

International Business
Prof. J. K. Nayak
Department of Management Studies
Indian Institute of Technology, Roorkee

Lecture – 29
Foreign Exchange, Foreign Exchange Market, Features, Participants

Welcome everyone, to our course of International Business. So, in the last lecture we were discussing about balance of payment, what balance of payment is and what are its components. So, we discussed about the major components like the capital account, the you know the financial account right, the current account. And, then the you know we discussed on how balance of payment of a country gives an idea about its economic position right.

So, whether it is in a surplus, it is in a deficit and how the balance of payment has to always match. It has to be a balanced account right, like any balance sheet the both the debit and the credit side has to be balanced. So, from there today we will talk on another very important issue which has a very large influence on the world finance and the financial markets is foreign exchange right.

Recently, you must have come across a company called Cox and Kings which has been you know in the verge of close down in India right. It is basically nothing more than a travel agent, it was a travel agent, but why I am saying it they were basically foreign exchange regulators. So, they help you in currency exchange when you go from one country to another. So, for example, we have Thomas Cook, Cox and Kings right.

So, these are some examples. So, what is foreign exchange? When you understand the foreign the word foreign exchange is when you have to go outside to another country may be on a for on a tourist visit or a educational trip or something, you need some currencies of another country right. So, when you so, how do you do that? You give your own currency here may be your Indian rupee and in exchange you take a dollar or some other currency which is particularly from that country.

So, suppose you are going to some European countries; you need euros, you may need pounds so, you need dollars. So, basically it happens that sometimes the dollar is one currency which is may be used in almost most of the countries right. So, it has a very

high applicability. So, what is this foreign exchange and why do we need it and how it impacts businesses across the world? So, today that is our major discussion.

(Refer Slide Time: 02:55)

What is Foreign Exchange?

Individual Retail *Org.*

Foreign Exchange

- The trading of one currency for another or system of converting one national currency into another (Rupee for Dollar) *Euro \$*
- It also involves trading one currency for another. *100 71.19*
- An exchange rate is the price of a currency (value of one currency relative to the other) $1\$US = Rs\ 71.19$
- It is essential for the trading between nations.
- Most popular is the U.S dollar followed by euro.

For example, how many Indian rupees does it take to buy one U.S. Dollar? As of December 24, 2019, the exchange rate is 71.19, meaning it takes Rs. 71.19 to buy \$1 U.S.



IT ROORKEE NPTEL ONLINE CERTIFICATION COURSE

So, what is foreign exchange? As it says as you can see this diagram. So, there is something like you know we are somebody is giving you know Indian denominations of 2000 rupees and an in exchange they are taking the dollars, 100 rupees dollars right. So, as I said when I am going to a let us say to attend a conference abroad; so, I need dollars.

So, whichever country I am going, suppose I am going to even Turkey or I am going to Canada or I am going to any country; I can take a few that the local you know denominations of that particular currency of that country. And may be a few amount I can keep in dollars, because dollars is used everywhere across the world right.

So, what is this foreign currency, foreign exchange? Foreign exchange is the process of trading of one currency for another or system of converting one national currency into another. So, for example, as I said rupee for dollar right; so or some you know one currency against the other right; dollar versus euro right; so, euro dollar. So, all these thing; when you are converting or exchanging it is termed as foreign exchange.

It also involves trading one currency for another right; an exchange rate. So, how do you how do you determine? How do you exchange the currency? Right. Its not that you give 1 rupee note and you get 1 dollar; so, there has to be some equivalence. So, this

equivalence is known as the exchange rate right. So, this exchange rate is the price of a currency or value of one currency in relation to the other.

So; that means, for example, as of today the Indian rupees 1 US dollar is equal to today November, you know in the month of November 22nd, 23rd it is 71.19 rupees is equal to 1 US dollar. So, suppose you need let us say a 100 US dollars; that means, you need 100 US dollars you have to pay out 7119 rupees right. So, that is what it says.

The most popular in the world is the US dollar followed by the euro. There are in dollar also you know there are several dollars. For example: the US, the Australian, the Canadian; but we are talking about here the US dollar which is the most popular followed by the euro right. So, as it says for example, how many Indian rupees does it take to buy 1 US dollar?

As of December 24, 2019 the exchange rate is 71.19; meaning it takes rupees 71.19 to buy 1 US dollar right. So, this is the basic meaning. So, as you can understand, this has this will have an effect on two important points: one this exchange has an impact on people like me or individuals or this is called the retail market right. And, where it is on a organizational basis right.

