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Research Paper

Glittering Illusion or Golden Shield? Understanding Gold's Role in Indian Markets

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ABSTRACT

Gold has long been considered a safe-haven asset, offering stability during market downturns. This research paper explores whether gold functions best as a hedge, a diversification tool, or a viable long-term investment. Gold prices account for currency and inflation risks, making it an effective hedge. However, when viewed purely as a long-term investment, does gold still hold an advantage over equities? This study has found that gold has outperformed NIFTY 50 while also providing diversification benefits. But does this mean one should prefer gold over equities? With the discontinuation of Sovereign Gold Bonds, retail investors may be uncertain about their next best investment option. And from the various alternatives to investing in gold, Gold ETFs should be the ideal choice. While Indian consumers have a deep-rooted preference for physical gold, Gold ETFs offer liquidity, efficiency, and convenience, making them a practical investment choice in the current market scenario.

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INTRODUCTION

If we open our lockers today, we are likely to find some gold mostly in the form of jewelry. For centuries Indian consumers have been holding gold not with a view of investment but because of cultural heritage. The deep-rooted trust in gold stems from the sense of security and comfort it provides, making it a preferred store of wealth long before stock markets even existed. The study by ^[1] supports this notion, highlighting how gold plays a crucial role in Indian customs, religious rituals, dowries, and intergenerational wealth transfer.

Many studies have explored gold's role in investment portfolios and found that it can be a useful tool for diversification ^[2]. Various research shows that gold often moves differently from equity markets, especially over the long term, this characteristic of gold makes it a good diversification tool to reduce systematic

risks in the portfolio. Some studies also suggest that gold acts as a safe haven during economic crisis, though this may vary across countries and periods. However, a study done by ^[3] showed that gold performed as a hedge and safe haven in most of the financial markets for domestic investors. In the Indian context, gold has shown steady performance and lower volatility compared to stocks. There is also mixed evidence on whether gold protects against inflation, with some findings supporting short-term benefits, especially during inflation spikes.

In recent years, gold has given exceptionally high returns in India as compared to the US. Investors often see it as the strong performance of gold in India but overlook the factor behind it which is the depreciation of the Indian rupee against the US dollar. The declining value of the rupee against the U.S. dollar

has significantly contributed to gold's abnormal return in India. We will see further in our research analysis how the depreciating rupee has amplified the gold returns in India. This research paper aims to explore whether gold is a reliable long-term investment or if its high returns are merely a byproduct of currency depreciation. If the rupee were to stabilize, would gold still provide abnormal returns? While gold remains a strong hedge and a valuable diversifier, basing long-term investment decisions solely on its historical CAGR in India may be misleading.

The data for this study has been sourced from investing.com and AMFI. Since the price of gold for both countries wasn't readily available, so the spot prices have been used as a proxy. After comparing gold returns with equity returns, it could be concluded that gold definitely has a negative correlation with equities, though gold shows a little weaker correlation in the US than in India. The further analysis explained how the depreciating rupee against the dollar amplified the gold returns in India.

LITERATURE REVIEW

1. Gold as a Portfolio Diversifier

Several studies highlight gold's effectiveness in portfolio diversification, particularly over longer horizons. According to [4], gold behaves differently across time frames. While it may not offer protection during short-term equity downturns, it consistently shows a negative correlation with equities over the long run, making it a strong diversifier for long-term investors. Similarly, the study by [5] supports the notion that precious metals, including gold, enhance diversification benefits when included in portfolios. These studies employ robust statistical techniques such as vine copulas and show that gold provides asymmetric risk protection across various global markets. This finding aligns with the existing literature, as the analysis also demonstrates a negative correlation between gold and equities, reinforcing gold's potential as a diversifying asset.

