

International Finance
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Lecture - 7
Features of Foreign Exchange Market

Good morning, today we will discuss features of foreign exchange market. Here we will be discussing about how the foreign exchange market operate. What are, who are the participant in the foreign exchange market, and how the foreign exchange market over different countries have developed, and foreign exchange market how the foreign exchange quotation take place, how the participant take position in the foreign exchange market, why different exchange rate are there for different requirements. In this process, we will conclude that foreign exchange market is highly liquid. Foreign exchange market turnover is very high, foreign exchange market the market participants are very large, and individual players in the foreign exchange market cannot create any kind of pressure in determining the market exchange rate.

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Foreign Exchange Market: Features

- The focal point of understanding international finance revolves around foreign exchange market.
- In foreign exchange market international currencies are traded.
- It is a market where banks, companies, exporters, importers, fund managers, individuals, central banks of different countries buy and sell of foreign currencies.
- Foreign exchange rates are quoted in pairs of currencies, e.g. Euro/US\$, US\$/Japanese Yen, US\$/INR, etc.



Let us start with the foreign exchange market features. The focal point of understanding international finance revolves around foreign exchange market. If you want to understand the international finance, you have to understand the foreign exchange market. In foreign exchange market international currencies are traded; different

countries have their own exchange rate, their own foreign currency as we discussed in earlier session. Now all almost, all country are under inconvertible paper currency standard, their domestic currency are in papers, and these papers are traded in international market in the form of foreign currency.

So, in foreign exchange market international currencies are traded on the basis of buying and selling, the exchange rate among country determine. It is a market where the banks, companies, exporters, importers, fund managers, individual central bank of different countries buy and sell foreign currency. So, this foreign exchange market the participants are number of participants are there. These commercial banks they are authorised dealer in foreign exchange market. Corporate they buy and sell foreign exchange foreign exchange, exporter, importers, fund managers individuals, central banks all participate in the foreign exchange market and their demand in buying powers determine the exchange rate. Foreign exchange markets are quoted in pairs of currency example euro against dollar US dollar against Japanese yen, US dollar against Indian currency that is INR.

Each currency have a quote, has a symbols. Their symbols are internationally determined and their international standardisation process is there to get a symbol for domestic currency. So, in foreign exchange markets the exchange rate take place among two pairs of currency. The pairs of currency among each other determine the exchange cross currency exchange rate.

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Market Participants

- The forex market is a OTC market without any centralized clearinghouse.
- Foreign currency transactions are channelled through the world-wide interbank market.

Participants

- Bank and non bank foreign exchange dealers
- Foreign exchange brokers
- Hedgers, Speculators and arbitragers
- Central banks and treasuries
- Individuals and firms conducting commercial or investment transactions



So, who are the participants in the foreign exchange market? The foreign exchange market is OTC market. It means that over the counter the trading take place. There is no physical place where the foreign exchange foreign exchange buyers or sellers meet together. It is a OTC over the counter where telephone or internet facility other communication networks help in trading process.

So, foreign exchange market is a OTC market without any centralised clearing house. Centralised clearing house may not be there, but there are some agency, some platforms provide the central clearing process. But there is no physical place where foreign exchange of different currencies are traded. Foreign currency transaction are channelled through worldwide interbank market. The interbank the banks in different countries, they themselves create a interbank market. Through the interbank market worldwide the currency are channelized.

Then who are the participant in the foreign exchange market? The foreign participants are banks and non bank foreign exchange dealers, bank, commercial bank non bank, the insurance company, the mutual fund provident fund, the non banking financial intermediaries are there they are the primary purchaser or seller of foreign currency. Foreign exchange brokers are there broker they get the quote and try to maximize their return hedger speculator arbitragers. They are also participants of foreign exchange market. Hedgers, importer, exporter they have underlying risk in foreign exchange. So, they hedge their position. Speculator because one currency the rate the speculator take profit from the market when there is a movement of foreign currency volatility of foreign currencies are there. They take position in the foreign exchange market and try to make profit.

An arbitrage they change the position from one country to another country, from one currency to another currency and take arbitrage of opportunity available in different currency central bank and treasury. Central banks generally intervene in the foreign exchange market; so as to target a particular exchange rate, because each country has own target, its own currency rate, because currency, as we discussed earlier currency rate decide, what is called the macroeconomic policy of a country.

So, always central banks try to intervene in foreign currency market. So, as to target particular exchange rates the exchange rates should not be volatile in nature, it should not

affect the export importer and because of that reason always central bank try to intervene in the foreign exchange market. Individuals and firms conducting commercial or investment transaction, individuals they need foreign exchange, firms also they need foreign exchange. They also participate in the foreign exchange market.

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Market Participants

- **Wholesale Forex Market:** In this market, banks and non-bank financial institutions transact with each other. They undertake trading on behalf of customers, but majority of trading is undertaken for their own account by proprietary desks.
- Besides banks and non-bank financial institutions, multinational corporations, hedge funds, pension and provident funds, insurance companies, mutual funds etc. participate in the wholesale market.
- **Hedge funds** collect huge sums from high networth individuals and undertake speculative trades in equity, debt, forex and derivatives market. Mutual funds with international equity portfolio are also major players in this market.



Market participant further the wholesale foreign exchange market and also we have a retail foreign exchange market, wholesale foreign exchange market. Primarily non bank banks and non bank they are the major player in the wholesale foreign exchange market. They undertake trading on the for their own customers, they buy and sell foreign exchange, foreign exchange to take profit and also the they act as a broker as a agent for exporter importer and because of that reason they are the wholesale player in the foreign exchange market.

