



Investment Behavior in Precious Metals: A Survey-Based Study on Gold–Silver Allocation Preferences among Indian Retail Investors in Volatile Market Conditions

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Abstract

The present study examines the investment behavior of Indian retail investors towards precious metals, particularly gold and silver, under volatile market conditions. The research focuses on allocation preferences, investor awareness, risk appetite, and portfolio diversification patterns among retail investors. Primary data were collected from 327 respondents through a structured Google Form questionnaire. Statistical tools such as percentage analysis, Chi-Square Test, One-Way ANOVA, and Independent Sample t-test were used for hypothesis testing and interpretation of data. The findings reveal that gold remains the dominant investment preference due to its perceived safety, liquidity, and inflation-hedging capability, while silver is increasingly considered a high-growth investment avenue because of industrial demand. The study also identifies the influence of demographic variables such as gender, age, occupation, and risk appetite on precious metal investment decisions. The research concludes that investor education, diversification strategies, and awareness regarding modern investment avenues such as Gold ETFs and Sovereign Gold Bonds can improve investment decision-making among Indian retail investors.

Keywords

Gold Investment, Silver Investment, Precious Metals, Retail Investors, Investment Behavior, Portfolio Diversification, Risk Appetite, Inflation Hedge, Volatile Markets, Indian Investors

1. Introduction

Investment behavior has become an important area of research in financial management and behavioral finance due to changing economic conditions, inflationary pressures, geopolitical

uncertainties, and market volatility. Investors continuously seek safe and profitable investment avenues to preserve wealth and generate returns. Among various investment options, precious metals such as gold and silver have historically occupied a significant position in investment portfolios due to their intrinsic value, liquidity, and safe-haven characteristics.

In India, gold possesses not only financial significance but also cultural and emotional importance. Indian households traditionally consider gold as a symbol of wealth, security, and social status. During periods of economic uncertainty, inflation, stock market volatility, and currency fluctuations, investors often increase allocation towards gold to reduce portfolio risk. Silver, on the other hand, has emerged as a dual-purpose investment asset due to its industrial applications and investment potential. The increasing industrial demand for silver in electronics, renewable energy, electric vehicles, and medical equipment has attracted investors seeking higher growth opportunities.

Recent market conditions characterized by inflationary trends, rising interest rates, global economic slowdowns, and geopolitical conflicts have increased investor interest in precious metals. The volatility experienced in equity and crypto currency markets has encouraged retail investors to diversify their portfolios through investments in gold and silver. Additionally, modern investment avenues such as Gold Exchange Traded Funds (ETFs), Digital Gold, Sovereign Gold Bonds (SGBs), and Silver ETFs have made precious metal investments more accessible to retail investors.

Behavioral finance theories suggest that investment decisions are influenced not only by rational economic factors but also by psychological, social, and emotional variables. Investor risk perception, awareness levels, income, occupation, gender, and financial literacy significantly affect investment allocation decisions. Understanding these behavioral patterns is essential for policymakers, investment advisors, financial institutions, and researchers.

The present study attempts to analyse the investment behavior of Indian retail investors towards gold and silver investments during volatile market conditions. The research specifically focuses on allocation preferences, investor awareness, demographic influences, and portfolio diversification patterns among retail investors based on primary data collected from 327 respondents.

2. Objectives of the Study

1. To analyze the investment preferences of Indian retail investors towards gold and silver investments.
2. To examine the influence of demographic variables on precious metal investment behavior.
3. To study the relationship between risk appetite and precious metal allocation preferences.
4. To evaluate investor awareness regarding gold and silver as investment instruments.

