

## A Study on Factors Influencing Gold Price Fluctuations in India

Dr. Sathyanarayanan<sup>1</sup> S. R, Mr Tharani J.S<sup>2</sup>

Assistant Professor<sup>1</sup>, Student<sup>2</sup>

B. Com (Honours) International Accounting and Finance

Department of Commerce – International Accounting and Finance

Faculty of Science and Humanities

SRM Institute of Science and Technology, Chennai

[sathyans@srmist.edu.in](mailto:sathyans@srmist.edu.in), [tj7160@srmist.edu.in](mailto:tj7160@srmist.edu.in)

---

### Abstract

This research analyses the principal determinants affecting gold price variations in India. Gold has been a major investment in the Indian economy for a long time because it is culturally important, keeps its value, and protects against inflation and economic uncertainty. Many Indian families buy gold in the form of jewellery, coins, and bars, which makes it an important part of their savings and investment decisions. But gold prices change a lot because of many things happening in the US and around the world, so it's important to know why they do. The study focuses on big macroeconomic factors that affect gold prices, like inflation, interest rates, changes in the exchange rate, and the state of the global economy. It also looks at how changes in policy, economic events, and financial instability affect how prices behave. Investors, policymakers, and businesses can make better financial decisions if they know about these things. Secondary data from trusted organisations such as the Reserve Bank Of India (RBI) and World Gold Council, along with published academic reports, has been used to conduct the analysis. Historical data on gold prices and macro-economic variables will then be analysed using different statistical tools including Trend Analysis, % Change Analysis and Correlation Analysis for identifying trends/relationships. Conclusions drawn from the analyses show that there is a significant affect on the price of gold in India, due to inflation rates, by fluctuations in the exchange rate and by fluctuations in the global environment, providing further credence to gold being a 'safe haven' investment.

**Keywords:** Gold Prices, Inflation, Exchange Rate, Investment, Indian Economy

### 1. Introduction

#### 1.1 Overview of gold

This paper is aimed at providing a detailed examination of gold price behaviour in India, along with the contributors to price fluctuations. In the Indian economy, Gold plays a

dual role as a financial investment and as a marker of wealth in society. Price fluctuations are affected by a multitude of macroeconomic variables, such as inflation rates, currency exchange rate, international economic conditions (including the Dow Jones), and the level of investor confidence. Understanding these variables is necessary to determine the history and future trend of Gold price changes.

## **1.2. Structure of the Indian Gold Market**

The Indian gold market consists of many different types of players such as: Importers, wholesalers, bullion dealers and retailers. India's limited supply of gold has made it heavily reliant on the purchase of imported gold. The gold market can be categorized into two categories: The physical category includes jewellery or bullion, while the financial category includes products such as ETFs or Gold Bonds. Due to its diversity and interconnection, this market is very dynamic.

## **1.3. Operations of the Gold Market**

The gold market operates by importing gold, pricing it, distributing it, and trading it. In India, gold prices are primarily influenced by the international price of gold and the movement of currency exchange rates. There are also several ways that the price of gold is affected by the government's rules and regulations (this would include taxes and duties). Trading can take place either through a physical market or a financial platform which allows the gold market to be affected by the state of the economy.

## **1.4 Objectives of the Study**

This study will analyse trends & fluctuations in gold prices & how they relate to significant macroeconomic factors (inflation, exchange rates, etc.) effecting price changes as well.

## **1.5 Need for the Study**

The study has become necessary due to fluctuating prices in gold and how gold is viewed as a safe-haven asset.

Investors will be able to see what causes the prices of gold to change, which will then allow them to decide where they want to invest.

### **1.6 Problem Statement**

Investors' and other market participants' uncertainty regarding which factors influence the price fluctuations of gold stems from a lack of definitive knowledge of these influences

### **1.7 Scope of the Study**

This study will only focus on the historical journey (a decade's worth of data) of gold prices (India) based off of selected macroeconomic variables, such as interest rates and inflation, in accordance with a secondary data source.

