

The usage of gold and the investment analysis based on gold rate in India

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ABSTRACT

Gold is one of the main commodities where the customers invest their money comparatively with bank for better interest. In the Indian context people purchase gold for their children's marriages for later period. The investment in gold is better suits for easy conversion into money with quickest possible time from the bank and gold merchants. The appreciation or depreciation of gold based on other investment options like fixed deposit, provident fund, international crude oil price, stock market, mutual fund etc. The comparative analysis of gold with other investment options give an edge to the customer to clearly understand the investment pattern for their hard-earned money expected to give good returns in the future.

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1. INTRODUCTION

From the early 2600 BC onwards gold has been mined in Egypt and later in the other parts of the world too. Although the biggest market for gold on the planet is owned by India and China. Around 3000 tons of gold produced in the world out of which 750-800 tons are imported to India. The reason behind the hike in the rate of gold is apparently due to its amazing usage and it's a very rare metal to find too. There are also few more other motives for the intensification of price. To extract [1] a small amount of gold a larger amount of gold ore could be used; along with lot of human resources involved with it. If the ore is of lower rating in quality only 5 grams of gold can be extracted from a large ton of ore. As matter of fact this metal can be stretchable, spongy and can be moulded into different [2] shapes easily. It becomes very flexible, so other metals can be added to make useful ornaments and this valuable commodity is used for various purposes all over the world. It has a decent cathode of power and warmth. Additionally, it has a capacity to preserve through any atmosphere; that won't get influenced by moistness, air, or most dangerous or destructive elements. It is the best instance for the reliable materials.

“Even if there is defect in Gold it's quality, worth and nature won't change; but Gold is Gold” says the poet. Gold is utilized in multiple fields like financial trade, mechanical purposes, business, science, dentistry and hardware. In some cases, it is being used for consumption to get the beauty in their body. Human psyche considers gold as the most sensuous metal desired and fascinated for its beauty. Geoffrey Chaucer says “If gold rusts, [3] what then can iron do? ”. Gold won't get tarnished quickly, but with rare acid. The best care given to gold makes it to be a lasting one, that is another reason why both consumers and designers covert to this metal. However, there are also some other ways to invest once wealth; along with capitalizing on gold one can also credit on the bank to safe guard and to increase the profit.

2. GOLD MEASUREMENT METHOD

Practically, "Fineness of gold is assigned in karats," gold can be refined to purified into maximum 999 [4] purities level and it is measured in parts per thousand; and which is ordinarily condensed with "kt" or "K." Thus, the virtue of gold is estimated in aspect of karat. To decide the level of gold in any bit of ornaments, basically isolate the karat content by 24 and increase by 100. Along these lines, 18kt is 750g unadulterated ($18/24 \times 100$) or 75 percent gold. However, for jewellery purposes, it has to be mixed with many other metals to blend to make it more flexible, durable and useful one.

For the past few years gold price remains stable; hence trading, buying and investment has resurfaced investors and customers' interests towards other investment options. The aim of this paper is to foresee the gold pattern value and usability of gold ware into different years and it can give the idea to the customers to look for the safe investment options. The method used here for the prediction is based on hypothesis that is there is a strong relationship between current price value and previous year's value. Using this method following Figure 1 shows the actual rate and the assumed rate.