So, where large organizations trying to import some items; so, they have to pay right so, they have to pay in dollars. So, in such conditions when you are trying to make any transaction, make any business. So, the organizations have to pay or buy whatever they are getting money or they you know giving money, the currency is the dollar. So, at that time also they would require a exchange right. So, according to the currency of that particular country they would have to make the exchange.

(Refer Slide Time: 06:21)

Foreign Exchange Market

- A market in which National currencies are bought and sold against one another. Some foreign exchange markets are Mumbai, London, New York, Tokyo, Zurich and Frankfurt)
- It is a non-localized market which exists in the network of information system (Over the counter).
- The foreign exchange market is one of the largest and most liquid markets in the world. It is dominated by the U.S. dollar, the Euro, the Japanese yen, and the British pound.
- According to the Bank for International Settlements triennial report of 2016, the foreign exchange market cap averaged \$5.1 trillion per day. The Forex market has an estimated turnover of \$6.6 trillion a day as per Bureau of International Settlements (2019) ✓
- Without the foreign exchange market, international trade and international investment would be impossible. companies would have to resort to barter



(o.i.)

IT ROORKEE NPTEL ONLINE CERTIFICATION COURSE

So, what is this foreign exchange market then? So, as you see, you can see this table right; this you know diagram. So, this is like US dollar, US dollar, euro. So, there are something some like this looks like kind of a chart right. So, it says a market in which the national currencies are bought and sold against one another; some foreign exchange markets are for example, Mumbai, London, New York, Tokyo, Zurich, Frankfurt right.

So, these are some of the major locations, exactly it is not that there is a place right. The foreign exchange market happens Over The Counter, it is an OTC right. So, as it is written over here. So, it is a non-localized market which exists in the network of a information system. So, the business is done through telephone may be internet today has come up and foreign exchange markets have grown tremendously.

So, all these thing has works on the information system right. So, the foreign exchange market is one of the largest and the most liquid markets in the world. In fact, when you talk about financial markets nothing can be considered more bigger than the foreign exchange market. It is dominated by the US dollar, the Euro, the Japanese yen and the British pound right.

According to the Bank for International Settlements report of 2016, the foreign exchange market cap averaged 5.1 trillion per day that is in 2016. But, if you look at today, the foreign exchange market, the foreign the Forex market which is basically said foreign exchange is Forex has an estimated turnover of 6.6 trillions a day.

So, now you can imagine as of 2019 how big is this. The entire business that is done in this Forex market in 1 to 2 days or 3 days is even bigger than the GDP of some of the most popular nations right. Without the foreign exchange market international trade and international investment would be just impossible. Companies would have to resort to barter system then.

That means, if I am buying let us say iron, iron ore and you know if or I am selling you know if, but the currency would not have been there. So, to buy iron may be I have to give something that I had may be oil right. So, if one country would have given oil, the other country would have given you know iron ore to it. So, this would have happened had the transaction this foreign exchange market would not have been there.

Only barter system which is this one is the barter system would have been possible, but barter system; obviously, is a very very old and nearly obsolete system so. So, today these international markets they work only because, it is possible due to the this foreign exchange market and, the feasibility of transferring one currency or exchanging one currency with the other.

So, if you I need something form Japan to buy something from Japan, I would need yen. If I need to buy something from Australia, I would need dollars; if I need to buy something from you know some other country, I would need the host country's you know currency. So, all these things are possible only because of the Forex market.

(Refer Slide Time: 09:43)

Features of Foreign Exchange Market

The foreign exchange market is unique because of com cent

- The foreign exchange market is a global network of banks, brokers, and foreign exchange dealers connected by electronic communications systems. (JP Morgan Chase, Bank of America Merrill Lynch, Cit, Goldman Sachs, HSBC, Deutsche Bank, Standard Chartered)
- Foreign exchange market functions 24 hours of the day (different time zones of the globe)
- If exchange rates quoted in different markets were not essentially the same, there would be an opportunity for arbitrage - the process of buying a currency low and selling it high A B

For example:

If the dollar price of the euro \$0.99 in New York and \$1.01 in Frankfurt. An arbitrageur would purchase Euros at \$0.99 in New York and immediately resell them in Frankfurt for \$1.01, thus realizing a profits of \$0.02 per euro.

- The variety of factors that affect exchange rates like inflation rate, interest rate, money supply etc

IT ROOEREE NPTEL ONLINE CERTIFICATION COURSE

So, what are the features of this foreign exchange market? First of all you have to understand this market is a 24 hour market ; I have mentioned it. Let us see. The foreign exchange market is a global network of who? Who are the members? The banks, the brokers, the foreign exchange dealers; all connected even you know the individual retailers also, the individuals also by electronic communication systems.

