

Commodity Futures Market Performance in India With Reference To Crude Oil and Natural Gas.

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ABSTRACT

Commodities futures trading in India have a long history. The first commodity futures market appeared in 1875 but the new standardized form of trading in the Indian capital market is an attractive package for the people who earn money through speculations by trading into futures. It is a well known fact and it should be remembered that the trading commodities through futures exchanges is merely an old wine in a new bottle. To study the behavior of Crude oil and Natural gas commodities and to analyze the price movements of such commodities and to compare the volatility of the price variations for a certain period of time and to understand the relative market of the commodities. The present study makes an overview of the Indian commodity futures market. The study discusses the evolution and performance of the market, its present status and future prospects. The aim of the study is to know the clear picture involved in the commodities trading and to understand the futures market and its impact on the investors who are interested in diversified portfolios, which involves high risk and high return

Keywords: *Derivatives, Commodities, Futures, Options, Oil, Natural Gas*

Introduction

Commodity markets have been gaining importance in recent years, giving participants an opportunity to go for forward contracting and hedging. In particular, derivative markets have attained more than eighteen times in trading volume when compared to the spot markets. In India, Commodity futures trading have a long history. The first commodity futures market appeared in 1875. But the new standardized form of trading in the Indian capital market is an attractive package for all the people who earn money through speculation by trading into futures. It is a well-known fact and should be remembered that the trading in commodities through futures exchanges is merely, "Old wine in a new bottle".

OBJECTIVES OF THE STUDY

The following are the objectives of the study

- To understand the basics of commodity market and to discover the emerging prospects in the Indian commodity market.
- To study the futures market with a special focus on Crude oil and Natural gas.
- To analyze the price patterns and variations through technical analysis.
- To understand the functioning of commodity market in India.
- To understand the factors influencing the Indian commodity market under MCX through fundamental analysis on Crude oil and Natural gas (Energy).

SCOPE OF THE STUDY

The study is about Indian commodity market and mainly focuses on futures market (Crude oil and Natural gas), its history, trading and latest developments in the country in commodities market. The study vastly covered the aspects of commodity trading, derivative market, market participants, clearing

and settlement mechanisms in Indian commodity exchanges. The study mainly focuses on the analysis of futures market of Crude oil and Natural gas. The scope of the study is limited to Indian commodity market and research is completely based on the futures trading of crude oil and natural gas which are being traded at Multi Commodities Exchange of India which only deals with metals and energy.

RESEARCH METHODOLOGY

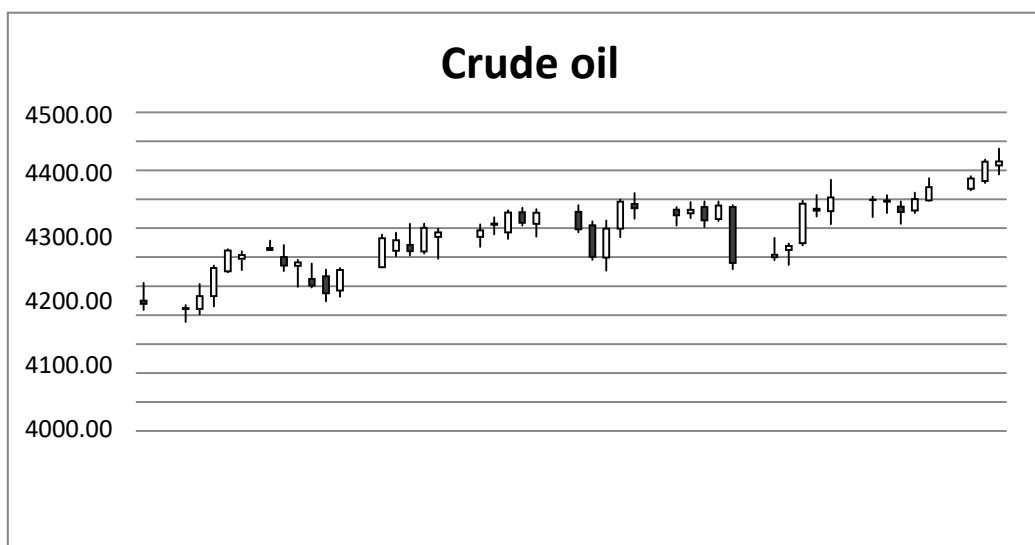
Primary data was collected in systematic manner by meeting the existing investors in commodity market and other individuals. Secondary data has been collected from stock brokers and major exchanges. □ Some data was collected from the organization Ticker Qube Commodities Pvt Ltd. The variable prices of the commodities i.e., Crude oil and Natural gas were collected for the period of two months (September October 2019) from MCX website.

TOOLS AND TECHNIQUES OF DATA ANALYSIS

Technical analysis is commonly used by traders, as it is appropriate for short-term judgment in markets and analyzes the past price patterns, trends and volume to construct charts in order to determine future movement. In technical analysis, a candlestick pattern is a movement in prices shown graphically on a candlestick chart that some believe can predict a particular market movement. Candlesticks are graphical representations of price movements for a given period of time. They are commonly formed by the opening, high, low, and closing prices of a financial instrument.

