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Futures market of India: An overview

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Abstract
Futures market of India is very complicated market because of its structure, historical evolution, regulation and constraints. Different prices, markets, participants, exchanges and commodities make futures market very different and unique. Commodity futures market performs two significant economic functions of price discovery and price risk management. One of the most important consequences of the futures market is that it enables an efficient redistribution of risks. Commodity exchanges in Indian are still at a nascent stage. In many of the discussions on development of derivatives market, regulatory reforms and in designing other institutional structures, references to commodity futures trading is hardly even mentioned. Keeping this in mind, overview of spices market of India are given in context of definition and importance, structure, types of markets and prices, participants, list of exchanges, turnover in terms of volume and value, list of commodities, historical evolution, regulation, constraints and bottlenecks.

Keywords: Futures market, historical evolution, turnover

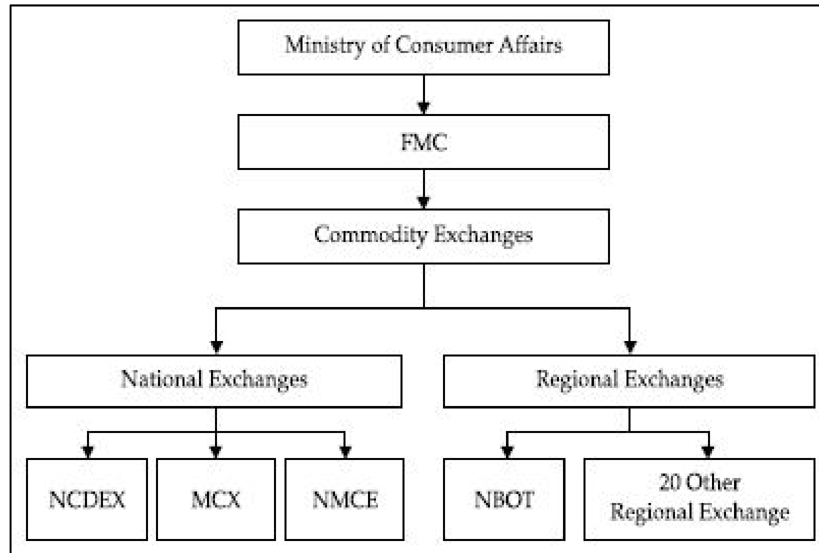
Introduction

Definition and Importance of Futures Commodity Market

A futures market is an auction market in which participants buy and sell specific quantities of a commodity or financial instrument at a specified price with delivery set at a specified time in the future. The futures market is a centralized market place for buyers and sellers from around the world, who meet and enter into commodity futures contracts. Like most other markets, futures exchanges are mostly electronic. Futures contracts are used by producers and suppliers of commodities to avoid market volatility. These producers and suppliers negotiate contracts with an investor who agrees to take on both the risk and reward of a volatile market. The primary advantage of futures is that it allows individuals and businesses to protect their positions against price fluctuations. For the buyer, it offers protection from future price increases and for the seller, it offers protection from prices falls.

A market where commodities are traded is referred to as a commodity market. It is the market where a wide range of products, viz., precious metals, base metals, crude oil, energy and soft commodities like palm oil, spices, coffee etc. are traded. The commodities markets are one of the oldest markets where trading in commodities takes place and is similar to an equity market. Commodity Markets are markets where raw or primary products are exchanged. Futures market pricing is based mostly on an open cry system or bids and offers that can be electronically matched. The commodity exchanges are more self-regulating than stock exchanges. Futures contract in the commodities market, similar to equity derivatives segment will facilitate the activities of speculation, hedging and arbitrage to all class of investors. Futures contracts are used as hedging instruments in agricultural commodities. Hedging is a common practice of insures against a poor harvest by purchasing futures contracts in the same commodity. These raw commodities are traded on regulated commodities exchanges in which they are bought and sold in standardized contracts. Commodity markets require the existence of agreed standards so that the trades can be made without visual inspection. Commodity market is an important constituent of the financial markets of any country. Forward Markets Commission (FMC) is a regulatory authority for commodity futures market in India.

It is a statutory institution set up in 1953 under Forward Contracts (Regulation) Act, 1952. All the exchanges have been set up under overall control of Forward Market Commission of Government of India.



Source: Forward Market Commission

Graph 1: Structure of the Commodity Futures Market

Types of Markets and Prices in Commodity Futures Market

There are two distinct forms of commodities market, namely, the over the counter market, and the exchange based market. In over the counter markets participation is restricted to people involved with that commodity. The OTC markets are essentially spot markets and are localized for specific commodities. Almost all the trading taking place in these markets is delivery based. The buyers and sellers have their set of brokers who negotiate the prices for them. The goods and the money would be exchanged directly between the buyers and the sellers and the market is restricted to only those people whom are directly involved with the commodity. OTC can be used to refer to trade via a dealer and network is generally decentralized. The exchange traded markets are only derivative markets, where everything is standardized and it could also be guaranteed that goods and products are in compliance with the terms of trade.

A person can purchase a contract by paying only a percentage of the contract value. In exchange transactions are completed through a centralized source. Commodity trading consists of direct physical trading and derivatives trading, that includes spot trading and futures trading. Spot trading is any transaction where delivery takes place either immediately or with a minimum lag between the trade and delivery due to technical constraints. The predefined price is called spot price. spot contract is a contract of buying or selling a commodity, security or currency for settlement on the spot date. The spot price is the current market price at which an asset is bought or sold for immediate payment and delivery. It involves visual inspection of the sample or of the commodity and is carried out in wholesale markets. Futures contracts are an agreement between two parties to exchange at some fixed future date a given quantity of a commodity for a predefined price. Futures contract where contract terms are agreed now but delivery and payment will occur at a future date. The predefined price is known as the futures price. The futures prices are prices at which an asset can be bought or sold for delivery in the future.