2. Safe Haven Role

The findings of [6], [2] support the view that gold acts as a "safe haven" in times of crisis, and high uncertainty when flight to quality towards assets of last resort is expected to be observed. Gold is considered as a stabilizing instrument across multiple markets due to its hedging and safe haven properties [7]. While in the evidential study of [8] gold is considered a weak safe haven for an emerging country like India, the research conducted in this study found that gold performs as a good hedge for Indian markets, based on 12-month rolling. In contrast, [9] argue that gold's safe-haven properties are limited in duration. Their findings suggest that gold serves as a safe haven only for a short period, approximately 15 trading days after which its protective qualities diminish. According to them, investors who hold gold for longer durations may not only lose its hedging benefits but also experience capital erosion. Ongoing trade and tariff wars between countries have created significant economic tensions and heightened geopolitical risks. These uncertainties and risks impact the financial markets making them riskier and more volatile. Gold, historically known as a store of value during

times of economic tensions, becomes an attractive option to hedge against market volatility. The findings [10] support the idea that gold acts as a safe haven in response to increased geopolitical risks. As a result, both institutional investors and households [11], including the central banks take flight to safety by turning towards gold. The rising demand for gold amid these uncertainties contributes to higher gold prices, reinforcing its role as a hedge against global economic instability. The study done by [12] explored the strategic function of gold as a safe haven in response to the anticipated 2025 global trade and tariff war, the finding is aligned with the view that gold remains a credible hedge during geopolitical instability.

3. Gold vs. Equity Performance in India

Focusing on the Indian context, [13] compared gold with major equity indices like BSE Sensex and Nifty 50, and the study concludes that gold is less volatile, safer, and a better long-term asset due to its consistent performance relative to these benchmark indices. This adds a regional perspective to the broader debate around gold's utility in investment portfolios. The study by [14] finds that there is no causal relationship between Gold Price and Stock market price in the short run, however, Gold price and Stock market price are cointegrated indicating a long-run equilibrium relationship between them and they move together.

4. Gold as a Hedge Against Inflation

The inflation-hedging capability of gold also garners mixed evidence. In the study by [15] a negative relationship was found between gold and inflation which suggests that gold acts as an internal hedge against inflation for India. The use of nonlinear autoregressive distributed lags model (NARDL) by [16] shows that gold acts as an effective short-term hedge against inflation in India, during inflationary spikes, gold prices tend to rise, offering investors protection. However, the study finds no consistent long-term relationship between gold prices and inflation (measured by CPI), suggesting that gold's inflation-hedging properties weaken over time.

Research gap

While numerous studies highlight the diversifying characteristics, safe haven nature, and hedging capabilities of gold, our research takes a different perspective. We focus on how Indian gold prices are largely driven by two key factors, the exchange rate and international (U.S.) gold prices. In essence, Indian gold returns can be approximated as the sum of the annual returns from the exchange rate and U.S. gold prices. This framework leads us to a key insight: if the Indian rupee were to stabilize or appreciate, the elevated gold returns witnessed in India may normalize, potentially reducing gold's appeal as a high-return asset.

RESEARCH OBJECTIVES

- Does gold truly serve as an effective hedge against equity markets?
- Has gold's performance in India been driven by rupee depreciation?

- What would happen to gold's returns if the rupee stabilizes?
- What is the best alternative investment option in gold for Indian retail investors post sovereign gold bond discontinuation?

DATA AND METHODOLOGY

The data for this research paper has been collected from various websites including AMFI, Investing.com, etc. Since the raw data was a bit unstructured, it was processed and cleaned accordingly. The gold prices for both countries weren't readily available, so instead gold spot prices were used. To make the analysis more relevant to the Indian markets, certain approximations were made. The original gold prices data collected from sources was available for 24 karat gold to ounces, and it was converted into 22 Karat per 10 grams as this is more of a standard and daily used measurement in India. Since a lot of approximation was done the data might show some minor discrepancies.