Similarly, other institution also play, they are the hedge fund pension fund, provident fund, insurance company mutual fund. They also trade in wholesale market in foreign exchange. Hedge funds collect huge sum from high net worth individual and undertake what is called speculative trade in equity debt and forex derivatives. Mutual fund also take position in international equity market.

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Hedger, Speculators and Arbitrageurs

- Hedgers are traders, like exporters and importers who undertake forex trading because they have assets or liability in foreign currency which value is continuously changing. Hedgers use the foreign currency market to hedge the risk associated with volatility in foreign exchange market.
- Speculators are traders who essentially buy and sell foreign currency to make profit. These traders do not have any genuine requirement for trading foreign currency.
- Arbitrageurs buy and sell the same currency at two different markets whenever there is price discrepancy.



So, they are they are also the market participant in foreign exchange market. So, there are if you see in a larger prospective in foreign exchange market we have three different players, major players. They are hedger, speculator and arbitrageur. Hedger are trader like exporter importers who undertake forex trading because they have asset. They have assets or liability in foreign currency whose value continuously changing. Hedgers use the foreign currency market to hedge risk associated with the volatility in foreign exchange market. Speculators are trader who essentially buy and sell foreign currency to make profit. This trader do not have any genuine requirement for trading foreign currency because there is no genuine requirement speculator. Speculators change their position to make profit. Their position they change from one currency to another currency, from one country to another county. Wherever there is a profit they take the profit, they buy and sell foreign currency for very few minutes and within the few minutes. They make profit and take away the profit and go out from the liquidate their position.

Arbitrageur buy and sell the same currency at two different places and whenever there is a price discrepancy because it may happen that when US dollar in against India or Indian currency and US dollar against Japanese yen and yen against US India; there is a three way arbitrage arbitrageur possibilities are there because there may be some minute level of profit arise within the market. And this minute level profit arbitrageur take booked and move from one place to another place from one market to another market.

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Central Banks, Treasury and Retail

- **Central Banks and Treasuries:** All central banks participate in forex markets to maintain official/unofficial target rate for its home currency.
- **Treasuries of commercial Banks** participate in forex market as brokers, dealers, arbitrageurs of foreign currencies.
- **Retail Market:** In the retail market, individuals (tourists, foreign students, patients traveling to other countries for medical treatment) small companies, small exporters and importers operate.
- Money transfer companies/remittance companies (for example like Western Union) are also major players in the retail market.



So, there are other players in the foreign exchange market also. The players are central bank, treasury and retail central banks. And treasury as I mentioned earlier all central bank participating in foreign exchange market to maintain a official or unofficial target exchange rate for against their home currency because it is generally found that all central bank try to target a particular exchange rate which is suitable for their economic policy. Whenever there is volatility, speculation whenever there is a appreciation significant appreciation depreciation in foreign currency; the central bank intervene in the foreign exchange market by through buying and selling of foreign currency asset or foreign currency foreign currency itself. Treasury of commercial bank: commercial banks they generally trade in foreign exchange market not only to make profit, but also for their own customers.

The customers are primarily broker, dealers, arbitrageur in foreign exchange market. They take the customers may be exporter, importer, some kind of big net worth individual. For them the commercial bank takes position in the market. Each generally commercial bank have a foreign exchange dealing rooms or treasury with the treasury. They take position in the foreign exchange market for their own customer also to make profit. Retail market: in foreign exchange market retail markets retail individuals their individuals are may be in the form of they need foreign exchange for tourist purpose, for student also need foreign exchange, patient travelling to other country they need foreign exchange and

small company small exporter importer they need foreign exchange for their export import side.

So, retail market primarily small transaction takes place where individual or small company they trade in retail market. There are money transfer companies are there, remittances companies are there. So, they also like travelling agencies are there, tourist companies are there, they also like our Western union, Thomas Cook. These are the these are agency also small transfer of foreign currency for remittances purpose they also participate in the foreign exchange market. They are the retail player because the volume transaction is very low here.

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Forex Settlement and SWIFT

- In an interbank forex all transactions are done electronically through SWIFT.
- Banks undertaking forex transactions simply transfer bank deposits through SWIFT to settle a transaction.
- SWIFT is the Society for Worldwide Interbank Financial Telecommunication is a cooperative organization headquartered at Belgium.
- The Swift network connects more than 8000 banks, financial institutions and companies operating more than 200 countries.
- Swift provides a standardized messaging service to these members. As the forex market is mainly an OTC market, SWIFT message provides some kind of legitimacy to the transactions.



So, as per after discussing about the participant in the foreign exchange market; let us come to about forex settlement and swift. As I mentioned that foreign exchange market there is over the counter and it takes place through the what is called a commit that is through a telecommunication networks. At through the telecommunication networks the foreign exchange trading takes place, settlement takes place and worldwide there is a agency called SWIFT. It is a cooperative agency among and inter-banks are the interbank companies are participant in the SWIFT account.

All transaction settlement takes place through SWIFT account. In a interbank forex all transaction are done electronically through SWIFT. SWIFT stands for society for worldwide interbank financial telecommunication. It is a cooperative agency

organisation having its headquarter in Belgium. All foreign exchange dealers they are the member of the SWIFT. At present may be around more than 8000 banks, financial institution and company operate are the member of SWIFT. They are operating the swift spread over more than 200 countries and SWIFT all members or dealers they have a account sin a SWIFT and whenever there is a transaction take place the transaction pass through a SWIFT network in the form of a telegraphic message and that message determine whether the particular bank or authorised dealer is buying or selling foreign currency.