## **2.REVIEW OF LITERATURE**

Gold prices in India are heavily affected by the global and domestic macroeconomic environment. Inflation and exchange rate are the two most important macroeconomic determinants of gold price. According to **Sathish Pachiyappan and Chandrakala G. (2022)**, macroeconomic variables such as interest rates, inflation, and exchange rate impact gold price volatility. This impact from macroeconomic variables tends to increase during economic uncertainty. Additionally, **Nisarga M. and Marisetty N (2023)** claim that both inflation and exchange rate have a significant positive impact on gold prices in India because of the way investors view gold as a hedge against inflation and the depreciation of their currency.

Due to India's reliance on imports of gold, fluctuations in the exchange rate significantly affect India's gold prices. **Arjun D.P. (2021)** concluded that changes in both international prices for gold and fluctuation of exchange rates on the global market have a meaningful impact on gold price levels in India. **G. Sankararaman et al. (2018) and K.S. Sujit and B.R. Kumar, (2011)** have also reported strong evidence indicating that changes to either global commodity price levels or fluctuations in the value of currency will impact gold prices domestically.

In addition, we know that gold is also considered by many people to be a safe-haven investment during times of economic turmoil or uncertainty. **Dirk G.Baur and Thomas K.McDermott (2010)**, observed investors flocking to gold during times of financial crisis, while Manu Sharma, Prashar E. and Saini G.S. (2015), **Jyotirmayee Sahoo et al. (2024)**, indicated that global economic conditions, inflation or geopolitical instability are important factors affecting the price of gold.

Additionally, the research conducted by **Shelly Singhal, Choudhary S., and Biswal P. C. (2019)** as well as **Suresh Gopal & Munusamy J. (2016)**, indicates that there is an interconnectedness between the prices of gold and crude oil, stock markets, and other financial variables. This demonstrates that global financial markets are interconnected in nature and that there is a high degree of integration among Financial Markets throughout the world. Overall, the literature indicates that gold prices are being influenced by a variety of factors including; Inflation, Exchange Rates, Global Uncertainty, and the dynamics of Financial Markets. This will give rise to a good basis for evaluating how gold prices have behaved in India from 2015–2025.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The methodology involved in research is a systematic way to collect, analyse and interpret data to fulfil research objectives. In this analysis of gold price fluctuations in India, the methodology provides a framework to analyse based on macroeconomic variables how fluctuations in gold prices are related to those same variables. As well, the methodology ensures that the results obtained from the analysis will be reliable, valid and provide meaning or interpretation from the collected data.

#### **3.2 Research Design**

This study employs a descriptive and analytical research design. A descriptive analysis of how gold prices have changed over time will be undertaken. Analytical techniques will look at the relationship between different variables and the price of gold, including: inflation; exchange rates; interest rates and; the price of gold on international markets. The data will be organised in the form of tables, charts and graphs to identify trends and to assist in determining final conclusions.

#### **3.3 Nature of Data**

Secondary quantitative data was utilized for this study. This data was obtained from the Reserve Bank of India, World Gold Council, MCX, and other journals and financial publications. Using secondary data helps ensure that costs are kept low, that the data is reliable, and that trends from the past can be analysed.

### **3.4 Sources of Data**

Data was collected from various sources such as central bank reports, gold council publications, price reports from commodity exchanges, public databases, financial websites and journals, as well as research articles in order to produce accurate data; consequently, there is no primary raw data.

### **3.5 Period of the Study**

The analysis includes the years 2015 - 2025 and utilizes the data collected during this period in order to examine historical use of gold through long-term trends, as well as any fluctuations or impacts of changing economic conditions on the price of gold.

### **3.6 Variables of the Study**

Dependent variable: Price of gold in India Independent variables: Inflation rate, exchange rate (Rupee to Dollar), Interest rate, international price of Gold.

