

MODULE 9

International Financial Flows from Trade

- International trade necessarily involves the flow of money and other financial instruments across national borders.
- We need to understand how these funds are generated, and how they are used to pay for the various transactions that occur between various countries involved in International Trade.
- That is, we need to understand how an international transaction is settled between a country (such as the United States), and another country (such as Japan).
- Let's say, for example, that the U.S. imports Toyota cars from Japan.

- In this case, since the Japanese seller of Toyota cars must be paid in Japanese currency (the Yen), the U.S. buyer of the Toyota cars must obtain the Yen in order to pay for the Toyota cars.
- Therefore, the U.S. importers of Toyota must SUPPLY the U.S. currency (the Dollar) in order to obtain the Japanese currency (the Yen), to pay for the cars.
- This transaction is done in the International currency Exchange Rate market.
- In this way, the international Exchange Rate value of each country's currency, is freely determined in the market.

Exchange Rate and Exchange Rate Policies

- The **Exchange Rate (x)** of a country's currency is the rate at which that currency exchanges for the currencies of other countries.
- The value of x at any time depends on the exchange rate policy that is being pursued by the country, at that time.
- A country may decide to pursue a *Fixed* Exchange Rate Policy, or a *Flexible* Exchange Rate Policy, during any period of time.
- *Fixed* Exchange Rate policy is if/when the country's currency Exchange Rate is pegged at some constant level.
- *Flexible* Exchange Rate policy is if/when the country's currency Exchange

Rate is allowed to be freely determined by the currency's supply and demand, in the international currency market.

■ A *Quasi-Fixed* Exchange Rate policy is if/when the country's currency Exchange Rate is allowed to **float** freely, in the international currency market, but that Exchange Rate is not allowed to rise above, or fall below, certain levels.

-- A country's volume of Exports and Imports are highly impacted by the level of the Exchange Rate (x), of the country's currency.

-- This is because in order for the country's products to be sold in the world market, the foreign buyers must obtain the country's currency in order to pay for the country's products.

-- However, the price to pay in order to obtain (purchase) the country's currency, is the Exchange Rate (x) of that currency.

-- The higher the price of the currency (the higher the x), the lower would be the amount of it that is purchased, and thus the lower would be the amount of the country's exports that would be bought/sold (demanded) in the world.

Exchange Rate Determination

- The Exchange Rate of a country's currency is defined as the **ratio of one unit of that currency, per one unit of another country's currency**.
- Thus, by definition, the Exchange Rate of a country's currency, is **the amount of foreign currency it costs to obtain one unit of that country's currency**.

- That is, between, say, the U.S.A. and Japan, the Exchange Rate of the U.S. dollar is how much Japanese Yen it costs to get one U.S. dollar.
- To illustrate with another example, let us consider the Exchange Rate of the U.S. Dollar in exchange to the Canadian Dollar.
- That is, for the U.S. Dollar, the value of the Exchange Rate, x , relative to the Canadian Dollar, is given as:

$$x^{\text{US}} = \frac{\$1^{\text{US}}}{\$1^{\text{Cda}}}$$

- Using this formula, the Exchange Rate of any country's currency can be calculated.
- The Exchange Rate of any country's currency must be expressed in terms of another country's currency.

- An example can be used to illustrate how to calculate the Exchange Rate of a country's currency.
- Between, say, the U.S. and Canada, for example, the Exchange Rate of the U.S. dollar, relative to the Canadian dollar, is, say, \$1.08 Canadian.
- That is,

$$x^{\text{US}} = \frac{\$1^{\text{US}}}{\$1^{\text{Cda}}} = 1.08$$

- This means that, it will cost Canada \$1.08 of their currency, in order to obtain one U.S. Dollar.
- This also means that, in order to obtain one Canadian Dollar, U.S. residents must pay: $1/(1.08) = \$0.92$.

-- The interpretation of this, is that the **Exchange Rate of the U.S. dollar is \$1.08 Canadian dollars; and the Exchange Rate of the Canadian dollar is \$0.92 U.S. dollars.**

The Exchange Rate Market

- Like any other market, the Exchange Rate market is the interaction of the **supply** and the **demand** of international currencies (in the international currency market), to determine the prices (exchange rates) of various currencies.

The Supply of Currency

-- The Supply of a currency, such as the U.S. Dollar, is the quantity of U.S. dollars that are being offered (**by Americans**) to exchange for foreign currencies.

-- The higher the x of the U.S. dollar, the higher would be the quantity supplied, and vice versa.

-- This is because higher x means that it is cheaper to acquire (purchase) foreign currencies (to pay for foreign goods).

-- Higher x of the U.S. dollar means cheaper foreign currencies and cheaper foreign goods.

-- The Supply Curve of the dollar is therefore positively sloped in price-quantity space (x - $Q_{\$}$ space).

The Demand of Currency

-- The Demand for a currency, such as the U.S. Dollar, is the quantity of U.S. dollars that are being bought (**foreign countries**) in exchange for foreign currencies.

-- The higher the x of the U.S. dollar, the lower would be the quantity demanded, and vice versa.

-- This is because higher x means that it is more expensive for foreign countries to acquire (purchase) the U.S. dollar (to pay for U.S. goods).

-- Higher x of the U.S. dollar means higher prices of U.S. goods for foreign countries.

-- The Demand Curve of the dollar is therefore negatively sloped in price-quantity space (x - $Q_{\$}$ space).

- Thus, for any given country's currency (e.g. the U.S. dollar), the international currency Exchange Rate market is given by the Supply-Demand equilibrium.