So, these people the banks, the brokers, the banks could be the commercial banks, the central bank of a country right. So, the brokers may be the you know the fund agencies and others, the foreign exchange dealers and so, the corporations. So, basically what it says is the it is a global network of banks, brokers and foreign exchange dealers connected by a communication system.

So, for example, the popular ones are like JP Morgan Chase, Bank of America, Merrill Lynch, Citi, Goldman Sachs, HSBC, Deutsche Bank, Standard Chartered. These are some of the names of the most involved or the most popular participants in the global in the foreign exchange market. So, these people are have a play big role right and in the transaction, in the entire transaction systems.

The foreign exchange market functions 24 hours of the day different time zones according to the different time zones of the globe. So that means, it is one market which never you know takes rest. So, as you can you can also you must have heard the Citi banks punch line which says a bank which never sleeps Citi bank right. So, no wonder they are correct because when they work for 24 hours; so, there is no time to sleep.

If exchange rates quoted in different markets were not essentially the same, there would be an opportunity for arbitrage. Now, what is arbitrage? Very very simple of you know understanding, but has a very high impact. Now, arbitrage is the process of buying a currency low and selling it high. Now, let us take in two different markets A and B right. So, if we take two markets for example, A and B, A and B. Now, if the dollar price of the euro is 0.99 in New York and 1.01 in Frankfurt, let us say.

This would help the arbitrage would buy or purchase the Euros at 0.99 here and in New York and immediately resell them in Frankfurt for 1.01, thus realizing a profit of 0.02. So, this phenomena of buying at the same time may be at a lesser price and selling the same item at another market at a higher price is called arbitrage. Arbitrage is taking advantage of the difference of the value in two different markets.

So, the variety of factors that affect exchange rates are like the inflation rate, interest rate, money supply etcetera right. So, these factors affect the exchange rate basically ok.

(Refer Slide Time: 12:53)



So, if you look at the market share of the leading foreign exchange currencies in 2019, by value of turnover you will get a understanding that no wonder the US dollar leads the race and it is it has the highest market share right ah. So, it is about 88 percent followed by the euro 32 percent, yen 17 percent, British pound 13 percent, Australian dollar 7 percent; it goes in a hierarchy right.

And, the last around you know the Mexican peso is around 2 percent. So, what it says is basically it you have to understand here that the euro and the US dollar, the yen and the pound; these four they are leading from the front right. They have the highest market share. In terms of global liquidity and all over the place by far the most utilized currency is the US dollar - known widely as the world’s reserve currency.

Because, every country on the planet keeps large sums of dollars in reserve in order to make hard currency trades on major commodities like oil, gas, grain and gold which is the commodities basically right. This advantage is what gives Washington unprecedented power and leverage in international affairs. Most transactions involve US dollars on one side; the US dollar is a vehicle currency.

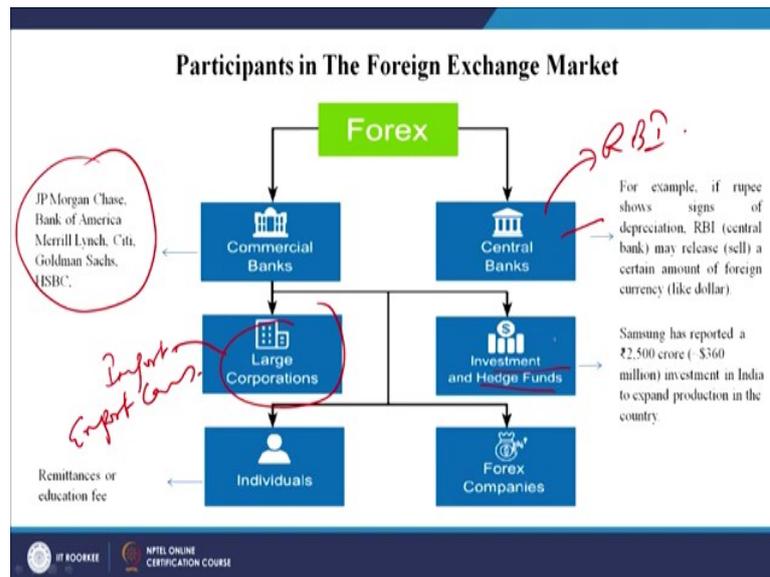
So, what it says basically is if you look at the amount of use of the US dollar in fact, many people many critics, economists they feel that the entire even the you know politics behind the behind keeping the dollar as a number 1 you know currency is there is a large politics behind it right. And, many countries are trying to dismantle the US dollar, but the US has its own interest; obviously.

