONDS

When a foreign entity issues a bond in the domestic market's currency to raise capital, the bond is referred to as a foreign bond. The practise of issuing foreign bonds, such as bulldog bonds, Matilda bonds, and samurai bonds, is widespread among international companies that conduct substantial business on the local market.

A multinational business will issue a foreign bond in a nation other than their own, denominating it in the currency of that nation. Owning foreign bonds allows domestic investors to diversify their holdings abroad, and because they are traded on regional exchanges, they are simpler to get. Nevertheless, there are some implicit and explicit risks related to foreign bonds, such as the effects of two interest rates, currency exchange rates, and geopolitical uncertainty.

Investors find these bonds appealing because they can diversify and add international content to their portfolios without the increased currency rate exposure, as foreign bond investors are typically domestic investors. However, there are still some particular dangers associated with holding foreign bonds. Foreign bonds often have higher yields than domestic bonds because investing in them entails many risks. There is interest rate risk with foreign bonds.

The market value or resale value of a bond decreases when interest rates increase. Let's take the scenario where an investor owns a 4%-paying 10-year bond and interest rates rise to 5%. Few investors are interested in buying the bond without a price reduction to make up for the income gap.

Inflation risk also exists for foreign bonds. When purchasing a bond at a fixed interest rate, the real value of the bond is derived by deducting the yield for inflation. An investor's true return is the net difference of 3% if they buy a bond with a 5% interest rate at a period when inflation is 2%. For foreign bonds, currency risk continues to be an implicit concern. Exchange rate fluctuations, for instance, might cause the yield on a bond with a 7% return in a European currency to drop to 2% when converted to dollars.

Note that this risk is implicit because the price of these bonds would always be expressed in US dollars. Before making an investment, investors should think about political risk by evaluating the stability of the government issuing the bond, the rules governing its issuance, the functioning of the legal system, and other considerations. Foreign bonds have a risk of payback. It's possible that the nation issuing the bond lacks the resources to pay off the loan. A portion or the entirety of an investor's principal and interest may be lost.

Examples of Foreign Bonds:

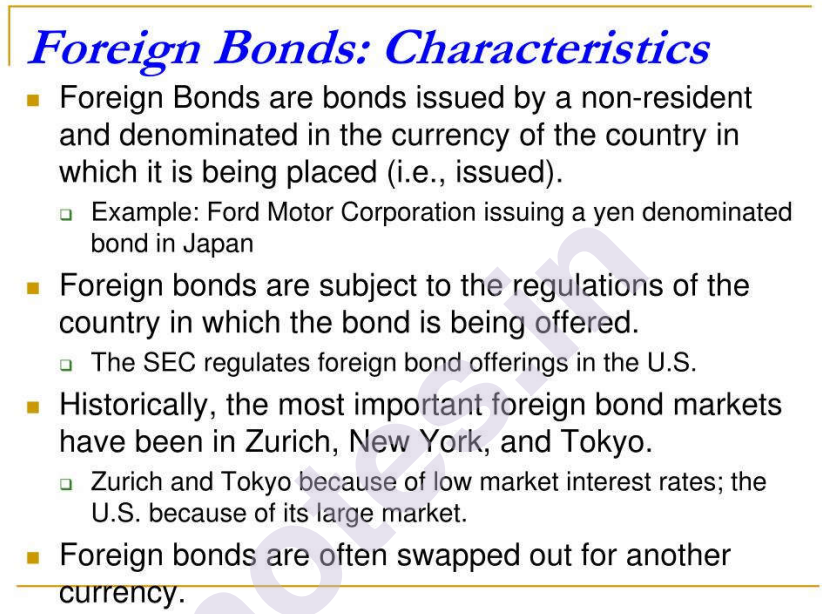
Only a few of the numerous examples of foreign bonds are included here. For instance, a foreign bank or company may issue a bulldog bond in the United Kingdom in British pounds sterling. These bonds are generally issued by foreign firms seeking funding in the UK when interest rates there are lower than those in their own country.

A bond issued in the Australian market by a non-Australian corporation is known as a Matilda bond. For instance, Apple Inc. sold $1.4 billion in notes with maturity dates of June 2020, January 2024, and June 2026 in June 2016. Apple joined other businesses, including Qantas Airways Ltd., Coca-Cola Co., and Asciano Ltd., in selling securities beyond the seven-

year threshold that had previously been the upper limit for many nonfinancial corporate borrowers.

A corporate bond issued in Japan by a non-Japanese corporation is known as a samurai bond. Samurai bonds, which have a maturity of seven years, were sold for $1.1 billion in May 2016 by the French bank SocieteGenerale SA. The transaction came after Bank of America Corporation's $1.08 billion euro-yen offering earlier in the same month.

Features of Foreign Bonds:



Source: https://image3.slideserve.com/6675888/foreign-bonds-characteristics-l.jpg

7.4 EUROBONDS

The organisation that oversaw Italy's national railroads, Autostrade, issued the initial Eurobond in 1963. It was a $15 million Eurodollar bond that was created by bankers in London, issued at Schiphol Airport in Amsterdam, and paid for with taxes saved in Luxembourg. It offered secure investments in dollars to investors across Europe. The spectrum of issuers includes multinational businesses, independent states, and supranational organisations. Even while the majority of bonds have a duration of less than 10 years, a single bond offering can have a size of well over a billion dollars and have maturities ranging from five to thirty years.Eurobonds provide investors with diversification while being particularly appealing to issuers headquartered in nations without significant capital markets.

A financial instrument known as a "Eurobond" is one that is issued on a market or in a nation where the native currency is not used. Eurodollar or Euro-yen bonds are two examples of how Eurobonds are typically categorised according to the currency they are denominated in. Eurobonds

are frequently referred to as foreign bonds because they are issued in a different currency.

Eurobonds are significant because they enable businesses to raise cash while providing the option to issue them in different currencies. Eurobonds are typically issued on behalf of the borrower by a global syndicate of financial institutions, one of which may underwrite the bond and therefore guarantee the sale of the entire issuance.

A financial instrument known as a "Eurobond" is one that is issued on a market or in a nation where the native currency is not used. Eurobonds are significant because they enable businesses to raise cash while providing the option to issue them in different currencies. The term "Eurobond" simply means that the bond was issued outside of the country that issued the currency; it does not imply that the bond was issued in Europe.

Due to its great degree of flexibility, which allows issuers to select the country of issuance based on the regulatory environment, interest rates, and market depth, Eurobonds are quite popular as a financing vehicle. They are particularly appealing to investors since they typically have low face values or par values, making them inexpensive to buy in. Additionally, because of their high liquidity, Eurobonds are simple to buy and sell.

The name "Eurobond" merely refers to the fact that the bond was issued outside of the nation that established the currency; it does not imply that the bond was issued in Europe or that it was priced in the euro. A business could, for instance, issue a US dollar-denominated Eurobond in Japan.

Features of Eurobonds:

Source: https://image3.slideserve.com/6675888/the-main-features-of-a-eurobond-l.jpg

7.5 RISKS IN INTERNATIONAL BONDS:

Investors must be concerned about any risk that could result in the price of the bonds dropping by the time they desire to sell the bonds because it is usual practise to sell international bonds on secondary markets. Four types of risk are associated with international bonds from the standpoint of investors:

1. RISK OF DEFAULT CREDIT
2. RISK OF INTEREST RATES;
3. LIQUIDITY RISK
4. EXCHANGE RATE RISK.

1. **CREDIT RISK :** The possibility of default, in which case interest or principal payments to investors are halted temporarily or permanently, is represented by the credit risk of foreign bonds. This danger may be particularly important in nations with severely restricted creditor rights since it may be difficult for creditors to compel debtor companies to take the necessary steps to enable debt repayment.Even if the company that issued the bonds is still making its regular coupon payments, unfavourable economic or company-specific circumstances can make the issuing company consider bankruptcy as being more likely. The needed return on these bonds increases as the issuing company's credit risk rises because potential investors want to be compensated for the rise in credit risk. In order to account for the credit risk to potential buyers of the bonds, any investors who wish to sell their bond holdings under these circumstances must do so at a lower price.

2. **INTEREST RATE RISK :** The risk of falling bond value as a result of rising long-term interest rates is represented by the interest rate risk of foreign bonds. The needed rate of return for investors increases as long-term interest rates rise. Investors increasingly employ a higher discount rate to calculate the current value of bonds expected future cash flows.As a result, bond valuations decrease. When interest rates rise, even bonds with minimal credit risk exposure frequently lose value. Because fixed-rate bonds' coupon rates are fixed even when interest rates rise, they are more susceptible to interest rate risk than floating-rate bonds. In order to make up for investors accepting a coupon rate that is lower than their desired return, the market price of these bonds must be decreased.

3. **EXCHANGE RATE RISK :** Exchange rate risk is the chance that bonds' value will decrease (from the investor's perspective) if the bond's currency depreciates against the investor's home currency. As a result, the bond's estimated future coupon or principal payments may be converted into less of the investor's home currency.

4. **LIQUIDITY RISK :** Due to the lack of a regularly active market for the bonds, there is a risk that their value will decrease when they are put up for sale. As a result, investors who want to sell the bonds might

have to reduce their asking price. Liquidity risk is decreased when the bond market is continually active because there is a steady stream of buyers and sellers. To persuade other investors to buy the bonds in the secondary market, investors must lower the price at which they intend to sell foreign bonds when they are not regularly traded.

7.6 SUMMARY

- **Foreign Bonds :** A foreign bond is a bond issued in a domestic market by a foreign entity in the domestic market's currency as a means of raising capital.

- **Eurobond :** A Eurobond is a debt instrument that's denominated in a currency other than the home currency of the country or market in which it is issued.

- **Credit Risk :** The credit risk of international bonds represents the potential for default, whereby interest or principal payments to investors are suspended temporarily or permanently.

- **Interest Rate Risk :** The interest rate risk of international bonds represents the potential for the value of bonds to decline in response to rising long-term interest rates.

- **Exchange Rate Risk :** Exchange rate risk represents the potential for the value of bonds to decline (from the investor's perspective) because the currency denominating the bond depreciates against the home currency of the investor.

- Liquidity Risk : Liquidity risk represents the potential for the value of bonds to decline at the time they are for sale because there is not a consistently active market for the bonds.

