

## MANAGEMENT DISCUSSION AND ANALYSIS

### ECONOMIC REVIEW

According to the International Monetary Fund (IMF), the Indian economy is one of the fastest growing major economies and is projected to grow at 7.3% in 2019 against 7.1% in 2018, whereas the projected global growth rate is 3.3% in 2019. The higher projection of IMF is in line with India's estimated GDP growth of 6.8% in 2018-19 according to the Economic Survey 2018-19. The proximate factors responsible for the moderation in the growth rate from 7.2 % achieved in the preceding financial year are mainly declining growth of private consumption, tepid increase in fixed investment and muted exports. Monetary policy has attempted to provide a fillip to the growth impulse through rate cuts and easing of bank liquidity.

While the growth outlook for many developed and emerging economies continues to weaken amid unresolved trade tensions and elevated geo-economic and geo-political uncertainties, resilience of the Indian economy is evident from the growth number. Major multilateral agencies such as the World Bank, IMF and United Nations Development Programme (UNDP) remain optimistic about the vibrancy of the Indian economy.

### GLOBAL FINANCIAL MARKETS

Global financial markets are the barometers of the performance of the respective economies that is being served by them. 2018 was a challenging year for most asset classes in global financial markets. Global stocks fell by about 7% in 2018, volatility in asset prices increased. Stocks had been a major beneficiary of the regime of low interest rates and loose monetary policy environment pursued by central banks since the global financial crisis. Low interest rates also drove down the yield on other asset classes such as bonds. As interest rates started to rise and central banks began to tighten monetary policy, investor interest in stock began to decline towards the last quarter of year resulting in surrendering the gains in prices during the first three quarters of the year.

### GLOBAL COMMODITY MARKETS

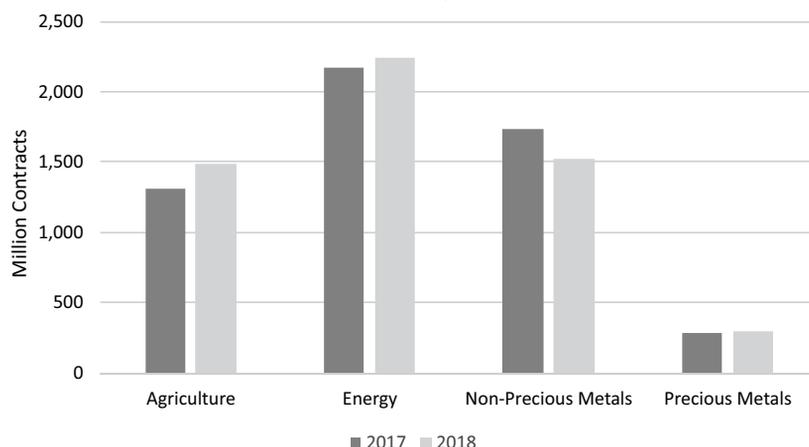
Global commodity markets witnessed sound, albeit differential, growth during 2018, despite the significant headwinds from a strong dollar. Aggregate measures of commodity price movements, such as the Bloomberg Commodity Index (BCOM), displayed low volatility of 10% to 11% during 2017 and 2018. This was reflected in the traded volumes of commodity derivatives. According to data released by the Futures Industry Association (FIA), global commodity derivatives volume grew by 0.6% to 4.30 billion contracts in 2018, although the growth in different segments were different, reflective of the volatility trends. While agricultural commodity derivatives recorded the highest growth rate of 14%, volume in non-precious metals derivatives declined by 12% during 2018, whereas the volumes in energy and precious metals derivatives increased by 3% and 4% respectively. The global derivatives data is given in Table 1.

**Table 1: Global Futures and Options Volumes by Category (million contracts)**

Years	CY 2017	CY 2018	Change % Increase / Decrease
Equity Index	7,516	9,983	33%
Individual Equity	4,754	5,788	22%
Interest Rates	3,968	4,554	15%
Currency	2,984	3,929	32%
Energy	2,171	2,238	3%
Non-Precious Metals	1,740	1,523	-12%
Agriculture	1,306	1,488	14%
Other	480	489	2%
Precious Metals	279	291	4%
<b>Total</b>	<b>25,199</b>	<b>30,282</b>	<b>20%</b>

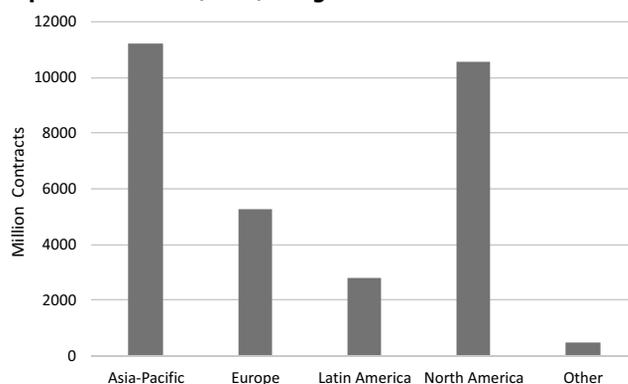
*Source: Futures Industry Association*

The international prices of commodities remained volatile during the year. During 2018, prices of most energy, metal and mineral, and agricultural commodities declined in the last quarter of the year, only to rebound in the first quarter of 2019. By March 2019, more than half of all commodities (energy commodities being a major exception) had recouped their losses and returned to September 2018 levels. The weakness of energy, as well as, metal and mineral prices in late 2018, mainly reflected concerns about global growth, especially in China amid trade tensions. Table 2 shows the segment-wise trend in global commodity derivatives traded volumes during the last two years.

**Table 2: Global Futures and Options Volumes - Commodity Segment**


*Source: Futures Industry Association*

According to Futures Industry Association (FIA), global trading in derivatives showed significant regional dispersion. Trading activity in Asia-Pacific, which had the largest market share of 37% rose by 27% to 11.2 billion contracts (in all segments) during 2018. India, which constituted 45% of the Asia-Pacific derivatives market, grew by 54%, as against the global growth rate of 20%. Table 3 shows the regional dispersion of global commodity derivatives traded volumes in 2018.

**Table 3: Global Futures and Options Volumes (2018) – Region wise**


*Source: Futures Industry Association*

## INDUSTRY STRUCTURE AND DEVELOPMENT

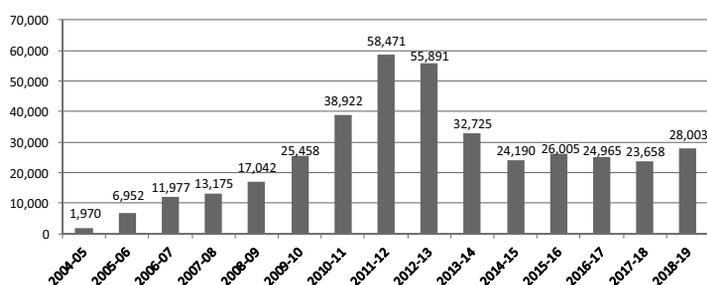
The Indian commodity derivatives exchanges are playing an important role in helping market participants manage risk exposure on account of price volatility, in addition to contributing towards modernizing and improving the efficiency of the country's commodity sector.

During FY 2019, total value of commodity futures traded by all national commodity exchanges in India was ₹ 71.97 lakh crore against ₹ 60.09 lakh crore in FY 2018. The growth of 20% can be attributed to a number of factors, including the expansion of the market driven by a slew of regulatory developments. As noted in the SEBI Annual Report (2018-19), the number of commodity Options contracts traded in 2018-19 was 1.49 million lots, contributing to a notional turnover of ₹1,81,119 crore.

In volume terms too, India's commodity derivatives market expanded by about 20% in 2018-19 over 2017-18. The total volume of commodity futures traded by all national commodity exchanges exceeded 246.45 million lots. Such a healthy growth in the Indian market contrasts with the virtual stagnation (growth of 0.6%) in the global commodity derivatives trading volumes. Wide variations, however, were seen in the growth rates in different segments in India: trading in energy futures contracts expanded by 27% while that in agricultural commodities shrunk by 21%. Table 4 provides the segment-wise volumes in India's commodity futures market across the last two years, while Table 5 provides a snapshot of the Average Daily Turnover in the Indian commodity futures market over the years.