Data Analysis

Figure 4.1 Crude Oil trends in prices for two months using candlestick charts



Base: dates, Height: Commodity prices, variables taken are: open, high, low, close.

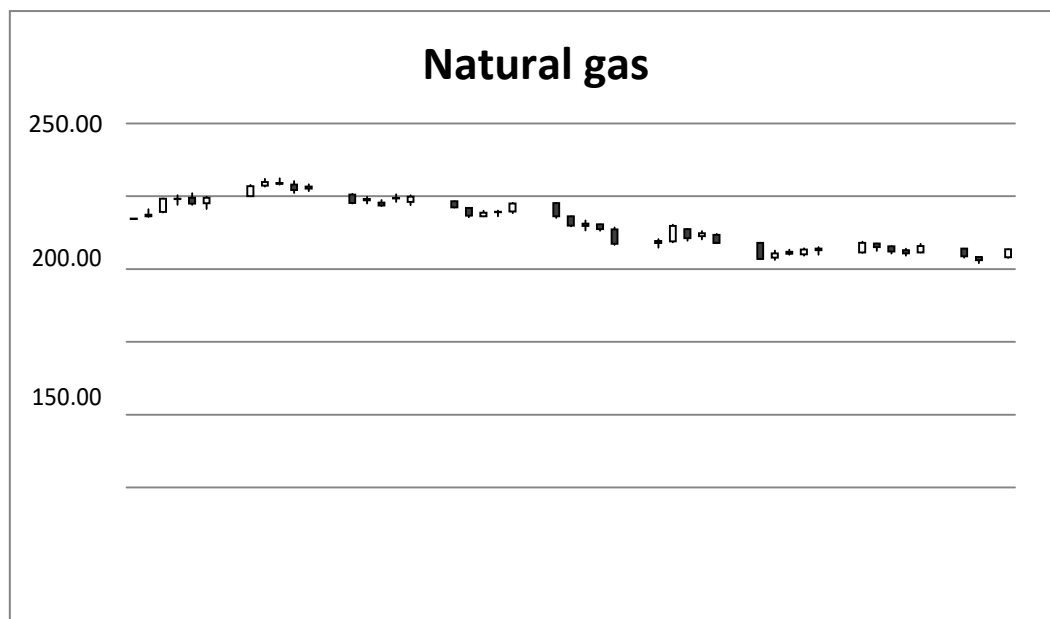
Interpretation:

Date	Buying price	Selling price
11 Dec, 2019	4175	4756
18 Dec, 2019	4317	4330
Profit/Loss	142 (profit)	426 (loss)

Loss is $100 \times 426 = 42600$ and profit is $100 \times 142 = 14200$

Because buyer price future will increase, so he can get profit. Seller future price also increase, so profit decrease. Incase if seller future price decreases, he gets a loss. Here, the closing price of the crude oil at the end of the contract period is 14200 rupees and this is considered as a settlement price.

Figure 4.2 Natural Gas trends in prices for two months using candlestick charts



Base: dates, Height: Commodity prices, variables are taken: open, high, low, close.

Interpretation:

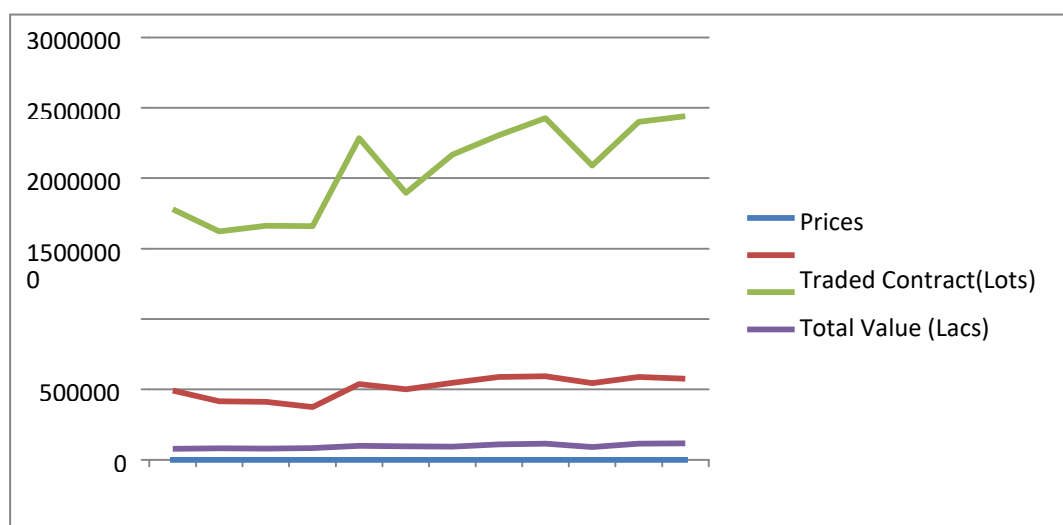
Date	Buying price	Selling price
11 Dec, 2019	157	165
26 Dec, 2019	158	163
Profit/Loss	1 (profit)	2 (loss)

