

A Study On Performance of Multi Commodity Exchange of India Limited

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Abstract: The commodity derivative market is believed to exist in India for over 100 years. Over two decades, commodity futures have become a popular class for portfolio investors. At present, about five National Commodity Exchange are contributing towards the development of the market under the valve of the Securities and Exchange Board of India (SEBI). The commodity market in India facilitates these exchanges domestically and globally based on the requirements for the development of the economy. The leading Multi commodity exchange of India currently holds a market share of 92.6% as of September 2021-22, with 1,19,941 crores of daily turnover since inception and ranked as 7th position with 33% YOY change in commodity options and futures contracts traded in 2019 as recorded in World Federation of Exchanges. MCX is currently working towards the requirement of different market participants by providing innovative products and services. This research paper is an attempt to understand the development and performance of Multi commodity exchange since its inception.

Keywords: Commodity market, Commodity exchange, Multi commodity exchange.

1. Introduction

A commodity futures exchange is an electronic platform where sellers and buyers transact on derivative contracts in an organized way. These transactions are transparent bringing together many sellers and buyers from across the country who trade in a very transparent manner to arrive at an efficient price. These exchanges promote trade in 'standardized' quality products. Most commodity markets across the world trade in raw materials. The major participants in these markets are farmers, traders, exporters, processors etc. and investors. All these participants come to the exchange platform for managing the price risks that arise when one trades in the future.

The difference between a commodity exchange and a typical wholesale or terminal market is that exchange creates a transparent organized mechanism for arriving at an efficient price on the exchange platform; whereas, in a wholesale market the prices are negotiated between buyers and sellers. In India, the Securities and Exchange Board of India (SEBI) regulate all commodity derivative exchanges. In the derivatives market, volatility is associated with big signs in either direction. It plays an important role in commodity pricing, hedging, risk

management and optimal portfolio selection. Volatility is associated with uncertainty or risk in portfolio value. Higher volatility, higher portfolio value and lower volatility, lower the fluctuations in portfolio value even though it changes over time. The commodity market has been sophisticated every day. The future price depends on the availability of information. A small price change may have a large effect on trading. Hence, there are many analysts and researchers increasing interest in volatility in derivatives especially commodity markets.

2. Objectives of the Study

- To examine the development of Multi Commodity Exchange of India Limited.
- To analyse the performance of Multi Commodity Exchanges of Indian Limited.

3. Review of Literature

Golak Nath, Manoj Dalvi, Vardhana Pawaskar, Sahana Rajaram & Manoel Pacheco (2019) The effectiveness and price discovery in the Indian gold futures market are investigated in this research. To establish the direction of information flow between these markets, the link between domestic and international spot prices and gold futures prices is investigated. The microstructure of the market and the impact of different policy shifts on India's gold market are investigated. The futures and domestic spot markets have a long-run co-integrating connection. The daily price discovery occurs in the futures market, although not in the spot market, according to our findings. Futures are ineffective as a hedge against domestic spot prices. We used the relatively close gold futures contracts offered on the MCX, which are the most liquidity in terms of trading volumes, for our analysis. Trading that lasts longer than a month is considered illiquid and is therefore excluded from the analysis. The MCX spot price is thought to be indicative of domestic spot pricing, whereas the WGC spot price is thought to be representative of global market prices. For the analysis, the natural logarithm of all variables was used. The information was gathered from January 2008 to March 2018. The goal of this research was to investigate the microstructure of the Indian gold market as well as policy changes. Across numerous

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political regimes, the study experimentally checks for gold futures efficient markets and determines the direction of the flow of information between the spot and futures markets.