Participants of the Futures Market

An efficient market for commodity futures requires a large number of market participants with diverse risk profiles. Ownership of the underlying commodity is not required for trading in commodity futures. The market participants simply need to deposit sufficient money with brokerage firms to cover the margin requirements. Market participants can be broadly divided into scalpers/day traders, hedgers, speculators arbitrageurs, aggregators, position traders, brokers, exchange and regulator. Scalpers/Day Traders are those participants who take positions in futures contracts for a single day and liquidate them prior to the close of the same trading day. The scalpers have the shortest time horizon. They hold their positions for a few minutes while day traders close their positions before the end of trading each day. Both the scalpers and the day traders attempt to make profit out of the intra-day movement in commodity futures prices. Hedgers are generally the commercial producers and consumers of the traded commodities. They participate in the market to manage their spot market price risk as commodity prices are volatile and their participation in the futures market allows them to hedge or protect themselves against the risk of losses from fluctuating prices. The futures markets exist primarily for hedgers. The hedgers simultaneously operate in the spot market and the futures market. They try to reduce or eliminate their risk by taking an opposite position in the futures market on what they are trying to hedge in the spot market. The Hedgers seek to minimize and manage risk and transfer the risk by foregoing the associated profit. Arbitrageurs are traders who buy and sell to make money on price differentials across different markets. Arbitrageur involves simultaneous sale and purchase of the same commodities in different markets. Arbitrageur keeps the prices in different markets in line with each other. Usually, such transactions are risk free. The arbitrageurs make the process of price discovery more efficient. Speculators are traders who speculate on the direction of the futures prices with the intention of making money. Most speculators do not prefer to make or accept deliveries of the actual

commodities, rather they liquidate their positions before the expiry date of the contract. Thus, for the speculators, trading in commodity futures is an investment option. The speculators assume this risk in the hope of realizing profits by predicting price movements. They do not hedge but trade with the objective of making profits from movements in prices. Aggregators bring liquidity in the futures market and help farmers to benefit from price discovery and price risk management. Aggregators are allowed to collect commodities from farmers and sell in the futures market. Position Traders maintain overnight positions, which may run into weeks or even months, in the anticipation of favorable movement in the commodity futures prices. They may hold positions in which they run huge risks and may also earn big profits. Brokers typically act as intermediaries and facilitate hedgers and speculators. A commodity broker is a firm or individual who acts as intermediaries between buying and selling commodity contracts on behalf of clients for a commission. The Exchange is a central place i.e., physical or virtual, where market participants trade standardized futures contracts. Regulator oversees the working of the exchange.

List of Exchanges

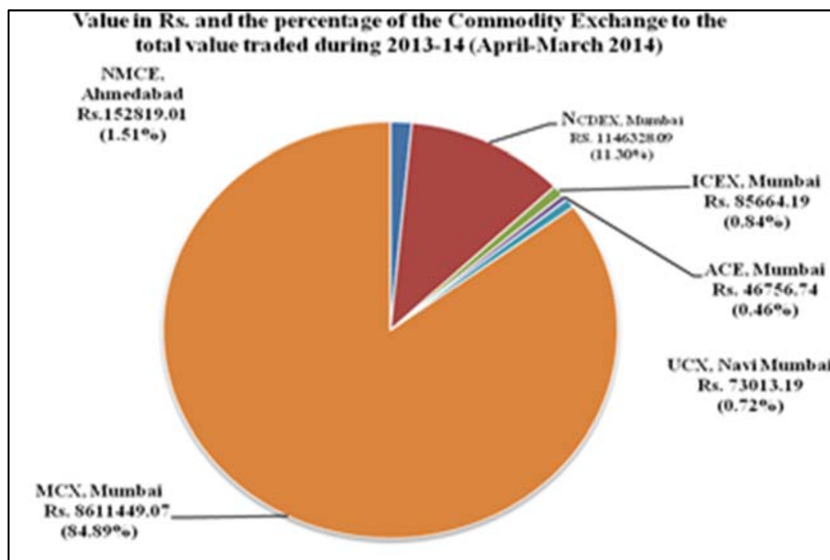
Before the introduction of national commodity futures exchanges, there were 24 regional commodity exchanges in India. The regional exchanges are commodity specific and mostly cater to the needs of a local area, such as Bikaner Commodity Exchange Ltd. for trading in guar seed. Currently, almost all of the regional exchanges are on the verge of closure. Almost 17 out of 24 registered regional exchanges have not traded for the 5 years and 13 of them have not carried out trading in 10 years. Currently there are 17 recognized exchanges, 6 national and 11 regional exchanges (see table 1).

Table 1: Name of Exchanges under Forward Market Commission (FMC)

S. No.	Name of the Exchanges
A.	**National Multi Commodity Exchanges**
1	National Multi Commodity Exchange of India Ltd., Ahmedabad (NMCE)
2	Multi Commodity Exchange of India Ltd., Mumbai (MCX)
3	National Commodity & Derivatives Exchange Ltd., Mumbai (NCDEX)
4	Indian Commodity Exchange Ltd., Mumbai (ICEX)
5	ACE Derivatives and Commodity Exchange, Mumbai
6	Universal Commodity Exchange Ltd., Navi Mumbai
B.	**Commodity Specific Regional Exchanges**
7	Bikaner Commodity Exchange Ltd, Bikaner
8	Bombay Commodity Exchange Ltd, Mumbai
9	Cotton Association of India, Mumbai
10	The Chamber of Commerce, Hapur
11	First Commodity Exchange of India Ltd, Kochi
12	India Pepper & Spice Trade Association, Kochi
13	National Board of Trade, Indore
14	Rajkot Commodity Exchange Ltd., Rajkot
15	Spices & Oilseeds Exchange Ltd, Sangli
16	Surendranagar Cotton Oil & Oilseeds Association Ltd, Surendranagar
17	Vijay Beopar Chamber Ltd., Muzaffarnagar