And automatically the transaction settlement takes place. There is no physical movement of currency from one place to another place and SWIFT provide the platform for remittances for trading, for channelization of foreign exchange, for the settlement purpose. SWIFT like swift there are many other many other worldwide platforms are there and SWIFT is the largest platform in the country in a in the world at present providing settlement for the international transaction process.

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Where are these Markets?

- No physical place
- Over the Counter Markets
 - Mainly over telephone
- Forex market is an ongoing 24-hour, 365 days market. As the markets remain open at different time on a given day, normally GMT is used to refer the trading hours at different locations.
- Contacts are all over the Globe
- 24 hour Market, 5 days market
- Day opens at Tokyo and Sydney
- Day closes at Los Angeles trading



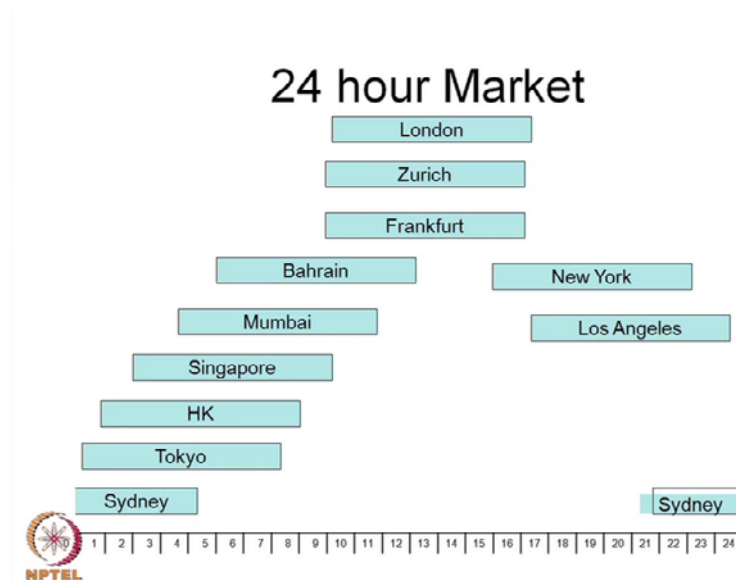
Before closing at Los Angeles, Sydney opens up for the next day.

Then question is where the markets are? the We discuss about foreign exchange market, but any market for foreign exchange. There is no physical place, I mentioned there that there is no physical place for foreign exchange market. It is over the counter market and the settlement trading takes place through a through a telecommunication network, mainly primarily over telephone, over SWIFT account. Forex market is a 24 hours

market 365 days market, round the year the market operate round the clock, the market is market operate.

As the market remain open in different time period different time in a on a given day. Normally, GMT the Greenwich meridian time is used for refer used to refer what is called trading hours at different location. The contact are all over the globe because the foreign exchange market 24 hour market is all over the globe the transaction takes place. And the 24 hours 5 days market operate round the year 365 days. Day opens at Tokyo early morning of early morning it starts from Tokyo and Sydney and day closes at Los Angeles and in between it pass through different countries in different time before closing at Los Angeles, Sydney again opens for the next day.

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So, it is a 24 hours market. If you see the pattern the 24 hour market is Sydney and Sydney and Tokyo almost same time it start; then it passed through around with 6.30 or 7 o'clock of Indian IST Indian standard time at Hongkong, Singapore; around 9 o'clock it is early mornings of 9 Mumbai, Bahrain. Then it is same time around 6 of evening of Indian standard time the Frankfurt Zurich London operate. Then it passed through New York, Los Angeles and about Los Angeles market about to close Sydney and Tokyo market that time about to open.

So, it is a 24 hour market and foreign currency trading take place all over the world any at any time. So, whenever somebody, some companies or some individual have foreign

currency assets and liability; the assets and liability change their value because trading taking place every moment in foreign currency market. So, when trading taking place every moment in foreign currency market even though we are closing our balance sheet; the balance sheet never close because the foreign currency value either appreciate or depreciate as per the trading.

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Liquidity

- Foreign Exchange market is one of the largest and liquid financial markets in the world.
- Liquidity is reflected by number of market makers and number of trades.
- Participants in forex market are large commercial banks, central banks, currency speculators, corporations, governments, financial institutions, exporters and importers.



So, foreign currency market it is a highly liquid market. Liquid market in the sense that, continuous buying and selling, 24 hours of buying and selling take place in foreign exchange market. There are number of players in the foreign exchange market. A liquidity is reflected by a number of players. They are market makers, market takers are there and traders in foreign currency markets are huge large commercial bank, central bank. The currency circulator, currency arbitrage, corporate government financial institution, exporter, importer; they take part in foreign exchange market it is a huge market huge volume of transaction and having high liquidity market because the particular day the trading itself is trillions of dollar. So, the liquidity in foreign currency market is the highest. There is no such market in the world as liquid as the foreign exchange market.