Kirithiga, S. Naresh, G, Thiyagarajan, S (2018) Investing in gold and silver has traditionally been thought to be a safer bet; yet, as risk concerns have increased in recent years, so has an interest in these bullion commodities. The price, return, and volatility criteria are frequently used to choose whether to invest in an asset. The unpredictability of any individual investment determines its risk. Exchange-traded derivatives can efficiently handle high volatility risks, and bullion futures contracts come in a variety of sizes to meet the needs of different bullion investors. The daily spot and futures prices of all available gold and silver contracts were gathered from the multi-commodity exchange (MCX) over ten years from 2006 to 2015 to investigate the influence of volatility in setting bullion prices. The errors made in modelling returns are measured by volatility, which may be recorded using methods like autoregressive conditional heteroskedasticity (ARCH) and generalised autoregressive conditional heteroskedasticity (GARCH). In all sizes of contracts for gold and silver, the analysis demonstrates that the previous day's return information effects today's return volatility. As a result, the study suggests that, while commodity spot prices collect information from futures prices, volatility data has little impact on the two.

Shashi Gupta, Himanshu Choudhary, D. R. Agarwal (2018) The purpose of this paper is to explore the long-term economic efficiency and price discovery in the Indian commodity futures market experimentally. Two agricultural commodities, two industrial commodities, two precious metals, and two energy commodities were used in the research. The spot and futures market time series are analyzed using advanced statistical approaches such as restricted cointegration and the vector error correction model (VECM). The limited cointegration test indicates that all commodity' near-month futures prices are co-integrated with spot prices, but that futures prices are ineffective at predicting future spot prices. The null hypothesis of effectiveness and unbiasedness is rejected for all eight commodity markets in the Indian commodity futures market, which is evidenced as the low volatility market (Kumar & Pandey, 2013, *Journal of Indian Business Research*, 5(2), 101–121). This confirms the result of Fortenbery and Zapata. Short-term inefficiencies and bias are confirmed by the statistically significant value of prior spot and futures prices. Commodity futures are the most essential indication of commodity price changes, according to the considerable value of the error correction term (ECT) of futures prices.

Sushimita Bose (2017) Given the large volumes of commodity futures trading and their involvement in the portfolios of a wide range of investors, commodity futures are treated here as a financial product comparable to equities futures. As a result, we look at the patterns in the inter-calculated by the two national multi-commodity exchanges. On these exchanges, futures contracts are exchanged electronically. This should be emphasized that Indian commodity/futures indexes are hypothetical indexes; unlike equity/futures indices, they are not (yet) exchange tradable. Each index, therefore, is

indicative of price fluctuations in the spot/futures market as a whole because it is derived using real-time prices of exchange traded commodities/futures. Our data sample includes the MCX's multi-commodity spot and futures indexes, as well as the NCDEX's agricultural commodities spot and futures indexes and global index values. The sample period is from June 2005 to September 2007. Adjusting the estimation to become robust to heteroscedasticity of the returns data is another type of improvement. Indian commodity/futures indices are notional indices, it should be highlighted. Each index, however, is indicative of price fluctuations in the spot/futures market because it is derived using real-time prices of exchange-traded commodities/futures.

Prabina Rajib (2015) Though the agricultural industry significantly contributes to the Indian economy, it is hampered by several barriers, one of which is outmoded agricultural marketing and price discovery rules, which result in low price realization by Indian farmers. Six national-level exchanges in India offer commodities futures contracts, with several also offering electronic spot exchanges to assist spot commodities trading. Farmers, on the other hand, have been underrepresented in these trades. ITC-ABD, one of India's leading Agri-commodity aggregators and exporters, has begun to use these exchange platforms to hedge price risk. Mr S. Sivakumar has over three decades of expertise in the agriculture sector and has a thorough understanding of commodity markets and the demands of Indian farmers. This interview attempts to gain an understanding of his thoughts on growing farmers' involvement in commodity derivatives trading, as well as ITC-commodity ABD's hedging approach.

