WELCOME

PRESENTATION ON

FOREIGN EXCHANGE MARKET

By

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FOREIGN EXCHANGE MARKET

- A market in which various national currencies are bought & sold
- It is also called FX / FOREX / Currency market
- Largest market in the world
- Daily transaction exceed 5.3 trillion (April 2013)

FOREIGN EXCHANGE MARKET

- Transaction takes place in many centers across the world
- New York, London, Paris , Zurich, Milan Tokyo, Hong Kong, Singapore, Sydney Frankfurt etc
- Financial centers function as anchors of trading between different category of buyers and sellers

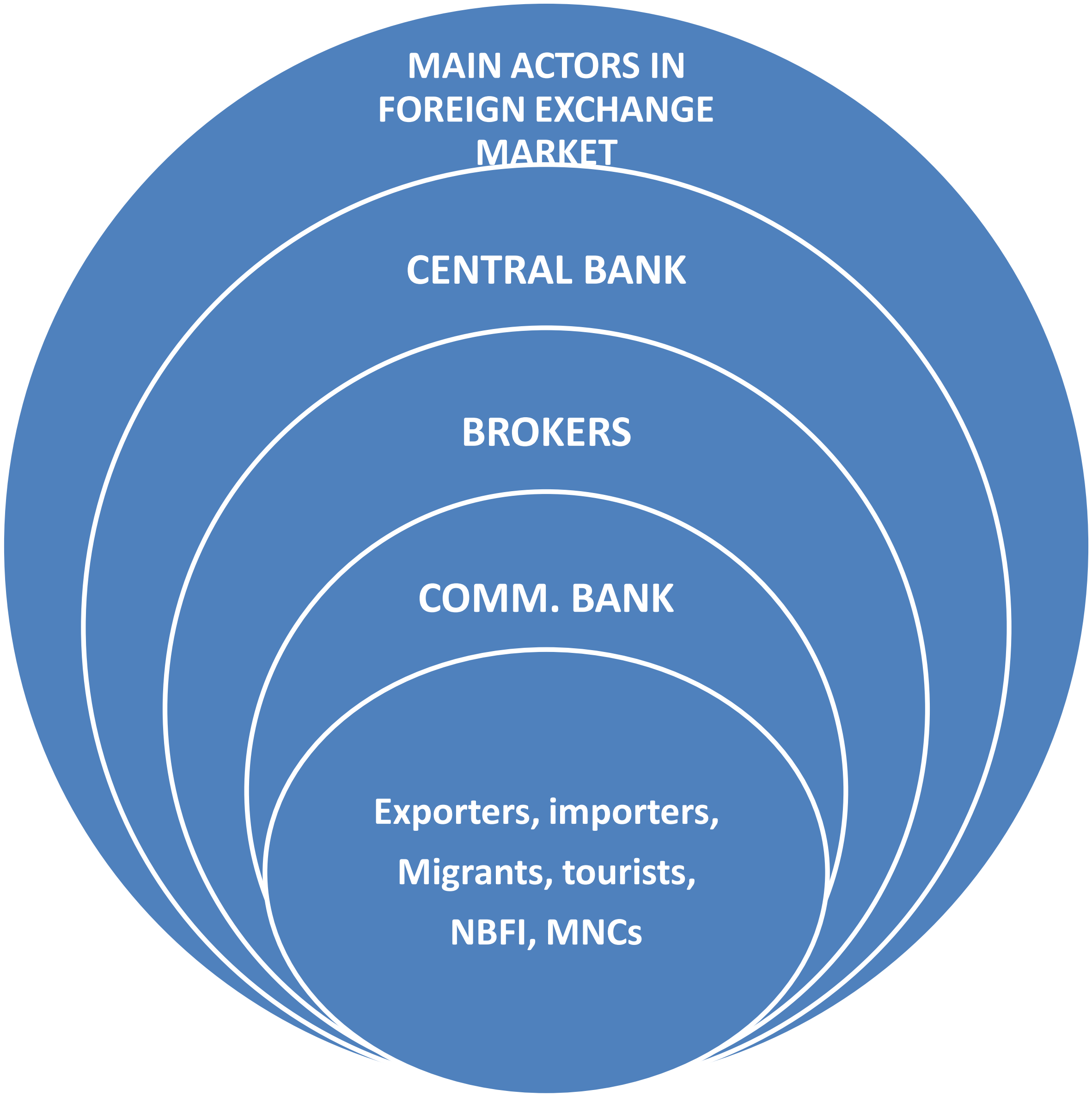
FOREIGN EXCHANGE MARKET

- *SUN NEVER SETS OVER FE MARKET*
- *Buying and selling takes place round the clock (24 hrs a day) except on weekends*
- *Trading takes place 22 hrs GMT on Sunday (Sydney) until 22 hrs. GMT Friday (New York)*
- NEW York--- Sanfrancisco-----Tokyo----- Hong Kong----- Singapore------ Zurich----- London -----New York

FOREIGN EXCHANGE MARKET

- *MAIN ACTORS / PARTICIPANTS*
- CENTRAL BANK– Lender / of last resort
- BROKERS----- Arrange FE between Banks
- COMM. BANK---- Deal with Primary dealers
- Exporters, importers,
- Migrants tourists, } PRIMARY DEALERS
- NBFI, MNCs

FOREIGN EXCHANGE MARKET



FOREIGN EXCHANGE MARKET
Interesting facts

- It works round the clock
- Single unified market- same rates prevail everywhere
- It is truly a global market- currency transactions require only few seconds through the electronic channels

FOREIGN EXCHANGE MARKET
Interesting facts

- Largest market - daily transaction 5.3 trillion USD
- Daily transactions have increased from 1.7 trillion USD in 1998 to 3.98 trillion in 2010 and to 5.3 trillion in 2013
- It is a perfectly competitive market- even though central banks intervene

FOREIGN EXCHANGE MARKET
Interesting facts

- UK ranks first in terms of daily transactions

COUNTRY	PERCENTAGE OF TOTAL TRANSACTIONS (2013)
UNITED KINGDOM	41
USA	19
SINGAPORE	5.7
JAPAN	5.6
HONG KONG	4.1

FOREIGN EXCHANGE MARKET
Interesting facts