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Different Forex Rates: Instruments

- **Spot trades:** The spot market relates to immediate purchase and sale of foreign currency
- **Outright forwards:** While in a forward transaction parties agree to buy and sell foreign currency later.
- **FX swaps:** In swap transactions, parties agree to swap payment and receipt of foreign currency over a specified period.
- **Currency Derivatives:** Currency Swaps, FX options



So, foreign exchange market there is no one single rate. The different rates are there for different kind of traders. We have a spot rate; spot rate the trade, spot rate market related to immediate purchase and sale of foreign currency market. So, spot market is where there is immediate transaction takes place. There is a outright forward market because when somebody needs foreign exchange after one month, two month or 10 days there is a market for them also. It is called forward market. There is swap market because want to convert one currency to another currency, one party there is negotiation among the different party agreed to swap their currency there is a swap market.

Also, now-a-days foreign currency derivative markets are there where futures options are traded in recognised exchange. The foreign currency derivative market also quite popular now-a-days. So, for different purpose different rates are there, along with that we have interbank rate, we have merchant rate, we have rate for small transaction, large volume transaction that is also part of different rates.

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International Foreign Exchange Market

International Money Market:

Place : London, New York, Tokyo

Instruments : CP, Bank's borrowing,
Bankers' acceptance

Clearance :CHIPS, CHAPS, SWIFT

International Equity Market

Instruments:

FII, GDR, ADR,

Long-term Offshore funds in the forms of
long-term borrowings



So, what are the instruments in foreign currency market? The foreign exchange market have different kind of instrument. Its instruments spread over from 2 days to 10 years, 15 years. The instruments have different own places of trading. The places are like London, New York, Tokyo are there; Hongkong in India, in Asian region Hongkong, Singapore. The major places where foreign currency trading takes place. There are different kinds of instrument for trading foreign currency market. It is called commercial papers banks, borrowing banks acceptance. These are different instruments short term transaction for long term transaction. We have equity market, we have the instruments are also there for GDR. That is a global depositary receipt American depositary receipt, long term up source market long term borrowing markets are there where foreign currency instruments are available.

The clearing houses I as I mentioned; there are number of clearing houses. The chips chaps these two clearing houses, then primarily centre around US and European country and SWIFT is the worldwide trading platform for settlement of foreign exchange transaction.

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Market Makers and Market Takers

- Markets where currencies of different countries are bought and sold.
- Interbank and merchant markets are two major components of foreign exchange market.
- ‘Market Makers’ – Who command in the market.
- ‘Market Takers’ – Who accept the price of the market.
- Large number of participants
- Largest volumes
- Market makers and takers change their position continuously.



There are two; then generally two concepts are there in foreign currency market which is called generally we divide the participant into market maker and market taker. Market makers and market takers they are the participant in the foreign exchange market. Market makers generally influence the command the foreign exchange market. Market taker accept the price determined by the market forces.

Since large number of participants are there large volume transaction takes place, it is very difficult to decide in a particular time period who is the market maker and who is the market taker. It may happen particular moment the market makers; some bank may be market maker, next movement they would be market takers, depends upon their volume of transaction. Their requirements when they have huge amount of foreign currency. They want to upload in the foreign exchange market. Generally they are the market makers who is whenever there is a requirements are there they want to buy a from foreign exchange market. They are the market takers.

So, market makers and market takers change their position as per the requirement and not a single player can command over the foreign exchange market because players are huge volumes are large. That is almost a perfect competitive market exchange.

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Exchange Rates Mechanism

Exchange Rate Quotation: Direct

US\$1 = Rs. 53.4525/4550

Bank would sell US\$: Rs. 53.4550 (Offer rate)

Bank would purchase US\$: Rs. 53.4525 (Bid rate)

Offer rate – Bid Rate = Transaction cost + Profit

Two Ways Quotation : Importance

We cannot know whether the player is a buyer or seller



Let us let us now come to the exchange rate mechanism because foreign exchange market is a difficult different market where exchange rate depends upon the different kind of quotation. We call exchange rate quotation there are direct method indirect method of quotation. When you mention US dollar one US dollar is 53.4525 and 4550 what does this mean?

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Handwritten slide content showing exchange rate calculation:

$$US\$1 = \text{Rs. } 53.4525 / 4550$$

<u>Rs. 53.4525</u>	← Bid Rate
<u>Rs. 53.4550</u>	← Offer Rate
Transaction cost + Profit	

The slide also features the NPTEL logo in the bottom left corner and a small box in the top right corner containing the text "NPTEL I.I.T. KGP".

It means that when you when you write the 1 US dollar is equal to rupees 53.4525 oblique 4550; it means that when I have US dollar I want to sell in the market then market will give me rupees 53.4525.

If you want to buy US dollar from the market I have to surrender Indian rupee 53.4550. So, this is called direct method of quotation of foreign currency market. Here you are quoting one your US dollar how much how many rupees. And if I buy one US dollar then I have to surrender more Indian rupee. You want to sell US dollar the market will give me less. So, when I want to purchase US dollar from the market I have to pay 53.4550; want to sell US dollar in the Indian then market will give me 53.4525.

So, the difference between it is called offer rate and bid rate. The offer rate and bid rate the difference between these two give generally contains the transaction cost and the profit for the brokers because authorised dealer; I have to purchase foreign currency foreign currency from the authorised dealer. I have to sell currency and with the with the authorised dealer.

So, authorised dealer always try get a commission, commission which is nothing but the difference between offer price and the bid price. The offered price and bid price contain the transaction cost and profit for the authorised dealer. So, what I mentioned here the offer rate and bid rate determine the transaction cost and profit. Here bid rate bank would purchase bank would purchase at 4525 you have US dollar bank will purchase bid for the US dollar at the 4525. If you buy want to buy from the bank, banks are authorised dealer. You want to buy US dollar from the bank; bank will offer US dollar at 4550.

