

# Month Wise Behavioural Pattern Of Commodity Derivative Trading Volume In India

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## ABSTRACT

*Existing research studies did not sufficiently explain the determinants of rapidly growing total volume of commodity derivative market trading. All these led to the question that does the commodity derivative trading volume follow positive growth trend continuously?. The lowest monthly commodity derivative trading volume was found to have recorded mostly in the month of January. The highest monthly commodity derivative trading volume was recorded mostly in the month of November. The volume of trading has fallen down during the months of March, July, and December over corresponding months in previous year.*

**Key Words:** Commodity, Derivative Trading. Volume of Trading

## 1. INTRODUCTION

This article provides an explanation of monthly behavioural pattern of commodity derivative trading volume in India since 2014 to 2018. A commodity is generally considered to be any kind of tangible good that can be interchanged with other goods of the same type. According to the Securities Contracts (Regulation) Act, 1956 (SCRA) "goods" mean every kind of movable property other than actionable claims, money and securities. Commodities are mostly used as inputs in the production of other goods or services. Grains, Gold, Crude Oil, Copper, Natural Gas are some examples of commodities [1]. Commodity derivatives are contracts. Contracts are agreement between two parties for mutual benefit. Commodity derivative contracts provide for i) selling commodities at a specified price on a particular future date and ii) buying commodities at a specified price at particular future date. As commodities are available on a future date at a price specified in the contract the buyer is protected from hike in price of the commodity. Similarly, the sellers are protected from the price fall as the commodities are bought on a future date at the specified price. Since buyers enjoy protection from price hike and sellers from price fall, commodity derivative contracts became a tool for price risk management. Thus, commodity derivatives are defined as the exchange traded or OTC like futures, forwards and swaps with the underlying being non

financial commodities. But, the commodity derivatives are financial instruments. The value of commodity derivative is based on underlying commodities, such as oil, gas, metals, agricultural products and minerals. Other assets such as emissions trading credits, freight rates and even the weather can also underlie commodity derivatives [2].

Who are the beneficiaries really needing the tool? The ultimate consumers are not the buying parties needing commodity derivative contracts, because, they buy small quantities of commodities in retail markets for family consumption. Similarly, retail sellers of the commodities are not the parties of derivative contracts as their market and turnover is small. They buy at the current market prices, add a margin and sell the commodities to the ultimate retail consumers. Large producers and high quantity buyers are in need of subscribing to derivative contracts to manage the price risk. It is economically viable for them to bear the cost associated with entering into commodity derivative contracts. Commodity derivatives give an option to the investors and traders to transfer their risk to professional risk bearers. Exchanges offer a continuous and fair market for the price discovery wherein the producer of the commodity is free from middlemen. Since the commodity exchanges ensure the continuity of trade, financiers and bankers have no issues to extend a loan against the commodities. Commodity exchanges offer hedging opportunities. This helps to reduce the effect of fluctuation in the price [3]. From the time of invention of the tool it underwent remarkable changes. It acquired too many new features responding to changing economic conditions. Many commodities were brought into the contract process. It also attracted many new types of contracts and speculative investors. Subsequently, the volume of commodity derivative trading has grown phenomenally. The research works on commodity financialisation has heavily focused on few dimensions such as futures contract pricing, macroeconomic effects, returns yielded by the futures etc. Research works did not sufficiently explain the determinants of rapidly growing total volume of commodity derivative market trading. All these led to the question that does the commodity derivative trading volume follow positive growth trend continuously?

*Objective of the Paper*

To study the trend behaviour of trading volume of commodities derivative trading in Indian commodity exchanges.

*Analysis of Monthly Trend Behaviour of Commodity Derivative Trading in India*

Seasonal pattern is generally measured in terms of monthly variations. Yosef Lefkovitz [4], and Maria Socorro Gochoco-Bautista et al., [5] have studied monthly frequency commodity related values. This paper analyses the monthly trend behaviour of commodity derivative trading volume in the three major Indian commodity exchanges. The monthly turnover in Indian commodity exchanges is next only to the US and China [6]. Several natural processes such as seasonal cycles based on harvests, monsoons, depressions, and other weather events would also be expected to have an impact on price discovery in commodity markets; this is another area that needs to be studied [7]. This paper attempted to study the monthly behaviour of commodity derivative trading volume in Indian commodity exchanges.

The trend behaviour of volume of commodity derivative contracts traded in Indian commodity exchanges during the year 2014 is presented in the following table.

Table No: 1  
Trend in Volume of Commodity Derivative Trading in India during the Year 2014

Month	Monthly Traded	Monthly Average	% Change
January	1921409.47	60044.05	--
February	2009699.06	62803.10	4.60

March	1861551.89	58173.50	-7.37
April	1886625.49	60858.89	4.62
May	1808093.05	58325.58	-4.16
June	1912774.80	61702.41	5.79
July	1926814.35	62155.30	0.73
August	1809966.20	58386.01	-6.06
September	2027224.88	67574.16	15.74
October	1897262.81	63242.09	-6.41
November	2326757.58	83098.49	31.40
December	2203056.92	78680.60	-5.32

Source: MCX [8], NCDEX[9] and NMCE[10]

The lowest volume of trading in commodity derivatives was recorded in the year may 2014. The highest volume was recorded in the month November 2014. The monthly average of commodity derivative trading lowest and highest level have registered during the months of February and December respectively. The months March, May, August, October and December displayed with negative percentage change when compared to previous months presented in the table. It implies that the volume of trading has fallen down during the months.