Source: Annual Report, 2013-14, Forward Market commission (FMC)

However, the bulk of trading i.e., 99.88% is concentrated in six national level commodity exchanges i.e., Multi Commodity Exchange of India (MCX), Mumbai, National Commodity and Derivatives Exchange of India (NCDEX), Mumbai, National Multi Commodity Exchange
(NMCE), Ahmedabad, Indian Commodity Exchange (ICEX), New Delhi, ACE Derivatives & Commodity Exchange Limited (ACE), Mumbai and Universal Commodity Exchange Limited (UCX), Navi Mumbai. MCX contains 84.89 percent of total traded value of commodity trade exchange. NCDEX share in total value is 11.3 percent. NMCE ranks third in value with 1.51 percent. ICEX, ACE and UCX shares are very small with less than one percent in total traded value (see graph). In terms of total number of contracts traded, MCX has become the world's largest commodity futures exchange in gold and silver, second largest in natural gas, and third in crude oil. The top four commodities i.e., gold, silver, copper and crude oil forms 85 percent of MCX's total trading business. NCDEX, on the other hand, deals with a large number of agricultural and metal commodities, while NMCE portfolio includes major agricultural commodities and metals. The Forward Markets Commission (FMC) has allowed trading of 113 commodity futures contracts in the Indian markets (see table 2). These include food grains and pulses, oilseeds and oils, spices, metals, fibres and manufactures and many others commodities. However, gold, silver, guar seed, pepper and gram are the prominently traded items in the Indian derivatives markets. Gold, silver, and petroleum crude recorded the highest turnover in MCX; while in NCDEX, soya oil, guar seed, and soyabean was dominant; and in NMCE, pepper, rubber, and raw jute were the most actively traded commodities. There are more than 3000 members registered with the exchanges. More than 20,000 terminals spread over more than 800 towns and cities of the country provide access to the trading platforms.



Source: Annual Report, 2013-14, Forward Market commission (FMC)

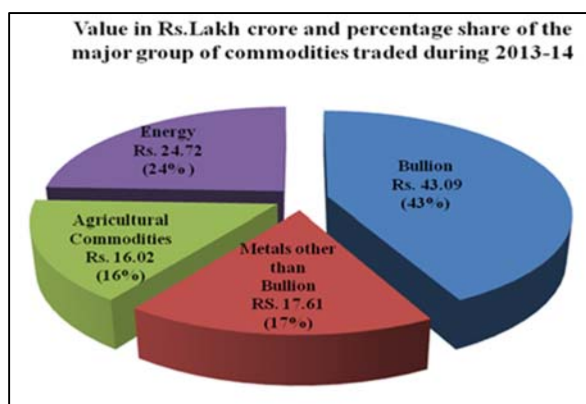
Graph 2: Turnover of the Commodity Exchanges to the Total Traded Value during 2013-14

Table 2: List of Commodities Notified Under Section 15 of the F.C. (R.) Act 1952

Sl. No.	Commodity	Sl. No.	Commodity	Sr. No.	Commodity
I	Food Grains and Pulses	II	Oilseeds and Oils	IV	Metals
1	Arhar Chunni	40	Linseed Oilcake	78	Silver Coins
2	Bajra	41	Rapeseed Oil/Mustard Oil	(V)	Fibres and Manufactures
3	Barley	42	Rapeseed Oilcake/ Mustard seed Oilcake	79	Art Silk Yarn
4	Gram	43	Rapeseed/Mustard seed	80	Cotton Cloth
5	Gram Dal	44	RBD Palmolein	81	Cotton pods
6	Guar	45	Rice Bran	82	Cotton Yarn
7	Jowar	46	Rice Bran Oil	83	Indian Cotton
8	Kulthi	47	Rice Bran Oilcake	84	Jute goods
9	lakh (Khesari)	48	Safflower	85	Kapas
10	Maize	49	49 Safflower Oil	86	Raw Jute Including Mesta
11	Masur	50	Safflower Oilcake	87	Staple Fiber Yarn
12	Moth	51	Sesame (Til)	(VI)	Others
13	Mung	52	Sesame Oil	88	Camphor
14	Mung Chuni	53	Sesame Oilcake	89	Castor seed
15	Mung Dal	54	Soy meal	90	Chara or Berseem
16	Peas	55	Soy Oil	91	Crude Oil
17	Ragi	56	Soybean	92	Gram Husk (Gram Chilka)
18	Rice or Paddy	57	Sunflower Oil	93	Gur
19	Small Millets	58	Sunflower Oil cake	94	Khandsari Sugar
20	Tur Dal (Arhar Dal)	59	Sunflower Seed	95	Polymer
21	Tur(Arhar)	III	Spices	96	Potato
22	Urad (Mash)	60	Aniseed	97	Rubber
23	Urad dal	61	Betel nuts	98	Seedlac
24	Wheat	62	Cardamom	99	Shellac
II	Oilseeds and Oils	63	Chillies	100	Sugar
25	Celery seed	64	Cinnamon	101	Furnace Oil
26	Copra Oil/Coconut Oil	65	Cloves	102	Ethanol
27	Copra Oilcake / Coconut Oilcake	66	Coriander seed	103	Cooking Coal
28	Copra/ Coconut	67	Ginger	104	Electricity
29	Cotton seed	68	Methi	105	Natural Gas
30	Cottonseed Oil	69	Nutmegs	106	Onion
31	Cottonseed Oilcake	70	Pepper	107	Carbon Credit
32	CPO Refined	71	Turmeric	108	Thermal coal
33	Crude Palm Oil	IV	Metals	109	Methanol
34	Crude Palm Olive	72	Copper	110	Melted Menthol Flakes
35	Groundnut	73	Zinc	111	Mentha Oil
36	Groundnut Oil	74	Lead	112	Menthol Crystals
37	Groundnut Oilcake	75	Tin	113	Iron Ore
38	Linseed	76	Gold		
39	Linseed oil	77	Silver		