To evaluate the performance and characteristics of gold, multiple analytical approaches have been employed in this research. A 12-month rolling correlation analysis was conducted using monthly returns, aiming to assess the dynamic relationship between gold and equity over time. For long-term performance measurement, Compound Annual Growth Rate (CAGR) analysis was done over a 20-year period (2005–2024). Additionally, a scenario analysis was undertaken to isolate the impact of INR depreciation on gold prices, assuming all other factors remain constant. Lastly, a correlation analysis for the period 2012–2025 was performed to understand the movement of gold with equity in this timeframe.

This report is based on data available up to April 2025. Any changes beyond this period are not reflected in the analysis. All the charts and graphs shown in this research paper have been independently prepared using the clean dataset.

RESEARCH AND FINDINGS

1) Gold's Correlation with Equities

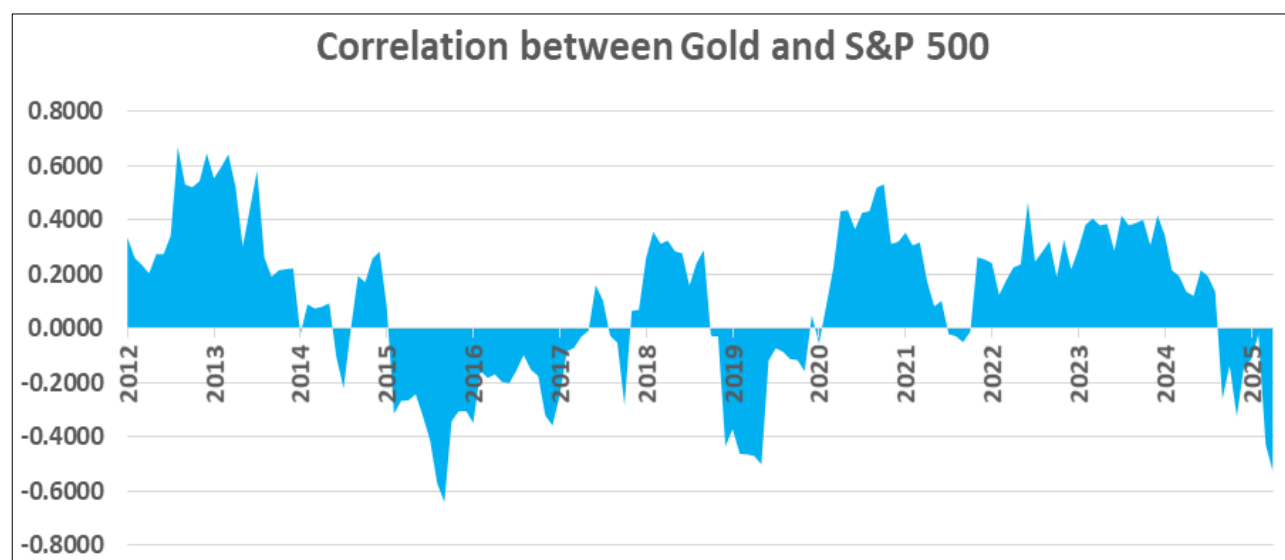


Figure 1a: 12 months rollover correlation of gold prices in USD with S&P 500, Source-^[17]