**Table 4: Volumes of Commodity Futures traded on Indian Commodity Exchanges (Million Contracts)**

	FY17-18	FY18-19	Change % Increase / Decrease
Agriculture	2.32	1.83	-21%
Metals	68.13	78.84	16%
Bullion	27.84	28.84	4%
Energy	107.63	136.95	27%
<b>Total</b>	<b>205.93</b>	<b>246.45</b>	<b>20%</b>

**Table 5: Turnover of the Indian Commodity Futures Exchanges (Rs crore)**
**Indian Commodity Futures Market, ADT in Crs**


\* For national level commodity exchanges;

Source: Derived from FMC data, exchange's websites; No. of trading days at MCX considered for computing ADT.

**MCX BUSINESS OVERVIEW IN 2018-19**

As per the 2018 summary statistics for annual trading activity in global exchange-traded markets released by FIA, MCX was ranked world's 7<sup>th</sup> largest commodity futures exchange based on the number of futures contracts traded. MCX's ranking amongst all exchanges across all asset classes remained 20<sup>th</sup> in 2018, same as that in 2017. The overall growth of the Indian commodities markets with introduction of new products and participants can be expected to help MCX improve its ranking amongst global exchanges in the years ahead. In a notable development, MCX became a full member of the World Federation of Exchanges (WFE) during the year, underscoring the significance of your Company in the league of global exchanges.

MCX clocked an average daily turnover of ₹ 25,648 crore (single-side) in futures during FY 2019, as against ₹ 21,193 crore achieved during the previous fiscal. The average daily turnover (notional) in the options segment, was ₹ 704 crore. The total turnover of your Company stood at ₹ 65.91 lakh crore (futures) during FY 2019, as compared with ₹ 53.83 lakh crore in FY 2018, a growth of about 22.5%. The total notional turnover in options segment at MCX was ₹ 1,80,945 crore. MCX's market share in Indian commodity Futures in FY 2019, across various segments were 96.77% for precious metals and stones, 100% for base metals, 100% for energy and 15.54% for agricultural futures contracts.

**PRODUCT-WISE PERFORMANCE**

Product-wise performance of your Company during 2018-19 is given in Annexure I

**FINANCIAL POSITION AND RESULT OF OPERATIONS**
**Revenue:**

The Company derives its revenues from transaction fees, admission fees, annual subscription fees, terminal charges, connectivity income, interest income, dividends from and gains on sale of investments, and other miscellaneous income.

During FY 2019, the Company's total income increased to ₹ 38,472 lakh from ₹ 34,620 lakh in FY 2018. The Company continued to perform well during the fiscal with a net profit margin of 35%. The operating expenses increased from ₹ 18,552 lakh in FY 2018 to ₹ 20,575 lakh in FY 2019, registering a rise of 11%.

The profit before exceptional items and tax for FY 2019 increased to ₹16,365 lakh from ₹14,402 lakh in the last financial year, registering a rise of 14%. During FY 2019, the profit after tax increased by 28% to ₹13,650 lakh as against ₹10,635 lakh in FY 2018.

The Company operates in a single segment business. Transaction fees comprise a significant portion (approximately 74%) of the Exchange's revenue. The transaction revenue during FY 2019 was ₹28,331 lakh, as against ₹ 23,892 lakh in the previous fiscal. The Company continued deployment of surplus funds in high performing assets such as mutual funds, fixed deposits and tax-free bonds. The investment income was ₹ 7,737 lakh in FY 2019 (Previous year ₹ 8,579 lakh) including gain / (loss) on fair valuation of mutual funds and bonds. (Table 6).

**Table 6: MCX's Income**

(₹ in lakh)

Particulars	FY 2019	FY 2018	Change % Increase / (Decrease)
Transaction Revenue	28,331	23,892	19%
Other Operating Income	1,504	2,092	-28%
Investment Income	7,737	8,579	-10%
Other Income	900	57	1479%
<b>Total</b>	<b>38,472</b>	<b>34,620</b>	<b>11%</b>

**Expenses:**

The Company's expenditure consists of employee benefit expenses, clearing and settlement charges, depreciation / amortization charges, computer technology and software support charges and other expenses (Table 7).

**Table 7: MCX's expenditure**

(₹ in lakh)

Particulars	FY 2019	FY 2018	Change % Increase / (Decrease)
Employee benefit expense	6,517	6,796	-4%
Clearing and Settlement charges	2,142	-	100%
Depreciation and amortization	1,529	1,666	-8%
Computer technology and Software support	5,465	6,312	-13%
Other expenses*	6,454	5,444	18%
<b>Total</b>	<b>22,107</b>	<b>20,218</b>	<b>9%</b>

\*Other expenses principally comprise costs / charges pertaining to advertisement, repairs and maintenance, license fees, legal and professional charges, etc.

The Company transferred its clearing and settlement division to its wholly owned subsidiary, Multi Commodity Exchange Clearing Corporation Ltd (MCXCCL) with effect from September 01, 2018, and consequently certain expenses, such as employment benefit, computer technology & software support and depreciation have reduced for FY 2019. Also, payment of ₹ 2,142 lakh has been made towards clearing and settlement charges with effect from September 01, 2018.

**Provision for taxation:**

The Company's provision for tax decreased by 91% to ₹ 335 lakh during FY 2019 from ₹ 3,767 lakh in previous financial year. Pursuant to SEBI Circular no. CIR/MRD/DRMNP/25/2014 dated August 27, 2014, every stock exchange shall contribute at least 25% of the Minimum Required Corpus to Core Settlement Guarantee Fund (SGF) established and maintained by its clearing corporation. During the year, your Company has contributed ₹ 7,938 lakh towards Core SGF in compliance with the aforesaid SEBI circular. The said contribution to Core SGF, being an expenditure allowable under section 37 of the Income Tax Act, 1961, has resulted in tax payable u/s 115JB (Minimum Alternate Tax) under the Income Tax Act, 1961. Further, in accordance with the guidance note issued by the Institute of Chartered Accountants of India on "Accounting for credit available in respect of MAT under the Income Tax Act, 1961", the Company can recognize MAT credit as an asset only when and to the extent there is convincing evidence that the Company will be liable to pay normal income tax during the specified period. Accordingly, the Company has recognized MAT credit entitlement of ₹ 2,065 lakh for the year ended March 31, 2019.

**Profit analysis:**

The net profit margin stood at 35% in FY 2019. (Previous year: 31%)

**Financial performance and operational performance parameters:**

The transaction fees has increased by 19% from ₹ 23,892 lakh in FY 2018 to ₹ 28,331 lakh in FY 2019.

**Shareholders' funds****Share capital:**

As of March 31, 2019, the Company's share capital stood at ₹ 5,100 lakh, i.e., 509.98 lakh shares of ₹ 10 each. (Previous year: ₹5,100 lakh).

**Other equity:**

The Company's other equity increased to ₹ 1,41,185 lakh as on March 31, 2019 from ₹ 1,32,527 lakh as on March 31, 2018. The net worth stood at ₹ 1,46,285 lakh as on March 31, 2019 as against ₹ 1,55,687 lakh (including SGF) as on March 31, 2018.

**Secured loans:**

The Company had no secured loans in its books as on March 31, 2019, as well as, on March 31, 2018.

**Fixed assets:**

The Company's fixed assets stood at ₹ 17,581 lakh as at March 31, 2019, as against ₹ 16,177 lakh as at March 31, 2018.

**Investments:**

As on March 31, 2019, the Company's investments (Non-current and Current) stood at ₹ 1,25,201 lakh, as against ₹ 1,41,613 lakh as on March 31, 2018. The decrease was mainly on account of redemption of investment for transfer of fund to settlement guarantee fund of MCXCCL.

**Current assets and current liabilities:**

The current assets consisting of trade receivables, cash and cash equivalent, bank balances, loans and other current assets (excluding current investments) was ₹ 12,425 lakh as at March 31, 2019, as compared to ₹ 13,034 lakh as at March 31, 2018.

The current liabilities consisting of creditors, security deposits, and others, stood at ₹ 11,908 lakh as at March 31, 2019, as against ₹ 38,260 lakh as at March 31, 2018.

**Key Financial Ratios:**

Sr. no.	Ratio	Standalone		Consolidated	
		FY 2019	FY 2018	FY 2019	FY 2018
1	Debtors Turnover (Revenue from operation/Debtors)	32.86	41.18	49.92	41.18
2	Current Ratio (Current assets/Current liability)	5.48	2.66	2.69	2.75
3	Operating Profit Margin (Operating Profit/Turnover)	31.04%	28.60%	31.32%	27.66%
4	Net Profit Margin (Net profit/Turnover)	35.48%	30.72%	36.69%	30.80%
5	Return on Net worth (Net profit/ Net worth)	9.33%	6.83%	9.25%	6.94%

**Notes:**

- Increase in current ratio is mainly due to transfer of members' deposits to MCXCCL on account of transfer of clearing & settlement business.
- Increase in Return on Net worth is on account of increase in Net profit for the year.

