

# A Comparative Study of Gold Price Movements In Indian and Global Markets

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## INTRODUCTION

Since the earliest times, gold has been important for mankind. The basic reason for this being its unique physical properties. Gold as a commodity, as a currency, continues to play its ancient role as the only true standard of value in times of war or crisis. History tells us that only gold retains its value during war; change of empires and govt. and at the time of crisis. Gold is the oldest and most respected currency in the world and only one respected currency in the world when national paper money loses value. That is why every central bank of any significance buys and holds Gold in reserve in a world of almost universal paper money. The monetary use of gold, along with silver has been very wide spread since ancient times. Gold and silver coins have been the most readily acceptable medium of exchange due to the intrinsic value of the two metals. The major problem in this use of gold as a coinage metal is its short supply. It is produced only by a few countries mainly South Africa (producing 3/4<sup>th</sup> of the total world production), Soviet Union, Canada, USA, Ghana, Philippines and Australia. In India, gold has maintained an important presence since very early times.

## MONETARY ROLE OF GOLD

The monetary role of gold may be analyzed by the three age-old functions of money:

- A medium of exchange
- A standard of value
- A store of value

In the shape of coins, gold has been used as medium of exchange for ages.

## THE GOLD STANDARD

The Scottish philosopher David Hume first provided an insight into the monetary role of gold in the late eighteenth century in his “**Specie Flow Mechanism.**” By ‘specie’ he meant any one of the monetary metals, gold or silver. This was a ‘pure gold standard’. This system visualized free gold coinage, ready conversion of currency notes into gold at the par value, lack of restrictions on holding of gold, its international mobility and free trade. Consequently, the balance of payments flows. Since this will change the quantity of money in the economy, the levels of prices, output and employment will respond. The magnitude of these related changes will depend upon the ratios of exports and imports to the GNP of a country. This system required an adequate supply of gold in order to sustain the growth in output and trade.

The gold policy of the govt. has also led to gold sales from time to time. This as well as the policy of gold reserve management has been examined. The role of gold in India has an important fiscal aspect. A part of the demand for gold in India is related to the generation of black money. At the same time, the stock of private gold has been looked upon as a potential source for balancing the union govt. budget as well as for balancing the balance of payments. Thus, the role of gold is inseparably linked up with fiscal reform in the country.

## GOLD AS AN INVESTMENT OPTION

There are many savings and investment options available in India. One of the options is gold. Gold has been valued since prehistoric times and is the investment option that has been seen as the ultimate form of safe haven investment and the only true form of wealth. Gold has been popular in India because it acted as a good hedge against inflation. There is so much uncertainty in the world in terms of economic growth and geopolitics; it is no surprise that many investors, big and small have chosen to hedge their investments through gold.

Gold is an important and popular investment for many reasons:

- Gold remains as an integral part of social and religious customs, besides being the basic form of saving.
- Gold has aesthetic appeal .Its beauty recommends it for ornament making above all other metals.
- Gold is indestructible which does not tarnish and is also not corroded by acid-except by a mixture of nitric and hydrochloric acids.
- Gold is a currency that has no borders and does not need to be honoured by any governmental obligations.

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- Gold has long proven ability to retain value and appreciate in value. Gold is readily available in a standardized form.

## **GOLD BETTER THAN EQUITIES**

According to the World Gold Council, investing in gold is considered to be safer than traditional investments in equities and bonds since gold is the commodity where the price is determined by various factors apart from its demand and supply. Also, it is a commodity that is priced in US Dollars as against our local currency. The factors that affect the price of gold are rather different from factors that affect other assets like say domestic fixed deposits. Inflation will have no impact on the price of gold, other factors remaining the same, thereby lending support to your wealth. In fact, in times of inflation, more money tends to move to gold, thereby driving up its price. The last few years show a steep rise in oil prices resulting in a rise in inflation not only in India but globally. The impact has been varied across countries depending on factors such as economic cycle and oil consumption. This general price rise has added to the attractiveness of gold.

In other words, when the stock market crashes or when the dollar weakens, gold continues to be a safe haven investment because gold prices rise in such circumstances.

## **GOLD INVESTMENT OPTIONS**

Not many people know that there are various investment options in gold like gold bars, numismatic coins, and gold accumulation plans by banks and financial institutions, and gold mutual funds. Across the world, several investment options are available for investors to put their money in the yellow metal.