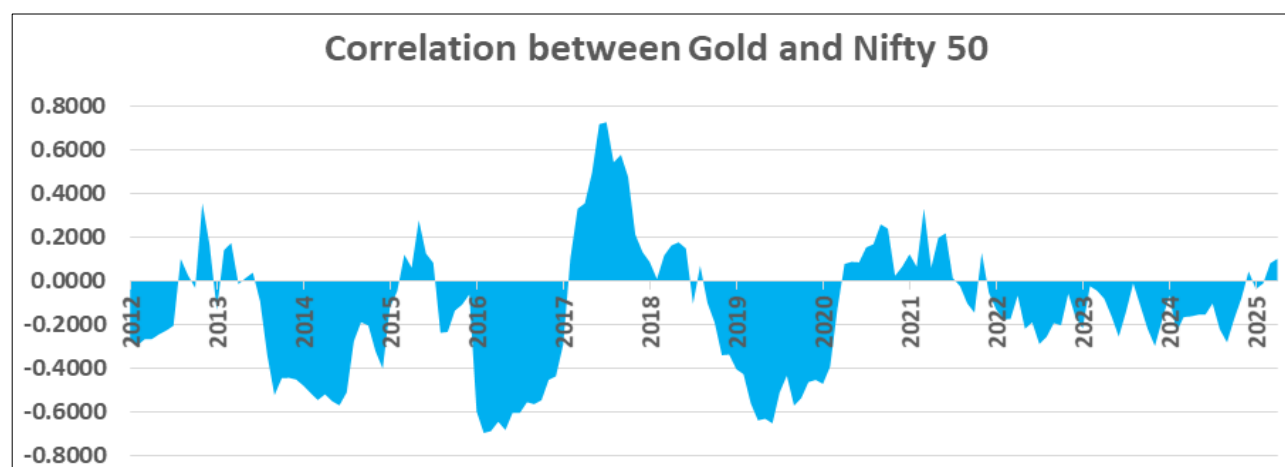


Fig 1b: 12 months rollover correlation of gold prices in INR with Nifty 50, Source- ^[17]

If both graphs are carefully analyzed, it can be seen that the correlation is not always negative, nor does it move in a stable direction. Prices of both the gold and equities get affected by other macroeconomic factors too so it's hard to find a perfect negative correlation between them. However, gold is showing a negative correlation at times making it a valuable diversifier in periods of economic distress.

- By looking at both graphs we could see that gold is showing a stronger negative correlation with Nifty 50 when compared to global equity markets like S&P 500.
- This indicates that during market downturns, gold tends to move in the opposite direction of Indian equities more consistently.
- As a result, gold can serve as a more effective hedge against volatility in the Indian stock market.

2) Rupee Depreciation's Impact on Gold Prices

Gold price movements in India are primarily influenced by:

- Global gold prices (USD terms)
- INR/USD exchange rate

Thus, according to this assumption, the relationship can be approximated as:

$$(1 + \text{Returns of Gold in INR}) \approx (1 + \text{Returns of Gold in USD}) \times (1 + \text{Exchange rate CAGR})$$

According to the data of the past 20 years (2005-2024):

- Returns of gold in INR = CAGR of 12.36%
- Returns of gold in USD = CAGR of 8.76%
- INR/USD depreciation rate = CAGR of 3.26%

Using the above-stated formula, the gold returns in INR come out to be around 12.30%, whereas the actual return is 12.36%. The difference between the actual return and the calculated return of 0.06% could be due to other factors. This assumption works mainly because spot prices have been used, if actual market prices had been used, the difference would have been bigger, showing the impact of other macroeconomic factors more clearly. This helps the present analysis isolate whether gold's high returns in India are due to INR depreciation or its intrinsic value growth.