So, this is this is called the bid rate that bid rate and this is called offer rate. Then offer rate and bid rate decide what is called transaction cost plus profit, profit for the authorised dealer. So, always in foreign currency market two way quotation take place. The two way quotation that whenever you want to purchase US dollar or want to sell US dollar you have to go to authorised dealer. Authorised dealer in India are all financial institution that is commercial banks are there.

When you want to purchase dollar you have to go to a bank and ask for a quotation. The bank will give you know they bank will ask you whether you want to buy or sell. Then if you do not disclose your position; they will give you two rate quotation what is called what is the buying rate, what is the selling rate. They will never give you one way

quotation because two way quotation is that they do not want to disclose whether they want they the authorised dealer want to buy or sell because they if they disclose their position then there will be rigging in the foreign exchange market.

So, for that reason always two way quotations are there in foreign exchange market. Authorised dealer never disclose whether they are buyer and seller. When you go to a bank and ask for a quotation for the dollar; they will give you the 4325 4525 or 4550. These are buying rate and selling rate of US dollar against Indian rupee.

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Direct and Indirect Quotation

- Direct: Number of home currency units per one unit of foreign currency
- Ex: 53.3550 number of rupees per one USD
- Indirect: Number of foreign currency units per one unit of home currency
- Ex: 0.01874 number of USD per one INR
- In India all foreign currency is quoted in direct fashion
- In most of the home markets direct quote is followed



Then as I mentioned there is direct and indirect quotations are there. Direct quotation is home currency in direct quotation, home currency vary foreign currency remain constant. So, when here when you mention here one dollar one dollar is 40 534525 4550. It is a direct quotation here the Indian rupee is varying US dollar is fixed. The Indian rupee is varying US dollar is fixed here. So, it is a direct quotation. In case of indirect quotation the foreign the home currency that is in case of India home currency rupee, rupee remain constant one rupee how many dollars. So, that is indirect quotation.

So, suppose if you have a indirect quotation one rupee is equivalent to 0.0187874 US dollar. That is called per rupee will get this much of dollar this many of dollar. So, it is a indirect quotation. In India the at present we have direct quotation. Many country also following direct quotation, indirect quotation you rarely find. So, in case of India we

have direct quotation, our home currency is varying and foreign currency is fixed. So, it is a direct quotation.

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Exchange Rates Mechanism

Exchange Rate Quotation

Interbank market Mumbai

US\$1 =Rs. 53.4525/4550

Interbank market London

US\$1 = FRF 6.7500/7550

At what rate you can buy FRF against Rs.?



The exchange rate mechanism as I mentioned here; exchange rate quotation we have different kind of rates in foreign exchange market. Different markets because in India we have interbank market at Mumbai. Similarly, interbank market also available interbank market also available in also available in London, Tokyo, Singapore, Hongkong many other places; so suppose there is a interbank quotation rate here interbank market at Mumbai quote US dollar 534525. So, US dollar interbank market quote in Mumbai one US dollar is one us dollar is 534525 and interbank market in London quote 1 US dollar in place in terms of French Franc, French currency is FRF 6.7500 7575 7550.

Then how you can exchange FRF against Indian rupee? Because here in we you have Indian rupee you want to purchase French Franc. Then question is here how you can purchase? You have to go from one market to another market because there may not be a direct quote for French franc available in Indian market. What you have to do? You have to purchase dollar from India, then sell the dollar in London to get the French Franc. When you want to purchase dollar in India then you are surrendering rupee purchasing dollar the authorised dealer will ask you here us dollar one US dollar is equal to 534525 and 4550.

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US \$1 = Rs. 53.4525 / 4550 - Mumbai
buying rate of US \$1 = 53.4550
London Market
US \$1 = FRF 6.7500 / 7550
US \$1 = FRF 6.7500
Rs. 53.4550 = FRF 6.7500
FRF 1 = Rs. _____

So, in London Indian market Mumbai market US dollar is this is Mumbai market Mumbai interbank market. So, US dollar is available at 534525 4550; means you want to purchase US dollar you have to surrender more than buying rate of US dollar will be buying rate of US dollar will be 534550. Once you surrender rupees 40 534550 get 1 US dollar, then in the London market you sell US dollar and purchase Franc.

So, in London market London market US dollar is US dollar 1 US dollar is FRF 6.7500 and 7550. Since you are selling US dollar; you will get you are selling US dollar in London market. So, you will get less amount. So, you will get for one US dollar, you will get French Franc of 6.7500. So, 1 US dollar is 6.7500 and 1 US dollar in Indian rupee is these two. So, it means that 53 rupees 4550 is equivalent to FRF 6.7500.

Now, you can calculate one FRF is how much how many rupees. So, FRF we can calculate FRF,1 is equal to how much rupee by dividing these two. This will give you the Indian rupee. The conversion of these two will give you the F 1 FRF is how many rupee. So, this is called cross currency calculation process because many market you cannot get a direct quote for your own domestic currency. So, if you want to purchase in India French Franc; then you have to migrate from interbank market Mumbai to interbank market London to get a indirect quote for the FRF against Indian rupee.