7.7 QUESTIONS

1) What are Foreign Bonds? Explain its characteristics.
2) What are Euro Bonds? Explain its features.
3) What are the risks involved in Foreign Bonds. Explain each type of risk involved in it.
4) _____ is a bond issued in a domestic market by a foreign entity in the domestic market's currency as a means of raising capital.
5) _____ is a debt instrument that's denominated in a currency other than the home currency of the country or market in which it is issued.

6) _____of international bonds represents the potential for default, whereby interest or principal payments to investors are suspended temporarily or permanently.

7) _____ risk of international bonds represents the potential for the value of bonds to decline in response to rising long-term interest rates.

8) _____ represents the potential for the value of bonds to decline (from the investor's perspective) because the currency denominating the bond depreciates against the home currency of the investor.

9) _____ represents the potential for the value of bonds to decline at the time they are for sale because there is not a consistently active market for the bonds.

7.8 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce. G. Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.efinancemanagement.com
- www.investopedia.com

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8

CURRENCY FORWARD AND FUTURES

Unit Structure :

8.0 OBJECTIVES

- To understand Forward and Future Contracts.
- To study terminologies related to Currency Futures.
- To Study Hedging, Speculation and Arbitrage.

8.1 FORWARD AND FUTURE CONTRACTS

FORWARD CONTRACT:

The rate set today for delivery of a currency at a future time is known as the forward exchange rate. Although the rate is negotiated and agreed upon at the time of contract formation, delivery and payment are postponed until maturity. For value periods of one month (30 days), two months (60 days), three months (90 days), six months (180 days), nine months (270 days), and twelve months, banks commonly provide forward rates (360 days). Actual contracts, however, can be negotiated for durations up to 5 or 10 years.

Hedging, arbitrage, and speculation are the three primary types of activity that the forward exchange market is useful for. Hedging is the process of protecting oneself from the potential future swings in the spot exchange rate. By purchasing (selling) the requisite amount of foreign currency in the forward market, an importer (exporter) who must make (is to receive) a payment in foreign currency at a specific future date can protect themselves against the exchange rate risk. He is therefore aware of the

exact amount he will pay (get) in native currency because the conversion rate is currently fixed.

In any event, there are other methods of carrying out these tasks without using forward contracts. Using the spot market is an additional option. Thus, the question of which market is the better alternative automatically arises. We'll examine this issue by examining the situation of an economic agent who needs foreign money to speculate, make a payment in the future, or invest in foreign bonds. For the sake of simplicity, let's concentrate on a market for one-period forwards and refer to the appropriate forward rate as Ft; t+1, where t and t+1 are the dates on which the forward contract is negotiated and executed, respectively.Additionally, let A, St, it, and i*t represent the sum of foreign currency that will eventually be due, the date t spot exchange rate, and the domestic and international interest rates for one period, respectively.

FUTURE CONTRACT:

A futures contract to exchange one currency for another at a specific future date at a price (exchange rate) that is set on the purchase date is known as a currency future, or FX future. A futures contract is a binding commitment to buy or sell a certain commodity asset, securities, or both at a defined price at a predetermined future date.

For the purpose of facilitating trading on a futures exchange, futures contracts are standardised for both quality and quantity. When purchasing a futures contract, the buyer assumes the responsibility for purchasing and receiving the underlying asset at the contract's expiration. The underlying asset must be available and delivered by the futures contract seller by the expiration date.

Futures contracts are a type of financial derivative that obligates either the buyer or the seller to buy or sell an underlying asset at a present price and date in the future. By employing leverage and a futures contract, an investor can speculatively predict the future direction of an asset, commodity, or financial instrument. Futures are frequently used to protect against losses from unfavourable price movements by hedging the movement of the underlying asset's price. Almost every commodity imaginable, including grains, cattle, energy, currencies, and even stocks, has tradable futures contracts. The Commodity Futures Trading Commission oversees futures transactions in the US (CFTC).

Futures are a type of derivative financial contract that binds the parties to exchange an item at a fixed price and future date. Regardless of the market price on the day of expiration, the buyer or seller must acquire or sell the underlying asset at the predetermined price. Physical commodities or other financial instruments are examples of underlying assets. Futures contracts are standardised to make trading on a futures market easier and specify the quantity of the underlying asset. Futures can be utilised for trading speculation or hedging.The terms "futures contract" and "futures" are interchangeable.

For instance, you may hear someone mention that they purchased oil futures, which is the same as an oil futures contract. When someone uses the term "futures contract," they usually mean a particular kind of future, such as futures on S&P 500 index, gold, bonds, or oil. One of the most straightforward ways to invest in oil is through futures contracts. The more generic term "futures" is sometimes used to refer to the entire market, as in the sentence "They're a futures trader." In contrast to forward contracts, futures contracts are standardised.

COMPARISON BETWEEN FUTURE AND FORWARD CONTRACT :

Forward and Future Contracts: What Is the Difference?

Characteristics	Forward Contract	Future Contract
Meaning	An agreement entered into by two parties to trade assets in future and at an agreed-upon rate	An agreement where parties agree to sell fixed assets at fixed prices in the future
Form	Unique contract	Standard contract
Settlement	Upon maturity	Anytime
Regulation	None - self regulated	Regulated by the stock exchange
Trading	Over the counter	Organized stock exchange platform

Source:https://investinganswers.com/sites/www/files/forward-and-future-contracts-table.jpg

8.2 NON-DELIVERABLE FORWARDS

A cash-settled, typically short-term forward contract is known as a Non-Deliverable Forward (NDF). Non-deliverable transactions are those in which the notional amount is never exchanged. For a predetermined sum of money—or, in the case of a currency NDF, at a predetermined rate—two parties consent to take opposing sides in a transaction. This means that the difference between the contracted NDF price and the current spot

price is settled between counterparties. The difference between the agreed-upon rate and the spot rate at the time of settlement is used to determine the profit or loss on the notional amount of the agreement.

A two-party currency derivatives contract known as a non-deliverable forward (NDF) is used to swap cash flows between the NDF and current market rates. The discrepancy resulting from the comparison between this exchange.

Cash flow = (NDF rate - Spot rate) * Notional amount

NDFs are frequently quoted for time periods ranging from one month to one year and are traded over-the-counter (OTC). They have gained popularity among firms looking to hedging exposure to illiquid currencies during the 1990s and are most usually quoted and settled in U.S. dollars. A non-deliverable forward (NDF) is typically carried out offshore, i.e., away from the illiquid or untraded currency's domestic market. For instance, it won't be feasible to settle the transaction in a currency with a party outside the restricted country if that money is prohibited from moving offshore.

The NDF can, however, be resolved between the two parties by changing each party's earnings and losses from the contract into a freely tradable currency. The earnings or losses can then be divided among them in that freely traded currency. Having said that, illiquid markets or currencies are not the only ones that use non-deliverable forwards. They can be utilised by parties that are not interested in providing or receiving the underlying product but are trying to hedge or expose themselves to a certain asset.

All NDF contracts specify the currency pair, notional amount, fixing date, settlement date, and NDF rate. They also specify that the transaction will be settled at the spot rate in effect on the fixing date. The calculation of the difference between the current spot market rate and the agreed-upon rate takes place on the fixing date. The settlement date is the deadline by which the party receiving payment must pay the difference. An NDF settles more like a forward rate agreement (FRA) than like a conventional forward contract.

There could be a non-deliverable forward between the two parties if one agrees to buy U.S. dollars (sell yuan) and the other agrees to buy Chinese yuan (sell dollars). They settle on a 6.41 percent interest rate on a million dollars. In one month, the fixing date will be set, and settlement will follow soon after. The value of the yuan in relation to the dollar has increased if the rate is 6.3 after one month. Money is owing to the entity that purchased the yuan.The party who purchased U.S. dollars is owed money if the rate rose to 6.5 since the value of the yuan has declined (the value of the dollar has climbed).

The Chinese yuan, Indian rupee, South Korean won, New Taiwan dollar, Brazilian real, and Russian ruble are the largest markets for NDF. NDF trading is primarily conducted in London, while there are other significant markets in New York, Singapore, and Hong Kong. The U.S. dollar serves as the primary medium of exchange for NDF trading. The euro, the

Japanese yen, and, to a lesser extent, the British pound and the Swiss franc, are also used in active markets.

8.3 CURRENCY FUTURES

Exchange-traded futures contracts known as currency futures define the price in one currency at which another currency may be purchased or sold at a later time. Currency futures contracts are enforceable in court, and counterparties who are still in possession of them on the contract's expiration date are obligated to produce the specified currency amount at the agreed-upon price on the agreed-upon delivery date. Currency futures can be used to speculate on currency price movements as well as to hedge other trades or currency concerns. In contrast to non-standardized currency forwards, which are traded over-the-counter, currency futures (OTC).

Futures contracts for currencies called "currency futures" describe the cost of exchanging one currency for another at a later time. The spot rates of the currency pair are used to calculate the rate for currency futures contracts. To protect against the danger of receiving payments in a foreign currency, one can use currency futures. The Chicago Mercantile Exchange (CME), which hosts the world's biggest currency futures market today, established the first currency futures contract in 1972. Contracts for future foreign exchange are daily marked-to-market. This means that traders are in charge of making sure they have enough money in their account to pay margins and any losses that may arise after taking a position.

Prior to the delivery date specified in the contract, futures traders can cancel their commitment to buy or sell the currency. By closing out the position, this is accomplished. Currency futures contracts are physically delivered four times a year on the third Wednesdays of March, June, September, and December, with the exception of those involving the Mexican Peso and South African Rand.

For instance, purchasing a Euro FX future at 1.20 on the U.S. exchange obligates the buyer to purchase Euros at $1.20 USD. They are accountable for purchasing 125,000 euros at $1.20 USD if they let the contract expire. The buyer would need to purchase this much since each Euro FX future on the Chicago Mercantile Exchange is worth 125,000 euros. On the other hand, the contract's seller would be required to deliver the euros and get US dollars. Speculators who liquidate their positions before to the futures expiration date make up the majority of participants in the futures markets. They fail to give the actual money in the end. Instead, they gain or lose money depending on how much the price of the futures contract changes.

