CTM

CERTIFICATE IN INTEGRATED TREASURY MANAGEMENT

Session 5- Global Commodity Market Products

What is commodity?

- A commodity is a product having commercial value that can be produced, bought, sold, and consumed Commodities include agricultural products such as wheat and maize, energy products such as oil and gasoline, and metals such as gold, silver and copper
- Futures Contract is a type of forward contract. Futures are exchange traded contracts to sell or buy standardized financial instruments or physical commodities for delivery on a specified future date at an agreed price Commodity Futures are contracts of commodities that are traded at a futures exchange

Nature of Futures

- Futures are a trading instrument, involving margin ,contract expiry etc.
- Futures cannot be directly used for investment, since they have a limited life
- Short life-cycle of the instruments (currently 3-6 months) might lead to failure of long term investment strategies.
- Futures are inherently volatile

Why Commodities?

- Separate asset class
- Enables significant portfolio diversification for an investor
- Liquid asset class, compared to some other asset classes
- Low cost of entry and exit
- Currently in a long term bull phase

Diversification

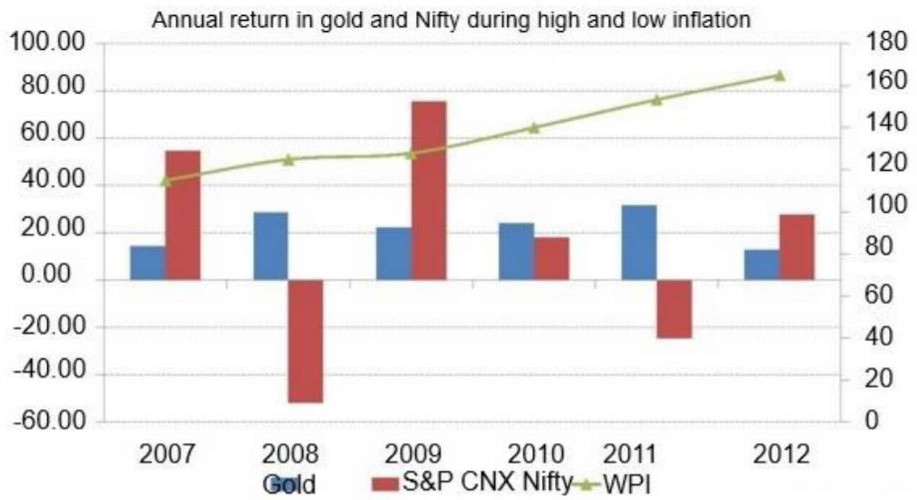
- Commodities are different from other asset classes and an allocation to it would help provide diversification benefits
- Diversification is strongly desirable in a portfolio as it reduces the likelihood of substantial losses arising from a change in macro economic, geopolitical or financial conditions that are particularly damaging for one asset class .
- In case of a downward trend, allocation to commodities can help to limit the downside risk

Inflation Hedge

- Commodities seem to be performing better during higher inflationary period. While unexpected inflation provides the best environment for commodities, expected inflation provides a favorable set of conditions for commodity price increases. Oil, metals, sugar prices have all benefited from, and in some cases, have been the foundation of inflation in finished goods prices in the past.
- It can be seen that the returns on commodities futures are positively correlated with inflation. Higher commodity prices were the leading wave of high prices in general and that's why commodity returns do better in inflationary times, while stocks and bonds could perform poorly

Inflation Hedge

Example - Gold vs. Nifty



Commodity Markets in India

- Spot markets relatively inaccessible for financial investors
- Spot markets are governed under state laws
- Derivatives markets are highly accessible for financial investor

Commodity Futures in India

In India there are currently three national level exchanges that offer trading in commodity futures

- NCDEX (National Commodity and Derivative Exchange)
- MCX (Multi Commodity Exchange)
- NMCE (National Multi Commodity Exchange)

Categories of Commodities

Agri Commodities	Non Agri Commodities
✓ **Edible Oil**	✓ **Precious Metals**
Soya Bean, Soya Oil, Mustard Seed, Crude Palm Oil	Gold, Silver
✓ **Spices**	✓ **Base Metals**
Pepper, Jeera, Cardamom, Turmeric, Chilly, Coriander	Copper, Aluminum, Lead, Nickel, Zinc
✓ **Pulses and Grains**	✓ **Energy**
Wheat, Maize, Chana	Crude Oil, Natural Gas
✓ **Others**	✓ **Others**
Guarseed, Guar Gum, Mentha oil, Rubber	Steel

Strategies

- View based trading- Buy/Sell and hold
- Calendar Spreads
- Collateralized futures
- Arbitrage
- Jobbing

View based trading- Buy/Sell and hold

Definition

- It means taking naked buy or sell position with intention to earn when price rise or fall respectively .