- The four major currencies which is generally accepted as means of payment- USD, Euro Japanese Yen and GBP – Vehicle currencies
- USD, Euro, Japanese Yen ,GBP, AUD are the most traded currencies
- One needs FE
- 1. to pay for imported goods or services
- 2. to visit a foreign country
- 3. to make investment abroad
- 4. to buy foreign financial assets

FOREIGN EXCHANGE MARKET
Interesting facts

- If you import goods from USA you have to make payment in dollars
- You make payment by debiting the amount from your bank account
- Your bank will debit the amount in you're a/c and it instructs its correspondent bank in the US to credit the a/c of the exporters a/c with dollars.

FOREIGN EXCHANGE MARKET

- ARBITRAGE– The economic force keeping it to be a single market
- Its functions
- 1. transfer of purchasing power
- 2. Provision of credit for foreign trade
- 3. Hedging against exchange risk

FOREIGN EXCHANGE MARKET

- *EXCHANGE RATE*
- Rate at which the currencies of two countries are exchanged
- Two systems
- 1. The price quotation system- how many units of domestic currency needed to buy 1 unit of foreign currency eg, 65 IRS for 1USD
- 2. Volume quotation system
- How many units of foreign currency can be bought with 1 unit of home currency.

DETERMINATION OF EXCHANGE RATE

- **Exchange rate between any two currencies is determined by demand and supply**
- **If we take demand and supply of foreign currency we get the price of foreign currency in terms of domestic currency- price quotation system**
- **If we take demand and supply of domestic currency we get price of domestic currency in terms of foreign currency- volume quotation system**

DETERMINATION OF EXCHANGE RATE

- Demand for foreign exchange is derived demand
- Why foreign currency is demanded
- 1.to import goods
- 2. to pay for services- travel hotel accommodation
- 3. to visit foreign country
- 4. to invest abroad

DETERMINATION OF EXCHANGE RATE

- SUPPLY OF FOREIGN EXCHANGE
- 1.goods exports
- 2. service rendered to foreigners-shipping ,insurance etc
- 3. tourist arrivals
- 4. foreign investments

