Commodity Options : Gold, Crude, Copper, Silver

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WHY OPTIONS?

An option contract offers the best of both worlds. It will offer the buyer of the contract protection if the price of the underlying moves against him but allows him to walk away from the deal if the underlying price moves in his favour.

Options:

- Give buyer the “right”, but not the “obligation”
- To buy or to sell an agreed amount of underlying asset (Notional Value)
- On or before an agreed future date (expiry date)
- At an agreed exchange rate (Strike Price)
- In exchange for fee (Option Premium)

Call Option

- A call option gives the buyer, the right but not the obligation to buy specified quantity of the underlying asset at the set strike price on or before a specified date.

- The seller (writer) however, has the obligation to sell the underlying asset if the buyer decides to exercise his option to buy.

Put Option

- A Put option gives the buyer of the option the right but not the obligation to sell specified quantity of the underlying asset at the set strike price on or before a specified date.

- The writer of the option however, has the obligation to buy the underlying asset if the buyer of the put option decides to exercise his option to sell.

WHAT ARE OPTIONS?

- An option is the right, but not the obligation, to buy or sell a futures contract & buyer of an option acquires this right.
- Commodity **Call** Option : Buy asset (futures contract) in the future at a pre-determined decided rate today.
- Commodity **Put** Option : Sell asset (futures contract) in the future at a pre-determined decided rate today.

	Call Option	Put Option
Option Buyer	Pays premium; right to buy	Pays premium; right to sell
Option Seller	Collects premium; obligation to sell	Collects premium; obligation to buy

OPTION TERMINOLOGY

- **Option price:** Option price is the price which the option buyer pays to the option seller. It is also referred to as the option premium.

- **Expiration date:** The date specified in the options contract is known as the expiration date, the exercise date, the strike date or the maturity.

- **Strike price:** The price specified in the options contract is known as the strike price or the exercise price.

- **European options:** European options are options that can be exercised only on the expiration date itself.

Some terms unique to options trading

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- **In the Money for Call Option**: Futures contract value is above strike price
- **In the Money for Put Option**: Futures contract value is below strike price
- **At the Money**: Futures contract value equals strike price
- **Out of Money for Call Option**: Futures contract value is below strike price
- **Out of Money for Put Option**: Futures contract value is above strike price
- **Open interest:** The total number of options contracts outstanding or open in the market at any given point of time.

FACTORS AFFECTING OPTION PRICES

Implied Volatility

- How much does the Futures move?
- More Futures fluctuation >> Option more likely to be exercised >> Higher risk >> Higher Price

Time

- How much time left for the Futures to move?
- More time left >> Option more likely to be exercised >> Higher Risk >> Higher Price

Strike Rate

- What is the rate that the Option becomes effective?
- Strike Rate closer Forward Rate >> Option more likely to be exercised >> Higher Risk >> Higher Price

Futures Direction (View)

- Which direction is the Futures likely to move?
- Expected favourable Futures movement >> Option more likely to be exercised >> Higher Risk >> Higher Price

Tail Risk

- Hugely ITM or OTM Options are costlier than theoretical values

Option Strategies

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- **Call Option**
  - **Buy Call (Bullish)** → Unfixed Gold → Premium Low
  - **Sell Call (Bearish)** → Inventory → Premium High
- **Put Option**
  - **Buy Put (Bearish)** → Inventory → Premium Low
  - **Sell Put (Bullish)** → Unfixed Gold → Premium High

HOW ARE OPTIONS DIFFERENT FROM FUTURES?

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Futures Contracts

- **Definition**

  An agreement to buy or sell an underlying on a certain date and at a certain price, in the future.

- **Obligation**

  Buyer and seller are both obligated to honor the contract upon expiry.

- **Margin Account**

  Both parties need to maintain a margin.

- **Advance payment/Contract pricing**

  No, except the initial margin

- **Risks**

  Both buyer and seller have unlimited risk

Options Contracts

- **Definition**

  An agreement which gives the buyer the right but not the obligation to buy or sell an underlying at a certain price on or before a certain date.

- **Obligation**

  Only seller is obligated to honor the contract on expiration.

- **Margin Account**

  Only option writer/seller maintains a margin.

- **Advance payment/Contract pricing**

  Requires upfront fixed premium from the buyer.

