

Emerging Commodity Exchanges in Globalized Economy

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Abstract

This research paper focuses on future trading of gold performance in MCX and discusses the evolution and performances of commodity market.

Keywords: *Commodity, Commodity markets, Emerging commodity exchange, Demand of Gold*

1. Introduction

A fall in the value of a currency is predictable from movements of gold price. Commodity prices are also compared with that of gold prices. Gold price started increasing in 2011 and in 2013 it grew by another 15 percent. Ranson (2005) found that global commodity prices also respond to economic growth in the short run. But these price changes are infrequently sustained over the time. Demand and supply, existing inventories are not able to explicate the long-run behavior of prices in the commodity. Over the long term, commodity prices are part of a general movement in the prices of tangible assets including commercial real estate, precious metals and collectibles. All these prices are driven predominantly by the changing values of the US. There is a common faith that the price of commodities tends to move in unity. They are influenced by common macroeconomic factors such as Oil and gold price, inflation and exchange rates, interest rate and so on. These are the two strategic commodities which have received much attention in recent. Crude oil is the world's most commonly traded commodity and its price is the most volatile in the commodity market. Gold is considered as a leader in the bullion market of precious metals as increases. It is price seem to lead to parallel movements in the price of other precious metals on the commodity market (Hammoudeh, 2008).

Soytas (2009) in his research paper concentrated on the gold performance of commodity markets in national as well as international commodity markets. According to his study, gold is also an investment of assets and commonly known as a "safe haven" to avoid the increasing risk in financial markets. Using gold is one of risk management tools in hedging and diversifying commodity portfolios. Investors are investing the money in both advanced and emerging markets often switch between oil and gold to diversify their portfolios.

2. Review of Literature

Lakshmi, Visalakshmi and Padmavathy (2017) has explored the nexus between spot returns and futures contracts for crude oil and gold. The study examines whether future trading volume react faster to news and help to predict in spot returns. The researcher founded the effect in the Indian context using data from the Multi Commodity Exchange (MCX) of India from January 2005 to May 2012. The Vector Autoregressive model (VAR), Granger causality Wald test, variance decomposition and impulse response function are applied to the data collected. The results exhibited that for both crude oil and gold

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is influenced by its own past than the past spot returns. Further, bidirectional causality runs from gold spot returns to gold futures trading volume. Contrarily, we do not have sufficient evidence to support that crude futures trading volume aid in the forecast of crude spot returns in India. Overall, the finding implies that gold futures trading volume react faster to information and help to predict the gold spot returns than crude oil in the Indian commodity markets.

Bansal and Kaur (2017) denoted that global commodity markets have gone through a long journey. In India, the emergence and augmentation of the organized commodity derivative market is relatively a recent phenomenon. Since its inception in June 2000, derivative exchanges have exhibited exponential growth in terms of volume and value of trade. The setting up of the three exchanges was the turning point in the history of commodity market of India. Hence, the study is undertaken to analyze the trends and progress of the national commodity exchanges of India and comparing the value of the trade of the selected non-agricultural commodities. Data for the commodities under study covers period from the year 2004-2005 till the year 2014-2015. The study is based on the secondary data related to exchanges such as MCX, NCDEX and NMCE.

Dhole (2014) investigated that the antiquity of a commodity futures market in India epoch back to the ancient times cited in *Kautilya's Arthashastra*. It has been commodity heard in Indian markets for centuries, seems to be coined in 320 BC, referred in Forward Contracts (Regulation) Act, 1952. They found the markets have made enormous advancement in terms of technology, transparency and the trading activity. It has happened after the Government protection was removed from a number of commodities and market forces were allowed to play their role. Rational Government policies and the plinth of effective laws have benefited in many ways like credit accessibility, improved product quality, predictable pricing, Import-export competitiveness, and price risk management and price discovery.

3. Objectives of the Study

The investor's revenue based invests the money due to commodities for framing the valuables objectives such as given below.

1. To analysis future trading of gold performance in MCX.
2. To evaluate the performance and demand of commodities markets in the worldwide.
3. To measure the dispersion and descriptive analysis of commodity markets in world wide.