FOREIGN EXCHANGE MARKET

- Real exchange rate
- Real magnitudes are obtained from corresponding monetary magnitudes to eliminate the changes solely due to price rise
- ER – a Nominal concept
- Not obtained by P *Q
- It is a relative concept
-

FOREIGN EXCHANGE MARKET

- No agreement – Which relative price
- 1. Oldest method is to take the ratio of general price level of two countries expressesd in a common currency
- $R_r = P_h/r{*}P_f$
- 2. Relative price of tradable and non tradable goods PT
- $R_{r=} P_T/P_{NT}$

FOREIGN EXCHANGE MARKET

- ***EFFECTIVE EXCHANGE RATES***
- **1. Exchange rate involve only two currencies**
- **2. does not give any idea about over all value of the currency**
- **3. In a floating rate system rate rising against one currency but falling against another**
- **An index no of bilateral exchange rates of a currency with all other currencies with suitable weights.**

FOREIGN EXCHANGE MARKET

- ***EFFECTIVE EXCHANGE RATES***
- $Rei = \sum^{n}_{j=1\ J\neq i} WjRj_{i}\ ,\ \sum wj = 1$
- **R ei= nominal effective exch. Rate of i^{th}currency**
- **Rji- nominal exchange rate of i^{th}currency w.r.t. currency j**
- **Wj –weight of currency j**
- **Base of EER 100 A rise above 100- appreciation**

FOREIGN EXCHANGE MARKET

- *SPOT RATE VS FORWARD RATE*
- A market for on the spot exchange of currency- spot market
- Spot transaction- that requires on the spot delivery of currencies
- Rate applicable – spot rate
- The name misleading – requires two days to complete- to clear cheques

FOREIGN EXCHANGE MARKET

- *FORWARD MARKET*
- Market for forward transactions
- A forward transaction involves agreement b/w two parties to exchange currencies at an agreed rate on an agreed future date
- No currency exchange at present
- Purpose- avoid exchange risk

FOREIGN EXCHANGE MARKET

- FORWARD MARKET
- Exchange risk- possibility of loss due to unfavourable changes in exchange rate
- Speculation or Hedging
- Average economic agent is risk averse
- Hedging is avoidance of exchange risk by equating assets and liabilities in the same currency– have zero net position= open position

FOREIGN EXCHANGE MARKET

- Hedging is equalisation of assets & liabilities in the same currency
- A= L means to have open position
- A≥ L means to have a long position—risk =speculator
- A≤ L means to have short position – risk

FOREIGN EXCHANGE MARKET

- Agent who has to make payment buys it in the fwd market
- Options available if future liabilities
- 1. buy forward
- 2. Pay now- loss of interest
- 3. Buy spot invest till he needs fund= Spot covering

FOREIGN EXCHANGE MARKET

- Options available one has to get payment
- 1. sell forward
- 2. allow discount to the debtor for paying early
- 3. borrow from bank and invest
- Decision on the basis of cost & benefits

FOREIGN EXCHANGE MARKET

- Forward premium or discount
- If the forward rate of a currency is below spot rate it is said to be at a *forward discount*
- If forward rate is higher than spot rate it is said to be at a *forward premium*

FOREIGN EXCHANGE MARKET

- Spot rate $1= Ɛ1
- Three month's Forward rate $.99 = Ɛ1
- Euro is at at a forward discount of 1%
- If forward rate is $1.01= Ɛ1
- Euro is at a forward premium
- FD/ FP $= \frac{FR - SR}{SR} * 4 * 100$
- Multiplication by 4 is to express on annual basis

FOREIGN EXCHANGE MARKET

- If Spot rate \$1= Ɛ1
- Three month's Forward rate \$.99 = Ɛ1
- FD = $\frac{\$0.99-\$1.00}{\$1.00} \times 4 \times 100$

$$= \frac{-\$0.01}{\$1.00} \times 4 \times 100 = -0.01 \times 4 \times 100 = -4\%$$