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Different Rates in the Market

- Rates given by different market makers need not be same
- Differential rates exist
 - Syndicate bank 53.3400 / 3500
 - Canara bank 53.3350 / 3450
 - Nova scotia bank 53.3425 / 3525
- Rates quoted are as perceived by market makers
- Market takers choose the best rate according to their availability



So, there are different rates, different rate in the market because foreign exchange market is highly volatile market. The rates are changing continuously. In a particular moment you can get 10 15 quotation per US dollar in India itself. So, different banks or different authorised dealer will give you different rate for US dollar at a particular moment. So, why different rates are available? If you see if you see rates are given by different bank at particular moment. Syndicate bank in India giving one US dollar 533435, here is Canara bank is giving 533350 3450, Nova Scotia small bank of foreign bank they are giving 533425 3525. A particular moment different authorised dealer is giving different quote for US dollar in against Indian rupee. Why it is happening? Because the quotes are perceived by the market; what market players in the market different players are there their psychology, their behaviour, their persistence decides the rate and different market players in particular moment give different rate for the foreign currency.

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Why Different Rates?

- Rate given by market maker depends upon different factors
 - Position
 - Need
 - View
 - Sometimes on who is the party?
- For better business interests, market makers always quote prevailing market rates.



So, the different rates are available why because the different rates are available because position, need and view. Position some authorised dealer might have lot number large amount of dollar. They want to take dollar position they give you high quote for dollar, some need dollar they give you lower quote for the dollar, some authorised dealer may view the market dollar will appreciate. So, they will give you high figure for the dollar.

So, the views, need and position decide the rate and also for different players if you are a exporter you will get a you get a good quote for your dollar because large volume transactions are there. If you are a individual buyer you will get a large quote for your dollar for dollar because your volume is very less. So, business interests market player for business interest market makers always quote prevailing market rate.

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Factors Affecting Fx Rate

- Balance of Payment
 - Export
 - Imports
 - Current a/c payment and receipts
- Fiscal Policy
- Interest rate
- Money supply
- Central bank intervention
- Speculation
- Expectation and traders behaviors



So, market player decide what kind of rate they suppose to give to different players or different participants in the market and question is here. Why different rates are there in foreign exchange market and which are the factors which affecting the foreign exchange market.

So, the factors are balance of payment because the balance of payment if you see export import foreign current account payment and receipts are there, exporter export their commodity and get foreign exchange when our large amount of foreign exchanges are there they will appreciate the domestic currency. Importer generally require foreign currency to buy to buy foreign asset or some kind of goods and services from foreign country, when importer demand more foreign currency then rupee or the domestic currency will depreciate.

Similarly, if there is a large foreign current account deficit; the current account deficit is primarily because of export import. If the export imports are more and more current account deficits are there, then domestic currency will depreciate. Similarly, fiscal taxation interest rates are there also influence the foreign exchange market. Money supply create inflation. So, inflation also depreciate the domestic currency, central bank intervention central bank as we discussed earlier central bank always interfere in the foreign exchange market to target a particular exchange rate which is suitable for their exporter importer for their economic activity.

So, their intervention also influences their foreign exchange rate. Speculator; speculator always buy and sell foreign exchange to get the foreign currency for to get profit and their position also influence the foreign exchange rate and most important the expectation and traders behaviour; because if traders behave particular currency may appreciate. So, they take position in the currency a traders behaviour or their expectation also influence the foreign exchange rate. These are the basic parameters which are some real sector, some are the monetary sector that influence the exchange rate in a country.

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Exchange Rates Settlement Mechanism

Cash transaction = Same day

Tom Transaction = Next Day

Spot Transaction = 2 days

Forward Transaction = Beyond Spot date



Exchange rate settlement mechanism because in exchange rate market three different kind of settlement takes place particularly at spot transaction real time settlement takes place all transaction a cash transaction, tom transaction and spot transaction. These are what is called very short term transaction in the foreign exchange market and these transaction influence the everyday influenced by everyday movement of foreign currency. Cash transaction takes place same day today you purchase same day, today itself you close your position, tom transaction next day, next day means you are purchasing something for today you purchase tomorrow you liquidate your position.

The spot transaction spot is after two days. Two days means today you purchase tomorrow and day after tomorrow you settle your position. That is called spot transaction and there is also transaction forward transaction what is called beyond two days and this


is a forward transaction after two days you need foreign currency you go to the authorised dealer ask for a quotation what is called forward transaction.

Forward transactions are available beyond spot rate, that is beyond the 2 day and it is available in India for up to 9 month to 1 year. So, forward transaction generally hedges exporter, importer. They take in forward market to remove the risk in the foreign exchange transaction process. So, forward transaction is a risk management product.

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Inter-bank Forex Market

- Inter-bank market is only among Ads
- It is a wholesale market with a certain minimum lot size
- Banks contact each other to sell or buy forex
- Generally a few market makers and many market takers would be there
- Market makers can sell or buy according to the request
- Banks contact a market maker over phone or trading screen



So, there are different markets rates are there what is called interbank forex rate. We have a merchant rate, we have interbank rate. Interbank Forex market primarily for banks and financial institution, authorised dealers are the member of interbank market. They transact among themselves. So, that is the interbank rate. It is the wholesale market because it is a wholesale market because wholesale whole sale player that is the player large volume transaction player the inter banks are the wholesale market and there is a minimum lot size for interbank also. That volume is fixed minimum lot sets are there.