**COMPETITIVE STRENGTHS****Brand Recognition**

MCX is India's leading commodity derivative exchange having a market share of 91.6% in FY 2019. MCX has over a period of time created its brand equity. The prices at MCX serve as a benchmark for trades in physical markets, thereby, making it a 'price setter'. For settlement of metal contracts, MCX was taking prices from London Metal Exchange (LME). However, post conversion of base metals into compulsory delivery based contracts, MCX is assisting the domestic market to explore its prices and is striving to be a 'price setter' in base metals. MCX has been a pioneer in launching new products and facilitating new participants to trade in the Exchange platform, as and when, allowed by the Regulator. The initiatives taken by your Company for growth and market development have been appreciated and recognized at various fora viz. Commodity Participants Association of India (CPAI), Bullion Federation Global Convention (BFGC), ASSOCHAM, PHD Chamber of Commerce and Industry, etc.

## Sound Corporate Governance and Regulatory Framework

As a Commodity Exchange, the Company is subject to a high level of regulatory oversight. MCX is committed to working with all the stakeholders to ensure an orderly, informed and fair market for the benefit of all concerned. MCX is also committed to strong and effective internal governance and regulation, and believes that regulatory integrity benefits investors and attracts market participants to trade on the Exchange platform.

Your Exchange has a dedicated Regulatory department which performs various functions towards ensuring compliance with the regulatory requirements applicable to the Exchange. Some of the activities in relation to the same are provided hereinbelow:

### i. Investor Services :

The Exchange has a dispute resolution mechanism in place for redressal of disputes between Investors / Clients and Members of the Exchange. Any investor / client can lodge a complaint with the Exchange, through its online portal or by submitting the prescribed "Client Complaint form (CCF)"; physically or through email to any of the Investor Service Centre or through SEBI Complaints Redressal System (SCORES). On receipt of such complaint, the Exchange initially tries to resolve the complaint. Complaints, which do not get resolved within fifteen days from the date of lodging the complaints or cases where parties are aggrieved by the resolution worked out, are referred to Grievance Redressal Committee (GRC).

The next level of dispute resolution mechanism is Arbitration and Appellate Arbitration. The Exchange also has Arbitration panels at four Regional Arbitration Centres, i.e., Chennai, Delhi, Kolkata and Mumbai.

The Exchange has set-up 10 Investor Service Centre (ISC) across India viz. Bengaluru, Chennai, Delhi, Gandhinagar, Hyderabad, Indore, Jaipur, Kanpur, Kolkata and Mumbai. GRC are available at all these 10 ISCs.

### ii. Early warning System:

To protect the interest of investors, SEBI, vide circular dated December 17, 2018, decided to put in place an Early Warning Mechanism and sharing of information between Stock Exchanges, Depositories and Clearing Corporations. This was done to detect the diversion of client's securities by the stock broker at an early stage, so as to take appropriate preventive measures. The Exchange w.e.f. February 1, 2019 has implemented this system which, *inter alia*, covers the following early warning signals:

- a. Significant reduction in net worth over previous half year / year ;
- b. Significant losses in the previous half year / year;
- c. Failure to submit information sought by the Stock Exchange on its dealing with related parties / promoters;
- d. Non-recovery of significant dues from debit balance clients over a period;
- e. Significant dues to credit balance clients over a period;
- f. Failure by stock broker to upload weekly data regarding monitoring of clients' funds as specified in SEBI's circular on Enhanced Supervision, for 3 consecutive weeks; and
- g. Mis-reporting / wrong reporting about the client funds / securities.

### iii. Strengthening of Disclosure norms:

- a. On the disclosures by exchanges related to deliverable supply and position limit calculation for agricultural commodity derivatives, SEBI, further advised exchanges to prominently disseminate the details of five year average deliverable supply, current year's deliverable supply, source of data, categorisation of commodity, position limits, etc., for each of the commodity traded on the exchange. Accordingly, the Exchange is disseminating the same on its website.
- b. In order to enhance transparency to the public in Commodity Derivatives Markets, SEBI directed the exchanges to provide additional disclosures on their website with respect to trading in commodity derivatives. The Exchange has been providing disclosures pertaining to top participants, members and market wide position limits, from February, 2019 onwards.

## Technology

### Technology Innovations

Technology is the prime driver for the Exchange to provide a Trading system with reliability, integrity and security, and meet the challenges of dynamic nature of commodities business. Moreover, the Exchange's consistent efforts to upgrade and enhance its technology systems, has helped it to stay ahead of the curve in the continuously evolving commodities market. The focus of the Exchange is towards technical enhancements, with cost effective options on

technology platforms by receiving continuous contribution from client experience enhancing member satisfaction. In the previous year, MCX has continued to invest in providing robust trading technology with lower latency, higher scalability and better operational experience for trading, surveillance and real time risk management. The upgraded technology platform with its scalable architecture, is capable of adapting to innovations and new market solutions.

### **Robust Platform**

The Exchange technological infrastructure is built on the next generation technology platform, which can cater to all market participants by virtue of being fast, secure, cost effective, transparent and regulated. This has enabled the Exchange to retain its members' confidence and market leadership position in commodities markets consistently. The Exchange's online trading platform is accessible to the members through trader workstations (TWS) or computer-to-computer links (CTCL) and also FIX protocols, over a Point to Point and MPLS leased lines, satellite data connections (VSATs), and the Internet, through secured (SSL-based) Virtual Private Networks (VPN) with two factor authentication (2FA). The Exchange always strives to provide better connectivity options at competitive cost. The Exchange has provided option of higher bandwidth connectivity to its members over point to point and MPLS leased lines.

### **Efficiency and Operational Excellence**

The Exchange has always focused on developing, implementing and maintaining enhanced functionalities required by its members, while ensuring that such technology is not vulnerable to security and operational risks. The upgraded version of the Exchange's system has enabled it to handle even the peak volumes with ease and better efficiency with market competitive peak transactions (Orders and Trades put together) per day, which is well above the record volumes witnessed by the Exchange till date.

### **Process Excellence**

The Exchange is ISO 9001:2015 certified for processes and is committed to provide continuous delivery of its services through an effective and efficient response. The robust technology of the Exchange, enables it to provide market safeguards through real time risk monitoring system and execution of adequate mechanisms that tracks the members' margin utilisations and mark-to-market (MTM) losses online, against their deposits made available to the Company. The system automatically generates alerts and takes pre-decided actions which provides flexibility to Exchange users and trading members to manage and control the risks, monitoring and surveillance.

## **OPPORTUNITIES**

Ever since the commodity derivatives market came under the regulatory supervision of SEBI, the market regulator has been making a lot of efforts to develop and integrate commodity markets. These favourable policy and regulatory changes are bringing in various opportunities for MCX. As a result, there has been a significant expansion of the products and permissible participant categories in the commodity markets. The last two years have been of great significance, with the Regulator permitting the launch of new products and increasing the categories of participants in this market.

### **Expansion of permissible participant categories**

With SEBI allowing institutional participants in the commodity derivatives market, your Company expects the market to expand and become more participative. In March 2019, SEBI permitted Mutual Funds and Portfolio Management Services (PMS) to participate in the commodity derivatives market. Earlier, SEBI (Custodian of Securities) Regulations, 1996 was amended, allowing custodial services in goods that are the underlying for commodity derivative contracts. The presence of financial institutions such as mutual funds is expected to offer the common domestic investors an additional avenue for better financial investment. This can also make the commodity derivatives market more robust by providing liquidity especially to the far months' contracts. Enhanced liquidity and participation of diverse groups including hedgers and financial institutions, strengthens the price discovery mechanism and makes risk management on exchange platforms more efficient and cost effective to the stakeholders, by lowering the impact on cost of trade.

In September 2018, SEBI approved the regulatory framework for permitting 'Eligible Foreign Entities' (EFEs) to participate in the domestic commodity derivatives markets. When EFEs with exposure to the Indian commodity markets hedge their price risks on the Indian exchanges, they will help connect price discovery of commodities in India to the international trade in commodities. India being a major source for various commodities like Cotton, Mentha Oil, etc., global participation in such contracts is expected to support more efficient price discovery and add to the market depth.

