Lets Begin - What are Derivatives

A bet that something will go up or down

They are financial contracts that derive their value from an underlying asset

These financial instruments help you make profits by betting on the future value of the underlying asset

So, their value is derived from that of the underlying asset.

How it works

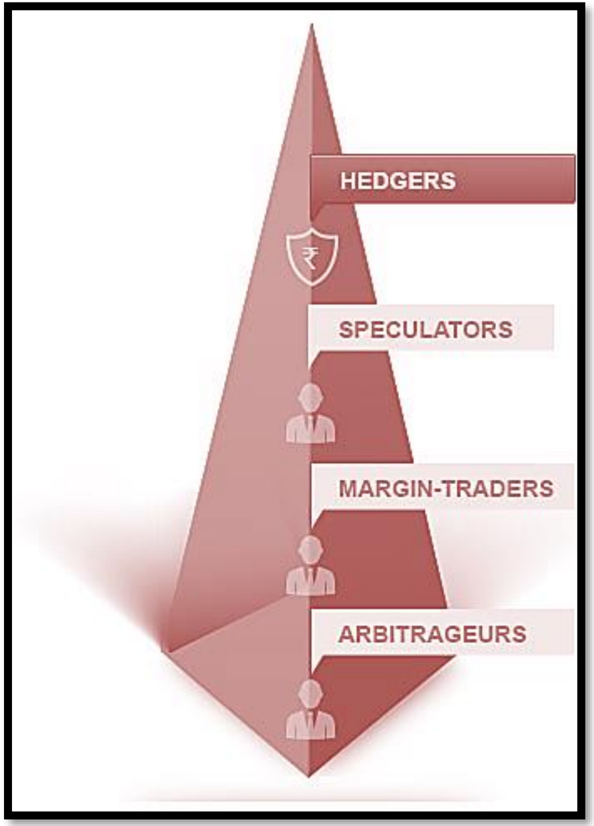
- Value is derived from an asset or a group of assets
- Contract between two or more parties
- Change in underlying will bring change in the price of a derivative
- Exchange Trades Vs Over the Counter

Participants in Derivative Markets

- **Hedgers**
- ✓ They use derivatives in order to reduce risk
- ✓ They don’t want to miss upon anything
- ✓ Risk Averse

- **Speculators**
- ✓ They love betting
- ✓ To get Extra Leverage
- ✓ Very Risky

- **Arbitrageurs**
- ✓ Advantage from 2 different markets



Basic Terminologies

- Spot Contract – Agreement to Buy or Sell and Asset
- Spot Price – Price at which you Buy or Sell
- Long Position /Bullish – Buy
- Short Position/Bearish – Sell
- Expiry
- Margins

Forward Contract

- A forward contract is an agreement between two parties to buy or sell an asset
- The owner of a forward contract has the obligation to buy the underlying asset at a fixed date in the future for a **fixed price which is decided today**
- They are traded on, Over the Counter (OTC)

Forward and Futures

- Forward and Futures contracts lock in a price today for the purchase or sale of something in a future time period
- Futures and Forwards commit both parties to the contract to take a specified action
- Having a long position means you are committed to buy the good at the specified price in the future

Futures Vs Forwards

FUTURES	FORWARDS
They trade on exchanges	Trade in OTC markets
Are standardized	Are customized
Identity of counterparties is irrelevant	Identity is relevant
Regulated	Not regulated
Marked to market	No marking to market
Easy to terminate	Difficult to terminate
Less costly	More costly

How Future Contract work

- No money changes hands between the long and short parties at the initial time the contracts are made

- Only at the maturity of the forward or futures contract will the long party pay money to the short party and the short party will provide the good to the long party.

- One has no intention of taking delivery of the commodity

- When one “sells” a futures contract, no intention of selling the commodity. Again, post margin.

More on Future Contracts

- The life of one contract is 3 months.
- At any point of time, 3 futures contract will be available for trading with different time limit to expiry – 1month, 2 month and 3 month contract. (Also called near month, mid month and far month contracts)

- **DIFFERENT TYPES OF FUTURES**

✓ Stock futures and stock index futures – traded on the NSE

✓ Commodity futures – traded on MCX / NCDEX

✓ Interest rate futures – traded on NSE

Pricing and Valuation

- Every day, the exchange defines a price called the “settle” price, which is essentially the last trade on that day

- Every day until expiration a buyer’s margin account is credited (or debited if negative) with the amount: change in settle price $\times$ contract amount

- If contract is cash settled, on the last day the margin account is credited with (cash settle price-last settle price)$\times$contract amount.

- If contract is physical delivery, on last day buyer must receive commodity

Initial Margin

- Long and the short parties must deposit money in their brokerage accounts.

- Approx. – 15-20 % of the total value of the contract

- Not a down payment, but instead a security deposit to ensure the contract will be honored

- **Maintenance Margin** – If Market is not in favour of your contract then the investor is required to bring the account balance back to the initial margin requirement

Stock Futures Vs Index Futures

STOCK FUTURES

- UNDERLYING ASSET - STOCKS
- LOT SIZE - NUMBER OF SHARES

INDEX FUTURES

- Underlying Asset - Index
- No physical settlement possible
- Lot size - point to rupee conversion

Live Trading - Example

Tata Consultancy Services Limited - TCS

Get Underlying Quote | Option Chain

- ( ) Index Derivatives
- (•) Stock Derivatives
- ( ) Currency Derivatives

Instrument Type:	Symbol :	Expiry Date :	Option Type :	Strike Price :	
Stock Futures	TCS	24DEC2014	Selec	Select..	Get Data

2,374.90	Prev. Close	Open	High	Low	Close
-93.05 -3.77%	2,467.95	2,398.50	2,405.05	2,365.00	-

Fundamentals | Historical Data

Print

Traded Volume (contracts)	14,316
Traded Value (lacs)	42,682.80
VWAP	2,385.18
Underlying value	2,359.95
Market Lot	125

Order Book | Intra-day | Future v/s Index

Buy Qty.	Buy Price	Sell Price	Sell Qty.
125	2,374.40	2,374.95	125
250	2,374.35	2,375.35	250
125	2,374.30	2,375.40	250

MAGIC INSTITUTE OF EXCELLENCE

THANK YOU