The Movement of Industrially Applicable Yellow Metal and Its Impact on Global Currencies

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Abstract: Gold Has Long Been Considered The Desirable Of Precious Metals, And Its Value Has Been Used As The Standard For Many Currencies. Gold Has Been Used As A Symbol Of Purity, Value, Royalty. Gold Is A Major Financial Asset For Countries And Central Banks. The Demand Of Gold Obviously Has Two Impacts First It Increases Or Decreases The Margin Of Importers And Suppliers In India, As Most Of The Demand Of Indian Market Is Catered By Imported Gold So With The Rise Of International Price Purchase Price Which Impacts The Retail Price Of Gold. The Gold Price In India Is Determined By The Demand Of Metal. Gold Has A Profound Impact On The Value Of World Currencies. The Gold Standard Has Been Abandoned ,Gold As A Commodity Can Act As A Substitute For Fiat Currencies, It Will Play An Integral Role In The Foreign Exchange Markets. Investors Typically Buy Large Quantities Of Gold When Their Country Is Experiencing High Levels Of Inflation. The Demand Of Gold Increases Due O Its Inherent Value And Limited Supply. Gold Is Able To Retain Value Much Better Than Other Forms Of Currency. The Price F Gold Is Generally Inversely Related To The Value Of The United States Dollar. A Stronger Us Dollar Tends To Keep The Price Of Gold Lower And Vice-Versa ,This Is Because People Have A Tendency To Invest And Trade In Dollars When The Dollar Is Strong And When The Dollar Is Weak, However, People Prefer To Invest In Gold, According To The Wgc (World Gold Council) And The London Bullion Market Association.

Keywords: Gold, Currency, Forecast, Correlation Hypothesis.

I. INTRODUCTION:

Gold and its impact on the currency is significant to analyse because both currency and yellow is a cost factor for electronic industry which uses gold in their manufacturing process. This paper has made an attempt to analyse the gold impact on currency based on the analysis suggestions have been given to investors on gold.

II. REVIEW OF lITERATURE

Gold is an important investment option in the world. when there was recession every stock market, countries economy was going down at that time gold show his real value as an investment option over mutual funds, stock market and many other investment.

I have tried to give a detailed description about the factors which moves gold prices, gold demand and the global currencies of four countries which have been compared with gold prices. Forecasting the future prices of gold. Identify and analyze the factors which moves the gold price.

The study revealed that, traditionally gold played a significant role during times of political and economic crises and during equity market crashes; whereby gold has responded with higher prices and a source of hedge against all the inconsistencies in economy. The importance of interest rates has been studied and reported that the price of gold was strongly related to the US interest rate. It was found that a close correspondence between the time series properties of the relative price of gold and the TS properties of real interest rates. The study also reported the significance of interest rates on the price of gold; increases in expected interest rates will cause a negative adjustment in the price of gold. It was found that unanticipated components of US money supply and PPI announcements had significant impacts on the daily gold price using regression analysis (Fortune, 1987). The study reported that unanticipated weekly growth in the announced level of money supply led to an increase in gold volatility (Bailey, 1988). The main objective of the study was to explain the correlation between interest rates and gold standards.

III. OBJECTIVES

- To forecast the December 2018 values of gold price
- To forecast the December 2018 values of US Dollar, Euro, Japanese Yen and UK Pound
- To find out the movement of gold price and its impact on global currencies
- To give relevant suggestion to investors investing in gold
- To known the demand of gold

IV. LIMITATION OF THE STUDY

The data collected by me through primary and secondary sources
- The data collected for three years only
- The information is limited
- Time is one of the main constraints of the study

V. METHODOLOGY

To achieve the objective of studying the stock market data that has been collected research methodology for this study it can be two types.
  i. Primary
  ii. secondary

VI. PRIMARY DATA

Primary data has been collected directly without any references .In this study it is gathered through interviews with concerned officers and staff of the organization either individually or collectively

VII. SECONDARY DATA

Secondary data has been collected from already published sources such as audited annual reports and internal records of the organization.