### **Lowering cost of participation**

During the year, SEBI slashed the regulatory fee on agricultural commodities trading, a move that would support the growth and development of the Indian commodity derivatives markets and also make it more inclusive. The market regulator also exempted FPOs from maintaining mark-to-market margins, whenever they made early pay-in of their deliveries.

### Expansion of gold delivery centres

Aimed at further expanding the gold contracts' footprint in India, MCX added five more locations to the list of additional delivery centres for gold and gold mini contracts in addition to the existing three main and additional delivery centres. The network of eight delivery centres spread across India's main consumption centres is expected to bring about seamless and efficient integration between the spot and derivatives markets of gold. This is aimed at enabling lakhs of jewellers, big and small, to conveniently take physical deliveries of gold through exchange mechanism from their nearest locations.

### Introducing delivery-based Base Metal contracts

Another significant opportunity your Company cashed in was in addressing the demand for base metal contracts with compulsory delivery settlement. The launch of indigenously benchmarked deliverable metal contracts on MCX has paved the way for the Indian market prices for metals to be discovered in a transparent manner. MCX metal contracts that are benchmarked to domestic spot prices are compulsory delivery based contracts and are settled based on the domestic polled spot prices, against the earlier practice of following international prices. With the launch of deliverable contracts, therefore, your Company is now offering the benefit of fair price discovery reflective of domestic fundamentals and price risk management to the Indian metals market ecosystem. In an effort to bring in good market practices, your Company is in the process of aligning trading lot sizes with delivery lot sizes.

### Forging partnerships

During the year, MCX signed a MoU with Indian Bullion and Jewelers Association (IBJA), for jointly exploring opportunities to set up a bullion spot exchange; and with the Indian Cotton Federation for knowledge sharing initiatives. MCX also signed a MoU with the IMC Chamber of Commerce and Industry (IMC), for jointly undertaking a host of activities for market development and investor outreach. MCX joined hands with the Institute of Chartered Accountants of India (ICAI) at their SME Leader Awards 2018 where a Special Jury Award was given under the category 'Best Commodity Price Risk Management', recognizing the efforts of a Chartered Accountant to enable SMEs, manage their price risks by setting up commodity hedging desks.

## POTENTIAL THREAT

### Competition

The market Regulator gave its nod to NSE and BSE, two biggest stock exchanges, to offer commodity derivatives products. MCX thus faced competition from new players. This is a potential threat to your Company. Your Company endeavours to mitigate the impact of competition by continuously improving its products, technology and processes; introducing new products; sustained investor awareness activities; and having a customer-focused approach.

### Cybersecurity threats

The cyber-attack horizon is expanding day-by-day. Cyber-attacks are becoming more sophisticated, MCX is continuously evaluating and implementing various security solutions for early identification, better detection, quick protection, response and recovery from all such cyber-attacks. An incident of cyber-attack may have financial impact on the company due to loss of reputation and trust. Hence, cyber security has been and continues to be a topic of great priority for Financial Market Infrastructures (FMIs), involving investment of significant time, effort and money.

Constant enhancement in the Cyber Security Framework and Information Security Management System has been your Company's top priority. MCX has adopted a defence-in-depth strategy to ensure information security at all layers with well-defined Cyber Security and Cyber Resilience Policy. MCX Information Security Policy is based on the ISO 27001:2013 controls and is also ISO 27001:2013 certified. To manage cyber security risk associated with processes, information, networks and systems, the Cyber Security and Cyber Resilience Policy of your Company includes the following:

- i. 'Identify' critical IT assets and risks associated with such assets,
- ii. 'Protect' assets by deploying suitable controls, tools and measures,
- iii. 'Detect' incidents, anomalies and attacks through appropriate monitoring tools / processes,
- iv. 'Respond' by taking immediate steps after identification of the incident, anomaly or attack,
- v. 'Recover' from incident through incident management, disaster recovery and business continuity framework.

The Business continuity and disaster recovery plan (BCP-DR Plan) is aiming at timely restoration of systems affected by any type of disasters including incidents of cyber-attacks or breaches. The plan also includes live trading at DR without announcing to the members as mandated by SEBI. MCX's recovery plan is well within the Recovery Time Objective (RTO) of 4 Hours and Recovery Point Objective (RPO) of 30 minutes as specified by SEBI.

Further, your Exchange has also engaged two technology experts to guide in its endeavour to develop a greater strength in technology.

## RISKS AND CONCERNS

Your Company's business performance and financial position depends on various internal and external factors, some of which may give rise to risks and concerns.

### Business Risks

#### Falling prices and volatility yielding declining contract values

As the Exchange's transaction fee is calculated on the basis of the value of commodity futures contracts traded on the Exchange, the volume and value of contracts traded on it have a direct impact on the company's revenues. The trading volumes and value of contracts are affected by external factors, including commodity-specific events and factors such as the construction of new production facilities or processes, new uses or discontinuance of historical uses, mine / plant closures, adoption of new technology by the commodity-specific industry, weather, natural disasters, trade policies and regulations, geopolitical events, etc., all affecting level of production and consumption of commodities.

#### Decline in Options volumes on introduction of transaction charges

To enhance participation of users in the newly introduced Options segment, your Company has been waiving off transaction charges on Options. Since long-term elasticity of volumes with respect to transaction charges on Options are yet to be determined, there is a risk that traded volumes may decline when the Exchange starts levying transaction charges on Options. This has potential to impact your Company's revenue.

### Market Risks

#### Falling yield on Treasury Income

Treasury income comprises of Dividend Income, Interest Income, Gain / Loss on sale of investments and on account of fair valuation of financial assets at each balance sheet date. The fair valuation is impacted by the movement in interest rates, which have witnessed high volatility during the current financial year. The rise in interest rates results in Mark to Market losses, which can be substantial in instruments which have longer duration. Your Company has investments in Long Term Tax free bonds and in certain long duration Mutual Fund schemes within regulatory guidelines.

### Macro-economic Trends

India's commodity derivatives market is impacted by both the domestic and the global economic conditions. Thus, as a part of the Indian commodity derivatives market, the results of your Company's operations are significantly impacted by these economic conditions. Events such as the country's industrial growth, global financial crisis, recession, inflation, etc. influence the commodity fundamentals, hence, the market. Generally, an increase in demand for commodities along with increased price volatility has a positive impact on your Company's operational results. The Company constantly monitors emerging economic trends, and realigns its business strategy, as and when required.

### Technology Risk

#### Technology: cutting edge and vulnerability

One of the most significant enablers for the Company to experience high inclusive growth has been its technology. The innovation in products and processes, which has made the Company an undisputed leader in the industry has been made possible by use and deployment of state-of-the-art technology. The successful operations of your Company's business and operating results are dependent in part on the use and deployment of technology. However, technology is susceptible to obsolescence, and increasingly, to cyber-attacks from across the globe. To continue to be the 'exchange of choice' to its stakeholders, your Company needs to be at the cutting edge of technological infrastructure and connectivity, meeting the ever-evolving demands of its stakeholders with safe and multiple choices of connectivity as per the participant needs. Thus, maintenance of such technology is the highest priority for Company business. On the other hand, the Company expects that advancements in technology, technological infrastructure and connectivity options will enable it to provide more efficient trade execution services, and increase its economies of scale. This is expected to have a positive impact on its revenues.

Your Company sources its core trading software platform from third party vendor and does not own intellectual property rights of the said software. In case the third party vendor is unable to provide services, or keep pace with technological advancements, it may have some impact on technology operations and technology enhancements required, if any.

### Financial Risk

#### Imposition or enhancement of statutory costs

The imposition of Commodity Transaction Tax (CTT) on the sale of non-agricultural commodity futures contracts led to a steep decline in the volumes traded on your Company's trading platform, as compared to the volumes seen in pre-

CTT period. Any new tax or increase in a tax like CTT or a new statutory levy may, likewise, dampen volumes, thereby impacting your Company's profitability.

## Regulatory Risk

### Adverse regulatory and policy decisions

All aspects of your Company's operations are subject to regulatory oversights. Changes in laws, regulations, taxation etc., or new rules, regulations or policies may necessitate the Company to allocate more resources for compliance, hence, increase operational expenses. This may impede the Company's ability to operate and grow its business or may affect the economic prospects for market intermediation.

## RISK MITIGATION PLAN

Your Company regularly reviews the risks it faces and takes appropriate action to minimize the likelihood of such occurrences or their impact.

