

# EXPERIENTIAL ANALYSIS AND MARKET TRENDS ON COMMODITY DERIVATIVES

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## ABSTRACT

*There is a tremendous assortment of financial products especially derivatives. They are either traded on organized exchanges (called exchange traded derivatives) or concurred legitimately between the contracting counter-parties via phone or through electronic media as OTC derivatives. Contracts are built on straightforward structure like forwards, futures, options and swaps to take into account the particular prerequisites of clients. OTC market is certainly not a physical commercial center yet an assortment of agent sellers dispersed the nation over. Fundamental thought of the market is a method for working together than a spot. Purchasing and selling of agreements is coordinated through arranged offerings over a system of phone or electronic media that interface a great many delegates. The fundamental idea of a derivative agreement continues as before for all the underlying assets, regardless of whether the basic happens to be a commodity or value or list prospects. A few highlights are extremely impossible to miss to Commodity derivatives markets. Indeed, even on account of physical settlement, financial assets are not massive and needn't bother with unique office for storage, whereas in commodity market, because of the massive nature of the underlying assets, physical settlement in commodity derivatives makes the requirement for warehousing.*

*Key Words: Derivatives, commodity derivatives, commodity market indices, agricultural commodity, OTC – Over-the-counter.*

## INTRODUCTION

The market comprises a broad range of different instruments. The derivatives commodity derivatives market has made excellent progress in the last few years, in view of this the potential returns of derivatives market are much greater.<sup>11</sup> For want of robust pecuniary planning and channelize their savings in to 22 Commodity derivatives especially agricultural commodities recommended for their investment alternatives. There is a constant verification of prices trends and predicting future commodity price movements through the use of technical analysis<sup>33</sup> and experiential analysis are imperative to understand and move forward to clinch potential investments. The risk was more in non-liquid contracts<sup>44</sup> where more than one day may be required to close the defaulters position. A financial forecasting exercise is usually carried out in order to provide an aid to decisions<sup>55</sup>. Hence this research of brings the observational experience in terms of commodity derivative market movements assures all segments of Indian investors including pecuniary savers have been directed towards commodity derivatives market for their investments alternatives. Hence this research focuses the current market movements form the

past two months assists the investors to understand and took profit gearing financial assets for their investments.

## RESEARCH OBJECTIVES

To understand the Indian Commodity Derivatives Market movements  
 To Interpret the aggregate turnover of the Indian Derivatives Market  
 To know the trends in Commodity Market Indices  
 To interpret the movement of Agricultural Commodity Derivatives

## RESEARCH METHODOLOGY

The present experiential study about the Indian Commodity Derivatives Market movements, Indices, and Agricultural Commodity have drives to analyze the existing latest information and data flow in the designated market such as BSE, NSE and MCX. This research has used the method of experiential analysis and interpret suitably to encode the positive math-s on derivatives investments.

## DATA COLLECTION

Secondary data collected from BSE, NSE websites and Annual Reports and SEBI Bulletins.

## DASHBOARD OF INDIAN COMMODITY DERIVATIVES MARKETS

**Table-1: Indian Commodity Derivative Markets**

<b>Commodity Market Indices</b>			
<b>Items</b>	<b>Jan-2020</b>	<b>Feb-2020</b>	<b>% Change</b>
Nkrishi	3,258	3,072	-5.7
MCX iCOMDEX	10,102	9,505	-5.9
<b>Commodity Market Turnover (Rs.in Crores)</b>			
<b>Items</b>	<b>Jan-2020</b>	<b>Feb-2020</b>	<b>% Change</b>
<b>All-India</b>	<b>9,25,564</b>	<b>8,60,685</b>	<b>-7</b>
<b>MCX, of which</b>	<b>8,80,816</b>	<b>8,26,256</b>	<b>-6.2</b>
<i>Futures</i>	8,40,347	7,92,259	-5.7
<i>Options</i>	40,470	33,997	-16
<b>NCDEX, of which</b>	<b>37,714</b>	<b>27,400</b>	<b>-27.3</b>
<i>Futures</i>	37,699	27,389	-27.3
<i>Options</i>	14	11	-20.8
<b>ICEX</b>	<b>4,589</b>	<b>4,146</b>	<b>-9.6</b>
<b>BSE</b>	<b>2,333</b>	<b>2,725</b>	<b>16.8</b>
<b>NSE</b>	<b>113</b>	<b>157</b>	<b>39.7</b>

Source: MCX, NCDEX, ICEX, BSE and NSE.