The trend behaviour of volume of commodity derivative contracts traded in Indian commodity exchanges during the year 2015 is presented in the following table.

Table No:2

Trend in volume of commodity derivative trading in India during the year 2015

Month	Monthly Traded	Monthly Average	% Change
January	2336617.40	80573.01	--
February	2152049.62	74208.61	-7.90
March	2112272.13	72836.97	-1.70
April	2119324.90	73080.17	0.33
May	2178818.35	75131.67	2.81
June	2069396.12	71358.49	-5.29
July	2181497.42	72716.58	1.90
August	2372536.98	79084.57	8.76
September	2193251.01	73108.37	-7.56
October	2231727.14	74390.90	1.75
November	1912731.72	63757.72	-14.29
December	1970992.67	67965.26	6.60

Source: MCX, NCDEX and NMCE

The lowest volume of trading in commodity derivatives was recorded in the year January 2015. The highest volume was recorded in the month November 2015. The monthly average of commodity derivative trading lowest and highest level have registered during the months of January and November respectively. The months March, July, and December displayed with negative percentage change when compared to previous months presented in the table. It implies that the volume of trading has fallen down during the months.

The trend behaviour of volume of commodity derivative contracts traded in Indian commodity exchanges during the year 2016 is presented in the following table.

Table No: 3  
Trend in volume of commodity derivative trading in India during the year 2016

Month	Monthly Traded	Monthly Average	% Change
January	2263926.54	78066.43	--
February	2516616.55	86779.88	11.16
March	2311795.72	79717.09	-8.14
April	2346006.51	83785.95	5.10
May	2368555.37	84591.26	0.96
June	2657540.33	94912.15	12.20
July	2744332.23	98011.87	3.27
August	2440019.61	87143.56	-11.09
September	2375573.72	84841.92	-2.64
October	2062820.12	73672.15	-13.17
November	2505628.44	89486.73	21.47
December	1738496.41	62089.16	-30.62

Source: MCX, NCDEX and NMCE

The lowest volume of trading in commodity derivatives was recorded in the year January 2016. The highest volume was recorded in the month November 2016. The monthly average of commodity derivative trading lowest and highest level have registered during the months of January and November respectively. The months March, July, and December displayed with negative percentage change when compared to previous months presented in the table. It implies that the volume of trading has fallen down during the months.

The trend behaviour of volume of commodity derivative contracts traded in Indian commodity exchanges during the year 2017 is presented in the following table.

Table No: 4  
Trend in volume of commodity derivative trading in India during the year 2017

Month	Monthly Traded	Monthly Average	% Change
January	1958192.60	67523.88	--
February	1961988.13	67654.76	0.19
March	1914663.17	66022.87	-2.41
April	1917158.60	63905.29	-3.21
May	1831929.87	63170.00	-1.15
June	1890119.76	65176.54	3.18
July	2117718.29	75632.80	16.04
August	2221039.51	79322.84	4.88
September	2251792.72	80421.17	1.38
October	1954266.52	67388.50	-16.21
November	2150588.63	74158.23	10.05
December	1991576.43	68675.05	-7.39

Source: MCX, NCDEX and NMCE

The lowest volume of trading in commodity derivatives was recorded in the year January 2017. The highest volume was recorded in the month November 2017. The monthly average of commodity derivative trading lowest and highest level have registered during the months of January and November respectively. The months March, July, and December displayed with negative percentage change when compared to previous months presented in the table. It implies that the volume of trading has fallen down during the months.

The trend behaviour of volume of commodity derivative contracts traded in Indian commodity exchanges during the year 2018 is presented in the following table.

Table No: 5  
Trend in Volume of Commodity Derivative Trading in India during the Year 2018

Month	Monthly Traded	Monthly Average	% Change
January	2243466.07	80123.79	--
February	2487858.38	88852.09	10.89
March	2441515.40	87196.98	-1.86
April	2688112.25	92693.53	6.30
May	2346759.48	73336.23	-20.88
June	2450661.41	74262.47	1.26
July	2449622.04	74230.97	-0.04
August	2373348.67	69804.37	-5.96
September	2970920.15	87380.00	25.18
October	2845277.45	83684.63	-4.23
November	2630221.54	77359.46	-7.56
December	2672005.31	78588.39	1.59

Source: MCX, NCDEX and NMCE

The lowest volume of trading in commodity derivatives was recorded in the year January 2018. The highest volume was recorded in the month November 2018. The monthly average of commodity derivative trading lowest and highest level have registered during the months of January and November respectively. The months March, July, and December displayed with negative percentage change when compared to previous months presented in the table. It implies that the volume of trading has fallen down during the months.

## 2. CONCLUSION

The lowest monthly commodity derivative trading volume was found to have recorded mostly in the month of January. The highest monthly commodity derivative trading volume was recorded mostly in the month of November. The volume of trading has fallen down during the months of March, July, and December over corresponding months in previous year.

## 3. REFERENCE

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