- i. When transaction charges would be introduced in commodity Options, due care will be taken to ensure that the charges proposed to be levied do not adversely affect traded volumes. This will include adequate study of the likely response of incremental transaction fees on trade volumes, as well as, response of such charges in other market segments having Options products.
- ii. To address the issue of decline in commodity prices decreasing contract values and, therefore, revenues, your Company has been seeking to diversify the product basket, incorporating Futures and Options on various commodity segments from energy to agri-commodities. A well-diversified product basket should help the Company counter the decline in prices.
- iii. To minimize the effect of interest rate volatility on treasury income, your Company is continuously rejigging its portfolio to be in line with the market trends, and if situation warrants reduce the tenure of the portfolio to minimise fluctuations in treasury income on a quarterly basis. Your Company constantly monitors the investments of the Company.
- iv. As a part of risk mitigation plan for avoiding business disruption, your Company has focused on strengthening its core technology infrastructure so that there is no single point of failure, thereby, ensuring uninterrupted services. As a backup plan, your Company has Disaster Recovery (DR) Site at GIFT city in Gandhinagar, Gujarat which has a robust infrastructure and accessibility. Further, your Company has Near Site in Mumbai with synchronous data replication to achieve zero data loss in case of any eventuality. Your Company has also strengthened its BCP-DR initiative and regularly conducts mock drills to test readiness and effectiveness of IT infrastructure at its Data Centre and also its DR site.

## SETTLEMENT RISK MANAGEMENT

Prior to operationalisation of MCXCCL w.e.f. September 03, 2019, your Company used market safeguards and risk management techniques to ensure that its members met their financial obligations promptly and the Exchange was protected from undesirable events. Some of the risk management mechanisms adopted by MCX were minimum net worth requirements for its members, margin requirements, Mark-to Market (MTM) loss monitoring, Insurance Coverage for members, warehousing, etc.

Subsequent to transfer of clearing and settlement division to MCXCCL, requisite risk management measures are being undertaken by the clearing corporation.

## STRATEGY

Your Company aims to further consolidate its position as a leading exchange by providing a wide array of commodity derivatives with increased focus on growing overall market size & diversifying its product and service offerings; maintaining new product innovation and development; and offering state of the art services to all its stakeholders. Your Company will continue to make relentless efforts in tapping the opportunities unfolding in India's commodity derivatives market.

### Focus on increasing participation and expanding product suite

With base metal contracts now being delivery based, the Exchange will work more closely with the industry to make them the products of choice, for hedging and delivery. Your Company will now offer the benefit of fair price discovery reflective of domestic fundamentals and price risk management to the Indian metals market ecosystem, thereby becoming a 'price setter' in base metals.

With SEBI permitting mutual funds and portfolio management services (PMS) to participate in the commodity derivatives market, and allowing futures on commodity indices, your Company looks forward to the participation of institutional players in this market, leading to greater liquidity and market depth.

While your Company is working towards offering trading in indices on commodity derivatives, it also looks forward to expand its product offerings with exotic derivative products such as weather derivatives, subject to necessary regulatory approvals.

Going forward, your Company will increase its focus on getting large corporates, and small and medium enterprises to hedge on the Exchange platform. On evolving regulatory developments, your Company will explore opportunities in broader commodity eco-system, including building and developing spot trading platforms for commodities such as gold, natural gas and others.

### **Efforts for financial literacy in commodity derivatives**

As a part of your Company's commitment towards improving financial literacy in commodity derivatives, MCX endeavours to reach out to a larger number of value chain participants and develop an efficient and vibrant ecosystem for the stakeholders. The Company will continue to undertake several initiatives in reaching out to members to keep them abreast about new products and future initiatives.

### **Focus on strengthening technical capabilities**

In anticipation and preparation for future opportunities in the SPOT trading space, your Company is investing in building a platform using latest technologies to launch a SPOT Exchange in the commodity space including Bullion and Natural Gas. The platform being built aims at being scalable to meet the high performance needs of the growing market.

Your company is investing in innovation and building in-house solutions to be agile and self-reliant to meet the growing demands of the market and regulators. Towards this the Company is adopting new technologies for applications and for enhanced analytics. The Company is strengthening its technical capabilities to develop and support these platforms with a right balance of in-house and outsourced talents.

## **INITIATIVES**

Your Company took a number of initiatives during the year for market development and growth:

### **Launch of independent Clearing Corporation**

During the year, India witnessed the launch of the country's first clearing corporation in the commodity derivatives market. Multi Commodity Exchange Clearing Corporation Limited (MCXCCL), a wholly owned subsidiary of MCX, was inaugurated by Shri S. K. Mohanty, Whole Time Member, SEBI, on August 30, 2018, following which, the clearing corporation took over the clearing and settlement functions of MCX. The presence of a separate and well-capitalized clearing corporation has the objective of enhancing trust among the participants of the commodity derivatives market, especially the institutional investors. At the same time, the segregation of post-trade risk management provides exchanges like MCX with more opportunities to focus on development and inclusiveness of the market. MCXCCL, within a few months of commencing operations, has already become a member of the prestigious Asia-Pacific Central Securities Depository Group. MCXCCL is being subjected to regulation and supervision using the 'Principles for Financial Market Infrastructure' (PFMIs), issued by CPSS and IOSCO in April 2012, to enhance safety and efficiency in payment, clearing, settlement and recording arrangements and to limit systemic risk and foster transparency and financial stability.

### **New products**

Another major initiative taken during the year was the launch of four new commodity Options contracts on futures of Crude Oil, Zinc, Copper and Silver. MCX is committed to meet the hedging and investment needs of commodity stakeholders, through expansion of its products. These new options contracts enable the Exchange serve stakeholders in the market with varied participation objectives, thereby making the commodity derivatives market more efficient and inclusive. The Exchange also launched futures contracts on Rubber during the year, which was discontinued in March 2019.

### **New facilities to better serve stakeholders**

Your Company remains committed to further strengthening its processes, creating products and systems in order to uphold the trust bestowed by its stakeholders. During the year, your Company undertook the measures listed below to facilitate its members and their clients.

- i) MCX opened five more gold delivery centres at Hyderabad, Bengaluru, Kochi, Chennai and Kolkata in order to enhance the reach of the gold derivatives market.
- ii) The Exchange launched the 'Member Assistance Portal' for online resolution of members' queries and introduced MCX Member Profile Interface (MMPI), an online utility for members, assisting them in updating their profile details and membership compliances.

- iii) MCXCCL successfully completed its transition to an electronic Negotiable Warehouse Receipt (e-NWR) system through the WDRA-recognized CDSL Commodity Repository Limited (CCRL) for physical delivery of agri-commodity derivatives. This development was undertaken to enhance confidence of the market participants undertaking physical delivery through the Exchange mechanism, and also promote e-NWRs and strengthen the linkage of the broader commodity market, with the world of finance through warehouse receipt financing.

### Outreach initiatives

MCX continues to take up various initiatives for spreading awareness among various stakeholders about the benefits of participating in a well-functioning, efficient, transparent commodity derivatives market. With the aim to develop a culture of risk management, your Company undertook various measures to educate potential hedgers on the necessity, benefits and modalities of price risk management using exchange traded commodity derivatives. Awareness programmes for various stakeholders of commodity markets, in association with various entities like Exchange members, media, industrial associations, banks etc. was one of the primary modes adopted for spreading awareness about the market. The details are given below:

