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Indian Commodity Markets: A Thematic Review of Existing Literature

K. Shree Jyothi¹ and D. Srinivasa Rao²

¹Research Scholar, KL University

²Professor, KL University

ABSTRACT

The commodity Derivative markets in India witnessed a phenomenal growth since liberalisation of commodity markets in the year 2000. This process was followed by setting up of the commodity exchanges leading the Indian commodity markets to be at par with the International Commodity markets. At present, the Indian commodity markets have an exhaustive list of commodities available for trading. The present study reviews the available literature and work done by various researchers on the commodity markets in India. The various themes on which the review has been done are origin and development, role of Exchanges, Regulatory mechanism, Performance of commodity market and Commodity Risk Management. The study aims at providing related information to the stakeholders of commodities market like investors, policy makers, and academicians.

Keywords: Commodities, Exchange, Derivatives, Commodity derivative market.

1. INTRODUCTION

Commodity markets are places where the buyers and sellers of commodities meet at one place. Trading in commodities is done through the exchanges at national and regional levels through the various financial instruments including Derivatives. Commodity exchange is a place where various commodities and derivatives are bought or sold. Indian commodity exchanges usually trade on commodity futures.

The commodity Derivative markets witnessed a phenomenal growth since the year 2000 resulting from the liberalisation of the commodity markets. This process was followed by setting up of the commodity exchanges leading the Indian commodity markets to be at par with the International Commodity markets. Currently, Indian commodity markets have an exhaustive list of commodities available for trading.

Commodity derivatives trading or future trading in India is regulated through a three tier regulatory structure i.e. the central government, Forward Markets Commission (FMC) and the recognized commodity exchanges. There are 6 National and 16 Regional commodity exchanges which are regulated by FMC.

The present study on the Indian commodity markets is organised in the following thematic sections:

- Origin and Development
- Regulatory Mechanism
- Commodity Exchanges
- Commodity Risk management
- Performance

2. RESEARCH GAP

Commodities market after 2000 has shown a remarkable boost which motivated the researchers for the study on the origin, growth and advancement. The existing review of literature in this area focussed on the exchanges in the Indian commodities market, and the performance of agricultural products. Hence, there is a need for a detailed thematic review of the existing literature to gain an understanding of various players in the market, current status, constraints and risks, regulatory bodies, future growth and opportunities. The study aims to be a ready reckoner for the investors to analyse and consider commodities as an alternative investment to equity and help academicians to conduct further research in this area and avoid redundancy. This study could also help the policy makers to make amendments which would facilitate the market to develop further.

3. OBJECTIVES OF THE STUDY

The present study aims to understand the current status of commodity markets in India with special focus on commodity derivatives. The study is done with major objectives as stated below:

- To study the origin and Development of Indian Commodity markets
- To study the role of regulatory mechanism in commodity trading
- To study the role of Exchanges in commodity markets
- To study the commodity risk management
- To study the performance of Indian commodity markets

4. RESEARCH METHODOLOGY

The present study is descriptive in nature and relating to commodity markets in India. Secondary data is collected from the books, articles, research and academic journals, newspaper articles, websites. Also, various reports and records issued and maintained by the Government of India are also used in the study.

5. THEMATIC ANALYSIS OF EXISTING LITERATURE

Origin and Development of Indian Commodity Markets

Vivek Rajvanshi (2015) in his paper “Commodity Futures Market in India”, explained the functioning of futures market and challenges of the futures market. The paper detailed the inception of commodities and their growth to become an alternative class of investment and heading towards financialization. Challenges along with the growth were focussed in the study. The study concludes that the Futures market dominates the spot market and the results suggest that inefficiencies in market led to increase in Basis Risk which can be reduced by hedging the commodity futures. The paper also suggests that commodity futures provide transparent price discovery for the traded commodities. Also, the market participants are concerned about the liquidity and higher transaction costs.