VIII. STATISTICAL ANALYSIS TECHNIQUES:

For the analysis of the gold prices, gold demand and global currencies, the following statistical techniques are used to find the data, they are as follow.

Correlation: Correlation is a statistical techniques used to measure and describe the strength and direction of the relationship between two variables. The correlation value is defined as 'r'.

T-Test: A t-test is an analysis of two samples with small sample sizes, testing the difference between the samples when they do not know the variances of two normal distributions.

FORECASTING: Forecasting is the process of making predictions of the future based on past and present data and most commonly by analysis of trends.

IX. DATA ANALYSIS AND INTREPRETATION

CORRELATION GOLD PRICE AND GOLD DEMAND FROM JANUARY 2016 TO DECEMBER 2017

Years/quarter	Gold demand/Tones	Gold price/Quarter
2016-Q1	1290	2626
2016-Q2	2335	2869.50
2016-Q3	992.8	3217
2016-Q4	1029.2	2893
2017-Q1	1034.5	2864
2017-Q2	953.4	2847
2017-Q3	915	3040
2017-Q4	1095.8	3015

Correlation = -0.2765

T = -1.314

CORRELATION GOLD PRICE AND US DOLLAR FRO

year	Gold price	Us Dollar value
Jan-2016	2665	67.9325
Feb-2016	2933	68.8349
Mar-2016	2626	66.2555
Apr-2016	3027	66.5125
May-2016	2625.87	63.8253
Jun-2016	2869.5	67.4895
Jul-2016	3155	64.0469
Aug-2016	3074	67.0311
Sep-2016	3217	66.7415
Oct-2016	3006	66.6976
Nov-2016	2587.77	68.6072
Dec-2016	2893	67.9047
Jan-2017	2883	67.4756
Feb-2017	2960	66.7209
Mar-2017	2864	64.8144
Apr-2017	3251	64.2723
May-2017	2871	64.5101
Jun-2017	2847	64.6167
Jul-2017	2620	64.1997
Aug-2017	2999	63.9987
Sep-2017	3040	65.4653
Oct-2017	2930	64.8609
Nov-2017	2918	64.5022
Dec-2017	3015	63.8456

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JANUARY 2016 TO DECEMBER 2017
Correlation = -0.16199
T = -0.76

CORRELATION GOLD PRICE AND EURO FROM JANUARY 2016 TO DECEMBER 2017.

Year	Gold price	Euro value
Jan-2016	2665	74.449
Feb-2016	2933	79.3776
Mar-2016	2626	75.1119
Apr-2016	3027	75.3617
May-2016	2625.87	74.781
Jun-2016	2869.5	70.8081
Jul-2016	3155	70.0301
Aug-2016	3074	74.739
Sep-2016	3217	74.1895
Oct-2016	3006	66.8043
Nov-2016	2587.77	72.985
Dec-2016	2893	71.192
Jan-2017	2883	67.4756
Feb-2017	2960	70.539
Mar-2017	2864	69.0604
Apr-2017	3251	70.0363
May-2017	2871	72.519
Jun-2017	2847	73.822
Jul-2017	2620	75.254
Aug-2017	2999	76.568
Sep-2017	3040	77.1304
Oct-2017	2930	75.3067
Nov-2017	2918	76.3482
Dec-2017	3015	76.6329

Correlation = -0.1304

T = -0.61

CORRELATION GOLD PRICE AND JAPANESE YEN FROM JANUARY 2016 TO DECEMBER 2017

Year	Gold price	Japanese .Yen value
Jan-2016	2665	0.58315
Feb-2016	2933	0.61146
Mar-2016	2626	0.58873
Apr-2016	3027	0.53212
May-2016	2625.87	0.58873
Jun-2016	2869.5	0.6565
Jul-2016	3155	0.652
Aug-2016	3074	0.6565
Sep-2016	3217	0.6565
Oct-2016	3006	0.6366
Nov-2016	2587.77	0.5976
Dec-2016	2893	0.581
Jan-2017	2883	0.5989
Feb-2017	2960	0.59
Mar-2017	2864	0.5816
Apr-2017	3251	0.5775
May-2017	2871	0.5819
Jun-2017	2847	0.5751
Jul-2017	2620	0.5822
Aug-2017	2999	0.5809
Sep-2017	3040	0.5803
Oct-2017	2930	0.569
Nov-2017	2918	0.5728
Dec-2017	3015	0.5666