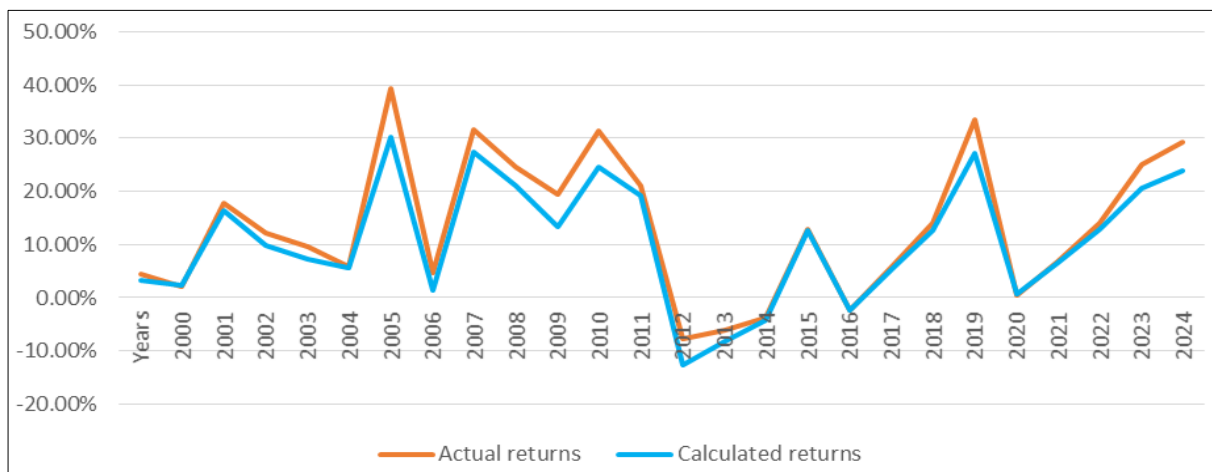


Fig 2a: Deviations between the values of actual gold returns in India and calculated gold returns in India, Source- ^[17]. (The calculated returns (Blue line) represent the gold returns in INR derived using the given formula)

When Figure 2a is examined, some minor discrepancies can be observed, which arise due to various macroeconomic factors influencing gold prices. These include import duties, demand-supply fluctuations, and central bank policies. However, despite

these variations, the overall trend aligns well, and the formula remains a reliable indicator of gold price movements in INR at a broader level.

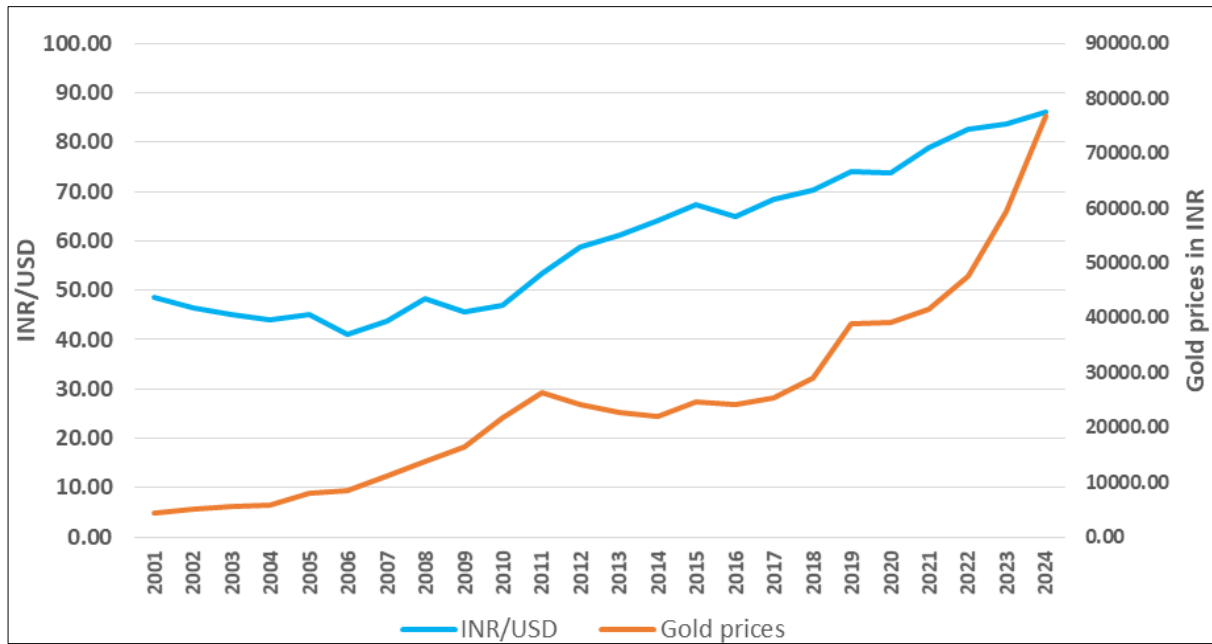


Fig 2b: Amplifying effect of INR depreciation on gold prices in India, Source-[17]

Upon analyzing Figure 3b it could be concluded that-

- As INR depreciates (blue line rising), the price of gold in INR (orange line) also rises.
- This suggests a strong correlation between currency depreciation and gold returns in India.
- If INR/USD had remained constant, gold price growth in INR would have been closer to gold price growth in USD.
- This means a significant portion of India's gold returns is not due to gold's intrinsic value but due to INR depreciation.

