Comprehensive Analysis on Silver

An Insightful Exploration on Recent Rally

8 Aug 2025

Introduction

IThe price of silver recently hit an all-time high at ₹1,15,000 per kilogram, marking an increase of over 35% within just 3 to 4 months. Silver has risen to prominence as one of the most essential commodities globally.

In fact, silver is the second most used commodity after oil. Its growing demand across various sectors including electric vehicles (EVs), solar panels, smartphones, semiconductors, AI, and data servers signals a promising future, potentially leading to further price escalation.

Demand Dynamics

The industry is increasingly pivoting towards emerging technologies.

Industrial Applications (~60%)

Silver's unique physical properties such as exceptional conductivity in high electrical and thermal use, corrosion resistance, and reflective properties make it invaluable across various industrial applications. Predominantly used in electronics (switches, circuit boards, semiconductor chips), silver's use is also critical in EVs and solar energy solutions. EVs require approximately 25–50 grams per vehicle, which is significantly higher compared to traditional vehicles.

Silver's usage in photovoltaic cells, which are used in solar panels, has increased from just 4% of global demand in 2016 to nearly 17% today, amounting to about 5,500 tonnes in 2024 alone. Its antimicrobial properties also find relevance in healthcare for making medical instruments.

Jewelry (~18%)

Silver jewelry remains attractive due to its affordability and cultural significance—especially in India, which accounts for 40% of global silver jewelry demand.

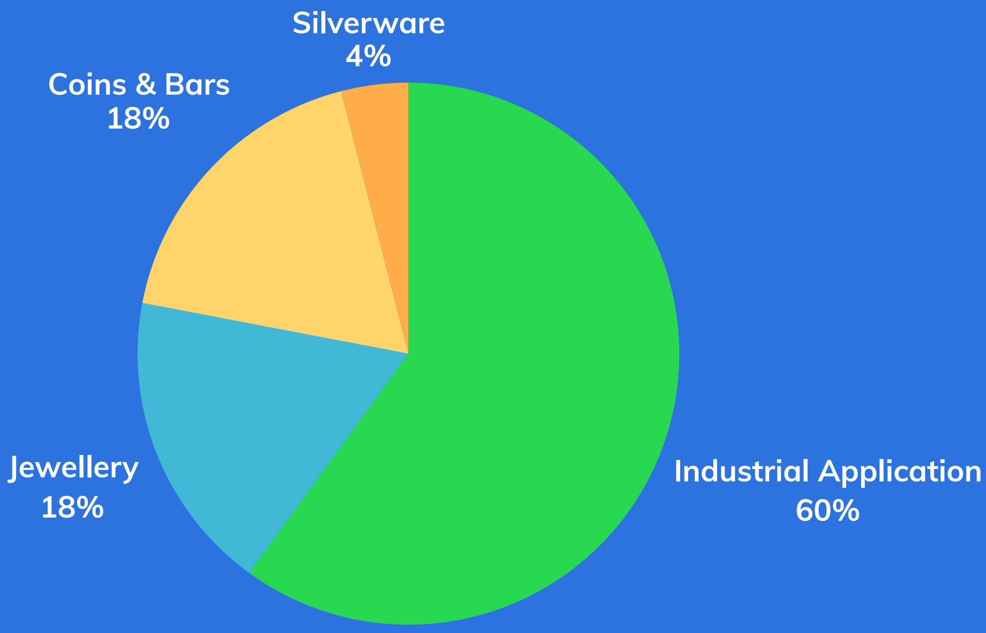
The demand in this segment remains robust even during economic downturns, as it is more affordable and cheaper compared to gold jewelry, particularly in rural India.

Investment (Coins & Bars ~18)