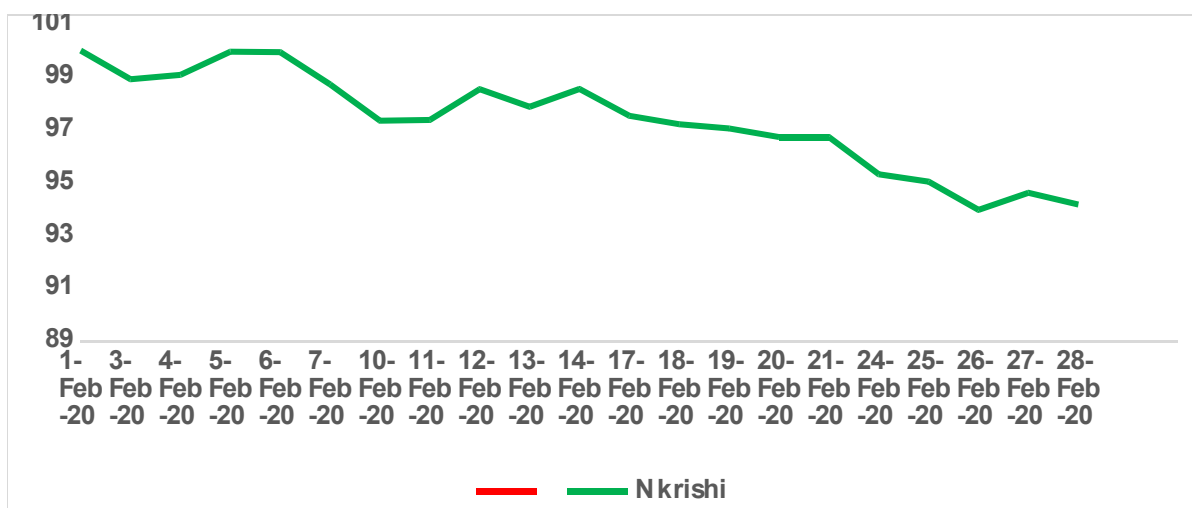
### Interpretations:

- During February 2020, MCX icomdex composite index, witnessed a fall of 5.9 per cent (M-o-M) driven by decrease in futures prices of base metals, energy and agri. segments. On Y-o-Y basis, MCX icomdex composite index decreased by 12.0 per cent.

- During the month, MCX icomdex crude oil index decreased by 12.1 per cent on account of decline in futures price of crude oil by 11.4 per cent. MCX icomdex base metal index declined by 6.9 per cent due to decrease in futures price of all the base metals. The futures prices of zinc, nickel, alumini, lead mini and copper declined by 12.4 per cent, 3.1 per cent, 1.5 per cent, 0.2 per cent and 0.05 per cent respectively. MCX icomdex bullion index decreased by 0.9 per cent due to decrease in future prices of silver by 6.4 per cent which was partially offset by increase in gold price by 1.0 per cent. Among the Agri. segment, futures prices of all the four commodities viz. cardamom, CPO, mentha oil and cotton decreased by 24.0 per cent, 10.7 per cent, 2.4 per cent and 2.2 per cent respectively.

**MOVEMENTS OF COMMODITY DERIVATIVES MARKET INDICES**

**Figure-1: Movement of Commodity Derivatives Market Indices during February 2020**



**Note:** The closing value of MCX Comdex and NCDEX Nkrishi have been normalised to 100 on February 01, 2020.

*Since MCX discontinued dissemination of MCX COMDEX index w.e.f. January 16, 2020, MCX icomdex composite index data is used for trend review.*

**Interpretations:**

- NKrishi index decreased by 5.7 per cent (M-o-M) as futures prices of nine out of 10 constituent commodities of the index (guarseed, soybean, chana, RM seed, cottonseed oilcake, coriander, barley, jeera and castorseed) except turmeric witnessed downtrend. On Y-o-Y basis NKrishi index declined by 6.0 per cent. Monthly trends in MCX icomdex composite Index and NKrishi Index are provided in Table 65.
- During February 2020, average daily volatility in MCX icomdex composite and NCDEX NKrishi indices was recorded at 0.9 per cent and 0.8 per cent respectively.