This analysis assumes different values for INR/USD and gold (22 karat per 10 grams) to find the gold prices in India in 2030.

Year- 2030	INR/USD	Gold prices in INR
Bear case (2%)	95.24	84812.51
Base case (3.20%)	100.98	89920.25
Bull case (6%)	115.44	102798.88

Three scenarios have been considered:

- **Bear Case (2% depreciation):** If the rupee depreciates at a slower rate of 2% per year, the price of gold after five years would be ₹84,812.51
- **Base Case (3.20% depreciation):** If the rupee continues to depreciate at its current rate of 3.20% per year, gold is expected to reach ₹89,920.25
- **Bull Case (6% depreciation):** If the rupee weakens significantly and depreciates at a higher rate of 6% per year, gold prices could rise to ₹1,02,798.88 over five years.

Therefore, it can be concluded that gold does work as a safe haven. However, considering a 100% investment in gold solely because it has outperformed Indian equity markets based on historical data would be inaccurate. Gold should be added to a

portfolio to diversify risk, but if someone wants to invest in it for the long term, expecting it to outperform equities, they should also consider the effect of exchange rates on gold prices before making a decision.

3) Gold ETFs

The study done by [18] concludes that investment in Gold ETFs is not a substitute for physical gold even though the prices of both are correlated, and the investors prefer holding physical gold rather than their ETFs. The findings of [19] show that the majority of Indian investors prefer holding physical gold instead of any other gold alternative, and the investors are not yet aware of the available alternate sources of investing in Gold. Although the other studies [20], [21] concluded that Gold ETFs are suited for anyone who wants to use gold as an investment option rather than for personal usage. Gold ETFs have proven to be effective tools for diversification and hedging against market volatility, thereby reinforcing gold's traditional role as a safe haven. With minimal tracking error and weak-form market efficiency, Gold ETFs align closely with the spot price of gold, making them reliable financial instruments even during uncertain economic conditions. After reviewing the literature on Gold ETFs in India, the study concludes that with Sovereign Gold Bonds becoming history, the next best alternative for investors would be Gold ETFs. However, most retail investors in India do not opt for Gold ETFs or any form of digital gold, likely due to a lack of awareness. Indian consumers traditionally prefer holding physical gold, driven by cultural sentiment and familiarity. While investing in Gold ETFs is more convenient and efficient, many remain hesitant due to limited exposure and understanding of these options.