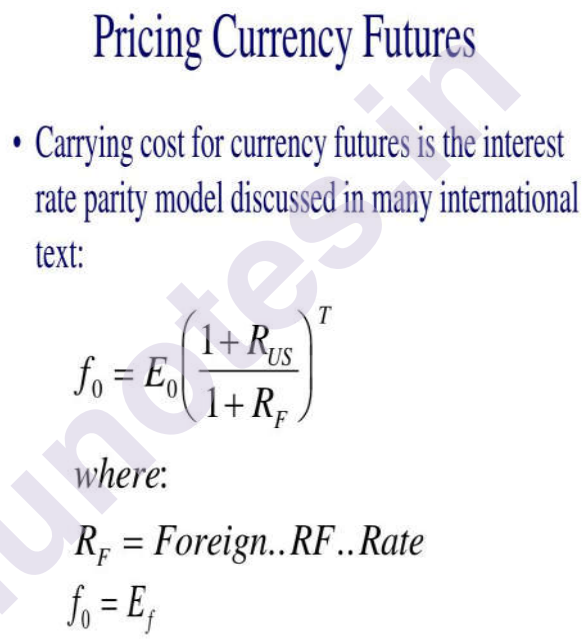
Currency Future Example :

Consider a fictitious corporation XYZ, a company with its headquarters in the United States, wants to protect against its anticipated receipt of 125 million euros in September since it is highly exposed to foreign exchange risk. The business might offer futures contracts on the euros they will be getting before September. The contract unit for euro FX futures is 125,000 euros. Because they are a U.S. corporation and don't require the

euros, they sell euro futures. As a result, they may sell them now and lock in a price at which the euros can be converted into dollars because they are certain they will receive euros.

1000 Euro futures contracts are sold by Company XYZ to cover its anticipated receipt. Consequently, the company's anticipated receipt is safeguarded if the euro declines in value relative to the dollar. As a result of their rate lock, they are able to sell their euros at that rate. However, the corporation forfeits any gains that might result from an increase in the value of the euro. The gain (compared to the price in August) they would have made if they had not sold the contracts must be forfeited because they are still required to sell their euros at the price of the futures contract.

8.4 PRICING CURRENCY FUTURES



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8.5 HEDGING, SPECULATION AND ARBITRAGE WITH FORWARDS AND FUTURES

HEDGING:

Hedging in the stock market is a technique to preserve your portfolio, which is frequently just as vital as portfolio growth. Hedging is frequently described in broader terms than are its explanations. It is not, nonetheless, an obscure term. Even if you are just starting out as an investor, understanding what hedging is and how it functions can be helpful. By establishing a contrary position in a comparable asset, investors can use the risk management technique of hedging to offset losses on their investments. Potential gains are often reduced as a result of the risk

reduction offered by hedging. Hedging is paying a premium in exchange for the security it offers. Derivatives like options and futures contracts are frequently used in hedging strategies.

Hedging is best understood by considering it to be a type of insurance. When someone chooses to hedge, they are protecting their finances from the effects of a bad incident. This does not guarantee that all bad things won't happen. However, the impact of a terrible incident is lessened if you have adequate insurance coverage. Hedging happens practically everywhere in reality. You can protect yourself against fires, break-ins, and other unforeseeable tragedies by purchasing homeowner's insurance, for instance.

Hedging strategies are used by portfolio managers, individual investors, and businesses to lessen their exposure to certain risks. Hedging, however, is more complex in the financial markets than simply paying an insurance provider a premium each year for coverage. Using financial instruments or market techniques systematically to balance the risk of any unfavourable price swings is known as hedging against investment risk. To put it another way, investors use a trade in another investment to protect one investment. To technically hedge, you must execute opposing trades in securities that have low correlations. Of course, you will still need to pay for this insurance in some way.

Example of Hedging :

For instance, if you hold shares of the XYZ Corporation, you can purchase a put option to hedge against sharp declines in the value of your stock. However, you must pay the option's premium in order to purchase it. Therefore, lowering risk always lowers the likelihood of reward. Therefore, hedging is primarily a strategy designed to minimise prospective losses (and not maximise a potential gain). In the event that the investment you are hedging against is profitable, you have typically also decreased your prospective profit. If your hedge was effective and the investment loses money, you will have lessened your loss.

Using derivative financial instruments is a common component of hedging strategies. Option contracts and futures are two of the most popular derivatives. You can create trading strategies using derivatives where a loss in one investment is balanced out by a gain in another.

Let's say you are a shareholder in Cory's Tequila Corporation (ticker: CTC). Despite your long-term confidence in the company, you are concerned about some potential short-term losses in the tequila market. You can purchase a put option on the firm, which provides you the right to sell CTC at a specified price, to hedge against a decline in CTC (also called the strike price). This tactic is referred to as a married put. Losses incurred if your stock price drops below the strike price will be partially offset by put option gains.

Another traditional illustration of hedging concerns a business that relies on a specific commodity. Let's say Cory's Tequila Corporation is concerned about agave prices fluctuating (the plant used to make tequila). If agave prices skyrocketed, the business would be in serious difficulties because this would negatively affect their profitability.

CTC has the option to enter into a futures contract to protect itself from the volatility of agave prices (or its less-regulated cousin, the forward contract). A futures contract is a kind of hedging tool that enables the business to purchase the agave at a particular price at a predetermined point in the future.CTC may now plan its budget without being concerned about agave's changing price.

This hedging approach will be successful if the price of agave skyrockets over the price stipulated by the futures contract since CTC will save money by paying the lower price. However, CTC is still bound to pay the agreed-upon price even if it decreases. They would have been better off not hedging against this risk, thus they should have done so. An investor can hedge against almost anything because there are so many different forms of options and futures contracts, including stocks, commodities, interest rates, and currencies.

Each hedging technique has a price attached to it. Therefore, you should consider whether the possible advantages outweigh the cost before deciding to employ hedging. Keep in mind that the purpose of hedging is to safeguard against losses, not to make money. It is impossible to avoid paying for a hedge, whether it is the price of an option or losing earnings from being on the wrong side of a futures contract. Although it's tempting to contrast insurance and hedging, insurance is much more exact. When you have insurance, your loss is fully covered (usually minus a deductible). A portfolio's hedging is not an exact science. Things can go wrong very easily. Although risk managers constantly strive for the ideal hedge, it is incredibly challenging to implement.

SPECULATION :

Speculation, often known as speculative trading, is the act of engaging in a financial transaction that carries a considerable risk of losing value but also carries the hope of a sizable gain or other significant value. With speculation, the chance of a sizable gain or other form of compensation more than offsets the risk of loss.

The act of engaging in a financial transaction that carries a high risk of value loss but also carries the expectation of a sizable gain is referred to as speculation. There wouldn't be much incentive to speculate without the promise of huge gains. Think about whether speculation is influenced by the type of asset, the anticipated length of the holding term, and/or the level of leverage used.

A speculative investment buyer is probably preoccupied with price changes. Despite the high level of risk involved in the investment, the investor is often more focused on making money based on fluctuations in

the investment's market value than on long-term investing. Currency speculation is the practise of investing speculatively when buying foreign currency is involved. In this case, an investor purchases a currency with the intention of selling it at a higher price in the future as opposed to an investor who purchases a currency to fund an import or a foreign investment.

There wouldn't be much incentive to speculate without the promise of huge gains. Sometimes it can be challenging to distinguish between speculation and straightforward investment, forcing the market participant to think about whether speculation or investment depends on factors that gauge the asset's nature, the anticipated length of the holding period, and/or the amount of leverage used on the exposure.

When purchasing a house with the goal to rent it out, for instance, the boundary between investment and speculation in real estate can become hazy. Even if this would count as investment, purchasing several condos with little down payment in order to sell them off soon and for a profit would surely be viewed as speculating.

Speculators can increase market liquidity and reduce the bid-ask spread, which helps producers effectively manage price risk. Through betting against favourable results, speculative short-selling may also rein in rabid bullishness and stop asset price bubbles from forming. Mutual funds and hedge funds frequently speculate in the bond, stock, and foreign exchange markets.

With an estimated $6.6 trillion changing hands between buyers and sellers each day on the forex markets, they operate at the largest volume and monetary value in the whole world. Using lightning-fast electronic trading platforms, positions can be taken and reversed in this market 24 hours a day, anywhere in the globe.

Spot deals to purchase and sell currency pairings, like EUR/USD (Euro-US Dollar), for delivery through options or straightforward exchange are a common component of transactions. Asset managers and hedge funds with multibillion dollar portfolios rule this market. It can be challenging to distinguish between normal hedging procedures—where a business or financial institution buys or sells a currency to protect against market fluctuations—and speculation in the forex markets.

Example of Speculation :

For instance, the sale of foreign currency in connection with the purchase of bonds may be regarded as either a common speculative move or a hedge of the bond's value. If the currency position is repeatedly bought and sold while the fund owns the underlying bond, it may become difficult to clearly describe these relationships.

ARBITRAGE :

Arbitrage is the simultaneous purchase and sale of a single asset or a group of related assets in various markets with the goal of making a profit from minute variations in the asset's quoted price. It takes advantage of brief fluctuations in the cost of identical or comparable financial products on various markets or in various forms. Market inefficiencies give rise to arbitrage, which both takes advantage of and corrects them.

Arbitrage is the simultaneous acquisition and disposal of an asset in many marketplaces in an effort to take advantage of minute price variations. Arbitrage transactions are made in equities, commodities, and currencies. Arbitrage makes use of the inescapable market inefficiencies. But arbitrage gets markets closer to efficiency by taking advantage of inefficiencies. Any time a stock, commodity, or piece of currency can be bought at one price on one market and simultaneously sold at a greater price on another, arbitrage can be used. The circumstance offers the trader the chance to benefit without taking any risks.

Arbitrage offers a way to make sure that prices don't diverge significantly from fair value over an extended period of time. Technology improvements have made it very challenging to profit from pricing mistakes in the market. A lot of traders have automated trading programmes configured to track changes in similar financial instruments. Any ineffective price structures are typically addressed immediately, frequently within a few seconds, and the opportunity is lost.

COMPARISON BETWEEN HEDGING AND SPECULATION :

HEDGING	SPECULATING
Pursuing a strategy to mitigate a risk event, due to changing interest rates, from impacting earnings	Betting on the direction interest rates will move with the hope of earning profits
Managing the volatility of interest rates	Seeking out volatile markets, and trading in and out of underlying assets whose value is impacted by the movement of rates
Seeking protection against undesired fluctuation of interest rates	Taking on risk to generate profits from fluctuating interest rates
Seeking risk adverse outcomes – reducing variability in income, expense and margin	Take on risk deliberately with the hope to earn profits

Source: https://static.wixstatic.com/media/ de837a_e1a4a817 bc9141e9 baea03416 fbe72d6~mv2.png/v1/fit/w_ 1000%2Ch_744 %2Cal_c/file.png

8.6 SUMMARY

- **Future Contract :** A futures contract is a legal agreement to buy or sell a particular commodity asset, or security at a predetermined price at a specified time in the future.