- i) During 2018-19, MCX conducted 745 awareness programmes across the country. A number of these programmes were conducted in association with industry associations or professional bodies (such as ICAI, ICSI, etc.) with the objective of spreading awareness about commodity hedging/ investment/ disclosures to the concerned stakeholders.
- ii) An exclusive event was held, in association with the Federation of Indian Chamber of Commerce and Industry (FICCI) on February 28, 2019, to create awareness among the new institutional participant categories, such as Alternative Investment Funds, Mutual Funds, Portfolio Managers, about investment opportunities using commodity derivatives.
- iii) In partnership with Ernst & Young LLP, USA, EY India, and Navitas Resources, Singapore, your Company organized a two-day workshop on 'Hedging of Aviation Turbine Fuel (ATF)' for personnel of airlines companies. Senior personnel from Finance and Procurement functions of Indian aviation companies (Air India, Jet Airways, Spicejet and Air Vistara) participated in this hedging workshop.
- iv) To sensitise banking personnel about risk management using commodity derivatives, a programme was conducted at the Canara Bank Staff Training College, Bengaluru, which was attended by about 50 officials from the credit and risk functions of the bank.
- v) In order to spread awareness about commodity markets among the student community, COMQUEST, a national-level quiz on commodities was conducted during the year. Teams from 56 colleges across the country competed in this quiz.
- vi) MCX conducted 99 events during the year focused on Farmer Producer Organizations (FPOs) and farmers, to spread awareness amongst the farming community about how the price discovery and price dissemination initiatives of commodity exchanges can enable them to realize better prices while selling their agricultural produce. More than 35,000 participants benefited from these events.
- vii) During the year, MCX entered into a MoU with the Department of Agriculture, Government of Maharashtra for launching 'Cotton Mission' in the State's Vidarbha region. The Mission is aimed at increasing market access for Vidarbha's cotton farmers, to enable them earn higher incomes by moving them up the cotton value chain and facilitating them to hedge and deliver on the Exchange platform. Under this Mission, 18 new warehouses were accredited for delivery of cotton in Maharashtra's Vidarbha region, and 27 awareness events were conducted for the benefit of farmers of the region.
- viii) On November 16, 2018, MCX observed 'India Commodity Day', to commemorate the 15<sup>th</sup> anniversary of the Exchange going live, as well as, to spread awareness about the importance of commodity trading among the public. The knowledge-sharing event brought together regulatory officials and industry leaders from India and abroad. Officials from a regulatory body, the US Commodity Futures Trading Commission (CFTC), global exchange, the London Metal Exchange and a leading Price Reporting Agency, Argus, deliberated on the path ahead for growth of India's commodity derivatives market.

### Other Stakeholder engagements

To honour the stakeholders of India's commodity derivatives market for their role in developing this market, your Company organized the third edition of MCX Awards on April 26, 2019. 57 members and other ecosystem partners were felicitated for their contribution in 7 award categories at the said event.

MCX participates in various conferences organized by trade bodies, stakeholders' associations for spreading awareness and as a forum for policy advocacy. During 2018-19, some of the major conferences in which the Company has participated included WFE General Assembly & Annual Meeting, IOSCO Annual Conference, LBMA/LPPM Precious Metals Conference, Annual FIA Asia Derivatives Conference, FIA Expo and FOW Trading Conference .

Your Company also undertook various initiatives for knowledge sharing with global exchanges and regulators. Senior management of the Exchange visited global exchanges such as CME and Dalian Commodity Exchange (DCE) during FY 2019. This helped in understanding their products and practices, and remain abreast of developments in trading, technology, clearing and risk management in global arena.

### **Publications**

MCX publishes various articles in print media and engages with the electronic media to create awareness about the benefits of the commodity derivatives markets, as well as for sensitizing policy-makers about various policy changes that can further its growth. Articles on various aspects of the market are regularly published in various publications including trade journals and mainstream newspapers and magazines with wide reach. Awareness about commodity markets, including hedging using commodity derivatives and the 'dos and don'ts' for safe trading, is also created through various channels of the electronic media, including regional channels. 'Commodity Insights Yearbook 2018', a resource for spreading market intelligence and a repertoire of analytical articles was released by your Company on India Commodity Day 2018. This publication also aims at spreading knowledge and promoting research in the commodity ecosystem. MCX's periodic newsletters, which are widely circulated and uploaded on the website are other effective tools used to regularly communicate with the Exchange's stakeholders. Various commodity-specific brochures on hedging, investment, disclosures, etc. and in multiple languages are also published to spread awareness about opportunities for hedging and investment in the commodity derivatives market.

### **Policy Advocacy**

Your Company endeavours to drive advocacy towards objectives, which are of significance to all stakeholders of the commodity derivatives market and for making the market more relevant and inclusive. During the year, the advocacy efforts were oriented towards policy and regulatory changes aimed at entry of new participant groups, such as mutual funds, Portfolio Management Services, banks, pension funds, insurance companies and other institutional entities in the commodity derivatives market, and also facilitating the participation of Alternative Investment Funds (AIFs) and custodial service providers in this market segment. Advocacy was also done for expansion of the permissible products to include index-based products and Options on new commodity futures. SEBI was requested to facilitate listed companies' compliance to disclosure of their exposure to commodity price risks and hedging activities in their Annual Reports. Following this request, the market regulator issued instructions and a format for disclosure of commodity price risks and risk management which is to be followed by all listed companies.

### **OUTLOOK**

A combination of macroeconomic factors, together with the structure and dimensions of the Indian economic growth story and supportive policy measures, provide for a positive outlook for your Company

#### **Economic growth - Boost to demand in commodities and their risk management**

The Indian economy is poised to traverse a high growth path. Supporting the strong growth story of the Indian economy would be sectors such as agriculture (and its value-add), mining, manufacturing, and related sectors. Aided by rising aggregate demand of a rising population (much of which is young), and an enabling policy environment, both the primary and secondary sectors could continue to retain their momentum.

The commodity-intensity of India's industrial and agricultural growth story means that the stability and growth of India's commodity market will continue to play an important role to sustain Indian economy. Besides, with a strong relation between primary sectors such as agriculture, mining and a host of user industries, the growth in the primary sector would continue to act as a catalyst for the development of other core industries like power, steel and cement. These, in turn, are critical for the overall development of the economy. Here too, the role of India's commodity market and its ability to supply key raw materials to industries cannot be overemphasized.

In all, the strong demand for commodities is expected to contribute to a strong demand for commodity risk management and price discovery, and further boost the demand for services such as warehousing, logistics, and assaying. Development of these services, which in turn, would contribute to sustainable growth of the commodity derivatives market through reduced costs and widespread availability, is a long term opportunity for your Company.

#### **Expansion of product and participant categories**

The Indian commodity derivatives market has been witnessing regulatory and policy enablements since SEBI took over the reins of the market in 2015. SEBI's historic decisions made in 2018-19 hold promises for the current year too.

SEBI allowed options on commodity futures in the metals and energy segments and also permitted newer participant segments in the commodity derivative market. The market regulator recently allowed Mutual Funds and Portfolio Managers to participate in the commodity derivatives market. This development can be a game changer in this market. In 2017-

18 bank broking subsidiaries were allowed to distribute commodity derivatives and broking houses allowed to integrate their entities across commodities and other asset classes under a single license, these entities took the advantage of these regulatory decisions and expanded their footprint in the commodity derivatives market starting 2018-19. Similarly, banks have started becoming professional clearing members of exchanges/ clearing corporations, making the exchange-traded commodity markets more attractive for financial institutions to participate.

In a development that brightens the future outlook of your Company, SEBI approved amendments to the SEBI (Custodian of Securities) Regulations, 1996 allowing custodial services in goods that are the underlying for commodity derivative contracts. These amendments by enabling participation of institutional investors in commodity derivatives market, are key to enhancing depth and liquidity of this market. In another initiative at market deepening, SEBI released a Consultation Paper for Warehouse Service Providers (WSP), warehouses, assayers and other allied service providers engaged in non-agricultural goods. This is a significant development for your Company which specializes in non-agricultural commodities, as standardisation of storage and delivery norms for non-agricultural commodities will help unlock their values and invigorate both their derivatives and physical markets.

SEBI has released the Guidelines for 'Design of Commodity Indices and Product Design for Futures on Commodity Indices' on June 18, 2019, which enables your Company to commence futures on commodity indices. Earlier, in January 2019, SEBI has released a Consultation Paper on introducing tradable derivative contracts on commodity indices. Once introduced, index-based products will encourage participation of institutions, such as mutual funds, in the commodity derivatives market. Further, trading in derivatives products on commodity indices may also increase liquidity in underlying commodity derivatives products, as participating entities may like to carry out arbitrage trades across index products and constituent commodity derivative contracts or may use one product to hedge their positions in other.

#### **Other enablements**

The government has expressed its intention of permitting electronic spot trading platforms for trading commodities. Subject to regulatory guidelines and approval, your Company will explore opportunities for building and developing spot trading platforms for commodities such as gold and natural gas.

Meanwhile, trading time was increased by an hour to boost participation. Now, one can trade in non-agri commodities from 9 am to 11.30/ 11.55 pm, and in agricultural/ agri-processed commodities from 9 am to 5 pm (up to 9 pm for internationally referenced agri-commodities).

These developments hold a lot of promise for the further growth of the commodity derivatives market and present a bright outlook for your Company.

#### **INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY**

The Board has put in place various internal controls to be followed by your Company to ensure that the internal control mechanisms are adequate and are effective. The Board has also put in place state-of-the-art technology and has automated most of the key areas of operations and processes, to minimize human intervention.