So, it works very hard in order to keep the US dollar at the top right. If the US dollar would not be the most used currency, automatically its business would come down the business or you can say the importance would fall. So, many countries would not even then use the US dollar for doing their business and; that means, the US dollars importance if it once comes down, the US economy will be will be greatly affected right.

So, if you look at the countries like Iran and all they want the US dollar to come down, but on the other hand the US government works very hard. In fact, there is a lot of you know if (Refer Time: 15:26) shadow, wars and other things that happen in order to keep the US dollar at the top ok. So, as it says the US dollar is a vehicle currency. So, vehicle currency means it is used for most of most of the transactions right.

The Bretton Woods Agreement established that the central banks would maintain fixed exchange rates between their currencies and the dollar. Because; that means, the dollar is such a powerful currency that almost all the countries because and it is also called as the worlds reserve currency; almost all the countries they have to keep some amount of reserves as in form of the dollar right. Because, almost all the transactions that you do across the world, all international transactions; they are largely done by the through the dollar ok.

(Refer Slide Time: 16:18)



Now, when you come to the participants in the foreign exchange market, the when you talk about as I said. So, the banks for example, JP Morgan Chase, Bank of America, Citi etcetera. So, there are large corporations right for example, the MNC's and all who are basically doing the business. So, somebody wants to buy some you know import something or you know even export cars or something you know. So, whatever; so, the large corporations are there.

Individuals are also there so, but they hold a very small value right and very very small value. Then there are central banks like for example, we have our RBI in India right. Every country has a central bank which basically controls the money supply in that particular country. Then you have the hedge funds, investment funds right.

So, there are large agencies again, there are very popular hedge fund agencies also and these fund agencies also are basically they work to improve their portfolios right and there are Forex companies. So, these are some of the members, the participants in the foreign exchange market or the Forex market. Now, let us see each one of them and try to understand.

(Refer Slide Time: 17:26)

Participants 90% inter bank trans. a/c
10%

- **Commercial Banks:** These banks serve their retail clients, the bank customers, in conducting foreign commerce or making international investment in financial assets that require foreign exchange.
- **Foreign exchange brokers:** they operate in the international currency market and act as agents who facilitate trading between dealers. Unlike the banks, brokers serve merely as matchmakers and do not put their own money at risk.
- **Central banks:** Another important player in the foreign market is Central bank of the various countries. Central banks frequently intervene in the market to maintain the exchange rates of their currencies within a desired range and to smooth fluctuations within that range.
- **MNCs:** are the major non-bank participants in the forward market as they exchange cash flows associated with their multinational operations. MNCs often contract to either pay or receive fixed amounts in foreign currencies at future dates, so they are exposed to foreign currency risk. This is why they often hedge these future cash flows through the inter-bank forward exchange market.
- **Individuals and Small Businesses:** Individuals and small businesses also use foreign exchange market to facilitate execution of commercial or investment transactions. The foreign needs of these players are usually small and account for only a fraction of all foreign exchange transactions.
- **Fund Managers, Hedge Funds, and Sovereign Wealth Funds:** They are basically transnational and home-country's money managers who may deal in hundreds of millions of dollars, as their portfolios of investment funds are often quite large. The major aim of hedge funds is to make profits and grow their portfolios.

IF ROOKEE NIEL ONLINE CERTIFICATION COURSE

The first comes the commercial banks. In fact, if you will it is interesting to know that 90 percent of the transactions in the Forex or the foreign exchange market is due to the interbank, interbank transactions happens due to the inter bank transactions right; 90 percent right. And, less than or the rest you can say the rest will be between the banks and the may be companies right, or corporations and others right.

So, this interbank is basically the largest or the most significant amount of the transaction that is happening in here. So, what are commercial banks? These banks serve their retail clients, the bank customers in conducting foreign commerce or making international investment in financial assets that require foreign exchange.

So, the commercial banks are those banks who help their customers in conducting foreign or making international investments right. So, these banks are one of the they are the largest among the largest players who are the most important participants in the Forex market.

Then you have members like the foreign exchange brokers, central banks, MNC's, individuals and fund managers. So, when you say about the brokers, they operate in the international currency market and act as agents who facilitate trading between the dealers. Unlike the banks these brokers are mainly as matchmakers and do not put their own money at risk. So, what are these people basically doing? They are responsible for disseminating the information regarding the value of the currencies right.