- **Gold savings accounts:** They operate like regular bank accounts where the customers account is credited with balances of gold and withdrawals can be either in the form of gold coins or currency equivalents.
- **Gold accumulation plan:** A monthly debit from customer's savings account is backed by 100 percent Physical gold.
- **Gold chits:** Also there are gold chits run by jewelers where at the end of the year, housewives can buy gold jewellery or coins from the same jeweler worth the total money they have paid in instalments.
- **Gold deposit scheme:** It is one of the options to invest in gold where one can keep gold in banks for a specified period like a fixed deposit and can claim as and when required. But it is not like pledging as the ornaments will not be returned in its original form because the banks melt them and rent them to the industry.
- **I-gold:** An investor can purchase gold from a stock broker just as he used to buy equity shares.
- **Mutual funds** and Buying gold as ornaments are other options.

Realizing the potential for Gold as a safe investment option the World Gold Council has made several suggestions regarding this matter. These include allowing banks to offer gold backed investment products and gold loans to local jewellers.

## **OBJECTIVES OF THE STUDY**

The main objectives of the present research are:

- (i) To study the trend of gold price movements in the post liberalization period and its relationship with international prices.
- (ii) To find out the correlation between gold prices in both the markets.
- (iii) To study the impact of changes in foreign exchange rates on the gold prices in Indian as well as in the international market.

## **RESEARCH METHODOLOGY**

### **❖ STATISTICAL HYPOTHESIS**

Since the basic objective of this work is to study the trend of gold price movements in the post-liberalized period in the Indian and International (London) market, it describes the characteristics trend line of the prices of gold during the period under study. Because of this variation, the focus is on hypothesis testing. Hypothesis testing has been done only for the following cases:

- (1) To test the significance of the value of Karl Pearson co-efficient of correlation between gold prices in Indian Gold Market and International Gold Market. To test it, the following hypothesis has been developed:  
 **$H_0$ : There is no correlation between gold prices in Indian Gold Market and International Gold Market.**  
 **$H_1$ : There exists a correlation between gold prices in Indian Gold Market and International Market.**
- (2) To test the significance of seasonal variability of Gold prices in Indian Gold Market and International Gold Market. To test, it the following hypothesis has been developed:  
 **$H_0$ : Seasonal Variability of gold prices in the two gold markets is same.**  
 **$H_1$ : Seasonal Variability of gold prices in the two gold markets is different.**

## ❖ PERIOD OF STUDY

The present study is a time series study covering a period from 1991 – 2008. This period was chosen because before 1991, the Govt controlled the economy of the country. The prices were not determined by the market forces but rather fixed by the Govt. from time to time. From 1990 onwards, the Govt. of India started the process of globalization and liberalization. It allowed the companies to enter the Indian market and a number of other steps were also taken to make India an active member of the world region.

## ❖ SAMPLE SELECTION

The research is mainly based on secondary data, which has been collected from various RBI Bulletins, IMF publications, Govt. of India Publications and web sites of moneycontrol.com etc.

## STATISTICAL TECHNIQUES USED

Different statistical techniques have been used for data presentation, analysis & interpretation of results. For data presentation, trend line graphs have been used while for analysis of data, the techniques used were measures of variation, correlation and time series analysis. For interpreting the results of hypothesis testing, student's t-test has been used.