Correlation = -0.261555

T = 1.261

CORRELATION GOLD PRICE AND POUND VALUE FROM JANUARY 2016 TO DECEMBER 2017

Year	Gold price	Pound value
Jan-2016	2665	96.61
Feb-2016	2933	95,19
Mar-2016	2626	95.19
Apr-2016	3027	97.02
May-2016	2625.87	97.36
Jun-2016	2869.5	89.78
Jul-2016	3155	88.34
Aug-2016	3074	88.04
Sep-2016	3217	86.42
Oct-2016	3006	81.64
Nov-2016	2587.77	85.76
Dec-2016	2893	83.89
Jan-2017	2883	85.00
Feb-2017	2960	82.57
Mar-2017	2864	81.29
Apr-2017	3251	83.09
May-2017	2871	83.01
Jun-2017	2847	84.17
Jul-2017	2620	84.75
Aug-2017	2999	82.72
Sep-2017	3040	87.48
Oct-2017	2930	85.96
Nov-2017	2918	87.28
Dec-2017	3015	86.25

Correlation = -0.3142

T = -1.52

X. FINDINGS

1. GOLD PRICE:

The lowest price of gold for past two years is 2,587(Nov, 2016) and the highest price in the past two years is 3,251 (Apr,2017).

2. GOLD DEMAND:

The lowest price of gold demand in the past two years is 915(Q3,2017) and the highest price in the past two years is 2,335 (Q2,2016).

3. GOLD PRICE AND GOLD DEMAND:

The r value between Gold price and Gold demand is = -0.2765 it shows that there exists a negative relationship between Gold price and Gold demand

Since the calculated T value -1.314< 2.776 the table value there exists a weak relationship between both Gold price and Gold demand Therefore assumed Ha2 hypothesis is accepted and H0, Ha1 are rejected.

The forecasted demand of Gold in Dec 2018 in India is 590 tonnes.

3.1 GOLD PRICE AND US DOLLAR:

The correlation r value -0.16
Since the calculated T value -0.76 < 2.074 the table value, there exists a weak and significant relationship between gold price and us dollar currency value. This indicates that both gold price and dollar value does not move in the same direction that is when gold price will increase dollar value decrease.

Therefore assumed Ha2 hypothesis is accepted and H0, Ha1 are rejected.

In Dec,2018 gold price is forecasted to be 2965.62 and US dollar is forecasted to be 62.1122.

4. GOLD PRICE AND CURRENCY EURO:

Since the correlation r value -0.13
Since the calculated T value -0.61 < 2.074 the table value, there exists a weak and significant relationship between gold price and Euro value. This indicates that both gold price and euro value does not move in same direction that is when gold price increases euro value decreases.

Therefore assumed Ha2 hypothesis is accepted and H0,Ha1 are rejected.

In Dec, 2018 gold price is forecasted to be **2965.62** and Euro value is forecasted to be **78.977**

5. GOLD PRICE AND CURRENCY JAPANESE YEN:

Since the correlation r value 0.26
Since the calculated T value 1.261 < 2.704 the table value, there exists a weak and significant relationship between gold price and Japanese yen value. This indicates that both gold price and j.yen value does not move in the same direction that is when gold price increases Japanese yen value decreases.

Therefore assumed Ha2 hypothesis is accepted and H0,Ha1 are rejected.

