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Commodities Derivatives Market In India- "Growth and prospects"

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Abstract:

Today's prices in the stock market are a reflection of tomorrow's profits. Indian markets have witnessed a buoyant trend that indicates better profit growth prospects for 2015. This seems to be the start of a golden era, not just for the markets, but also the Indian economy. Many factors have fallen into place for Indian markets and the economy. This paper will explain the growth of contracts traded in various commodities in one of the major exchange besides the relationship of commodity contracts with other economic factors; moreover it will impart a comprehensive view of commodity futures as risk management tool. India, now enjoys world ranking with respect to trading volume in certain commodities like Silver, Gold, Copper, Guar Seed etc. Nevertheless, the functioning has been distorted due to lack of understanding of the dynamic nature of the markets. With this enhanced role there is a need to deliberate on the issues of further research in the area so as to promote the growth and development of the market

Keywords: *Commodity Derivatives, India, Commodity Futures, Price Discovery.*

Introduction:

The Indian commodity market have undergone a drastic changes since last two decades where the demand of metals, oil, coal etc have increased tremendously with the increased pace of economic development. This increased need of energy commodities is undoubtly the result of liberalization and globalization of the economy. Soon it had drawn the attention of government to regulate this market as was in the case of stock market. Consequently, it led the formulation of MCX (multi commodity exchange) and NCDEX (national commodity and derivatives exchange ltd) which are providing a platform for trading commodities with standardized manner in large number of commodities. These markets include both the spot and futures trading. The major items of dealing in these markets are in precious metal which consist of Gold, Silver, Platinum besides Nickel, Aluminum, Copper etc, in energy, it consists of Crude oil, Natural gas etc, in fiber, it consist of cotton, jute etc, in edible oilseed, it consists of Groundnut, mustard seed, sunflower etc and many more. The demand of all these commodies is from retailers and industries as well. The commodity market of India is witnessed a significant growth and moreover surpassed the secondary market even. The emergence of national level multi commodity exchanges and liberalization in the commodity sector further indicates the enormous opportunities. For not only investment purpose but also hedge against inflation, political risk and in some cases currency risk.

In the wake of globalization and surge in global uncertainties, the prices in commodity markets have shown wide fluctuations. Commodity price volatility is the most critical issue being faced by

the producers of primary commodities. The instability in prices is largely originated by demand and supply discrepancies that stem from business cycles (as in case of metals, energy products and agricultural commodities) or political upheavals and unforeseen weather conditions. Since the year 2002, commodity prices have witnessed exceptional developments. The price rise has been drastic and unabated until the eruption of global financial crisis in the mid 2008 and has left many calculated hedges in a quandary. After a short respite the uptrend resumed in mid 2009. While the impact on metals, energy and non-agricultural commodities was more pronounced but the spike in case of food commodities has caused greater concern due to its social implications. Oil price rise in 2011 together with that of agricultural commodities has been especially disastrous for the poor in developing countries who spend 60 to 80 percent of their income on food (FAO, 2008). Prices for basic commodities limit the income of farmers/ small producers whereas high volatility of prices makes it very difficult for them to optimize the use of their income (Morgan 2000) Therefore, there are grave humanitarian concerns, social & economic repercussions of this vicious problem.

Relationship of BSE-SENSEX and commodity market:

The BSE-SENSEX is a financial index based on 30 highly liquid and largest market capitalization based scrips. This index is a barometer of Indian capital market and reported the trend of secondary market. Anyone can identify the trend of corporate world with the help of SENSEX. Retailers generally invest in companies through IPO/FPO or buying the stocks from secondary market. Moreover, Future and Option in both the segment Index and Sector-wise are also available in the market now-a-days. So far our study is concerned, it would be more fruitful to check the relationship between BSE-SENSEX and contacts traded in commodity market which will depict a comprehensive view of investor and further strategy can be built thereon.

Relationship of BSE-SENSEX and Commodity Mark

Year	Traded Contracts (in lots)	BSE-SENSEX (average)
2011	1821019	412.6
2012	2621019	5422.32
2013	45635534	11417.15
2014	94310537	14452.08
2015	197206801	18380.31

Commodity Future

Future contracts are just a step ahead the forward contract, wherein the settlement is done in standardized manner. The contracts are being cleared by clearing houses, so no question of counter party risk arise therein. In commodity derivatives, the crux of future contracts is to lock up the future price of your commodity on the day of contract and cover the risk to go down of price in

case of short and rise in case of long. This is basically used to transfer the risk. For e.g. if you are a producer of a commodity and expect a fall in selling price in future say at the time of harvesting, can short the commodity future in future market for specified quantity and get the agreed price, no matter where the price of such commodity goes. Likewise if an industrialist knows the need of any commodity like cotton for textile over the year, he can also go for long in present and can cover the demand-supply gap which can lead the hike in prices later on. While entering in the future contracts of agricultural products, one should keep in mind the time of sowing and harvesting besides the monsoon related factors, which lead the direct impact on the supply of that product.

