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Title

INDIAN COMMODITY MARKET:

GROWTH AND PROSPECTS

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Abstract:

It is to be rightly said that India is a commodity based economy since more than 70 % of the total population is engaged in primary sector directly or indirectly. Major industries of the economy like sugar, textile, metal, energy etc. are based on various commodities. So, far the financial returns are concerned, this sector has also become a good spot for booking good returns comparatively besides hedging against the inflation, since the returns in precious metals segments can be observed more than that of in equity and debt markets as are negatively correlated. After gaining the considerable popularity, the major commodity exchanges in India had started the future contracts in various commodities years 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.

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.

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, mustered 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.

Literature review:

Though we have found very little literature available on commodity derivatives specially, even the papers pertaining to the contribution on given topic is mentioned here. J.N. Dhankar (2007) has evaluated that commodity exchanges in India are steadily gaining popularity and provides an understanding on how commodity exchanges can mitigate trading risk. He correlates the relationship between spot price and futures prices in commodity market in the entire risk management process. The coefficient of correlation between spot and futures prices of 11 commodities at MCX and 6 commodities at NCDEX has been found of high degree. Sumit Gupta (2008) explains the economic functions of the commodity futures market, regulations of the commodity derivative market and the present scheme of regulation in Indian commodity derivatives market and the economic functions of the commodity futures market includes market creation by entering into futures contract. The regulation of commodity market is required to ensure that market efficiently performs the twin economic functions of price discovery and price risk management to properly integrate spot and futures prices, to provide protection against risk of volatility in prices. Pravakar sahoo 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. Narender L. Ahuja (2006) has analyzed that the Indian economy is witnessing a mini revolution in commodity derivatives and risk management. Until 2002 commodity derivatives market was virtually non-existent, except some negligible activity on an OTC basis. Now in september2005, the country has 3 national level electronic exchanges and 21 regional exchanges for trading commodity derivatives. This paper analyses questions such as: how did India pull it off in such a short time since 2002? Is this progress sustainable and what are the obstacles that need urgent attention if the market is to realize its full potential? Why are commodity derivatives important and what could other emerging economies learn from the Indian mistakes and experience? The policy changes favoring commodity derivatives were also facilitated by the enhanced role assigned to free market forces under the new liberalization policy of the Government. The commodities derivatives market has seen ups and downs, but seem to have finally arrived now. The market has made enormous progress in terms of technology, transparency and the trading activity. Interestingly, this has happened only after the Government protection was removed from a number of commodities, and market forces were allowed to play their role.

Objectives:

The paper fulfills the following objectives.

- To study the growth of commodity market in terms of traded contracts since 2003.
- To evaluate the commodity market prospects in terms of other economic factors.
- To impart a knowledge of commodity future as Risk Management tool.

Methodology:

The required data related to six major commodities have been taken from MCX one of the leading commodity exchange in India. The study is confined to growth of the commodity market from 2003 to 2010, the period have been taken deliberately because the contracts in major commodities have been started during this period. Moreover, the impact of recession on secondary market has also been studied in relation to the trend of commodity market. The percentage share in specific segment for the selected commodities has been evaluated to study the weight of commodities taken. BSE-SENSEX, the major barometer of financial market is taken on average basis to compare the relations

Leading commodity markets of India:

The government has now allowed national commodity exchanges, similar to the BSE & NSE, to come up and let them deal in commodity derivatives in an electronic trading environment. These exchanges are expected to offer a nation-wide anonymous, order driven screen based system for trading. The Forward Markets Commission (FMC) regulates these exchanges. Major commodity exchanges in India are namely:

MCX (Multi commodity exchange) located at Mumbai, NCDEX (National commodity and derivatives exchange ltd) located at Mumbai. NMCE (National multi commodity exchange ltd) located at Ahmadabad NBOT (National board of trade) located at Indore.

Segments in Commodities market:

The commodities market exits in two distinct forms namely the Over the Counter (OTC) market and the Exchange based market. Also, as in equities, there exists the spot and the derivatives segment. The spot markets are essentially over the counter markets and the participation is restricted to people who are involved with that commodity say the farmer, processor, wholesaler etc. Derivative trading takes place through exchange-based markets with standardized contracts, settlements etc. In the spot trade one pays cash and carries the goods. Whereas in future market a person can buy or sale a commodity future on an exchange based on his expectation of where the price will go, wherein the buyer or seller either closes (square off) his account or give/take delivery of the commodity. The broker maintains an account of all dealing parties in which the daily profit or loss due to changes in the futures price is recorded.

Traded contracts in different commodities since 2003:

A large number of commodities are available in the market for trading, but it is not possible to take each and every for study purpose. So for the sake of convenience and to make the study more meaningful, we have taken selective commodities i.e. Gold and Silver From precious metal, Cooper from non-precious metal, Crude oil from energy segment, cotton & mustard seed from agricultural products. The following table will present a comprehensive picture of contracts being traded in these commodities over the study period.