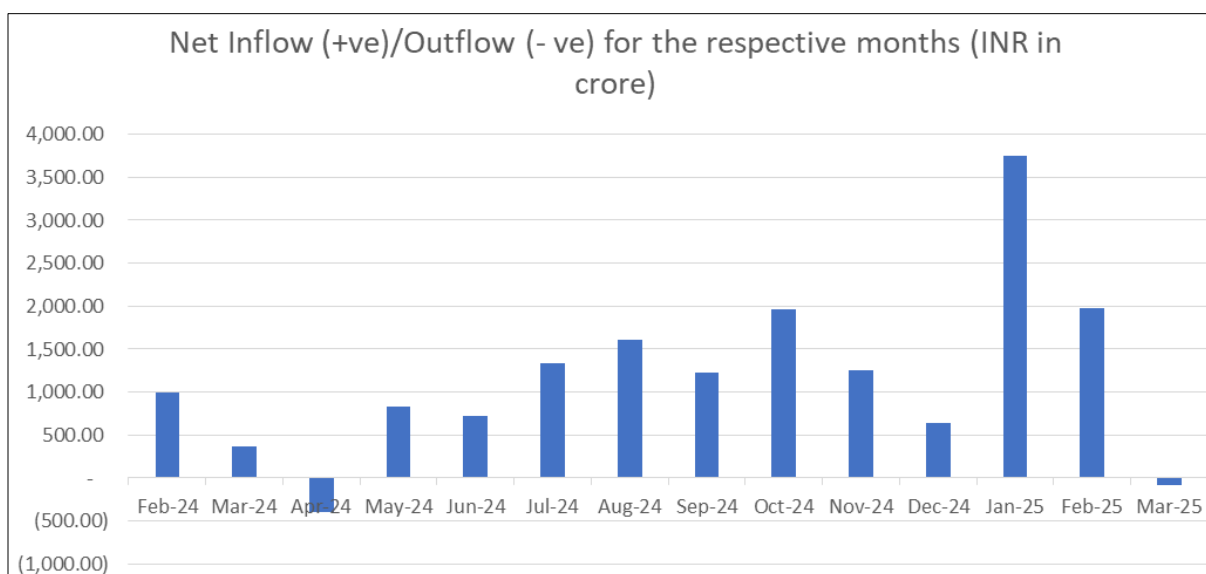


Fig 3a: Cash out/inflows in Gold ETFs, Source- ^[22]

According to AMFI data (Figure 3a), Gold ETFs witnessed a significant net cash inflow of ₹5,654.05 crores in the first three months of 2025. This surge suggests that, following the closure of Sovereign Gold Bonds and amid growing global uncertainty, investors are seeking safety by increasing their exposure to gold.

DISCUSSIONS AND CONCLUSIONS

Gold has always been considered a safe haven, working as a hedge, and providing stability during market downturns. This research mainly focused on whether gold is a good long-term investment or if its high prices are only because of rupee depreciation rather than its intrinsic value.

From the analysis, it can be concluded that gold does have a negative correlation with the equity markets, and gold indeed acts as a hedge in times of crisis. It could also be said that gold has outperformed NIFTY 50 in India but a major reason for this was the continuous fall of INR against the dollar. The scenario analysis further suggests that if the rupee stabilizes, gold's returns might also normalize, making it less attractive as a high-return asset. This means that blindly investing in gold based on past performance can be misleading. With Sovereign Gold Bonds (SGBs) no longer available, investors now need to look for alternative ways to gain exposure to gold. In reference to the past literature, this study finds that Gold ETFs are a more practical choice compared to physical gold.

To conclude, Gold is a great hedge and diversification tool, but in India, its long-term returns are closely linked to rupee depreciation. Investors should consider this before making any long-term investment decisions. For those who are not considering convenience yield while buying gold, Gold ETFs are the best option in the current scenario.

Implications

This study found that gold's high returns in India are largely driven by INR depreciation rather than intrinsic value growth.

This insight has key implications for both investors and policymakers. Investors should be cautious while relying on past CAGR figures, as future returns may normalize if the rupee stabilizes. Policymakers and asset management companies should try promoting more gold alternate investment sources so that investors can choose the ideal source for their investment.

Limitations

While this study provides valuable insights into the role of gold as an investment and its performance relative to equity markets and currency depreciation, certain limitations must be acknowledged. The data used in this study is based on several approximations, and the data on gold prices relied on spot prices rather than real market prices due to limited data availability. Additionally, the impact of other factors on gold prices was not considered which may affect the comprehensiveness of the analysis.

Scope for future research

This study was limited to framing a relationship between the exchange rate and gold prices using historical spot prices. Further research could consider using actual market prices of gold to assess the impact of other factors on gold prices. Additionally, future studies could be done while considering a longer time frame data to properly incorporate the cyclical changes too. Furthermore, an in-depth analysis of investor preferences regarding physical gold and alternative gold investment options possibly through questionnaires or surveys.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to this research.