- **Risks**

  Option buyer has limited risk; Option writer/seller has unlimited risk

BENEFITS OF COMMODITY OPTIONS

BENEFITS TO INDUSTRY/CORPORATES

- Options trading will make the **commodities market robust and efficient**.
- The combination of Futures and Options can give participants the benefit of price discovery of Futures and simpler risk management of Options.
- The **premiums on options are much lower**, sometimes a quarter of the initial margins paid on futures contracts.
- Hedgers can use option contracts where there is **no further outgo** after the initial payment for the option premium.
- Risk for options buyer is **limited to the premium paid**

PARTICIPANTS AND THEIR PAY-OFFS IN OPTIONS MARKET

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PARTICIPANT	PROFIT (Upside potential)	COST (Downside potential)
Call holder/buyer	Unlimited (to the extent of increase in price above strike price)	Limited (to the extent of premium paid)
Put holder/buyer	Practically unlimited (to the extent of price of underlying becoming zero)	Limited (to the extent of premium paid)
Call writer/seller	Limited (to the extent of premium received)	Unlimited (to the extent of increase in price above strike price)
Put writer/seller	Limited (to the extent of premium received)	Practically unlimited (to the extent of price of underlying becoming Zero)

Unlike an **option holder** who has a limited risk (the cost of the option premium) but practically unlimited potential for gains; an **option writer** is exposed to practically unlimited risk with limited gains (to the extent of option premium received).

FACTORS INFLUENCING OPTIONS PRICES (BLACK -76 MODEL)

Factors	Increase		Decrease	
	Call Prices Will	Put Prices Will	Call Prices will	Put Prices Will
Underlying Price	↑	↓	↓	↑
Time until Expiration	↑	↑	↓	↓
Volatility	↑	↑	↓	↓
Interest Rates	↓	↓	↑	↑
Strike Price	↓	↑	↑	↓

Commodity Options details

Options Details	Gold	Crude Oil	Copper	Silver
Launch date	17th Oct.17	15th May.18	21st May. 18	24th May.18
Strike Interval	100	50	5	250
Number of strikes	15,-1,-15	7,-1-,7	7,-1-,7	10,-1,-10
Number of Call & Put	31 CE & PE	15 CE & PE	15 CE & PE	21 CE & PE
Market Lot	100	100	1000	30
Tick Size	0.5	0.1	0.01	0.5
Tick Value	50	10	10	15
Expiry day	3 days prior to 1st tender day of futures	2 days prior to expiry of futures	2 days prior to expiry of futures	3 days prior to 1st tender day of futures
Future Expiry	5th June	19th June	29th June	5th July
Option expiry	29th May	15th June	27th June	27th June

Settlement Mechanism

Settlement Mechanism of Commodity Options	
ITM (In the money)	Devolve into futures
CTM (Close to money)	Devolve into futures only on instructions
OTM (Out of the money)	No devolvement

Options Costing

Business Development Details					
Particular	Gold	Silver	Crude Oil	Copper	Zinc
Trading Lot	1 Kg	30 Kg	100 bbl	1MT	5MT
Price*	225	700	160	11	4
Turnover (Premium Buy & Sell)	45000	42000	32000	22000	40000
Per Rupee Movement	100	30	100	1000	5000
*Please insert latest prices of premium					

Options Costing

Costing Details						
		Gold	Silver	Crude Oil	Copper	Zinc
Particular	Cost per lac	Amount	Amount	Amount	Amount	Amount
Transaction Charge (Nil upto sept. 18)	0	0	0	0	0	0
SEBI charges (Rs 0.15 / lac)+GST	0.177	0.07965	0.07434	0.05664	0.03894	0.0708
STT (Rs. 50 /lac) only on sell side premium	50	11.25	10.5	8	5.5	10
Stamp duty (Rs. 1 Lac) of premium turn over	1	0.45	0.42	0.32	0.22	0.4
Brokerage		0	0	0	0	0
GST on brokerage (18%)	18%	0	0	0	0	0
Total Cost		12	11	8	6	10