- **Forward Contract :** A forward contract is a **customizable derivative contract between two parties to buy or sell an asset at a specified price on a future date.**

- **Hedging :** A hedge fund is a limited partnership of private investors whose money is managed by professional fund managers who use a wide range of strategies, including leveraging or trading of non-traditional assets, to earn above-average investment returns.

- **Speculation :** In the world of finance, speculation, or speculative trading, refers to **the act of conducting a financial transaction that has substantial risk of losing value but also holds the expectation of a significant gain or other major value.**

- **Arbitrage :** Arbitrage is the simultaneous purchase and sale of the same or similar asset in different markets in order to profit from tiny differences in the asset's listed price.

8.7 QUESTIONS

1. Distinguish between Future and Forward Contract.
2. Explain the Hedging in detail.
3. Explain the Arbitrage in detail.
4. Explain Speculation in detail.
5. Explain how Forward Contract works.
6. Explain how Future Contract works.
7. A _____ contract is a legal agreement to buy or sell a particular commodity asset, or security at a predetermined price at a specified time in the future.
8. _____ contract is a **customizable derivative contract between two parties to buy or sell an asset at a specified price on a future date.**
9. A _____ fund is a limited partnership of private investors whose money is managed by professional fund managers who use a wide range of strategies, including leveraging or trading of non-traditional assets, to earn above-average investment returns.

10. _____refers to **the act of conducting a financial transaction that has substantial risk of losing value but also holds the expectation of a significant gain or other major value.**
11. _____is the simultaneous purchase and sale of the same or similar asset in different markets in order to profit from tiny differences in the asset's listed price.

8.8 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- Jeff Madura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.investopedia.com

9

CURRENCY OPTIONS

Unit Structure :

9.0 OBJECTIVES

- To study Currency Options.
- To understand Option terminologies.
- To study Hedging with Currency Options
- To understand Participating forward, range forward, zero cost collar, Barrier options.
- To study Asian Options and Innovations in options.

9.1 INTRODUCTION

The right to buy or sell currencies at set prices is provided by currency options. The Australian dollar, British pound, Brazilian real, Canadian dollar, euro, Japanese yen, Mexican peso, New Zealand dollar, Russian ruble, South African rand, and Swiss franc are just a few of the various currencies in which they are offered. A contract that grants the buyer the right, but not the responsibility, to purchase or sell a specific currency at a

particular exchange rate on or before a set date is known as a currency option (also known as a forex option). The vendor receives a premium in exchange for this right. One of the most popular strategies used by businesses, people, and financial institutions to protect themselves from unfavourable changes in exchange rates is through the use of currency options.

Contracts for currency options can be put or called. The right to purchase a specific currency at a specific price (referred to as the strike price or exercise price) within a specific time frame is offered by a currency call option. It is applied as a payables hedge. The right to sell a specific currency at a specific price within a specific time frame is offered by a currency put option. It is applied to future receivables hedging. On an exchange, call and put options on currencies can be acquired. Since there is no obligation, they provide more freedom than forward or futures contracts. The company has the option to decide not to exercise the option.

The use of currency options as a hedge has grown in popularity. About 30 to 40 percent of the Coca-Cola Company's forward contracts have been replaced with currency options. Even though forward contracts are used by the majority of MNCs, many of them also use currency options.

9.2 OPTION TERMINOLOGIES

1. **Spot Rate**: The spot rate is the current exchange rate.
2. **Strike Price**: The strike price is the exchange rate at which the contract can be exercised.
3. **Call and Put Options**: A call option provides the buyer with the right to buy a currency at the strike price. A put option provides the buyer with the right to sell a currency at the strike price. Buying a call on USD is the same as buying a put on the CAD because in both cases, the buyer is selling CAD for USD.
4. **Expiration Date**: An expiration date provides the time frame in which the option contract is valid.
5. **Contract Size**: The contract size is an essential element that determines how much currency is being settled.
6. **American vs European Options**: American options can be exercised by the buyer at any point prior to and on the expiration date. European options are limited only to be exercised on the expiration date.
7. **In the Money and Out of the Money**: In-the-money occurs when the option can be exercised, allowing the buyer to buy at the strike price that is better than the spot rate. Out-of-the-money occurs when the option will not be exercised because it is more expensive than buying at the spot rate.
8. **Premium**: The premium is the amount paid by the buyer to the seller for the options contract. The premium amount is determined by supply

and demand, as well as if the strike price is in-the-money or out-of-the-money.

OPTIONS PAY-OFFS:

A derivative, or contract, is an option that grants the buyer the right but not the responsibility to purchase or sell the underlying asset by a particular date (expiration date) at a particular price (strike price). Options come in two varieties: calls and puts. Options of the American variety may be exercised at any moment before they expire. Only the expiration date can be used to exercise European-style options. The buyer must pay an option premium in order to enter into an option contract. The two most popular options are called calls and put options:

Call Option :

Calls grant the buyer the option—but not the obligation—to purchase the underlying asset at the option contract's designated strike price. Investors purchase calls when they anticipate a gain in the price of the underlying asset and sell calls when they anticipate a decrease.

Put Option :

The buyer of a put has the option, but not the responsibility, to sell the underlying asset at the contract's designated strike price. If the put buyer exercises their option, the writer (seller) of the put option is compelled to purchase the asset. Investors purchase puts when they anticipate a decline in the underlying asset's price and sell puts when they anticipate a gain.

PAYOFFS FOR OPTIONS: CALLS AND PUTS :

The option premium for a call option is fully paid by the buyer at the time the contract is signed. After then, if the market shifts in his favour, the buyer can potentially profit. There is no chance that the option will cause a loss in excess of what was paid for it. One of the most alluring aspects of purchasing alternatives is this. The buyer secures a limitless profit potential with a known and severely constrained loss possibility for a little investment.

The investor loses the money they paid for the option if the spot price of the underlying asset does not increase over the option's strike price before it expires. However, the call buyer gets money if the value of the underlying asset does rise over the strike price. The profit is calculated as the difference between the market price and the option's strike price, multiplied by the underlying asset's incremental value, and deducted from the option's purchase price.

For instance, 100 shares of the underlying stock are covered by a stock option. Let's say a trader purchases a single call option contract with a $25 strike price on the ABC stock. He buys the option for $150. The price of shares of ABC stock on the option's expiration date is $35. The buyer/owner of the option makes use of his right to buy 100 shares of

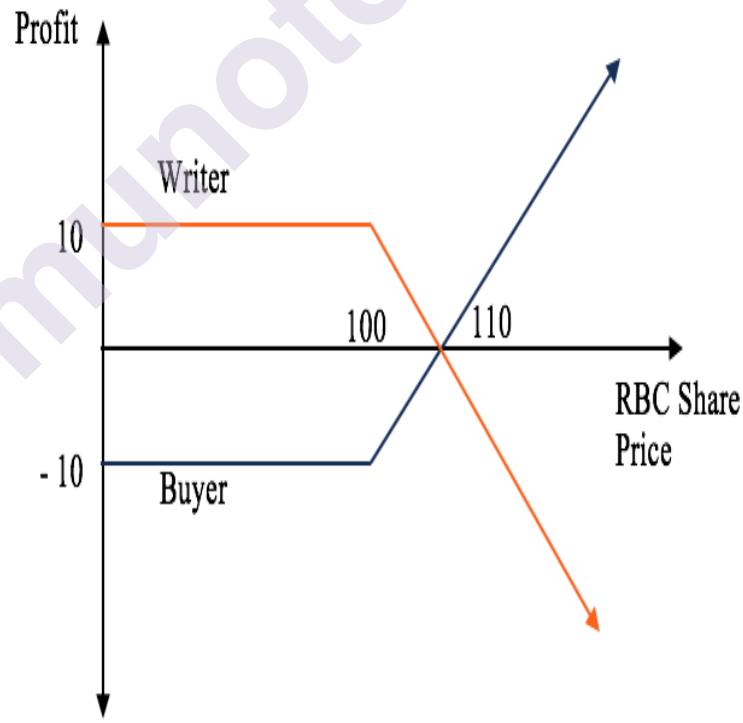
ABC at the strike price of $25 per share. At the $35 per share going rate on the market, he sells the shares right away.

He purchased 100 shares for $2,500 ($25 x 100), and he later sold them for $3,500 ($35 x 100). He will make $1,000 ($3,500 - $2,500) in profit from the option after deducting the $150 option premium. As a result, his net profit after transaction charges is $150, or $850. For just a $150 investment, that's a pretty nice return on investment (ROI).

Selling Call Options :

The downside for the call option seller is virtually limitless. The writer of the option suffers a loss since the spot price of the underlying asset is higher than the strike price (equal to the option buyer profit). The option expires worthless if the market value of the underlying asset does not rise above the strike price. In proportion to the price they paid for the option, the option seller makes a profit.

The possible payoff for a call option on RBC stock with a $10 option premium and a $100 strike price is illustrated in the example below. If the share price of RBC does not rise over $100 in the example, the buyer suffers a $10 loss. In contrast, the call's author is profitable as long as the share price stays below $110 per unit.