4. Commodity Markets/Exchanges

A commodities exchange is an exchange where various commodities and derivatives products are traded. Most commodity markets across the world trade in agricultural products and other raw materials such as barley, wheat, sugar, maize, coffee, cotton, cocoa, pork bellies, milk products, oil, metals, and so on and contracts based on them. These contracts can include spot, forwards, futures and options on futures. Other sophisticated products may include interest rates, environmental instruments and swaps.

Commodity exchanges usually trade futures contracts on commodities such as trading contracts to receive something, say corn, in a certain month. A farmer raising corn can sell a future contract on his corn. It will not be harvested for several months and guarantee the price. It protects the farmer from price drops and the buyer from price rises. Speculators and investors also buy and sell the futures contracts in an attempt to make a profit and provide liquidity to the system. However, due to the financial leverage provided to traders by the exchange, commodity futures traders face a substantial risk.

Chicago Board of Trade (CBOT) is established in 1848, ranked as one of the oldest futures/options trading exchange in the world. The exchange offers more than 50 different futures and option contracts for investors stretching across a number of asset classes. As of 2007, the CBOT operates as a subsidiary of the CME group.

New York Mercantile Exchange (NYMEX) is the world's largest physical commodity futures exchange, offering exposure to a wide variety of products. The commodity exchange (COMEX) also operates as a division of the NYMEX and is best known for offering exposure to various metals contracts. The two divisions joined in later of 2006, and were acquired by the CME group in the year of 2008.

London Metal Exchange (LME) is a major exchange that offers exposure to futures and options of a wide variety of base metals and other commodity products. Some of the metals traded includes such as aluminum, copper, tin, nickel, zinc, and lead. Though founded in 1877, the exchange can trace its roots all the way back to 1571, when the royal exchange in London was opened with only trading copper at that time.

The Intercontinental Exchange (ICE) is a U.S. based company that operates futures and over-the-counter contracts via internet marketplaces. The company was originally focused on energy contracts, but has widened its scope by offering exposure to a number of commodities, including cocoa, cotton, sugar, iron ore, natural gas and crude products. The platform is much more focused on just a select few commodities and may be a good fit for traders looking to single out just one or two commodities.

Multi Commodity Exchange (MCX) is a private commodity exchange located in Mumbai, India. The company was founded in 2003 and ranks as one of the top 10 commodity exchanges in the world. Traders can gain access to a number of the usual suspects like gold and silver. But also have the option to trade a number of commodities focused on the Indian economy like pepper, cashew kernel, and yellow peas and so on.

5. The Performance of Commodity Market in Global Market

Chicago Mercantile Exchange (CME) is a financial and commodity derivatives trading platform headquartered in Chicago. Originally founded in 1898 as the Chicago Butter and Egg Board, it has one of the largest options and future line-up of any exchange in the world. The CME offers contracts of all kinds, including agriculture, credit, economic events, equity index, Foreign Exchange, interest rates and other futures/options investments. The CME is owned and operated under the CME Group.

Africa's most active and vital commodity exchange is the South African Futures Exchange (SAFEX). It was informally launched in 1987 and has evolved into one of the leading emerging markets. The Johannesburg Securities Exchange acquired it. SAFEX only traded financial futures and gold futures for a long time, but the creation of the Agricultural Markets Division (as of 2002, the Agricultural Derivatives Division) led to the introduction of a range of agricultural futures contracts for commodities. Trade was liberalized such as white, yellow maize, bread milling wheat and sunflower seeds. SAFEX traded 30 million futures and option contracts in 2001, making it the world's 14th largest exchange.

Mergers were also the result of regulatory pressure. This was the case, for illustration, in Japan and particularly, China. In Japan, several exchange mergers took place, from 17 exchanges in September 1993, the number went to 8 in 1997. In the United Kingdom, LIFFE merged with the London Commodity Exchange in September 1996 and now trades a range of soft commodity and agricultural contracts, including futures and options on cocoa, robusta coffee, white sugar, grain and potatoes. In the United States, NYMEX, the world's premier energy futures exchange, merged in 1994 with COMEX, which

operates today as its subsidiary, and NYCE (created in 1870) and CSCE (founded in 1882) to merge and form in 1998 the “Board of Trade of the City of New York” (NYBT).

