# International Business Economics Course code - 306

## UNIT -1

International Trade: Trade Theories, Ricardo and Comparative advantage, Heckscher Ohlin model of factor abundance, Krugman's model of Intra-Industry Trade (5+1)

## **Domestic Trade**

▶ **Domestic trade** is the exchange of **domestic** goods and services within the boundaries of a country. This may be sub-divided into two categories, wholesale and retail.

#### For example:

- Person is selling goods in local market.
- Person is trading in some other city with in the country.

## International Trade

- International trade, economic transactions that are made between countries.
- International trade is the exchange of goods and services among countries
- International trade refers to the exchange of goods and services between the countries

## **Characteristics of International Trade**

- Territorial specialization:
- International competition:
- Separation of sellers from buyers
- ► Long chain of middlemen:
- Mutually acceptable currency
- International rules and regulations
- Government control
- Several documents

## Reasons for International Trade

- 1. Uneven Distribution of Natural Resources:
- 2. Division of Labor and Specialization
- 3. Differences in Economic Growth Rate
- 4. Comparative cost advantage
- 5. Technological advantages

# Advantages of International Trade

- (1) Optimum Allocation
- (2) Gains of Specialization:
- (3) Enhanced Wealth:
- (4) Larger Output:
- (5) Welfare Outline:
- (6) Cultural Values:
- (7) Better International Politics:
- (8) Dealing with Scarcity:
- (9) Advantageous Competition:
- (10) Larger size of Market:

## **Classification of International Trade:**

#### (a) Import Trade:

















#### List of imported goods:

- 1. Oil
- 2. Precious Stone
- 3. Electronics Gadgets
- 4. Heavy Machinery
- 5. Chemicals (Fertilizers)
- 6. Plastic
- 7. Vegetable Oil
- 8. Iron and Steel

# Export

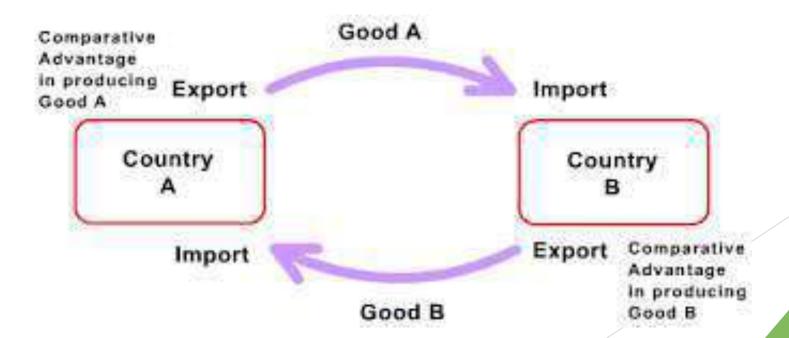
Sector	Share in Export (%) 2018-19
1. Petroleum products	14.10
<b>2.</b> Pearls, precious and semi Precious stones	7.78
<b>3.</b> Drug formulations, biologicals	4.36
<b>4.</b> Gold and other precious metal jewellery	3.92
5. Iron and steel	2.95
6. Organic Chemicals	2.83
7. Cotton and Accessories	2.63
8. Motor vehicle/Cars	2.58
<b>9.</b> Electric Machinery and Equipment	2.55
10. Products of Iron and steel	2.55

# **Entrepot Trade:**

An example for the Entrepot is that a certain Indian company may import rubber from Thailand and then exports it to a Japanese Company.

## Ricardo and Comparative advantage Theory

- Comparative advantage was first described by David Ricardo in 1817 in his book "On the Principles of Political Economy and Taxation"
- ▶ He used an example involving England and Portugal. Ricardo noted Portugal could produce both wine and cloth with less labor than England.
- This recognized the cause and benefits of <u>international trade</u> to the differences in the relative <u>opportunity costs</u> (costs in terms of other goods given up) of producing the same commodities among countries.



- Under comparative advantage theory the model which has taken to explain international trade is:
- Two countries
- Two commodities
- Free Trade

Ricardo demonstrated that if two countries capable of producing two commodities engage in the <u>free market</u>, then each country will increase its overall consumption by exporting the good for which it has a comparative advantage while importing the other good, provided that there exist differences in <u>labor productivity</u> between both countries. Widely regarded as one of the most powerful yet counterintuitive insights in economics, Ricardo's theory implies that comparative advantage rather than <u>absolute advantage</u> is responsible for much of international trade.

# Assumptions

- 1. There are only two countries.
- 2. Both of them produce the same two commodities.
- 3. Labor is the only factor of production.
- 4. The supply of labor is unchanged.
- 5. All labor units are homogeneous.
- 6. Tastes are similar in both countries.
- 7. The labour cost determines the price of the two commodities
- 8. The production of commodities is done under the law of constant costs or returns.
- 9. Barter system of Trade.
- 10. Technological knowledge is unchanged.
- 11. Factors of production are perfectly mobile within each country. However, they are immobile between the two countries.
- 12. Free trade is undertaken between the two countries. Trade barriers and restrictions in the movement of commodities are absent.
- 13. No Transportation cost

# Theory

- Assume there are two countries A and B
- There are two commodities X and Y
- Country A is producing 10 X or 10 Y commodity in 1 labour unit
- Country B is producing 6 X or 8Y commodity in 1 labour unit

#### **▶** Comparative Differences in Costs:

Comparative differences in cost occur when one country has an absolute advantage in the production of both commodities, but a comparative advantage in the production of one commodity than in the other. The comparative cost differences are illustrated in below table

#### **Out Put before Trade**

Country	Commodity - X	Commodity - Y
A	10	10
В	6	8
Total	16	18

- In this case,
- 1. country A has an absolute advantage in the production of both X and Y, but a comparative advantage in the production of X.
- 2. Country B is at an absolute disadvantage in the production of both commodities but its least comparative disadvantage is in the production of Y.
- 3. Before trade the domestic cost ratio in country A

1. Before trade the domestic cost ratio in country

If they were to enter into trade, country A's advantage over country B in the production of commodity

X is 10X of A / 6X of B or 5/3, Y, it is 10Y of A/8Y of B or 5/4.

Since 5/3 is greater than 5/4, A's advantage is greater in the production of commodity X, A will find cheaper to import commodity Y from country B in exchange for its X.

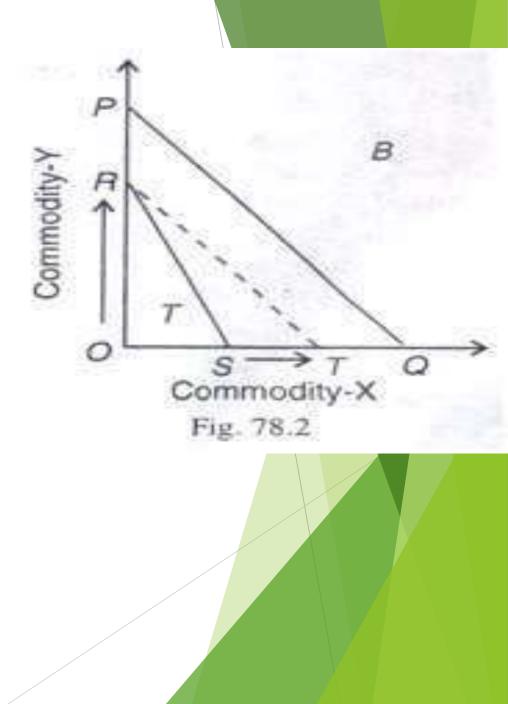
### **Out Put After Trade**

Country	Commodity - X	Commodity - Y	
Α	20	-	
В	-	16	

In other words, country A has a comparative advantage in the production of commodity X', and B has least comparative disadvantage in the production of Y. Thus, trade is beneficial for both countries.

Let PQ be the production possibility curve of country A and RS of country B. The curve PQ shows that country A has an absolute advantage in the production of both commodities X and Y respectively over country B. This is due to the fact that the production possibility curves RS of country B lies below the production possibility curve PQ of country A. Country B produces OR units of commodity Y and OS units of commodity X.

To show comparative advantage position in trade, draw a line RT parallel to line PQ. Now country A has a comparative advantage in the production of commodity X only because it exports OT (> OS) units relatively to country B. On the other hand, country B has a less comparative disadvantage in the production of commodity Y only. This is because, if it gives up resources required to produce OS units of X, it would be able to produce commodity Y by an amount less than OR. Thus country A has a comparative advantage in the production of commodity X, and country B has a less comparative disadvantage in the production of commodity Y.



### **Criticisms**

- **▶** Unrealistic Assumption of Labor Cost:
- No Similar Tastes:
- **▶** Unrealistic Assumption of Constant Costs:
- Ignores Transport Costs:
- Factors not fully Mobile Internally:
- **▶** Two-Country Two-Commodity Model is Unrealistic:
- **▶** Unrealistic Assumption of Free Trade:
- Neglects the Role of Technology:

Heckscher Ohlin model of factor abundance

H-O theory

The H-O theory is also known as the factor proportions theory or factorendowment theory. A principal result of the H-O theory is the Heckscher-Ohlin Theorem which states the following:

"A nation will export the product that uses its most abundant factor intensively"

- ► The H-O model explains comparative advantage in terms of the factor abundance of nations and the factor intensity of commodities.
- Factor abundance is the resource richness of nations.
- The model essentially says that countries export products that use their abundant and cheap factors of production and import products that use the countries' scarce factors.

# **Assumptions of H-O theory**

- 1. It two by two model i.e
  - Two countries (A and B)
  - Two commodities (X and Y)
  - Two factors of Production (Labor and Capital)
- 2. There is perfect competition in the market.
- 3. There are quantitative differences in factor endowments in different regions but qualitatively they are homogeneous.
- 4. Production functions of the two commodities have different factor intensities i.e. labor intensive and capital intensive
- 5. No transportation Cost
- 6. Free trade between the two countries
- 7. No change in Technical knowledge
- 8. No change in Taste and Preferences

#### According to the theory

► The relative scarcity of the factors (the shortage of supply in relation to demand) Is essential for trade between two regions.

Commodities scare factors imported

Commodities abundant factors exported

# H-O theory Model

There are two countries

A and B

There are two commodities

X and Y

X commodity is labor intensive

Y commodity is capital intensive

country A's PPC country B's PPC commodity X ( Labour interine)

Basic situation: Two identical countries (A and B) have different initial factor endowments. Self sufficient equilibrium (A and B) no trade, individual production equals consumption.

Trade equilibrium: after trade both countries consume the same at the point E, especially beyond their own Production-possibility frontier; production and consumption points are divergent.

There are two production possibility curves (PPC) of both the countries. Country A is capital intensive country and B is in labour intensive.

## Criticism

- **▶** No Similar Tastes:
- Ignores Transport Costs:
- ► Factors not fully Mobile Internally:
- ► Two-Country Two-Commodity Model is Unrealistic:
- Unrealistic Assumption of Free Trade:
- Neglects the Role of Technology:
- ▶ Only labor intensive and capital intensive is unrealistic.
- **▶** Homogeneous factors are not found.

## Krugman's model of Intra-Industry Trade

Prior to the 1980s, most trade theorists thought about international trade within the Ricardian framework of comparative advantage. In the early 20th century, trade theorists began working towards what is now known as the Heckscher-Ohlin theory. And the model looks at differences in factor endowments as a cause of international trade.

More recently, new trade theories have emphasized imperfect competition and increasing returns to scale, such as the Krugman (1980) model,

This model uses economies of scale, differentiated products and heterogenous preferences to explain intra - industry trade. The essence of the model is as follows:

- 1. Preferences are heterogeneous between and within countries
- 2. Production experiences economies of scale
- Products are differentiated

Industries within a country will produce goods which are targeted for the **majority** of their home consumers, thereby, exploiting economies of scale. However, not all consumers have the same preferences. Some **minority** will have preferences for the styles etc. produced elsewhere. Domestic firms find small production runs costly and forgo this segment of the market. This **minority then winds up buying imported** goods. The converse is also true that some portion of foreign consumers will have a greater preference for home country goods and home country winds up exporting to foreign's minority's share of the market.

The implications for this model exceeds a simple explanation of intra-industry trade With economies of scale there are only a feasible small number of firms to satisfy world demand (aircraft, for example). Under these conditions, the principle of first movers winning market share makes for compelling logic for advocates of managed trade.

Monopolistically competitive firms face a downward sloping demand due to brand loyalty etc. Profit maximization

#### Marginal revenue = Marginal Cost,

but unlike perfect competition, marginal revenue no longer equals price. Marginal Revenue (MR) - is the change in total revenue due to a change in quantity.

