A STUDY ON EXISTING LITERATURE OF COMMODITY MARKET

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ABSTRACT

India, a commodity based economy where two-third of the one billion population depends on agricultural commodities, surprisingly has an under developed commodity and commodity futures market. This is so because the trades in the commodity futures market were banned for almost four decades in India. There must be reasons for and against such ban but one thing it has done is to paralyze the research and knowledge creation in the domain and more so in the Indian context. The proposed research paper is conceived with an idea to understand the importance of commodity derivatives and learn about the market from Indian point of view. In fact it was one of the most vibrant markets till early 70s. Its development and growth was shunted due to numerous restrictions earlier. Now, with most of these restrictions being removed, there is tremendous potential for growth of this market in the country

The survey of the existing literature reveals that no specific work has been carried out to examine the relation between various economic parameters and future price of commodities traded. The present study is an attempt in this direction. The present studies outline theoretical literature the commodity futures market in India. The review of the past studies in the research means to note the observations, search and many more things done in the past regarding the question in the hand. The review of the earlier studies here is attempted chronologically in order to get a comprehensive picture. Abundance literature on commodity market in general gives theoretical explanation for the emergence of commodity futures market.

Keywords: Commodity market, Commodity Exchanges, Speculation, Forward Market Commission, Commodity Futures.

Introduction:

India is one of the top producers of a large number of commodities ranging from agricultural to non-agricultural products, with a long history in its trading market. These markets have been experiencing ups and downs since its inception, but with strengthening of the working our country has been able to bring a degree of stability to commodity market. It has been progressing in terms of technology, transparency and trading activity with the removal of government protection from a number of commodities. This action of our government has thus, allowed the market forces i.e. supply and demand, to rule the commodity.

The present paper is an attempt to represent the gist of research literature available on the topic, which gives a direction for further growth of the research topic. Research has been done to have a systematic review of both national and international studies done in the relevant area. There are several studies that examine the market efficiency and price forecasting, especially in developed countries. However, relatively very few studies exist on commodity market efficiency in under developed and agriculturally dominant countries like India.

Chronological review of the existing research works & Literature:

- *Samuelson (1965)* in his research paper "Proof that properly anticipated prices fluctuate randomly" analyzed the role of futures prices as predictor of future spot prices for a given contract and found that it follows a martingale; in other words, today's futures prices are the best unbiased predictor of tomorrow's futures prices. However, *J P Danthine and R E Lucas (1978)* both researched on "Information, Futures Prices and Stabilizing Speculation" "Asset Prices in an Exchange economy"and have shown theoretically that periodical failure of the martingale property to hold is not evidence ofthe market inefficiency. *Danthine (1978)* first criticized Samuelson's (1965) argument that spot commodity prices may not follow a sub-martingale if they vary with such factors as the weather, which may be serially correlated. He went on to develop possible reasons why the link between amartingale process and efficiency in commodity markets could be problematic.
- *G.C.Rausser and C.Carter (1983)* in their research examined the efficiency of the soybean, soybean oil, and soybean meal futures markets using semi strong form test via structurally based ARIMA models. They emphasized that "unless the forecast information from the models is sufficient to provide profitable trades, then superior forecasting performance in a statistical sense has no economic significance".
- *William G.Tomek (1997)* in his research paper "Futures Trading and Market Information Some New Evidence" stressed that if the futures market is efficient, then it should be able to forecast an econometric model. The development of co-integration theory by *Engle and Granger (1987)*in their study provided a new technique for testing market efficiency. *Aulton, Ennew, and Rayner (1997), Crowder and Hamed (1993), Fortenberry and Zapata (1993), Chowdhury(1991), Mckenzie and Holt (2002)* and many others accepted and used co-integration theory for testing market efficiency.
- *Gopal Naik and Sudhir Kumar (2002)* in their research paper "Efficiency and Unbiasedness of Indian Commodity Futures Markets" emphasized that agricultural commodity futures market has not fully developed as competent mechanism of price discoveryand risk management. The study found some aspects to blame for deficient market such as poormanagement, infrastructure and logistics. Dominance of spectators also dejects hedgers to participate in the market.
- *Narender L Ahuja (2006)* in his research on "Commodity Derivatives market in India: Development, Regulation and Future Prospective", concluded that Indian commodity market has madeenormous progress since 2003 with increased number of modern commodity exchanges, transparency and trading activity. The volume and value of commodity trade has shown unpredicted mark. This had happened due to the role played by market forces and the active encouragement of Government by changing the policy concerning commodity derivative. He suggested the promotion of barrier free trading in the future market and freedom of market forces to determine the price.
- *Kamal Nayan Kabra (2007)* in his research "Commodity Futures in India", concluded that in short span of time, the commodity futures market has achieved exponential growth in turnover. He found

various factors that need to be consider for making commodity market as an efficient instrument for risk management and price discovery and suggested that policy makers should consider specific affairs related with agricultural commodities marketing, export and processing and the interests involved in their actual production.

