

The Major Issues In Development Of Commodity Derivatives Market In India

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Abstract: *(Commodity derivative markets have traditionally been a contentious issue at various policy forums across the world, particularly with the imbroglgio created by allegations from various corners that they encourage excessive speculation and are therefore responsible for the recent commodity price escalation. While this suspicion of excessive speculation in the commodity markets has always been there among policymakers in developing nations like India, it has become more widespread since 2008 in the wake of worldwide inflationary pressures on food and energy. The main purpose of this study is issues in development of commodity derivative market in India. The commodity market provides trading to trade commodities of varied types. This study evaluates the extent to which commodity policies and regulatory framework. With the current pace of growth, India would emerge as a major player in the international market in terms of commodity consumption, production and trade. After gaining the considerable popularity, the major commodity exchanges in India has started the futures contract in various commodities year back, which can serve preferably to manage the risk that can arises due to adversity of expected prices of commodities besides the price discovery tool. The future contracts dealing in major commodity exchanges are standardize in nature. In this paper examine the commodity futures market in India, taking into consideration the history of commodity futures market. And after that I have discussed the mechanism of trading, segments and regulatory framework of commodity market in India.*

Keywords: *Commodity Market; Forward Market; Market Development, Commodities futures, Commodity Exchanges, Commodity Future Markets, FMC-Forward Market Commission*

I. Introduction

India, being an agro-based economy, has markets for most of the agro-based commodities. Indian Commodities is one of the first agricultural collateral management companies incepted in India over a decade ago. As the undoubted leader in the Indian agriculture sector, Indian commodities has for almost decade, dedicated itself to provide end to end agro solutions to farmers and the agriculture sector across the country. Indian commodities are working with different financial institutes and agricultural clients to give them professional warehousing solutions and collateral management services. Indian Commodities is a division of Suvidh Commodities.e.com Private Limited and backed by one of the largest commodities trading group in India with turnover more than 300 crore, offering complete solutions in commodity management and with immense experience in cotton trading and certification. Indian Commodities is backed by highly professional directors having immense experience in the field of agricultural commodity management and trading. Indian Commodities is managed by expert managerial team from the fields of Central Warehousing Corporation, Collateral Management Organized. The Indian commodity market offers a variety of products like rice, wheat, coal, petroleum, kerosene, gasoline; metals like copper, gold, silver, aluminum and many more. Commodities have gained importance with the development of commodity futures indexes along with the mobilization of more resources in the commodity market. Commodities actually offer immense potential to become a separate asset class for market-savvy investors, arbitrageurs and speculators. Indian commodity market consists of both the retail and the wholesale market in the country. Retail investors should understand the risks and advantages of trading in commodities futures before taking a leap. The commodity market in India facilitates multi commodity exchange within and outside the country based on requirements. Commodity trading is one facility that investors can explore for investing their money. The Indian commodity markets have undergone lots of changes due to the changing global economic scenario; thus throwing up many opportunities in the process. Demand for commodities both in the domestic and global market is estimated to grow by four times than the demand currently is by the next five years. Commodities' trading is a class of At present 21 commodity futures exchanges are working in the country, out of which, six are at national level and fifteen at regional level. All these exchanges are under the regulatory system of Forward Market Commission (FMC), Government of India. By and large, the market has staged a spectacular growth of trading in terms of volume and value of commodity

trading. It is very clear through the statistics that 53 commodities notified and permitted for futures trading in 2003 by Forward Market Commission moved to 113 in agricultural and non-agricultural commodities futures contracts. On the other hand, the market has registered a significant growth in terms of value, which was Rs.12.9364 billion in 2003-04 and augmented to Rs. 1812.6104, 1704.6840 and 1014.4795 billion during the last five years, i.e., 2011 to 2016 and this paper examines the Performance of Indian commodity derivatives market by evaluating the growth of the market in terms of number of commodities permitted for trading, volume and value of the commodity derivatives traded. The performance of the commodity market found through the volume and value of market has been growing at average compounded growth by 15 and 29 percent respectively and it is found that the growth between volume and value is non-linear as far as their estimated and actual growth is concerned. On the other hand, the variance between the volume and value of the market followed a reciprocal trend and the trend projection of market over a period of next ten years analysis depicts linear growth.

II. Objectives Of Study

- 1) To study the history and evolution of Indian Commodity Market.
- 2) To study the different forms of investing in Indian commodity markets.
- 3) To study the different segments of Indian Commodity Markets.
- 4) To analyze the regulatory framework of commodity market in India.
- 5) To study the challenges as faced by commodity market in India.