Shree Bhagwat, Angad Singh Singh (2015) Commodities futures trading in India has a long and illustrious history; India's first commodity market, the Bombay Cotton Trade Association, was founded in 1875. The bullion futures market first appeared in Mumbai in 1920. There are presently 22 recognized commodities exchanges in India, with six national-level electronic multi-commodity exchanges: NMCE (Ahmedabad); MCX (Mumbai); NCDEX (Mumbai); ICEX (Mumbai); ACE (Ahmedabad); and UCX (Ahmedabad) (Mumbai). The purpose of this article is to look into the structure and performance of commodities exchanges in India. MCX is the world's largest commodities futures exchange for Silver, Gold, and Crude Oil. During the Financial Year 2013-14, national exchanges accounted for 99.72 per cent of the turnover of commodities futures contracts traded in India. In 2013-14, MCX had an 84.89 per cent market share on its own. The current investigation is based on analytic and descriptive research. Because of the high turnover and year-to-year fluctuations in values, no tool is used. Volatility in commodity pricing has always been a key source of concern for both producers and consumers. Two-thirds of India's one-billion-strong population is reliant on agricultural products. Commodity futures markets are an important aspect of any agricultural liberalization plan.

Nidhi Aggarwal, Sargam Jain and Susan Thomas (2014) The policymaking community in India scrutinizes and criticizes all derivatives trade, particularly those involving agricultural

commodities. The consensus is that these financial instruments are traded by quite different people than agriculturists, resulting in derivatives values that are influenced by different factors than the underlying commodity price. This research evaluates the effectiveness of commodity futures price discovery and hedging after this adjustment, concluding that, on aggregate, futures prices regulation very effectively, but help to control risk less effectively. The study speculates on what elements might improve hedging success from the perspective of the hedger. Large settlements costs are a result of a lack of distribution centres and the instability of invoices raised, a mismatch between the grade stated in the futures contract and what is ready for sale in the market, and disruptions resulting from various regulatory interventions. The link between futures and spot market prices is the basis for all evaluations of how effectively a futures market aids in price discovery or hedging efficacy. The information for the research comes from three commodities exchanges: MCX, NCDEX, and NMCE, and spans the years 2003 to 2014. The initial phase of the research uses daily pricing data on both spot and futures prices, which is comparable to what is accessible in the exchange's copy. These two results are unrelated to other microstructure outcomes such as price volatility or market size, according to our findings. We believe that these factors produce price disturbances in either the spot price or the futures price, or both, reducing the hedging benefits of utilizing futures substantially.

N. R. Parasuraman, Ullas Rao (2014) India's rising economic weight in the emerging economy club has resulted in a constant influx of new financial instruments into the capital markets. The associated dangers arising from a volatile world economic weather driven by a slew of geopolitical events exert huge pressure on corporate management to implement effective techniques in mitigating some of these risks, even though an expanding economy presents an enormous opportunity for firms to earn outstanding rates of return on financial resources. In recent years, India has seen an increase in financial managers' interest in skilfully utilizing investment products such as Futures and Options to combat the uncertainty stemming from price swings in underlying assets. Using an empirical analysis characterized by the expense, we analyse the premise surrounding economic efficiency surrounding commodities markets in this research. We also apply the cost-of-carry concept to the stock markets to support the reality of the occurrences. The cost-of-carry model is rejected by both single hypothesis and joint hypothesis tests, meaning that in the absence of external effectiveness, speculators should be able to profit from relative prices between futures and spot prices in both commodities and equities markets. While market manipulators trading in stocks would be forced to scrupulously follow the standards set forth by the capital markets regulator (SEBI), the range of inspection in products is significantly more limited. Even though the Forward Markets Commission (FMC) regulates commodity markets such as the MCX, the long-awaited Forward Contract Regulation Act (FCRA) is still pending. The viability of market efficiency over a longer time horizon would be an intriguing expansion. Furthermore, we used the cost-of-carry model to test the market efficiency

hypothesis empirically. It would be interesting to look at the impact of other common empirical models on market efficiency results.