Gold Costing

Devolvement costing		Call		Put	
		Buyer	Seller	Buyer	Seller
Gold Future price	30000				
Premium price	300				
CTT on exercise of options @0.0001 of FSP (only for purchaser)	Rs. 0.10/lac	3		3	
Devolvement of options into futures @0.01% of Short position	Rs. 10/Lac		300	300	
If buyer squares off devolved position (CTT on short position)	Rs. 10/Lac	300			300

Crude Oil costing

Devolvement costing		Call		Put	
		Buyer	Seller	Buyer	Seller
Crude Oil Future price	4500				
Premium price	45				
CTT on exercise of options @0.0001 of FSP (only for purchaser)	Rs. 0.10/lac	0.45		0.45	
Devolvement of options into futures @0.01% of Short position	Rs. 10/Lac		45	45	
If buyer squares off devolved position (CTT on short position)	Rs. 10/Lac	45			45

Copper Costing

Devolvement costing		Call		Put	
		Buyer	Seller	Buyer	Seller
Copper Future price	450				
Premium price	4.5				
CTT on exercise of options @0.0001 of FSP (only for purchaser)	Rs. 0.10/lac	0.45		0.45	
Devolvement of options into futures @0.01% of Short position	Rs. 10/Lac		45	45	
If buyer squares off devolved position (CTT on short position)	Rs. 10/Lac	45			45

