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An Analysis on Commodity Market with Special Reference to Gold

Michelle Jenita Pinto
[1] *Student, II M.Com.(FA), Jyoti Nivas College Autonomous, Bangalore, India*

ABSTRACT

The commodities' markets are one of the fastest growing areas in the investment world. A commodity market is an exchange for buying and selling of commodities for future delivery. Commodity trading in India started much before it started in many other countries. However, years of foreign rule, draughts and periods of scarcity and government policies, caused the commodity trading in India to diminish. Commodity trading was however restarted in India recently, but a lot more developments and initiatives needs to be taken in this avenue. Investing in commodities offers protection against risk, diversified portfolio, trading on lower margin and safety. The study focuses on understanding the concepts and mechanism of commodity trading with special reference to Gold. It also aims to analyze the factors that influence the prices of gold and analyze the gold trend in the commodity market.

1. INTRODUCTION

Commodity markets are markets where raw or primary products are exchanged. These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contracts. The commodities market consists of the trading of forward contracts or future contracts. Forward contracts are contractual agreements to buy/sell any commodity bet there in two entities while futures contracts are market agreements to buy/sell very specific commodities bet there in two entities over a recognized commodities exchange. It is a physical virtual market place for buying and selling of raw or primary products. For investors' purposes there are currently about 50 major commodity markets worldwide that facilitate investment trade in nearly 100 primary commodities. Commodities are split into two types: hard and soft commodities. Hard commodities are typically natural resistless that must be mined or extracted (gold, rubber, oil, etc.), whereas soft commodities are agricultural products or livestock (corn, wheat, coffee, sugar, soybeans, pork, etc.)

1.1 Gold

Gold is a natural resource available all over the world but not in abundance. In science it has atomic number 79 and is symbolized as AU. It is a highly Precious metal and is invested in coins, jewels, bars, certificates, accounts etc. It attracts all human beings as a source of prestige or as a source of investment to make maximum returns. In India gold has become a very prestigious metal from ancient days itself; it stands for its unique property and it is treated as an asset and core wealth by the people According to the investors owning gold is very much safe because all over the globe gold is same there is no difference in production and people think it will help in difficult situation as there is high liquidity power. Investing in gold is safe because it doesn't include the crop rotation fluctuation in the market. All over the world gold is accepted and traded as a commodity.

Address for correspondence:

Mail Id: michellejp15@gmail.com

1.2 Features of Gold

- It can be a source of investment
- It is treated as safe
- It is an asset diversifier
- It has high liquidity power
- It acts an insurance

1.3 Gold as an Investment Avenue

Investing in gold is booming from the past two decades. The investors will invest in this to protect themselves from the political, economical inflation and social disaster. However, it is subject to risk in the market especially in futures contracts and derivatives. Even the government will invest in this product to be secure from inflation; gold has become more like currency rather than commodity.

1.4 Investment Sources

1. Gold Bars
2. Gold Coins
3. Gold Exchange –Traded Products(ETPs)
4. Gold Certificates
5. Gold Accounts
6. Gold Mining companies
7. Derivatives

1.5 Factors Affecting Gold Price

The major factors impacting the gold price can be summarized as under:

- Demand for the product
- Inflation rate
- Value of dollar
- Gold reserve
- Monetary policy
- Speculation in the market
- Supply of the product
- Growth in demand for exchange traded paper backed products

2. RESEARCH METHODOLOGY

2.1 Statement of the Problem

When investing for a long and a short term there may be differences in fundamental analysis and technical analysis. Because calculation of fundamental analysis in commodity market is difficult this depends upon the supply and demand for the resources. The highlight of the study is to appropriate use of technical analysis in order to facilitate the investors in decision making.

2.2 Need for the Study

Commodity markets are where raw or primary products are exchanged. Commodity market is of two types i.e., Hard (Non-Agricultural) and Soft (Agricultural) commodities. Here Hard commodities are typically Nonagricultural or natural resources (Gold, Silver, Copper, Natural Gas) and Soft Commodities are the agricultural commodities (Coffee, Corn, Wheat, Sugar). The problem faced by the participants in the market is to predict the price movement of the commodity and to take the right decision when to enter and exit the market to make a maximum profit. As Gold Commodities are more sensitive in the market, their price prediction is a rigorous job. Thus, there is a need to study the present scenario of the performance of the non-agricultural commodities in Indian stock market.