Source: Forward Market Commission (FMC)

Turnover in Commodity Futures Market



Source: Annual Report (2013-14), Forward Market Commission

Graph 3: Major Group- Wise Commodities Futures Market Turnover during 2013-14

Table 3: Group-Wise Commodity Turnover in Commodity Futures Market

Turnover in Commodity Futures Market (Volume of trading in lakh tonnes, value in Rs. crores)						
	2011-12		**2012-13**		**2013-14**	
Commodity	**Volume**	**Value**	**Volume**	**Value**	**Volume**	**Value**
Agricultural Commodities	4942.1(35.2)	2196149.5 (12.1)	4398.1 (30.3)	2155700.4 (12.6)	3612.0 (40.9)	1602401.9 (15.8)
Bullion	10.3 (0.1)	10181957.2 (56.2)	7.3 (0.1)	7862678.7 (46.1)	4.0 (0.0)	4308937.8 (42.5)
Metals other than Bullion	1387.9 (9.9)	2896720.7 (16.0)	1742.8 (12.0)	3260050.6 (19.1)	978.4 (11.1)	1761359.9 (17.4)
Energy	7685.5 (54.8)	2851268.5 (15.7)	8361.9 (57.6)	3768408.9 (22.1)	4238.3 (48.0)	2472095.3 (24.4)
Others	-	7.8 (0.1)	0.01 (0.0)	1.3 (0.0)	-	-
Total	14025.7 (100.0)	18126103.8 (100.0)	14510.1 (100.0)	17046840.09 (100.0)	8832.8 (100.0)	10307715.9 (100.0)
Sources: Different Annual report of forward Market Commission (FMC)						
Figures in brackets are the percentage to the total volume and value of trade						

Table 4: Group-wise and Commodity-wise Turnover of Commodity Futures Market during 2013-14

Volume of Trading and Value of Trade during the year 2013-14 in Major Commodities			
Volume of Trading - In lakh tonne, Value - In Rs. crore			
Sr. No	**Name of the Commodity**	**2013-14**	
		Volume	**Value**
A	**Bullion**		
i	Gold	0.09	2513697.33
ii	Silver	3.94	1795240.49
	Total for A	**4.03**	**4308937.82**
B	**Metals other than Bullion**		
i	Aluminum	129.07	137609.82
ii	Copper	185.83	785562.21
iii	Lead	326.49	406971.56
iv	Nickel	22.05	190796.34
v	Steel	1.72	483.71
vi	Zinc	206.8	231896.17
vii	Iron	106.42	8040.08
	Total for B	**978.37**	**1761359.89**
C	**Agricultural commodities**		
i	Chana/Gram	525.73	164754.94
ii	Wheat	10.47	1637.22
iii	Maize	47.3	6168.26
iv	Soy Oil	417.69	290044.79
v	Mentha Oil	4.6	41798.11
vi	Guar Seed	45.73	24719.8
vii	Guar Gum	8.09	12237.77
viii	Potato	66.9	4239.66
ix	Chillies	12.53	7537.48
x	Jeera (Cumin seed)	22.48	28917.5
xi	Cardamom	1.47	11310.62
xii	Pepper	0.42	1600.7

xiii	Rubber	6.43	10514.94
xiv	Other Agri	2442.21	996920.17
	Total for C	3612.03	1602401.96
D	Energy	4238.33	2472095.31
Grand Total (A+B+C+D)		8832.76	10144794.98
Note: Natural Gas Volumes are not included in the Total Volume.			

Source: Annual Report (2013-14), Forward Market Commission

Among major group of commodities percentage of share in value is largest for bullion with 43 percent. Energy shares 24 percent in total value in commodity trade. Metals other than bullion and agricultural shares are 17 and 16 percent respectively in total commodity traded value in 2013- 14 (see graph 3). In volume energy, agricultural and metal other than bullion share are 48, 41 and 11 percent respectively in total traded volume in commodity futures market (see table 3). Though bullion share in value is largest, but share in volume is less than 0.05 percent. Share in value affected by the prices of commodities and volume share affected by physical nature of commodities. From 2011-12 to 2013-14 share of agricultural has increased considerably in volume as well as volume (see table 3). Share of bullion in volume remains constant with share of less than 0.1, whereas value share keeps falling over period of time and falls to a large extent over periods. Metals other than bullion share in volume and value showed mixed result, but over the period of time share in both increased marginally. Energy shows very different and opposite result. Share in volume over period of time shown considerable fall, whereas value share in total commodities traded has shown large increase over period taken. Group-wise and commodity-wise turnover of commodity futures market during 2013-14 in terms of value and volume are also covered (see table).