3. Review of Literature

1. A substantial body of literature has explored the significance of precious metals, particularly gold and silver, in investment portfolios under volatile economic conditions.
2. Gold has long been recognized as a hedge against inflation and currency fluctuations. Baur and McDermott (2010) found that gold acts as a safe-haven asset during periods of financial distress, protecting investors against market downturns. Similarly, Ghosh et



- al. (2004) emphasized gold's role in preserving wealth during inflationary periods and currency depreciation.
5. In contrast, silver is often associated with higher return potential but also greater volatility. Lucey and Tully (2007) highlighted that silver prices are more volatile due to their sensitivity to industrial demand, making it attractive to investors seeking higher returns despite increased risk.
 6. Behavioral finance theories provide insights into how psychological factors influence investment decisions. Daniel Kahneman and Amos Tversky (1979) introduced Prospect Theory, which explains how investor sentiment, biases, and risk perception affect financial choices, including investments in precious metals.
 7. Empirical studies indicate that during financial crises, investors increase their allocation to gold. Hood and Malik (2013) demonstrated that gold serves as a strong hedge and safe haven during extreme market downturns, reinforcing investor confidence during crises.
 8. In the Indian context, cultural factors significantly influence gold investment behavior. World Gold Council (2020) reported that gold holds deep cultural and traditional value in India, often associated with festivals, weddings, and long-term wealth preservation.
 9. Affordability has been identified as a key factor driving silver investment. Batten et al. (2010) noted that silver's lower price compared to gold makes it more accessible to small investors, enabling broader participation in precious metal markets.
 10. Diversification benefits are another important aspect highlighted in literature. Markowitz (1952) established that portfolio diversification reduces risk, and subsequent studies confirm that including gold and silver enhances portfolio stability due to their low correlation with traditional assets.
 11. Market awareness and financial literacy significantly impact investment decisions. Lusardi and Mitchell (2014) found that financially literate individuals are more likely to make informed and diversified investment choices, including alternative assets like precious metals.
 12. Demographic variables also influence investment behavior. Barber and Odean (2001) demonstrated that factors such as age, income, and education affect risk tolerance and asset allocation decisions.
 13. Recent studies highlight the growing role of digital platforms in precious metal investments. Reserve Bank of India (2022) and World Gold Council reports emphasize the rise of digital gold, exchange-traded funds (ETFs), and online trading platforms, which have improved accessibility and transparency for retail investors.
 14. Hull (2022) explained the significance of derivatives and commodity markets in managing investment risk. Bodie, Kane, and Marcus (2021) The authors discussed portfolio diversification and the role of alternative assets including gold and silver. Mishkin (2021). His study explained the role of precious metals as protection against inflation and economic uncertainty.
 15. Siegel (2020) observed that long-term investors include gold in portfolios to hedge against inflation and currency depreciation. Fabozzi (2020) Fabozzi examined financial market behaviour and investor strategies under volatile economic conditions



4. Research Methodology

Research Design:

The present study is descriptive and analytical in nature. It attempts to analyze the investment behavior of Indian retail investors towards gold and silver investments.

Sources of Data:

The study is based on primary data collected through a structured questionnaire circulated through Google Forms.

Sample Size:

A total of **327** valid responses were collected and used for analysis.

Sampling Technique:

Convenience sampling method was adopted for collecting responses from retail investors.

Tools Used for Analysis

The following statistical tools were used:

- Percentage Analysis
- Frequency Distribution
- Chi-Square Test
- One-Way ANOVA
- Independent Sample t-Test
- Graphical Analysis

Software Used:

Statistical analysis was conducted using SPSS and spreadsheet-based analytical tools.

5. Hypotheses of the Study

Hypothesis 1

Ho: There is no significant association between gender and risk appetite.

H1: There is a significant association between gender and risk appetite.

Hypothesis 2

Ho: There is no significant difference in portfolio allocation among different occupational groups.

H1: There is a significant difference in portfolio allocation among different occupational groups.



Hypothesis 3

Ho: There is no significant difference in awareness levels between male and female respondents.

H1: There is a significant difference in awareness levels between male and female respondents.

6. Data Analysis and Interpretation

6.1 Demographic Analysis

Table 6.1: Gender-wise Distribution of Respondents

Data Source: Distribution of Respondents based on Gender

Gender	Frequency	Percentage
Male	210	64.22
Female	117	35.78
Total	327	100

Interpretation:

The sample consists predominantly of male respondents (64.22%), while female respondents account for 35.78%. This indicates a relatively higher participation of males in precious metal investment activities.