Contracts traded in various segments of MCX from 2003:

year	Contracts traded (All)	Precious metal		Non-prec. Metal	energy	Agricultural product	
		Gold	Silver	Copper	Crude oil	Cotton	Mustard seed
2003	5176	3802	122	Nil	Nil	Nil	Nil
2004	2621019	724236	1583732	4151	Nil	422	678
2005	20349975	2773381	6481449	186921	5157811	5489	3826
2006	45635534	11988919	12496828	5293964	4466538	5136	17073
2007	68945925	10366705	15441649	15375506	13938813	2722	Nil
2008	94310537	26001228	23886120	14277796	20507001	Nil	Nil
2009	161173737	30423657	28510224	29602264	4109281	10118	Nil
2010	197206801	31581365	37766114	31341022	41537053	Nil	Nil

Source: www.mcxindia.com

As is clearly indicated from the table that the commodity market is gaining its importance very significantly during the study period. During 2003, the numbers of traded contracts were 5176 (in lot) and within one year it increased up to 2621019. An increasing trend is being observed during the study period except year 2005. The main reason of this drastic increase after 2004 is starting the contracts trading in crude oil. The tremendous jump in contracts traded from Gold and crude oil segment can be observed in the period. So far the Precious metal segment is concerned; in 2003 the traded contracts in gold were 3802 while the numbers were just 122 in silver contracts. But in the following year i.e. 2004, the numbers of contracts in silver were found very high in terms of percentage increased from preceding year. Trading in cooper, cotton and in mustard seed were started during 2004 with the number of 4151,422 and 678 traded contracts respectively. No contracts have been traded in mustard seed from 2007.

Share of selected commodity from its respective segment:

The selective commodities have been taken from the respective segment, so as to make the study precise. The percentage share of particular commodity has been taken from the total contacts traded in respective segment. For e.g. Gold and silver is taken from precious metal, whereas cooper from non-precious metal. The following table will present the comprehensive picture of the same.

Percentage share in particular segment

Year	gold	Silver	Copper	Crude oil	Cotton	Mustard seed
2003	97	3	Nil	Nil	Nil	Nil
2004	31	69	57	nil	.13	.22
2005	30	70	79	98	.09	.06
2006	49	51	86	67	.06	.20

2007	40	60	68	89	.05	Nil
2008	52	48	67	96	Nil	Nil
2009	52	48	62	80	.4	Nil
2010	46	54	44	79	Nil	Nil

Source: www.mcxindia.com

The analysis of above table revels that except agricultural commodities i.e. cotton and mustard seed all other commodities have a significant share in its respective segment. During 2003, 97% of contracts in precious metal segment were made for gold, but thereafter silver contracts have shown a remarkable growth so far the percentage share is concerned. Cooper in its segment also having good place up to 2008, but the share of aluminum and zinc contract has increased. Likewise the share of contracts traded in crude oil in energy is largest followed by ATF and Natural Gas. The share of agricultural products is less due to large number of commodities under the particular segment.

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 Market

Year	TRADED CONTRACTS(in lots)	BSE-SENSEX (average)
2003	5176	4412.60
2004	2621019	5422.32
2005	20349975	7756.15
2006	45635534	11417.15
2007	68945925	16407.10
2008	94310537	14452.08
2009	161173737	12789.07
2010	197206801	18380.31

Source: www.bseindia.com

It can be analyzed that during the year 2003 traded contract in commodity market were 5176 and at that time sensex was at 4412.60 so it shows that there were less trading in commodity market during the initial period of study it means at that time period investor likes to invest in financial market competitively. In 2004 contracts traded in commodity market rise to 2621019 and the sensex also increases up to 5422.32 hence it can be traced as the starting of investment interest in commodity market as government of India had removed various restrictions on specific commodities to be traded. In 2006 sensex rises to 11417.15 and at that time contracts traded in commodity market was 45635534 which is being observed as very high, this shows that trading in commodity market increases day by day, it is because of investors wanted hedge against the price fluctuation in specific commodities that time to avoid the risk, because at that time the fluctuation in the prices of specific commodity was very high. Moreover, one of the reasons is increased knowledge of investors so far investment perspective in commodities is concerned. In 2010 sensex rises to 18380.31 and traded contracts in commodity market were 197206801. As is indicated in the table that the sensex went down during 2008 and 2009 from the preceding level, but on the other hand the trend in commodity market remain increasing in the same period. This part of the study period shows negative relation in the concerned markets means people prefer to go commodity market when they feel any corrections or crises in financial market.

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 latter 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.

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.

Conclusion:

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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