Robert S. Pindyck (2014) Prices of commodities are variable, and volatility fluctuates with time. Volatility issues can influence market variables by influencing the marginal value of storage and a portion of the total marginal cost of storage generation, rather than the current cost to produce the commodity rather than waiting for more price data. This research looks at the impact of volatility in short-term commodity market dynamics as well as the factors that influence volatility. It creates a conceptual framework of stocks, spot, and futures market that clearly accounts for instability and estimates it using daily / monthly data for the petroleum complex, which includes crude oil, heating oil, and gasoline. The estimation is based on weekly statistics for crude and heating oil from January 1, 1984, to January 31, 2001, and gasoline from January 1, 1985, to January 31, 2001. (Reflecting the later start of gasoline futures trading). To calculate market prices and variability, daily future settling prices for the closest contract (typically the spot contract), the second nearest, and the third-nearest were employed. Non-trading days must be considered. If the spot price maintained a geometric Distribution, the sample variance might be calculated by dividing log price increases by the ratio of the number of preceding days. Taking volatility into consideration can assist explain changes in the spot-futures spread, but not changes in the current price. When it comes to volatility, market characteristics don't explain much of its behaviour, hence it can be considered exogenous. These findings lend some credence to the commodity price dynamics method suggested at the outset. The findings for heating oil were quite close to the theory, while for crude oil and gasoline the results are less clear cut. Instead of fundamentals, price variation could be due to speculative noise trading or herding.

P. Srinivasan and P. Ibrahim (2014) Using Johansen's Vector Error Correction Model (VECM) and the Bivariate ECM-EGARCH (1,1) model, this study seeks to investigate the price discovery and market volatility in Gold futures and spot markets of the National Commodity Derivatives Exchange (NCDEX). The empirical conclusion demonstrates that the gold spot market is dominant and functions as an effective price discovery engine. Aside from that, the findings of the study reveal that certain information spills over from the spot market to the futures market and that the gold spot market has the power to expose all new information through the channel of its innovation. The major goal of the Indian commodity market is to increase value for traders by providing a way to protect their businesses from unfavourable price changes. Traders and exporters can use the futures market's price discovery mechanism to hedge their price risk and increase their competitiveness. The procedure by which markets attempt to achieve an optimum price is known as price discovery. The current research is significant in that it allows for the determination of which market is more efficient in processing and reflecting new information. Furthermore, studying volatility interdependence can reveal how information is

conveyed and distributed across futures and spot markets. Price volatility is closely connected to the flow in an arbitrage-free economy. The analysis confirms that NCDEX's gold futures market found it difficult to integrate information into its prices. This obviously demonstrates that the gold futures market is not yet mature and effective in terms of information dissemination. To summarize, the spot gold market is more perfectly efficient than that of the futures market.

Brajesh Kumar (2011) This research looks at the real-time and dynamic connection among spot price volatility and futures trading activity, such as volume and open interest, in a developing commodities derivatives market, using the Indian commodity derivatives market as an example. The impact of futures trading volumes on spot volatility in the Indian commodity futures market is investigated in this study. We look at this for a broad range of commodities, including agriculture, metals, precious metals, and energy commodities. The GARCH method is utilized to represent the concurrent link between spot volatility and futures market activity, while the VAR modelling methodology is used to model the lead-lag relation. It is investigated the dynamic link between spot volatility, futures trading volume, and open interest. Four agricultural commodities, Soybean, Maize, Castor seed, and Guar seed, three metals, Aluminium, Copper, and Zinc, two precious metals, Gold and Silver, and two precious metals, Gold and Silver, make up our data. NCDEX data on volume and open interest is utilized for agricultural commodities, while MCX data is used for non-agricultural commodities. The choice of platform for a futures contract is dependent on a commodity price relatively higher trading volume at the exchange. It was found that Agricultural commodities' daily mean returns are positive and minor, except for maize, which has negative returns. The marketplace has the most resistance, or traders'

response to fresh information, which lasts for more than ten days. At longer lags, we also observe some notable peaks (positive/negative). It could be due to a pricing miscalculation or market friction. The spot's stationarity is restored.

Sushmita Bose (2009) In recent years, persistent inflation expectations in global commodity prices have spurred a dispute about their nature, with global commodity speculating getting singled out as the principal cause of rising costs, leading to calls for a ban on futures trading for numerous key commodities. Increased capital has been coming into the commodity futures market in recent years, necessitating an examination of the role future market participants may play in creating or distorting prices in the core commodities market. The US Securities and Exchange Commission and the Indian Expert Committee on Futures Trading conducted investigations but found no clear evidence of the futures market's role in exacerbating price inflation. However, the taskforces have raised several critical problems that might be used to develop a guideline for enhancing the infrastructure, supervision, and efficiency of India's commodity market.