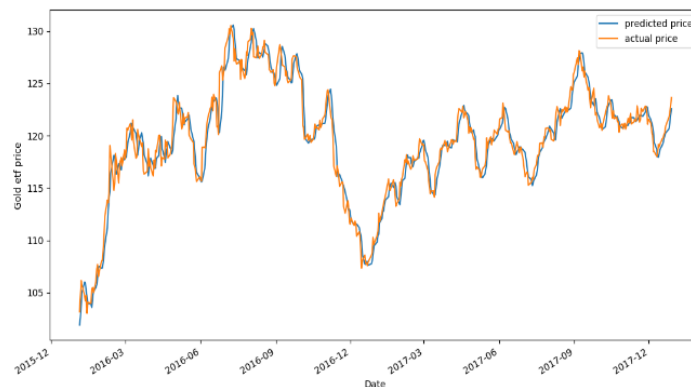


Figure 1. Gold rates chart

3. INVESTING ON GOLD

From the ancient days the value of the precious metal remains [5] high in spite of the economic and financial crisis at different period. From the past few years value of currency is fluctuating based on the foreign exchange market, crude oil price and inflation; likewise, gold rate also is instable. The [6] investors or customers are at greater risk of investing or buying it. Since around the globe Gold is considered as essential for the core and it is considered as liquid asset, so the commercial exchange is very simple. Thus, it is used widely as precious metal therefore; prediction on gold is great help for planning and implementing the future investment upshot. By predicting the rate of gold is not only to give hope to the people also to safeguard the money at this scenario as its value is fluctuating drastically. For many companies these both units are traded as stock, and always prediction of the stock is bit challenging problem as it is non-trivial due to its non-linearity. Consequently, stockholders will devote in this to shield from the political, monetary expansion and social fiasco. Capitalizing in gold is benevolent because there is no "crop rotation fluctuation in the market". Therefore, along with the multi-national companies' individual persons also invested in gold reserves. Meanwhile, this precious metal has become more like currency such that the government even is expected to increase the gold reserve. Normally [7] individuals surmise that the advantage of gold is it will help in the troublesome occasions as there is high liquidity control.

Sometimes, based on the policy of the government and gold regulation bodies the price of Gold swings on daily [8] basis. However, estimating monthly gold rates' rise and decline can assist financial specialists to decide when to purchase or offer these products. Historically besides other mode of payment gold is used for auxiliary trade transactions worldwide. In this modern scenario, central banks of all countries hold the expensive metals to assure re-payment of foreign debts, regulates inflation and reflects the financial strength too. The reduced thickness [9] of alloyed gold is required to have a more noteworthy holding scope than the ordinary alloyed metallization in the arrangement of ultrasonic aluminum wire bonds. For any prospective buyer of gold, it is imperative to comprehend what factors influence the rates of gold so they can foresee with greater accuracy, the patterns in the rates and accordingly have the capacity to guide a venture to a superior benefit. It is not only the investors, researchers also have a keen interest in understanding the business of gold with the goal that a concrete study and precise forecast by using different methods. Insightful researches and studies have been forecasted to determine the rate.

4. FACTORS AFFECTING GOLD PRICE

The number of people using gold are increasing in modern times because of increasing population, marriages, and beautification process and investment option. The price of the gold gradually increasing when we compare with the olden times. Normally price will increase when the demand is high and price comparatively decreases when the demand is less. To measure dependability and [10] efficacy of local outdated gilded recovery method for jewellery row and to regulate if the traditional (small scale) progression is able to yield a higher percentage of gold purity from the jewellery scrap as compared to the modern procedures.

The following reasons are:

- **Inflation:** Many investors like to hold gold rather than currency due to the variation of the value of money. As a consequence, when the [11] customers want to buy gold for their usage the rate may go high.
- **Global Movement:** Vulnerability of trade rates among real monetary firms is the central reason for gold value fluctuation. India being one of the major importers of gold gets affected immediately whenever there is an undertaking in the values of the coinage in the world.
- **Government gold reserves:** The price surges unexpectedly every time the government decided to reserve more gold for their assistance.
- **Festive seasons:** At the time of festival and wedding seasons the proportion of buying gold is shoot up since consumers count rise.
- **Interest rate trends:** Demand for gold intensifies when the interest rates and financial product of the bank and financial institutions is low.
- **Stock market:** When an economy undergoes slowdown in stock market bondholders extract their holdings from stocks and investing their savings in gold until the economy revives. Thus, it is proved that gold has been a source of venture for securities.
- **Production costs:** When the production cost of the gold grows miners [12] sell gold for high rate to preserve the profits. On the off chance that the expense of mining surpasses the present world cost for the metal, the mine will be compelled to moderate its creation or suspend it inconclusively until the point that the cost of gold trips [13] sufficiently high to enable a benefit to be made at that specific mine. Foreseeing the [14] Gold can be done through many models such as mathematical, statistical, correlation, random theory etc.