**INTERPRETATIONS ABOUT AGGREGATE TURNOVER**

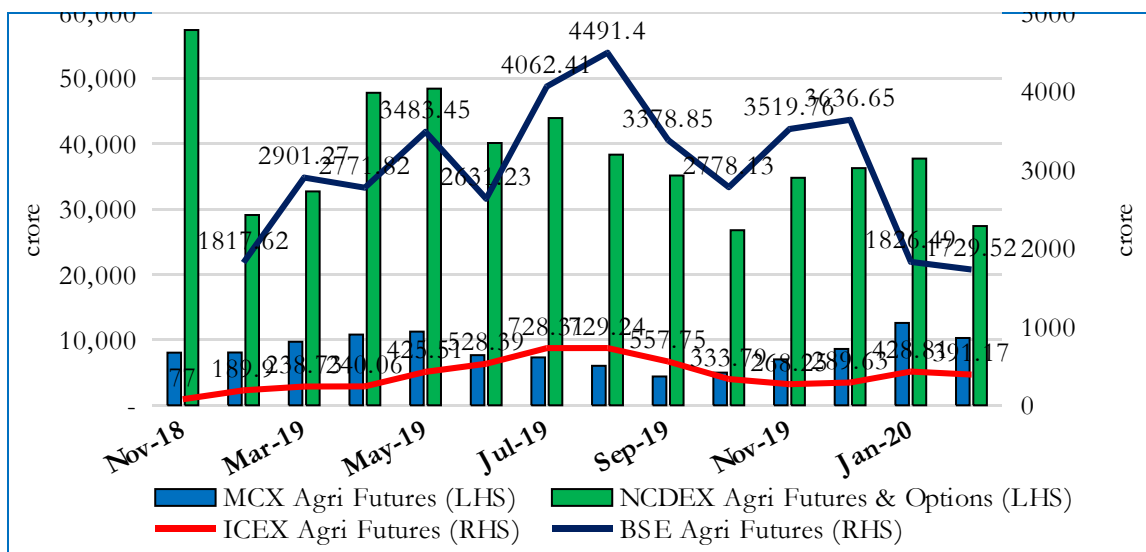
- During February 2020, the aggregate turnover of all the commodity exchanges taken together decreased by 7.0 per cent to ₹8,60,685 crore due to decrease in turnover at MCX, NCDEX and ICEX. However, turnover at BSE and NSE increased during the month. The

agricultural segment contributed 4.6 per cent to the total turnover, while non-agricultural segment accounted for 95.4 per cent.

- The total turnover (futures & options) at MCX decreased by 6.2 per cent to ₹8,26,256 crore during February 2020. The turnover in futures segment decreased by 5.7 per cent due to decrease in traded volume (except metal and energy) and value of all the four segments viz. bullion, metal, energy and agri. The turnover in futures segments of agri. decreased by 18.3 per cent, followed by metal 14.5 per cent, bullion 9.5 per cent and energy segment by 0.1 per cent.
- The notional turnover of options contracts traded at MCX decreased by 16.0 per cent during the month, as turnover in metal, bullion and energy segments decreased by 67.5 per cent, 19.8 per cent and 12.1 per cent respectively. The options contracts contributed 4.1 per cent to the total turnover at MCX.