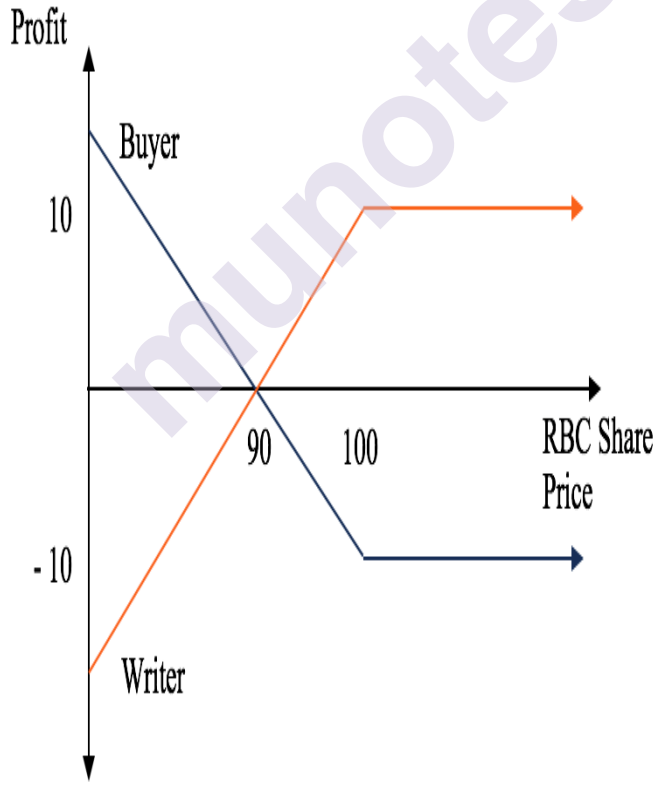
Source: https://cdn.corporatefinanceinstitute.com/assets/options-calls-and-puts01.png

PUTS:

The right to sell the underlying asset at the option strike price is granted to the buyer of a put option. The amount that the spot price deviates from the strike price determines how much the option buyer will profit. The put buyer is "in-the-money" if the spot price is lower than the strike price. The option will not be exercised if the current price stays higher than the strike price. Once more, the option buyer's loss is strictly capped at the option premium.

If the spot price of the underlying asset is less than the contract's strike price, the put writer is "out-of-the-money." Their loss is equal to the gain of the put option buyer. The option expires without being exercised and the writer keeps the option premium if the spot price stays above the contract's strike price.

The payoff for a hypothetical 3-month RBC put option with a $100 strike price and a $10 option premium is depicted in the figure below. The possible loss for the buyer (blue line) is capped at the $10 price of the put option contract. If the stock price stays over $90, the put option seller, or writer, is in-the-money.



Source:https://cdn.corporatefinanceinstitute.com/assets/options-calls-and-puts02.png

9.3 HEDGING WITH CURRENCY OPTIONS

The ability to buy or sell a foreign currency contract at a certain price on a specific date is provided by foreign currency options. The owner of the option is not compelled to exercise the option under this hedging strategy, unlike forward contracts. If currency movements have rendered exercising the option lucrative for him/her, the contract buyer may do so at the agreed price (referred to as the strike price) when the precise date (known as the expiration date) of the contract approaches. If changes have rendered the choice worthless, it expires without being used by the business or person.

9.4 RANGE FORWARD

A range forward contract is a zero-cost forward contract that uses two derivative market positions to generate a range of exercise prices. A range forward contract is designed to offer defense against unfavourable changes in exchange rates while maintaining some upside potential to profit from advantageous currency moves.

In order to protect against currency market volatility, range forward contracts are most frequently utilized. In order to provide settlement for funds within a range of prices, range forward contracts are built. They need to hold two positions in the derivative market, which establishes a range for settlement at a later date.

A trader must use two derivative contracts to take long and short positions in a range forward contract. Usually, the net cost of the two jobs together is zero. To manage currency risks from overseas clientele, large firms frequently use range forward contracts.

9.5 ZERO COST COLLAR

A zero-cost collar is a type of options collar strategy that involves buying call and put options that cancel each other out in order to limit a trader's losses. The disadvantage of this method is that returns are limited if the value of the underlying asset rises. To protect against price volatility in an underlying asset, adopt a zero-cost collar method. The purchase of call and put options that set a ceiling and floor on gains and losses for the derivative is a zero-cost collar approach. Because premiums or prices for various alternatives may not always match, it could not always be profitable.

In a zero-cost collar approach, one half of the strategy spends money to offset the expense experienced by the other half. After taking a long position in a stock that has seen significant gains, this protective options technique is used. The investor sells a covered call and purchases a defensive put. This tactic is also known as hedge wrappers, zero cost options, and equity risk reversals. The investor purchases an out-of-the-money put option and simultaneously sells or writes an out-of-the-money call option with the same expiration date to construct a zero cost collar.

Source:https://th.bing.com/th/id/OIP.fQq_Krtc9Ev2HqUF9bhwPAHaEt?w=267&h=180&c=7&r=0&o=5&dpr=1.3&pid=1.7

9.6 PARTICIPATING FORWARD

A foreign exchange instrument that enables importers and exporters to control their currency risk and take advantage of positive market trends. A protection rate for a given currency amount for a future settlement date will be agreed upon.

An instrument that combines forward and option trading is a participation forward. You divide the amount you wish to hedge or protect into two halves. One component function like a typical forward contract. To put it another way, you bind yourself legally to exchanging a specific sum of foreign currency at a specific rate on a specific date. The second component functions similarly to a typical financial option product. In other words, you have the option—but not the requirement—to exchange a given quantity of foreign currency at a particular rate on a particular date. You decide how to divide. You might choose a ratio of 50:50 (50 percent forward and 50 percent choice), 60:40, or perhaps another one that makes more sense to you.

Nevertheless, there will be a single exchange rate that applies to the entire contract. This rate is referred to as the worst-case rate. Participating

forwards don't force you to pay a premium to lock in your worst-case rate like regular options do. Additionally, you are only required by law to complete the forward portion of the transaction. Therefore, you can still profit from the market exchange rate if it is higher than the "worst-case rate."

On the other hand, because forward contracts constitute a legal obligation, there is a limit to how much you can profit from a favourable exchange rate as you will always have to exchange some of the money at the worst-case rate. Additionally, the worst-case rate is less favourable than the rate you would receive from a typical forward contract. You compensate for not paying a premium for the option with the worse rate.

9.7 BARRIER OPTIONS

The payment of a barrier option, a particular kind of derivative option contract, is based on the value of the underlying asset. Alternatively put, the payoff only occurs if the asset underlying the barrier options reaches or exceeds a predefined price specified in the option contract. If the price of the underlying asset rises over a specific level, a barrier option may expire worthless (a knock-out option), reducing the option holder's profit and the option writer's losses (seller). The barrier option may be a knock-in option, meaning that it is worthless until the underlying asset reaches a specific price.

Due to the fact that barrier choices have more features than standard American and European options, they are regarded as exotic options. Since barrier options' values fluctuate together with the value of the underlying assets, they are also known as path-dependent options.When the value of the underlying asset surpasses a specific price threshold, the option may be exercised.

Classification of Barrier Options:

Barrier options are classified into the following:

1. **Knock-in barrier option**:

A knock-in barrier option is a type of barrier option where the associated rights begin to exist once the price of the underlying asset is reached. The holder can only exercise the option at and after the price reaches a specific level in the open market, according to this clause. The barrier option becomes a vanilla option and is priced accordingly if the knock-in price level is reached at any point during the barrier option's contract term. The knock-in barrier option expires worthless if the knock-in price level is never achieved.

Options for knock-in barriers are further divided into options that are up-and-in or down-and-in.

- An up-and-in barrier option's option contract doesn't begin until the underlying asset's price crosses the predefined price barrier.

- On the other hand, if it is a down-and-in barrier option, it becomes valid as soon as the value of the underlying asset falls under the first established barrier price.

2. Knock-out barrier options:

When the underlying asset encounters a barrier during the contract's time horizon, knock-out barrier options lose their validity. Possibilities for knocking down barriers can also be divided into up-and-out and down-and-out options.

a. When the price of the underlying security rises above the barrier that was established above the starting price of the underlying security, an up-and-out option ceases to exist.

b. A down-and-out option terminates when the underlying security drops below the barrier that was established below the underlying security's initial price. The option is cancelled or knocked out if an asset that supports the barrier option crosses the barrier at any time during the option's term.

9.8 ASIAN OPTIONS

As opposed to normal options (American and European), which base their reward on the price of the underlying asset at a certain moment in time, Asian options base their payoff on the average price of the underlying asset over a specified period of time (maturity). With these options, the buyer can buy (or sell) the underlying asset at the average price rather than the current market rate.

Average options are another name for Asian options. The word "average" might be interpreted in a number of different ways, and the options contract needs to make that clear. The price of the underlying asset at specific intervals, which are also mentioned in the options contract, is often averaged geometrically or arithmetically to determine the average price. The averaging mechanism accounts for the relatively low volatility of Asian options. They are employed by traders who have long-term exposure to the underlying asset, including buyers and sellers of commodities, etc.

Asian options fall under the category of "exotic options," which are utilised to address specific business issues that conventional options cannot. They are created by making slight adjustments to common settings. Asian options typically cost less than their conventional counterparts, though this is not always the case because the average price is less volatile than the spot price.

When a company is worried about the average exchange rate over time, for example.

1. When a specific price at a particular moment might be manipulated.

2. When the underlying asset's market is very volatile.

3. When pricing is inefficient as a result of light market activity (low liquidity markets).

9.9 INNOVATION IN OPTIONS

Innovation Options evaluate efforts based on the flexibility they offer the company in the present, not on irrational forecasts about the future. When dealing with uncertain or untested markets, this kind of risk management is more accurate, practical, and sound.

9.10 SUMMARY

a. Options are a type of derivative that grant the buyer the right, but not the duty, to purchase or sell the underlying asset by a particular date (the expiration date) at a specific price (strike price).

b. Currency Options provide you the opportunity to buy or sell currencies at predetermined rates.

c. A range forward contract is a zero-cost forward contract that uses two derivative market positions to create a range of exercise prices.

d. A barrier option is a specific kind of derivative option contract, and its payout is based on the value of the underlying asset.

e. When the price of the underlying security rises above the barrier established above the starting price of the underlying security, an up-and-out option ceases to exist.

f. When the price of the underlying security drops below the barrier that was established below the underlying security's opening price, the down-and-out option ceases to exist. The option is cancelled or knocked out if an asset that supports the barrier option crosses the barrier at any time during the option's term.

g. Asian Options give the buyer the option of buying (or selling) the underlying asset at the average price rather than the current market rate.

9.11 QUESTIONS

1. Explain how Option Payoffs works.

2. how Hedging with Currency Option works.

3. Explain Range Forward in detail.

4. Short Note on Zero cost collar.
5. Short Note on Participating forward.
6. Short Note on Barrier options.
7. Short Note on Asianoptions.
8. Short Note on Types of Barrier Options.
9. An _____ is a derivative, a contract that gives the buyer the right, but not the obligation, to buy or sell the underlying asset by a certain date (expiration date) at a specified price (strike price).
10. _____ provide the right to purchase or sell currencies at specified prices.
11. _____ contract is a zero-cost forward contract that creates a range of exercise prices through two derivative market positions.
12. _____ is a type of derivative option contract, the payoff of which depends on the value of the underlying asset.
13. _____ stops existing when the underlying security moves above the barrier that was set above the initial price of the underlying security.
14. _____stops existing when the underlying security moves below the barrier that was set below the initial price of the underlying security. If an asset underlying the barrier option strikes the barrier anytime during the option's life, the option is terminated or knocked out.
15. _____ options allow the buyer to purchase (or sell) the underlying asset at the average price instead of the spot price. The option contract starts only when the price of the underlying asset exceeds the predetermined price barrier.
16. _____, it turns valid as the underlying asset value drops below the initially set barrier price.