2.3 Objectives of the Study

- To study and analyze the commodity market of selected non-agricultural product i.e., Gold
- To study the price volatility among commodity market of selected non-agricultural product i.e., Gold
- To identify the co-relationship between Gold price and Dollar exchange rate.

2.4 Scope of the Study

- Studying the commodity price movements in the market.
- Analysis of the relationship of gold with the exchange rates.
- Helps in buying and selling strategy by recognizing the trend reversals in a former stage.
- To help investors in decision making.

2.5 Methodology Adopted

Research methodology is the route used to systematically resolve the research problem. It is a scientific way of studying how research is done scientifically, approved by the researcher in reviewing the research problem alongside with the reason behind study. It is essential for the researcher to distinguish not only the research methods and procedures but also the methodology.

➢ **Sample size:**

The sample consists of one commodity – from MCX market, on the basis of the research objectives. This study is mainly based on the Gold prices in Indian commodity market.

➢ **Data Collection**

The research is purely based on secondary data.

- **Secondary Data**

Secondary data was collected by referring to following sources:

1. Alpha Commodities Private Ltd Online publication.
2. BSE websites
3. Text books
4. Research Journals

➢ **Study Period**

The study includes a period of 5 years from 2011-2015.

➢ **Source of Data**

- The main source of data is collected through websites of BSE, MCX to obtain the historical prices.
- Also the other relevant data required for the purpose of the study was gathered from the various websites, publications, magazines and reports prepared by research scholars.

➢ **Statistical tools and indicators used**

- Simple Moving Averages
- Moving Average Convergence Divergence
- Bollinger Band Width
- Relative Strength Index
- Correlation

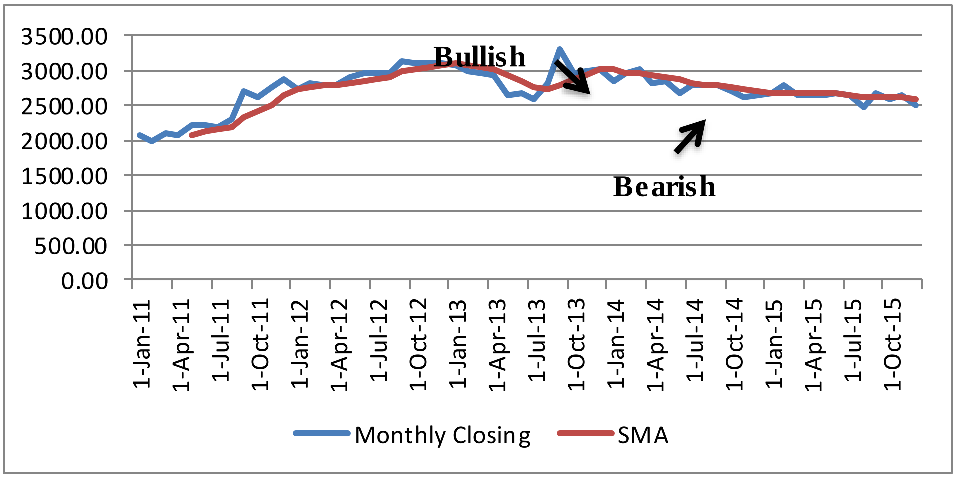
2.6 Limitations of the Study

- Study is confined only to the commodity market in Indian context.

- The study of this analysis was mainly based on historical data.
- The study is covers a period of five years (20011-2015).

3. DATA ANALYSIS AND INTERPRETATION

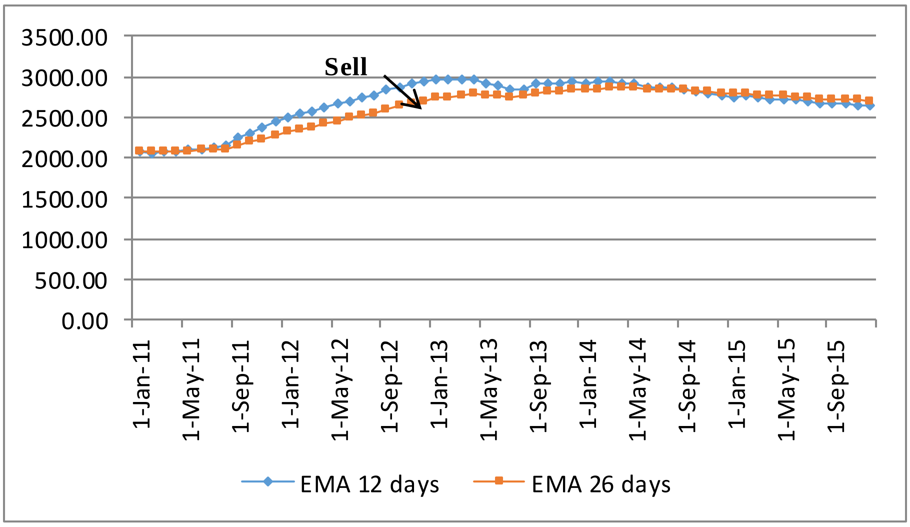
Graph 3.1: Simple Moving Averages (SMA)