REFERENCES

1. Vennila DR. Is gold an emotional asset or economic asset in the Indian context. 2022;13(4).
2. Baronyan SR, Nae A. Gold in a fragmented world: Safe haven and strategic asset. 2025.
3. Gürgün G, Ünalımsı İ. Is gold a safe haven against equity market investment in emerging and developing countries? Finance Research Letters [Internet]. 2014 [cited 2025 Jun 14];11(4):341–8. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1544612314000361>
4. Michis A. The systematic risk of gold at different timescales. SSRN Journal [Internet]. 2018. Available from: <https://www.ssrn.com/abstract=3156049>
5. Dinh THT. Financial role of precious metals in portfolio diversification. 2023.
6. Taurasi Dott ssa D. Taurasi_Donatella_Tesi [Internet]. [cited 2025 Jun 14]. Available from: https://amsdottorato.unibo.it/id/eprint/5693/1/Taurasi_Donatella_Tesi.pdf
7. Gomis-Porqueras P, Shi S, Tan D. Gold as a financial instrument. Journal of Commodity Markets [Internet]. 2022 ;27:100218. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2405851321000519>
8. Baur DG, McDermott TK. Is gold a safe haven? International evidence. 2010.
9. Baur DG, Lucey BM. Is gold a hedge or a safe haven? An analysis of stocks, bonds and gold. 2009.
10. Baur DG, Smales LA. Gold and geopolitical risk. SSRN Journal [Internet]. 2018. Available from: <https://www.ssrn.com/abstract=3109136>
11. Chatterjee O, Gopalakrishnan B, Mohapatra S. Gold in household portfolios during a pandemic: Evidence from India. International Review of Economics & Finance [Internet]. 2024 [cited 2025 Jun 15];93:1288–306. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1059056024002405>
12. Simarmata HMP, Simarmata PP, Tampubolon J. Gold as a safe haven during the 2025 global tax war: A qualitative literature review. Jurnal Semesta Ilmu Manajemen dan Ekonomi [Internet]. 2025 [cited 2025 Jun 15];1(4):485–98. Available from: <https://jurnalpustakacendekia.com/index.php/J-SIME/article/view/352>
13. Lakhangonkar S, Kamath K, Shelkande M, Manisha I. Is gold a safer & better asset than shares? 2023;11(2).
14. Panchal N. A study on dynamic relationship between gold price and stock market price in India. Towards Excell [Internet]. 2021 [cited 2025 Jun 14];:341–53. Available from: <https://hrdc.gujaratuniversity.ac.in/Publication/article?id=3608>
15. Patel SA. Gold as a strategic prophecy against inflation and exchange rate. Business Perspectives and Research [Internet]. 2013;2(1):59–68. Available from: <https://doi.org/10.1177/2278533720130105>
16. Hoang THV, Lahiani A, Heller D. Is gold a hedge against inflation? New evidence from a nonlinear ARDL approach. Economic Modelling [Internet]. 2016;54:54–66. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0264999315004095>
17. Investing.com – Stock market quotes & financial news [Internet]. Available from: <https://www.investing.com/>
18. Gnanakumar PB. Descriptive analytics during disruptive periods of investments – A case study on gold & gold ETFs. 2020;9(04).
19. Aluru DS, Kadam MS. IJRAR23C2795-libre. 2023.
20. Goverdhan S, Jeyakumaran M. A study on performance evaluation of gold exchange traded funds in India: Pre & post COVID scenario. Journal of Economics, Finance and Management Studies [Internet]. 2022.5(4). Available from: <http://ijefm.co.in/v5i4/14.php>
21. Aarthi DB. A review of related literature on gold ETFs. 2020;11(5).
22. Association of Mutual Funds in India. Mutual funds India | Investment plans | Tax saving | Mutual funds NAV [Internet]. Available from: <https://www.amfiindia.com/>

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