### **3.7 Tools and Techniques Used for Analysis**

Statistical tools include:

- **Percentage Analysis** (rate of change)
- **Trend Analysis** (price movement)
- **Correlation Analysis** (relationship between variables), Charts and graphs support visual interpretation.

### **3.8 Method of Data Analysis**

Data is classified, tabulated, and analysed using statistical tools. Results are interpreted to identify patterns and determine factors influencing gold prices in India, forming the basis for conclusions.

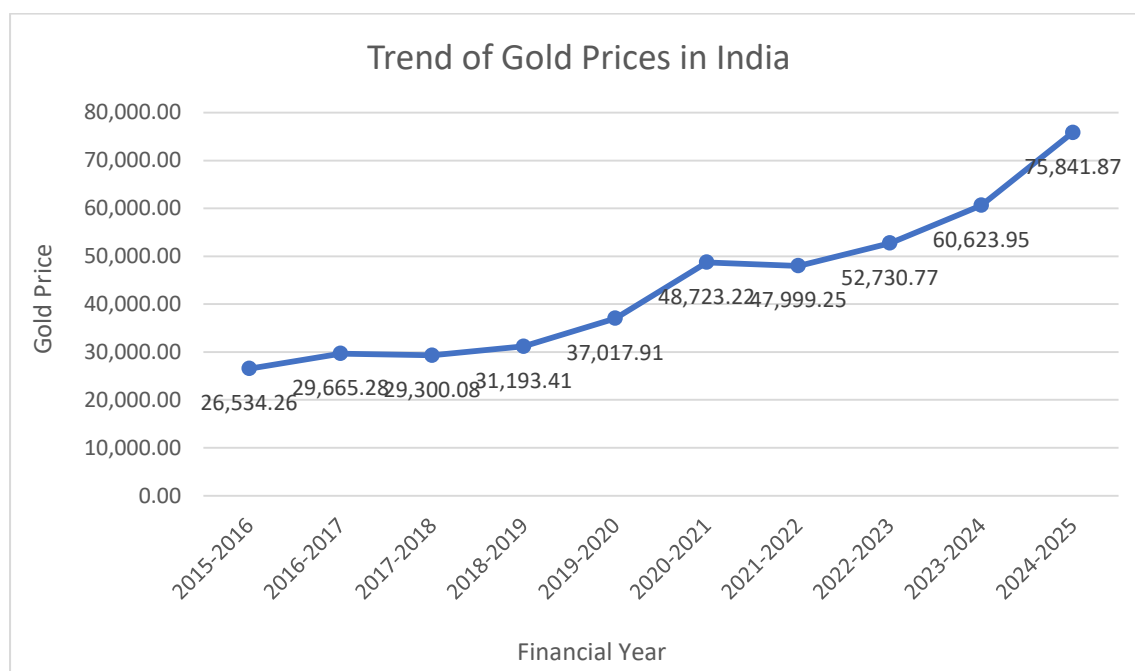
## **4. Data Analysis and Interpretation**

### **4.1 Objective 1: Trend of Gold Prices in India (2015–2025)**

**Table 4.1 Trend of Gold Prices in India (2015–2025)**

Financial Year	Gold Price (₹ per 10 g)
2015-2016	26,534.26
2016-2017	29,665.28
2017-2018	29,300.08
2018-2019	31,193.41
2019-2020	37,017.91
2020-2021	48,723.22
2021-2022	47,999.25
2022-2023	52,730.77
2023-2024	60,623.95
2024-2025	75,841.87