## SEASONAL VARIATION IN THE GOLD PRICES

**EXHIBIT 1: Seasonal Index of Indian Gold Market by Simple Average Method (from 1991-2008)**

| Months/<br>Year | Jan      | Feb      | Mar      | Apr       | May       | Jun      | Jul       | Aug       | Sep      | Oct      | Nov       | Dec      | Total    | Average  |
|-----------------|----------|----------|----------|-----------|-----------|----------|-----------|-----------|----------|----------|-----------|----------|----------|----------|
| 1991            | 3738     | 3538     | 3440     | 3673      | 3755      | 3731     | 4160      | 4251      | 4250     | 4665     | 3950      | 4941     | 48092    | 4007.667 |
| 1992            | 4835     | 4650     | 4443     | 4553      | 4127      | 4100     | 4154      | 4084      | 4121     | 4049     | 3976      | 3966     | 51058    | 4254.833 |
| 1993            | 3966     | 4110     | 4082     | 4623      | 4600      | 4386     | 4680      | 3902      | 4376     | 4556     | 4622      | 4637     | 52540    | 4378.333 |
| 1994            | 4623     | 4485     | 4629     | 4674      | 4670      | 4575     | 4635      | 4623      | 4825     | 4793     | 4739      | 4720     | 55991    | 4665.917 |
| 1995            | 4725     | 4660     | 4680     | 4860      | 4740      | 4740     | 4695      | 4710      | 4895     | 5028     | 5030      | 5115     | 57878    | 4823.167 |
| 1996            | 4787     | 5223     | 4853     | 4828      | 4812      | 4750     | 4716      | 4800      | 4880     | 4730     | 4808      | 4742     | 57929    | 4827.417 |
| 1997            | 4596     | 4505     | 4443     | 4483      | 4459      | 4355     | 4140      | 4199      | 4164     | 4105     | 3874      | 3713     | 51036    | 4253.00  |
| 1998            | 3707     | 3738     | 3700     | 3938      | 3998      | 4028     | 3835      | 3771      | 3949     | 4020     | 3946      | 3961     | 46591    | 3882.583 |
| 1999            | 4060     | 3954     | 4007     | 4080      | 4008      | 3803     | 3752      | 3800      | 3846     | 4412     | 4299      | 4151     | 48172    | 4014.333 |
| 2000            | 4179     | 4355     | 4103     | 4166      | 4870      | 4511     | 4538      | 4520      | 4515     | 4537     | 4480      | 4540     | 53314    | 4442.833 |
| 2001            | 4404     | 4343     | 4372     | 4340      | 4557      | 4527     | 4497      | 4577      | 4815     | 4848     | 4727      | 4709     | 54717    | 4559.758 |
| 2002            | 4848     | 5127     | 5109     | 5278      | 5494      | 5604     | 5445      | 5373      | 5511     | 5458     | 5489      | 5696     | 64432    | 5369.328 |
| 2003            | 6096     | 6108     | 5781     | 5541      | 5968      | 5929     | 5780      | 5890      | 6191     | 6131     | 6331      | 6609     | 72354    | 6029.463 |
| 2004            | 6702     | 6534     | 6522     | 6318      | 6187      | 6370     | 6538      | 6620      | 6662     | 6865     | 7067      | 6932     | 79317    | 6609.743 |
| 2005            | 6613     | 6598     | 6768     | 6698      | 6548      | 6697     | 6590      | 6813      | 7144     | 7515     | 7772      | 8317     | 84072    | 7005.999 |
| 2006            | 8684     | 8770     | 8836     | 9786      | 10931     | 9795     | 10513     | 10505     | 9845     | 9506     | 10049     | 10032    | 117250   | 9770.858 |
| 2007            | 9984     | 10476    | 10302    | 10353     | 9724      | 9545     | 9600      | 9697      | 10259    | 10648    | 11357     | 11315    | 123259   | 10271.61 |
| 2008            | 12502    | 13092    | 13946    | 13006     | 13417     | 13606    | 14374     | 12870     | 13518    | 13988    | 14390     | 10770    | 159481   | 13290.07 |
| Total           | 103050.3 | 104265.6 | 104016.9 | 105198.43 | 106864.57 | 105049.4 | 106642.08 | 105005.49 | 107766.2 | 109853.2 | 110905.26 | 108865.5 | 1277483  | 106456.9 |
| Average         | 5725.01  | 5792.5   | 5778.71  | 5844.35   | 5936.92   | 5836.07  | 5924.55   | 5833.63   | 5987.01  | 6102.95  | 6161.40   | 6048.08  | 70971.27 | 5914.27  |
| Seasonal Index  | 96.80    | 97.94    | 97.70    | 98.81     | 100.38    | 98.67    | 100.17    | 98.63     | 101.23   | 103.19   | 104.17    | 102.26   | 1200.00  | 100.00   |

Source: [www.moneycontrol.com](http://www.moneycontrol.com)