Pros

- Best strategy to duplicate equity or debt investment

Cons

- Risky strategy

Calendar spreads

Definition

- Calendar Spreads involve taking opposite position in two different contracts (having different expiry dates) in the same commodity .

Pros

- Less risky compared to naked spot hold strategy

Cons

- Riskier than arbitrage strategy, since the investor is taking a directional call

Arbitrage

- Arbitrageurs are market players who
  - Have a very keen eye and understanding of the markets
  - Are opportunistic in nature and trade as and when the opportunities are there
  - Employ a variety of strategies to benefit from the myriad of imperfections present in the market
- Few arbitrage strategies are
  - Arbitrage between spot and futures
  - Cash and carry arbitrage
  - Inter exchange Arbitrage

How to trade in commodities

Trading in commodity futures is possible in two ways

- Become a direct member with a registered exchange
- Invest through a national level broker specializing in commodities

Introduction

Commodities actually offer immense potential to become a separate asset class for market-savvy investors, arbitrageurs and speculators. The size of the commodities markets in India is also quite significant. Of the country's GDP of Rs 13,20,730 crore (Rs 13,207.3 billion), commodities related (and dependent) industries constitute about 58 per cent. Currently, the various commodities across the country clock an annual turnover of Rs 1,40,000 crore (Rs 1,400 billion). With the introduction of futures trading, the size of the commodities market grow many folds here on

CONTRACT SPECIFICATIONS OF GOLD

SYMBOL	GOLD
Description	GOLDMMMYY
TRADING	
Trading unit	1 kg
Trading period	Mondays through Fridays
Trading session	Monday to Friday: 10:00 am to 11:30 pm / 11:55* pm
Quotation/Base value	10 grams
Price quote	Ex-Ahmedabad (inclusive of all taxes and levies relating to import duty and customs, but excluding sales tax / VAT, any other additional tax or surcharge on sales tax, local taxes, and octroi)
Maximum order size	10 kg
Tick size	₹1/10 grams (minimum price movement)
Daily price limit	The base price limit will be 3%. Whenever the base daily price limit is breached, the relaxation will be allowed upto 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto 9%. In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3% and inform the regulator.
Initial margin	Minimum 4% or based on SPAN whichever is higher.

CONTRACT SPECIFICATIONS OF GOLD

DELIVERY	
Delivery unit	1 kg
Delivery period margin	25% of the value of the open position during the delivery period
Delivery center(s)	Designated Clearing House facilities at Ahmedabad and at additional delivery centers at Mumbai and New Delhi.
Delivery logic	Compulsory
QUALITY SPECIFICATIONS	
995 purity	It should be serially numbered gold bars supplied by the LBMA approved suppliers or those suppliers, as may be approved by MCX, to be submitted along with the supplier's quality certificate.
999 purity	If the seller offers delivery of 999 purity, the seller will get a proportionate premium, and the sale proceeds will be calculated in the manner of rate of delivery * 999/995.
Less than 995	Rejected

Contract Launch Calendar of Gold

Contract Launch Months	Contract Expiry Months
February 2016	February 2017
April 2016	April 2017
June 2016	June 2017
August 2016	August 2017
October 2016	October 2017
December 2016	December 2017

CONTRACT SPECIFICATIONS OF SILVER

Symbol	SILVER
Description	SILVERMMMYY
Trading period	Mondays through Fridays
Trading session	Monday to Friday: 10:00 am to 11:30 pm / 11:55# pm
TRADING	
Trading unit	30 kg
Quotation/Base value	₹ / kg
Price quote	Ex-Ahmedabad (inclusive of all taxes and levies relating to import duty, customs, if applicable, but excluding sales tax / VAT, any another additional tax or surcharge on sales tax, local taxes, and octroi)
Maximum order size	600 kg
Tick size (minimum price movement)	₹1 / kg
Daily price limits	The base price limit will be 4%. Whenever the base daily price limit is breached, the relaxation will be allowed upto 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto 9%. In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3% and inform the regulator.
Initial margin	Minimum 4% or based on SPAN whichever is higher
Extreme loss margin	1%

