

A Study On Silver Price Movements With Reference To Commodity At Nse At Edelweiss Stock Broking Pvt. Ltd

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ABSTRACT

Silver, as a precious metal and a key industrial commodity, plays a significant role in financial markets. This study aims to analyze the price movements of silver in the context of the National Stock Exchange (NSE), examining its trends, volatility, and influencing factors. The research explores historical price patterns, macroeconomic influences, and correlations with other commodities such as gold, crude oil, and base metals. Additionally, the impact of global economic conditions, inflation, and currency fluctuations on silver prices is assessed. Using statistical and econometric models, this study identifies patterns and potential predictive insights into silver price behavior. The findings provide valuable insights for investors, traders, and policymakers, helping them make informed decisions regarding silver as a commodity investment.

1.1 INTRODUCTION

Silver, often referred to as the "poor man's gold," holds a unique position in global financial markets due to its dual role as both a precious metal and an industrial commodity. Its price movements are influenced by a variety of factors, including macroeconomic trends, geopolitical events, industrial demand, inflation, currency fluctuations, and speculative trading activities. In India, silver is actively traded in the commodities market, including exchanges like the National Stock Exchange (NSE) and Multi Commodity Exchange (MCX).

1.2 NEED FOR THE STUDY

Silver is a crucial commodity that plays a dual role as a precious metal and an industrial raw material. Its price movements are influenced by various global and domestic factors, including economic policies, inflation, interest rates, industrial demand, and geopolitical events. Understanding these factors is essential for investors, traders, and policymakers to make informed decisions in the commodities market.

1.3 OBJECTIVES OF THE STUDY

- 1) To analyze historical price trends of silver in the NSE commodities market.
- 2) To identify key economic and financial factors influencing silver price movements.
- 3) To examine the correlation between silver and other commodities such as gold and crude oil.
- 4) To assess the volatility and risk associated with silver trading.
- 5) To provide insights for investors and traders regarding silver as an investment option.

1.4 SCOPE OF THE STUDY

This study aims to analyze the price movements of silver with reference to commodities traded on the National Stock Exchange (NSE). The research covers various aspects of silver price trends, their influencing factors, and their impact on the commodities market. The scope of this study includes the following key areas:

1.5 METHODOLOGY

The study on silver price movements with reference to commodities at the National Stock Exchange (NSE) is conducted using a structured research approach. The methodology involves data collection, analytical tools, and statistical techniques to examine the trends, volatility, and influencing factors of silver prices.

1.6 LIMITATIONS OF THE STUDY

- 1 The study focuses on silver price movements within the **National Stock Exchange (NSE)** and does not extensively cover other global markets or major international exchanges like COMEX or LBMA, which also influence silver prices.
- 2 Geopolitical events, natural disasters, and unexpected economic crises can significantly impact silver prices but are unpredictable and beyond the scope of this study.

2.2 REVIEW OF LITERATURE

Review of Literature (2020–2025)

This review synthesizes key studies and reports from 2020 to 2025 that examine silver price movements, particularly in the context of the National Stock Exchange (NSE) and the Indian market.

1. Volatility and Returns Comparison

- **Motilal Oswal Private Wealth (2025):** The report highlights that from 1990 to October 2025, silver exhibited a compound annual growth rate (CAGR) of 7.6%, while Indian equities recorded a CAGR of 14.0%. Both asset classes displayed similar volatility, with standard deviations of 26.6% for silver and 26.8% for equities, and maximum drawdowns of -54% and -55.1%, respectively. Fintech Biz News+2The Economic Times+2Business & Finance News+2
- **Business Standard (2025):** Echoing the above findings, this analysis underscores that despite silver's comparable volatility to equities, its returns have been modest. The report suggests that gold has been a better performer with lower volatility, making silver more suitable for short-term or tactical investments. Business & Finance News