The design, implementation and maintenance of adequate internal financial controls are such that they operate effectively and ensure accuracy and completeness of the accounting records. Their presentation gives a true and fair view of the state of affairs of the Company and are free from material misstatements, whether due to error or fraud.

The operational processes are adequately documented with comprehensive and well defined Standard Operating Procedures. These includes the financial controls in the form of maker and checker being with separate individuals.

The Board has approved a scheme of financial sub-delegation to officials of your Company for incurring expenses. The Board, with a view to ensure transparency, has also formulated various policies and has put in place appropriate internal controls for the procurement of services, materials, fixed assets, monitoring income streams, investments and financial accounting.

Internal control measures includes adherence to systemic controls, information security controls, as well as, role based/ need based access controls. Further, the existing systems and controls are periodically reviewed for change management in the situations of introduction of new processes / change in processes, change in the systems, change in personnel handling the activities and other related activities.

The Audit Committee of the Company, comprising of majority of Public Interest Directors, reviews and recommends the unaudited quarterly financial statements and the annual audited financial statements of your Company to the Board for approval.

Your Company has appointed a firm of chartered accountants to conduct independent financial and operational internal audit in accordance with the scope as defined by the Audit Committee. The reports from the Internal Auditors are reviewed by the Audit Committee on periodic basis and the Internal Auditor have been advised to issue flash reports, if required.

Further, all related party transactions are placed before the Audit Committee and are approved / ratified by it after deliberations.

### MATERIAL DEVELOPMENTS IN HUMAN RESOURCES

Your Company continues to attract, retain and nurture talented workforce in its endeavour to be an employer of choice. As on March 31, 2019, your Company employed 351 employees.

Consequent to the expiry of the tenure of Mr. Mrugank Paranjape as MD & CEO, Mr. P.S. Reddy was appointed as MD & CEO of the Company w.e.f. May 10, 2019.

Cultural integration being the integral part of management philosophy, the Exchange launched multiple employee initiatives during the year. The primary focus was on delivering a premium employee experience and building organisational capabilities.

Premium employee experience was actualized through our continual efforts and initiatives like structured Reward & Recognition program and rewarding their Long Service to recognize the contribution & value add of deserving employees.

Structured 'Internal Job Posting' platform has been put in place offering opportunities within the Exchange to the aspiring and deserving employees for lateral & hierarchical career growth. To enhance competencies and collaborative efforts of the senior team of the Exchange, 360 degree feedback was initiated to align self-perception to the perception across subordinate, peers and senior levels.

Further, objective appraisal systems based on Key result areas (KRAs) have been put in place, wherein, mid-term feedback to all employees is provided across all levels.

HR Continues to run online **HR Portal called 'HR-Connect'**, for enhanced transparency in Employee Lifecycle Management and Performance Evaluation Systems enabling employees to receive timely feedback, chalkout personal development plan, identify training needs and decide on suitably rewarding deserving employees.

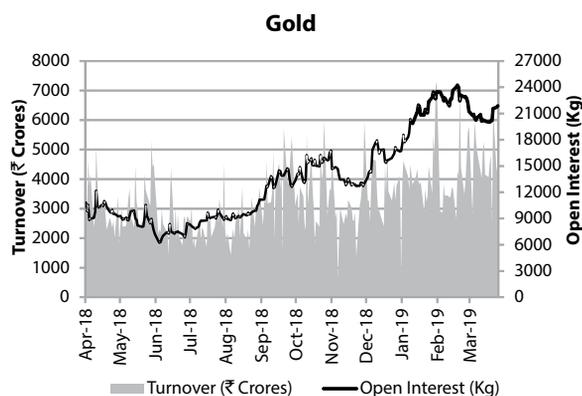
### CAUTIONARY STATEMENT

In this annual report some future developments which are expected to be implemented have been given. This has been to help investors better understand the Company's future prospects and make informed decisions while interacting with the Exchange. This annual report and other written and oral statements made from time to time may contain such forward looking statements that set out anticipated results based on management's plans and assumptions. Wherever possible efforts have been made to identify such statements by using words such as 'anticipates', 'estimates', 'expects', 'projects', 'intends', 'plans', 'believes', and words and terms of similar substance in connection with any discussion on future operations or financial performance have been used. It cannot be guaranteed that any forward-looking statement will be realised, although, we believe, we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. Should 'known' or 'unknown' risks or uncertainties materialise, or should the underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Investors should bear this in mind when they consider forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

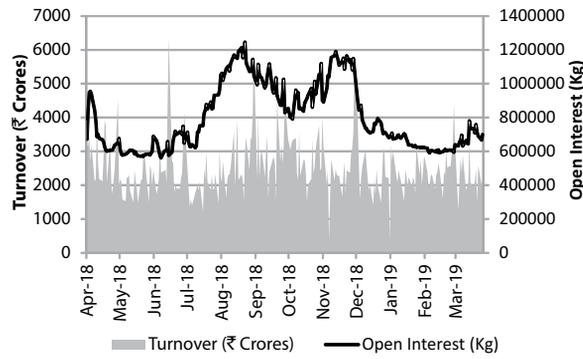
### ANNEXURE I

#### Turnover and Open Interest of Commodity Futures Contracts Traded on MCX in 2018-19

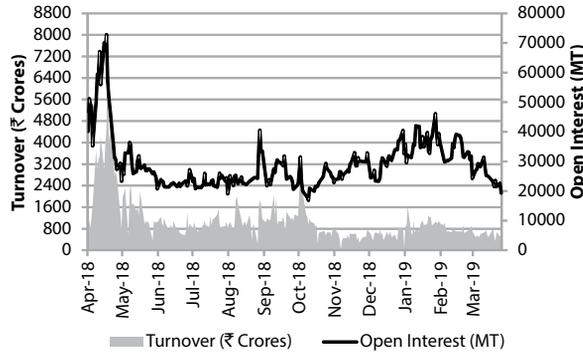
(All variants of each commodity combined)