CONTRACT SPECIFICATIONS OF SILVER

Additional and/or Special margin	In case of additional volatility, an additional margin (on both buy and sell side) and/or special margin (on either buy or sell side) at such percentage, as deemed fit, will be imposed in respect of all outstanding positions
Maximum allowable open position*	For individual clients 100 MT or 5% of the market wide open position, whichever is higher for all silver contracts combined together For a member collectively for all clients: 1000 MT or 20% of the market wide open position, whichever is higher for all silver contracts combined together
DELIVERY	
Delivery unit	30 kg
Delivery period margin	25%
Delivery center(s)	Ahmedabad designated clearing house facilities
Quality specifications	Grade: 999 and fineness: 999 (as per IS 2112:1981) No negative tolerance on the minimum fineness shall be permitted. If it is below 999 purity, it is rejected. It should be serially numbered silver bars supplied by LBMA approved suppliers or other suppliers as may be approved by MCX.
Delivery logic	Compulsory

CONTRACT SPECIFICATIONS OF SILVER

Contract Launch Calendar of Silver	
Contract Launch Months	**Contract Expiry Months**
March 2016	March 2017
May 2016	May 2017
July 2016	July 2017
September 2016	September 2017
December 2016	December 2017

CONTRACT SPECIFICATIONS OF COPPER

Symbol	COPPER	COPPERM
Description	COPPERMMMYY	
Trading period	Mondays through Fridays	
Trading session	Monday to Friday: 10:00 am to 11:30 pm / 11:55[#] pm	
Contract listing	As per contract launch calendar	
Last trading day	Last calendar day of the contract expiry month	
Trading unit	1 MT	250 kgs
Quotation/base value	1kg	
Tick size	5 paise per kg	
Maximum order size	70 MT	
Daily price limit	The base price limit will be 4%. Whenever the base daily price limit is breached, the relaxation will be allowed upto 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto 9%. *In case price movement in international markets is more than the maximum daily price limit (i.e 9%), the same may be further relaxed in steps of 3% beyond the maximum permitted limit, and inform the Commission immediately.*	
Initial margin	Minimum 4% or based on SPAN whichever is higher	
Extreme Loss Margin	1%	
Additional and/or Special margin	In case of additional volatility, an additional margin (on both buy side and side) and/or special margin (on either buy side or sell side) at such percentage, as deemed fit, will be imposed in respect of all outstanding positions.	

CONTRACT SPECIFICATIONS OF COPPER

Maximum allowable	**For individual clients:** 7,000 MT or 5% of the market wide open position whichever is higher for all Copper contracts combined together. **For a member collectively for all clients:** 70,000 MT or 20% of the market wide open position whichever is higher for all Copper contracts combined together.
Delivery logic	Both option
Delivery center	Within 20 Km outside Mumbai octroi limit.
Delivery unit	9 MT with tolerance limit of +/– 1% (90 kg)
Due date rate (DDR) calculation	Due date rate is calculated on the last day of the contract expiry, by taking the international spot price of Copper and multiplying by USD-INR rate as notified by the Reserve Bank of India on that particular day.

Contract Launch Calendar of Copper

Contract Launch Months	Contract Expiry Months
July 2016	February 2017
September 2016	April 2017
December 2016	June 2017
March 2017	August 2017
May 2017	November 2017

Snapshot of Contract specifications of crude oil and crude oil mini

SYMBOL	CRUDEOIL	CRUDEOILM
Description	CRUDEOILMMMYY	CRUDEOILMMMMYY
No. of contracts a year	12	
Contract duration	6 months	
TRADING		
Trading period	Mondays through Fridays	
Trading session	Monday to Friday: 10:00 a.m. to 11:30 p.m. / 11:55* p.m.	
Trading unit	100 barrels	10 barrels
Quotation/Base value	₹ / barrel	
Maximum order size	10,000 barrels	
Tick size (minimum price movement)	₹ 1	
Daily price limits	The base price limit will be 4%. Whenever the base daily price limit is breached, the relaxation will be allowed upto 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto 9%. In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3%. and inform the Commission immediately.	