# Thank you

# Unit -2

Unilateral and multilateral trade policies, Tariffs in competitive markets, WTO tariff policy, Quota, Tariff and quota in monopolistic markets, Dumping and Antidumping Duty under the WTO, Subsidies and Countervailing duties under the WTO, Export taxes, Export subsidies, Economic Integration - Custom Unions and Free Trade Areas - Major Regional Trade Agreements(5+1)

# WTO TRADE ORGANIZATION WORLD

# **History of WTO**

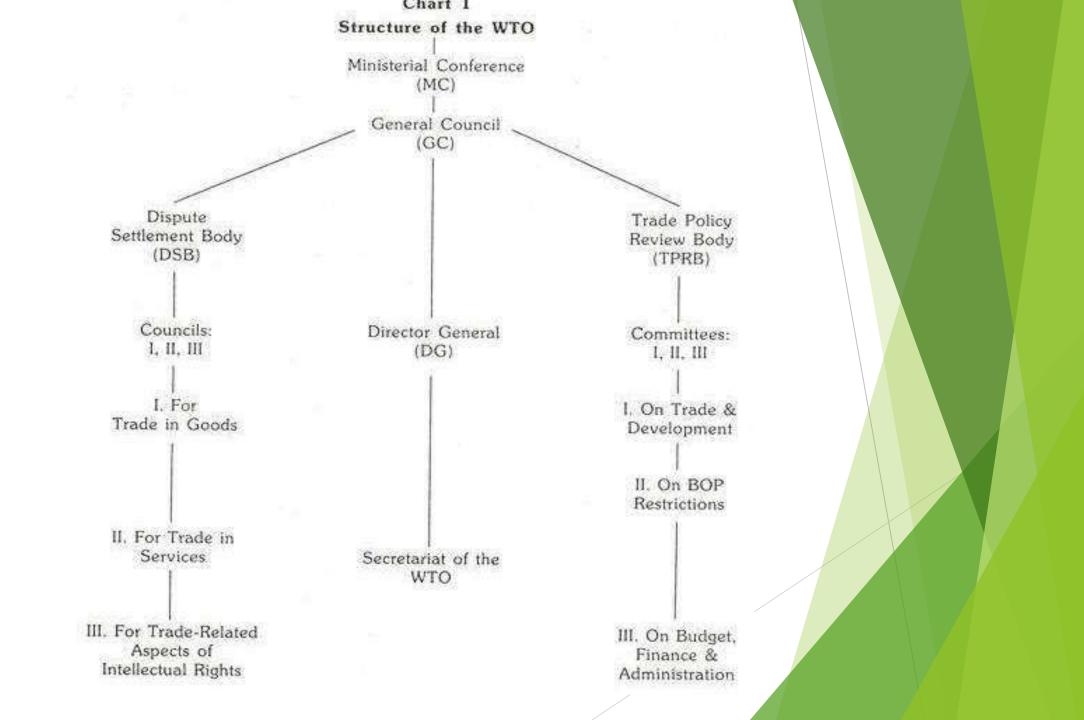
- In 1948, there was a failed attempt to create an "International Trade Organization".
- From 1948 to 1994, the GATT (General Agreement on Tariffs and Trade) provided the rules for world trade. GATT was a provisional agreement and organization under whose umbrella negotiation rounds were held.
- From 1948 to 1995, there have been 8 trade rounds. At first, the rounds focused on lowering tariffs on imported goods. The most comprehensive round was the Uruguay round (1986 to 1994). 123 countries took part in the discussions.
- ► The WTO officially commenced on 1 January 1995 under the Marrakesh Agreement, signed by 123 nations on 15 April 1994, replacing the General Agreement on Tariffs and Trade(GATT)

## Introduction of WTO

- ► The World Trade Organization (WTO) is a global organization that helps countries and producers of goods deal fairly and smoothly with conducting their business across international borders.
- It mainly does this through WTO agreements, which are negotiated and signed by a large majority of the trading nations in the world. These documents act as contracts that provide the legal framework for conducting business among nations. There are several groups within the WTO, with the highest decision-making authority going to a group known as the Ministerial Conference, which can make decisions on all matters and trade disputes among members.
- Over the past 60 years, the WTO, which was established in 1995, and its predecessor organization the GATT have helped to create a strong and prosperous international trading system, thereby contributing to unprecedented global economic growth.
- The WTO currently has 164 members, of which 117 are developing countries or separate customs territories. WTO activities are supported by a Secretariat of some 700 staff, led by the WTO Director-General. The Secretariat is located in Geneva, Switzerland, and has an annual budget of approximately CHF 200 million (\$180 million, €130 million). The three official languages of the WTO are English, French and Spanish.

### Organizational structure

- The Ministerial Conference (MC) is at the top of the structural organization of the WTO. It is the supreme governing body which takes ultimate decisions on all matters.
- The General Council (GC) is composed of the representatives of all the members. It is the real engine of the WTO which acts on behalf of the MC.
- GC has to part: dispute settlement body and trade policy review body
- The administration of the WTO is conducted by the Secretariat which is headed by the Director General (DG) appointed by the MC for the tenure of four years.



## **Functions of WTO**

- Administering WTO trade agreements
- Forum for trade negotiations
- Handling trade disputes
- Monitoring national trade policies
- Technical assistance and training for developing countries
- Cooperation with other international organizations

# Agreements under WTO

Agreement on Agriculture (AOA)

Non-Agricultural Market Access (NAMA)

Most Favoured Nation (MFN)

**National Treatment** 

Special safeguard mechanism (SSM)

Sanitary and phytosanitary measures (SPS)

Anti Dumping

Countervailing Duties

Trade facilitation

General Agreement on Trade in Services (GATS)

Trade related Investments Measures (TRIMS)

Trade related Intellectual Property Rights (TRIPS)

## Agreement on Agriculture

The WTO Agreement on Agriculture contains provisions in 3 broad areas of agriculture and trade policy:

- Market access: Tariff and Non Tariff barrier(burocratic barrier, local product uses) in international trade should be reduced
- 2. Domestic support: the subsidiary should be reduced

Amber box: trade distortion subsidiary need to reduce

**Green box**: these are permitted subsidiary like:

environmental subsidiary, agriculture infrastructure

subsidiary

Blue box: the subsidiary which are provided to control the

production . For example: subsidiary on saffron

- 3. Export subsidies: a. Percentage of subsidiary provided on export in budget need to reduce
  - b. Total volume of the subsidiary in budget for export need to reduce

# MFN (Most Favored Nation )

- ▶ India has given MFN to Pakistan in 1996
- MFN means the country will be treated differently in international trade in comparison to other country.

## National Treatment

Once the goods enter into the country then the imported goods and domestic goods can not be treated differently.

India import Japan

# Sanitary and phytosanitary Measures

Defines the safety measures under

- Food security
- Animal health
- Plant health

it defines that country should follow the safety measures and if the measures are not followed then the country can deny the import.

Ex- 2012

India WTO US

# **Anti Dumping**

- Dumping: it means to sell the product in other country on very low cost to destroy the local industry of the country.
- Anti Dumping: to protect this Anti dumping can be done by imposing the import duties.
  import toys on low cost
- ▶ India ← China
- impose the import duty
- ► China 100 Rs.
- ▶ 20 Rs.
- 120 Rs.

# Subsidies and Countervailing measures

the use of countervailing measures to offset injury caused by subsidized imports. These measures are imposed when the subsidized imported goods harm the local industry.

for example

country A

exporting

subsidized goods

affected

local industry of Country B will be adversely

country B two options - 1. DSB 2. tariffs and non tariffs barriers

So the B country can impose countervailing measures in form of import duty or the country B can go in Dispute settlement Body (DSB)

## Trade Related Investment Measures (TRIMs)

It refers to certain condition or restrictions imposed by a Government in respect of foreign investment in the country. The TRIM text provides that the foreign capital would not be discriminated by the member Governments.

#### Features of TRIMs

- 1. Abolition of restriction imposed on foreign capital
- 2. Offering equal rights to the foreign investor on par with the domestic investor
- 3. No restrictions on any area of investment4. No limitation or ceiling on the quantum of foreign investment
- 5. Granting of permission of without restrictions to import raw material and other components
- 6. No force on the foreign investors to use the total products and or materials
- 8. Restriction on repatriation of dividend interest and royalty will be removed

## Trade Related Intellectual Property Rights (TRIPs)

Intellectual property rights may be defined as "Information with commercial value". IPR have been characterized as a composite of "ideas and creative expression". Plus " the public willingness to give the status of property. It include

- a. Protection of patent
- b. Copyright
- c. Trademarks
- e. Trade secrets
- f. Layout design (topography of integral circuits)

## Objectives of WTO

- 1. To improve the standard of living of people in the member countries.
- 2. To ensure full employment and broad increase in effective demand.
- 3. To enlarge production and trade of goods.
- 4. To increase the trade of services.
- 5. To ensure optimum utilization of world resources.
- 6. To protect the environment.
- 7. To accept the concept of sustainable development.

## Unilateral trade agreement

- ▶ A unilateral trade agreement is a commerce treaty that a nation imposes without regard to others. It benefits that one country only. It is unilateral because other nations have no choice in the matter. It is not open to negotiation. The <a href="World Trade Organization">World Trade Organization</a> defines a unilateral trade preference similarly. It occurs when one nation adopts a trade policy that isn't reciprocated. For example, it happens when a country imposes a trade restriction, such as a <a href="tariff">tariff</a>, on all imports.
- ▶ A unilateral agreement is one type of <u>free trade agreement</u>. Another type is a <u>bilateral agreement</u> between two countries. It is the most common because it's easy to negotiate. The third type is a <u>multilateral agreement</u>. It's the most powerful but takes a long time to negotiate. Some conservatives define unilateral trade policies as the absence of any trade agreement whatsoever.<sup>2</sup> In that definition,

"the United States would lift all tariffs, regulations, and other restrictions on trade. It's unilateral because it doesn't require other nations to do the same. The argument is that the government should not restrict the rights of its citizens to trade anywhere in the world. In that scenario, other countries would keep their tariffs on U.S. exports. That would give them a unilateral advantage. They could ship cheap goods into the United States, but U.S. exports would be priced higher in their

#### **Multilateral Trade**

- Multilateral <u>trade agreements</u> are commerce treaties among three or more nations. The agreements reduce <u>tariffs</u> and make it easier for businesses to <u>import</u> and <u>export</u>. Since they are among many countries, they are difficult to negotiate.
- ► That same broad scope makes them more robust than other types of trade agreements once all parties sign. Bilateral agreements are easier to negotiate but these are only between two countries. They don't have as big an impact on economic growth as does a multilateral agreement.
- Multilateral trade agreements strengthen the global economy by making developing countries competitive.
- Multilateral trade standardize import and export procedures giving economic benefits to all member nations.

- ► Some <u>regional trade agreements</u> are multilateral. The largest is the <u>North</u>
  <u>American Free Trade Agreement</u> which was ratified on January 1,
  1994. NAFTA is between the United States, <u>Canada</u>, and <u>Mexico</u>. It magnified trade between 1993 and 2018.
- ► The Central American-Dominican Republic Free Trade Agreement was signed on August 5, 2004. CAFTA-DR eliminated tariffs on more than 80% of U.S. exports to six countries. These include Costa Rica, the Dominican Republic, Guatemala, Honduras, Nicaragua, and El Salvador. By 2019, it increased trade by 104%, from \$2.44 billion in January 2005 to \$4.97 billion in November 2019.<sup>4</sup>
- ► The <u>Trans-Pacific Partnership</u> would have been bigger than <u>NAFTA</u>. Negotiations concluded on October 4, 2015. After becoming president, <u>Donald Trump</u> withdrew from the agreement. He promised to replace it with <u>bilateral agreements</u>. The TPP was between the United States and 11 other countries bordering the Pacific Ocean. It would have removed tariffs and standardized business practices.

- All global trade agreements are multilateral. The most successful one is the <u>General Agreement on Trade and Tariffs</u>. Twenty-three countries signed GATT in 1947. Its goal was to reduce tariffs and other trade barriers.
- In September 1986, the Uruguay Round began in Punta del Este, Uruguay.<sup>6</sup> It centered on extending trade agreements to several new areas. These included services and intellectual property. It also improved trade in agriculture and textiles. The Uruguay Round led to the creation of the <a href="World Trade">World Trade</a>
  <a href="Organization">Organization</a>. On April 15, 1994, the 123 participating governments signed the agreement creating the WTO in Marrakesh, Morocco. The WTO assumed management of future global multilateral negotiations.
- ► The WTO's first project was the <u>Doha round of trade agreements</u> in 2001.<sup>7</sup> That was a multilateral trade agreement among all WTO members. Developing countries would allow imports of financial services, particularly <u>banking</u>. In so doing, they would have to modernize their markets. In return, the developed countries would reduce farm <u>subsidies</u>. That would boost the growth of developing countries that were good at producing food.
- Farm lobbies in the United States and the <u>European Union</u> doomed Doha negotiations. They refused to agree to lower subsidies or accept increased foreign competition. The WTO abandoned the Doha round in July 2008.
- On December 7, 2013, WTO representatives agreed to the so-called Bali package.<sup>9</sup> All countries agreed to streamline customs standards and reduce red tape to accelerate trade flows. Food security is an issue. India wants to subsidize food so it could stockpile it to distribute in case of famine. Other countries worry that India may dump the cheap food in the global market to gain market share.