**EXHIBIT 2: Seasonal Index of International Gold Market by Simple Average Method (from 1991-2008)**

| Months/<br>Year | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    | Total   | Average  |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|----------|
| 1991            | 383.64 | 363.83 | 363.33 | 358.39 | 356.82 | 366.72 | 367.68 | 356.23 | 341.74 | 358.69 | 360.17 | 361.06 | 4338.30 | 361.525  |
| 1992            | 354.45 | 353.89 | 344.35 | 338.50 | 337.23 | 340.80 | 353.05 | 342.96 | 345.55 | 344.38 | 335.87 | 334.80 | 4125.83 | 343.8192 |
| 1993            | 329.01 | 329.35 | 330.08 | 342.07 | 367.18 | 371.89 | 392.19 | 378.84 | 355.27 | 364.18 | 373.83 | 383.35 | 4317.24 | 359.77   |
| 1994            | 386.88 | 381.91 | 384.13 | 377.27 | 381.26 | 385.64 | 385.49 | 380.35 | 391.58 | 389.77 | 384.39 | 379.29 | 4607.96 | 383.9969 |
| 1995            | 378.55 | 376.64 | 382.12 | 391.03 | 385.12 | 387.56 | 386.23 | 383.81 | 383.05 | 383.28 | 385.10 | 387.31 | 4609.80 | 384.15   |
| 1996            | 400.27 | 404.79 | 396.25 | 392.83 | 392.01 | 385.27 | 383.47 | 387.46 | 383.14 | 381.41 | 377.85 | 369.00 | 4653.75 | 387.8125 |
| 1997            | 354.11 | 346.58 | 351.81 | 344.47 | 343.97 | 340.76 | 324.10 | 324.01 | 322.82 | 324.87 | 306.04 | 288.74 | 3972.28 | 331.0233 |
| 1998            | 289.15 | 397.49 | 295.94 | 308.29 | 299.10 | 292.32 | 292.87 | 284.11 | 288.98 | 296.22 | 294.77 | 291.62 | 3630.86 | 302.5717 |
| 1999            | 387.07 | 287.22 | 285.96 | 282.62 | 276.88 | 361.37 | 256.08 | 256.70 | 366.60 | 310.72 | 293.18 | 283.34 | 3647.74 | 303.9783 |
| 2000            | 284.32 | 299.94 | 386.39 | 279.86 | 275.31 | 385.73 | 281.55 | 274.47 | 373.68 | 270.00 | 266.01 | 271.45 | 3648.71 | 304.0592 |

|                |         |         |         |         |         |         |         |         |         |         |         |         |           |          |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|----------|
| 2001           | 94.78   | 93.48   | 93.90   | 92.99   | 97.23   | 96.33   | 95.51   | 97.24   | 101.18  | 101.05  | 98.59   | 98.48   | 1160.7677 | 96.73064 |
| 2002           | 100.50  | 105.49  | 104.98  | 108.06  | 112.31  | 114.66  | 111.84  | 110.76  | 113.93  | 113.01  | 113.91  | 118.49  | 1327.9368 | 110.6614 |
| 2003           | 127.40  | 128.15  | 121.58  | 117.16  | 126.98  | 127.22  | 125.30  | 128.43  | 135.28  | 135.27  | 139.20  | 145.28  | 1557.2519 | 129.771  |
| 2004           | 147.72  | 144.56  | 145.18  | 143.96  | 137.01  | 140.08  | 142.12  | 142.98  | 144.68  | 150.10  | 156.86  | 157.82  | 1753.0842 | 146.0904 |
| 2005           | 151.38  | 151.14  | 155.05  | 153.24  | 150.61  | 153.74  | 151.54  | 156.34  | 162.81  | 167.75  | 170.17  | 182.11  | 1905.8802 | 158.8234 |
| 2006           | 196.30  | 198.13  | 198.88  | 218.00  | 241.11  | 234.11  | 226.23  | 225.74  | 213.51  | 209.12  | 224.14  | 224.70  | 2609.977  | 217.4981 |
| 2007           | 225.32  | 237.31  | 233.80  | 242.54  | 238.09  | 234.01  | 237.51  | 237.55  | 254.42  | 269.40  | 287.83  | 286.74  | 2984.5164 | 248.7097 |
| 2008           | 317.58  | 329.26  | 345.73  | 324.76  | 317.91  | 317.55  | 335.50  | 299.28  | 296.29  | 287.96  | 300.08  | 224.82  | 3696.7175 | 308.0598 |
| Total          | 4908.44 | 4929.17 | 4919.46 | 4816.04 | 4836.13 | 5035.75 | 4848.27 | 4767.27 | 4974.50 | 4857.20 | 4867.97 | 4788.41 | 58548.60  | 4879.05  |
| Average        | 272.69  | 273.84  | 273.30  | 267.55  | 268.67  | 279.76  | 269.34  | 264.84  | 276.36  | 269.84  | 270.44  | 266.02  | 3252.70   | 271.05   |
| Seasonal Index | 100.60  | 101.02  | 100.82  | 98.70   | 99.12   | 103.21  | 99.36   | 97.70   | 101.95  | 99.55   | 99.77   | 98.14   | 1200      | 100      |