So, volume is something very big banks contact each other over for over phone, the over over phone or over internet facility available now-a-days and try to get the buy and sell foreign exchange. Generally few market makers and many market takers would be there because in international market it is very difficult to influence their rate. So, market makers are very few because very big bank like in India; State bank of India one of the largest player or ICICI bank one of the largest player HSBC the largest player city group

the largest player they might be the market maker. All other authorised dealers small banks are there merchant merchants are there they are market takers. Market makers can sell buy according to the request. Whenever there is a request from the customer side the market makers buy and sell foreign currency; bank contact market maker over phone or trading screen.

Now, the Reuter screens are there, Bloombergs are there. They also buy and sell take place through the trading screen and also maximum buy and sell take place over the counter that is through telephone lines.

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Inter-bank rate

- Inter-bank market is the most liquid and therefore works as benchmark rate for other markets
- Inter-bank rates have the least spread among all the markets
- Inter-bank rate forms basis on which rates of other markets are quoted
- Inter-bank rates are also called 'base' rates



So, inter-bank rate; interbank rate one of the lowest rate in the market because large volume transaction takes place; players are very, very few players are there. Transaction takes place for the requirements, only interbank is the most liquid rate liquid market and therefore, the bench mark it is a bench mark rate for other rate because other rates are there. Spot rate forward rate merchant rate are there in foreign currency market interbank rate it is a benchmark rate against, which the other rate start.

Similarly, interbank trade are very spreads are very less. So, spreads may not be available. Interbank rates form the basis on which other rates depend, other rates are quoted also. Interbank rates are also called base rate. The base rate because benchmark rate for that reason it is called the base rate; other rate, other rate nothing but a margin over the interbank rate.

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MERCHANT RATES

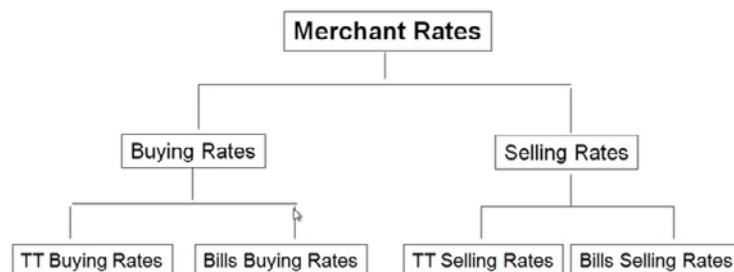
- Merchant rates are generally two types
 - TT rates
 - Bills rates



There are also some rates called merchant rates merchant rates are of two types because merchants are exporter, importers they are the merchant. Their volume of transaction is very high. They need foreign currency for buying for importer needs for buy goods and services. Exporter gets foreign currency by exporting the goods and services. So, whenever merchant the merchant rate so, for exporter importer primarily. So, there are two kinds of rates available as a merchant rate; one is called TT rates telegraphic transfer rates and bills rate because all export import contract are on bills basis.

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MERCHANT RATES



So, bills rates are there TT rate telegraphic transfer rate bills rates called and there are different kinds of merchant rate. One is called buying rate another is called selling rate; for buying rate TT buying rates telegraphic transfer buying rates. TT selling rates that is called bills buying rate. Whenever a merchant a merchant can buy rates or sell the rate similarly selling side TT selling rate and bill selling rate; we have TT buying rate bills buying rate we have TT selling rate and bills selling rate. So, on this rate the TT buying, TT selling, bills buying bills selling all merchant transaction takes place and we will be discussing, we will be using this rate for further calculation when you will discuss arithmetic of exchange rate, we will use this rate for the for the calculation of LC, guarantee, other things; so bills buying, bills selling, TT buying, TT selling, the basic rates for the merchant transaction.

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TT-Rates: Applicability

TT-Buying Rate:

- Inward remittances
- TT, MT, DD
- Conversion of proceeds of instruments
- Cancellation of outward TT, MT, DD

TT-Selling Rate:

- Outward remittances
- TT, MT, DD
- Conversion of proceeds of instruments
- Cancellation of inward TT, MT, DD
- Import document received directly by the importer



So, in the TT rates applicable to TT buying rates, for inward remittances for TT telegraphic transfer money transfer there is demand drop in foreign currency with TT buying rates are available. Conversion of proceed of instrument when exporter brings foreign, they convert the foreign currency against TT buying rate. When cancellation of outward transaction. Suppose importer wanted to cancel the contract import contract. They use the TT buying rate TT selling rate outward remittances.

Suppose you want to remit from currency US dollar from India to abroad you purchase a TT, you sell a TT what is called TT selling rate. It is outward transmissions are there.


Similarly, purchase of foreign currency T telegraphic transfer money transfer in case of foreign currency transfers are there, there you TT selling rate conversion of process instrument also for uses cancellation import document received directly by the by the importer all that TT selling rate is used and you will be discuss and you will be using this rate for different calculation in our next class.

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Bill-Rates: Applicability

Bill-Buying Rate:
– Purchase /discount/ negotiation of export bills

Bill-Selling Rate:
– Transaction involving remittance for import bills



Bills rate applicability; bills rate bills buying rate purchase discount and negotiation of export bill. Similarly bills selling rate transaction involve for remittances of import bill. The bills buying, bills selling these are contract instrument. The contract instruments are used for bills rate and these applicable rates are bills buying rate, bills selling rate.

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FORWARD CONTRACT

- Forward contract involves two parties
- Parties agree to sell/buy a specified amount of forex at a specified rate at a specified date in future
- No exchange of money takes place at the time of entering forward agreement
- At expiration, a forward contract can be settled either by
 - physical delivery
 - cash settlement



There are another transact rates available in the foreign currency market which called a forward contract because in forward contract as I mentioned earlier it is a risk management practices.