Table 6.2: Age-wise Distribution of Respondents

Data Source: Distribution of Respondents based on Age

Age Group	Frequency	Percentage
Below 25	256	78.29
25-35	42	12.84
36-45	2	0.61
46-55	13	3.98
56 and Above	14	4.28
Total	327	100

Interpretation:

A substantial majority (78.29%) of respondents belong to the below 25 years age group, indicating that younger investors constitute the dominant segment of the sample. The representation of older age groups is comparatively limited.

Table 6.3: Occupational Distribution of Respondents

Data Source: Distribution of Respondents based on Occupation

Occupation	Frequency	Percentage
Student	285	87.16
Business Owner	17	5.20
Salaried Employee	13	3.98
Professional	9	2.75
Housewife	1	0.31
Homemaker	1	0.31
Retired	1	0.31
Total	327	100

Interpretation:

Students constitute the overwhelming majority of respondents (87.16%), indicating that the survey largely captures the perceptions and investment preferences of younger individuals and prospective investors.

6.2 Hypothesis Testing

6.2.1 Chi-Square Test

Hypothesis 1

- H_0 : There is no significant association between Gender and Risk Appetite.
- H_1 : There is a significant association between Gender and Risk Appetite.

Chi-Square Value	Degrees of Freedom	p-value	Decision
11.617	2	0.003	Reject H_0

Interpretation:

The Chi-Square test yielded a value of 11.617 with a significance level of 0.003. Since the p-value is less than the threshold value of 0.05, the null hypothesis is rejected. Therefore, a significant association exists between gender and risk appetite. This suggests that male and female investors exhibit different levels of risk tolerance while investing in precious metals.

6.2.2 One-Way ANOVA Test

Hypothesis 2

- H_0 : There is no significant difference in portfolio allocation among different occupational groups.
- H_1 : There is a significant difference in portfolio allocation among different occupational groups.



F-value	p-value	Decision
0.304	0.822	Accept H_0

Interpretation:

The ANOVA test produced an F-value of 0.304 and a p-value of 0.822. Since the p-value exceeds 0.05, the null hypothesis is accepted. Hence, there is no statistically significant difference in precious metal portfolio allocation among respondents belonging to different occupations.

6.2.3 Independent Sample t-Test

Hypothesis 3

- H_0 : There is no significant difference in awareness levels between male and female respondents.
- H_1 : There is a significant difference in awareness levels between male and female respondents.

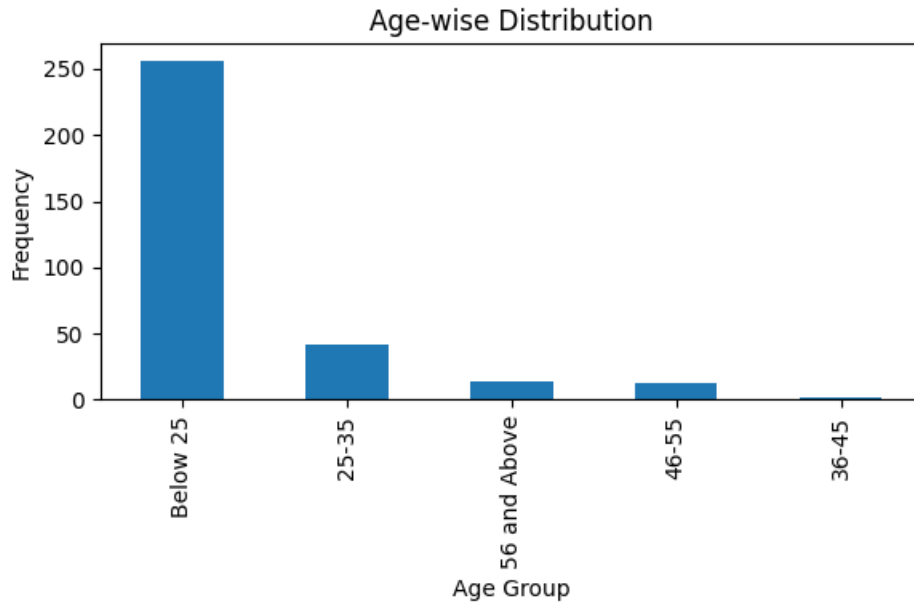
t-value	p-value	Decision
1.284	0.201	Accept H_0

Interpretation:

The independent sample t-test resulted in a t-value of 1.284 and a p-value of 0.201. Since the p-value is greater than 0.05, the null hypothesis is accepted. Therefore, there is no significant difference in awareness levels regarding precious metal investments between male and female respondents.