CONTRACT SPECIFICATIONS OF CRUDE OIL

Price quote	Ex-Mumbai (excluding all taxes, levies, and other expenses)
Initial margin	Minimum 5% or based on SPAN, whichever is higher
Additional and/or special margin	In case of additional volatility, an additional margin (on both buy side and sell side) and / or special margin (on either buy side or sell side) at such percentage, as deemed fit, will be imposed in respect of all outstanding positions.
Maximum allowable open position*	For individual clients: 4,80,000 barrels or 5% of the market wide open position, whichever is higher For a member collectively for all clients: 48,00,000 barrels or 20% of the market wide open position, whichever is higher
DELIVERY	
Delivery unit	50,000 barrels with +/– 2% tolerance limit

Contract Launch Calendar of Crude Oil

Contract Month	Contract Launch Date	Contract Expiry Date
January 2017	20th July 2016	19th January 2017
February 2017	22nd August 2016	17th February 2017
March 2017	20th September 2016	20th March 2017
April 2017	20th October 2016	19th April 2017
May 2017	21st November 2016	19th May 2017
June 2017	20th December 2016	19th June 2017
July 2017	20th January 2017	19th July 2017
August 2017	20th February 2017	21st August 2017
September 2017	21st March 2017	19th September 2017
October 2017	20th April 2017	18th October 2017
November 2017	22nd May 2017	17th November 2017
December 2017	20th June 2017	18th December 2017

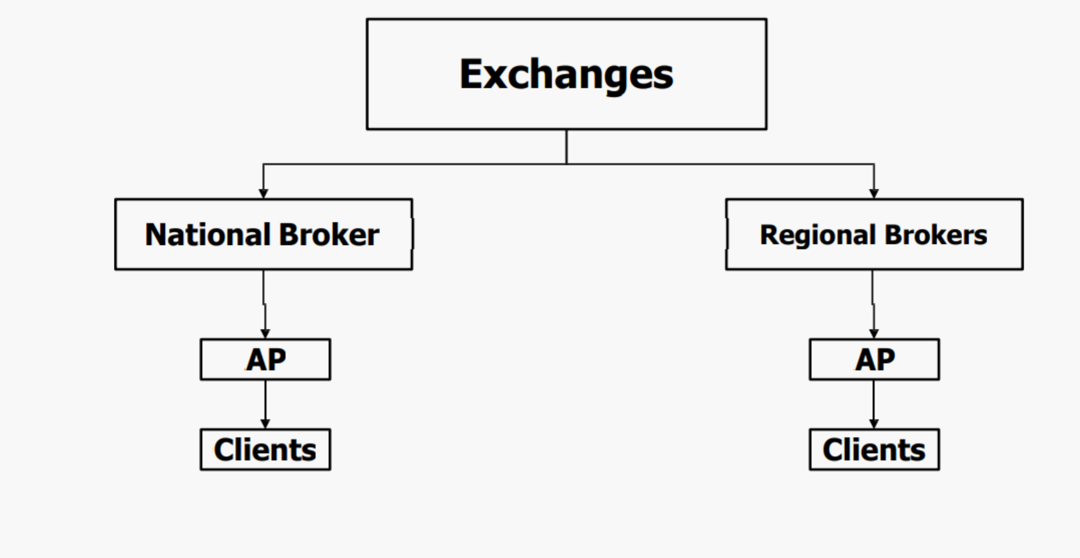
Questions

- Where do I need to go to trade in commodity futures?
- How do I choose my broker?
- What is the minimum investment needed?
- Do I have to give delivery or settle in cash?
- What do I need to start trading in commodity futures?
- What are the brokerage and transaction charges?
- Where do I look for information on commodities?
- Who is the regulator?
- Who are the players in commodity derivatives?
- In which commodities can I trade?