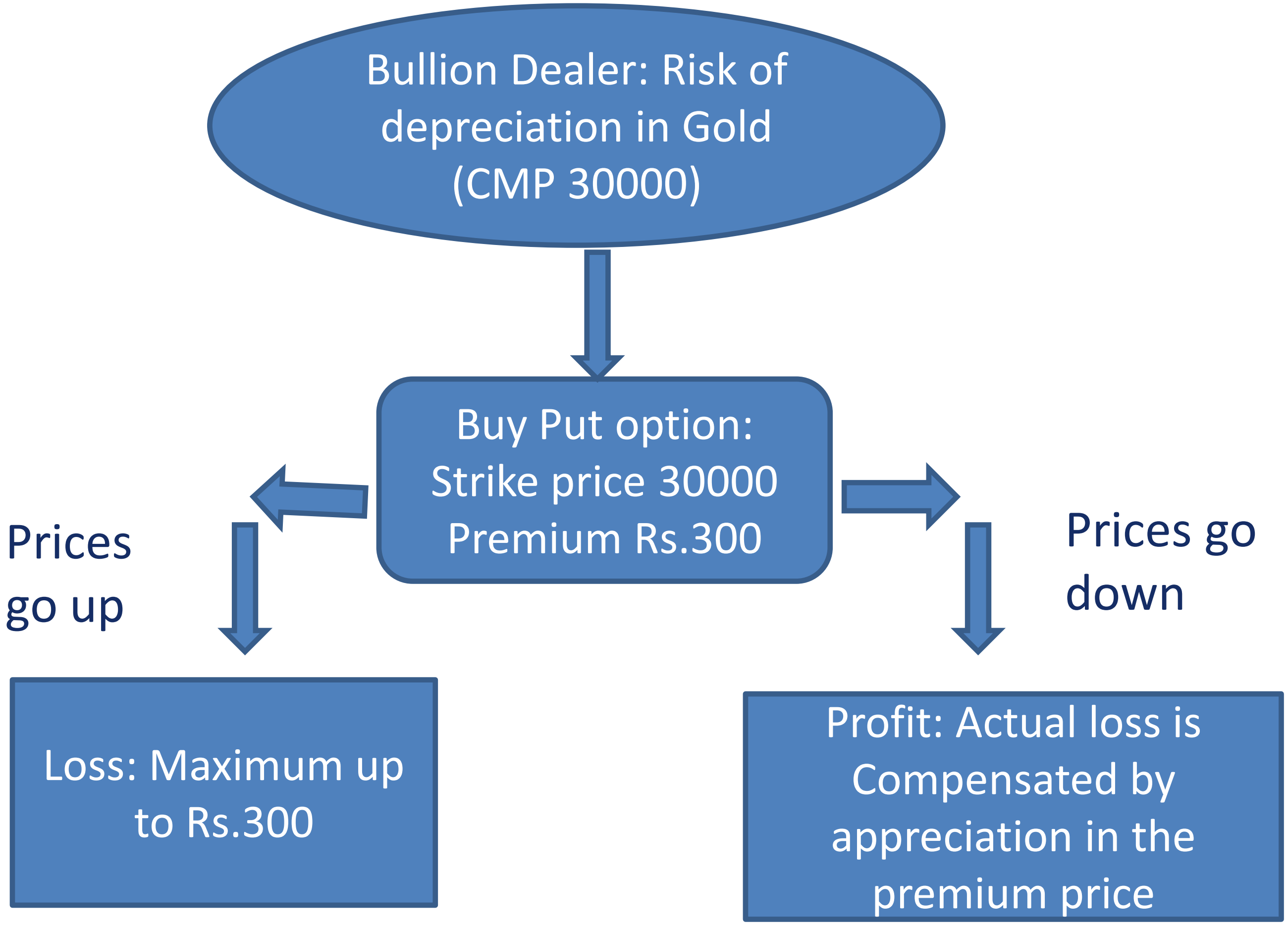
EXAMPLE – HEDGING STRATEGIES

- Options represent a form of Price Insurance, cost of which is the Option Premium determined during its trading by markets
- Improves market Liquidity, Transparency
- Maximum Loss to the extent of Premium paid for Buyer
- Possible apportioning of Hedging cover as may be needed

Basic hedging strategies:

Call or Put Protection Buying Calls (for metal consumers having bought Unfixed Gold from Banks , Importers , Wholesalers etc)	Buying Puts (for metal consumers having bought Fixed Gold from Banks, Importers, Wholesalers etc)