Source: www.moneycontrol.com

From EXHIBIT 1 & 2; it is clear that prices of gold in both the Indian market and International market do not show any seasonal affects. The values of seasonal indices in Indian market range from 97.70 to 104.17 while in the International market, the values vary from 97.70 to 103.21. So in both the markets, there is only marginal difference in the values of monthly seasonal indices, which show that no seasonality is associated with gold price movements in the two markets.

### COMPARISON BETWEEN INDIAN AND INTERNATIONAL MARKET REGARDING GOLD PRICES

Before making any comparison between gold prices in Indian market and International market, it is worth mentioning that prices in Indian market are quoted in Indian rupee while in London Metal Market, prices are quoted in U.S. dollars. So for making a fruitful comparison of variability in the two markets, relative measure of dispersion, instead of absolute measures of dispersion has been used. But there are certain observations, which can be made without looking into the aspects, which are as follows:-

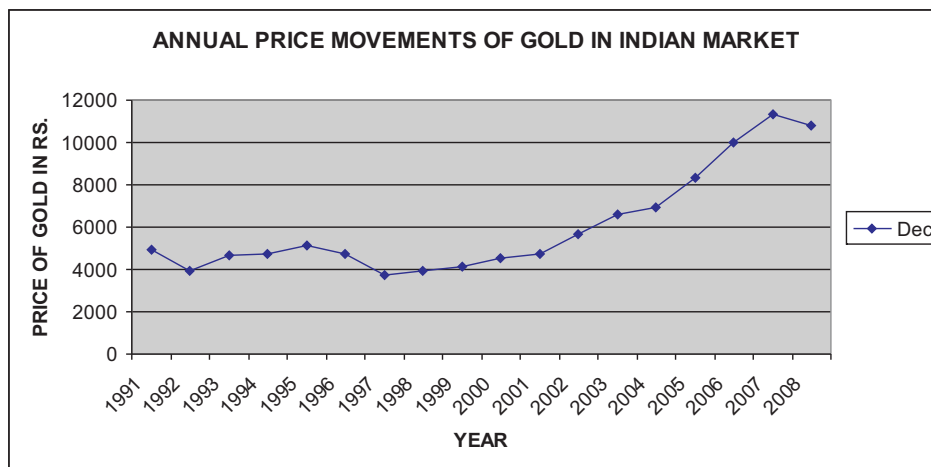
• **Trend in Price Movement:** - In Indian Market, the average annual prices of gold showed an increasing trend from the year 1991 to 1996, then showed a decreasing trend in 1997 and 1998 and again showed on increasing trend in the year 2000. On the other hand, starting from the year 1991, the prices in the international gold market declined in 1992 but showed an upward trend from 1993 to 1996; then the prices again showed a downward trend from 1997 to 1999 and finally, the prices rose again in the year 2000. From 2001 to 2008, the gold prices are continuously increasing in Indian market, but it has a fluctuating trend in the international market.

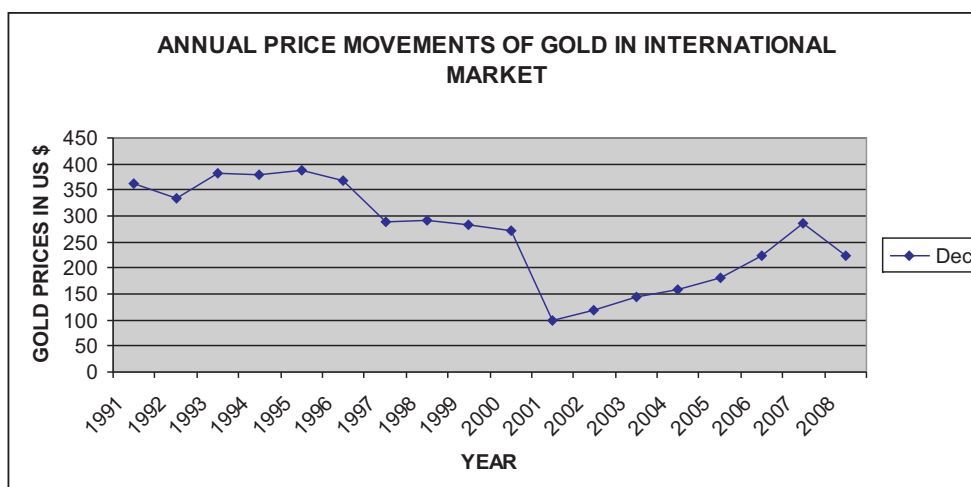
So in general, it can be said that the direction of price movements in the two markets is the same barring a couple of years. The same can be judged from the following graph:-