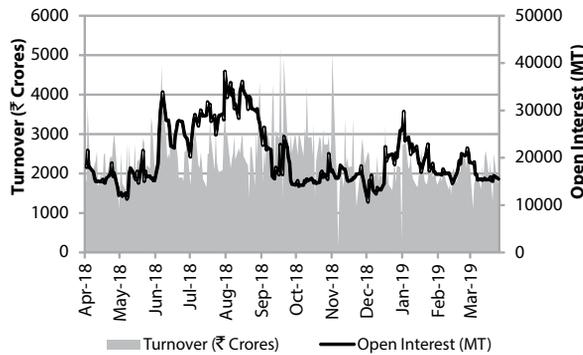
### Silver



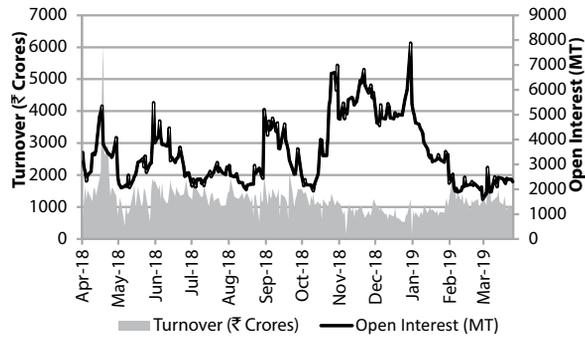
### Aluminium



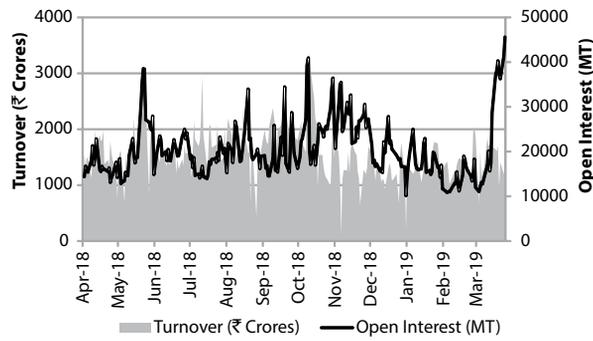
### Copper



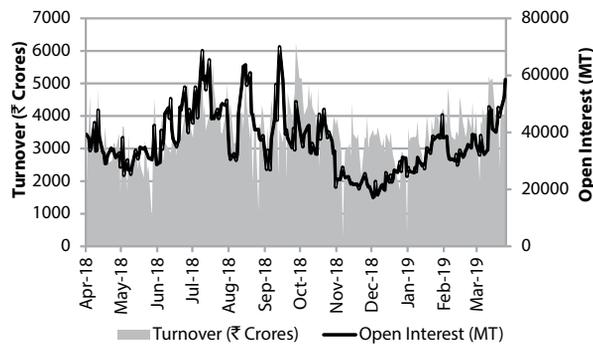
### Nickel

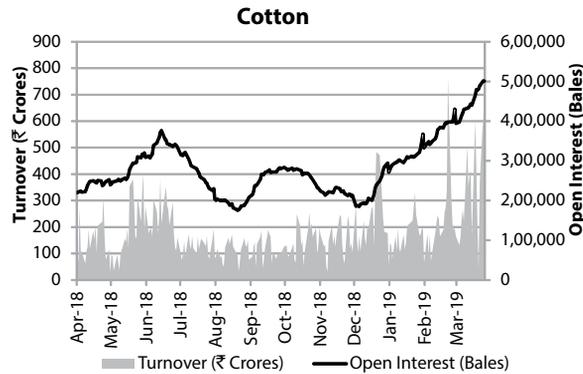
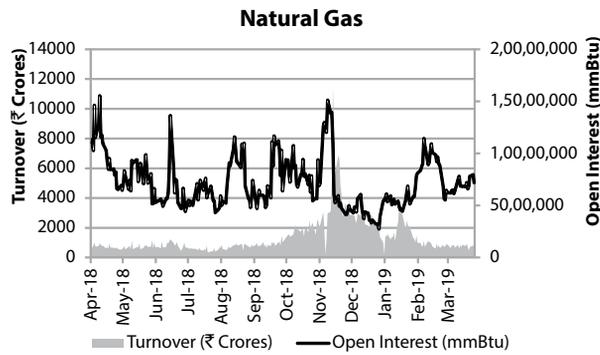
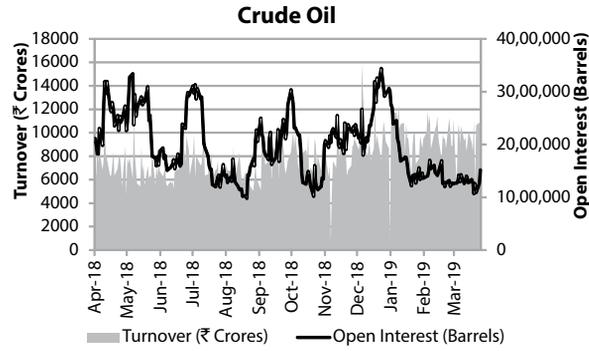


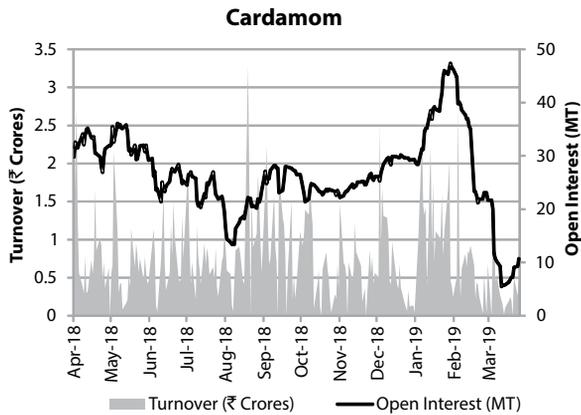
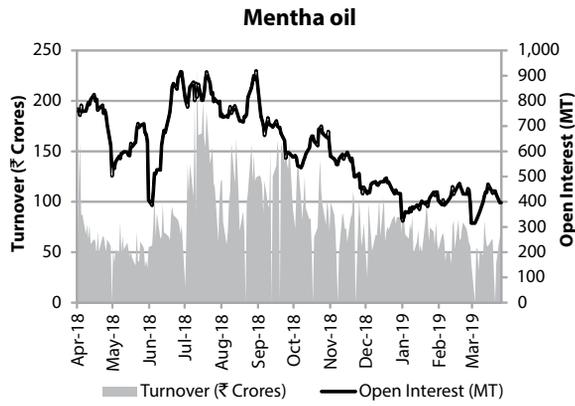
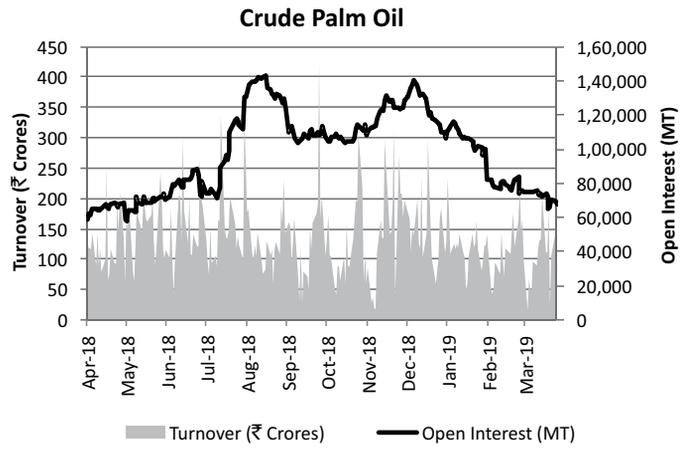
### Lead



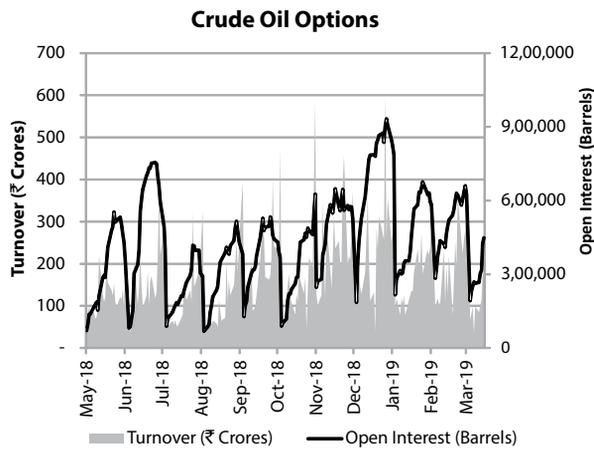
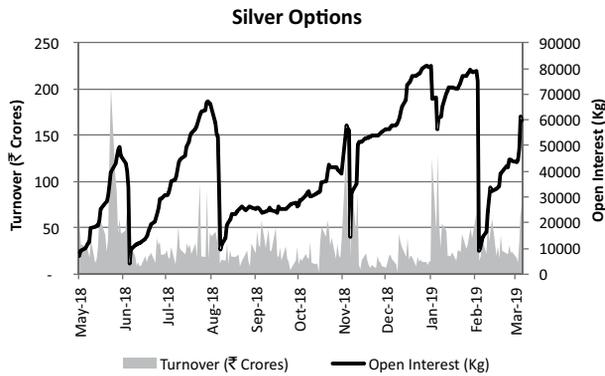
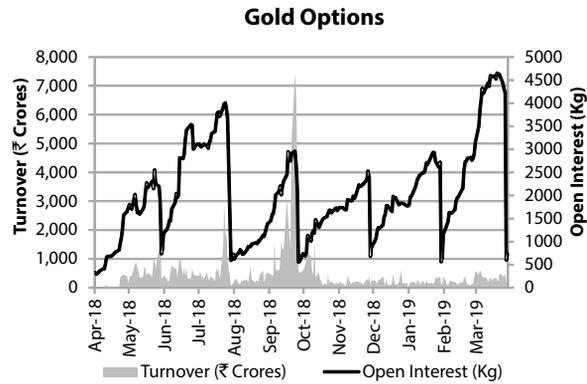
### Zinc



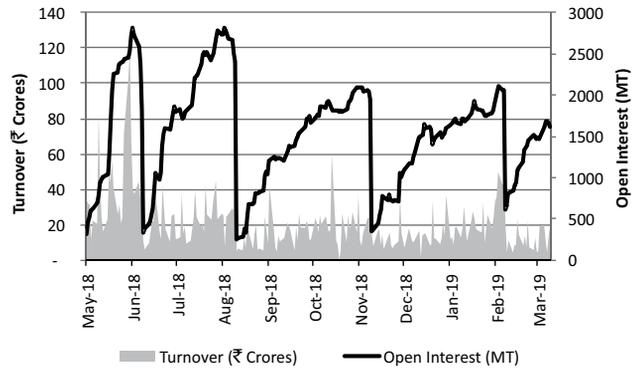




## Turnover and Open Interest of Options Contracts Traded on MCX in 2018-19



### Copper Options



### Zinc Options