Interpretation:

The SMA is plotted using last 5 years data of gold. Here 5 months moving average has been taken to construct the Simple Moving Averages. The 5 years chart of Simple Moving Averages shows that on many occasions monthly moving average line cuts the 5 months Simple Moving Averages line from top to bottom which signals a bearish market and it is the right time to go out of the market. And some time the monthly moving average line cuts the 5 months Simple Moving Averages line from bottom to top which signals a bullish market and it is the right time to invest in the market. For example, in December 2015 the Simple Moving Averages and monthly moving averages are closely equal hence it is not a buying signal to the investors.

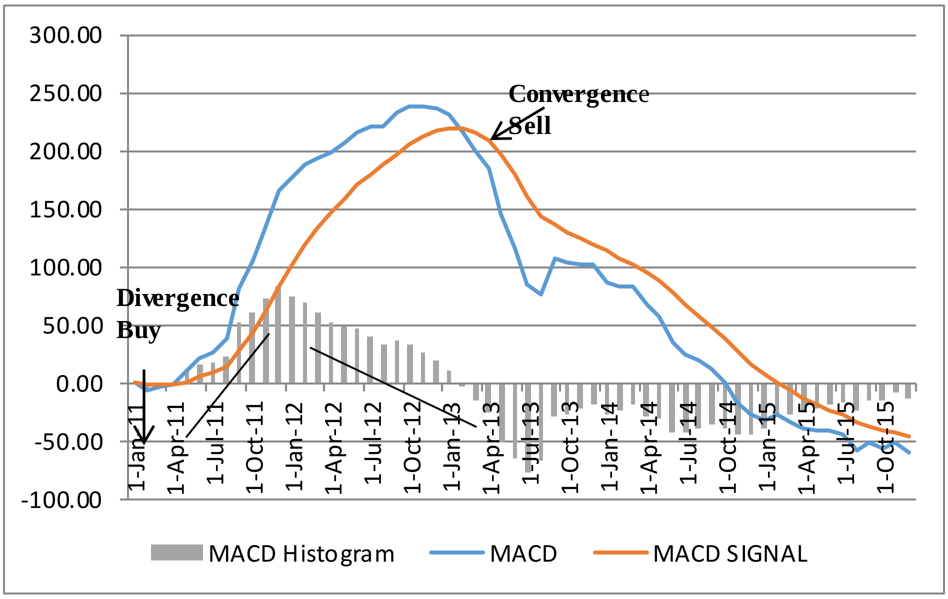
Graph 3.2: Moving Average Convergence Divergence (MACD)



Interpretation:

The Moving Average Convergence Divergence is plotted using last 5years data of gold. Here, MACD is calculated through Exponential moving average (EMA) 12 and EMA 26 period. If EMA 26 line is above the EMA 12 line, then it is bearish signal and vice versa - if the EMA 12 line is above the EMA 26 line then it is bullish market signal. The average closing price of EMA 12 in December 2015 is 2632 which is less than the EMA 26 in December 2015, 2692 thus it is advisable to buy the commodity in the market.