Bhaskar Goswami, Isita Mukherjee (2015) in the paper “How attractive is the Commodity Futures in India?” compared the return on commodity futures with common stocks, long term government bonds, treasury bills, rate of inflation and detailed that high returns are generally associated with high risk in line with the general theory of risk-return. The standard deviation on real rates of return of commodity futures are same as the standard deviation on nominal rates of return. Results suggest that though common stocks gave higher return but provided poor hedging during inflation.

S. Selvanathan, Dr. V. Manohar (2013) in the paper “Online Trading - An Insight to Commodities Trade with Special Reference to India” explained the online trading process and the related trends in India. It is concluded that online trading in India has not taken off in spite of the benefits which include low transaction costs, convenience, speed, boundary spanning, improved communication, and risk management. One of the reasons quoted for the same was the economic conditions of traders and the study also expects that online trading in commodities will improve with better economic conditions.

Shunmugam and Debojyoti Dey (2011) in the paper “Taking Stock of Commodity Derivatives and their Impact on the Indian Economy” attempted to give a comprehensive view of all the research studies on commodity derivatives market. The paper focussed mainly on the impact of spot markets and the eco system on the commodity derivatives market. It discussed that commodities have performed well in the markets and the benefits are reaped by various stakeholders. It is suggested that the next step would be institutional support to be given so that commodities can develop further. This could be in the form of allowing new products like options, indices and other intangibles which would attract the risk averse investors.

Sunanda Sen, Mahua Paul (2010) in the paper “Trading in India’s Commodity Future Markets” attempted to study the development of commodity futures market and the official policies on future trading. It is observed that future trading in agricultural products neither resulted in price discovery nor in less volatility in food prices. Also explained that future markets in commodities seem to provide new avenues of speculation to traders. The link between commodity futures and trading in financial markets had been explained.

Mantu Kumar Mahalik, Debashis Acharya and M. Suresh Babu (2009) in the paper “Price Discovery and Volatility Spillovers in Futures and Spot Commodity Markets: Some empirical Evidence from India” concluded that futures commodity markets play a dominant role in the price discovery of

spot markets but there is no co-integrating relationship between the spot and futures markets. The study proposed the government intervention in checking the dynamics of spot and future markets.

Golaka C Nathand Thulasamma Lingareddy (2008) in the paper “Commodity Derivative Market and its Impact on Spot Market” studied the impact of futures trading in three commodities which were banned by government to understand if seasonal/cyclical fluctuations in these commodities prices have been affected by the introduction of futures in those commodities. Results show that the futures trading has not helped in reducing the seasonal/cyclical fluctuations in prices.

Sushimita Bose (2008) in the paper “Commodity Futures Market in India-A Study of Trends in the Notional Multi-Commodity Indices” attempted to understand the information flows between futures and spot prices in the commodity derivatives market. The timing and strength of commodity futures markets was also elaborated. It concluded that efficient commodity markets have immense potential for contributing to price stability and economic development of the country.

Regulatory Mechanism

Dr. Shree Bhagwat, Angad Singh Maravi (2015) in the paper “The Role of Forward Markets Commission in Indian Commodity Markets” examined the role of Forward Markets Commission. The study included functions, powers and limitations of Forward Markets Commission and the different types of commodities regulated by FMC and the exchanges present in India are detailed. Results showed important developments of Forward Markets Commission and the need for further improvement is explained. The future plans to be taken by government for improvement in FMC are also mentioned.

K.G. Sahadevan (2012) in the paper “Commodity Futures and Regulation- A Vibrant Market Looking for Powerful Regulator” elucidated that the present legal and institutional framework is inadequate for the effective regulation of fast growing commodity markets in India. Results explain that an active regulator is indispensable in the formative stage of markets, particularly to ensure they have the best practices and procedures for trading, margining, clearing, market monitoring and surveillance, risk control, settlement and delivery. It is stated that regulator can act as the line of defence against manipulation.