In Dec, 2018 gold price forecasted to be 2965.62 and Japanese yen value is forecasted to be 0.5333

6. GOLD PRICE AND GREATER BRITISH POUND(GBP):

Since the correlation r value -0.31
Since the calculated T value -1.528 < 2.704 the table value. there exists a weak and significant relationship between gold price and pound value. This indicates that both gold price and pound value does not move in same direction that is when gold price increases pound value decreases.

Therefore assumed Ha2 hypothesis is accepted and H0,Ha1 are rejected.

in Dec, 2018 gold price forecasted to be 2965.62 and pound value is forecasted to be 81.36.

7. GOLD PRICE AND GOLD DEMAND:

Since the correlation r value -0.27

Since the calculated T value -1.314 < 2.704 the table value. There exists a weak and significant relationship between gold price and gold demand. This indicates that both gold price and gold demand does not move in same direction that is when gold price increases gold demand decreases.

Therefore assumed Ha2 hypothesis is accepted and H0,Ha1 are rejected.

In Dec, 2018 gold price forecasted to be 2965.62 and gold demand forecasted to be 590.27.

XI. SUGGESTION:

1. Since the r value and T value indicates a weakness between the relationship between Gold and US dollar it indicates that whenever Gold value decreases US dollar increases and vice-versa. Traders and investors are suggested to invest in Gold when US dollar decreases.

   The forecasted value of gold for Dec 2018 shows that there will not be much change in Gold in the near term, traders and investors are suggested that investing in Gold will not give enormous profit in the near term.

   The forecasted value of US dollar in Dec 2018 shows that there will be a decline in the value of US dollar in near term so traders and investors are advised to stay away from US dollar in the near term.

2. Since the r value and T value indicates a weakness between the relationship between Gold and Euro it indicates that whenever Gold value decreases Euro increases and vice-versa. Traders and investors are suggested to invest in Gold when Euro decreases.

   The forecasted value of gold for Dec 2018 shows that there will not be much change in Gold in the near term, traders and investors are suggested that investing in Gold will not give enormous profit in the near term.

   The forecasted value of Euro in Dec 2018 shows that there will be a increase in the value of Euro in near term so traders and investors are advised to invest in Euro currency for a short term gain.

3. Since the r value and T value indicates a weakness between the relationship between Gold and Japanese Yen it indicates that whenever Gold value decreases Japanese Yen increases and vice-versa. Traders and investors are suggested to invest in Gold when Japanese Yen decreases.

   The forecasted value of gold for Dec 2018 shows that there will not be much change in Gold in the near term, traders and investors are suggested that investing in Gold will not give enormous profit in the near term.

   The forecasted value of Japanese Yen in Dec 2018 shows that there will be a decrease in the value of Yen in near term so traders and investors are advised not to invest in Japanese Yen in the short term.

4. Since the r value and T value indicates a weakness between the relationship between Gold and Pound it indicates that whenever Gold value decreases pound increases and vice-versa. Traders and investors are suggested to invest in Gold when pound decreases.

   The forecasted value of gold for Dec 2018 shows that there will not be much change in Gold in the near term, traders and investors are suggested that investing in Gold will not give enormous profit in the near term.

   The forecasted value of pound in Dec 2018 shows that there will be a increase in the value of pound in near term so traders and investors are advised to invest in pound for a short term gain.

5. Since there exists a negative relationship between GOLD demand in India and Gold price it indicates that Gold price is not influenced by Gold demand , so investors can ignore Gold demand in India while investing in Gold.

XII. CONCLUSION

I had good experience while doing this research. I got more knowledge on movement of gold price and gold demand with global currencies. In this research i have compared four global currencies value with gold price for the past two years. The main element in this project is calculation of correlation value and forecast value. While calculating it the investors can take correct decisions whether to invest or not. There is a impact of gold price on global currencies because they maintain weak relationship and they move in opposite direction so that it shows increases in gold price and decreases in global currencies. Thus traders are advised to invest in gold because there is decline in the value of global currencies.

The further scope of research exists in comparing gold movement with electronic stock movement because the industry uses gold in their manufacturing process.

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