4. Research Methodology

The study aims to focus on the development of exchange with special reference to Multi Commodity Exchange (MCX). The study is exploratory in nature and the data is secondary, collected from annual reports, journals, books, newspapers and from the website of Multi Commodity Exchange, securities, and exchange board of India. The data period considered for the research is from 2003 to 2020.

A. Development of Multi Commodity Exchange of India Limited (MCX)

Multicommodity exchange is India's no 1 exchange playing as a market leader providing the commodity ecosystem

Table 1
Key milestone

2021	MCX empanelled two domestic refiners as per "MCX Good Delivery Norms for BIS-Standard Gold/Silver" for delivery in Gold Mini (100 grams) futures and options contracts w.e.f. March 6, 2021
2020	MCX launched the Rubber contract on 28th December 2020 MCX launched futures on the MCX Comdex Base Metal Index (METLDEX™) on October 19, 2020, and became the first Indian exchange to have derivatives on an index of Base Metals MCX launched futures on the MCX Comdex Bullion index (BULLDEX™), India's first bullion index, on August 24, 2020 Silver Mini (5 Kg) contract became deliverable with Silver (five nos. of one-kilogram bars) as a delivery lot from the June 2020 contract Silver (1kg) Micro contract was made deliverable with one-kilogram silver bar as a delivery lot from February 2020 contract
2019	Launched the MCX iCOMDEX™ commodity index series, comprising of a composite index, two sectoral indices and four single commodity indices in December. Introduced real-time MCX Comdex Excess Return index series including composite, sectoral (bullion & metal) and single commodity ER indices. Cotton: Record delivery of 3.94 lakh bales (1 bale=170 kg) in the season ending in Aug 2019, since inception from October 2011. Conversion of all MCX Base Metals futures contracts to delivery-based settlement mode from Both-options settlement mode from March 2019 and onwards. Successfully introduced 1-gram delivery based Gold Petal Contract. Signed MoU with Zhengzhou Commodity Exchange. Launch of Kapas Contract
2018	Grant of recognition to Multi Commodity Exchange Clearing Corporation Limited (MCXCCL) a wholly owned subsidiary of MCX to act as a Clearing Corporation. Launched Options contract in Crude Oil, Silver, Copper & Zinc Launched first-ever Brass futures contract in the world
2017	Launched first-ever Gold Options contract on futures in India
2015	MOU with CME group
2012	Became India's first listed exchange
2008	Became a member of the International Organisation of Securities Commissions (IOSCO) 2006 Product licensing agreement with NYMEX (CME Group)
2005	Post licensing agreement with NYMEX, Licensing agreement with LME
2003	Commenced operations on November 10

participants with a platform towards Price Discovery and Risk Management. The exchange, which started its operations in November 2003, operates under the regulatory framework of the Securities and Exchange Board of India (SEBI). The exchange offers both future and options trading in various segments including bullions, industrial metals, energy, and agricultural commodities. The first exchange to offer options in Gold with Gold (1 Kg) futures as underlying in the year 2017 on Dhanteras day. Currently, MCX offers options on commodity futures contracts traded on an exchange. As per current norms, only European Style Commodity options are available in India.

The exchange has an extensive wide reach at the national level, with around 600+ registered members and 48000 plus Authorized persons having a presence around 1199 cities and towns in India as on 30th September 2021. The exchange has around 92.6 per cent of the market share in terms of value and volume of commodity futures as of 2021-22. MCX has an association with the leading global exchange such as CME Group, London Metal Group, Dalian commodity Exchange, Taiwan Futures exchange, Zhengzhou commodity exchange and European energy exchange.