OPTION STRATEGY FOR BULLION DEALER: PROTECTING INVENTORY – FIXED GOLD

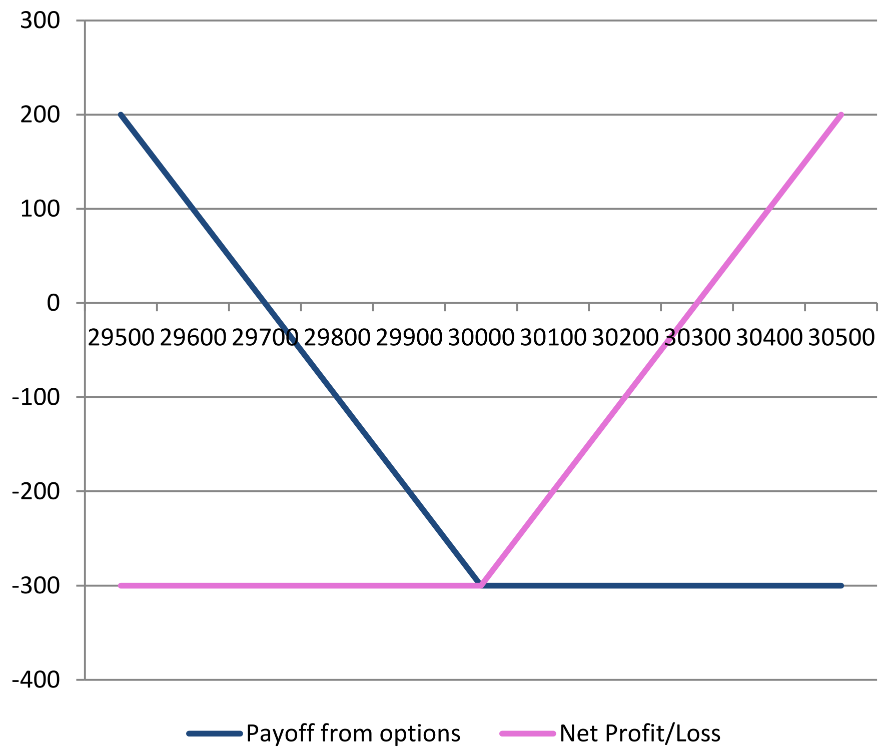


The loss is limited to the extent of the premium paid i.e. Rs. 300/= & no MTM

EXAMPLE: PROTECTING INVENTORY – FIXED GOLD

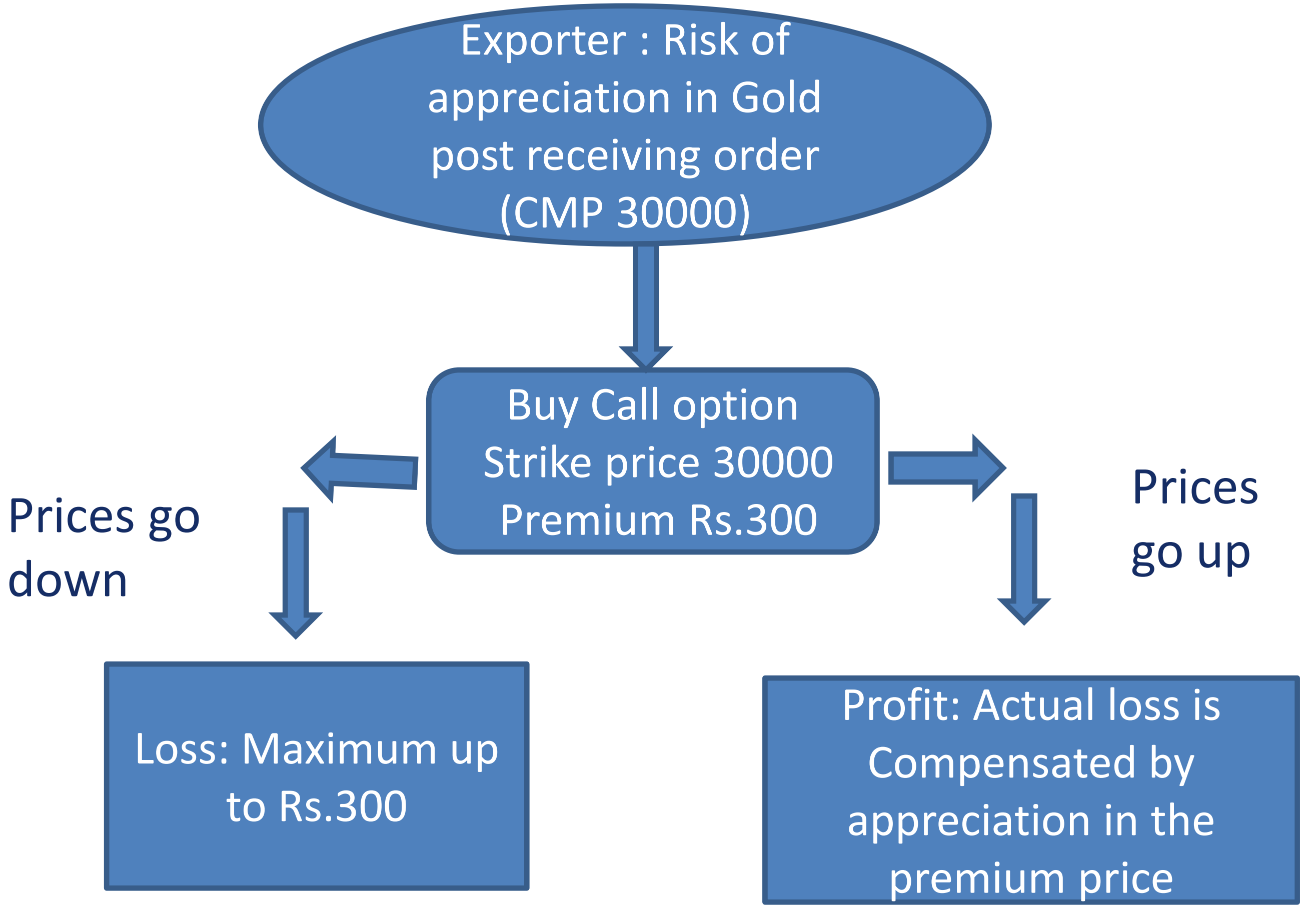
Buy Put option : Strike price 30000 Premium Rs.300

P&L Payoff at Expiration Matrix (Premium: 300)			
Underlying Price At Expiry	Payoff from options	Physical Stock	Net Profit/Loss
29500	200	-500	-300
29600	100	-400	-300
29700	0	-300	-300
29800	-100	-200	-300
29900	-200	-100	-300
30000	-300	0	-300
30100	-300	100	-200
30200	-300	200	-100
30300	-300	300	0
30400	-300	400	100
30500	-300	500	200



Having hedge through options Bullion dealer protect himself against downside risk and also avails opportunity profit if prices go beyond 30300/- in physical markets