The all foreign currency transaction forward beyond two days take place at forward rate because suppose a importer needs dollar after 10 days rupee is depreciating then dollar will appreciate. So, there is a risk for the importer. So, importer want to minimise these risk she will book the dollar from now onwards. How to book? There is a forward transaction takes place against US dollar. So, the forward rate comes forward contract are risk management practices. Risk management instrument available in foreign currency market, there are two party a; the one party sells the forward contract. Another party purchase the forward contract. Parties agree to buy and sell specified amount of foreign currency after specified date in near future.

So, there is no immediate transaction may not take place anything the transaction takes place after the forward contract during the time of delivery of forward contract. So, at the delivery time the contract may be cancelled contract may be physically deliver or there may be cancel cash settlement may also take place forward contract are risk management tools available in foreign currency market. Forward contract are over the counter rate OTC market rate.

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Conclusion

- Forex market is highly liquid.
- 24 hours market
- Large number of players
- Different rates for different purposes
- Primarily a OTC market
- SWIFT platform provides the settlement
- Domestic and international factors drive the rates
- Inter-bank and merchant are the primary players
- USD, EURO, YEN are the major currencies



London, New York, Tokyo are major places of forex trading

Let us come to the conclusion side of the foreign exchange market. We discussed various features of the foreign exchange market. The features are foreign exchange market is highly liquid market. It is a market for 24 hours. So, every moment you can get a quote for the foreign exchange rate, foreign currency rate. Large number of buyers and sellers are there in the foreign exchange market means individual buyers and seller may not be in a position to influence the foreign exchange market.

However, it is possible that particular moment some players may be market makers and some players may be market takers. However, it is not possible for particular player to be market maker always or market takers always. The market makers and market takers depends upon the strength of foreign currency market and also their individual strength during the time of buying and selling. Different rates are available in for different purpose in foreign exchange market. There are spot rate, cash rate, tome rate, forward rate, merchant rate, interbank rate. These are the different rates are available for different purpose, but different transaction for different instruments of foreign exchange market.

Foreign exchange market primarily OTC market over the counter through internet through telephone. Telephone recognise foreign exchange trading places are there, recognised exchange are there where the foreign exchange derivatives are transaction takes place that is called derivative in foreign exchange market. Options futures are takes place transaction takes place in a recognised stock exchange; however, the primarily

foreign exchange markets spot and forward market their rates are over the counter and settlement takes place also through over the counter and SWIFT society for worldwide international financial transaction that is a platform, is a platform among the banks that swift provide the platform for settlement of remittances, settlement of foreign exchange dealings, foreign exchange transaction process. It is a worldwide buddy all banks and financial institution authorised dealers or members of foreign exchange market and they have their SWIFT account where domestic international factors they derived exchange rates.

There are many factors which derive the exchange rate which domestic factor international factors are there. We also discussed about the same thing interbank and merchant rate are, primary merchant are the merchant are the primary players in foreign exchange market. So, interbanks are authorised dealer merchant exporter, importer. They are the primary players in foreign exchange market. We have major currencies in foreign exchange market. At present the US dollar, euro, Japanese yen, French franc, these are the major currency in foreign exchange market. At present major places are London, New York, Tokyo, Hong Kong, Singapore these are the major places for foreign exchange trading process.

After discussing these foreign exchange features of foreign exchange market. Next session we will be discussing about the arithmetic foreign exchange calculation process. There you will discuss about the calculation of different rates calculations and use you will be using the forward rate, TT buying, TT selling, bills buying, bills selling, direct quote, indirect quote. All these concept and calculate the exchange rate.

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References are given here. These are references are there. These references are useful for you go through the reference and you can learn further.

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Model Questions

- Why forex dealers give two-way quote in terms of Bid-Ask spread?
- What is the difference among Hedgers, Speculators and Arbitrageurs?
- Explain the role of SWIFT in forex trading.
- Describe various factors affecting forex rates.



Model question; I will mentions here model questions, some questions I identify. Why forex dealers give two way quote in terms of bid and ask? What is the requirement of two way quotes? You will discuss, because buyers and seller the authorised dealers they do not want to disclose themselves, whether they are buying and selling. If they disclose

that buying they are the buyers, they are the seller, they are the rigging, there would be a artificial appreciation depreciation of foreign exchange.

So, two way quote is essential for the functions of foreign exchange market. What is the difference among hedgers? Differentiate between the hedgers, speculators and arbitragers. Why they are different and what are the functions of hedgers, speculators and arbitragers? You discuss the functions of hedgers, the functions of speculator and such functions of arbitrage. Where they are they are in the foreign exchange market? What way they influence the foreign exchange rate? This you have to discuss in the second question. Third question explain the rule of SWIFT in forex trading. A SWIFT as I mentioned is a platform for the foreign exchange transaction process. How the foreign SWIFT, SWIFT provide the platform? What way the transaction takes place? What are the, what way the settlement take place? You have discussed discuss the all these things in the say third question.

Fourth is the, describe various factor affecting foreign exchange rate here. We will discuss what are the factor that is your balance of payment fiscal policy, monetary policy inflation exchange rate, money supply expectation, behaviours of customer, behaviours of traders. All these factors affect the foreign exchange rates. You have to discuss in the foreign number question number fourth.

Thank you.