• **Correlation between prices in the two markets:** - For further analysis of the relationship between gold prices in Indian and International markets, Karl Pearson coefficient of correlation is calculated between gold prices in Indian market and the international market.

Figure 1:

#### ANNUAL PRICE MOVEMENTS OF GOLD IN INDIAN & INTERNATIONAL MARKETS





**EXHIBIT: 3 Co-Efficient Of Correlation Between Gold Prices In Indian Market And International Market**

| Year  | X         | Y       | X <sup>2</sup> | Y <sup>2</sup> | XY       |
|-------|-----------|---------|----------------|----------------|----------|
| 1991  | 4007.60   | 361.53  | 16060858       | 130700.3       | 1448848  |
| 1992  | 4254.83   | 343.81  | 18103578       | 118205.3       | 1462853  |
| 1993  | 4378.33   | 359.77  | 19169774       | 129434.5       | 1575192  |
| 1994  | 4665.91   | 383.99  | 21770716       | 147448.3       | 1791663  |
| 1995  | 4823.16   | 384.15  | 23262872       | 147571.2       | 1852817  |
| 1996  | 4827.48   | 387.80  | 23304563       | 150388.8       | 1872097  |
| 1997  | 4253.00   | 331.04  | 18088009       | 109587.5       | 1407913  |
| 1998  | 3882.50   | 298.98  | 15073806       | 89389.04       | 1160790  |
| 1999  | 4014.33   | 327.03  | 16114845       | 106948.6       | 1312806  |
| 2000  | 4442.83   | 304.05  | 19738738       | 92446.4        | 1350842  |
| 2001  | 4559.76   | 96.73   | 20791394       | 9356.816       | 441068.3 |
| 2002  | 5369.33   | 110.66  | 28829688       | 12245.95       | 594177.4 |
| 2003  | 6029.46   | 129.77  | 36354422       | 16840.51       | 782449.3 |
| 2004  | 6609.74   | 146.09  | 43688708       | 21342.39       | 965619.7 |
| 2005  | 7006.00   | 158.82  | 49084024       | 25224.86       | 1112716  |
| 2006  | 9770.86   | 217.50  | 95469671       | 47305.42       | 2125143  |
| 2007  | 10271.61  | 248.71  | 105505953      | 61856.52       | 2554649  |
| 2008  | 13290.07  | 308.06  | 176626070      | 94900.84       | 4094137  |
| Total | 106456.80 | 4898.49 | 1.133E+10      | 23995197       | 5.21E+08 |

Gold prices in Indian market ( Rs / 10gms) – X

Gold prices in International market ( \$ / oz) – Y

The value of  $r$  was found to be  $-0.23$ . To test whether this value of  $r$  shows a significant relationship between two prices, Student's  $t$ -test has been used. The hypothesis developed was:

**H<sub>0</sub>:** There is no correlation between the gold prices in the Indian market and prices in the International Market ( $r = 0$ ).

**H<sub>1</sub>:** There is significant correlation between the gold prices in the Indian market and prices in the International market ( $r \neq 0$ ).

Table value of  $t$  at 5% level of significance and for 16 degree of freedom = 2.120. Since the calculated value of  $t$  ( $-0.9453$ ) is less than the table value of  $t$ , we accept  $H_0$ . Thus, it can be said that the correlation between gold prices in Indian market and gold prices in International market is not statistically significant.

#### • Changes In Foreign Exchange Rate and Gold Prices Movements

In the discussion above, value of Karl Pearson Coefficient of Correlation was calculated between gold prices in Indian market and International market. Value of ' $r$ ' was found to be  $-0.23$ , which is statistically not significant.