OPTIONS STRATEGY FOR JEWELERS: BUYING UNFIXED GOLD



The loss is limited to the extend of the premium paid i.e. Rs. 300/- & no MTM

EXAMPLE : BUYING UNFIXED GOLD

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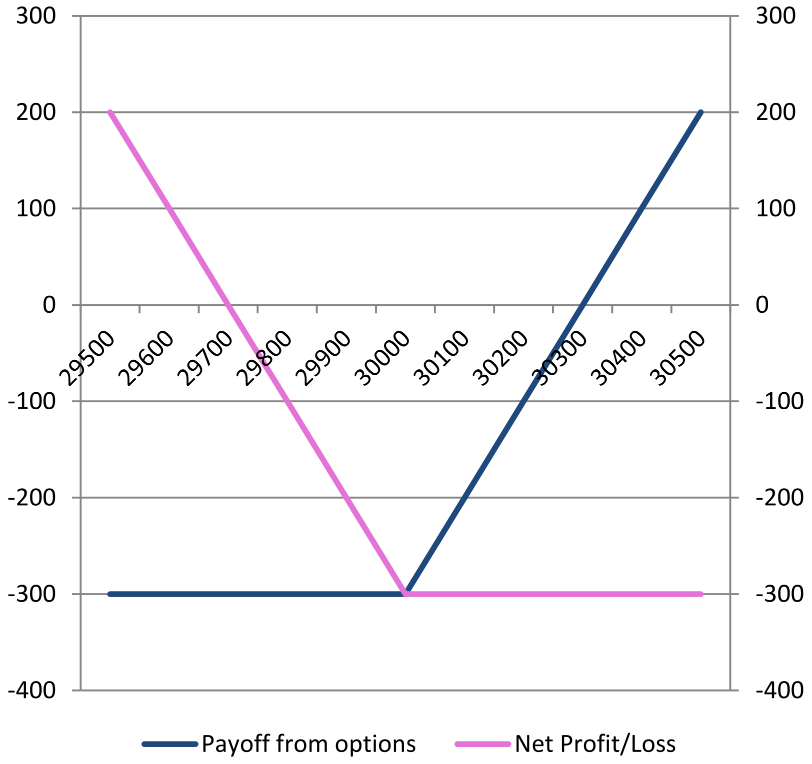
Buy Call option Strike price 30000 Premium Rs.300

P&L Payoff at Expiration Matrix (Premium: 300)			
Underlying Price At Expiry	Payoff from options	Physical Stock	Net Profit/Loss
29500	-300	500	200
29600	-300	400	100
29700	-300	300	0
29800	-300	200	-100
29900	-300	100	-200
30000	-300	0	-300
30100	-200	-100	-300
30200	-100	-200	-300
30300	0	-300	-300
30400	100	-400	-300
30500	200	-500	-300



Having hedge through options Jeweller protect himself against upside risk and also avails opportunity profit if prices break below 29700 in physical markets

OPTIONS TRADING STRATEGIES

STRADDLE:
Simultaneously buying of a put and a call of the same underlying, strike price and expiration date.
Used when anticipating a price swing but direction of swing not known.

BULL CALL SPREAD:
Buying a call option at a particular strike price and simultaneously selling a call option at higher strike price of the same underlying and expiration month. Used when one is moderately bullish.

STRANGLE:
Simultaneous buying of out-of-the-money put and out-of-the-money call of the same underlying and expiration date. Works best when underlying price moves sharply in either direction.

BEAR PUT SPREAD:
Buying a put option at a particular strike price and simultaneously selling a put option at lower strike price of the same underlying and expiration month. Used when one is moderately bearish.

BENEFITS - AMENDMENTS TO SECTION 43(5)

- The Finance Act, 2013 has removed this anomaly and provided for coverage of commodity derivatives transactions undertaken in recognized commodity exchanges too under the ambit of Section 43(5) of the Income Tax Act, 1961, on the lines of the benefit available to transactions undertaken in recognized stock exchanges.

- Hedgers are no longer forced to undertake physical delivery of commodities in order to prove that their transactions are in the nature of hedging and not 'speculation'. This is clearly a great impetus for the growth of the commodity derivatives market in India.

THANK YOU