III. Review Of Literature

Pravakar shoo and Rajiv Kumar (2009) has evaluated that trading in commodity derivatives on exchange platform is an instrument to achieve price discovery, better price risk management besides helping macro economy with better resource allocation. The govt. has proposed to impose transaction tax by 0.017% of trading volume in the 2008-2009 budgets. He examine the efficiency and futures trading price nexus for 5 top selected commodities namely gold, copper, petroleum crude, soya oil and chana in commodity futures market in India. He suggests that commodity futures market is efficient for all 5 commodities. Further he has not supported that futures market leads to higher inflation due to lack of evidence.

Bhawna et al. (2009) found the removal ban on commodities achieved the spectacular growth, achieved its objective as price risk management and price discovery and high untapped potential market growth in agriculture commodities. IIT Bombay (2009) conducted a research study on behalf of Forward Market Commission (FMC) of India and found that seventy percent of population depends on agriculture commodities, and there is a need to liberalize the to manage the price risk through commodity futures.

Sabnavis and Gurbandani (2010) analyzed global commodity markets. These markets have proved to be efficient price discovery mechanism in India and worldwide. Further, Gurbandani (2010) found that both spot and future prices for selected agricultural commodities are efficient in weak form. Future prices are independent and past prices have no role in the contribution of future price prediction.

Basu and Gavin (2010) concluded that the investors are searching for the alternatives like high risk mortgage debt and financial derivatives market to mitigate the risk. The study also found that there is negative correlation between equity market to commodity futures return and it gives scope of bringing the arbitrage to exit hedging profits.

Shanmugam and Dey (2011) showed that the commodity market have performed better for all the stakeholders. There is an urgent need for new instruments in the commodity markets. In addition, the regulator has to develop stringent policies that can allow financial intermediaries like institutional investors, banks and mutual funds to benefit at gross root level. Swati and Shukla (2011) concluded there is a need to convergence of all types of market like equity, commodity, forex and debt, which should be developed and regulated properly to provide wide-ranging risk management solutions to Indian stakeholders.

Gupta and Ravi (2012) investigated the relationship in price discovery which proved that futures markets are more responsive in dissemination information and price discovery to correct spot market.

Mahanta (2013) analyzed price trends in the international market and concluded that gold price movements in international market is positively correlated with Indian gold price movements, so proper considerations to international markets should be given while designing policies of derivatives market in India.

Barua and Mahanta (2013) investigated the high inflationary pressure due to commodity derivatives. Few futures contracts like red gram, black gram, chickpeas, wheat, rice, potato, refined soybean oil and rubber have been canceled, but analysis proved that the ban on these commodity futures contract didn't bring price stability.

Popli and Singh (2014) revealed that commodity futures market was volatile in USA, U.K. and India. The comparison between US, U.K and Indian futures markets reveals the policy makers have to follow the clue from U.S and U.K regulation to promote and encourage investments in commodity derivatives market.

Kaur and Anjum (2015) carried out the study on agricultural commodity futures in India and found that in spite of development of commodity futures market, farmers could not gain leverage from the market, as there is no integration between spot and futures market. They further found that due to lack of infrastructure and warehousing, regional exchanges could not penetrate to rural India

IV. Methodology

The present study is conducted on commodity markets in India. The study is descriptive in nature. The literature and data are mainly based on a secondary source which has been collected from commodity market and their various publications, text book related topics, magazines, reputed journals, newspapers, and various internet sources like www.mcxindia.com, www.ncdexindia.com, www.nmceindia.com, www.fmce.gov.in and other publications. The various reports and records issues as maintained by Government of India (GOI) are also used in this study. This study is based on historical background of commodity markets in India & its policies and designed to gather descriptive information's. There is no tool applied to values and volume fluctuations of the commodity market.

HISTORY OF COMMODITY MARKET DEVELOPMENT IN INDIA:

The turnover of the commodity market in our country has grown potentially in a short span of time. This market favours more of speculators. The future market leaves a lot to be desired as an effective instrument of risk management and price discovery for the benefit of the growers, traders, processors and other stakeholders. Further the policymakers have looked over the consideration involving the discipline of checks and balances. The opening up of the commodity future market in India was an important initiative taken with an aim to improve domestic market efficiency. It further aids the price discovery process and provides a platform for price risk management in commodities. In September 2013, the regulatory body FMC has been brought under the control of Ministry of Finance. At present 46 commodities are traded in six National Exchanges and 11 Commodity specific exchanges. The futures trading in agricultural products constitute the total turnover in 2013-14, with food items contributing 55.6 per cent and non-agricultural products contributing 17.5 per cent. However, the volume of trade has declined by 39 per cent during 2015-16, over the previous year. The FMC has been implementing the price dissemination scheme to control the inflationary trends and to provide the requisite prices to the farmers. The future markets help the farmers to predict the price, as well as it helps the government to take the pre-emptive reaction when required. Though, it has been noted that the prices has been largely influenced by the Euro-crisis.