S. Poornima, Deepthy (2015) in the paper “Commodity Market in India” discussed about the status of commodity market in India. The paper focussed on the SEBI-FMC merger and studied its impact on future growth prospects and challenges. The merger was aimed at streamlining the regulations and curb wild speculations in commodity.

Commodity Exchanges

Dr. Shree Bhagwat, Angad Singh Maravi (2016) in the paper “A Study of Commodity Market v/s Multi Commodity Exchange of India Limited (MCX)” explained the performance of MCX in Commodity market. It detailed that from September 28, 2015 followed by the merger of FMC and SEBI, MCX is being regulated by the Securities and Exchange Board of India (SEBI). MCX is the largest commodity exchange in India offering more than 55 commodities contracts across various segments. The Multi Commodity Exchange of India Limited is the world’s largest exchange in Silver, the second largest in Gold, Copper and Natural Gas and the third largest in Crude Oil futures. MCX is the most efficient and cost-effective platform for price discovery and price-risk management in India’s commodity market.

Dr. Shree Bhagwat, Angad Singh Maravi (2015) in the paper “Commodity Exchanges in Commodity Markets of India: An Analytical Study of National Commodity Exchanges” traced the evolution path and gave the organisation structure of Indian Commodity exchanges. The study evaluated the growth, present status and policy alternatives of Indian commodity exchanges. They also analysed the 6 national commodity exchanges and the results show that MCX is the No. 1 commodity exchange in India.

Ms. M. Venkateswari, Dr. G. Ravindran (2014) in the paper “Commodity Derivatives Exchanges in India: A Study of Select Exchanges” analysed the trend and progress of the commodity national exchanges MCX and NCDEX. The performance of these exchanges is evaluated. The criteria for performance is number of contracts, volume traded and value of the commodities traded and awareness programs conducted. The CAGR of both the exchanges is high and the number of awareness programs conducted for farmers is more than the programs conducted for non-farmers.

Commodity Risk Management

E. Kalaivani, Dr. A. Lakshmi (2015) in the paper, “An Overview of the Commodity Risk Management to the Business Process” studied the impact of commodity risk on business process. It discussed the Commodity Risk Management (CRM), categories of the commodity, and types of commodity risk, commodity and foreign exchange risk. The business’s financial performance or position will be adversely affected by fluctuations in the prices of commodities. Consumers of commodities such as airlines, transport companies, clothing manufacturers and food manufacturers are primarily exposed to rising prices, which will increase the cost of the commodities they purchase.

Nidhi Aggarwal, Sargam Jain and Susan Thomas (2014) in the paper “Do futures markets help in price discovery and risk management for commodities in India?” examined the price discovery and hedging effectiveness of commodity futures. They concluded that while the commodity future markets were reformed so that futures markets could be substituted for commodity price risk management through price controls by the government, government interventions are the most significant barrier to futures providing good hedging effectiveness against commodity price risk.

Golaka C. Nathand T. Lingareddy (2007) in the paper “Commodity derivatives contributing for rise or fall in risk” studied the impact of introduction of future trading on spot prices of commodities. The study found that volatilities of urad gram and wheat prices were higher during the period of futures trading than that in the period prior to introduction as well as after the ban of futures contracts.

Performance of Commodity Markets

Bhaskar Goswami, Isita Mukherjee (2015) in the paper “Risk-Return Analysis of Different Commodity Futures in Indian Derivative Market” made a comparative analysis of risk-return on different groups of commodity future and groups of commodity futures. The groups of commodities are agricultural commodity futures, metals, energy and oil and oil related commodity futures. They attempted to study the performance of these futures in the presence of risk-free assets and inflation. Study confirmed the general theory of risk-return. The result suggested that oil & oil related products gave the highest return among all commodity futures but proves to be an ineffective hedge against the inflationary pressure.

Angad Singh Maravi (2015) in the paper “Performance Analysis of Indian Agricultural Commodity Market” investigated the performance of agricultural commodities and concluded that there is positive

growth in the agricultural commodity market. They also suggested that all the agricultural commodities should be traded in the exchanges as agricultural sector plays a key role in the economy to provide food security to the trillions of people.