9.12 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- Jeff Madura, International Financial Management

- Siddaiah, International Financial Management : An Analytic Framework
- www.corporatefinanceinstitute.com
- www.investopedia.com
- www.wikihow.com
- www.assurehedge.com
- www.dbinetti.com

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10

SWAPS

Unit Structure :

10.0 OBJECTIVES

- To understand the concept of Swaps.
- To study Interest Rate Swaps.
- To study Currency Swaps.

10.1 INTRODUCTION

There are two main families of derivatives contracts: Contingent claims, first (e.g., options) 2. Forward claims, such as swaps, forward contracts, and exchange-traded futures. An agreement to swap cash flow sequences for a predetermined amount of time is known as a swap. At least one of this series of cash flows is typically decided by a random or unknown variable at the time the contract is initiated, such as an interest rate, foreign exchange rate, equities price, or commodity price.Conceptually, a swap could be compared to a collection of forward contracts or to holding long positions in one bond and short positions in another bond. The two most popular and fundamental types of swaps—interest rate and currency swaps—are covered in this chapter.

10.2 MEANING

Through a derivative contract known as a swap, two parties can exchange the liabilities or cash flows from two various financial instruments. Although the instrument can be almost anything, most swaps involve cash flows based on a notional principal amount, such as a loan or bond. The

principal typically doesn't change hands. One leg of the swap is made up of every cash flow. One cash flow is often constant, whereas the other is variable and dependent on an index price, a benchmark interest rate, or a fluctuating currency exchange rate.

An interest rate swap is the most typical type of exchange. In general, swaps are not traded on exchanges or used by regular investors. Instead, swaps are specialized over-the-counter (OTC) contracts that are made to meet the interests of both parties and are typically made between businesses or financial organizations.

10.3 INTEREST RATE SWAPS

A forward contract known as an interest rate swap exchanges one stream of future interest payments for another based on a predetermined principal sum. In order to decrease or increase exposure to interest rate swings or to achieve a somewhat lower interest rate than would have been achievable without the swap, interest rate swaps often include the exchange of a fixed interest rate for a floating rate, or vice versa. A basis swap, which involves trading one kind of floating-rate for another, is another example of a swap.

With interest rate swaps, one set of cash flows is exchanged for another. The contracts are between two or more parties according to their desired parameters and can be tailored in many different ways because they trade over-the-counter (OTC). If a business can readily borrow money at one type of interest rate but wants another, swaps are frequently used.

TYPES OF INTEREST RATE SWAPS :

There are three different types of interest rate swaps:

1. Fixed-to-floating,
2. floating-to-fixed, and
3. float-to-float.

1. Fixed-to-Floating :

Consider the case of TSI, a business that may offer its investors bonds with very appealing fixed interest rates. The management of the organisation believes that a variable rate will result in a greater cash flow. In this situation, TSI may agree to a swap with a bank acting as the counterparty, whereby the firm obtains a fixed rate and pays a fluctuating rate.

The two fixed-rate payment streams are netted, and the exchange is constructed to match the fixed-rate bond's maturity and cash flow. The preferred floating-rate index is selected by TSI and the bank; it is typically LIBOR for a one-, three-, or six-month duration. Then, TSI receives LIBOR plus or minus a spread that takes into account both market interest rate situations and its credit ratings.

2. Floating-to-Fixed :

If a corporation can't get a fixed-rate loan, it can borrow money at a floating rate and use a swap to get a fixed rate. The loan's floating-rate tenor, reset, and payment dates are mirrored and netted on the swap. The swap's fixed-rate component becomes the business's borrowing rate.

3. Float to Float :

Basis swaps are contracts that businesses occasionally enter into to alter the kind or duration of the variable rate index that they pay. For instance, if the six-month LIBOR rate is more desirable or aligns with other payment flows, a corporation may switch from the three-month LIBOR to it. A business may alternatively choose another index, such as the federal funds rate, the price of commercial paper, or the rate on Treasury bills.

10.4 CURRENCY SWAP

The exchange of interest—and occasionally principal—in one currency for the equivalent amount in another is known as a currency swap, often known as a cross-currency swap. Throughout the term of the contract, interest payments are exchanged at predetermined intervals. It is regarded as a foreign exchange transaction, and a company's balance sheet is not obliged by law to include it.

To get past exchange controls, which are governmental restrictions on the buying and/or sale of currencies, currency swaps were initially conducted. Foreign exchange restrictions are typically used by countries with weak or developing economies to prevent currency speculation, but most industrialised economies now no longer impose them. Therefore, swaps are currently most frequently performed to protect long-term investments and alter the parties' exposure to interest rates. Businesses that operate internationally frequently utilise currency swaps to obtain loans at more favourable rates in the local currency than they might if they obtained a loan from a bank in that nation.

In a currency swap, the parties predetermine whether or not they would first exchange the major amounts of the two currencies. The inferred exchange rate is determined by the two primary sums. A swap including the exchange of €10 million for €12.5 million, for instance, results in an assumed EUR/USD exchange rate of 1.25. Exchange rate risk arises from the requirement to exchange the same two principle amounts at maturity since the market might have moved away from 1.25 in the interim.

Based on interest rate curves at the time of commencement and the credit risk of the two parties, pricing is typically expressed as London Interbank Offered Rate (LIBOR), plus or minus a specific number of points. One can exchange currencies in a number of ways. Many swaps only use notional principal amounts, which implies that the principal amounts are not really traded but are instead used to calculate the interest due and payable each period. If the entire principal is exchanged when the transaction is signed, the exchange is then reversed at the deal's maturity. Currency swaps are a

relatively flexible kind of foreign exchange because their maturities can be negotiated for at least 10 years. Both fixed and fluctuating interest rates are possible.

RISKS OF INTEREST RATE SWAPS AND CURRENCY SWAPS :

- **Interest rate risk** is the possibility that interest rates will decline before the swap bank can release a counterparty on the other side of an interest rate swap agreement.
- **Exchange-rate risk** is the risk that the swap bank encounters as a result of changing exchange rates while the bank is laying off a swap it has with one counterparty with an opposite counterparty.
- **Credit risk :** The main risk a swap broker faces is credit risk. It speaks of the possibility of a counterparty defaulting. The swap bank that is in the middle of the two counterparties has obligations exclusively to the counterparty that is not in default. Each counterparty and the swap bank are parties to a separate agreement.
- **Basis risk** refers to a situation in which the floating rates of the two counterparties are not pegged to the same index. Any difference in the indexes is known as the basis. For example, one counterparty could have its FRNs pegged to LIBOR, while the other counterparty has its FRNs pegged to the U.S. Treasury bill rate. In this event, the indexes are not perfectly positively correlated and the swap may periodically be unprofitable for the swap bank. In our example, this would occur if the Treasury bill rate was substantially larger than LIBOR and the swap bank receives LIBOR from one counterparty and pays the Treasury bill rate to the other.
- **Mismatch Risk :** The difficulty of finding an exact opposite match for a swap the bank has agreed to take is referred to as mismatch risk. The mismatch could be with regard to the size of the principle sums the counterparties want, the individual debt issues' maturities, or the dates for debt service.
- **Sovereign Risk:**The likelihood that a nation may impose exchange limitations on a currency engaged in a swap is referred to as sovereign risk. Due to this, it could be extremely difficult or even impossible for a counterparty to fulfil their duty to the dealer. Provisions allow for the termination of the swap in this situation, costing the swap bank money.

The International Swaps and Derivatives Association (ISDA) has standardised two swap agreements to make it easier for the swap market to function. The "Interest Rate and Currency Swap Agreement" governs currency swaps, and the "Interest Rate Swap Agreement" specifies the general parameters for interest rate swaps denominated in U.S. dollars. The time needed to set up swaps has been shortened thanks to the standardised agreements, which also include provisions for early termination of swaps by a counterparty.

10.5 SUMMARY

- Swap: A swap is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments.
- Interest Rate Swap: An interest rate swap is a forward contract in which one stream of future interest payments is exchanged for another based on a specified principal amount.
- Currency Swap: A currency swap, sometimes referred to as a cross-currency swap, involves the exchange of interest—and sometimes of principal—in one currency for the same in another currency.

10.6 QUESTIONS

1. Explain the term Swaps.
2. Explain various types of Swaps.
3. Explain Currency Swaps.
4. Explain Interest Rate Swaps.
5. Explain different types of Interest Rate Swaps.
6. A _____ is a derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments.
7. An _____ is a forward contract in which one stream of future interest payments is exchanged for another based on a specified principal amount.
8. _____ sometimes referred to as a cross-currency swap, involves the exchange of interest—and sometimes of principal—in one currency for the same in another currency.

10.7 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.investopedia.com

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11

CAPITAL BUDGETING FOR INTERNATIONAL PROJECT INVESTMENT DECISIONS

Unit Structure :

11.0 OBJECTIVES

- To understand Capital Budgeting.
- To understand capital budgeting appraisal techniques in international project investments.

11.1 INTRODUCTION

The procedure a company uses to assess potential big projects or investments is called capital budgeting. Before a project is accepted or denied, capital budgeting is necessary. Examples of such projects include the construction of a new plant or a significant investment in a third-party enterprise. A business may examine the lifetime cash inflows and outflows of a planned project as part of capital budgeting to ascertain whether the projected returns will satisfy an adequate target benchmark. The practise of capital budgeting is sometimes referred to as investment assessment.

In an ideal world, firms would take advantage of any and all chances and projects that increase profit and value for shareholders. To choose the projects that will generate the best return throughout the course of the relevant time, management uses capital budgeting procedures since the amount of capital or money that each organisation has available for new projects is restricted.

11.2 DISCOUNTED CASH FLOW (DCF)

The term "discounted cash flow" (DCF) refers to a method of valuation that calculates an investment's value based on its anticipated future cash flows. Using estimates of how much money an investment will make in the future, DCF analysis seeks to evaluate the value of an investment today. It can aid those who are trying to decide whether to purchase securities or a firm. Business owners and managers can use discounted cash flow analysis to help them make decisions about operational and capital budgets.