So, these brokers are matchmakers, who are only disseminating the information across the globe right; about the value of the currencies. The next is the central bank, as I said another important player is the central bank of the various countries right. Now, these banks frequently intervene in the market to maintain the exchange rate of their currencies within a desired range and to smooth fluctuations within that range.

Now, if you are following the economic times or financial express or any good paper or something or the news at least, then you must be understanding that the central bank or the for example, the reserve bank in of India is trying to maintain the exchange rate right. So, it is trying it intervenes in the market to maintain the exchange rate, it does not allow the exchange rate to go up tremendously right. So, within it wants to keep it within a desired range in an you know optimal range right.

So, that the transactions become necessarily smooth and they there is not much of chaos right that develops. So, these central banks are basically they are operating in these markets; they are controlling the other banks also and trying to control the entire the exchange rate right of this currencies. And, they make lot of rules also accordingly how you have to manage the exchange rates, the currencies basically how much you can keep, what are the different.

For example, the Indian government has certain rules that how much you know a currencies of different different countries you can hold at one point of time. The MNC's are the major non-bank participants. So, these are the corporations basically participants in the forward market as they exchange cash flows associated with their multinational operations. Now, there are two markets: the one is the spot market and the forward market.

Now, here we are talking about the forward market for something that you have to pay right in the future. And, then you have a spot market which you have to pay immediately right, on the spot let us understand that way. So, the MNC's often contract to either pay or receive fixed amounts in foreign currencies at future dates. So, that is what I am saying the forward market, it is a future date right. So, they are exposed to foreign currency risk.

Now, suppose today I have to I have made a deal and I have to pay the money after sometime may be right; after the goods the you know the product has reaches me. Now,

the time which I am at which I am paying, by that time let us say according to the because of the change in the currency or volatility of the currencies the I am I have to pay higher amount, than what I would have paid today.

So, in such a condition the players or the corporations who are making business in large amounts, their entire business can be can have a very; it having a very serious effect on their business just because the currency value has changed. So, today what it is? Let us say today it is 71.19; 1 dollar is 71.19 and tomorrow it changes to either 70 or let us say 73. So, in both the cases one it is a it has come down and other it has gone up.

So, both the cases, there will be some effect on this corporations right because they are not buying in very small amount; they are buying in bulk amounts right. In such conditions, this is why they try to always hedge the future cash flows through the interbank forward exchange market. Now, what is hedging? Hedging is basically to try when the companies try to hedge means, they try to reduce the risk right through some mechanisms and connection with this banks right.

So, since the business is a perennial is a continuous thing that is happening. So, these MNC's, these corporations have to keep in mind all the time the currency situation; if whether it is in their favor or not. So, but if you say if it one things in terms of favor or you know against, then it will be also a very risky proposition. So, in order to you know reduce this uncertainty, they try to hedge their values right.

Individuals and small businesses are also use foreign exchange market to facilitate execution of commercial or investment transactions. The foreign needs of these players are usually small, only account for a they account for a very small fraction of the entire foreign exchange transactions. Here even individuals who are paying a education fee or for remittances, anything that would also be considered, but that is a very very small amount.

Last is the hedge funds, the wealth funds and the fund managers. They are basically transnational and home country's money managers who may deal in hundreds of millions of dollars, as their portfolios of investment funds are often quite large right. The major aim of these hedge funds is to make profits and grow their portfolios. So, as we see the foreign exchange market has 6 important participants right.

The commercial bank, the foreign exchange brokers, the central banks, the MNC's or the corporations, the individuals and small businesses and finally, the funds; the fund managers or the fund wealth funds and all these right players. So, all these players together make up the foreign exchange market right. And, if I say it is the biggest financial market as I said right. And, this market has a huge you know effect on the transaction or the business transactions for any corporation for any country anything right.

Because, the entire businesses that happen among countries, all countries are routed through this foreign exchange market. So, the entire businesses of different all the countries across the world are routed through this foreign exchange; because the way to transact can only be done by having the right currency because, today you do not have a barter system.

So, in order to have that currency and in order to take advantage of that currency you know currencies system, one has to be extremely sharp, one has to be extremely careful and has to understand the dynamism of the foreign exchange market right. So, a very small fluctuation also can have a very large impact just because, of the volume of the sheer size of the businesses that are happening right. Even a point let us say 0001 percentage up or down may result in millions of dollars of loss or gain for corporations and countries right.

So, today we have only started with the foreign exchange market, we have tried to understand it little bit. And, in the next session I will take up little, we will try to talk deep into it; we will go deep into it and try to understand what are its implications and how it affects the entire international or the business right.

So, thank you very much, have a wonderful day.