An investor can transect with the approved clearing member of commodity exchange concerned. To open an account he has to fill the necessary document like Know your client form, Risk disclosure document etc accompanied by the prescribed identity proof. For opening a Léger account, the investor has to submit a canceled cheque of the bank concerned in which he has his personal account. Before opening an account with a clearing member, he is expected to evaluate certain key factors like net worth, market credibility, credit facilities and the kind of services provided etc. It is mandatory to post the required margin in your account for trading in commodity derivative market. The initial margin money for commodity future is approx 5% of the contract value; however the daily price fluctuation risk is cleared on the basis of Mark to Market. The additional and special margin is demanded whenever felt necessary in consideration the volatility and price movement. The trading terminal of MCX or any other commodity market will provide you the necessary information about the opening, high or low prices besides the expiry month, symbol, unit, volume, open interest etc. the volume here would mean the number of contract executed and Open Interest would mean the number of future contracts that are not closed out on a particular day simply stated the contracts are still outstanding.

Price Discovery:

Pricing of future contracts are directly related to the spot price and expected future price of an underlying asset, which here means a commodity. Simply stated the change in spot price will lead the change in gain or loss of future contracts in the same direction. The gain or loss in future contracts will always be linear. The emergence of commodity derivatives has reduced transaction cost as well as enabled risk free trading for producer, investor, and commodity trader and benefited both market participants and non participants.

Evolution of Commodity Futures

Commodity markets have existed for centuries around the world. Cash transactions were most common but sometimes forward agreements were also made, for example forward agreements related to rice markets in seventeenth century in Japan; however most scholars agree that forward agreements date back much further in time. Forward agreements gradually gave way to futures contracts when the first organized grain futures trading in U.S. began in places such as New York city and Buffalo city. Development of modern futures began in Chicago in 1840s. The city was a natural hub for trade, but the trading that took place was inefficient and unorganized until a group of Chicago based

businessmen formed the Board of Trade in the city of Chicago in 1848. As trading of forward contracts increased, the Board decided that standardizing these contracts would streamline the trading and delivery processes. These standardized forward contracts are essentially the first modern futures contracts. The usefulness of futures trading began apparent and a number of futures exchanges came up in the country, the first one being Chicago Mercantile Exchange (CME) in 1919. Led by the innovative thinking of CME, the futures industry has expanded phenomenally to meet the risk management needs of our complex society.

The City UK (independent membership body, established in June 2010, promoting the UK financial and related professional services industry) estimates that commodities trading on exchanges increased by around a fifth in 2010 to over 2,500 million contracts. This follows a 19% increase in the previous year. Most of the growth in trading in these two years was in non-precious metals and agriculture contracts. Worldwide, there are around 50 major commodity exchanges that trade in more than 90 commodities. China and India have gained in importance in recent years with their emergence as significant commodities consumers and producers, though the market capitalization of Indian Exchanges has fallen considerably in 2011 due to foreign exchange variation Developments are taking place both at the national and international front for improvements of commodity futures market. At the International front The Task Force on Commodity Futures Markets (Task Force) was formed in September 2008 by the Technical Committee of IOSCO(International Organization of Securities Commissions) responding to calls for an examination of the functioning of certain commodity futures markets from the G8 Finance Ministers in 2008. It was decided that the scope of the Task Force should go beyond oil to include other commodity derivatives such as agricultural-based contracts. Task Force recommended that work on commodities markets be placed on a permanent basis within IOSCO. This will include making new recommendations for further work which is likely to lead to proposals to improve market transparency, anti-market abuse treatment for other commodities markets, where necessary. The Task Force noted that there had been a range of further studies in the intervening period and that many of these supported the view of the academic literature reviewed in the March 2009 which assessed contemporary research into the causes of observed price volatility, and did not find any conclusive evidence of systematic influence from speculative activity. However, the Task Force acknowledged that commodity futures markets can experience periods of significant volatility and that improvements should be made to the functioning of these markets.

At national level the Government of India's Working Group on Agricultural Marketing Infrastructure and Policy Required for Internal & External Trade for Eleventh Five-Year Plan (2007-12) saw an important role for commodity futures exchanges as delivering price discovery & risk mitigation for farmers, with emphasis on the development of electronic spot exchanges as a mechanism for further extending these benefits.

New Developments in Commodity Futures Market:

At present 113 commodities being regulated under the section 15 of the FC9R) Act 1952, which are traded on 5 National and 16 Regional commodity exchanges. During the year 2014-15 the share of major commodities in the trading activity was as follows:

Bullion 56%

Energy Products 16%

Base Metals 16%

Agricultural Commodities 12%

Share of different commodity exchanges to the total volume traded of commodities during 2014-15

Exchange	Value of trade (in Cr.)	% Share
MCX, Mumbai	15597095.47	86.05%
NCDEX, Mumbai	1810210.1	9.99%
NMCX, Ahmadabad	268350.95	1.48%
ICEX, Mumbai	258105.67	1.42%
ACE, Ahmadabad	138654.61	0.76%
Others	53687	0.30%

Evolution of Commodity Prices (January 2010- May 2015)