Historical Perspective of Indian futures market

The long experience gained by India in regard to commodity derivatives are of two folds: experience during Pre Independence era and Post-Independence. The first commodity exchange was set up in India by Bombay Cotton Trade Association Ltd., and formal organized futures trading started in cotton in 1875. Subsequently, many exchanges came up in different parts of the country for futures trade in various commodities. The Gujarati Vyapari Mandali came into existence in 1900 which has undertaken futures trade in oilseeds first time in the country. Hapur wheat futures set up in 1913. The Calcutta Hessian Exchange Ltd. and East India Jute Association Ltd. were set up in 1919 and 1927 respectively for futures trade in raw jute. In 1921, futures in cotton were organized in Mumbai under the auspices of East India Cotton Association (EICA). Futures in gold and silver began in Mumbai in 1920 and continued until it was prohibited by the government by mid 1950s. Many exchanges were set up in major agricultural centers in north India before world war broke out. The existing exchanges in Hapur, Muzaffarnagar, Meerut, Bhatinda, etc. were established during this period. After a few years of lackluster trading, the markets underwent

Rapid growth between the two world wars. As a result, before the outbreak of the Second World War, a large number of commodity exchanges, trading futures contracts in several commodities such as cotton, jute, oilseeds, groundnut, wheat, rice, sugar, silver and gold flourished at various locations across the country. The commodity options were traded during the pre-independence period. Options on cotton were traded until they along with futures were banned in 1939. Defence of India Act, 1943 was invoked to prohibit futures trading in some commodities during the Second World War.

After independence, on the recommendation of the Forward Market Commission (FMC), futures trading were initiated on 16 diverse commodities and started trading at recognized associations. Consequently, the total number of commodities traded and the number of recognized associations moved respectively to 50 and 30. However, the government withdrew the ban on futures with passage of FCRA in 1952. The Act has provided for the establishment and constitution of Forward Markets Commission (FMC) for the purpose of exercising the regulatory powers assigned to it by the Act. The futures trade in spices was first organized by India Pepper and Spices Trade Association (IPSTA) in Cochin in 1957. Later, futures trade was altogether banned by the government in 1966 in order to have control on the movement of prices of many agricultural and essential commodities. Post-independence, the Indian constitution listed the subject of "Stock Exchanges and Future Markets" under the union list. As a result, the regulation and development of the commodities futures markets were defined solely as the responsibility of the central government. After the ban of futures trade all the exchanges went out of business and many traders started resorting to unofficial and informal trade in futures. In the wake of recurring agricultural shortages, rising prices and a growing apprehension that speculating activities on commodities through futures trading may fuel inflation in Indian economy, the central government banned futures trading in most of the commodities. Even if the Dantwala Committee (1966) recognized the benefits of commodity trading even at the time of commodity scarcity, the recommendation are ignored by the concerned authorities. In order to monitor the price movements of several agricultural and essential commodities, futures trade was completely banned by the government in 1966. Subsequent to the ban of futures trade, many traders resorted to unofficial and informal trade

in futures. This banning process continued till end 70s, followed by formation of Khusro Committee in the year 1980, the recommendation of which supported the revival of futures trading in most of the major commodities including cotton, jute, potatoes and onions, etc. Again based on the recommendations of the Professor A.M. Khusro Committee, futures trading in gur (Muzaffar nagar and Hapur, 1982), potatoes (Hapur, 1985) and caster seed (Ahmadabad, and Mumbai, 1985) are permitted. The ban on all other commodities still continued with the misconception that speculative futures trading destabilizes the prices of commodities. As part of economic liberalization of 1991 an expert committee on forward markets under the chairmanship of Prof. K.N. Kabra was appointed by the government of India in 1993 to have a relook on the necessecity of commodity futures in Indian economy. The Kabra Committee (1994) recommended the reintroduction of futures which were banned in 1966 and also to widen its coverage to many more agricultural commodities and silver

and also the upgradation of existing commodity exchanges to facilitate futures trading at the international level. But ultimately the actual reform started after the intervention of international bodies followed by the submission of World Bank – UNCTAD report in the year 1997. The international pressure lead the Government of India to accept and implement the majority of the recommendations of Kabra Committee (1994). Based on the recommendations of Kabra Committee, futures trading in coffee (Banglore, 1998), cotton (Mumbai 1999), soy oil (Indore 1999), sugar (2001), tea (2002), and bullion (2003) was reintroduced and introduction of International Futures Contracts for pepper (Cochin, 1997) and Castor oil (Mumbai, 1999) was done. In order to give more thrust on agricultural sector, the National Agricultural Policy 2000 has envisaged external and domestic market reforms and dismantling of all controls and regulations in agricultural commodity markets. It has also proposed to enlarge the coverage of futures markets to minimize the wide fluctuations in commodity prices and for hedging the risk arising from price fluctuations. In line with the proposal many more agricultural commodities are being brought under futures trading. Before 2003, futures trading were allowed for select commodities, including cotton, jute, potatoes, spices, etc. Under the essential commodity act (1955), free trade in many commodities was restricted and futures contracts were limited to specific commodities listed under FCRA.

A major step was taken in 2003, when the central government realized the importance of commodity futures and agreed to remove the ban on futures trading for all commodities. This eagerness to stimulate commodity futures trading in India not only lead to recognizing and strengthening of various regional commodity exchanges, but also to build up national level muti-commodity exchanges. Accordingly four national level multi-commodity exchanges National Multi Commodity Exchange (NMCE), Multi Commodity Exchange (MCX) and National Commodities and Derivatives Exchange (NCDEX) were recognized for online futures trading, which started their operations since the year 2003. Therefore, the year 2003 is considered to be a turning point in the history of Indian commodity futures market. With rising prices, the functioning of futures markets came under suspicion during 2006-07 and the government ordered a possible delisting of futures contracts for commodities like urad, tur, wheat and rice to avoid the abnormal rise in their domestic spot prices. Followed by this, sugar, oil, rice and potato were also added to the list in 2007, but were subsequently delisted in 2008. India Government again banned future trading in chana, potato and soya oil in 2008. Futures trading in India are currently permitted in 6 national level multi-commodity exchanges and 11 regional level commodity specific exchanges, and almost 200 different futures contract written on almost 113 commodities. Out of the total, number of agricultural commodities traded in national level exchanges is almost 28 to 30. In fact, there seems to be no limit to the number of commodities eligible to be traded in commodity exchanges, except the fact that the commodity should fulfill the criteria of becoming 'Goods' as defined in the Forward Contract. However, a steady process of opening up has been visible in future market for commodities over the last two years. As a result of significant policy change, liberalization of world markets and other developments, Indian commodity markets notched up phenomenal growth in terms of number of products on offer, participants, spatial distribution and volume of trade. It is widely proposed to setup an efficient derivative market for commodities to strengthen the agricultural market.