## **Tariffs**

#### **Tariffs**

- ▶ A tariff is defined as a tax on imported goods.
- It adds to the cost borne by consumers of imported goods and is one of several trade policies that a country can enact.

#### Common Types of Tariffs

- Specific tariffs: A fixed fee levied on one unit of an imported good is referred to as a specific tariff. It is calculated on physical quantity
- Ad Valorem Tariffs: An ad valorem tariff is levied as a fixed percentage of the value of the commodity imported. "Ad valorem" is Latin for "on value" or "in proportion to the value." The US currently le8vies a 2.5% ad valorem tariff on imported automobiles. Thus if \$100,000 worth of autos are imported, the US government collects \$2,500 in tariff revenue. In this case, \$2500 is collected whether two \$50,000 BMWs are imported or ten \$10,000 Hyundais.

#### Common Types of Non Tariffs

• Licenses: A license is granted to a business by the government and allows the business to import a certain type of good into the country.

- ▶ **Import quotas**: An import <u>quota</u> is a restriction placed on the amount of a particular good that can be imported. This sort of barrier is often associated with the issuance of licenses.
- **Voluntary Export Restraints (VER):** This type of trade barrier is "voluntary" in that it is created by the exporting country rather than the importing one.
- **▶** Local Content Requirement

Instead of placing a quota on the number of goods that can be imported, the government can require that a certain percentage of a good be made domestically.

For example, it can say that 15% of the value of the good must come from domestically produced components.

#### **Purpose of Tariff**

- 1. Protecting Domestic Employment
- 2. Protecting Consumers
- 3. Infant Industries
- 4. National Security
- 5. Retaliation

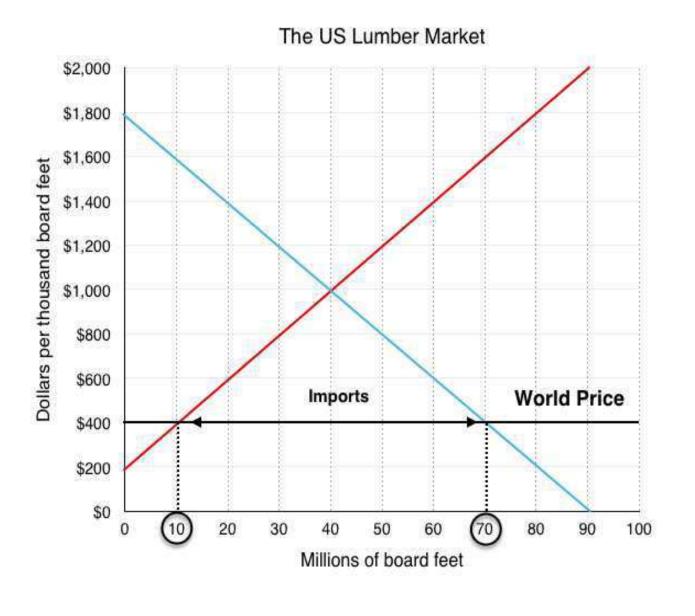
# Tariffs in competitive markets

- Working of the Tariffs can be understood with an example. US lumber market. In the domestic market, the **domestic equilibrium price and quantity** are \$1,000/board feet, and 40 million board feet, respectively. This is denoted as
- $\rightarrow$  PD = \$1,000 and
- $\triangleright$  QD = 40 million.

In this case, the **world price**, or PW is substantially lower than the domestic price. While this is not always the case, there is no incentive to import if PW is greater than PD.

With access to imports with prices as low as \$400, American consumers will purchase significantly more lumber. Their quantity demanded will increase to 70 million units.

Domestic producers, on the other hand, lose a large degree of surplus from the imports. Whereas before they supplied 40 million board feet of lumber at \$1000, now they can only supply 10 million board feet.

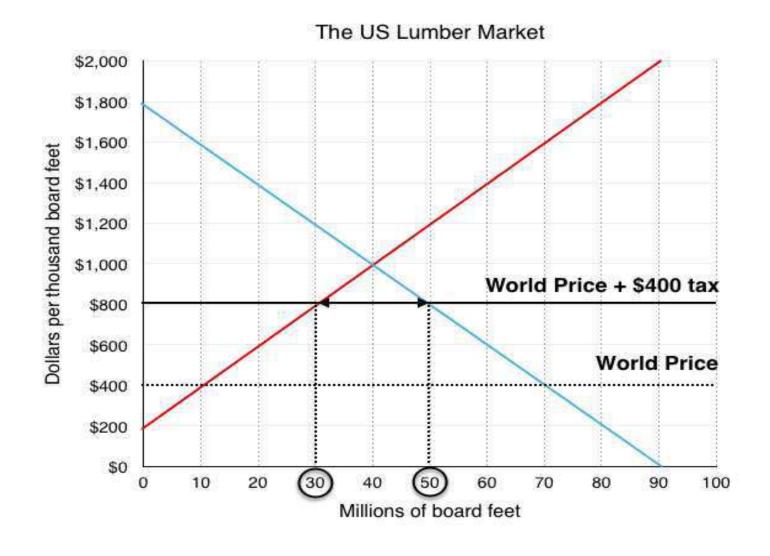


With such a significant portion of lumber production being imported, the government may choose to introduce a protectionist policy to restrict foreign competition, due to severe pressure from domestic producers. One important clarification about our model at this point is that the only surplus America cares about is domestic. Any producer surplus to Canadian firms is irrelevant in American decision making.

Suppose the government enacts a

\$400 **tariff** on imports to restrict competition.

A tariff is a tax imposed on important goods or services. This creates an equilibrium price equal to \$800 (world price + the \$400 tariff). While this price is still below the domestic equilibrium, more domestic firms are now able to compete. In the new equilibrium, total quantity is 50 million board feet, 30 million of which are domestic. This means that imports have dropped from 60 million to 20 million board feet.



In this situation, domestic producers are better off, as they are now able to sell 20 million more units. Consumers, on the other hand, are worse off, as they face a higher price. The government is better off with revenue collected by the tariff.

## **Economic Integration**

- Economic integration is an arrangement among nations that typically includes the reduction or elimination of trade barriers and the coordination of monetary and <u>fiscal policies</u>.
- Economic integration aims to reduce costs for both consumers and producers and to increase trade between the countries involved in the agreement.
- Economic integration is sometimes referred to as regional integration as it often occurs among neighboring nation.

#### **Example:**

- 1. North American Free Trade Agreement (NAFTA): Canada, Mexico and the USA.
- 2. <u>Association of Southeast Asian Nations</u> (ASEAN): Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- 3. <u>Southern Common Market</u> (MERCOSUR): Argentina, Brazil, Paraguay, Uruguay, Venezuela and Bolivia.
- 4. Central American Common Market (CACM): Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.
- Bolivarian Alliance for the Peoples of Our America (ALBA TCP): Venezuela, Cuba, Bolivia, Nicaragua, Dominica, Ecuador, San Vicente and the Grenadines, and Antigua and Barbuda.

#### **Advantages of Economic Integration**

The advantages of economic integration fall into three categories:

- Trade benefits:
  - A. reduction in Tariffs, availability of goods and service
- 2. Employment: Increasing employment because of
  - A. Market expansion
  - B. Cross Boarder Investment (MNCs)
  - C. Technology Transfer
- 3. Political cooperation
  - A. Stronger economic ties,
  - B. Resolve conflicts peacefully and lead to greater stability.

#### **The Costs of Economic Integration**

Despite the benefits, economic integration has costs. These fall into two categories:

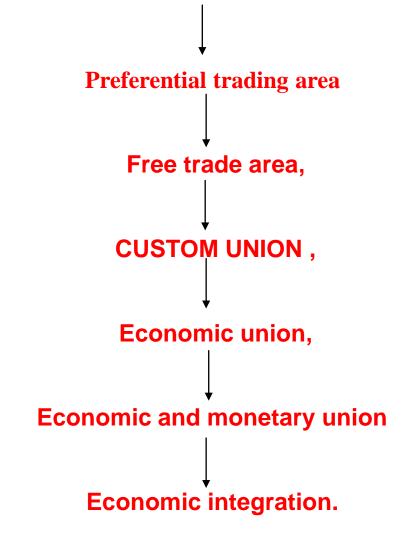
1. Diversion of trade. That is, trade can be diverted from nonmembers to members, even if

it is economically detrimental for the member state.

2. Erosion of national Authority. Members of economic unions typically are required to

adhere to rules on trade, <u>monetary policy</u>, and fiscal policies established by an unelected external policy - making body.

## **Stages of Economic Integration**



- **1. Preferential trading area:** Preferential Trade Areas (PTAs) exist when countries within a geographical region agree to reduce or eliminate <u>tariff</u> barriers on selected goods imported from other members of the area.
- **2. Free trade area**: Free Trade Areas (FTAs) are created when two or more countries in a region agree to reduce or eliminate barriers to trade on all goods coming from other members. The **North Atlantic Free Trade Agreement** (NAFTA) is an example of such a free trade area, and includes the USA, Canada, and Mexico.

#### Advantages of a Free Trade Area

#### 1. Increased efficiency

The good thing about a free trade area is that it encourages competition, which consequently increases a country's efficiency, in order to be on par with its competitors. Products and services then become of better quality without being too expensive.

#### 2. Specialization of countries

When there is tough competition, countries will tend to produce more products or goods that they are most efficient at. This is because they take less time to complete and their output is higher.

#### 3. No monopoly

When there is free trade, and tariffs and quotas are eliminated, monopolies are also eliminated because more players can come in and join the market.

#### 4. Lowered prices

When there is competition, especially on a global level, prices will surely go down, allowing consumers to enjoy a higher purchasing power.

#### 5. Increased variety

With imports becoming easier and cheaper, consumers will gain access to a variety of products that are inexpensive.

#### **Disadvantages of Free Trade Area**

#### 1. Threat to intellectual property

When imports come in more easily, domestic producers can easily access them, allowing them to copy the ideas and sell them as knock-offs. With many countries with little to no laws on <u>intellectual property</u>, it would be easy to steal ideas.

#### 2. Unhealthy working conditions

Outsourcing jobs in developing countries can become a trend with a free trade area. Because many countries lack labor protection laws, workers may be forced to work in unhealthy and substandard work environments.

#### 3. Less tax revenue

Since member countries are no longer subject to import taxes, they need to think of ways to compensate for the reduced tax revenue.

## **Customs Union**

A customs union is an agreement between two or more neighboring countries to remove trade barriers, reduce or abolish <u>customs duty</u>, and <u>eliminate quotas</u>. Such unions were defined by the General Agreement on Tariffs and Trade (GATT) as third stage of economic Integration.

#### **Purpose of Customs Unions**

- The purpose of a customs union is to make it easier for member countries to trade freely with each other. The union reduces the administrative and financial burden of barrier trading and fosters economic cooperation among nations.
- However, member countries do not enjoy the liberty to form their own trade deals. The countries in the customs union usually restructure their domestic economy and economic policies in order to maximize their gain from membership in the union. The <a href="European Union">European Union</a> is the largest customs union in the world in terms of the economic output of its members.
- A customs union generates trade creation and diversion that helps with economic integration. Below are the advantages and disadvantages of customs unions.

#### **Advantages of Custom Unions**

#### ▶ 1. Increase in trade flows and economic integration

The main effect of a free-trade agreement is that it increases trade between member countries. It helps improve the allocation of scarce resources that satisfy the wants and needs of consumers and boosts <u>foreign direct investment (FDI)</u>.

#### **2.** Trade creation and trade diversion

The effectiveness of a customs union is measured in terms of trade creation and trade diversion. Trade creation occurs when the more efficient members of the union sell to less efficient members, leading to a better allocation of resources.

Trade diversion occurs when efficient non-member countries sell fewer goods to member countries because of external tariffs. It gives less efficient countries in the union the opportunity to capitalize on their position and sell more goods within the union. If the gains from trade creation exceed the losses from trade diversion, that leads to increased economic welfare among member countries.

#### **▶** 3. Reduces trade deflection

One of the main reasons a customs union is favored over a free trade agreement is because the former solves the problem of trade deflection. This occurs when a non-member country sells its goods to a low-tariff FTA (free trade agreement) country, which then resells to a high-tariff FTA country, leading to trade distortions. The presence of a common external tariff in customs unions helps avoid problems that arise from tariff differentials.

## **Disadvantages of Customs Unions**

Along with the advantages, customs unions also come with a few drawbacks:

#### ▶ 1. Loss of economic sovereignty

Members of a customs union are required to negotiate with non-member countries and organizations such as the WTO. This is necessary to maintain a customs union; however, it also means that individual member countries are not free to negotiate their own deals.

If a country wants to protect an <u>infant industry</u> in its market, it is unable to do so by imposing tariffs or other protective barriers due to the liberal trading policies. Similarly, if a country wants to liberalize its trade outside the union, it is unable to do this due to the common external tariff.