Month	Price	Change	Month	Price	Change
Jan-10	146.12	3.70%	Jan-11	182.13	4.13%
Feb-10	142.43	-2.53%	Feb-11	190.04	4.34%
Mar-10	148.9	4.54%	Mar-11	199.61	5.04%
Apr-10	158.01	6.12%	Apr-11	210.09	5.25%
May-10	146.61	-7.21%	May-11	199.53	-5.03%
Jun-10	143.49	-2.13%	Jun-11	196	-1.77%
Jul-10	144.05	0.39%	Jul-11	198.95	1.51%
Aug-10	148.45	3.05%	Aug-11	190.51	-4.24%
Sep-10	150.28	1.23%	Sep-11	188.72	-0.94%
Oct-10	159.55	6.17%	Oct-11	182.87	-3.10%
Nov-10	164.9	3.35%	Nov-11	186.38	1.92%
Dec-10	174.9	6.06%	Dec-11	184.04	-1.26%

Evolution Of Commodity Prices (January 2012- May 2013)

Month	Price	Change	Month	Price	Change
Jan-12	188.4	2.37%	Jan-13	187.55	2.78%
Feb-12	195.87	3.96%	Feb-13	190.65	1.65%
Mar-12	201.81	3.03%	Mar-13	183.73	-3.63%
Apr-12	197.53	-2.12%	Apr-13	179	-2.57%
May-12	185.14	-6.27%	May-13	179.4	0.22%
Jun-12	169.95	-8.20%	Jun-13	179.17	-0.13%
Jul-12	177.9	4.68%	Jul-13	183.55	2.44%
Aug-12	185.46	4.25%	Aug-13	185.66	1.15%
Sep-12	186.9	0.78%	Sep-13	185.06	-0.32%
Oct-12	183.11	-2.03%	Oct-13	182.36	-1.46%
Nov-12	180.59	-1.38%	Nov-13	179.65	-1.49%
Dec-12	182.48	1.05%	Dec-13	184.27	2.57%

Evolution Of Commodity Prices (January 2014- May 2015)

Month	Price	Change	Month	Price	Change
Jan-14	180.03	-2.30%	Jan-15	114.8	-12.28%
Feb-14	183.18	1.75%	Feb-15	120.88	5.30%
Mar-14	183.06	-0.07%	Mar-15	117.07	-3.15%
Apr-14	184.61	0.85%	Apr-15	119.57	2.14%
May-14	184.27	-0.18%	May-15	124.84	4.41%
Jun-14	185.16	0.48%	Jun-15	122.88	-1.57%
Jul-14	181.28	-2.10%	Jul-15	114.79	-6.58%
Aug-14	175.21	-3.35%	Aug-15	104.24	-9.19%
Sep-14	168.43	-3.87%	Sep-15	103.48	-0.73%
Oct-14	157.53	-6.47%	Oct-15	103.47	-0.01%
Nov-14	148.41	-5.79%	Nov-15	97.56	-5.71%
Dec-14	130.87	-11.82%	Dec-15	90.67	-7.06%

Jan 2010 - Dec 2015: 48.110 (78.51 %)

73 Index Number Description: Commodity Price Index, 2015 = 100, includes both Fuel and Non-Fuel Price Indices.

Unit: Index Number Source: International Monetary Fund

Benefits of commodity futures market:

The primary benefit of commodity futures market is that they provide hedging against price risk. Hedging is the practice of offsetting the price risk in a cash market position by taking an equal and opposite position in the futures market. By taking a position in the futures market that is opposite to that held in the spot market, the producer can offset the losses in the latter with the gains in the former. Hedgers use the futures market to mitigate their price risk while speculators seek to profit from the price movements in the market and in doing so they provide much needed liquidity to the market.

Another important function of futures market is price discovery. Price signals are essential for the firms to take their production & marketing decisions. Price discovery is the process of buyers and sellers arriving at a transaction price for a given commodity. It also implies how information is produced and transmitted across markets and whether these transmitted prices can be used as a reference price for the trading needs. Proper price discovery can help farmers and traders in avoiding price slumps in the post harvest period and also help consumers in coping with price volatility. If new information is reflected first in futures prices, the futures markets are said to perform the price discovery function efficiently.

Futures markets also provide support for credit needs to small producers. The collateral value of inventory is enhanced if it is hedged, enabling firms to borrow on better terms

Conclusion:

In its history of commodity derivatives, commodity futures market has witnessed several developments since 2003. There has been tremendous growth in commodity futures market in terms of volume of trade, number of products on offer participants and technology. The growth of commodity market is remarkable during last decade. Prices of all commodities are heading northwards due to rapid increase in demand for commodities. Developing countries like China are voraciously consuming the commodities. That's why globally commodity market is bigger than the stock 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, coffee etc. are being traded. It is important to develop a vibrant, active and liquid commodity market. This would help investors hedge their commodity risk, take speculative positions in commodities and exploit arbitrage opportunities in the market. Value of contracts traded in commodity market represents the demand for trading and the people awareness regarding market .The inverse relation of commodity market with stock market shows the alterative ahead investors whenever the feel bearish trend in the same.

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