Regulation of Commodity Futures Market in India

The Forward Market Commission (FMC) is the regulatory authority for the commodity futures market in India. It is equivalent of the Securities and Exchange Board of India (SEBI), which regulates the equity markets in India. Recently FMC have been merged with SEBI. The need for regulation arises on account of the fact that the benefits of futures markets accrue in competitive conditions. The regulation is needed to create competitive conditions. In the absence of regulation, unscrupulous participants could use these leveraged contracts for manipulating prices. This could have undesirable influence on the spot prices, thereby affecting interests of society at large. Regulation is also needed to ensure that the market has appropriate risk management system. In the absence of such a system, a major default could create a chain reaction. The resultant financial crisis in a futures market could create systematic risk. Regulation is also needed to ensure fairness and transparency in trading, clearing, settlement and management of the exchange so as to protect and promote the interest of various stakeholders, particularly non-member users of the market. Commodity futures contracts and the commodity exchanges are regulated by the government under the Forward Contracts (Regulation) Act, 1952. The nodal agency to regulate the futures market is the Forward Markets Commission, situated at Mumbai, which functions under the aegis of the ministry of consumer affairs. FMC has now come under Security Exchange Board of India (SEBI). Commodities in India have always been regulated through various legislations like FCRA, 1952; ECA, 1955 and Prevention of Blackmarketing and Maintenance of Supplies of Commodities Act, (PBMSCA) 1980. The FCRA, 1952 envisages a three-tier regulation for commodity futures trading in India. These are (a) an association recognised by the Government of India on the recommendation of the FMC, (b) the FMC and (c) the central government. As per the act, the exchange that organises forward trading in regulated commodities can prepare its own rules i.e., Articles of Association and bylaws and regulate trading on a day to day basis. The FMC approves those rules and bylaws and provides a regulatory overview. The ECA, 1955 came into powers to control production, supply, distribution, etc. of essential commodities for maintaining or increasing supplies and for securing their equitable distribution and availability at fair prices. Using the powers under the ECA, 1955, various departments of the central government have issued control orders for regulating production, distribution and quality of products, movements, etc. pertaining to the commodities that are essential and administered by them. Currently, 29 commodity groups have been declared essential under the Act. The PBMSCA, 1980 targets the prevention of unethical trade practices like hoarding and blackmarketing etc., in essential commodities. It is being implemented by state governments to detain persons who obstruct the supplies of essential commodities. All types of forward contracts in India are governed by the provisions of FCRA, 1952. The act categorized commodities into three groups based on the extent of regulation: (a) the commodities in which futures trading can be organised under the auspices of a recognised association (b) the commodities in which

futures trading is prohibited (c) the free commodities which are neither regulated nor prohibited. However, options in goods are prohibited by the FCRA, 1952 but the ready delivery contracts remain outside its purview. The ready delivery contract, as defined by the act, is the one that provides for the delivery of goods and payment of a price, either immediately or within a period not exceeding eleven days after the date of the contract. All ready delivery contracts where the delivery of goods and payment for goods is not completed within eleven days from the date of the contract are defined as forward contracts. The act classifies forward contracts into two, specific delivery contracts and those excluding specific delivery contracts or futures contracts. Specific delivery contracts are distinguished as transferable and non-transferable. The distinction between the transferable specific delivery (TSD) contracts and non-transferable specific delivery (NTSD) contracts is based on the transferability of the rights or obligations under the contract. Forward trading in TSD and NTSD contracts are regulated by FCRA, 1952. As per section 15 of the act, every forward contract in notified goods, currently 36 commodity items, which is entered into except those between members of a recognized association or through or with any such member, is treated as illegal or void. As per the section 17(1) of the act, 82 items are prohibited from entering into forward contracts. Section 18(1) of the act exempts NTSD contracts from regulatory provisions. However, over the years, regulatory provisions of the act were applied to the NTSD contracts, and 79 commodity items are currently prohibited from NTSD contracts under section 17 of the act. Moreover, another 15 commodity items have been brought under the regulatory provisions of section 15 of the act, out of which trading in NTSD contracts has been suspended for 12 items. At present, the NTSD contracts in cotton, raw jute and jute goods are permitted only between, through or with the members of the associations specifically recognised for the purpose.