#### **2.** Distribution of tariff revenues

Some countries in the union do not receive a fair share of tariff revenues. This is common among countries like the UK that trade relatively more with countries outside the union. Around 20%-25% of the tariff revenue is retained by the member who collects the revenue. It is estimated that the cost of collecting this revenue exceeds the actual revenue collected.

#### ▶ 3. Complexity of setting the tariff rate

A common problem faced by customs unions is the complexity of setting the applicable tariff rate. The process is very costly and time-consuming. Member countries often find it hard to forgo the trade of certain goods or services because another country in the union is producing it more efficiently. The problem is usually faced by developing countries and is a major issue that the UK is dealing with during <a href="https://example.com/Brexit">Brexit</a>.

#### 4. common market:

A common (or single) market is the most significant step towards full economic integration. In the case of Europe, the single market is officially referred to a the 'internal market'.

#### 5. Economic union:

Economic union is a term applied to a trading bloc that has both a common market between members, and a common trade policy towards non-members, although members are free to pursue independent macro-economic policies. Example European Union in 1993

#### 6. economic and monetary union:

Economic and Monetary Union (EMU) is a key stage towards compete integration, and involves a single economic market, a common trade policy, a single currency and a common monetary policy.

#### 7. complete economic integration:

Complete economic integration involves a single economic market, a common trade policy, a single currency, a common monetary policy, together with a single fiscal policy, including common tax and benefit rates — in short, complete harmonization of all policies, rates, and economic trade rules.



## UNIT -3

Currency and International Finance: Currency market and exchange rate, Spot and forward markets, Types of Foreign Exchange Transactions – Reading Foreign Exchange Quotations – Forward and Futures Market – Foreign Currency Options – Arbitrage – Speculation and Exchange-Market Stability, Currency market and basic Central Bank operation, Product market approach to determination of exchange rate, Asset market approach to determination of exchange rate.



# FOREIGN EXCHANGE MARKET





# INTRODUCTION

- The foreign exchange market is a global online network where traders buy and sell currencies.
- It has no physical location and operates 24 hours a day.
- The Forex market has an estimated turnover of \$6.6 trillion a day.
- Demand and supply of currency determines exchange rates.
- The forex market is the largest, most <u>liquid market</u> in the world.
- Forex market is an electronic network of banks, brokers, institutions, and individual traders

### FOREIGN EXCHANGE RATE DETERMINATION



• A foreign exchange rate is the rate at which one currency is exchanged for another. Thus, an exchange rate can be regarded as the price of one currency in terms of another.

on 01 Apr 2020.

• In India the free exchange rate regime is prevailed. Foreign exchange rate is determined on the basis of Demand and Supply theory.

### Forces Behind Exchange Rate Determination

Foreign Exchange is a price of one country currency in relation to other country currency, which like the price of any other commodity is determined by the demand and supply factors. The demand and supply of the foreign exchange rate come from the residents of the respective countries.

### **Demand for Foreign Exchange**

### **Supply of Foreign Exchange**



1. Foreign currencies is required for the purchase of foreign goods and services (IMPORTS).

- 2. Foreign currency is needed to invest in foreign country assets/markets, Assets, Bonds etc. shares/bonds etc.
- 3. Indians Travelling abroad for Tourism Purpose.

1. Foreign currencies is supplied on the sale of foreign goods and services (Export ).

2. Foreigners investing in Indian Stock markets, Assets, Bonds etc. (FPIs And FDIs)

3. Foreigners travelling to India.

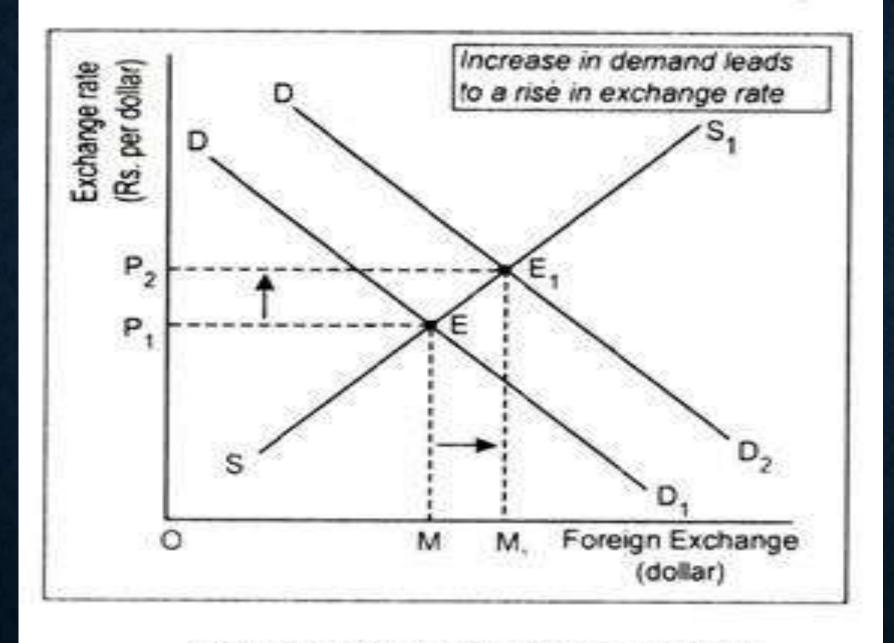


Fig. 5.5: Equilibrium Exchange Rate





• If at the point OP1 the value of

$$50 \text{ Rs.} = 1 \$$$
 or  $1\$ = 50 \text{ Rs.}$ 

• When the demand of the dollar will increase, dollar appreciates from Rs. 50 = 1 to Rs. 53 = 1, while rupee depreciates from 1 = 1 Rs. 50 to 1 = 1 Rs. 53.

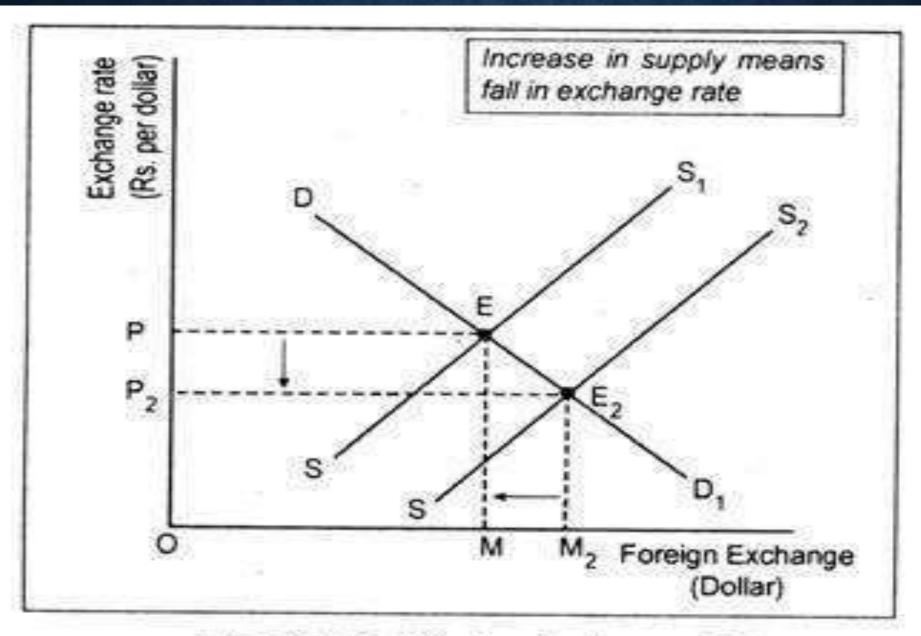


Fig. 5.6 : Equilibrium Exchange Rate





• If at the point OP the value of

$$50 \text{ Rs.} = 1 \$$$
 or  $1\$ = 50 \text{ Rs.}$ 

• When the supply of the dollar will increase, dollar depreciate from Rs. 50 = 1 to Rs. 48 = 1, while rupee appreciate from 1 = 1 Rs. 48.

# INFLATION INTEREST RATE CURRENT ACCOUNT DEFICIT **PUBLIC DEBTS FACTORS AFFECTING EXCHANGE** RATES





POLITICAL STABILITY & FCONOMIC PERFORMANCE

### 1. Inflation Rates

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Changes in market inflation cause changes in currency exchange rates. A country with a lower inflation rate than another's will see an appreciation in the value of its currency.

### 2. Interest Rates

Increases in interest rates cause a country's currency to appreciate because higher interest rates provide higher rates to lenders, thereby attracting more foreign capital, which causes a rise in exchange rates.

### 3. Country's Current Account / Balance of Payments

A deficit in current account due to spending more of its currency on importing products than it is earning through sale of exports causes depreciation. Balance of payments fluctuates exchange rate of its domestic currency.

### 4. Government Debt

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

### 5. Terms of Trade

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

### 6. Political Stability & Performance

A country's political state and economic performance can affect its currency strength.

### 8. Speculation

If a country's currency value is expected to rise, investors will demand more of that currency in order to make a profit in the near future



## TRANSACTIONS IN FOREIGN EXCHANGE MARKET

In foreign exchange market different transactions takes place as per the requirement of the party involved in transaction. These are as follows:

### Spot Transaction

In foreign exchange market, Spot transaction is a contract of buying or selling currency for settlement (payment and delivery) on the spot date, which is normally two business days after the trade date. The exchange rate at which the transaction takes place is known as spot rate.

### **▶** Forward transaction

In Forex market the forward transaction takes place on a future date for the purchase or sale the foreign currency. The rate on which both the parties are agreed now but delivery and payment will occur at a future date is known as forward rate.

#### Cross transaction

A cross transaction is the currency exchange rate between two currencies where both the currencies are not the official currencies of the country in which the exchange rate quote is given in. For example, if an exchange transaction between the euro and the Japanese yen was taken place in an American then it will be considered a cross transaction and the quote of euro and Japanese yen in American newspaper will be considered a "cross rate".

# **EXCHANGE RATE QUOTATION**

Exchange rate quotation means expression of value of one currency in terms of another currency. The quotation can be done by two ways which are as follows:

1. Direct Quotation: Direct quotations the way where value of foreign currency is expressed in terms of domestic currency. Under direct quotation the way of expression is as follows:

• 
$$1 \$ = 72 \text{ Rs.}$$

The above expression is the way of direct quotation where the 1 unit of dollar is expressed in Indian rupee (home currency)

Direct quotation method is very popular method to quote the currency rate in foreign exchange market. And this method is considered as by default method if there not mention any other method is being used.

### 2. Indirect Quotation:

Indirect quotation is the method of quote the currency where the value of domestic currency is expressed in terms of foreign currency.

$$72 \text{ Rs.} = 1 \$$$

Above expression is the way to show the indirect quotation. Here 72 Rs., that is the domestic currency, is expressed as 1 \$ which is foreign currency.

Though this is not the popular method of exchange quotation.

# ARBITRAGE:

Foreign exchange market is not the centralise market and that is why the difference arises in different currency quotations. And this fact about foreign exchange market give an opportunity to Arbitrager to make profit.

Arbitrage is the process by which a person can earn the profit by selling and buying the currency at a same time in different market to take the advantage of price differential.

• For example: if there is dollar rupee exchange rate in Bombay is

• 
$$1 \$ = 71 \text{ Rs.}$$

And in New York it is

• 
$$1 \$ = 72 \text{ Rs.}$$

Now it can be seen that this is the good opportunity to earn the profit by taking the advantage of this exchange rate differential. So now the person or the bank can purchase the dollar form Bombay and will sale that dollar in New York. And can earn the profit. By this way the demand of the dollar will be increased in Bombay and the supply of Dollar will be increased in New York and this will make the price of the dollar against the Rupee equal in Bombay and New York.

## ADVANTAGE OF ARBITRAGE STRATEGY

Arbitrage strategy provide the following advantage to the arbitrager:

1. Trading with no risk: Arbitrage trading in foreign exchange market is likely to be having no risk and this is because of fact that such strategies gives the trader with the opportunity to offset the risk. When a person import some goods from other country in that condition the person will purchase the currency of that country also so that at the time of payment if some currency value differential occurs it can be offset by selling that currency of other country.

### For Example:

If a person buys 1 \$ from the Indian currency market at 72 Rs. and sell that 1 \$ in the Dubai currency market within part of a second at 64.45 Rs. then it will be considered as a perfect arbitrage trade.

- **2. Profit Certainty:** Arbitrage does not give only advantage of risk free trading rather it also gives an opportunity to earn profit, Since the price differences in the foreign exchange market are usually slow in micro-pips, in order to make significant profits, arbitrageurs generally focus either on trading large spots or trading as frequently as possible. Though the profit from a one trade may not be so large. When the arbitrageur trades continually or in large volumes, the profits grow like anything.
- **3. Price inefficiencies can easily overcome**: Arbitrage process takes the advantage of the currency differential. Currency can be overvalued or undervalued and before the correction take place the pre designed computer system identifies the currency which are under or overvalued and gives a chance to take advantage of this price differential

## ARBITRAGE STRATEGIES

Following are the Arbitrage strategy which are used by the traders or other people:

### 1. Triangular Arbitrage

Triangular arbitrage is a strategy which takes the benefits of the price variation between 3 currencies in the foreign exchange market. It is also known as three-point arbitrage or cross currency arbitrage. when one market is undervalued and another is overvalued, the price differences arises.

