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A STUDY ON COMMODITIES MARKETS

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ABSTRACT

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. This paper provides an overview of the commodity market in India and its participants, and analyses twelve commodities that are traded in MCX (Multi Commodity Exchange), in terms of price discovery of the spot and futures markets using GARCH model. It also analyses the impact of trading volume, inflation and other macroeconomic factors on spot and futures price movements.

Keywords: Commodity markets, derivative markets, MCX

1. INTRODUCTION

COMMODITY:

In economics, a COMMODITY is a marketable item produced to satisfy wants or needs. Economic commodities comprise goods and services. The more specific meaning of the term COMMODITY is applied to goods only. It is used to describe a class of goods for which there demand is, but which is supplied without qualitative differentiation across a market.

Commodity Futures:

Commodity includes all kinds of goods. FCRA defines “goods” as “every kind of moveable property other than actionable claims, money and securities”. Or any product that can be used for commerce or an article of commerce which is traded on an authorized commodity exchange is known as commodity.

The commodity futures trading, consists of a futures contract, which is a legally binding agreement providing for the delivery of the underlying asset or financial entities at specific date in the future.

Like all future contracts, commodity futures are agreements to buy or sell something at a later date and at a price that has been fixed earlier by the buyer and seller.

So, for example, a cotton farmer may agree to sell his output to a textiles company many months before the crop is ready for actual harvesting.

This allows him to lock into a fixed price and protect his earnings from a steep drop in cotton prices in the future. The textiles company, on the other hand, has protected itself against a possible sharp rise in cotton prices.

The complicating factor is quality. Commodity futures contracts have to specify the quality of goods being traded. The commodity exchanges guarantee that the buyers and sellers will stick to the terms of the agreement.

When you buy or sell a futures contract, you are not actually signing a written piece of paper drawn up by a lawyer; you are entering into a contractual obligation which can be met in one of two ways. The first is by making or taking delivery of the actual commodity. This is the exception, not the rule however, as less than 2% of all futures contracts are met by actual delivery. The other way to meet your obligation, the method you most likely will use, is by offset. Very simply, offset is making the opposite, or offsetting sale or purchase of the same number of contracts bought or sold sometime prior to the expiration date of the contract. This can be easily done because futures contracts are standardized.

Commodity Market:

The commodity market is a market where forwards, futures and options contracts are traded on commodities. Commodity markets have registered a remarkable growth in recent years. The stage is now set for banks to trade in commodity futures. This could help producers of agricultural products bankers and other participants of the commodity markets. Banks have started acknowledging the commodity derivatives market.

2. REVIEW OF LITERATURE

ARTICLE: 1

Dr.Bimal Jaiswal (2015) In India product is rule explanation behind economy since over 70% of the total masses is busy with fundamental portion direct or by suggestion. The cash related returns are concerned, that this portion for the incredible returns generally to the others. In India the gold is seen as the most conceivable part of hypothesis. It has been a backbone of obvious, storable and transportable wealth. Regardless, the adjustments in its costs impact an odd condition in one to feature. In this it oversees alternate points of view joined to gold like its significance, purposes behind esteem fluctuation and impact on India economy in the periods of overall crisis. Sharing in gold is maybe a way to deal with keep up getting power. The obtaining vitality of gold additions as the veritable market cost of gold augmentations and decreases. Gold takes after a position of asylum for theorists especially at the surge of the worldwide monetary Inflation. This prompts a creating design where traders and examiners set aside huge proportions of their advantages into the gold portfolio.

ARTICLE: 2

P. Prakash and Dr.S. Sundararajan (2014) In this article the writer clarifies about the association among gold and silver over the 200l-20l3 periods, where this period includes a definite broad scope of monetary conditions, political change and expanded advancement in resources advertises by and large. Gold and silver have verifiably been viewed as close choices for each other, however both are valuable metal with differentiating hazard. Gold is more alluring than the silver as a venture road. The brokers must not arrive when the market will have high unpredictability conditions. It is demonstrated that the best elective wellspring of speculation is gold if the financial specialists are prepared to go for broke. Putting resources into gold and silver has high hazard however coordinating to returns both brings the significant yields. The financial specialists ought not purchase the ware all at a once on the grounds that the value changes each second, consequently the speculators should purchase in little amounts to purchase more when it goes down. On the off chance that the speculator is enthusiasm for transient increases it is prudent to for Gold Avenue and the silver as a ware has positive effect on the gold market.