The Forward Contract Regulations Act (1952) has been amended over the years. Various committees have worked on and reshaped the act in varying capacities. An example is the Kabra Committee in 1993, which proposed strengthening of the FMC and a few amendments to the Forward Contracts (Regulation) Act, 1952. The major amendments included allowing options in goods, increase in outer limit for delivery and payment from eleven days to thirty days for the contract to remain as a ready delivery contract and registration of brokers with the FMC. The government accepted most of these recommendations and futures trading have been permitted in all recommended commodities except bullion and basmati rice. The exchanges are required to get prior approval of the FMC for opening of each contract in commodities which are notified under section 15 of the FCRA, 1952. Regulation is essential especially in a private ownership and market oriented system to ensure the necessary checks and balances in the system. However, stringent and continuous regulation for long period of time would do no good to the system. The exchanges are already assumed to be self-regulatory agencies. Their role must get strengthened further along with FMC minimizing its role as a facilitator making the existing regulation an appropriate regulation. The FMC has imposed several regulatory measures that are implemented in developed markets such as daily mark to market margining, time stamping of trades, innovation of contracts and creation of a trade guarantee fund, back office computerisation for the existing single commodity exchange and online trading for the new exchanges, demutualisation for the new exchanges, one third representation of independent directors on the boards of existing exchanges, etc. The exchanges, therefore, had to be virtually forced into adopting some of the measures by the regulatory dictate. The exchanges have attributed the subsequent fall in the volume of trade to the introduction of these measures. Exchanges such as the Bombay Commodity Exchange and Kanpur Commodity Exchange, which implemented most of these reforms, were literally deserted by all traditional players. The government has taken a landmark decision to deregulate long duration margining contracts i.e., non-transferable specific delivery contracts from the purview of the Forward Contracts (Regulation) Act, 1952. There is a need for radically pruning the negative list of commodities in which futures trading is not allowed. The reasons, whether right or wrong, which led the government to ban a large number of commodities no longer exist today. Prior to 1960, futures trading used to be conducted in traditional commodities at the conventional places of trading as per the set terms and conditions. When futures trading in these traditional commodities was prohibited, either non-transferable specific delivery contracts or futures trading in the commodities of minor nature which had no tradition of futures trading were used as a guide for conducting futures trading in traditional commodities. Most of these minor commodities were included in the negative list to prevent such disguised trading. Now that most of these conventional commodities such as edible oil and cotton are legally allowed, the need for using minor commodities as a guise has disappeared. Secondly, futures trading can generally be conducted only in commodities, which have competitive markets. It is necessary that the market forces of demand and supply largely determine the prices. India has already made a transition from being a food importing country to a food surplus country. The Government will have to substantially dilute the administered price mechanisms and integrate the internal food grains market with the global markets. Under the warehouse receipt system, the warehouses which meet the prescribed standards of storage, preservation, testing, grading and certification would be licensed by the Central Regulatory Authority and the warehouse receipts issued by these warehouses would become negotiable. The Central Regulatory Authority would evolve the system of inspection, monitoring and surveillance to ensure that the licensed warehouses comply with the prescribed standards and warehouse receipts issued by them truly reflect the quality, quantity and ownership of the goods.

Commodity exchanges could create a marketplace for trading and settlement of warehouse receipts to facilitate hassle-free trading in commodities. There are many exchange specific regulations imposed by Forward Market Commission (FMC).

Constraints and Bottlenecks in Commodity Futures Exchanges

Commodity futures markets are the strength of an agricultural surplus country like India. Commodity exchanges play a pivotal role in ensuring stronger growth, transparency and efficiency of the commodity futures markets. This role is defined by their functions, infrastructure capabilities, trading procedures, settlement and risk management practices. Commodity exchanges in India are in

their nascent stage of development. There are numerous constraints and bottlenecks in the growth of this particular segment in India. Institutional and policy level issues have to be addressed by the government and the FMC for rejuvenating the paralyzed agricultural futures markets. Some of the major problems that handicap the commodity exchanges are discussed below.

Constitution of exchanges

All commodities exchanges in India are mutual organizations.

They are promoted by traders who carryout trading as well as keep the management controls of exchanges. The structure needs to be altered so as to ensure an arm's length relationship between those who promote and manage the exchange on the one hand and those who have trading interest in exchanges on the other.

Trading parameters

The terms and conditions of contracts play a crucial role in the growth and development of trading in any exchange. They should be market friendly in the sense that the terms are affordable to large traders as well as small traders and should be attractive to all prospective beneficiaries of futures trading. Especially in a country like India, where corporate farming is absent and predominant section of the farmers own small agricultural lands, meeting the specifications of the contract becomes difficult. Such farmers prefer spot markets rather than commodity markets for trading. Even the small traders refrain from trading owing to the capital constraints. Many such aspects of contracts seem to go against the wider interests of prospective beneficiaries of futures trading.

Infrastructure

Lack of efficient and modern infrastructural facilities are a major bottleneck in the growth of futures markets in India. Though some of the exchanges own huge office premises, they lack necessary institutional infrastructure including warehousing facilities, independent and automated clearing house and modern and transparent trading platforms. As a Result, majority of the exchanges have to depend on a few commodities and consequently, the turnover is low.

The trading system

Most of the exchanges till date have open outcry system and only few have introduced electronic trading system. Emphasizing the need for automation and on-line trading system for ensuring better transparency and fairness in trading practices is needed. It has been observed that very less percent of members are only actively trading in these Exchanges. Therefore, the priority of FMC and exchanges should be creation of a better environment for active trading. To attract a greater number of investors towards sector specific commodities, regional exchanges must introduce the electronic trading system to assure transparency and fairly priced commodities.

Broking community

Although a large number of members exist in the records of exchanges, most of them shy away from trading due to the fact that the business is not very profitable. It is essential to attract large scale broking firms who have diversified into stock broking and other related businesses.

Existence of unofficial market

The black market which existed outside the exchange premises during the ban on futures trading for over 30 years still continues to exist even inside the exchanges. It has been widely accepted and admitted by exchanges that at least 25 to 30 per cent of trade in the exchanges go unreported. The unofficial market operating outside the official exchange is much larger. These unofficial traders find the margin, stamp duty and income tax requirements least encouraging to come to the official contract channels.