• Under this strategy person converted the first country's currency into second country's currency and second country's currency into third country's currency and third country's currency into again first country' currency. By this way the person earns the profit. But this process should be done in fractions of second.

### 2. Cryptocurrency Arbitrage

This strategy advantageous when there is currency value differential between the two crypto-currency market.

• For example, If a specific coin is trading lower on first exchange in comparison to second exchange then one can purchase the coin on first crypto exchange and sell it in second crypto exchange for higher price and can earn from the price difference.

### DISADVANTAGE OF ARBITRAGE

#### 1. Transaction Cost:

Too many transactions in Arbitrage may leads to higher cost and taxes for transaction, that reduces the profit that is earn by the arbitrager.

### 1. Advance Technology and software:

Arbitrage process also required advance technical knowledge and software. That can make able to the arbitrage to identify the price discrepancies.

### 1. Capital:

Arbitrage is an expensive process and to earn the huge profit one may required the thousand dollars to invest in purchasing the currency.

#### 1. Short Run:

Arbitrage opportunity occurs for very sort time if one could fail to cater that opportunity it will collapse. So keen attention is very much required.

# CURRENCY MARKET AND BASIC CENTRAL BANK OPERATION

Over the last six decades since independence the exchange rate system in India has transited from fixed exchange rate regime to floating rate regime.

- Par Value System (1971-1974): After Independence Indian followed the 'Par Value System' whereby the rupee's external par value was fixed with gold and UK pound sterling.
- ▶ Pegged Regime (1974-1991): India pegged its currency to the US dollar (1971-1991) and to pound (1971-74). Following the breakdown of Breton Woods system, the value of pound collapsed, and India witnessed misalignment of the rupee. To overcome the pressure of devaluation India pegged its currency to a basket of currencies. During this period, the exchange rate was officially determined by the RBI within a nominal band of +/- 5 percent of the weighted average of a basket of currencies of India's major trading partners.
- The period since 1991 -1993: The transition to market-based exchange rate was in response to the BOP crisis of 1991. As a first step towards transition, India
  - introduces partial convertibility of rupee in 1992-93 under LERMS.

- ► Liberalized Exchange Rate Management System (LERMS): The LERMS involved partial convertibility of rupee. Under this system, India followed a dual exchange rate policy, where
- 40 % converted at the official exchange rate and the remaining
- 60% converted at the market-based exchange rate
- Market-Based Exchange rate Regime (1993- till present): The LERMS was a transitional mechanism to provide stability during the crisis period. Once the stability is achieved, India transited from LERMS to a full flash market exchange rate system. As a result, since 1993, exchange rate fluctuations are marker determined. In the 1994 budget, 60:40 ratio was removed, and 100 percent conversion at market-based rate was allowed for all goods and capital movement

# CENTRAL BANK INTERVENTION IN CURRENCY OR FOREX MARKET

Foreign exchange intervention is the process whereby a central bank buys or sells foreign currency in an attempt to stabilize the exchange rate, or to correct misalignments in the forex market. This is often accompanied by a subsequent adjustment, by the central bank, to the money supply to offset any undesirable knock-on effects in the local economy.

The mechanism mentioned above, is referred to as "sterilized intervention"

- Traders must keep in mind that when central banks intervene in the forex market, moves can be extremely volatile. Therefore, it is essential to set an appropriate <u>risk to reward ratio</u> and make use of prudent <u>risk management</u>.
- Central banks intervene in the forex market when the current <u>trend</u> is in the opposite direction to where the central bank desires the exchange rate to be. Therefore, trading around central bank intervention is a lot like trading <u>reversals</u>.
- Additionally, the forex market tends to anticipate central bank intervention meaning that it is
  not uncommon to see movements against the long-term trend in the moments leading up to
  central bank intervention. Since there is no guarantee that traders can look for the new trend
  to emerge before placing a trade

### FORWARD MARKET

• A market in which foreign exchange is bought and sold for future delivery is known as Forward Market. It deals with transactions (sale and purchase of foreign exchange) which are contracted today but implemented sometimes in future.

### **Reasons for Forward Market**

- 1. Minimising the loss due to the fluctuation in Foreign exchange rate.
- 2. To Make profit (Speculation)

#### **Forward rate**

• The rate at which one currency can be exchanged for another currency on a specific future date.

### **Forward contract**

• An agreement that specifies the amount of a specific currency that will be exchanged, the exchange rate, and the future date at which a currency exchange will occur. The forward rate is quoted at a premium or discount over the spot rate. Premium or discount depends on interest rate differential between the two countries.

- Charlotte Co. expects to receive 100,000 euros from exporting products to a Dutch firm at the end of each of the next 3 months. The spot rate of the euro is \$1.10. The forward rate of the euro for each of the next 3 months is also \$1.10. Charlotte Co. expects that the euro will depreciate to \$1.02 in 3 months.
- If Charlotte Co. does not use a forward contract, it will convert the euros received into dollars at the spot rate that exists in 3 months. A comparison of the expected dollar cash flows that will occur in 3 months follows.

Choices	Exchange Rate	Expected \$ Cash Inflows
1. Use the spot market.	The spot rate in 3 months is expected to be \$1.02.	100,000 euros×\$1.02 = \$102,000
2. Use the forward market.	The 3-month forward rate is \$1.10.	100,000 curos×\$1.10 = \$110,000

• Thus Charlotte expects that its dollar cash inflows would be \$8,000 higher as a result of hedging with a forward contract and decides to negotiate a forward contract to sell 100,000 euros forward. If Charlotte Co. were an investor instead of an exporter, and expected to receive euros in the future, it could have used a forward contract in the same manner.

### FUTURE MARKET

- Forex futures are exchange-traded currency <u>derivative</u> contracts obligating the buyer and seller to transact at a set price and predetermined time.
- Currency futures contracts are legally binding and counterparties that are still holding the contracts on the <u>expiration date</u> must deliver the currency amount at the specified price on the specified delivery date.

Currency futures can be used to hedge other trades or currency risks, or to speculate on price movements in currencies.

# CURRENCY FUTURES EXAMPLE

Company XYZ, which is based in the United States, is heavily exposed to foreign exchange risk and wishes to hedge against its projected receipt of 125 000 euros in September. Prior to September, the company could sell futures contracts on the euros they will be receiving. Euro FX futures have a contract unit of 125,000 euros. They sell euro futures because they are a US company, and don't need the euros. Therefore, since they know they will receive euros, they can sell them now and lock in a rate at which those euros can be exchanged for US dollars.

• Company XYZ sells 1,000 futures contracts on the euro to hedge its projected receipt. Consequently, if the euro depreciates against the US dollar, the company's projected receipt is protected. They locked in their rate, so they get to sell their euros at the rate they locked in. However, the company forfeits any benefits that would occur if the euro appreciates. They are still forced to sell their euros at the price of the futures contract, which means giving up the gain (relative to the price in August) they would have had if they had not sold the contracts.

# HOW IS FUTURES CONTRACT DIFFERENT FROM FORWARD CONTRACT?

### 1. The Structure and Purpose

The Forward contracts can be customized as per the needs of the customer. There is no initial payment required and this is mostly used for the process of hedging. The Futures contracts on the other hand are standardized and traders need to pay a margin payment initially.

### 2. The Method of Transaction

The Forward contracts are negotiated directly by the seller and the buyer and are not regulated by the markets. The Futures Contracts are quoted and traded over the stock exchange and are government regulated.

### 3. The Risk and Guarantees

The Forward contracts include a high counter party risk and there is also no guarantee of asset settlement till the maturity date. The Futures contract involves a low counterparty risk and the value is based on the market rates and is settled daily with profit and loss.

### 4. The Contract Size and Maturity

The Forward contracts mature after the delivery of the Asset and this may not happen in Future contracts. The size of the contract is standardized in Futures but in Forward it entirely depends upon the requirements of both the parties.

### 5. The Risk Factor

When an agreement happens between two different parties, there can be a risk that any one party can default on the agreement terms. Any of the party can be unwilling or be unable to follow the terms during the time of settlement. This risk is termed as the counterparty risk. In Futures, the clearing house of the stock exchange acts as counterparty for both parties. This reduces the credit risk and the risk is reduced further as all the positions taken in futures are marked to market every day. With such features, there is absolutely no counterparty risk when it comes to a trade in futures.

On the other hand, the Forward contracts do not have any such mechanisms. The Forwards are always settled during the time of delivery and thus the profit or a loss can only be known during settlement. Hence, the loss can be more for the participants in Forwards which can be due to a default.

### CASE STUDY

• Sherbury Herbal Products, located in central England, is an old line producer in herbal teas and medicines. Its products are marketed all over the United Kingdom and in many parts of Europe. Sherbury Herbal generally make invoice in British Pound Sterling when it sales to foreign customers as to guard against exchange rate changes. Company has received a large order from a wholesaler of Europe for £ 320000 upon the delivery after 3 months and the invoice will be prepared in Euro. Sherbury controller Elton Peter, is concerned with whether the pound will appreciate verses Euro in next 3 months, thus eliminating all or most of its profit when Euro Receivable is paid. He thinks that this is an unlikely possibility, but he decided to contact with the firm's banker for taking the suggestion about the exchange rate exposure. Mr. Peter learns from the banker that the current spot rate is 1 £ = 1.4537 Euro. Thus the invoice amount should be 465184 euro. Banker offer to set a forward contract to Mr. Peter.

### Questions

- 1. What would you do if you are in place of Mr. Peter.
- Suggest alternative hedging possibilities for Sherbury Herbal Products, treating you as its treasury manager.

## Unit-4

### **Topics**

Exchange rate policies and macroeconomic management: Fixed and flexible rates - Central Banks actions, Impact of changing exchange rates on exports and imports, Volatility managements by the government and Exchange rate regimes, Open economy macroeconomics, Monetary approach and asset market approach to predict future exchange rate, 3 International Financial Crises models - Understanding the recent few crises, The Euro Crisis/ crisis in Venezuela, Economic risk indicators for FDI and FII

# Fixed exchange rate:

Under fixed exchange rate the rate is determined by the Monetary authorities. The exchange rate if imposed in foreign exchange market by authority interventions. The authorities make the policies related to the exchange rate determination.

### **▶** Advantages of Fixed exchange rate:

- i. The fixed rate in the country is beneficial in international trade. With the help of fixed exchange rate, the price of he goods can be predicted and it promotes international trade.
- ii. As fixed rate reduces the future uncertainty of exchange rate and this encourages to long term capital flow in smooth manner.
- iii. Fixed rate regime eliminates the fear of appreciation and depreciation of the currency.
- iv. Under the fixed rate the speculation is controlled by the monetary authorities of the country.

## Disadvantages of the Fixed Rate

- i. Under fixed rate the large foreign exchange reserve to be maintained. And in adverse balance of payment conditions it's very difficult.
- ii. Fixed rate system needs very complicated measures to take that is very difficult to opt by the country,
- iii. Balance of payment conditions and fluctuation in international price level compel the country to change the exchange rate.
- iv. At present, this system can run with severe difficulties. And most of the countries are not in favour of the fixed rate system.

# Floating exchange rate:

- Fluctuating rate is determined by the market force i.e. demand for and supply of foreign currency. The monetary authorities do not interfere in determination of exchange rate. Under the floating rate system is there is more supply of the currency it reduces its value and if there is more demand of the currency in foreign exchange market then the value of the currency will increase.
- ► The demand and supply of the currency generate automatically without any intervention of the authorities

# Advantages of Flexible exchange rate

- ► The chief merit of the freely fluctuating exchange rate is that the BOP disequilibrium gets corrected automatically with the change in exchange rate.
- **▶** Absorption of Sudden Shocks
- **▶** Minimum Buffer of Foreign Exchange Reserves

# Exchange Rate Regime

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# Impact of exchange rate on Export

### 1. Appreciation in Currency

If currency is appreciated then it leads to the costlier domestic goods in caparison to other country' goods. And this will be the reason of decreasing export.

### 2. Depreciation in Currency

If currency is depreciated then it leads to cheaper domestic goods in comparison to other country. And this will be the reason of increasing export

```
For Example :
```

```
1 \$ = 50 \text{ Rs.} Appreciation 1 \$ = 45 \text{ Rs.}
```

- export worth Rs. 500 = 10 \$ after Appreciation now they will = 12 \$
- costlier domestic goods for US = decrease in Export

- exporting worth Rs. 500 = 10 \$ after Deprecation now = 8 \$
- cheaper the domestic leads to increase in Export

# Impact of exchange rate on Import

#### 1. Appreciation in Currency

If currency is appreciated then it leads to the costlier domestic goods in caparison to other country' goods. And this will be the reason of increasing import.