FOREIGN EXCHANGE MARKET

- IF Spot rate \$1= Ɛ1 &

  forward rate is \$1.01= Ɛ1

$$FP = \frac{\$1.01-\$1.0}{\$1.00} x4x100$$

$$= \frac{\$0.01}{\$1.00} x4x100 = 0.01\ x4x\ 100 = +4\%$$

FOREIGN EXCHANGE MARKET

- ***SPECULATION***
- **SPECULATION is purchase (sale) of an asset with the view to resell (repurchase) them on a later date, with expecting a gain from future change in price relative to ruling price and not a gain from its use or transfer b/w markets**
- **They deliberately assumes an exchange risk expecting profit**

FOREIGN EXCHANGE MARKET

- One expecting an increase in the price of an asset will buy and hold it---bull
- One expecting a decrease in the price of an asset will sell it.------ bear
- If R_1 is the expected future rate & r is the spot rate,

Bull : ($R_1 > r$) will buy it now—takes a long position

Bear : ($R_1 < r$) will sell it now.. Takes a short position

CURRENCY DERIVATIVES

- Enormous amount of derivative instruments are used in the foreign exchange markets
- Standard instruments are traded in organised exchanges -
- Chicago Board of Options Exchange
- London International Financial Futures Exchange (LIFFE)
- Marche A Terme Internationale Finance (MATIF)

CURRENCY DERIVATIVES

- They are also traded outside the exchanges– OTC markets
- OTC exchange– banks & other institutions make contracts tailor-made to the needs of parties
- Major instruments– FUTURES, OPTIONS, SWAPS

CURRENCY DERIVATIVES

- *FUTURES*
- *A currency futures contract is an agreement b/w two counter parties to exchange specified amounts of 2 currencies on a given date in future at an exchange rate pre determined at the time of the contract*
- Definition is similar to that of forwards
- But there are differences

CURRENCY DERIVATIVES
Futures vs. Forwards

Forwards

- 1. Forward contract can be of any amount
- 2.forwards are OTC instruments- directly ex-changed b/w parties
- 3. Forwards have counter party risks
- 4. FWds are illiquid as sets- cannot be transferred to another person
- 5. Cover around 50 currencies

FUTURES

- 1. Futures contracts will be of standard amounts
- 2. Traded in organised exchanges
- 3. no such risk. Payment guaranteed by exchanges
- 4. Can be freely bought & sold in the market
- 5. Futures are only in major currencies- Yen, $, pounds,Euro, Can$, Aus$, Peso, etc

CURRENCY DERIVATIVES

- FUTURES
- The asset to be delivered in fulfillment of the contract is called the *underlying*
- In most futures contracts, as physical delivery is difficult , so *reversing of trade*
- Contract is ended before maturity

CURRENCY DERIVATIVES

- OPTIONS
- Option gives its buyer the right but not an obligation to buy or sell a currency in future at a predetermined price(exch. Rate).
- OPTIONS – more complicated than forwards & futures
- Seller of the option= *Option writer*
- Buyer of the option = *Option holder*

CURRENCY DERIVATIVES

- OPTIONS- Two Types
- PUT OPTION- Gives its Holder the right to sell
- CALL OPTION – Gives its holder the right to buy
- *Underlying currency*- currency in which option is given
- *Counter currency*- Currency in which price is paid

CURRENCY DERIVATIVES

- *Strike/ exercise price*- price at which the deal is struck
- *Option premium*- price paid by writer to holder
- *Maturity/expiry date*- date of expiry of contract

CURRENCY DERIVATIVES

- OPTIONS
- American Option: Right can be exercised anytime till maturity
- European Option : Right can be exercised only on maturity date
- A flexible instrument- fixes maximum price payable- allows to take advantage of changes in exchange rates

CURRENCY DERIVATIVES

- OPTION
- Option holder can decide not to exercise the right if future spot rates is favorable
- Only source of loss to the holder is option premium =only source of gain to option writer
- Holder has unlimited possibility of gain
- Writer has unlimited possibility of loss

CURRENCY DERIVATIVES

- SWAPS
- A currency SWAP is a hybrid type of contract which includes a spot sale of a currency with a clause for the forward repurchase of the same currency at an agreed rate.
- Swap transactions can be b/w private individuals or central banks