Multiplicity of exchanges

Many of the exchanges are set up as specialized ones for trading in one or a few commodities. The international experience however shows that exchanges are only to provide a platform for trade in many commodities and different forms of contracts. If an exchange provides a well-organized trading system for certain commodities it can introduce new products and attract large number of traders. In India, majority of the exchanges are specialized in trading a few commodities. There is no real integration among the existing exchanges. As a result of these small exchanges spreading across the nation and specializing in select few commodities, the turnover, volume of trade and the revenues of exchanges are all low.

Controlled market

Price variability is an essential pre-condition for futures markets. Any distortion in the market mechanism will dilute the process of natural variability of prices and potential risk. It is imperative that for a vibrant futures market commodity pricing must be left to market forces. However, in India many of the commodities in which futures trading are allowed have been still protected under ECA, 1955.

Regulation

Government has two important role to play to play, an oversight role by which the government disciplining those who try to manipulate the markets for their own benefit, and ensuring the sanctity of contracts; and secondly, an enabling role by which the government providing the necessary legal and regulatory framework for the smooth functioning of the system. Regulation in futures commodity market is a major problem and bottlenecks.

Prohibition on major products for derivatives trading, the non-availability of fool proof legal system of contracts are seriously constraining the futures market.

Promotion of the use of derivatives

With the increasing technological sophistication of trading methods, better transparency and guarantee of trade in futures, more institutional players like foreign institutional investors should be allowed to trade in recognized commodity exchanges. Another major reason for the backwardness of commodity futures markets is the lack of interest by corporate bodies and banks. The exchanges under the guidance of the FMC must undertake publicity and mass awareness programmes for the Promotion of this segment. For this purpose it would be beneficial for FMC to have a functional alliance with its counterpart in stock markets.

Modification of income tax provisions and rationalization of stamp duty: In the past, speculative and non-speculative

businesses were treated equally for taxation so far as right to set off or carry forward of loss was concerned. As a result, it was possible to set off speculative losses against speculative profits. Current tax rule however does not allow for setting off or carrying forward of speculative losses against regular business income.

Lack of price transparency

The commodity futures markets also suffer from problems of lack of price transparency. There is no common interface or communications infrastructure using which prices from one market to other become accessible. Cost of collecting information from one market to other is high.

Fragmented order flow and the lack of economies of scale

Futures markets trade on today, tend to be the smaller of the agricultural commodities, the probability of reaching economies of scale in setting up exchange infrastructure become smaller.

Summary

A futures market is an auction market in which participants buy and sell specific quantities of a commodity or financial instrument at a specified price with delivery set at a specified time in the future. Commodity futures market performs two significant economic functions of price discovery and price risk management. One of the most important consequences of the futures market is that it enables an efficient redistribution of risks. Futures contracts are used as hedging instruments in commodities. Commodity market is an important constituent of the financial markets of any country. Forward Markets Commission (FMC) is a regulatory authority for commodity futures market in India. It is a statutory institution set up in 1953 under Forward Contracts (Regulation) Act, 1952. There are two distinct forms of commodities market, namely, the over the counter market, and the exchange based market. Market participants can be broadly divided into scalpers/day traders, hedgers, speculators arbitrageurs, aggregators, position traders, brokers, exchange and regulator. Currently there are 17 recognized exchanges, 6 national and 11 regional exchanges. However, the bulk of trading i.e., 99.88% is concentrated in six national level commodity exchanges Multi Commodity Exchange of India (MCX), Mumbai, National Commodity and Derivatives Exchange of India (NCDEX), Mumbai, National Multi Commodity
Exchange (NMCE), Ahmedabad, Indian Commodity Exchange (ICEX), New Delhi, ACE Derivatives & Commodity Exchange Limited (ACE), Mumbai and Universal Commodity Exchange Limited (UCX), Navi Mumbai. MCX contains 84.89 percent of total traded value of commodity trade exchange. NCDEX share in total value is 11.3 percent. NMCE ranks third in value with 1.51 percent. ICEX, ACE and UCX shares are very small with less than one percent in total traded value The Forward Markets Commission (FMC) has allowed trading of 113 commodity futures contracts in the Indian markets. Among major group of commodities percentage of share in value is largest for bullion with 43 percent. Energy shares 24 percent in total value in commodity trade. Metals other than bullion and agricultural shares are 17 and 16 percent respectively in total commodity traded value in 2013- 14. In volume energy, agricultural and metal other than bullion share are 48, 41 and 11 percent respectively in total traded volume in commodity futures market. The long experience gained by India in regard to commodity derivatives are classified and discussed in two folds: experience during pre-independence era and post-independence. Indian commodity markets notched up phenomenal growth in terms of number of products on offer, participants, spatial distribution and volume of trade. The Forward Market Commission (FMC) is the regulatory authority for the commodity futures market in India. Commodity futures contracts and the commodity exchanges are regulated by the government under the Forward Contracts (Regulation) Act, 1952. Commodities in India have always been regulated through various legislations like FCRA, 1952; ECA, 1955 and Prevention of Black marketing and Maintenance of Supplies of Commodities Act, (PBMSCA) 1980. The FCRA, 1952 envisages a three-tier regulation for commodity futures trading in India. Some of the major problems that handicap the commodity exchanges are constitution of exchanges, trading parameters, infrastructure, trading system, existence of unofficial market, broking community, multiplicity of exchanges, controlled market, income tax provisions and rationalization of stamp duty, lack of price transparency, fragmented order flow and the lack of economies of scale are some bottlenecks and constraints in the futures market. The institutional and policy level issues associated with commodity exchanges have to be addressed by the government in coordination with the FMC in order to take necessary measures to pave the way for a significant expansion and further development of the commodity futures markets.

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