#### 2. Depreciation in Currency

- If currency is depreciated then it leads to cheaper domestic goods in comparison to other country. And this will be the reason of decreasing import.
- For example:

1 
$$\$ = 50 \text{ Rs}$$
 Appreciation 1  $\$ = 45 \text{ Rs}$ .

Import 500 Rs.

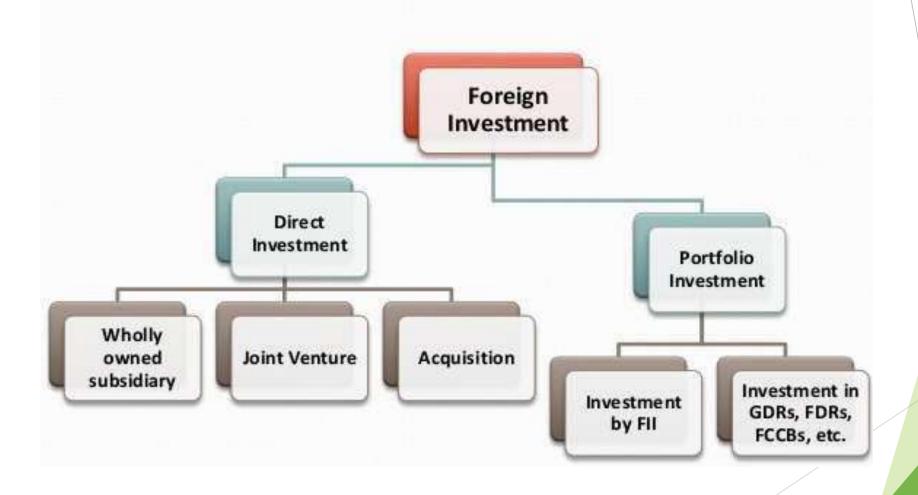
# Foreign Direct Investment FDI



# Foreign Portfolio Investment FPI



# Types of Foreign Investment



# **Foreign Direct Investment**

#### Introduction

Foreign investment involves capital flows from one country to another, granting the foreign investors extensive ownership stakes in domestic companies and assets.

Foreign investment denotes that foreigners have an active role in management as a part of their investment or an equity stake large enough to enable the foreign investor to influence business strategy.

Through Foreign Direct Investment a firm invests directly in facilities to produce and/or market a product in a foreign country.

Foreign Direct Investment (FDI) is defined as an investment made by an investor of one country to acquire an asset in another country with the intent to manage that asset (IMF, 1993).

Foreign investment and technology play an important role in the economic development of a nation and have been exploited by a number of developing countries.



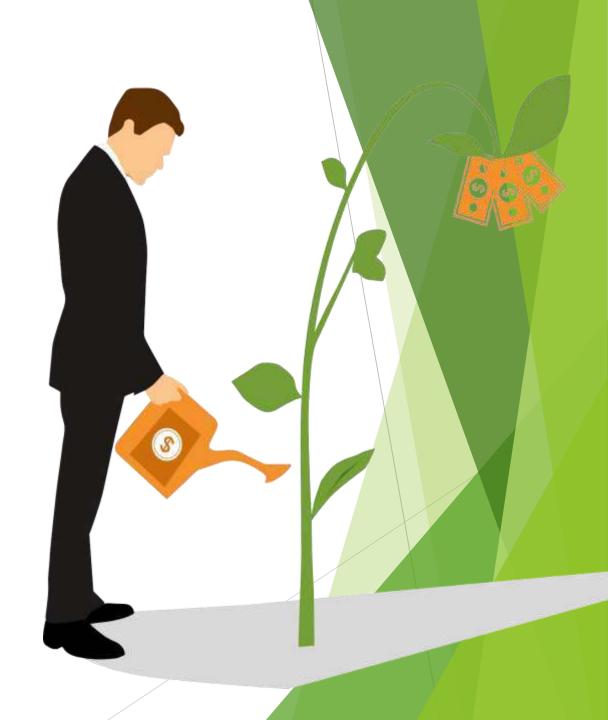
FDI are supposed to bring many benefits to the economy. They contribute to GDP, capital formation, balance of payment and generate employment.



To attract multinational companies, governments are offering tax holidays, import duty exemption, subsidised land and power and many other incentives.



Foreign direct investments include long-term physical investments made by a company in a foreign country, such as opening plants or purchasing buildings.



#### **Automatic Rout**

FDI up to 100% is allowed under the automatic route in all activities/sectors except the following which require approval of the government:

Activities/items that require an Industrial License.

Proposals in which the foreign collaborator has an existing venture/tie up in India in the same field.

Proposals for acquisition of shares in an existing Indian company in some cases.

All proposals falling outside notified sectorial policy/caps or under sectors in which FDI is not permitted.

### **Government Approval Rout**

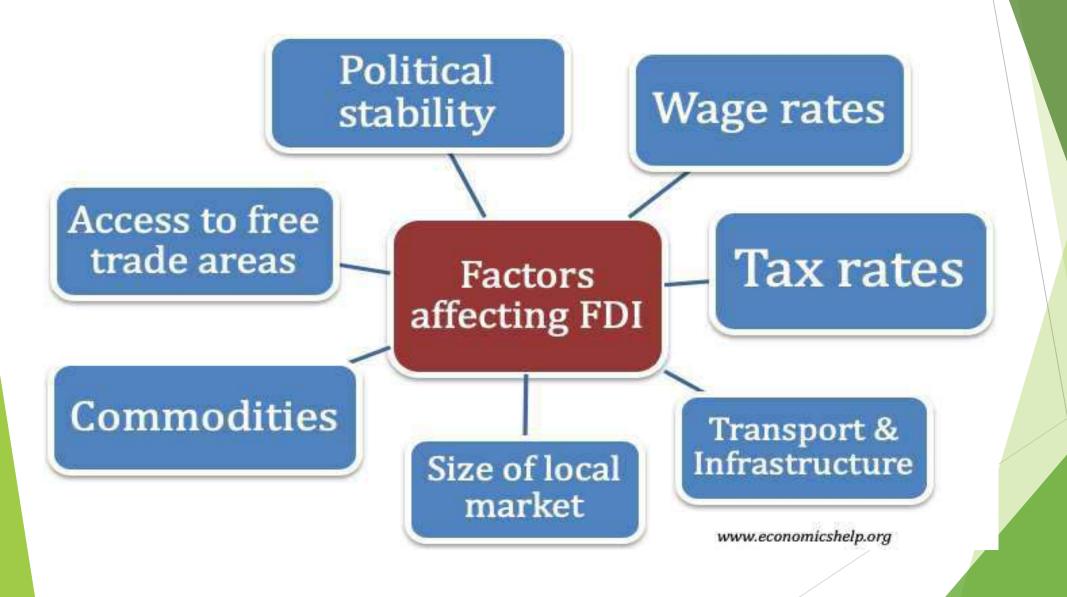
- ✓ The Foreign Investment Promotion Board (FIPB) is a national agency of Government of India, with the remit to consider and recommend foreign direct investment (FDI) which does not come under the automatic route.
- ✓ It provides a single window clearance for proposals on FDI in India.
- ✓ In a significant move aimed at expediting flow of foreign investment into the country, the Union Cabinet liberalized the FDI policy further by allowing the FIPB to clear proposals from overseas entities worth up to 1,200 crore, against the existing limit of 600 crore.
- ✓ Recommendations of FIPB for proposals up to ` 1,200 crore are approved by Minister of Finance.
- ✓ While recommendations for proposals of more than `
  1,200 crore need to be approved by Cabinet Committee on Economic Affairs.

# Routs of Foreign Direct Investment



Sector	Sectoral Cap/ Route	
Defence Industry	49% automatic route	
Civil Aviation	49% FDI (100 percent for NRIs) Automatic	
Asset Reconstruction Companies (ARCs)	100 % (FDI + FII) - by FIPB if beyond 49%	
Banking: Private Sector Banking: Public Sector	74% (FDI + FII) by FIPB if beyond 49% 20% (FDI + FII) FIPB	
Broadcasting (i) FM Radio (ii) Cable Network (iii) DTH	26% (FDI + FII) FIPB 49% (FDI + FII) Automatic 74% (FDI + FII) FIPB beyond 49%, 26% (FDI + FII) FIPB	
Commodity Exchanges	49% (26% FDI + 23% FII) Automatic	
Credit Information Companies (CICs)	74% Automatic (FII only 24 %)	
Insurance	49%; up to 26% automatic and beyond it FIPB	
Stock Exchanges, Depositories, Clearing Corp	49% (26% FDI + 23% FII) Automatic	
Petroleum and Natural Gas Refining	49% FDI in case of PSUs Automatic	
Publishing of Newspapers and Current Affairs News	26%(FDI+FII) FIPB	
Security Agencies in the Private Sector	49 % FIPB	
Satellite and Establishment and Operation	74 % FIPB	
Single Brand Product Retailing	100% subject to sourcing conditions, FIPB beyond 49%	

# Factors Influencing On FDI



# Executive Summary Executive Summary Size: 710 kb

#### List of Indian Multinationals

Arvind Mills Limited	Ashok Leyland Limited
Aurobindo Pharma Limited	Bharat Forge Limited
Dr Reddy's Laboratories Limited	Glenmark Pharmaceuticals Limited
Infosys Technologies Limited	ITC Limited
Mahindra & Mahindra Marico Industries	
Limited	Limited
Motherson Sumi	Nicholas Piramal
Systems Limited	India Limited
Rico Auto Industries	Satyam Computer
Limited	Services Limited
Sundram Fasteners	Tata Consultancy
Limited	Services Limited
Tata Steel Limited	Tata Tea Limited
Thermax Limited	Titan Industries Limited
Voltas Limited	Videsh Sanchar Nigam Limited
Wockhardt Limited	Zee Telefilms Limited
	Aurobindo Pharma Limited Dr Reddy's Laboratories Limited Infosys Technologies Limited Mahindra & Mahindra Limited Motherson Sumi Systems Limited Rico Auto Industries Limited Sundram Fasteners Limited Tata Steel Limited Thermax Limited Voltas Limited

# **Benefits to the Host Country**

# Resource-transfer Effects

FDI can make a positive contribution to a host economy by supplying capital, technology, and management Resources that would otherwise not be available and thus boost that country's economic growth rate.

#### **Employment Effects**

Direct efforts arise when a foreign MNCs employs a number of host-country citizens. Indirect effects arise when jobs are created in local suppliers as a result of investment and when jobs are created because of increased local spending by employees of the MNC.

### Balance-of-Payments Effect

There are three potential balance-of-payments consequences of FDI. First, when an MNE establishes a foreign subsidiary, the capital account of the host country benefits from the initial capital inflow.

if the FDI is a substitute for imports of goods or services, it can improve the current account of the host country's balance of payments

### Effect on Competition and Economic Growth

Increased competition tends to stimulate capital investments by firms in plant, equipment, and R&D as they struggle to gain an edge over their rivals.

The long-term results may include increased productivity growth, product and process innovations and greater economic growth.

### **Cost to the Host Country**

# Possible Adverse Effects on Competition within the Host Nation

The foreign MNE may be able to draw on funds generated elsewhere to subsidize its costs in the host market, which could drive indigenous companies out of business and allow the firm to monopolize the market.

**Dumping** 

# Adverse Effects on the Balance of Payments

There are two main areas of concern with regard to the balance of payments. First, the initial capital inflow that comes with FDI must be the subsequent outflow of earnings from the foreign subsidiary to its parent company.

A second concern arises when a foreign subsidiary imports a substantial number of its inputs from abroad, which results in a debit on the current account of the host country's balance of payments

# Perceived Loss of National Sovereignty and Autonomy

The concern is that key decisions that can affect the host country's economy will be made by a foreign parent that has no real commitment to the host country and over which the host country's government has no real control

**Cultural Impact** 

### **Effect on Home Country**

First, the capital account of the home country's balance-of-payments benefits from the inward flow of foreign earnings FDI can also benefit the current account of the home country's balance of payments if the foreign subsidiary created demands for home country exports of capital equipment, intermediate goods, complementary products, and the like.

Second, benefits to the home country from outward FDI arise from employment effects. As with the balance of payments, positive employment effects arise when the foreign subsidiary creates demand for home-country exports of capital equipment, intermediate goods, complementary products, and the like.

Third, benefits arise when the home-country MNE learns valuable skills from its exposure to foreign markets that can be transferred back to home country. This amounts to a reverse resource transfer effect.

### **Effect on Home Country**

Most important concerns centre around the balance-of-payments and employment effects of outward FDI. The home country's balance of payments may suffer in three ways. First, the capital account balantbe of the payments suffers from the initial capital outflow required to finance the FDI.