5. FLUCTUATION IN GOLD RATE

Over the time there has been a hypothetical [15] experimental association between gold and other major costly items. Some studies have proved that fixed and positive correlation between gold and United States Dollar. One percent change in US general price level grounds one percent intensification in price of gold, so gold can be regarded as long-term inflation [16] hedging tool. There is a strong relationship between the price of Gold, Silver and Crude oil. Sudden events impact the long-term relationship but there is a slow reversing process. In the short-run, there are several factors that significantly [17] influence the price of gold: US inflation and its volatility; credit risk has a positive effect on the price of gold. Then again, higher financing costs are generally administrative technique answer to high increment solid with the heading of progress of gold cost. Figure 2 shows the fluctuation in gold rate.

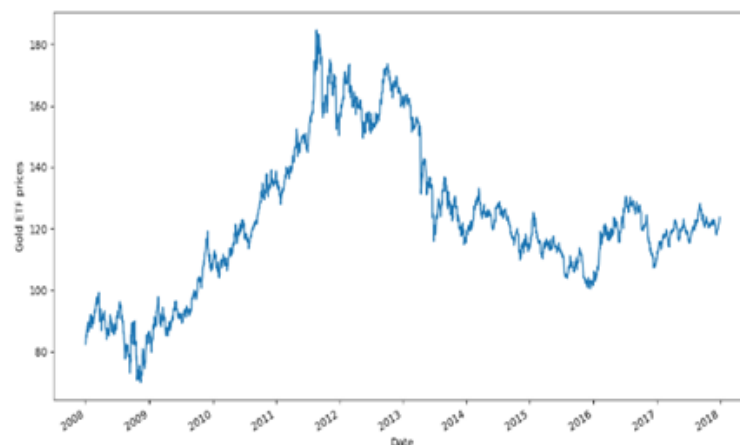


Figure 2. Fluctuation in gold rate

5.1. Gold and silver

Apart from the economic fundamentals that drive the price of gold; experiential study examines gold and silver have verifiably been viewed as close substitutes for each other, both being valuable metals that can be utilized back as money. There is significant proof that these metals can assume a helpful job in differentiating hazard, and in addition [18] being an appealing interest in their own right, in this manner, one may expect that the costs share comparative elements. Figure 3 shows the Gold and silver rate. After effective research it's found that there is significant relationship between gold and silver. The tools used are correlation, regression and ANOVA. The optional goal of this paper is to demonstrate the connection among gold and silver in ware advertise.

5.2. Gold and oil

Gold has emerged [19] to be second largest imported commodity after crude oil. Gold and oil have distinct characteristics even though it comes from [20] ground. The price of crude oil is another significant factor for determining other precious metals' price. Since it is also used in a wide range to make other supplies as well; such as to produce fuel for transports, to produce variety of goods like asphalt, lubricants, plastics, bottles etc. Hence this unpolished emollient is considered as the "Mother of Commodities". After United States and China, India is the third largest importer of crude oil. The political risk of oil manufacturing republics and their financial crises are significant influences for the effect [21] of gold price instabilities. Figure 4 shows the gold and oil rate. The instability of worldwide swelling have no noteworthy connection with gold cost. However, there is a lot of correlation between gold, silver and crude oil. Whenever there is an increment in either the gold price goes high too.