Dr. Irfan ulhaq, Dr. K. Chandrasekhara Rao (2014) in the paper “Efficiency of Commodity Markets: A Study of Indian Agricultural Commodities” studied the efficiency of Indian agricultural commodities futures market through the uses of time series methodologies. Results show that the markets for all the ten commodities included in the study are efficient in long run but short run inefficiencies and pricing biases exist which can be attributed to dynamic lag structure and slow adjustment to long run equilibrium.

Annual Report 2013-14, Ministry of Agriculture, Government of India “Future Trading and Spot Market Volatility: Evidence of Select agricultural Commodity from Multi Commodity Exchange of India” focussed on the impact of future trading activity on price volatility. Five (5) commodities data, for a period of 10 years, was taken from MCX and analysed for price volatility. The study concluded that for most of the agricultural commodities past conditional variance has greater impact on volatility of spot returns than recent news announcements.

Prof. Sanjay Sehgal, Dr. Namita Rajput, Mr Rajeev Kumar Dua (2012) in the paper “Futures Trading and Spot Market Volatility: Evidence from Indian Commodity Markets” examined, empirically, the effect of futures trading activity on spot price volatility for seven agricultural commodities. Results show that futures and spot markets are interlinked and any information shock should affect both the markets. Paper suggested that in most of the commodities the unexpected futures trading volume causes spot price volatility.

Sandeep Sehrawat (2015) in the paper “Impact of Futures Contract on Agricultural Commodity Prices: An Indian Perspective” studied the role and significance of Indian commodity market on the efficient functioning. The benefits of futures market on investors, producers, consumers and companies has been explained and concluded that commodity market structure needs to be strengthened instead of restricting the commodity futures market.

Gouri Prava Samal, Dr. Anil Kumar Swain, Minakshi (2015) in the paper “Dynamic Relationship between Spot and Futures Prices of Turmeric - Evidence from National Commodity and Derivatives Exchange Ltd. (NCDEX)” studied the area, production, productivity and export trends of turmeric in India. The relationship between the spot and future prices was studied and results show that futures markets dominate the spot markets. The strong flow of information from futures market to spot market in turmeric and futures prices help in discovering the prices in spot markets.

Rijukoruth and J. Mohamed Zeyavudheen (2015) in the paper “A Review of Agricultural Commodity Financialisation in India” studied the growth, performance and financialisation of commodity derivative market. The paper studied the growth in agricultural commodity financialisation in India and its influence on the price movements. They also discovered the relationship between the future prices and spot prices and suggested that commodity markets in India needs government intervention in every aspect.

6. CONCLUSION

Indian economy has witnessed a phenomenal growth in the commodity market in the decade. The thematic study makes it clear that commodity market has played two important roles i.e. price discovery and risk

management. Research indicates that the market participants are worried about the transaction costs and liquidity. Efficient commodity markets have immense potential for contributing to price stability and economic development. Commodity futures markets play a dominant role in the price discovery of spot markets but there seems to be no co-integrating relationship between the spot and futures markets. It is suggested for government intervention in checking the dynamics of spot and future markets. It is stated that regulator can act as the line of defence against manipulation. The merger of SEBI and FMC was aimed at streamlining the regulations and curb wild speculations in commodity. MCX is the most efficient and cost-effective platform for price discovery and price-risk management in India's commodity market. MCX is the leading commodity exchange in India. Commodity market structure can be strengthened instead of restricting the commodity futures market. The studies show that performance of businesses is adversely affected by price fluctuations in the commodities. Hence, management of the variability of prices or risk is very important. However, there seems to be inadequate research work done in understanding the risk perspectives of commodity markets. Thus there is an imperative need for research on risks associated with commodity markets in order to establish relationship between various factors and stake holders, to discover the mechanisms for overcoming these risks for effective returns from trading in the commodity markets.

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