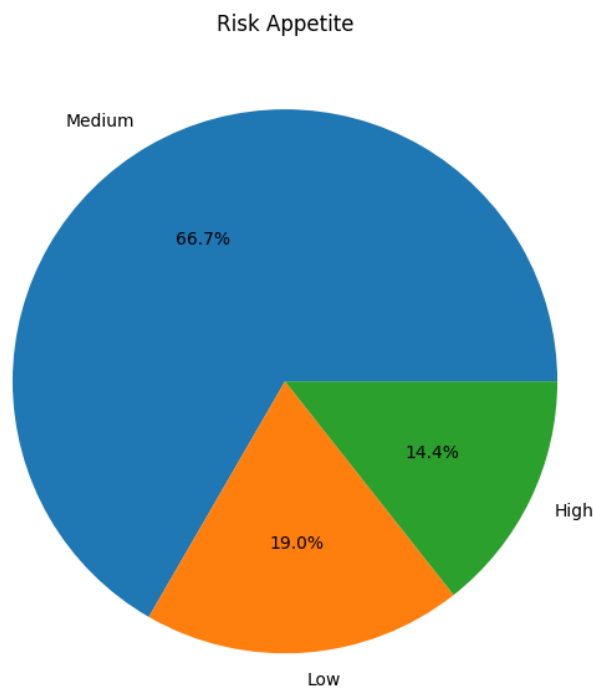
6.3 Graphical Analysis

Figure 6.1 Age-wise Distribution of Respondents



The graphical analysis indicates higher participation from the below 25 years age group.

Figure 6.2 Risk Appetite Distribution



The majority of respondents exhibit medium risk appetite.

Overall Interpretation

1 Preference for Precious Metals

The majority of respondents prefer gold over silver due to its perceived safety and stability. Gold is preferred primarily for safety and wealth preservation, whereas silver is preferred for growth potential and affordability.

2 Factors Influencing Investment

Key factors identified include:

- Safety and security
- Return potential
- Liquidity
- Affordability

3 Impact of Market Volatility

A significant proportion of respondents indicated increased investment in gold during volatile market conditions.

4 Demographic Influence

- Younger investors showed inclination towards silver
- Higher-income groups preferred gold
- Educated investors exhibited diversified preferences

7. Findings of the Study

1. Gold remains the most preferred precious metal investment among Indian retail investors.
2. Investors perceive gold as a safe-haven asset during volatile market conditions.
3. Silver is increasingly gaining popularity due to industrial demand and lower investment cost.
4. Most respondents possess medium risk appetite and prefer balanced investment strategies.
5. Occupational background significantly influences portfolio allocation towards precious metals.
6. Young investors show increasing interest in digital gold and ETF-based investments.
7. Investors primarily invest in precious metals for wealth preservation and portfolio diversification.
8. Inflation and economic uncertainty strongly influence investment decisions in precious metals.
9. Awareness regarding modern investment instruments such as Sovereign Gold Bonds and Silver ETFs is moderate.
10. Retail investors consider precious metals as long-term investment assets.



8. Recommendations and Suggestions

1. Financial institutions should conduct awareness programs regarding precious metal investments and portfolio diversification.
2. Investors should be educated about modern investment avenues such as Gold ETFs, Silver ETFs, and Sovereign Gold Bonds.
3. Retail investors should diversify investments across multiple asset classes to reduce risk.
4. Government and regulatory agencies should improve transparency and investor protection mechanisms in commodity markets.
5. Financial advisors should customize investment strategies according to investor risk appetite and financial goals.
6. Investors should evaluate both risk and return before increasing allocation towards precious metals.
7. Younger investors should be encouraged to adopt systematic investment approaches for long-term wealth creation.
8. Investment literacy initiatives should focus on behavioral finance and emotional investment decision-making.

9. Conclusion

The study concludes that precious metals continue to occupy a significant position in the investment portfolios of Indian retail investors. Gold remains the dominant investment avenue due to its perceived stability, liquidity, and inflation-hedging capability. Silver is gradually emerging as an attractive alternative investment due to its industrial demand and growth prospects. The research highlights that demographic variables, occupational factors, and risk appetite influence investment allocation decisions.