The value of an investment is ascertained using discounted cash flow analysis using the investment's projected cash flows. The projected discount rate is used to calculate the present value of anticipated future cash flows. If the DCF is more than the investment's current cost, the opportunity may yield profits and be worthwhile. Because it takes into consideration the rate of return anticipated by shareholders, businesses frequently utilise the weighted average cost of capital (WACC) as the discount rate. The fact that DCF relies on potentially erroneous future cash flow projections is a drawback.

The goal of a DCF analysis is to calculate an estimate of the return on investment, taking time value into account. A dollar you have today is worth more than a dollar you receive tomorrow because it can be invested, according to the time value of money theory. As a result, a DCF analysis is helpful in any circumstance where someone is paying money now with the hope of obtaining more in the future.

EXAMPLE:

For instance, $1 in a savings account will be worth $1.05 after a year if the interest rate is 5%. Similar to this, if you cannot move a $1 payment to your savings account to collect interest, its current worth is just 95 cents.

Using a discount rate, discounted cash flow analysis determines the present value of anticipated future cash flows. The idea of the present value of money can be used by investors to assess whether the future cash flows of a project or investment will be more valuable than the initial investment.

Consider the opportunity if the computed DCF value is more than the investment's current cost. It may not be a good opportunity or additional research and analysis may be required before moving forward with it if the calculated value is less than the cost.

An investor must estimate future cash flows and the eventual value of the investment, machinery, or other assets in order to perform a DCF analysis. For the DCF model, the investor must also choose an appropriate discount rate, which will change based on the project or investment being considered. The discount rate used can be influenced by a number of variables, including the risk profile of the company or investor and the state of the capital markets.Alternative models should be used in place of DCF if the investor is unable to predict future cash flows or the project is too complex.

DISCOUNTED CASH FLOW FORMULA:

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \cdots \frac{CF_n}{(1+r)^n}$$

Where:

CF = Cash Flow
R = Discount Rate

CALCULATION OF DCF :

A corporation typically utilises its weighted average cost of capital (WACC) as the discount rate to assess the DCF when deciding whether to invest in a particular project or buy new equipment. The average rate of return anticipated by business shareholders for the current year is factored into the WACC. Let's use the example of your organisation wanting to start a project. WACC for the business is 5%. This indicates that your discount rate will be 5%. The project will cost $11 million to start, will last five years, and generate the expected annual cash flows listed below.

Cash Flow

Year	Cash Flow
1	$1 million
2	$1 million
3	$4 million
4	$4 million
5	$6 million

Using the DCF formula, the calculated discounted cash flows for the project are as follows.

Discounted Cash Flow

Year	Cash Flow	Discounted Cash Flow (nearest $)
1	$1 million	$952,381
2	$1 million	$907,029
3	$4 million	$3,455,350
4	$4 million	$3,290,810
5	$6 million	$4,701,157

The total value of the discounted cash flows comes to $13,306,727. The net present value (NPV) is obtained by deducting the initial investment of $11 million from that sum, giving us $2,306,727.

The project may produce a return greater than the initial cost, or a positive return on investment, according to the positive number of $2,306,727. As a result, the project might be worthwhile.

The NPV would have been $693,272 if the project had cost $14 million. That would suggest that the project would cost more than it would earn in returns. So, it might not be worthwhile to make.

ADVANTAGES OF DCF:

- Investors and businesses can get a sense of whether a proposed investment is worthwhile through discounted cash flow analysis.
- It is analysis that can be used for a variety of capital investments and projects where it is possible to predictably estimate future cash flows.
- Its projections can be changed to provide multiple what-if scenarios with varied outcomes. Users can utilise this to take into account various projections that could be made.

DISADVANTAGES OF DCF :

- The major limitation of discounted cash flow analysis is that it involves estimates, not actual figures. So, the result of DCF is also an estimate. That means that for DCF to be useful, individual investors and companies must estimate a discount rate and cash flows correctly.
- Furthermore, future cash flows rely on a variety of factors, such as market demand, the status of the economy, technology, competition, and unforeseen threats or opportunities. These can't be quantified exactly. Investors must understand this inherent drawback for their decision-making.
- Even if accurate estimations can be generated, DCF shouldn't always be relied upon completely. When evaluating an investment opportunity, businesses and investors should also take into account

other, well-known factors. Other typical valuation techniques that might be employed include prior transactions and similar company analysis.

11.3 PROJECT IRR, NPV AND PAY-BACK PERIOD

INTERNAL RATE OF RETURN :

In financial analysis, the internal rate of return (IRR) is a statistic used to calculate the profitability of possible investments. IRR is a discount rate that, in a discounted cash flow analysis, reduces all cash flows' net present values (NPV) to zero.

The same formula is used for NPV calculations and IRR calculations. Remember that the project's true financial value is not represented by the IRR. The annual return is what brings the NPV to a negative value.

Generally speaking, the higher an internal rate of return, the more desirable an investment is to undertake. IRR is uniform for investments of varying types and, as such, can be used to rank multiple prospective investments or projects on a relatively even basis. In general, when comparing investment options with other similar characteristics, the investment with the highest IRR probably would be considered the best.

FORMULA FOR IRR:

$$IRR = \sum_{t-1}^{t} \frac{C_t}{(1+r)^t} - C_o$$

Where:
C_t = *Net Cash Inflow During the Period t*
r = *Discount Rate*
t = *Number of Time Periods*
C_o = *Total Initial Investment Cost*

Source:https://th.bing.com/th/id/OIP.esldqCwiDwHK4E_6X8qZaQHaEk?w=285&h=180&c=7&r=0&o=5&dpr=1.3&pid=1.7

CALCULATION OF IRR:

1. To find the discount rate, or IRR, one would use the formula, setting NPV equal to zero.

2. Because the original investment is an outflow, it is always negative.

3. Depending on the predictions of what the project would deliver or require in terms of a capital infusion in the future, each succeeding cash flow may be positive or negative.

4. IRR must be determined iteratively through trial and error or by using software designed to calculate IRR because of the nature of the formula, which makes it difficult to calculate analytically.

NET PRESENT VALUE (NPV):

The difference between the current value of cash inflows and withdrawals over a period of time is known as net present value (NPV). To evaluate the profitability of a proposed investment or project, NPV is used in capital budgeting and investment planning.

Using the appropriate discount rate, computations are performed to determine the current value of a stream of future payments, or NPV. Projects that have a positive NPV are generally worthwhile pursuing, whereas those that have a negative NPV are not.

FORMULA FOR NPV:

$$NPV = \frac{Cash\ Flow}{(1+i)^t} - initial\ investme$$

A project or venture has a positive net present value (NPV) if its expected earnings, discounted for their present value, are more than their expected costs, also expressed in current dollars. An investment with a positive NPV is presumed to be successful.

A negative NPV investment will result in a net loss. The net present value rule, which states that only investments with a positive NPV should be taken into consideration, is based on this idea.

CALCULATION OF NPV:

Period	Cash Flow	Net Present Value
Month 1	$25,000	$\frac{\$25,000}{(1+0.0064)^1}$ = $24,841.02
Month 2	$25,000	$\frac{\$25,000}{(1+0.0064)^2}$ = $24,683.05
Month 3	$25,000	$\frac{\$25,000}{(1+0.0064)^3}$ = $24,526.08
Month 4	$25,000	$\frac{\$25,000}{(1+0.0064)^4}$ = $24,370.11
Month 5	$25,000	$\frac{\$25,000}{(1+0.0064)^5}$ = $24,215.13

PAYBACK PERIOD :

The time it takes to recoup the cost of an investment is referred to as the payback period. It is simply the amount of time it takes an investment to break even. The payback period is crucial since people and businesses invest money primarily to be reimbursed. In general, an investment is

more appealing the faster its payoff is. Everyone may benefit from knowing the payback period, which can be calculated by dividing the initial investment by the typical cash flows.

FORMULA FOR PAYBACK PERIOD:

Source: https://th.bing.com/th/id/OIP.HVghHs92Ywk-cyYevD5TrgHaDz?w=334&h=179&c=7&r=0&o=5&dpr=1.3&pid=1.7

CALCULATION OF PAYBACK PERIOD :

The investment is more enticing the faster the payback. On the other hand, the longer the payout, the less appealing it is. For instance, it would take 4.2 years to meet the payback period if solar panels cost $5,000 to install and the savings are $100 each month. Most of the time, this is a relatively good payback period because, according to experts, it may take a residential homeowner in the United States up to eight years to break even on their investment.

IRR VS NPV VS PAYBACK PERIOD:

11.4 IMPACT OF TRANSFER PRICING

The price that one division of a firm charges another division for the goods and services rendered is known as transfer pricing in accounting. Transfer pricing enables the determination of costs for the exchange of goods and services between subsidiaries, affiliates, or businesses under shared ownership that are a component of the same larger firm. Corporate

tax benefits may result from transfer pricing, although tax authorities may challenge these assertions.

Transfer pricing is an accounting and taxation technique that permits pricing exchanges between subsidiaries that share common ownership or control or within businesses. Both domestic and international transactions are subject to the transfer pricing practise.

To calculate the amount to bill another division, subsidiary, or holding company for services delivered, a transfer price is utilised. Transfer pricing frequently reflect the going rate for that commodity or service. Research, patents, and royalties are examples of intellectual property that might be subject to transfer pricing.

The transfer pricing method may be used by multinational corporations (MNCs) to distribute earnings among the different affiliate and subsidiary businesses that make up the parent company. However, businesses occasionally have the ability to abuse this method by changing their taxable income, which lowers their overall tax burden. Companies can transfer their tax liabilities to countries with low tax rates by using the transfer pricing mechanism.

IMPACT:

Let's think about the following example to better understand how transfer pricing affects a company's tax burden. Let's imagine that a vehicle manufacturer has two divisions: Division A produces software, and Division B produces automobiles. In addition to its parent firm, Division A also sells the software to other automakers. Usually at the going rate that Division A bills other automakers, Division B pays Division A for the software.

Consider a scenario in which Division A chooses to charge Division B a lesser fee as opposed to using the going rate. Due of the decreased pricing, Division A's sales or revenues are consequently lower. Conversely, Division B's profits are higher because of reduced COGS (cost of goods sold). In other words, Division A's sales are reduced by the same amount as Division B's cost savings, thus the firm as a whole doesn't suffer financially.