The average daily trading of commodity futures contracts stood at Rs. 31595crore in 2020-21 as compared to Rs. 32550

Table 2
Commodities traded at MCX

Metal	Bullion	Energy	Agriculture	Index
Aluminium	Gold	Crude oil	Black pepper, Cardamom	MCX BULLDEX, MCX METLDEX
Copper	Gold mini	Natural gas	Cotton	
Lead	Gold Guinea		Crude Palm oil	
Nickel	Gold petal		Kapas	
Zinc	Silver		Mentha Oil	
	Silver mini		Rubber	
	Silver micro			

Table 3
Performance of commodity Futures Group-wise in tonnes, lots and crore (Sources: SEBI Handbook of Statistics)

Period	No. of Trading days	Agriculture			Metals			Bullion		
		Volume	Volume	Turnover	Volume	Volume	Turnover	Volume	Volume	Turnover
		('000 tonnes)	(Lots)	(₹ crore)	('000 tonnes)	(Lots)	(₹ crore)	('000 tonnes)	(Lots)	(₹ crore)
1	2	3	4	5	6	7	8	9	10	11
2010-11	307	27,242	39,67,369	1,14,152	1,24,163	7,41,49,730	25,08,858	710	7,65,08,289	51,69,268
2011-12	310	32,465	61,18,325	1,97,781	1,18,499	8,88,65,001	27,09,758	1,011	22,83,44,739	99,63,667
2012-13	305	32,926	76,30,359	2,70,295	1,51,396	11,39,43,114	31,40,109	723	16,22,79,284	78,07,063
2013-14	310	20,877	59,05,031	1,71,391	85,674	6,37,97,242	17,26,336	400	9,27,48,201	42,63,195
2014-15	255	13,504	33,71,516	1,10,268	62,083	4,73,52,037	12,74,213	240	4,62,94,585	21,53,427
2015-16	257	13,961	34,10,594	1,21,699	89,331	6,38,95,652	15,05,004	234	4,26,02,824	20,70,147
2016-17	260	15,947	30,87,740	1,39,312	93,078	6,44,21,776	17,53,887	207	3,71,51,550	20,40,270
2017-18	254	11,648	23,17,338	1,14,082	95,153	6,81,33,042	21,12,532	164	2,78,40,060	13,63,703
2018-19	257	9,662	18,28,722	1,01,233	1,11,475	7,88,35,865	25,25,601	169	2,88,37,833	15,13,817
2019-20	259		17,89,000	1,00,919		3,75,97,000	15,68,294		5,08,29,000	29,15,534

Energy			Total			Open interest at the end of the period		
Volume	Volume	Turnover	Volume	Volume	Turnover	Open Interest ('000 tonnes)	Open Interest (Lots)	Value
('000 tonnes)	(Lots)	(₹ crore)	('000 tonnes)	(Lots)	(₹ crore)			(₹ crore)
12	13	14	15	16	17	18	19	20
6,31,870	5,81,72,478	20,49,224	7,83,986	21,27,97,866	98,41,502	682	2,73,364	12,180
7,30,401	6,65,26,548	27,25,889	8,82,377	38,98,54,613	1,55,97,095	605	6,33,342	15,720
8,16,378	9,11,92,784	36,63,589	10,01,423	37,50,45,541	1,48,81,057	1,141	6,52,817	21,908
4,21,354	5,17,51,062	24,50,527	5,28,305	21,42,01,536	86,11,449	413	3,44,214	11,128
4,04,556	5,15,57,804	16,45,799	4,80,383	14,85,75,942	51,83,707	561	3,11,143	8,715
8,07,702	12,43,25,369	19,37,345	9,11,229	23,42,34,439	56,34,194	605	3,03,973	9,080
6,74,225	11,78,49,477	19,32,191	7,83,457	22,25,10,543	58,65,661	540	2,84,204	9,230
5,74,029	10,76,34,572	17,92,678	6,80,995	20,59,25,012	53,82,996	576	3,00,172	11,205
6,71,698	13,69,46,607	24,50,777	7,93,004	24,64,49,027	65,91,428	513	3,13,641	14,244
	20,54,810	38,13,027		29,56,960	83,97,775		1,48,505	11003

Table 4
Performance of commodity options group-wise in tonnes, lots and crore

	2017-18		2018-19		2019-20	
	Volume in 000tons	Value in crores	Volume in 000tons	Value in crores	Volume in 000tons	Value in crores
Bullion	0.03	10,354	2.23	1,35,700.09	3	93,008
Metals other than Bullion			194	6,493	80	2,163
Energy			12,264	38,752	24,964	75,285

Sources: SEBI Handbook of Statistics

crore in 2019-20 a decline of 3%. The total turnover of commodity futures trade on exchange stood at 79 lakh crores in 2020-21. a reduction of 4% due to fewer trading hours allowed because of a pandemic. The net worth of the Company as of March 31, 2021, stood at Rs1,58,036 lakh.