**INTERPRETATIONS ABOUT AGRICULTURAL COMMODITY**

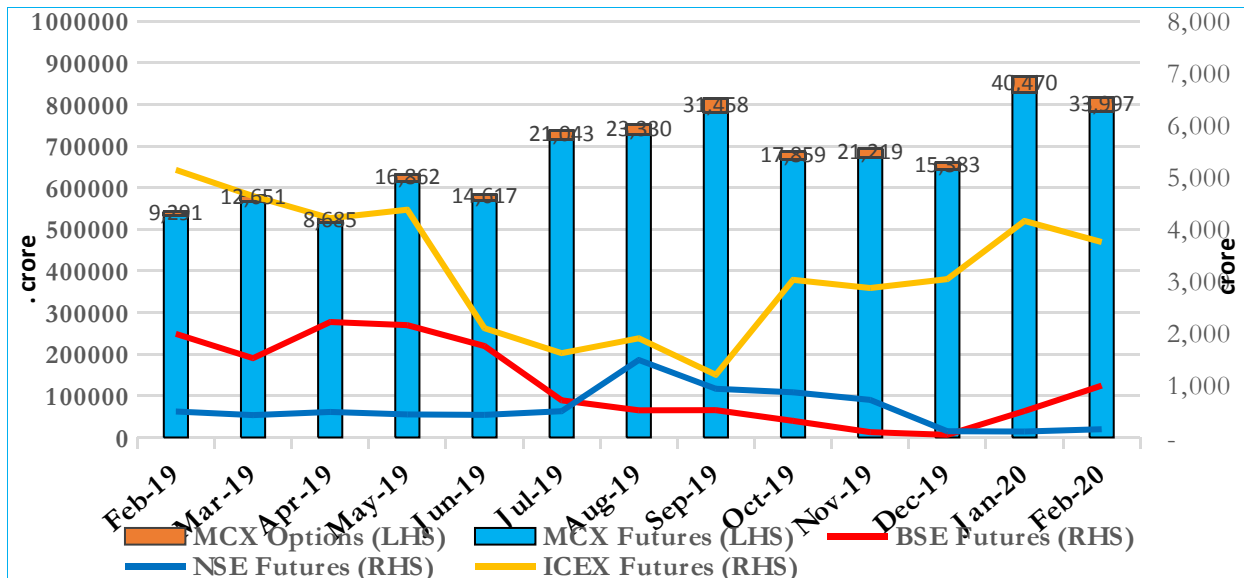
**Figure-2 Trends in turnover of agricultural commodity derivatives (₹crore)**



Source: MCX, NCDEX, BSE & ICEX

**MARKET MOVEMENTS IN TURNOVER OF NON-AGRICULTURAL COMMODITY DERIVATIVES**

**Figure-3 Trends in turnover of non-agricultural commodity derivatives - futures and options**



Note:-Values represented on the top of the bars are respective monthly option turnover at MCX (in Rs.crore). Source: MCX, ICEX, BSE & NSE.

**Interpretations:**

- During the month, the total turnover at NCDEX decreased by 27.3 per cent to ₹27,400 crore, due to decrease in traded value of all the commodities except chana. Turnover in options segment at NCDEX decreased from ₹14.2 crore to ₹11.2 crore in February 2020, a decline of 20.8 per cent.
- In February 2020, turnover at ICEX decreased by 9.6 per cent to ₹4,146 crore due to decrease in traded value of gems and stone, steel long and agri. segments by 9.1 per cent, 8.8 per cent and 12.3 per cent respectively.
- The commodity derivative turnover at BSE increased by 16.8 per cent due to increase in traded value in non-agri. segment (bullion and energy) by 96.6 per cent. However, the turnover in agri. segment of BSE declined by 5.3 percent. At NSE, the total turnover during the month increased by 39.7 per cent as turnover in energy segment increased significantly from ₹113 crore to ₹157 crore.

**CONCLUSION**

The commodity market movements are caused by three major factors such as price volatility, time to expiration, and interest rates. The consequences of movements in the underlying asset’s price either up or down influences both call and put options and in the same way the other derivative contracts too. The effect of time to expiration on all the derivatives contracts are similar to that of price volatility and its premiums. Generally, longer the maturity of the contract greater is the uncertainty and hence the higher premiums. This is also time decay. Interest rates are slightly complicated because they affect almost all types of derivative contracts. Therefore the dynamism in the derivative contracts are Price, Time decay and Interest rates.

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