equaliFi ACADEMY

CTM

CERTIFICATE IN INTEGRATED TREASURY MANAGEMENT

Session 6- Application of Derivatives as Hedging Tool

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What are Derivatives?

- A derivative is a financial instrument whose value is derived from the value of another asset, which is known as the underlying.

- When the price of the underlying changes, the value of the derivative also changes.

- A Derivative is not a product. It is a contract that derives its value from changes in the price of the underlying.

  Example : The value of a gold futures contract is derived from the value of the underlying asset i.e. Gold.

Traders in Derivatives Market

There are 3 types of traders in the Derivatives Market :

- HEDGER

A hedger is someone who faces risk associated with price movement of an asset and who uses derivatives as means of reducing risk. They provide economic balance to the market.

- SPECULATOR

A trader who enters the futures market for pursuit of profits, accepting risk in the endeavor. They provide liquidity and depth to the market.

ARBITRAGEUR

- A person who simultaneously enters into transactions in two or more markets to take advantage of the discrepancies between prices in these markets.
- Arbitrage involves making profits from relative mispricing.
- Arbitrageurs also help to make markets liquid, ensure accurate and uniform pricing, and enhance price stability
- They help in bringing about price uniformity and discovery

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1. OTC and Exchange Traded Derivatives.

- OTC

  Over-the-counter (OTC) or off-exchange trading is to trade financial instruments such as stocks, bonds, commodities or derivatives directly between two parties without going through an exchange or other intermediary.

- The contract between the two parties are privately negotiated.
- The contract can be tailor-made to the two parties' liking.
- Over-the-counter markets are uncontrolled, unregulated and have very few laws. Its more like a freefall.

2. Exchange-traded Derivatives

Exchange traded derivatives contract (ETD) are those derivatives instruments that are traded via specialized Derivatives exchange or other exchanges. A derivatives exchange is a market where individuals trade standardized contracts that have been defined by the exchange.

- The world's largest derivatives exchanges (by number of transactions) are the Korea Exchange.

- There is a very visible and transparent market price for the derivatives

Economic benefits of derivative

- Reduces risk
- Enhance liquidity of the underlying asset
- Lower transaction costs
- Enhances liquidity of the underlying asset
- Enhances the price discovery process.
- Portfolio Management
- Provides signals of market movements
- Facilitates financial markets integration

What is a Forward?

- A forward is a contract in which one party commits to buy and the other party commits to sell a specified quantity of an agreed upon asset for a pre-determined price at a specific date in the future.

- It is a Customised contract, in the sense that the terms of the contract are agreed upon by the individual parties.

- Hence, it is traded OTC.

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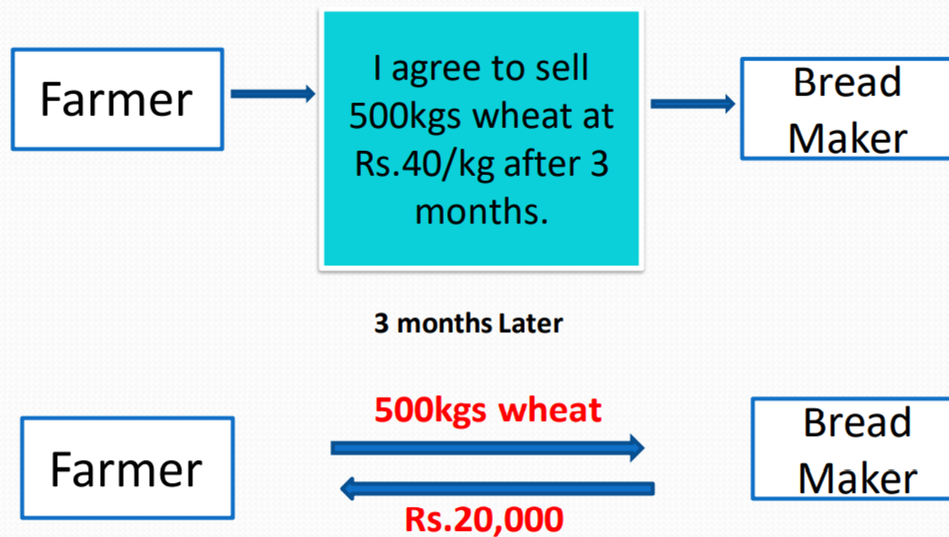
Forward Contract Example



Risks in Forward Contracts

- Credit Risk – Does the other party have the means to pay?
- Operational Risk – Will the other party make delivery? Will the other party accept delivery?
- Liquidity Risk – Incase either party wants to opt out of the contract, how to find another counter party?

Terminology

- Long position - Buyer
- Short position - seller
- Spot price – Price of the asset in the spot market.(market price)
- Delivery/forward price – Price of the asset at the delivery date

What are Futures?

- A future is a Standardized forward contract.
- It is traded on an organized exchange.
- Standardization- - quantity of underlying - quality of underlying(not required in financial futures) - delivery dates and procedure/Expiry Dates - price quotes

Futures Contract Example

A

L $10
S $12
Profit $2

Market Price/Spot Price	
D1	$10
D2	$12
D3	$14

B

S $10
L $14
Loss $4

C

L $12
S $14
Profit $2

Types of Futures Contracts

- Stock Futures Trading (dealing with shares)
- Commodity Futures Trading (dealing with gold futures, crude oil futures)
- Index Futures Trading (dealing with stock market indices)

Closing a Futures Position

- Most futures contracts are not held till expiry, but closed before that.
- If held till expiry, they are generally settled by delivery. (2- 3%)
- By closing a futures contract before expiry, the net difference is settled between traders, without physical delivery of the underlying.

Terminology

- Contract size – The amount of the asset that has to be delivered under one contract. All futures are sold in multiples of lots which is decided by the exchange board. Eg.If the lot size of Tata steel is 500 shares, then one futures contract is necessarily 500 shares.

- Contract cycle – The period for which a contract trades. The futures on the NSE have one (near) month, two (next) months, three (far) months expiry cycles.

- Expiry date – usually last Thursday of every month or previous day if Thursday is public holiday

Terminology

- Strike price – The agreed price of the deal is called the strike price.

- Cost of carry – Difference between strike price and current price.

Margins

- A margin is an amount of a money that must be deposited with the clearing house by both buyers and sellers in a margin account in order to open a futures contract.

- It ensures performance of the terms of the contract.

- Its aim is to minimize the risk of default by either counterparty.

COMPARISON	FORWARD	FUTURES
• Trade on organized exchanges	No	Yes
• Use standardized contract terms	No	Yes
• Use associate clearinghouses to guarantee contract fulfillment	No	Yes
• Require margin payments and daily settlements	No	Yes
• Markets are transparent	No	Yes
• Marked to market daily	No	Yes
• Closed prior to delivery	No	Mostly
• Profits or losses realised daily	No	Yes

Thank You