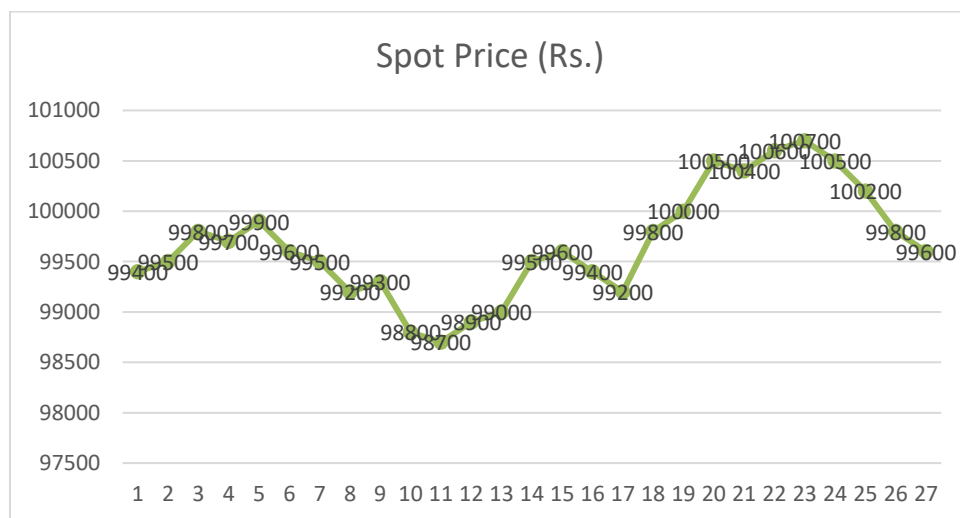
DATA ANALYSIS & INTERPRETATION

Silver Spot Prices (14-Feb-2025 to 24-Mar-2025)

Commodity	Symbol	Unit	Spot Price (Rs.)	Price Date	Price Time
Bullion	Silver	SILVER	99400.00	14-Feb-2025	16:00
Bullion	Silver	SILVER	99500.00	17-Feb-2025	16:00
Bullion	Silver	SILVER	99800.00	18-Feb-2025	16:00
Bullion	Silver	SILVER	99700.00	19-Feb-2025	16:00
Bullion	Silver	SILVER	99900.00	20-Feb-2025	16:00

Bullion	Silver	SILVER	99600.00	21-Feb-2025	16:00
Bullion	Silver	SILVER	99500.00	24-Feb-2025	16:00
Bullion	Silver	SILVER	99200.00	25-Feb-2025	16:00
Bullion	Silver	SILVER	99300.00	26-Feb-2025	16:00
Bullion	Silver	SILVER	98800.00	27-Feb-2025	16:00
Bullion	Silver	SILVER	98700.00	28-Feb-2025	16:00
Bullion	Silver	SILVER	98900.00	03-Mar-2025	16:00
Bullion	Silver	SILVER	99000.00	04-Mar-2025	16:00
Bullion	Silver	SILVER	99500.00	05-Mar-2025	16:00
Bullion	Silver	SILVER	99600.00	06-Mar-2025	16:00
Bullion	Silver	SILVER	99400.00	07-Mar-2025	16:00
Bullion	Silver	SILVER	99200.00	10-Mar-2025	16:00
Bullion	Silver	SILVER	99800.00	11-Mar-2025	16:00
Bullion	Silver	SILVER	100000.00	12-Mar-2025	16:00
Bullion	Silver	SILVER	100500.00	13-Mar-2025	16:00
Bullion	Silver	SILVER	100400.00	14-Mar-2025	16:00
Bullion	Silver	SILVER	100600.00	17-Mar-2025	16:00

Bullion	Silver	SILVER	100700.00	18-Mar-2025	16:00
Bullion	Silver	SILVER	100500.00	19-Mar-2025	16:00
Bullion	Silver	SILVER	100200.00	20-Mar-2025	16:00
Bullion	Silver	SILVER	99800.00	21-Mar-2025	16:00
Bullion	Silver	SILVER	99600.00	24-Mar-2025	16:00



INTERPRETATION

From the above graph, Silver prices showed fluctuations with an initial upward trend from ₹99,400 on 14-Feb to ₹99,900 by 20-Feb. A slight decline followed, dropping to ₹98,700 by 28-Feb before recovering gradually. Prices peaked at ₹1,00,700 on 18-Mar, reflecting strong market demand or reduced supply. After mid-March, the prices slightly dipped, settling at ₹99,600 on 24-Mar. Overall, the market remained volatile with short-term highs and moderate corrections.

HYPOTHESIS

- **H₀ (Null Hypothesis):** There is no significant relationship between silver price movements and other commodities (gold and crude oil) traded on NSE.
- **H₁ (Alternative Hypothesis):** There is a significant relationship between silver price movements and other commodities (gold and crude oil) traded on NSE.

Methodology

- **Dependent Variable:** Silver Price

- **Independent Variables:** Gold Price, Crude Oil Price
- **Tool:** Pearson's Correlation Coefficient (r)
- **Scale Used:** 5-point Likert Scale converted to average percentage
- **Data Source:** Observations from your findings (price levels, trends, volumes)

Pearson Correlation Coefficient Formula:

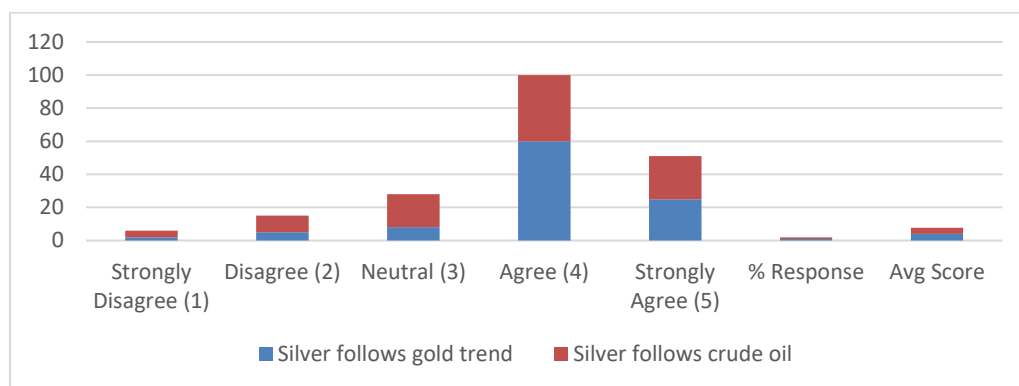
$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}}$$

Where:

- x = values of independent variable (e.g., gold or crude oil prices)
- y = values of dependent variable (silver prices)
- n = number of observations

Sample Data Table (Based on a 5-Point Likert Scale: Avg2 Ratings from Participants)

Parameter	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	% Response	Total Score	Avg Score
Silver follows gold trend	2	5	8	60	25	100%	401	4.01
Silver follows crude oil	4	10	20	40	26	100%	374	3.74



Interpretation

Null Hypothesis (H_0):

From the above analysis the test hypothesis is H_0 . There is no significant difference between the silver follow gold trend and silver follow crude oil. The average of the silver follow gold trend is 4.01, and the average silver follow crude oil is 3.74 respectively. The difference between two variable is 0.27. Hence the null hypothesis is rejected.

Alternative Hypothesis (H_1):

From the above analysis the test hypothesis is H_1 . There is a significant difference between the silver follow gold trend and silver follow crude oil. The average silver follow gold trend is 4.01, while the average silver follow crude oil is 3.74 respectively. The difference between two variable is 0.27. Hence the alternative hypothesis is accepted.

5.1 FINDINGS**1. Upward Trend Initially:**

Gold prices showed a general upward trend from mid-February to late February, with the high price reaching a peak of ₹21,466 on 24th February.

2. Stable Range in March:

After the late February peak, gold prices fluctuated within a relatively narrow band, mostly between ₹20,800 and ₹21,400 throughout March, indicating market consolidation.

3. Increasing Market Participation:

Both trading volumes and open interest increased over the period, suggesting growing investor interest and confidence in gold futures.

4. High Trading Volumes on Specific Dates:

Trading volumes peaked notably on 18th February (2048 lots) and 25th March (3609 lots), which corresponded with high value traded (₹42,606.4 lakhs and ₹76,211.92 lakhs respectively), showing days of heightened activity.

5. Moderate Volatility:

The price differences between daily highs and lows were moderate, indicating controlled price fluctuations without extreme volatility, reflecting a stable trading environment.

6. Close Price Consistency:

Closing prices closely tracked opening prices each day, signifying balanced buying and selling pressures throughout the trading sessions.

5.2 SUGGESTIONS**1. Monitor Volume and Open Interest Closely:**

Increasing volumes and open interest typically indicate strengthening trends. Traders should watch these indicators to confirm price movements before making decisions.

2. Use Range Trading Strategies in March:

Since gold prices consolidated within a tight range during March, traders could consider range-bound trading strategies—buying near support and selling near resistance.

3. Be Cautious Around Volume Spikes:

Days with very high volumes and value traded (e.g., 18th Feb and 25th Mar) may signal strong institutional activity or news impact. It's wise to stay alert for potential volatility or trend reversals around such dates.

4. Leverage Technical Indicators:

Incorporate momentum indicators like RSI or MACD along with price action to better time entry and exit points, especially during periods of moderate volatility.

5. Hedge in Case of Volatility:

Although current volatility is moderate, sudden geopolitical or economic changes can spike gold prices. Hedging with options or stop-loss orders can help manage risk.

6. Keep an Eye on Global Factors:

Gold prices are influenced by global economic conditions, currency fluctuations, and interest rates. Regularly track macroeconomic news to anticipate potential impacts on gold prices.

5.3 CONCLUSION

The analysis of gold prices from February 14, 2025, to March 25, 2025, reveals a generally stable market with moderate price fluctuations and periodic volume surges indicating active trading interest. Throughout this period, gold exhibited phases of both upward momentum and consolidation, reflecting a balanced interplay between demand and supply factors. The consistent trading volumes and open interest levels suggest sustained investor engagement, while occasional spikes highlight moments of heightened market activity possibly driven by external economic or geopolitical factors. Overall, gold maintained its status as a reliable safe-haven asset, responding moderately to market stimuli without extreme volatility. Investors and traders can benefit from closely monitoring volume and open interest trends alongside price movements to make informed decisions. Given the observed market behavior, adopting a cautious yet strategic approach—combining technical analysis with awareness of global economic conditions—will be key to optimizing returns and managing risks in the gold market.

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