Source: Compiled from RBI Database



**Fig 4.1 Trend of Gold prices in India**

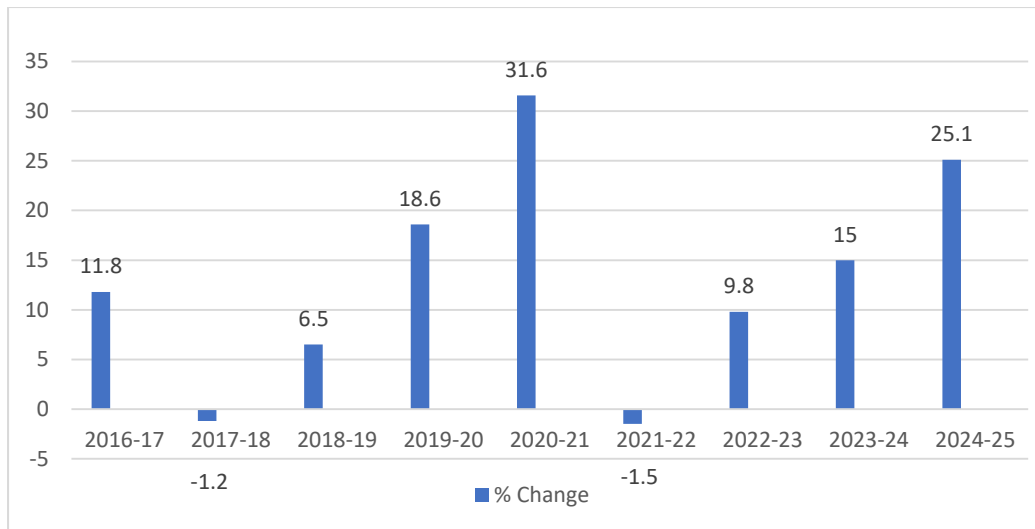
From Table 4.1 and Figure 4.1, the trend analysis of gold prices in India from 2015–2016 to 2024–2025 shows a clear long-term upward movement, despite minor short-term fluctuations. Gold prices increased significantly from ₹26,534 to ₹75,841, indicating substantial growth over the study period. This rising trend highlights gold’s importance as a

reliable investment and store of value in the Indian economy. In the initial years, moderate growth was observed, followed by a slight decline in 2017–2018 due to temporary market corrections. From 2018–2019 onwards, prices increased steadily, with a sharp surge during 2019–2021 driven by global economic uncertainty and the COVID-19 pandemic, which boosted safe-haven demand. Although a minor decline occurred in 2021–2022 due to partial economic recovery, prices rebounded strongly in subsequent years. The continued rise from 2022–2023 to 2024–2025 reflects the impact of persistent inflation, currency depreciation, and strong global demand. Overall, the analysis confirms that gold prices in India are influenced by macroeconomic factors such as inflation, exchange rate fluctuations, and global uncertainties. Despite short-term volatility, the long-term trend remains upward, establishing gold as a stable and economically sensitive investment during 2015–2025

#### 4.2 Objective 2: Percentage Change Analysis of Gold Prices.

**Table 4.2 Percentage Change in Gold Prices**

<b>Year</b>	<b>Gold Price</b>	<b>% Change</b>
2015-16	26534.26	–
2016-17	29665.28	11.8
2017-18	29300.08	-1.2
2018-19	31193.41	6.5
2019-20	37017.91	18.6
2020-21	48723.22	31.6
2021-22	47999.25	-1.5
2022-23	52730.77	9.8
2023-24	60623.95	15
2024-25	75841.87	25.1



**Fig 4.2 Percentage Change in Gold Prices**

**Source: Compiled from RBI Database**

From Table 4.2 and Figure 4.2, the percentage change analysis of gold prices in India from 2015–2016 to 2024–2025 highlights both growth and volatility during the study period. Gold prices showed alternating positive and negative changes, reflecting the dynamic nature of the market; however, the overall pattern indicates strong and sustained growth over time.