CURRENCY DERIVATIVES

- Example
- Bank of England credits 100million pounds to the a/c of European Central Bank and the latter credits 151.6 million Euros to the a/c of Bank of England and agrees to retransfer with one another at the rate of 1pound for 1.6 Euros
- Swap transaction is a transaction in which two currencies are exchanged simultaneously on the spot and forward markets in the opposite direction

CURRENCY DERIVATIVES

- Swap transactions are more important than fwd transactions
- Second only to spot transactions
- Organised by International Swap dealer's Association (ISDA)

CURRENCY DERIVATIVES

- USES
- 1. Cash management of MNCS
- Parent co. in US 3 month's excess liquidity of $ & subsidiary has shortage of $ but excess pounds- SWAP

CURRENCY DERIVATIVES

- 2. To raise funds cheaply
- European Co. --- wants Yen
- Japanese Co. Not interested to invest in Europe or Euro but are eager to invest in Chinese Yuan
- A Chinese Co. needs Euro but Europeans are not interested to invest in china or Yuan
- What is the solution

CURRENCY DERIVATIVES

- 3. Management of currency portfolios of banks
- Banks Swaps currencies to avoid currency mismatches
- SBI has $150 million excess of loans over deposits but it has excess deposit of pounds
- Swap includes two rates- so that swap rate is quoted as the difference b/w spot & fwd rates

CURRENCY DERIVATIVES

- SWAP vs FUTURES
- Most Fwds & futures are for short periods up to 1 yr…. Swaps are for 5 to 20 years
- Futures have active secondary markets not for Swaps
- Futures are std contracts– Swaps tailor made
- Futures contract guaranteed by futures exchange not for swaps

Foreign Exchange Market in India

- 1978- Banks were permitted to undertake FE transactions
- Forex market regulated & structured by RBI & FEDAI
- FEDAI Foreign Exchange Dealers Association of India- Voluntary association (1958)
- FEDA- sets ground rules & fixes charges & commission

Foreign Exchange Market in India

- Main players- Customers- Authorized Dealers(ADs) & RBI
- ADs are mainly commercial banks and other authorised institutions
- Customers, PSUs, Corporates & business deal with Ads for FE trannsactions
- Main Centres- Delhi, Kolkata, Mumbai, Bangalore, Ahemedabad, Kochi

Foreign Exchange Market in India

- Mainly an OTC market
- It can be divided into the following segments
- 1. Upper Segment- RBI---AD – RBI regulates rates
- 2.Interebank segment AD-AD & overseas banks
- 3.Primary segment-Customers, traders, Commerrce

Foreign Exchange Market in India

- 4. Licenced Money changers & travel Agents- They are authorized to encash travellers' cheques
- Specified hotels, Government shops are also permitted to receive Foreign Exchange
- Before 1993- Fixed exchange rate prevailed
- 1993- floating ER came into existence
- 1947- 1999 -regulated by FERA controlled by Exchange division of RBI

Foreign Exchange Market in India

- 1999- FEMA
- Since 2001- clearing and settlement – by Clearing Corporation of India (CCIL)
- 2017- $3.5 billion was the daily transaction
- One of the top 10 markets of the world

Foreign Exchange Market in India

- Main source of FE supply
- 1. Export of goods & services
- 2. Drafts
- 3. Travellers cheques
- 4. Capital inflow- direct & portfolio
- 5. NRI deposits
- 6. Commercial borrowing

Foreign Exchange Market in India

- Authorised money changers
- 1. *Category I-* All Com. Banks registered under RBI Act
- Urban Cooperative bank- limited way
- *2. Category II*-UFFMC- Upgraded Full Fledged Money changer- DO of P&T, NBFIs- operating region wise
- Non trade related transactions

Foreign Exchange Market in India

- Kochi- Lulu forex limited, MSL, manappuram finance
- ***AD category III-*** Financial Institutions- SIDBI, IFCI, CCIL, Eximbank, Factoring agencies- activities incidental to finance foreign trade and related matters

Foreign Exchange Market in India

- **Authorised Dealer IV-** Full Fledged Money Changers (FFMC) DOP, NBFC, Urban Coop. Banks – authorised to purchase Foreign Exchange from residents, and non Residents visiting . They deal in currencies for approved purposes