In Europe, the world’s second largest exchange, Eurex, resulted from the merger of the German DTB Deutsche Terminbörse and the Swiss Exchange SOFFEX in the autumn of 1998. That year also bore witness to the creation of Euronext, a pan European “one company, three centers” structure, merger between Amsterdam Exchanges (AEX), Brussels Exchanges (BXS) and the Paris Bourse, which created the first totally integrated cross-border single currency derivatives market. In February of 2002, Portugal’s Bolsa de Valores de Lisboa e Porto exchange merged with Euronext to become the Euronext Lisbon.

In Latin America, the Bolsa de Mercadorias & Futuros (BM&F) became in 2001 a member of the Globex Alliance, looking ahead with other member exchanges to a less costly, more competent, stronger and united international marketplace. In Asia in 2001 the Malaysia Derivatives Exchange was created out of the merger of Commodity and Monetary Exchange of Malaysia (COMMEX) and Kuala Lumpur Options and Financial futures Exchange (KLOFFE).

Chart-1

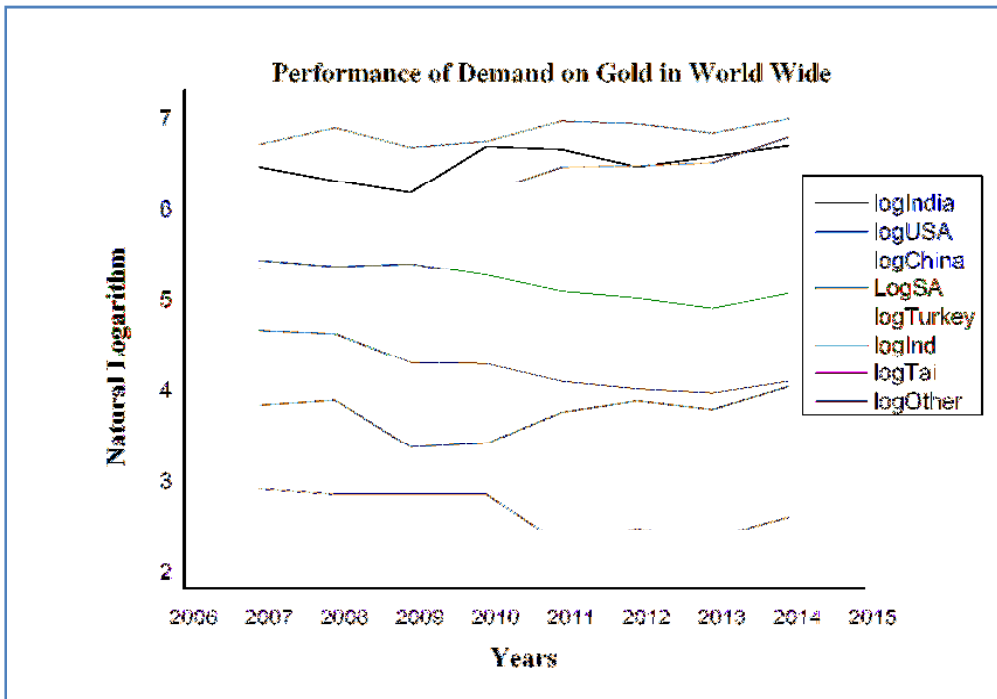
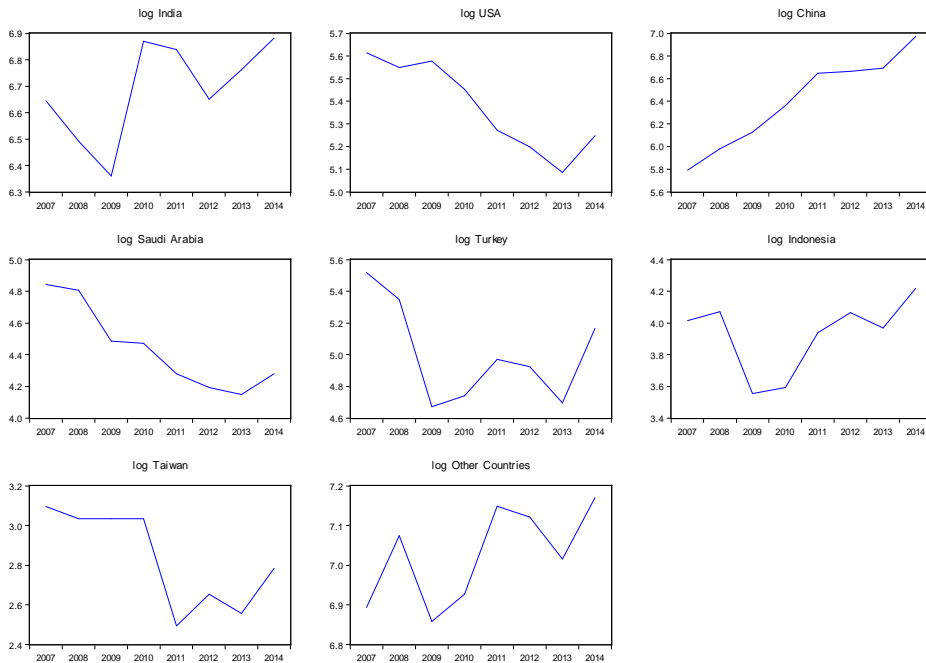