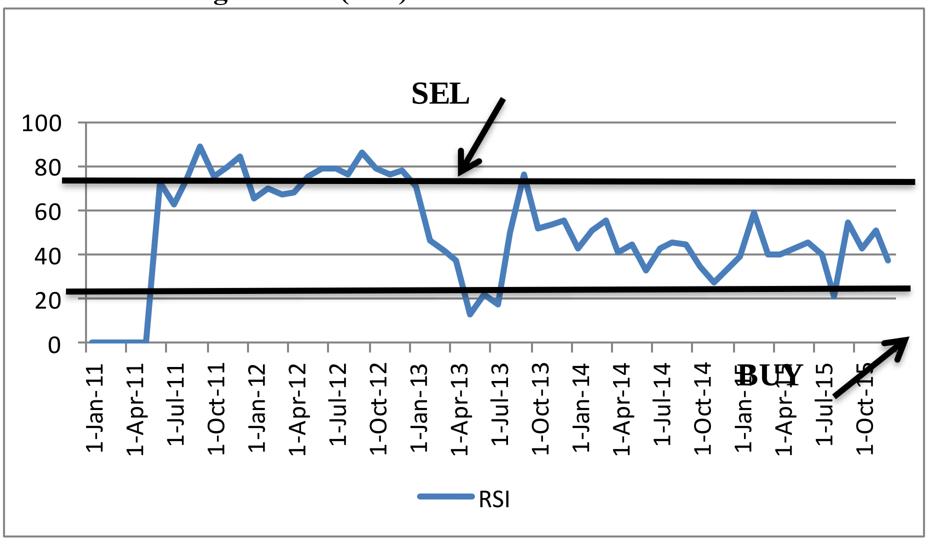
Graph 3.3: Moving Average Convergence Divergence Histogram



Interpretation:

The histogram is calculated to identify the Convergence and Divergence. If the MACD Histogram is shrinking in height, then it leads to the Convergence and it is potential sell signal. If the MACD Histogram is increasing in height, then it leads to Divergence which is a potential buy signal to the investors. If the MACD crosses the MACD Signal, then it is advisable to buy the commodity or if the MACD signal crosses the MACD line then it is advisable to sell the commodity. In the year April 2011 the market is in divergence hence it is to be bought and in the year April 2012 the market is turning to convergence hence it is to be sold in the market.

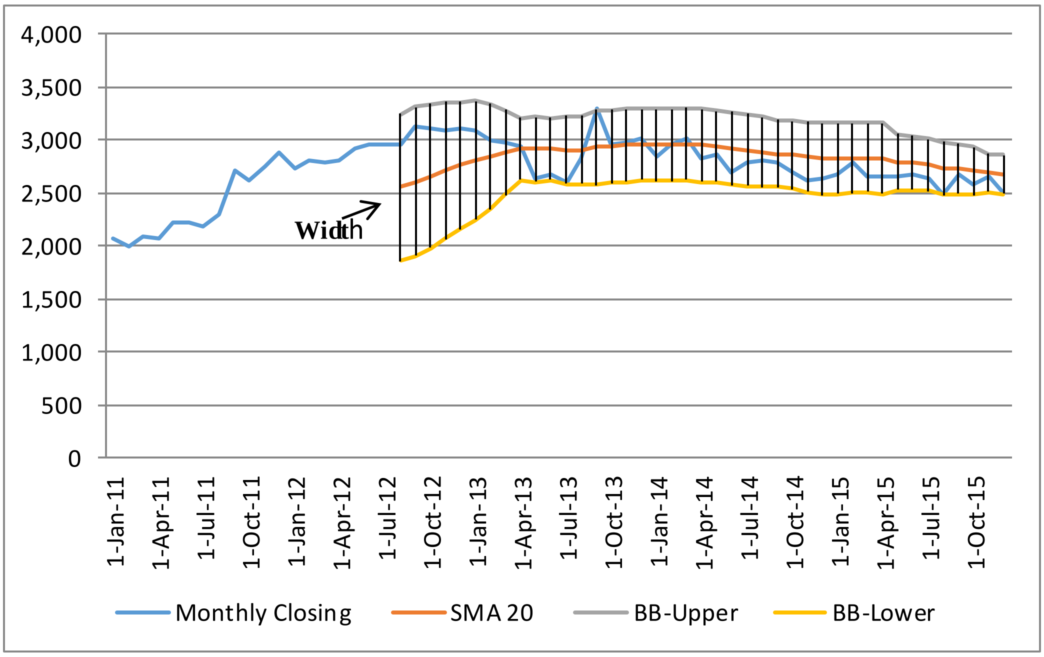
Graph 3.4: Relative Strength Index (RSI)



Interpretation:

The RSI graph shows the overbought and oversold areas. The RSI values from 30 and below indicates a good opportunity to buy the commodity and the RSI values from 70 and above indicate a good opportunity to sell the commodity. But as it is clear in above graph in the year 2015 there is no signal to buy or to sell thus it is recommended to hold the commodity still for a long term.