ARTICLE: 3

Mr.P.Periasamy (2014) The maker has picked the particular gadgets like RSI, EMA, ROC, MACD and SMA with a particular ultimate objective to separate the non-plant thing promote. In gold SMA exhibits period, the thing promote is increasingly erratic and only assumption of significant worth improvement can be given and it isn't possible to give the right future esteem advancement about the associations. The money related expert should hold up to the completion of the bear market to make their hypothesis approach. The acquiring decision should be made exactly when there is certain sign after the bear promote. From the latest three years esteem advancements of each item clears up that money related pros are satisfied from the benefits from enthusiasm for products. A budgetary pro can be triumphs exactly when they can pick the right things at the ideal time.

OBJECTIVES:

The objectives of the study are:

- To study the growth of commodity futures trading regarding Precious Metal i.e., Gold.
- To analyses the risk involved in Precious Metal i.e., Gold.
- To know the use of strategies available in the commodity market with Precious Metal i.e., Gold.
- To study the spot gold price.
- To analyses the impact of spot gold market on future gold market.

3. RESEARCH METHODOLOGY

RESEARCH GAP ANALYSIS

This study tests the popular claim that psychological barriers exist around key reference points in prices for gold and silver, namely around numbers ending in 0 (e.g. $450) and 00 (e.g. $200)

Need For The Study

Commodity market is growing and it is becoming more critical. Therefore the research is in on the commodity futures and analysis of risk and return involved in commodity futures.

Scope Of The Study:

- One month spot price for commodity futures like Gold is collected for calculation.
- The above mentioned commodity futures are more traded in the market in terms of volume.

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Methodology

RESEARCH

Research is a strategy in which the analysts wish to discover the final product for a given issue & along these lines the arrangement helps in forecasting game-plan. The examination has been all around characterized as "A cautious report or enquiry particularly through scan for new realities in part of information"

RESEARCH DESIGN

The examination configuration utilized in this task is Analytical/intelligent in nature the technique utilizing, which analyst needs to utilize certainties, data officially accessible, and investigate these to make a basic assessment of the execution.

TYPES OF RESEARCH

Research refers to the search for the knowledge. One can also define research as a scientific, systematic search for the actual information on a specific topic. In fact, research is an art of scientific investigation. **"A careful investigation or enquiry especially through search for new fact in any branch of knowledge**." Here the data collected are analyzed through Beta and Volatility to find out the degree of risk involved in commodity futures.

Methodology

Methodology states that how the research studies should be undertaken. This includes the design specifications, sources of data, methods of primary data collection, methods used for collecting secondary data etc. Mainly secondary data has been used for the study. Secondary data consists of collecting information from various financial sites. It includes the records and reports of research experts. For analysis and interpretation the following statistical tools are used:

1. Beta
2. Return
3. Risk

Sample Design

NCDEX and MCX are the India's the two major exchanges for commodity trading and as many as more than 55 commodities are listed. Single (one) commodity futures are taken as sample size for the purpose of the study.

Sources of data

- The required information or data collected from the stock brokers and two major exchanges.
- The spot prices of commodity were collected from for one month of January from various websites.
- The secondary data were the basis for the study.

HYPOTHESIS OF THE STUDY:

H0- There is no significant relation between bullion commodities risk & return and market risk & return.

H1- There is a significant relation between bullion commodities risk & return and market risk & return.

Limitations Of The Study

The following are the limitations of the study.

- Due to non-availability of sufficient time one month data was taken for analysis.
- Limited time was given for the data collection (35 days).
- Most of the information gathered for the study is from Internet and magazines etc. that are in the printed form. As the data is secondary which could not be expressed to be 100%.