Regional Vs Modern Exchange

	Regional Exchanges	National Exchanges
Trading	Open outcry / screen based only within exchange premises or nearby vicinity	Pan India network
Management	Run by broker/member	Professionally Managed
No of products	Limited	Extended product basket
Ownership	Member Owned	Demutualised
Outreach	Local	National

Participants on Exchange's Platform



The world's major commodity futures exchanges

Rank	Exchanges	2011	2012	2013
1	ICE	309,979,832	320,049,540	752,746,349
2	DCE	289,047,000	633,042,976	700,500,777
3	CME	677,164,726	664,775,187	653,690,421
4	SHFE	308,239,140	365,329,379	642,473,980
5	CZCE	406,390,664	347,091,533	525,299,023
6	MCX	346,192,991	388,751,074	264,627,693
7	LME	138,487,658	153,185,866	164,377,587
8	Moscow Exchange, Russia	38,222,672	22,346,532	38,304,522
9	NCDEX	47,413,948	44,885,711	32,435,100
10	Tokyo Commodity Exchange	31,670,031	25,479,111	26,845,712

Ranking based on futures contracts traded

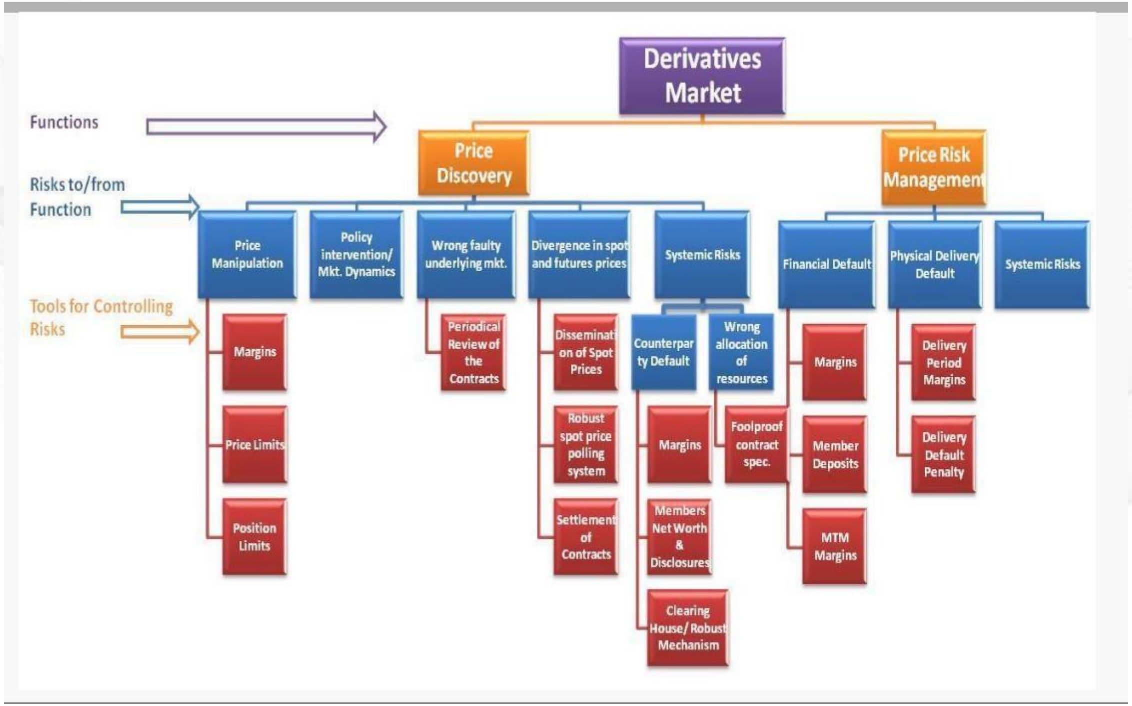
Source: Futures Industry Association

Potential benefits of Commodity Exchanges for developing countries

- ✓ **Market creation**
- ✓ **Stimulating regional integration & South-South* trade**
- ✓ **Price discovery**
- ✓ **Price risk management**
- ✓ **Infrastructure enhancement**
- ✓ **Market access**
- ✓ **Facilitate provision of finance**
- ✓ **Price transparency**
- ✓ **Reduced counterparty risk**
- ✓ **Quality assurance/upgrade**

*South–South Cooperation is a term historically used by policymakers and academics to describe the exchange of resources, technology, and knowledge between developing countries, also known as countries of the Global South.

Risks to/from Derivatives market



Benefits of exchange traded commodity futures

- Greater transparency & accessibility
- Large & diverse participation
- Access through internet from remote locations
- High liquidity/tightened spreads & reduced trading costs to all
- No counterparty default risk
- Smaller trading lots
- Additional hedging instrument for all actual users including banks
- Efficient price discover

Thank You