Graph 3.5: Bollinger Band Width (BBW)



Interpretation:

The width between Upper and Lower band refers to the volatility of the prices of the commodity, the higher the width the greater the volatility. In this time, it is advisable to sell the commodity and when there is low volatility the investor should either buy or retain the commodity. If the closing prices touch the Upper Bollinger Band, then the commodity is overbought and if the prices touch the lower Bollinger Band then the commodity is over sold in the market. It is advisable to buy the commodity when the stocks prices hit the lower band and to sell when the prices hit the upper band.

Table 3.1: Correlation between Gold and Dollars Exchange Rate

H0: There is no significant relationship between gold price and dollar exchange rate.

H1: There is significant relationship between gold price and dollar exchange rate.

Correlations

		Gold	Dollars
Gold	Pearson Correlation	1	-.838**
	Sig. (2-tailed)		.000
	N	60	60
Dollars	Pearson Correlation	-.838**	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation:

From the above table it is found that the correlation value is 0.000 that is below 0.05. So, it is significant, hence reject null hypothesis (H0) and accept alternative hypothesis (H1).

Inference:

As the correlation value is -0.838 it indicates that the inverse relationship exists between the gold price and dollar exchange rate in India. That shows there is inverse effect among variables where if the dollar price increases then the gold price will decrease and if dollar price decreases then the gold price will increase.

4. SUMMARY OF FINDINGS

- Analyzing the commodity market helped to find out the gold price volatility.
- Technical analysis was more helpful in decision making about the commodity market and reduced the errors in forecasting. The various tools in technical analysis were complicated but it has given realistic results.
- The performance of gold in the year 2015 was bearish. It has been fluctuating from Rs.3298 to Rs.2509 by the end of the year.
- The overall performance of gold indicates low returns for short term investment and the high returns for long term investments.
- SMA shows the price fluctuations in the market. The gold price is too sensitive in the market.
- MACD shows the relationship between the MACD histogram and the MACD signal line which helps in taking decisions regarding the entry period and exit period.
- Bollinger band is helpful to analyze the market when they are over bought and over sold in the market and it is also helpful to analyze the price volatility of the gold prices which are dependent on their band width.
- According to Relative Strength Index when it is above 70 it is advisable to sell the commodity and if it is below 30 it is usually recommended to buy the commodity.
- The gold and dollar exchange rates share the inverse relationship, where if dollar increases, the price of gold decreases and if the dollar price decreases, then gold price increases in the market.

5. SUGGESTIONS

Gold is a precious metal; its value cannot not be diminished in a shorter time. But even then there are some investment rules:

- Before investing, an investor should have clear and adequate knowledge of the stock market so that they can earn maximum returns.
- The commodity i.e., gold is a very complex financial instrument. Thus the traders must analyze the trend of the market.
- Investing for short term gains in current scenario will not be helpful as both commodity markets are in bearish market, the investor can go for long term investment to maximize the returns.
- The traders should not enter into the market in bullish period; they need to wait till the bearish market ends and then they need to invest when market gives positive signal to buy the commodity.
- Investors should not buy in bulk volume because of high price fluctuations. If the investors invest in one shot, then they cannot buy when the prices go down. So it is advisable to buy in small quantities.

6. CONCLUSION

The analysis emphasized on the commodity market which gave a real time experience in this field and thereby the study could reflect positively from the investors' perspective. The last five years' price movements of gold show that the investors are satisfied by the reasonable returns from the commodity market. Investors can make substantial returns only if investments are made in a disciplined manner. The blind investments have always led to too many blunders; an investor should always analyze the market by using the analytical tools for investments purpose. Investors can succeed in their investment only when they are able to select the right commodity at right time. The investors should closely watch the situation like market price, economy, returns and risk associated with the commodity before taking the decision to invest. Thus, utilizing the investment opportunities available in the commodity market will help in maximizing the returns. Finally, as per the present trend and the analysis it can be concluded that, in commodity market there is the high possibility of getting good returns, therefore it can be suggested that the investors can invest in the gold market without any hesitation.

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AUTHOR'S BIOGRAPHY

Michelle Jenita Pinto is pursuing her Master of Commerce (Financial Analysis) in Jyoti Nivas College Autonomous and completed her Bachelor of Commerce (Industry Integrated) from the same college. She has done a research on the topic "A Comparative Study on the Financial Position of Grameen Financial Services Pvt. Ltd". Her interested areas in research are risk assessment and decision making, effect of fund size on mutual funds performance, debt and equity choice for funds, determinants of financial development and commodity market.