Loss is $1250 \times 2 = 2500$ and profit is $1250 \times 1 = 1250$

Because buyer price future will increase, so he can get profit. Seller future price also increase, so profit decrease. Incase if seller future price decreases, he gets a loss. Here, the closing price of the crude oil at the end of the contract period is 1250

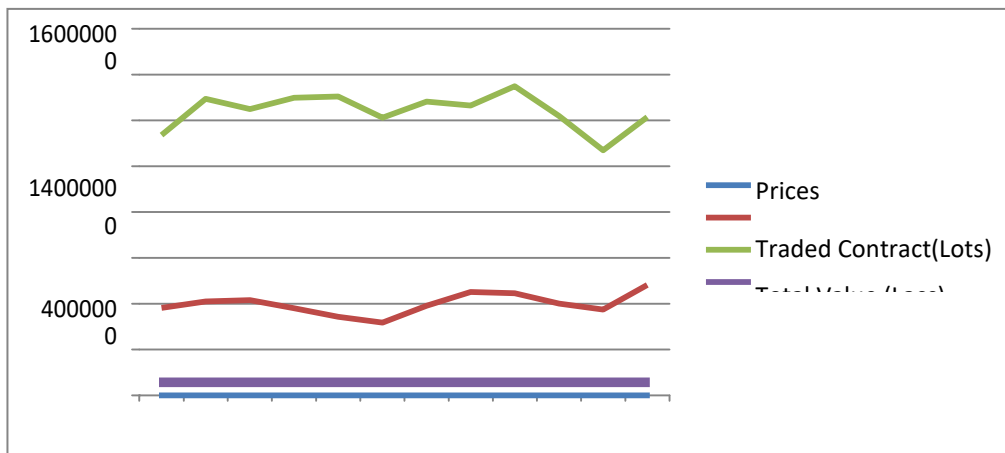
Figure 4.3 Monthly Crude oil Prices for the year 2018 and traded values in lots

Figure 4.4 Monthly Crude oil Prices for the year 2019 and traded values in lots



FINDINGS

1. In the last decade, the market has become very powerful and organized due to its strict controls and actions on transactions and market operations on members, investors and brokers etc. Thus, it has



created a great trust among the members and investors.

2. In a competitive market, behavior of price of a commodity is determined by demand and supply factors. In case of agricultural commodities, supply variability is high as production could be affected by natural factors like weather conditions and incidence of pests and other diseases. In case of metals and other energy commodities, deviations originate on the demand side through business cycles and future plan of production. So, it can be understood commodity prices are determined largely by supply and demand interactions in the global marketplace.
3. If markets are efficient, the daily variations in cash and futures prices are purely a result of new information.
4. Given the volatility in international crude oil risk management techniques are of utmost importance for stakeholders of this commodity, particularly its users. Amidst uncertainty, modern techniques and strategies, including market-based risk management financial instruments like 'Crude oil and Natural Gas Futures' offered on the MCX platform can improve efficiencies and consolidate competitiveness through price risk management.

SUGGESTIONS

1. Futures markets efficiency is contingent on the efficiency of spot markets. Cost of futures-spot arbitrage is reduced in an efficient spot market set up. Efficiency of spot markets in commodities is possible when the markets are integrated across geographical regions. Standardization of quality of commodities is also a major requirement. This reduces the basis risk in the use of futures contracts. But integration of the spot markets requires development of rural communication, transport and storage infrastructure. Hence experts opine of collecting funds through transaction tax and earmarking them exclusively for development of the required physical market infrastructure. This also requires removal of regulatory restrictions on movement and storage.
2. The low participation of farmers in futures trading is a global issue and is not unique to India alone. In fact, even in developed markets of US and Europe the direct participation of farmers in Agri-futures markets is very low. The mostly

illiterate farmers often have inadequate awareness and knowledge of market. FMC and exchanges are making efforts to spread awareness and knowledge of these markets among farmers and also to make these markets safe for trading by them. A large number of awareness programmes are being conducted but still are long away from attracting farmers to participate in these markets. The cutting-edge traders have the understanding and capacity to participate in these markets and consequently can reap benefits.

CONCLUSION

Commodities as an asset class have gone from relative darkness and have come into the limelight in recent times. There are two main reasons for increased focus on commodities; firstly, we have seen a bull market in commodities and that has attracted the attention of investors. Secondly, past studies and literature have unanimously shown that commodities have a low correlation with stocks and bonds, making it an attractive portfolio component. Over the years, investors became more active on the commodity market as a result of passive indices and the findings of researches. Small changes in production output may have great marginal effects on price, thereof the disreputable volatility of commodities. Prices of gold and oil for example have broken price records. Currently the price of gold is still going up, while the price of oil is descending as a result of using tactical oil reserves. Moreover, considerable research has been done regarding the reasons for investing in commodities and how to gain exposure to the commodity sector. However, there has been little research regarding the optimal size of an allocation to commodities.

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