To find whether changes in exchange rates of Indian rupee vis a vis US dollar also affected the gold prices in the two markets, value of Karl Pearson coefficient was calculated between (1) Exchange rates and prices in Indian gold prices and (2) Exchange rates and prices in International gold market.

#### EXHIBIT 4: Impact of Changes in Foreign Exchange Rates on Gold Prices

| Year | Average Prices in Indian Market (Rs/10gm) | Average Prices in London Market (\$/oz) | Average Exchange Rate* |
|------|---|---|------------------------|
| 1991 | 4007.60                                   | 361.53                                  | 24.16                  |
| 1992 | 4254.83                                   | 343.81                                  | 31.37                  |
| 1993 | 4378.33                                   | 359.77                                  | 31.38                  |
| 1994 | 4665.91                                   | 383.99                                  | 32.13                  |
| 1995 | 4823.16                                   | 384.15                                  | 35.37                  |
| 1996 | 4827.48                                   | 387.80                                  | 36.05                  |
| 1997 | 4253.00                                   | 331.04                                  | 41.01                  |
| 1998 | 3882.50                                   | 298.98                                  | 42.99                  |
| 1999 | 4014.33                                   | 327.03                                  | 44.67                  |
| 2000 | 4442.83                                   | 304.05                                  | 47.12                  |
| 2001 | 4559.76                                   | 96.73                                   | 48.66                  |
| 2002 | 5369.33                                   | 110.66                                  | 46.88                  |
| 2003 | 6029.46                                   | 129.77                                  | 45.48                  |
| 2004 | 6609.74                                   | 146.09                                  | 43.97                  |
| 2005 | 7006.00                                   | 158.82                                  | 45.41                  |
| 2006 | 9770.86                                   | 217.50                                  | 41.79                  |
| 2007 | 10271.61                                  | 248.71                                  | 42.95                  |
| 2008 | 13290.07                                  | 308.06                                  | 49.71                  |

\* [http://www.oanda.com/convert/fxaverage\\_result](http://www.oanda.com/convert/fxaverage_result)

Value of 'r' between gold prices in Indian market and exchange rate was found to be 0.42057, which is statistically significant. It means that changes in gold prices in Indian gold market are not independent of changes in exchange rate of Indian rupee vis-à-vis US dollar. Further, the value of 'r' between gold prices in international market and exchange rate was found to be -0.66882, which is statistically not significant. It shows that changes in exchange rate significantly affect the gold price changes in international market. Though there might be other factors also which effect the gold price movements in international market, but changes in international exchange rate is also a major factor.

#### CONCLUSION

It can be concluded that in international markets, exchange rate might be the most important factor. When rates in general decrease and gold prices increase, people may go for gold purchases in case of currency depreciation. But in the Indian gold market, exchange rate variation has an effect on price. Here the prices are dependent mainly on prices in international gold market and then the exchange rate. No definite increasing or decreasing trend was observed regarding variation in monthly average gold prices during a year for both the Indian gold market & International Market. Variations in annual average gold prices showed, in general, an increasing trend in the Indian Gold market for all but two years (1997 and 1998) but in case of the international gold market, this trend was less visible as of the total period undertaken for increasing trend was 5 while the years 1992, 1997, 1998 and 1999 showed a decreasing trend. After 2001, it shows an increasing trend. If monthly variations are considered, Indian gold market has greater variability than the International gold market. While taking into account the yearly variations in gold prices in the two markets, it was found that the Indian gold market has lesser variability than the International gold market.

#### SUGGESTIONS

Gold Policy should be reviewed because of the following reasons: -

- We should not waste scarce foreign exchange on unproductive purposes. The recent liberalization of imports through NRI and SIL route has shown that in reality, there is no adverse impact on liberalized gold import.
- Import on use of gold should be discouraged since it affects domestic savings adversely and implies diversion of resources for unproductive purposes.

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- Recognize the importance of gold in the Indian Economic System and enable gold to play a transparent and positive role in the industrial development, employment and export sectors of the economy.
- Create and nurture appropriate official regulatory framework and self-regulatory trade bodies.
- Exploit the scope for generating revenues to the central, state and local governments.
- Ensure orderly development of gold related industry in India in terms of physical standards and consumer protection.

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