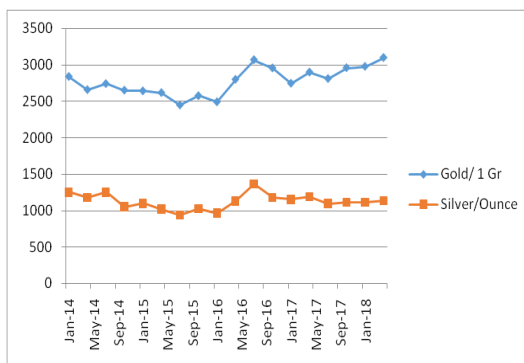


Figure 3. Gold and silver rate

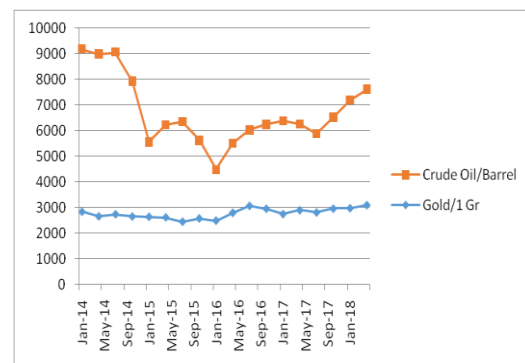


Figure 4. Gold and oil rate

6. BANK DEPOSIT FACTOR

Even though the economy is growing and the people's income is high, the steps taken towards savings is less in India, predominantly pastoral savings are not initialized and invested accurately. A study conducted [22] to 300 people of Aurangabad district in Maharashtra, they expressed their preference of 'safe' investments in "Bank deposits, gold jewellery and real estate are the most popular investment avenues for a majority of the investors." In this computerized [23] and everchanging circumstances Indian banks are putting their best effort to cope with world's economy and to meet the demand of the customers, as this sector is the pillar of country's economy. Yet there are a lot many people who keep investing on Gold for various reasons. Due to which also the rate hikes.

6.1. Popular investment of affluence

Generally, Bank is the state or central [24] governments authorized financial institute or corporation with the main role of expanding the economic growth; it does pact with money either for depositing, lending loan and for invests too. Moreover, banking faces a numerous consequence [25] both structurally and strategically. Therefore, it is challenging and adventurous to adopt to novel surge to journey ahead in this global field. Wherefore every single Bank by evading with by-products securities uses the asset/liability management techniques to either uphold or to reduce their interest rate. The two major reasons for saving money at bank [26] are to safeguard and to increase the balance also for immediate transfer and urgent withdrawal and it can be utilized without delay.

In the past few decades as the nature of finance are overturning; capitalizing has become intricate, with the huge number of savings and investment. In this digital era of financial accomplishments [21] and ever-changing circumstances Indian banks are putting their best effort to cope with world's economy and to meet the demand of the customers, as this sector is the pillar of country's economy. The below Table 1 shows the interest rate provided by State Bank of India (SBI) from 2014 to 2018.

Table 1. Bank interest rate

Duration	2012	2013	2014	2015	2016	2017	2018
7 days to 90 days	7.0	7.50	5.0	5.25	5.50	5.25	5.75
91 days to 180 days	7.3	7.50	7.0	6.75	6.75	6.25	6.25
180 days to 210 days	7.5	7.0	7.25	7.0	7.0	6.25	6.40
211 days to less than 1 year	9.0	7.50	7.50	7.25	6.90	6.25	6.70
1 year to less than 2 years	9.0	9.0	8.75	7.50	6.95	6.25	6.75
2 years to less than 3 years	9.0	9.0	8.75	7.50	6.85	6.25	6.85
3 years to less than 5 years	8.5	9.0	8.75	7.0	6.50	6.0	6.85

7. CONCLUSION

Since the earliest of time Gold is the natural resource; considered as the most popular mineral. The color of the pure gold is bright golden yellow. Gold nugget is usually 70 to 95 percent gold, and the reminder mostly are silver and copper; but the greater the silver content, the whiter its color is. The main aim and intention of this research is to predict the rate of gold in near future. Few papers have proved that gold rate can be prophesied depending on the previous value as shown in Figure 1. Added to that this paper implements a new method that there is a partial relativeness between gold, silver and crude oil which is shown in Figure 3 and Figure 4. Future study can show the study of bank interest vs investing on gold to show the better investment. Since many believe that Gold is one of the main investment options.

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