

A case study of the Indian commodity derivatives market

Susan Thomas and Ajay Shah

5th October 2007

The genesis

- The commodity derivatives market regulator is the Forward Markets Commission (FMC).
- FMC took inspiration from the success of the equity markets and set their aims on reforms for commodity derivatives.
Motivation? (a) Further development of the commodity derivatives markets.
- Experiment phase I: reform the existing exchanges.
- Experiment phase II: RFP for starting new national, multi-commodity exchanges.
- FMC accepted five proposals – out of these, three are operational today.

The genesis

- The commodity derivatives market regulator is the Forward Markets Commission (FMC).
- FMC took inspiration from the success of the equity markets and set their aims on reforms for commodity derivatives.
Motivation? (a) Further development of the commodity derivatives markets.
- Experiment phase I: reform the existing exchanges.
- Experiment phase II: RFP for starting new national, multi-commodity exchanges.
- FMC accepted five proposals – out of these, three are operational today.

Institutional development for commodity derivatives

- The same trading and clearing infrastructure as for equity derivatives.
- The exchanges themselves were permitted to trade multiple commodities on a single screen. The selection of the products were left to the exchanges. derivatives.
- Develop transparency of spot market prices: systems to poll prices off spot market transactions.
- The Forwards Contract Regulations Act, (FCRA) 1952, forbids options trading.
- FCRA also prohibits contracts that are not physically settled.
- The law has to be amended to permit both.
- Currently, the equity and the commodity derivatives business is segmented: ideally, this should be done within the same brokerage firm.

Institutional development for commodity derivatives

- The same trading and clearing infrastructure as for equity derivatives.
- The exchanges themselves were permitted to trade multiple commodities on a single screen. The selection of the products were left to the exchanges. derivatives.
- Develop transparency of spot market prices: systems to poll prices off spot market transactions.
- The Forwards Contract Regulations Act, (FCRA) 1952, forbids options trading.
- FCRA also prohibits contracts that are not physically settled.
- The law has to be amended to permit both.
- Currently, the equity and the commodity derivatives business is segmented: ideally, this should be done within the same brokerage firm.

Institutional development for commodity derivatives

- The same trading and clearing infrastructure as for equity derivatives.
- The exchanges themselves were permitted to trade multiple commodities on a single screen.
The selection of the products were left to the exchanges.
derivatives.
- Develop transparency of spot market prices: systems to poll prices off spot market transactions.
- The Forwards Contract Regulations Act, (FCRA) 1952, forbids options trading.
- FCRA also prohibits contracts that are not physically settled.
- The law has to be amended to permit both.
- Currently, the equity and the commodity derivatives business is segmented: ideally, this should be done within the same brokerage firm.

Institutional development for commodity derivatives

- The same trading and clearing infrastructure as for equity derivatives.
- The exchanges themselves were permitted to trade multiple commodities on a single screen. The selection of the products were left to the exchanges. derivatives.
- Develop transparency of spot market prices: systems to poll prices off spot market transactions.
- The Forwards Contract Regulations Act, (FCRA) 1952, forbids options trading.
- FCRA also prohibits contracts that are not physically settled.
- The law has to be amended to permit both.
- Currently, the equity and the commodity derivatives business is segmented: ideally, this should be done within the same brokerage firm.

Institutional development for commodity derivatives

- The same trading and clearing infrastructure as for equity derivatives.
- The exchanges themselves were permitted to trade multiple commodities on a single screen. The selection of the products were left to the exchanges. derivatives.
- Develop transparency of spot market prices: systems to poll prices off spot market transactions.
- The Forwards Contract Regulations Act, (FCRA) 1952, forbids options trading.
- FCRA also prohibits contracts that are not physically settled.
- The law has to be amended to permit both.
- Currently, the equity and the commodity derivatives business is segmented: ideally, this should be done within the same brokerage firm.

The evolution of commodity derivatives in India

The exchanges

There are three exchanges trading commodity derivatives:

- The National Multi-Commodity Exchange of Ahmadabad (NMCE), which started November 2002. A year later,
- Multi-Commodity Exchange (MCX), which was started Financial Technologies.
- National Commodity Derivatives Exchange (NCDEX), which was started with the joint effort of ICIC Bank and NSE.

In addition, the old, single commodity derivatives exchanges are in place.