4. DATA ANALYSIS & INTERPRETATION

Calculation of Beta of Gold futures

Date	Gold Open (Rs)	Gold Close (Rs)	Return on Gold (Y%)	Index open	Index close	Return on Index Metal (X)	X*Y	X²
1-Jan-23	32067	32098	0.096672592	5239.48	5244.98	0.104972249	0.010238	0.011019
2-Jan-23	32050	32423	1.135725429	5245.33	5312.56	1.281712342	1.455672	1.642784

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3-Jan-23	32529	32417	-0.344308236	5313.66	5282.71	-0.582461053	0.200546	0.339261
4-Jan-23	32230	32231	0.00311042	5256.4	5246.24	-0.193288182	-0.0006	0.03736
6-Jan-23	32270	32270	0	5247.6	5268.69	0.401898011	0	0.162322
7-Jan-23	32325	32309	-0.049497293	5274.84	5256.78	-0.342380053	0.016947	0.117224
8-Jan-23	32270	32246	-0.074372482	5260.54	5266.83	0.119569474	-0.00889	0.023297
9-Jan-23	32229	32213	-0.04964473	5264.24	5241.93	-0.423802866	0.02104	0.179609
10-Jan-23	32190	32345	0.482323999	5242.2	5273.94	0.605470985	0.292344	0.366595
11-Jan-23	32291	32237	-0.167229259	5273.97	5238.96	-0.663826302	0.111011	0.440665
13-Jan-23	32234	32234	0	5241.51	5244.45	0.056090707	0	0.003236
23-Jan-23	32279	32202	-0.238545184	5246.39	5222.72	-0.451167374	0.107624	0.203552
23-Jan-23	32280	32285	0.023489467	5222.31	5252.99	0.587479487	0.0091	0.345132
16-Jan-23	32320	32291	-0.089727723	5256.06	5248.68	-0.230409356	0.012599	0.019723
17-Jan-23	32125	32182	0.177431907	5244.28	5234.87	-0.179433592	-0.03184	0.032196
18-Jan-23	32123	32093	-0.068503823	5230.32	5217.66	-0.2420502	0.016581	0.058588
20-Jan-23	32038	32060	0.068668456	5216.1	5217.52	0.027223404	0.001869	0.000741
21-Jan-23	32124	32135	0.034242311	5216.44	5223.93	-0.009776783	-0.00033	9.56E-05
22-Jan-23	32800	32226	-1.75	5219.02	5240.61	0.413679196	-0.72394	0.17113
23-Jan-23	32174	32082	-0.285945173	5249.72	5252.85	0.059622227	-0.01705	0.003555

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24-Jan-23	32059	31866	-0.602023035	5254.27	5227.23	-0.523629054	0.309823	0.264843
25-Jan-23	31810	31726	-0.264067903	5236.23	5207.21	-0.554223533	0.236351	0.307235
27-Jan-23	31723	31678	-0.113523536	5223.99	5216.5	0.009777626	-0.00111	9.56E-05
28-Jan-23	31713	31658	-0.173430454	5225.23	5219.88	-0.100858349	0.017492	0.010172
29-Jan-23	31655	31652	-0.009477176	5226.7	5275.52	0.934050165	-0.00885	0.87245
30-Jan-23	31630	32360	-0.537464433	5274.61	5224.76	-0.945093571	0.507954	0.893202
31-Jan-23	32351	32392	-0.186998827	5223.72	5258.68	0.669254861	-0.12523	0.447902
Total			-2.991885598			-0.072592333	2.318527	6.944009

N= 27

$$\textbf{Beta} = \frac{n * \Sigma xy - (\Sigma x)(\Sigma y)}{n * \Sigma x^2 - (\Sigma x)^2}$$

$$\textbf{Beta} = \frac{27*2.318527- (-0.72592333)(-2.991885598)}{27*6.944009-(-0.72592333)^2}$$

$$\textbf{Beta} = \frac{62.60022543 - 0.217187955}{187.4882303 - 0.00526964}$$

$$\textbf{Beta} = \frac{62.38303748}{187.4829607}$$

Beta = 0.3327397723

5. CONCLUSION

The commodity future is the part of derivatives. The commodity futures markets are experiencing tremendous growth in the recent past. This can be emphasized by the fact that the trading volume of most commodities is increasing.

Price of agriculture commodities mostly fallows a cyclical pattern, unlike stocks. Therefore the prices are expected to fall at some point of time, and do not attract investors.

There are many types of risks involved in commodity futures trading but commodity futures are less risky than equity futures but it is highly volatile. The various risk management techniques can be used to minimize the risk, and henceforth from the different price movements.

Commodity futures trading included the intermediary and trading participants likes brokers who make use of the various technical analysis tools in order to make predictions of the price movement's they also take into consideration

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the fundamental analysis. Thus with the help of the various analysis tools, efficient price predictions can be made, where the investors in commodity futures can benefit from the price movements.

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