Table – 1 The Demand of Gold In Commodity Market

Year	Countries								Total
	India	USA	China	Saudi Arabia	Turkey	Indonesia	Taiwan	Others	
2007	769.2 (27.36)	274.5 (9.76)	327.8 (11.66)	126.9 (4.51)	249.3 (8.86)	55.5 (1.97)	22.1 (0.78)	985.6 (35.06)	2810.9 (100)
2008	660.2 (22.7)	256.9 (8.8)	395.6 (13.6)	122.4 (4.2)	210.3 (7.2)	58.7 (2.0)	20.8 (0.7)	1181.9 (40.7)	2906.8 (100)
2009	578.5 (23.1)	264.5 (10.6)	457.7 (18.3)	88.7 (3.5)	107.0 (4.3)	35.0 (1.4)	20.8 (0.8)	951.7 (38.0)	2503.1 (100)
2010	963.1 (31.5)	233.3 (7.6)	579.5 (19.0)	87.5 (2.9)	114.6 (3.8)	36.4 (1.2)	20.8 (0.7)	1019.4 (33.4)	3054.6 (100)
2011	933.4 (27.1)	194.9 (5.6)	769.8 (22.3)	72.2 (2.1)	144.2 (4.2)	51.3 (1.5)	12.1 (0.4)	1272.1 (36.9)	3450 (100)
2012	773.5 (23.8)	181.0 (5.6)	782.8 (24.1)	66.3 (2.0)	137.6 (4.2)	58.3 (1.8)	14.2 (0.4)	1237.5 (36.9)	3251.2 (100)
2013	864.2 (27.1)	161.8 (5.1)	806.8 (25.3)	63.4 (2.0)	109.5 (3.4)	52.9 (1.7)	12.9 (0.4)	1113.7 (35.0)	3185.2 (100)
2014	974.8 (25.2)	190.3 (4.9)	1065.8 (27.6)	72.2 (1.9)	175.2 (4.5)	68.0 (1.8)	16.2 (0.4)	1301 (33.7)	3863.5 (100)
Mean	302.45	252.59	245.08	239.51	186.73	174.58	106.24	1028.3	2535.48
Median	301	253	237.35	239.9	186.9	172.5	95.7	986.1	2477.2
Maximum	420	289.9	281.3	363.2	233.5	207	167	1293	2907.8
Minimum	218.9	225	216	145	145	150	59	817	2256
Std. Dev.	68.8954 5	18.47072	19.95872	64.21136	32.74179	18.5243 3	37.7576 8	189.1869	212.0242
Skewness	0.47519 7	0.291309	0.37914	0.31871	0.069435	0.63517 2	0.51708 8	0.232169	0.414846
Kurtosis	2.16925 5	3.144164	2.153871	2.6679	1.388414	2.34083 9	2.24924 4	1.421335	1.942889
Jarque-Bera	0.66391 1	0.150095	0.537885	0.215248	1.090206	0.85344 5	0.68048 2	1.128247	0.752447
Probability	0.71751 9	0.9277	0.764187	0.897965	0.579782	0.65264 5	0.71159 9	0.568859	0.686449
Sum	3024.5	2525.9	2450.8	2395.1	1867.3	1745.8	1062.4	10283	25354.8
Sum Sq. Dev.	42719.2 4	3070.509	3585.156	37107.89	9648.221	3088.35 6	12830.7 8	322125.1	404588.3
Observations	10	10	10	10	10	10	10	10	10