INITIATIVES TAKEN BY GOVERNMENT OF INDIA FOR COMMODITY MARKETS:

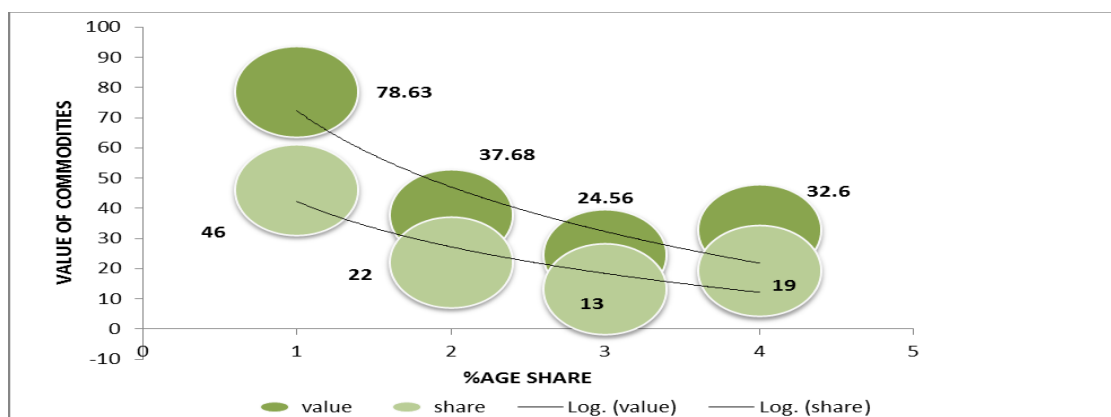
The Government of India (Forwards Commission Market along with SEBI) has undertaken various activities and assistance programmes to promote our commodities market. During the year 2015-16 the commission conducted 872 awareness programs, out of which 535 programmes were for the benefit of the farmers and 337 programs for other stakeholders. There were 100 capacity programmes conducted with the aim to build capacities of the important stakeholders in the eco-system of commodity future markets and to sensitize the policy makers about the utility of the futures markets. Out of the total 83 programs were conducted for the general states and 17 were for the NER states. The FMC is association with the Commodity Exchange initiated a process of dissemination of futures and spot prices of agricultural commodity by installing Price Ticker boards at various locations. This may help hedger group like farmers in their pre-sowing and post harvest decision making process and hedging their price risks in the market. The officers of the Commission participated in various international conferences and were also deputed for training/symposium organized by international organizations/training institutes. Further the commission with the National exchange has facilitated participation of hedgers in various exchange programs, exhibitions and expos.

CHALLENGES TO COMMODITIES MARKET IN INDIA:

Our country, being strongly agriculture based has to contend with the long-term decline and short term volatility of real commodity prices on international markets. The long-term decline in real prices reflects the tendency for productivity and production to grow at a faster rate than demand, leading to over-production which hampers the price provided to the farmers. Whereas the volatility reflects the impact of exogenous factors such as weather on our production of commodities. These problems are exacerbated by market distortions, tariffs and subsidies in developed countries, tariffs in developing countries and the market power in some commodity supply chains of large transnational corporations. These distortions also limit our access to lucrative markets and hinder attempts to secure a greater share of the final product price on the part of our producers and exporting community. To summarize in points following are the problems as faced by commodity markets in India: 1) Legal Challenges 2) Regulatory Challenges 3) Infrastructural Challenges 4) Awareness amongst the investors and producers 5) Other challenges regarding trading.

Sector-Wise Commodity Market Development

Within a short span of time the newly set-up multi-commodity exchanges have been able to introduce a number of contracts, a fairly good proportion of which are liquid and have been attracting increasing volumes. In the year 2015 -16the bullion is the highest traded commodity with 46 per cent share and value of Rs 78.63 lakh crores, followed by the energy products with value of Rs 37.68 lakh crores and share of 22 per cent, base metals with a value of Rs 32.60 lakh crores and share of 19 per cent and the agricultural products quote value of Rs 21.56 lakh crores sand 13 per cent share. Out of the nineteen exchange markets, the six exchanges – MCX, NCDEX, NMCE, ACE, and ICE contributes to 99.71 per cent of total value of the commodities traded. The total value traded in 2015-16 is represented in the Graph.