Second, the current account of the balance of payments suffers if the purpose of the foreign investment is to serve the home market from a low-cost production location. Third, the current account of the balance of payments suffers if the FDI is a substitute for direct exports

# Foreign Portfolio Investment or Foreign Institutional Investment

► Foreign portfolio investment (FPI) consists of securities and other financial assets held by investors in another country. It does not provide the investor with direct ownership of a company's assets and is relatively liquid depending on the volatility of the market. Along with foreign direct investment (FDI), FPI is one of the common ways to invest in an overseas economy. FDI and FPI are both important sources of funding for most economies.

FII: No Ownership

► FII: invest through Stock Market

FII : Volatility

# Categories of FPI

#### Category 1

Government and
Government related
investors such as central
banks, Governmental
agencies, sovereign wealth
funds and international or
multilateral organizations
or agencies.

#### Category 2

regulated Mutual Funds, Investment trusts, insurance/reinsurance companies, banks, asset management companies, investment managers/ advisors, portfolio manager, university funds and pension funds etc.

#### Category 3

Endowments, charitable societies, charitable trusts, foundations, corporate bodies, trusts, individuals and family offices.

# Limit of FPI in India

"The limits for FPI investment in Government securities (G-secs) and State Development Loans (SDLs) shall remain unchanged at 6% and 2%, respectively, of outstanding stocks of securities for FY 2020-21,"

"For FG / its related entities registered as FPIs purchase of equity shares of each **company** by a single **FPI** or an **investor** group shall be below 10 **percent** of the total paid up capital of the **company**."

tata: 1 crore Rs.

below 10 lcs through FPI

### FDI Vs. FPI

#### **Foreign Direct Investment**

FDI refers to the investment made by foreign investors to obtain a substantial interest in the enterprise located in a different country.

#### Foreign Portfolio Investment

FPI refers to investing in the financial assets of a foreign country, such as stocks or bonds available on an exchange

In FPI the role of investor is very active

It is the type of Direct Investment

FDI pusses very high degree of control

It is a long term investment

The management of this kind of projects are very efficient and proactive to the situation.

Investment has done on the physical assets of the foreign Country

**Entry and exit under FDI is difficult** 

FDI leads to transfer of funds, technology, and other resources to the foreign country.

In FPI the role of investor is passive

It is type of Indirect Investment

FPI have very low degree of control

It is a short term investment

Management of this project is comparatively less efficient

Investment has done on the financial assets of the foreign country

Entry or exit is relatively easy

FPI leads to Capital inflow to the foreign country

### Risks Associated with FDI & FII

#### **1.** Higher Transaction Costs

The biggest risk to investing in global markets is the additional transaction cost. This is the fact that, the world is relatively connected and globalize but still transaction widely depending on which foreign market is selected for the investment. Brokerage commissions in international markets are almost always higher than U.S. rates.

The process of recommendation of international investments includes significant units of time and money which are spent on analysis and research for the manager. This process may comprise engaging analysts and researchers who are specialised in the global market. This required additional cost to invest

#### 2. Fluctuations in Currency

When any investor in invest in global market directly then it required to exchange domestic currency into a foreign currency at the prevailing exchange rate.

In FDI, the company transfer its profit to the parent company and at that time the company required to convert the foreign currency back into its home currency. This conversion will be made on the current exchange rate and the fluctuation in the exchange rate can lead to the losses as well. So, the fluctuation in currency is a great risk for the FDI.

#### Liquidity Risks

Another risk inherent in foreign markets, especially in emerging markets, is liquidity risk. This is the risk of not being able to sell an investment quickly at any time without risking substantial losses due to a political or economic crisis.

There is no easy way for the average investor to protect against liquidity risk in foreign markets. Investors must pay particular attention to foreign investments that are or may become illiquid by the time they want to sell.

#### Political risk

Components of Political Risk

Government stability

Socioeconomic conditions

Profile of Investment

Corruption

Military intervention in politics

Law and order

# UNIT-5



International Banking: Reserves, Debt and Risk: Nature of International Reserves - Demand for International Reserves - Supply of International Reserves - Gold Exchange Standard - Special Drawing Rights - International Lending Risk - The Problem of International Debt - Financial Crisis and the International Monetary Fund - Eurocurrency Market

# IMF (International Monetary Fund



- During the Second World War, 1930 there was international chaos. There was a high need to plans for the construction of an international institution for the establishment of monetary order.
- ► The IMF commenced financial operations on 1 March 1947, though it came into official existence on 27 December 1945, in Washington on the recommendations of Bretton Woods conference.
- India was the founder member of IMF.
- Gita Gopinath was appointed as Chief Economist of IMF from 1 October 2018.



The current Managing Director (MD) and Chairwoman of the IMF is Kristalina Georgieva, who has held the post since October 1, 2019.





### Introduction



The IMF is an independent international organization. It is a cooperative of 189 member countries, whose aim is to

- Promote world economic stability and growth.
- ► The member countries are the shareholders of the cooperative, providing the capital of the IMF through quota subscriptions. In return, the IMF provides its members with Macroeconomic policy advice.
- Financing in times of balance of payments need.
- ► Technical assistance and training to improve national economic management.

# Objectives of IMF



- ▶ To promote international monetary co-operations.
- To ensure balance international trade.
- ► To ensure exchange rate stability.
- ► To eliminate or minimize the restrictions by promoting the system of multilateral payments
- ► To assist member country for eliminating short term adverse Balance of Payment.



# Constitution and Membership of IMF

- ► IMF is managed and controlled by the board of governors and members.
- ► Each member country nominate the Governor and all nominated Governors make board of Governors.
- Each Governor is allotted a number of votes which is determined by the quota allotted to the respective country in the capital of IMF.
- ► Governor has got the right of 250 votes on the basis of the membership and for one additional vote for each SDR 100000 of quota.

# SDR (Special Drawing Right )

DIMR Organization of States points to States

- ► The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves.
- The collapse of Bretton Woods system in 1973 and the shift of major currencies to floating exchange rate regimes lessened the reliance on the SDR as a global reserve asset.
- ► The SDR was initially defined as equivalent to 0.888671 grams of fine gold—which, at the time, was also equivalent to 1 U.S. dollar. After the collapse of the Bretton Woods system, the SDR was redefined as a basket of currencies.
- ► The SDR basket is **reviewed every five years**, or earlier if warranted, to ensure that the basket reflects the relative importance of currencies in the world's trading and financial systems.
- Currencies included in the SDR basket have to meet two criteria:
  - 1. The export criterion and
  - 2. The freely usable criterion

- Special drawing rights (SDR) refer to an international type of monetary reserve currency created by the International Monetary Fund (IMF) in 1969 that operates as a supplement to the existing money reserves of member countries. Created in response to concerns about the limitations of gold and dollars as the sole means of settling international accounts, SDRs augment international liquidity by supp
- Special drawing rights (SDR) are an artificial currency instrument created by the International Monetary Fund, which uses them for internal accounting purpose.
- ► The value of the SDR is calculated from a weighted basket of major currencies, including the U.S. dollar, the euro, Japanese yen, Chinese yuan, and British pound.
- The SDR interest rate (SDRi) provides the basis for calculating the interest rate charged to member countries when they borrow from the IMF and paid to members for their remunerated creditor positions in the IMF.<sup>1</sup>

### The role of the SDR

- ▶ The SDR was created as a supplementary international reserve asset in the context of the Bretton Woods fixed exchange rate system. The collapse of Bretton Woods system in 1973 and the shift of major currencies to floating exchange rate regimes lessened the reliance on the SDR as a global reserve asset. Nonetheless, SDR allocations can play a role in providing liquidity and supplementing member countries' official reserves, as was the case amid the global financial crisis.
- The SDR serves as the unit of account of the IMF and some other international organizations.
- ► The SDR is neither a currency nor a claim on the IMF. Rather, it is a potential claim on the freely usable currencies of IMF members. SDRs can be exchanged for these currencies.



# SDR currency basket in 2016

Currency	Weights determined in the 2015 Review	Fixed Number of Units of Currency for a 5-year period Starting Oct 1, 2016
U.S. Dollar	41.73	0.58252
Euro	30.93	0.38671
Chinese Yuan	10.92	1.0174
Japanese Yen	8.33	11.900
Pound Sterling	8.09	0.085946

### **Executive Board**

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► The Executive Board (the Board) is responsible for conducting the day-to-day business of the IMF. It is composed of 24 Directors, who are elected by member countries or by groups of countries, and the Managing Director, who serves as its Chairman. The Board usually meets several times each week. It carries out its work largely on the basis of papers prepared by IMF management and staff.





# Role of IMF

#### Role of IMF

- Exchange Rate Stability
- Eliminating BOP Disequilibrium
- Determination of Par Value
- Stabilize Economies
- Credit Facilities
- Maintaining Balance Between Demand and Supply of Currencies
- Maintenance of Liquidity
- ► Technical Assistance:

# **Operations of IMF**

Financial Assistance

Technical assistance

Surveillance

### **Financial Assistance**

IMF is and international financial organisation, this makes it obvious that one of the core operation of IMF is to assist its low-income members financially. It provides financial aid to its members in two ways viz. concessional lending and debt relief. IMF have

**Poverty Reduction and Growth Facility (PRGF):** through which it provides concessional lending to its member. The focus of PRGF is on poverty reduction and lasting economic growth

**Heavily Indebted Poor Countries (HIPC) Initiative** through which it provides debts relief to the member nations. HIPC Initiative has been enhanced to provide deeper, broader, and quicker debt relief

### **Technical Assistance**

IMF also assists its member nations technically such as public financial management, tax policy and administration, banking supervision, monetary and exchange rate policy, official statistics, and legal issues. It also prepares the report on technical help, it is called technical assistance report. IMF provides technical assistance mainly in six areas. These areas are-

- 1. For designing and implementing macroeconomic policies.
- 2. Banking and financial system reforms- for advice on banking system regulation, supervision, and restructuring; foreign exchange and monetary management and operations; clearing and settlement systems for payments; central bank legislation;
- 3. Fiscal reforms- for public expenditure management and reform; fiscal decentralization; design of social safety nets; and public debt management.

- 4. Stastical reforms- for managing, and disseminating economic data and improving data quality
- 5. Legal reforms- for drafting and reviewing economic and financial legislation based on international best practice.
- 6. Standards and codes- for helping countries meet international standards in the areas of statistical data, fiscal transparency, and monetary and financial policy transparency.

### Surveillance

Surveillance is one of the core operations of IMF. It provides multilaterally consistent assessments of member countries' external sector, including their exchange rates, current accounts, reserves, capital flows, and external balance sheets. Three types of surveillance are conducted by IMF viz. country surveillance, regional surveillance and global surveillance.

- Country surveillance- Country surveillance is an ongoing process that leads up in regular comprehensive consultations with individual member countries, with discussions in between as needed. This is done annually.
- Regional surveillance- Regional surveillance involves examination by the IMF of policies pursued under currency unions—including the euro area, the West African Economic and Monetary Union, the Central African Economic and Monetary Community, and the Eastern Caribbean Currency Union.
- Global surveillance- Under Global surveillance, Executive Board of the IMF's review and entails the global economic trends and developments. The main literatures use for this purpose are "world economic out look" report and "the global financial stability report".

# **Eurocurrency Markets**

- Euro-currency is a currency held by individuals and institutions in a European country other than its country of origin. It is accumulated in European banks that deal in other currencies such as American dollar, Japanese Yen, Swiss Francs, etc.
- ► This market is the largest market in the international monetary system. It has been playing a central role in short and medium term international borrowing and lending by large corporations and banks and for financing international trade.

### **Eurocurrency Markets**

- 1. The Eurocurrency markets originated in the 1950s.
- 2. The Govt. Of eastern Europe has started to deposit the dollar in European Bank because of being afraid from US Govt.
- 3. These dollars were known as the Eurodollar, in simple words

  Eurodollar = US dollars deposit in European Banks
- **4.** An extension of the Eurodollar is the **Eurocurrency**, which is a currency on almost half of world deposits are in the form of Eurodollar deposit outside its country of issue.
- 6. The Euroloan market is a part of the Eurocurrency market.
- 7. Euroloans are quoted on the basis of LIBOR, the London Interbank Offer Rate.
- 8. The participants in the Eurocurrency markets are very large global firms, banks, governments, and extremely wealthy individuals.
- 9. Eurocurrency market has no regulations, which results in lower costs.



# **Features of Euro-Currency Market:**

- International Market
- Independent Market
- Wholesale Market
- Competitive Market
- Short-Term Market
- Inter-Bank Market

# **Functioning of Euro Currency Market**

- The Euro-currency market is very extensive and complex.
- lt is a means of transferring short-term and medium-term funds from one country to another.
- Euro-currency deposits and loans expand whenever funds flow into the Eurobanks as deposits from-
  - (i) commercial banks or residents of the United States;
  - (ii) transfers by commercial banks or residents of other countries; and
  - (iii) central banks, either directly or through the Bank for International Settlements.