Let's assume, then, that Division A is located in a nation with greater taxes than Division B. By increasing Division B's profitability and decreasing Division A's, the corporation as a whole can reduce its tax burden. Division B will pay less tax if Division A sets lower pricing and transfers those savings to Division B, increasing Division B's profits by lowering COGS. In other words, Division A's choice to not charge Division B market price enables the corporation as a whole to avoid paying taxes.

EXAMPLES:

- Coca-Cola Co. (KO) maintains that the $3.3 billion transfer pricing of a royalty arrangement is justified because the company's production,

marketing, and sales are primarily focused in a number of international markets. Between 2007 and 2009, the business transferred IP value to subsidiaries in South America, Europe, and Africa. Coca-Cola and the IRS are still engaged in court proceedings, and the case has not been concluded.

- The IRS claims that Meta (META), previously Facebook, transferred $6.5 billion in intangible assets to Ireland in 2010 in order to dramatically reduce its tax liability. This is a high-stakes lawsuit. Meta might be forced to pay up to $9 billion in addition to interest and penalties if the IRS prevails in the legal dispute. The U.S. Tax Court trial, which was scheduled to begin in August 2019, has been postponed to give Meta more time to negotiate a settlement with the IRS.

11.5 SUMMARY

- The difference between the current value of cash inflows and withdrawals over a period of time is known as net present value (NPV).
- In a discounted cash flow analysis, IRR acts as a discount rate to bring all cash flows' net present values (NPV) to zero.
- The time it takes to recoup the cost of an investment is referred to as the payback period. It is simply the amount of time it takes an investment to break even.
- Discounted cash flow (DCF) is a term used to describe a way of valuing an investment by using its anticipated future cash flows. Using estimates of how much money an investment will make in the future, DCF analysis seeks to evaluate the value of an investment today.
- The procedure a company uses to assess potential big projects or investments is called capital budgeting. Before a project is accepted or denied, capital budgeting is necessary. Examples of such projects include the construction of a new plant or a significant investment in a third-party enterprise.

11.6 QUESTIONS

- Explain the Discounted Cash Flow Capital Budgeting technique in detail with an example.
- Explain the NPV Capital Budgeting technique in detail with an example.
- Explain the Payback Period Capital Budgeting technique in detail with an example.

- Explain the IRR Capital Budgeting technique in detail with an example.
- Explain the term Capital Budgeting and also comment why it is needed.
- _____ is the difference between the present value of cash inflows and the present value of cash outflows over a period of time.
- _____ is a discount rate that makes the net present value (NPV) of all cash flows equal to zero in a discounted cash flow analysis.
- The term _____ refers to the amount of time it takes to recover the cost of an investment. Simply put, it is the length of time an investment reaches a breakeven point.
- _____ refers to a valuation method that estimates the value of an investment using its expected future cash flows. Itanalysis attempts to determine the value of an investment today, based on projections of how much money that investment will generate in the future.
- _____ is the process a business undertakes to evaluate potential major projects or investments. Construction of a new plant or a big investment in an outside venture are examples of projects that would require capital budgeting before they are approved or rejected.

11.7 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.investopedia.com

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12

RISK MANAGEMENT

Unit Structure

12.0 OBJECTIVES

- To understand Risk Management.
- To study how risks can be managed in international trade or Business Operations.

12.1 INTRODUCTION

Economic activity is inescapably replete with risk and risk management. People often manage their affairs to be as content and safe as their surroundings and resources permit. But regardless of how meticulously these things are run, there is danger because the outcome, whether positive or negative, is rarely completely predicted. Almost everything we do carries some level of risk, but this chapter will concentrate on economic and financial risk, particularly as it relates to investment management.

Whether consciously or unconsciously, all organisations and investors manage risk in the decisions they make. Business and investment are fundamentally about allocating resources and capital to certain risks. These businesses may take steps to avoid some risks, pursue the risks that offer the highest rewards, measure and manage their exposure to these risks as appropriate during their decision-making process in an unpredictable environment. In an uncertain environment, tackling challenging business and financial issues is made simpler by risk management techniques and tools. Risk is not merely a matter of chance; organisations can actively control it through their choices and a framework for risk management.

The process of doing business or making investments involves risk. Investment return is directly correlated with risk even in the earliest models of current portfolio theory, such as mean-variance portfolio optimization and the capital asset pricing model, but risk must be efficiently controlled. One of the most important aspects of managing businesses and investments is accurately identifying and measuring risk as well as maintaining risks in line with the aims of the firm. More value for the firm, portfolio, or individual is more likely to occur as a result of effective risk management.

12.2 MEANING OF RISK MANAGEMENT

The detection, analysis, and reaction to risk elements that are inherent in a business's operations are all included in risk management. Effective risk management is acting proactively rather than reactively in an effort to influence future events as much as feasible. As a result, good risk management has the potential to lessen both the likelihood of a risk happening and its possible consequences.

12.3 IMPORTANCE OF RISK MANAGEMENT

Because it equips a company with the tools it needs to effectively identify and manage possible hazards, risk management is a crucial activity. When a danger is recognised, it is simple to mitigate it. Additionally, risk management gives a corporation a foundation on which to make wise decisions.

The greatest method for a firm to be ready for events that can impede progress and growth is to identify and manage risks. A company's chances of success increase when it assesses its strategy for dealing with potential challenges and then creates structures to meet them.

Progressive risk management also makes ensuring that issues with a high priority are handled as aggressively as feasible. Additionally, the management will be armed with the data they need to decide wisely and maintain the company's profitability.

12.4 RISK MANAGEMENT PROCESS

The steps that must be done are outlined in the risk management process. The risk management process, which consists of these five fundamental components, is used to manage risk. Starting with risk identification, it then moves on to risk analysis, risk prioritisation, solution implementation, and risk monitoring. Each stage in manual systems requires a significant amount of administration and paperwork.

Source:https://3.imimg.com/data3/RX/QC/MY-16998863/risk-management-system-500x500.jpg

12.5 MANAGEMENT OF RISK IN INTERNATIONAL TRADE/ BUSINESS OPERATIONS

Businesses engaged in international trade must manage risks related to business development, including those related to ethics, transportation, intellectual property, credit, currency, and many other factors. Since these risks have the potential to hinder the smooth operation of the company, proper steps must be made to reduce their impact. Here are six dangers that companies engaged in international trade frequently encounter, along with practical solutions for managing them.

1. Credit Risk :

The danger of failing to collect an account receivable is known as counterparty or credit risk. Businesses can protect themselves against this risk in a variety of ways while entering international markets. To save administrative costs and finance fees, the whole amount owing, or a reasonable portion of it, can be collected at the moment the order is placed before the services are rendered. This removes the possibility of non-payment. Even while this could be challenging for exporters and new enterprises, it can be resolved with minimal negotiation.This is a promise made by a financial institution to pay a specific sum to a service or product supplier in return for delivery within a specific term. Both the buyer and the seller are protected by this. It contains the terms of the transaction as well as a thorough description of the shipment.

2. Intellectual Property Risk :

This risk involves unauthorised third parties using a company's strategic knowledge or property in a way that has an impact on the value of the services or goods the company offers, either directly or indirectly. Due to the challenges in remotely violating corporate rights, these risks multiply tenfold when conducting business internationally. This can be prevented

by registering the company names and trademarks before concluding a contract in any nation. To stay ahead of the competition, it will also be beneficial to continuously adapt and enhance your services or products.

3. Foreign Exchange Risk :

The accounts payable and receivable for contracts that are currently or soon will be in force are often the subject of this. Foreign exchange rates are continually changing. Businesses would therefore be forced to convert monies generated abroad at rates that are less than what is budgeted.Due to this, it is essential that businesses have a suitable exchange policy in place. The stabilisation of profit margins relative to sales will be aided by this.Enhancing cash flow control, reducing the negative effects of rate fluctuations on sales and purchases, and streamlining domestic and international pricing. To create a successful policy, businesses must understand their exposure to foreign exchange risks. It's also critical to be aware of the tools available for hedging these risks and to regularly conduct comparative analysis to determine which option is optimal.

4. Ethics Risk :

Any product or service sold in a worldwide market must uphold a high ethical standard. While engaging in international trade, companies may at any time encounter specific issues relating to their values. Because social norms and conditions differ from one country to the next, it is important to exercise extra caution. No matter where they are located, you must make sure that your international partners and suppliers uphold your principles.

5. Shipping Risk:

You could run into problems including contamination, seizure, accident, vandalism, theft, loss, and breakage whether you're delivering items locally or abroad. Before sending any products to the buyers, you must confirm that you have enough insurance. For each party engaged in international trade, the International Chamber of Commerce has established guidelines outlining their responsibilities with relation to shipping risk. It is advisable to review the guidelines and adopt the appropriate safety precautions.

6. Country and Political Risks:

These include dangers like non-tariff trade barriers, monetary policy restrictions, or restrictions on the export of particular goods to certain nations. For instance, a number of nations have banned the sale of goods made from endangered animal species. Sanctions are an example of something that would never be in your control, therefore you would need to be ready to deal with them. By visiting the official website of the relevant country's Ministry of Foreign Affairs and Trade, you may learn more about these limitations.

12.6 SUMMARY

- Risk and risk management is an inescapable part of economic activity.
- Risk management encompasses the identification, analysis, and response to risk factors that form part of the life of a business.
- Effective risk management means attempting to control, as much as possible, future outcomes by acting proactively rather than reactively.

12.7 QUESTIONS

- Define Risk Management. Explain the Importance of Risk Management.
- Explain the process involved in Risk Management.
- Explain the 6 types of Risks faced by businesses while doing international trade and how they manage them.
- Risk and _____ is an inescapable part of economic activity.
- _____ encompasses the identification, analysis, and response to risk factors that form part of the life of a business.
- _____ means attempting to control, as much as possible, future outcomes by acting proactively rather than reactively.

12.8 REFERENCES

- International Financial Management book (Seventh Edition) by Cheol. S. Eun and Bruce.G.Resnick
- Prakash G Apte, International Finance : A Business Perspective
- Moosa, International Finance : An Analytic Approach
- JeffMadura, International Financial Management
- Siddaiah, International Financial Management : An Analytic Framework
- www.cfainstitute.org
- www.corporatefinanceinstitute.com
- www.360factors.com
- www.universalcargo.com