PERFORMANCE OF INDIAN COMMODITY MARKET DURING THE YEAR 2011 to 2016

Table:1. Annual Growth of Indian Commodity Market

Year	Traded Volume (In Lakhtonnes)	Value of Trade (In Rs Crore)
2011	12805.57	11948942.35
2012	14025.74	18126103.78
2013	14510.08	17046840.09
2014	8832.76	10144794.98
2015	686165.00	6135672.00
2016	1138013.00	6696380.00

Source: FMC & SEBI, Ministry of Finance (GOI)

The table -1 shows the growth of commodity market in India during the year 2010 to 2015. The traded volume in commodity market increased from 12805.57 lakh tonne in 2010 to 14510.08 lakh tonnes in 2012, where as traded volume decreased to 8832.76 lakh tonne in 2013, and then traded volume increased from 686165.00 lakh tonne in 2014 to 1138013.00 lakh tonne in 2015. The total value of trade in the commodity market rose from Rs.11948942.35 crore in 2010 to Rs.18126103.78 crore in 2011; where as value of trade continuously decreased from Rs.17046840.09 crore in 2012 to Rs.6135672.00 crore in 2014, and then value of trade increased Rs.6696380.00 crore in 2015.

Table: 2 Performance of National and Regional Commodity Exchanges (2010 to 2015)

(Volume of trading in lakhtonnes) (Value of trade in Rs. Crore)

Year	National Exchanges		Regional Exchanges	
	Volume	Value	Volume	Value
2011	12283.34 (95.92%)	11470516.01 (96.00%)	522.23 (4.08%)	478426.34 (4.00%)
2012	13346.53396 (95.16%)	17675656.52 (97.51%)	679.20604 (4.84%)	450447.26 (2.49%)
2013	13828.87 (95.31%)	16656053.85 (97.71%)	681.21 (4.69%)	390786.24 (2.29%)
2014	8361.47 (94.66%)	9910596.17 (97.69%)	471.29 (5.34%)	234198.81 (2.31%)
2015	683083.00 (99.55%)	6123810.00 (99.81%)	3082.00 (0.45%)	11862.00 (0.19%)

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2016	1134994.00 (99.73%)	6683150.00 (99.80%)	3019.00 (0.27%)	13230.00 (0.20%)
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Source: FMC & SEBI, Ministry of Finance (GOI)

The table 2 shows the national and regional exchanges value of trade and traded volume in Indian commodity market during the year 2010 to 2015. In the year 2010, traded volume in the national exchanges was 12283.34 (95.92%) lakh tonnes, where as regional exchanges 522.23 (4.08%) lakh tonnes, and value of trade in the national exchanges Rs.11470516.01 (96.00%) crore, while regional exchanges 478426.34 (4.00%) crore. During the year 2011, traded volume in the national exchanges was 13346.53396 (95.16%) lakh tonnes, while regional exchanges 679.20604 (4.84%) lakh tonnes and value of trade in the national exchanges Rs.17675656.52 (97.51%) crore, where as regional exchanges Rs.450447.26 (2.49%) crore. In 2012, traded volume in the national exchanges was 13828.87 (95.31%) lakh tonnes, where as regional exchanges 681.21 (4.69%) lakh tonnes, and value of trade in the national exchanges Rs.16656053.85 (97.71%) crore, while regional exchanges Rs.390786.24 (2.29%) crore. In the year 2013, traded volume in the national exchanges was 8361.47 (94.66%) lakh tonnes, where as regional exchanges 471.29 (5.34%) lakh tonnes, and value of trade in the national exchanges Rs. 9910596.17 (97.69%) crore, while regional exchanges Rs. 234198.81 (2.31%) crore. During the year 2014, traded volume in the national exchanges was 683083.00 (99.55%) lakh tonnes, while regional exchanges 3082.00 (0.45%) lakh tonnes and value of trade in the national exchanges Rs.6123810.00 (99.81%) crore, where as regional exchanges Rs.11862.00 (0.19%) crore. In 2015, traded volume in the national exchanges was 1134994.00 (99.73%) lakh tonnes, where as regional exchanges 3019.00 (0.27%) lakh tonnes, and value of trade in the national exchanges Rs.6683150.00 (99.80%) crore.