The statistical analysis demonstrates that occupational background significantly affects precious metal allocation preferences, while gender differences in awareness and risk appetite are statistically insignificant. The findings further indicate the growing importance of portfolio diversification and financial awareness among retail investors. In the context of volatile market conditions, precious metals continue to serve as important instruments for wealth preservation and risk management.

The study emphasizes the need for enhanced financial literacy, investor awareness programs, and customized investment guidance to improve retail investor decision-making in precious metal investments.

10. Scope for Future Research

1. Comparative analysis with other asset classes such as equities and crypto currencies.
2. Inclusion of rural and semi-urban investors.
3. Longitudinal studies to track changes in investment behavior over time.
4. Impact of global economic events on precious metal investments.

References

- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics*, 116(1), 261–292.



- Batten, J. A., Ciner, C., & Lucey, B. M. (2010). The macroeconomic determinants of volatility in precious metals markets. *Resources Policy*, 35(2), 65–71.
- Baur, D. G., & McDermott, T. K. (2010). Is gold a safe haven? *Journal of Banking & Finance*, 34(8), 1886–1898.
- Ghosh, D., Levin, E. J., Macmillan, P., & Wright, R. E. (2004). Gold as an inflation hedge? *Studies in Economics and Finance*, 22(1), 1–25.
- Hood, M., & Malik, F. (2013). Is gold the best hedge and a safe haven under changing stock market volatility? *Review of Financial Economics*, 22(2), 47–52.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy. *Journal of Economic Literature*, 52(1), 5–44.
- Markowitz, H. (1952). Portfolio selection. *Journal of Finance*, 7(1), 77–91.
- World Gold Council. (2020). *Gold demand trends report*.
- Reserve Bank of India. (2022). *Annual report on financial markets and investment trends*.
- Baur, D. G., & Lucey, B. M. (2010). Is gold a hedge or a safe haven? *Financial Review*, 45(2), 217–229.
- Bodie, Z., Kane, A., & Marcus, A. J. (2021). *Investments* (12th ed.). McGraw-Hill Education.
- Fabozzi, F. J. (2020). *Foundations of financial markets and institutions*. Pearson Education.
- Fisher, I. (1930). *The theory of interest*. Macmillan.
- Graham, B. (2006). *The intelligent investor*. Harper Business.
- Hull, J. C. (2022). *Fundamentals of futures and options markets*. Pearson Education.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Kothari, C. R. (2019). *Research methodology: Methods and techniques* (4th ed.). New Age International Publishers.
- Markowitz, H. (1952). Portfolio selection. *Journal of Finance*, 7(1), 77–91.
- Mishkin, F. S. (2021). *The economics of money, banking, and financial markets*. Pearson Education.
- Nofsinger, J. (2018). *The psychology of investing*. Routledge.
- Pindyck, R. S., & Rubinfeld, D. L. (2018). *Econometric models and economic forecasts*. McGraw-Hill.
- Ross, S. A., Westerfield, R., & Jordan, B. (2019). *Fundamentals of corporate finance*. McGraw-Hill Education.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, 19(3), 425–442.
- Siegel, J. J. (2020). *Stocks for the long run*. McGraw-Hill Education.
- Tobin, J. (1958). Liquidity preference as behavior toward risk. *Review of Economic Studies*, 25(2), 65–86.
- Treynor, J. L. (1965). How to rate management of investment funds. *Harvard Business Review*, 43(1), 63–75.
- Vij, M. (2017). *Commodity markets and derivatives*. PHI Learning.
- Williams, J. B. (1938). *The theory of investment value*. Harvard University Press.
- Zikmund, W. G. (2019). *Business research methods*. Cengage Learning.



- Damodaran, A. (2020). Applied corporate finance. Wiley Publications.
- Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. (2018). Modern portfolio theory and investment analysis. Wiley.
- Reilly, F. K., & Brown, K. C. (2019). Investment analysis and portfolio management. Cengage Learning.
- Statman, M. (2017). Finance for normal people: How investors and markets behave. Oxford University Press.