In the initial phase, prices increased by 11.8% in 2016–2017, followed by a slight decline of 1.2% in 2017–2018, indicating a temporary correction. From 2018–2019 onwards, growth became more pronounced, with increases of 6.5% and 18.6% in 2019–2020. The highest rise of 31.6% occurred in 2020–2021, driven by economic uncertainty during the COVID-19 pandemic, which boosted safe-haven demand for gold. A marginal decline of 1.5% in 2021–2022 reflected temporary market stabilization. Subsequently, gold prices recovered strongly, increasing by 9.8% in 2022–2023, 15% in 2023–2024, and 25.1% in 2024–2025. This sustained growth reflects the impact of inflation, exchange rate fluctuations, and global economic uncertainty. Overall, the analysis confirms that while gold prices exhibit short-term volatility, they maintain a clear long-term upward trend, reinforcing gold’s role as a reliable investment asset during economic instability.

## **5.CONCLUSION**

### **5.1 Major Findings of the Study**

The study analysed the fluctuations in the price of gold in India from 2015 to 2025, using various statistical methods such as trend analysis, percentage change analysis, and correlation analysis. The analysis demonstrated that gold had a strong upward trend (i.e. the price per ounce increased from ₹26,534.26 to ₹75,841.87 over the period of the study), with some minor fluctuations in the short run. The analysis shows that certain macroeconomic factors (specifically, inflation rates, fluctuations in the exchange rate, and global uncertainty regarding the economy) have a statistically significant effect on the price of gold. The findings of the study are consistent with those of previous studies conducted by Pachiyappan et al. [2022] and Nisarga M et al. [2023]. Both identified inflation and fluctuations in the exchange rate as significant determinants of the price of gold. Baur and McDermott [2010] noted that gold tends to be an investment vehicle when there is an economic crisis and thus, prices tend to rise during crisis. The research completed by Arjun D.P. [2021] established that the movements in international gold prices as well as changes in the exchange rate, have a significant impact on domestic gold prices in India.

## **5.2 Suggestions to Stakeholders**

### **Retailers (Jewellers & Bullion Dealers):**

Retailers should adopt dynamic pricing strategies and efficient inventory management to handle price volatility. The use of hedging techniques and digital pricing tools can help reduce financial risk and improve profitability.

### **Financial:**

Financial institutions should promote alternative gold investment options such as Gold ETFs, Sovereign Gold Bonds, and digital gold. This will reduce dependence on physical gold and improve market efficiency. They should also create awareness among investors regarding gold as a diversification tool rather than a short-term speculative asset.

## **5.3 Limitations of the Study**

The study is based entirely on secondary data, which may affect the accuracy and reliability of the findings. It considers only selected macroeconomic variables such as inflation, exchange rate, and interest rate, while other factors like geopolitical events, government policy

changes, and market sentiment are not analysed in detail. The study is limited to the Indian market and a specific time period, which may restrict the general applicability of the results.

### References:

- Arjun, D. P. (2021). *Factors influencing gold price fluctuations in India*.
- Baur, D. G., & McDermott, T. K. (2010). *Is gold a safe haven? International evidence*. *Journal of Banking & Finance*, 34(8), 1886–1898.
- Dani, S., & Ambavale, R. (2015). *A study of investor's preference and risk & return analysis of precious metals*. *International Journal of Advanced Research in Management and Social Sciences*, 4(2), 51–60.
- Nisarga, M., & Marisetty, N. (2023). *A study on various factors impacts on the gold price in India*. *Asian Journal of Economics, Business and Accounting*, 23(20), 254–265.
- Pachiyappan, S., & Chandrakala, G. (2022). *Do the macroeconomic factors influence the volatility of gold price? An empirical study*. *Journal of Commerce & Accounting Research*, 11(2), 37–44.
- Sharma, M., Prashar, E., & Saini, G. S. (2015). *Static and dynamic approaches to studying factors affecting the price of gold*. *The Journal of Wealth Management*, 18(1).
- Singhal, S., Choudhary, S., & Biswal, P. C. (2019). *Return and volatility linkages among crude oil price, gold price, exchange rate and stock markets*. *Resources Policy*, 60, 255–261