Monthly volumes on the top commodities exchanges, March 2007

Market	Popular contracts	Volumes (USD million)
* MCX, Bombay	Copper, Gold, Silver, Crude Oil, Zinc	56,626
* NCDEX, Bombay	Jeera, Pepper, Guar Seed, Channa, SoyOil	19,482
* NMCE, Ahmedabad	Pepper, Rubber, Gold, Zinc, Aluminium	1,220
* NBOT (National Board of Trade), Indore	Soy Oil	1,490
* Chamber of Commerce, Hapur	Mustard Seed	510
* Ahmedabad Commodity Exchange Ltd, Ahmedabad	Castor Seed	705
* The Surendranagar Cotton & Oilseeds Association Ltd, Surendranagar	Kapas (Cotton)	136
* Rajkot Seed oil, Bullion Merchants Association Ltd, Rajkot	Castor Seed	135

Products

Non-Agricultural

Energy (Crude Oil, Brent Crude Oil, Furnace Oil, Natural Gas)

Precious Metals (Gold, Silver)

Base Metals (Aluminium, Copper, Lead, Nickel, Tin, Zinc)

Ferrous Metals (Steel, Sponge Iron)

Polymers (Polyethylene, Polypropylene, Polyvinyl Chloride)

Agricultural

Pulses (Chana, Masoor, Moong, Tur, Urad, Yellow Peas)

Grain (Barley, Parboiled Rice and Basmati Rice, Wheat)

Oils and oilseeds (Castor Oil, Coconut cake and Oil, Cotton seed and oil, Groundnut seed and oil, Mentha Oil, Mustard Seed and Oil, Palmolein, Soya Bean and Soya Oil, Sesame Seeds)

Spices (Cardamom, Chilli, Cumin/Jeera seeds, Jaggery/Gur, Pepper, Sugar, Turmeric)

Non-edible Agriculture (Cotton and Cottonseed Oilcake, Guar Seed and Guar Gum, Mulberry Cocoons and silk, Raw Jute and Jute Bags, Rubber)

Others (Cashew, Coffee, Potato)

Contract specifications

- 1 Exchanges trade commodity futures contracts, but no commodity options.
- 2 The shortest maturity contracts are one-month contracts. The longest possible contract listed are twelve-month contracts.
- 3 Expiry dates vary: NCDEX has almost all its expiry dates on the 20th of the month and MCX has them on the 5th, the 15th or the 20th on a contract by contract basis.
- 4 Indian exchanges have experimented with partial cash settlement procedures. But, virtually all commodity contracts today have mandatory physical delivery.

Example of the gold contract on MCX, NCDEX

	MCX	NCDEX
Size	1 kg	1 kg
Quality	995 purity	995 purity
Delivery	Ahmedabad	Mumbai
Additional	Mumbai	Ahmedabad
Daily Price Limit	3%	4%
Expiry	5th day	20th day
Position Limit	2 Metric Tons	2 Metric Tons

Average daily volumes on Indian financial markets, March 2007

Market	Average Daily Volumes (USD.million)
Commodity derivatives	3,400
of which	
Agriculture	890 (27%)
Non-agriculture	2,510 (73%)
Equity derivatives	7,925
Equity spot	2,040
Government bonds spot	1,020

Top 15 Futures on Physical Commodities, volumes for 1-15 June 2007

	Commodity	Exchange	Trading volume		Share (%)
			(Rs.Cr/2 weeks)	(\$ Million/day*)	
1	Gold	MCX	26,795.88	558	18
2	Copper	MCX	26,409.80	550	18
3	Silver	MCX	20,405.04	425	14
4	Crude Oil	MCX	13,702.11	285	9
5	Zinc	MCX	12,821.65	267	9
6	Jeera	NCDEX	7,035.88	147	5
7	Nickel	MCX	6,212.78	129	4
8	Guar Seed	NCDEX	4,508.68	94	3
9	Pepper	NCDEX	4,165.32	87	3
10	Soy Oil	NCDEX	4,044.52	84	3
11	Soy Oil	NBOT	3,857.83	80	3
12	Gold	NCDEX	3,209.65	67	2
13	Chana	NCDEX	2,685.29	56	2
14	Soy Oil	MCX	2,586.21	54	2
15	R/M Seed	NCDEX	2,132.78	44	1

Questions?

- Email: `susant@igidr.ac.in`
- Email: `ajayshah@mayin.org`