Table:3 Total Volume of National and Regional Commodity Exchanges (2010 to 2015)
(Traded volume in lakh tonnes)

Exchanges	year					
	2011	2012	2013	2014	2015	2016
MCX	7839.71	8823.765	10014.23	5305.81	480383.00	911229.00
NCDEX	4120.84	4175.14896	3566.17	2745.43	194366.00	217737.00
NMCE	322.79	347.62	248.47	310.23	8334.00	6028.00
Regional Exchanges	522.23	679.20604	681.21	471.29	3082.00	3019.00
TOTAL	12805.57	14025.74	14510.08	8832.76	686165.00	1138013.00

Source: FMC & SEBI, Ministry of Finance (GOI)

The table 3 clearly shows the traded volume of national and regional exchanges from the year 2010 to 2015, which indicates an increasing trend traded volume commodities in 2010 to 2012. It was from 12805.57 lakh tonne in 2010 which increases to 14510.08 lakh tonnes in 2012, where as decreased to 8832.76 lakh tonne in 2013, and then increased from 686165.00 lakh tonne in 2014 to 1138013.00 lakh tonne in 2015. MCX is the major contributor in the Indian commodity market followed by NCDEX, and NMCE.

Table:4 Value of Trade of National and Regional Commodity Exchanges (2010 to 2015)

Exchange values in Rs.)	Years					
	2011	2012	2013	2014	2015	2016
MCX	9841502.90	15597095.47	14881057.12	8611449.07	5183707.00	5634194.00
NCDEX	1410602.21	1810210.10	1598425.87	1146328.09	904063.00	1019588.00
NMCE	218410.90	268350.95	176570.86	152819.01	36040.00	29368.00
Regional Exchanges	478426.34	450447.26	390786.24	234198.81	11862.00	13230.00
TOTAL	11948942.35	18126103.78	17046840.09	10144794.98	6135672.00	6696380.00

Source: FMC & SEBI, Ministry of Finance (GOI)

The table -4 shows the value of trade national and regional exchanges from the year 2010 to 2015, the value of trade increased from Rs.11948942.35 crore in 2010 to Rs.18126103.78 crore in 2011; where as value of trade continuously decreased from Rs.17046840.09 crore in 2012 to Rs.6135672.00 crore in 2014, and then value of trade increased Rs.6696380.00 crore in 2015. MCX recorded the highest turnover in terms of value of trade from 2010 to 2015 followed by NCDEX, and NMCE.

Initiatives of Government of India

The Government of India has under taken various activities and assistance programmes to promote our commodities market. During the year 2015-16 the commission conducted 872 awareness programs, out of which 535 programmes were for the benefit of the farmers and 337 programs for other stakeholders. There were 100 capacity programmes conducted with the aim to build capacities of the important stakeholders in the eco-system of commodity future markets and to sensitize the policy makers about the utility of the futures markets. Out of the total 183 programs were conducted for the general states and 17 were for the NER states. The FMC in association with the Commodity Exchange initiated a process of dissemination of futures and spot prices of agricultural commodity by installing Price Ticker board at various locations. This may help the group like farmers in the pre-sowing and post harvest decision making process and hedging their price risks in the market. The officers of the Commission participated in various international conferences and were also deputed for training/symposium organized by international organizations/training institutes. Further the commission with the National exchange have facilitated participation of hedgers in various exchange programs, exhibitions and expos.

V. Conclusion and Implications

It is found that the Indian commodity market exists since ancestral period as compared with World market. The organized market in the world started in mid of nineteenth century in US Establishing CBOT in 1850, whereas in India contemporarily Bombay Cotton Traders Association (BCTA) was established in 1875. The expansion of trading slowly gained momentum till 1952, because of establishment of Forward Market Commission and passing the Forward Trading Regulation Act. In 1966 due to some obstructions in regulatory and policy issues, the ban on commodity forward trading was continued till 2002. In this aftermath, Government formed some committees to study the feasibility of reintroduction of forward trading as part of second generation reforms and pressure from world economic reform regulators. Then a commodity derivative trading was reintroduced in 2003 with three major national commodity exchanges under the regulation of FMC. The growth of new journey moved with a remarkable attention to all the stakeholders in the market. Within a short span, it reached the stage to compete with global markets in certain commodities, viz, gold, silver, platinum etc. At present the number of exchanges moved to 6 national and 15 regional exchanges with the increase of permitted commodities from 53 to 113 for trading in the market. The performance of the commodity market found through the volume and value of market has been growing at average compounded growth in volume and value of futures market by 15 and 29 percent respectively. Such growth is non-linear between estimated and actual volumes and values. On the other hand, the variance between the volume and value of the market follows a reciprocal trend. The trend projection of market over a period of next ten years is linear at a growth rate of 45.65 and 58.71 percent in volume and value of market. Hence, the performance of the market is very considerable and progressive. Hence, the policy makers should concentrate to enhance the infrastructure facilities, integration of regional exchanges to national exchanges and penetration of information flow to reach the real users of the commodity derivatives market. With these changes, the commodity derivatives market can reach a vivacious market performance in the future provided the requisite facilities are created by the Government.

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