# Type of flow from the United States

# The first type of flow from the United States can be caused by one or more of the following factors:

- (1) A fall in US interest rates relative to Euro-currency rates;
- (2) An increased desire for asset diversification;
- (3) A fall in covered yield of foreign asset.
- (4) An expected appreciation of the US dollar.
- (5) The flow of Euro-currency from commercial banks or residents outside Europe involves a portfolio shift out of domestic currency assets into Euro-currency. Moreover, many central banks also redeposit a substantial proportion of their reserve gains in the Euro-market.



### The Euro-market is connected closely to the foreign exchange market because banks are able to manage their foreign currency positions in two ways:

- ▶ (1) They can buy and sell currencies outright in the spot and forward exchange markets.
- (2) They can borrow and lend currencies in the interbank market. However, many Eurocurrency loans are made to non-bank borrowers also, Let us analyze the functioning of the Euro-market.
- Suppose that a bank in London acquires dollar-deposits on a New York bank. If the London bank simply keeps these deposits, no Euro-dollars are created. But if this bank lends these dollars to some individual at interest rate, it creates dollar deposit claims against itself.
- These claims are Euro-dollars which the hank in London has created in excess of what it holds on a New York bank. Thus the ultimate increase in Euro-market aggregates will not be identical to initial deposit inflows because there are always subsequent flows induced by interest differentials and portfolio adjustments.
- The above process of credit creation in the Euro-market has led economists to use the credit-multiplier analysis to explain its behaviour. Given the initial levels of US and foreign interest rates, this multiplier is always less than 1. This is because an initial deposit inflow of, say, \$ 100 will encourage dollar rates to fall relative to foreign rates.
- This will, in turn, lead to a leakage in the original inflow. Moreover, the Euro-market is very vast and unregulated. Therefore, it does not operate like the ordinary banking system. Last but not the least, the multiplier analysis is essentially a tool for examining a credit creation in a closed economy, whereas the Euro-market is an open market. This fact severely limits the usefulness of the credit multiplier as a method for expanding the growth of the Euro-currency market.

# Role of Euro Currency Market in International Financial System:

- The Euro-currency market has been playing an important role in international financial system. Investing and borrowing US dollars is the core function of the Euro-currency market. It transfers short and medium terms funds throughout the world, thereby increasing international capital mobility. It not only enables individual banks to improve their portfolio allocation, but also provides important services to the non-bank private sector.
- ► The Euro-currency market attracts funds because it offers higher interest rates, greater flexibility of maturities, and a wider range of investment qualities than other short-term capital markets. It attracts borrowers because it lends funds at relatively low interest rates.
- ▶ It is competitive in the interest rates it charges and receives, both because of the economies of scale afforded by concentrating on wholesale transactions, and because the Euro-banks are not subject to the regulations which tend to raise costs in domestic banking. Commercial banks, central banks, government treasuries, international banks like the Bank of International Settlement, and multinational corporations are the borrowers and lenders in the Euro-currency market.

## **Effects of Euro Currency Market:**

#### **Positive Effects:**

The following have been the economic consequences of the Euro-currency market:

- 1. The expansion of the Euro-currency market has greatly increased international capital mobility and has helped in easing the global liquidity problem.
- 2. It has helped in integrating international capital markets.
- ▶ 3. It has played an effective role in recycling funds from countries having surplus balance of payments to those having deficit balance of payments.
- ▶ 4. International flows of Euro-currencies have improved economic efficiency by reducing interest differential among nations.
- ▶ 5. It has helped in financing BOP deficits and surpluses of countries through lending and borrowing their currencies in exchange for other currencies from the Euro-currency market.

### **Adverse Effects**

#### However, these flows of Euro-currencies have 2 adverse effects:

- ► First, when the monetary authority of a country is trying to curb inflation through a restrictive monetary policy, an inflow of short-term capital defeats such a policy. Again when there is an outflow of capital and the country is following an easy monetary policy to combat unemployment, such a policy again becomes ineffective. This is because the Euro-currency market does not operate under the regulations of any authority.
- Second, Euro-currencies provide an enormous fund of liquid resources which are used for speculative capital movements. These expose the economies of the concerned countries to severe strains of sudden and large withdrawals of credits. Such financial upheavals and disturbances also affect the international monetary system as a whole, especially when the countries involved are not protected by exchange controls or trade barriers.

# Components of Euro-Currency Market

The Euro-Currency market can be broadly divided into 4 components:

- (i) Euro-Currency deposit market involving short term deposits.
- (ii) Euro-Currency loan market (Euro-credits) involving syndicated loans.
- (iii) Euro-Bond market in which Corporate entities issue debt instruments to raise resources from investors through banks operating as underwriters.
- (iv) Euro-Notes market in which international borrowers raise resources directly from the investors without using banks as intermediaries or any underwriting support.

### International reserves

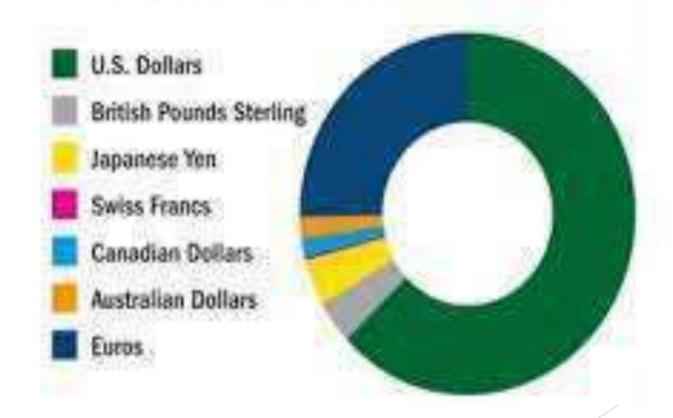
International reserves are any kind of reserve funds, which central banks can pass among themselves, internationally. International reserves remain an acceptable form of payment among these banks. Reserves themselves can either be gold or a specific currency, such as the dollar or <u>euro</u>.

#### Nature of International Reserve

- 1. International reserves are funds central banks exchange with each other on an international level.
- 2. The reserves can either be in gold or in an internationally-accepted commodity, like the dollar or the euro.
- 3. Special drawing rights (SDRs), or baskets of national currencies, can also be accepted as reserves.
- 4. The reserves are an accepted form of payment among the banks and streamline the process of transferring funds between many different central banks.
- Foreign exchange reserves are also assets a bank can hold in foreign currencies, and they include banknotes, bank deposits, bonds, treasury bills, and other government securities.



# WHAT ARE THE WORLD'S RESERVE CURRENCIES



### Financial Crisis

- A **financial crisis** is any of a broad variety of situations in which some financial assets **suddenly lose a large part of their nominal value**. In the 19th and early 20th centuries, many financial crises were associated with <u>banking panics</u>, and many <u>recessions</u> coincided with these panics. Other situations that are often called financial crises include <u>stock market crashes</u> and the <u>bursting</u> of other financial <u>bubbles</u>, <u>currency crises</u>, and <u>sovereign defaults</u>.
- Financial crises directly result in a loss of <u>paper wealth</u> but do not necessarily result in significant changes in the real economy.
- ▶ A **financial crisis** occurs when one or more financial markets or intermediaries cease functioning or function only erratically and inefficiently. A **non systemic crisis** involves only one or a few markets or sectors, like the Savings and Loan Crisis.
- A **systemic crisis** involves all, or almost all, of the financial system to some extent, as during the Great Depression and the crisis of 2008.

# **Types**

#### Bank crisis

When a bank suffers a sudden rush of withdrawals by depositors, this is called a *bank run*. Since banks lend out most of the cash they receive in deposits, it is difficult for them to quickly pay back all deposits if these are suddenly demanded, so a run renders the bank insolvent, causing customers to lose their deposits, to the extent that they are not covered by deposit insurance. An event in which bank runs are widespread is called a *systemic banking crisis* or *banking panic* 

# **Currency crisis**

In general, a currency crisis can be defined as a situation when the participants in an exchange market come to recognize that a <u>pegged exchange rate</u> is about to fail, causing <u>speculation</u> against the peg that hastens the failure and forces a <u>devaluation</u>.

Frankel and Rose (1996) define

"a currency crisis as a nominal depreciation of a currency of at least 25% but it is also defined as at least a 10% increase in the rate of depreciation"

### International financial crisis

When a country that maintains a <u>fixed exchange rate</u> is suddenly forced to <u>devalue</u> its currency due to accruing an unsustainable current account deficit, this is called a *currency crisis* or *balance of payments crisis*.

While devaluation and default could both be voluntary decisions of the government, they are often perceived to be the involuntary results of a change in investor sentiment that leads to a <u>sudden stop</u> in capital inflows or a sudden increase in <u>capital flight</u>.

Several currencies that formed part of the <u>European Exchange Rate</u> <u>Mechanism</u> suffered crises in 1992–93 and were forced to devalue or withdraw from the mechanism. Another round of currency crises took place in <u>Asia in 1997–98</u>.

### Wider economic crisis

- Negative GDP growth lasting two or more quarters is called a *recession*. An especially prolonged or severe recession may be called a *depression*, while a long period of slow but not necessarily negative growth is sometimes called <u>economic stagnation</u>.
- Some economists argue that many recessions have been caused in large part by financial crises. One important example is the <u>Great Depression</u>, which was preceded in many countries by bank runs and stock market crashes

# Causes and consequences of Financial Crisis

#### ► Strategic complementarities in financial markets:

It is often observed that successful investment requires each investor in a financial market to guess what other investors will do. <u>George Soros</u> has called this need to guess the intentions of others '<u>reflexivity</u>'.

### Leverage

Leverage, which means borrowing to finance investments, is frequently cited as a contributor to financial crises. when it borrows in order to invest more, it can potentially earn more from its investment, but it can also lose more than all it has. Therefore, leverage magnifies the potential returns from investment, but also creates a risk of <a href="mailto:bankruptcy">bankruptcy</a>

#### Asset-liability mismatch

Another factor believed to contribute to financial crises is asset-liability mismatch, a situation in which the risks associated with an institution's debts and assets are not appropriately aligned. For example, commercial banks offer deposit accounts that can be withdrawn at any time and they use the proceeds to make long-term loans to businesses and homeowners.

### Uncertainty and herd behaviour

financial crises emphasize the role of investment mistakes caused by lack of knowledge or the imperfections of human reasoning. <u>Behavioral finance</u> studies errors in economic and quantitative reasoning.

### Regulatory failures

Governments have attempted to eliminate or mitigate financial crises by regulating the financial sector.

### Contagion

<u>Contagion</u> (Infection)refers to the idea that financial crises may spread from one institution to another, as when a bank run spreads from a few banks to many others, or from one country to another, as when currency crises, sovereign defaults, or stock market crashes spread across countries

### Recessionary effects

Some financial crises have little effect outside of the financial sector, like the <u>Wall</u> <u>Street crash of 1987</u>, but other crises are believed to have played a role in decreasing growth in the rest of the economy.

# Financial Crisis Examples

- Credit Crisis of 1772. After a period of rapidly expanding credit, this crisis started in March/April in London. Alexander Fordyce, a partner in a large bank, lost a huge sum shorting shares of the East India Company and fled to France to avoid repayment. A panic led to a run on English banks that left more than 20 large banking houses either bankrupt or stopping payments to depositors and creditors. The crisis quickly spread to much of Europe. Historians draw a line from this crisis to the cause of the Boston Tea Party—unpopular tax legislation in the 13 colonies—and the resulting unrest that gave birth to the American Revolution.
- Stock Crash of 1929. This crash, starting on Oct. 24, 1929, saw share prices collapse after a period of wild speculation and borrowing to buy shares. It led to the Great Depression, which was felt worldwide for over a dozen years. Its social impact lasted far longer. One trigger of the crash was a drastic oversupply of commodity crops, which led to a steep decline in prices. A wide range of regulations and market-managing tools were introduced as a result of the crash.
- 1973 OPEC Oil Crisis. OPEC members started an oil embargo in October 1973 targeting countries that backed Israel in the Yom Kippur War. By the end of the embargo, a barrel of oil stood at \$12, up from \$3. Given that modern economies depend on oil, the higher prices and uncertainty led to the stock market crash of 1973–74, when a bear market persisted from January 1973 to December 1974 and the Dow Jones Industrial Average lost 45% of its value.

- Asian Crisis of 1997–1998. This crisis started in July 1997 with the collapse of the Thai baht. Lacking foreign currency, the Thai government was forced to abandon its U.S. dollar peg and let the baht float. The result was huge devaluation that spread to much of East Asia, also hitting Japan, as well as a huge rise in debt-to-GDP ratios. In its wake, the crisis led to better financial regulation and supervision.
- The 2007-2008 Global Financial Crisis. This financial crisis was the worst economic disaster since the Stock Market Crash of 1929. It started with a subprime mortgage lending crisis in 2007 and expanded into a global banking crisis with the failure of investment bank Lehman Brothers in September 2008. Huge bailouts and other measures meant to limit the spread of the damage failed and the global economy fell into recession.