B. Participants of Commodity Market

The participants can be Brokers, Individual, Banks, Mutual fund, III alternative category, Eligible foreign Entities, corporates all of these are classified into

- Hedgers: Hedgers use the derivative instrument to minimise the risk associated with the price of an asset.
- Speculators: Speculators uses derivatives to get benefited by leverage on future movement in the price of the asset.
- Arbitrageurs: Arbitrageurs use the derivative tools to take advantage of two different markets in the price of the asset.

5. Role of Commodity Exchange Market in Economic Development

Commodity exchange markets are an integral part of the economic system. The commodity market allows users to invest in commodities in non-agricultural products such as precious metals, Base metals, Agricultural products, Energy. Their role in economic development is very significant.

A. Price Discovery

Price discovery is the process of providing Equilibrium prices that reflects current and Prospective demands on current and prospective supplies and making these price visible to all. The commodity market is important in terms of actual trading that takes place because it will guide the economy in optimum production and consumption decision. The process will benefit in other aspects. The price by going to exchange will ensure a fair and competitive price.

B. Risk Management

The commodity market offers innovation in risk management. The risk exists because of its uncertainty in nature. Exchange Platform helps the buyer and seller to trade in the market by providing the possibility of effective risk management through hedging tools. The presence of different derivative instruments in the market makes risk management efficient.

C. Market Efficiency

The commodity market concentrates on cost savings to participants in the market. The market along with concentrating on liquidity the ease and speed with which trading transactions

can be executed in a Market situation. Hence eliminating the risk will ensure market liquidity where the current participants can exit the market anytime.

6. Performance

Table 3 clearly shows the Performance of commodities group-wise of trade value in Multi commodity exchange of India Limited (MCX) during the year 20010-11 to 2019-2020. The total of Agricultural stood at Rs. 114152 crore (2010-11) as compared to Rs. 100919 crore (19-20). The metal futures with Rs. 2508858 crore (2010-11) as compared to 1568294 crores (2019-20). Bullion futures have Rs. 5169268 crore (2010-11) as compared to Rs. 3813027crore (2019-20). The energy futures have 2049224 crores (2010-11) as compared to 3818027 crores (2019-20). The total futures contract for the period 2010-11 is 9841502 as compared to Rs 8397775 in 2019-20. The highest turnover is in 2011-12 with 15597095 and the lowest total turnover is Rs. 5183707 during 2014-15.

Table 4 clearly shows the Performance of commodities options group-wise of trade value in Multi commodity exchange of India Limited (MCX) during the year 2017-18 the traded value is 10354 crores as compared to Rs. 93008 crore in 2019-20 in the bullion market. The metals options started during 18-19 with 135700 crores in bullion as compared to 38752 during 2019-20, energy futures have 38752 in 2018-19 as compared to 75285 in 2019-20.

7. Conclusion

Indian commodity market has experienced a lot of changes due to the financial crisis, change in the global trend. At present, the market is an opening lot of opportunities and threats. MCX company being in the market for two decades by offering online trading, clearing and settlement of transactions, offering innovative products and spreading the base to participants. The MCX most active contracts as of November 2021 are Natural gas, gold, copper, MCX bulldex, MCX Metldex etc. the mixed opinion of future trading could be because of ups and downs in the market in terms of NSEL scam, The sudden shifts in operations of the commodity market, contract specification changes. The options trading is quite active in the market. They have had an increasing trend in the past 3 years with a positive sign towards markets. Thus it can be concluded that Multi commodity exchange is the most efficient concerning price discovery and risk management.

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