- *K. Lakshmi (2007)* in her research paper on "Institutional Investors in Indian Commodity Derivative Market-Prospective for the Futures"discussed the implications on the grant of permission to Foreign Institutional Investors, Mutual Funds and banks in commodity derivative markets. She found that participation of these institutions may boost the liquidity and volume of trade in commodity market and they could get more opportunities for their portfolio diversification.
- *Mukhopadhyay, Arup Ranjan, Pradhan, Biswabrata, and Gupta, Abhijit(2008)* in their research paper "Developing an Index for Trading Through Multi Commodity Exchange in India", researched to facilitate business development and to create market awareness, and conducted an index named MCX COMAX for different commodities viz. agricultural, metal and energy traded on Multi Commodity Exchangein India. By using weighted geometric mean of the price relatives as the index, weights were selected on the basis of percentage contribution of contracts and value of physical market. With weighted arithmetic mean of group indices the combined index had been calculated. It served thepurpose of Multi Commodity Exchange to make association among between various MCX members and their associates along with creation of fair competitive environment. Commodity trading market had considered this index as an ideal investment tool for the protection of risk of both buyers and sellers.
- *Swami Prakash Srivastava and Bhawana Saini (2009)* in their research paper "Commodity Futures Markets and its Role in Indian Economy"discussed that with the elimination of ban from commodities, Indian futures market has achieved sizeable growth. Commodity futures market proves to be the efficient market at the world level in terms of price risk management and price discovery. Study found a high potential for future growth of Indian commodity futuresmarket as India is one of the top producers of agricultural commodities.
- *Gurbandani Kaur and D.N Rao (2010),* under the research done by them titled " Efficiency of Indian Commodities Market: A Study of Agricultural Commodity Derivatives Traded on NCDEX have tested the market efficiency of agricultural commodities traded on National Commodity Derivative Exchange of India and pointed out that Indian commodity derivative market has witnessed phenomenal growth in few years by achieving almost 50 time expansion inmarket. By applying auto correlation and run tests on four commodities namely-Guar seed, Pepper, Malbar, refined Soya oil and Chana (Gram) the study observed the random walkhypothesis and tested the week form efficiency of these commodities. Indian agricultural commodity market is efficient inweek form of efficient market hypothesis.
- *Dharmbeer and Mr. Barinder Singh (2011)* in their research on "Indian Commodity Market: Growth and Prospects" summarizes theoretical and empirical research on the growth and prospects of emerging commodity markets and the resulting implication on policy and regulation. They foundfrom the previous studies that derivatives markets have supported the hedging role of emerging derivatives markets.All commodities are globally traded and the global demand-supply situation is widely known and availableto anyone who reaches out for it. The commodity markets are nowhere as volatile as stock futures. Since commodity exchanges promote price transparency, he refuses to buy the story that commodity exchange fuel inflation.
- *Meenakshi Malhotra (2012)* in her research paper "Commodities Derivatives Market in India: The Road Traveled and Challenges Ahead" examine that the commodity price very critical for the existence and growth of any industry and for the economy as a whole. Our government has brought about sweeping reforms in the commodities markets so that industry can efficiently manage the price risk they are faced with. They found the commodity price will continue to behave unpredictably. Risk management through commodity derivatives will give stability to the economic activities of the country.
- *Dr. G. Malyadriand B. Sudheer Kumar (2012)* in their research paper "A Study on Commodity Market" recalls that commodity derivatives arrived in India as early as 1875, barely about decade

after they arrived in Chicago. The commodity market in India has experience an unprecedented boom in terms of the number of modern exchanges, the numberof commodities allowed for derivative trading as well asthe values of futures trading in commodities. However there are several impediments to be overcome and issues to be settled for a sustained development of the market.