Source: World Gold Council

Above the table 1 shows that the countries are more investing the money to selected commodities of gold. The gold is a one of the commodity which is in demand and in supply more than other commodities. In 2007, India was at first (27.36) place in consumption of gold followed by other countries. China is a third place and out of 100 very low consumption of the gold is Taiwan (0.78). Taiwan people are not much interested to invest the money on gold commodity markets. The Indian commodity trading activities were on increasing trend before 2010 and after that went declining. Out of 100, USA (39.4) and Saudi Arabia (14.4) were initially at a growing stage and later went on reclining mode. India, China, Turkey and Indonesia are standard positions to consume as well as make it demand in the worldwide usages regarding the years of 2010-2014. Except the Taiwan are usages and demand of a commodity of gold is up and down. Taiwan is a one of the countries which means a standard growth of gold in commodity market in the world. The other developing countries performed well in the past eight years.

Chart-2 The Performance of Gold in World Wide

The average values (2007-2014) are up and down India (302.45), USA (252.59), China (245.08), Saudi Arabia (239.51), Turkey (186.73), Indonesia (174.58) and Taiwan (106.24) and so on. The values are higher deviation of standard deviations from India and Saudi Arabia compared to other countries. Other countries of the standard deviations are normally like USA (18.47072), China (19.95872), Turkey (32.74179), Indonesia (18.52433), and Taiwan (37.75768). The Taiwan and Turkey are high deviation from other countries. Hence the growth is low when compared to previous years of the gold.

Karl Pearson's Skewness values are three types such as Positive, Negative and Symmetric. All the countries values are maximum zero value which is called symmetric such as India (0.475197), USA (0.291309), China (0.37914), Saudi Arabia (0.31871), Turkey (0.069435), Indonesia (0.635172) and Taiwan (0.517088). Hence, all the demand values of gold are less than the zero which means symmetric skewness. Therefore, all the countries are normally distributors of the data proved through Pearson's skewness.

Karl Pearson's Kurtosis values are little different from one country to another such as India (2.169255) USA (3.144164), China (2.153871) Saudi Arabia (2.6679) Turkey (1.388414) Indonesia (2.340839) and Taiwan (2.249244). Hence, all the demand values of gold are less than the three co-efficient values, which is called Platy Kurttic Distribution. The Jarque-Bera test display that the performance of gold values which are less than the critical values 18.73. Hence the null hypothesis that , there is non-stationary data of gold in worldwide is not accepted. The alternative hypothesis of stationary of data of Gold in worldwide is accepted. Therefore the data is normally distributed as well as stationary data. This data may useful to do a further analysis.

6. Conclusion

The costs of modern metals are related to gold. It requires significant investment to react completely to developments in gold costs. At the point when the gold dove in April 2013, mechanical metals costs dropped too. The reason was not a matter of supply and request in the standard sense. They measure all these costs in U.S. dollars, and the estimation of the dollar essentially climbed. Since, the dollar has been

falling, the cost of gold has been bouncing back and metals costs have started to move back as well. While lingering behind gold, mechanical metals costs perform ahead of time of swelling. The role of gold as a hedge against inflation is strengthened. The implication for those investors who include US dollar denominated assets in their portfolios is that oil and gold could be close substitutes as safe havens from fluctuations in the US dollar's value. The oil price does nonlinearly cause the gold price and can be used to predict the gold price. This would significantly help monetary authorities and policy makers in monitoring the price of major commodities in markets.

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