- *Mr. Sharma KRS (2013)* in his research paper "A Study of Commodity Futuresin India" perception towards commodities futures trading in India with special reference to commodity futures exchanges. The growth of commodity derivative market in the country has been impressive. With institutional players prevented from participating in the commodity futures market, the retail investors, as a group, have emerged as major players in the said market. They also add that commodity futures are positively correlated with inflation, unexpected inflation and change in expected inflation.
- *Harvindaer pal Kaur and Dr. Bimal Anjum (2013)* in his study titled "Commodity Derivatives Market in India"examined that the India is among the apex producers of a number of commodities and has a long history of tradingin commodity derivatives. Commodity market has occupied imperative position in Indian economy sincethe establishment of Forward Market Commission in April 2003. There are 5 national and 21 regional commodity exchanges recognized and regulated by this commission. They found commodity futures reform two vital functions of the economy i.e. price discovery and management. Futures markets provide liquidity and facilities to hedge against future price risk. It helps buyers and sellers of agricultural products to quickly managetheir trade at a fair price. Commodity trading also offers a chance for financial leverage to hedgers, speculators and other traders.
- *Dr. Sunitha Ravi (2013)* in her research paper studied the "Price Discovery and Volatility Spillover in Indian Commodity Futures Markets Using Selected Commodities". The results of the research study indicate that the future market of the commodities is more efficient as compared to spot market. The future market also helps spot market in the process of Price Discovery. She found that the derivative instruments are available for the underlying commodities significantly influence the volatility.
- *Sagar Suresh Dhole (2014)* in his research paper "Commodity Futures Market in India: The Legal Aspect and its Rationale" investigated the antiquity of commodity futures market in India epoch back to the ancient times citied in Kautialya's 'Arthasastra', and have been commodity heard in Indian markets for centuries, seems to be coined in 320 BC, referred in Forward Contracts (Regulation) Act, 1952. They found the markets have made enormous advancement 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. Rational Government policies and the plinth of effective laws have benefited in many ways like Credit accessibility, improved product quality, predictable pricing, Import-export competitiveness, and price risk management and price discovery.
- *Dr. S. Rajamohan, G. Hudson Arul Vethamanikamand C. Vijay kumar (2014)* in his study titled "Commodity Futures Market in India" examined that the commodity trading has a long history and it has been modernized in the market. The commodities trading are occupied an important place in the economy it depends on the international trade A structural system has been created for commodity trades. It is creating awareness and the more opportunity to the investors and public.They found the market volatility is based on these commodities performance. However the commodity market has provided huge support to the Indian economy.
- *Rohit Bansl, Varsha Dadhich and Naveed Ahmad (2014)* in his study titled "Indian Commodity Market-A Performance Review" investigated the Indian commodity markets have recently thrown open a new avenue for retail investor and traders to participate commodity derivatives. The study discusses the evolution and performance of the market, its present status and the future prospect. They found the different commodities (agriculture, metals, bullion, energy and other) show a positive trend in their volume and value of trade. The percentage share of agriculture commodity in total commodity market has been declined in the year 2010-11 but bullion shows an increasing trend along with metal and energy. It all shows that the market has strong growth potential.

Findings &Conclusion:

It is quite evident from the above systematic review of literature that there are varieties of Views about the efficiency of commodity derivatives market. On one hand authors have proved that commodity derivativesare effective hedging tools whereas on theother hand these instruments have also being blamed for increasing inflation in theeconomy. Volatile commodity prices have spawned a plethora of reports by government agencies, academics and researchers. From these efforts, it is clear that fundamental factors that affect the supply and demand of commodities are the key drivers. These factors include demographics, weather, trade flows, production quotas and export controls. Perceptions about the financialization of physical commodity markets are raising concerns about the impact of investments on commodity price changes and volatility. While financialization is a trendy concept, there is little evidence that supports theidea that it is unduly affecting commodity markets, as a number of research articles and papers have highlighted the same. Although speculation is often blamed forcausing problems in markets, the economic evidence shows that overall it is a necessary activity that makes markets more liquid and efficient. This, in turn, benefits hedgers, investors, and other market participants. Speculation increases market liquidity by reducing bid-offer spreads, by making it possible to transact more quickly at a given size, and by making markets more resilient. Without speculation, there would be fewer opportunities for other market participants, especially hedgers, to manage the risks they encounter in their financial activities. The existence of vibrant commodities market does have a sizable impact on prices in spot market. The research carried so far is inconclusive on the direction of such impact. There is an urgent need to see how the markets research moves from the level of traders to the grass roots i.e. farmers. The research on impact of commodity futures markets on WCPI also needs an impetus.

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