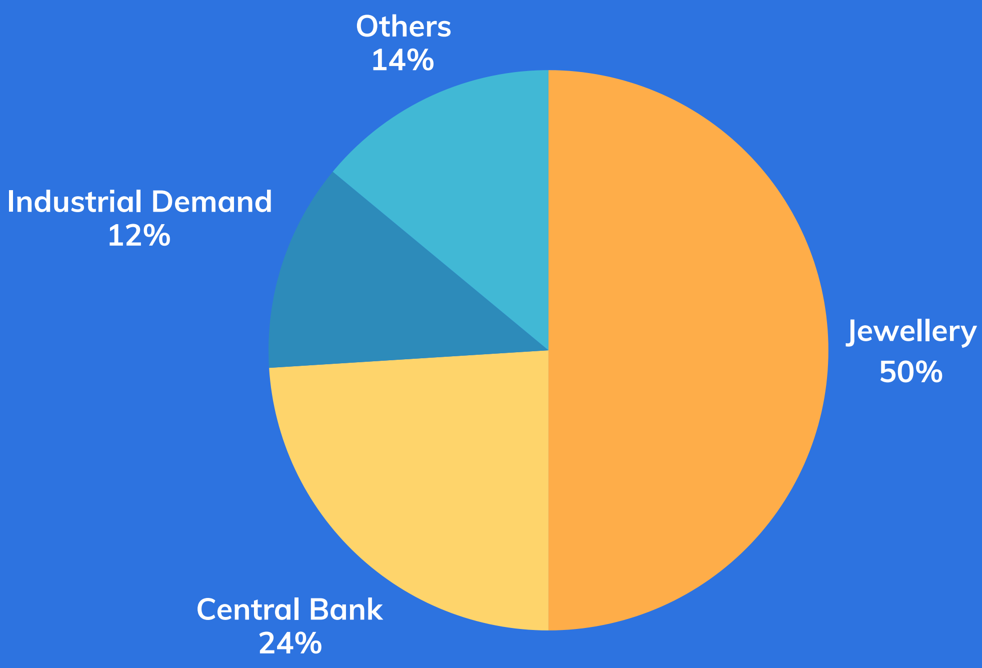
Recognized as a safe-haven asset, silver attracts investors during geopolitical uncertainties and inflationary periods. Post-pandemic (2020), silver demand soared by 80%, with continued growth expected due to ongoing global uncertainties.

Silverware

India leads this category, supplying over half of the global demand for traditional silver household items and giftware.



■ Silver Demand in various sectors



■ Gold Demand in various sectors

Supply Constraints

Silver Supply and Demand

Million ounces	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025F	Year on Year 2024	Year on Year 2025F
Supply												
Mine Production	900.1	863.9	850.8	837.4	783.8	830.8	839.4	812.7	819.7	835.0	1%	2%
Recycling	156.3	160.2	162.3	163.8	180.5	190.7	193.5	183.5	193.9	193.2	6%	0%
Net Physical Disinvestment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	na	na
Net Hedging Supply	0.0	0.0	0.0	13.9	8.5	0.0	0.0	0.0	0.0	0.9	na	na
Net Official Sector Sales	1.1	1.0	1.2	1.0	1.2	1.5	1.7	1.6	1.5	1.5	-9%	4%
Total Supply	**1,057.4**	**1,025.1**	**1,014.3**	**1,016.2**	**974.0**	**1,023.1**	**1,034.6**	**997.8**	**1,015.1**	**1,030.6**	**2%**	**2%**
Demand												
Industrial (total)	491.0	528.0	525.8	525.4	511.9	564.1	592.3	657.1	680.5	677.4	4%	0%
Electrical & Electronics	309.0	339.1	330.4	326.6	321.4	350.7	370.7	444.4	460.5	465.6	4%	1%
...of which photovoltaics	*81.6*	*99.3*	*87.0*	*74.9*	*82.8*	*88.9*	*118.1*	*192.7*	*197.6*	*195.7*	3%	-1%
Brazing Alloys & Solders	49.1	50.9	52.0	52.4	47.5	50.5	49.2	50.2	51.6	52.9	3%	3%
Other Industrial	132.9	138.0	143.5	146.4	142.9	162.9	172.4	162.6	168.4	158.9	4%	-6%
Photography	34.7	32.4	31.4	30.7	26.9	27.7	27.7	27.3	25.5	24.2	-7%	-5%
Jewelry	189.1	196.2	203.2	201.6	150.9	182.0	234.5	203.1	208.7	196.2	3%	-6%
Silverware	53.5	59.4	67.1	61.3	31.2	40.7	73.5	55.1	54.2	46.0	-2%	-15%
Net Physical Investment	212.9	155.8	165.9	187.4	208.1	284.3	338.3	244.3	190.9	204.4	-22%	7%
Net Hedging Demand	12.0	1.1	7.4	0.0	0.0	3.5	17.9	11.5	4.3	0.0	-62%	na
Total Demand	**993.3**	**972.9**	**1,000.8**	**1,006.4**	**929.0**	**1,102.4**	**1,284.2**	**1,198.5**	**1,164.1**	**1,148.3**	**-3%**	**-1%**
Market Balance	64.1	52.2	13.5	9.8	45.1	-79.3	-249.6	-200.6	-148.9	-117.6	-26%	-21%
Net Investment in ETPs	53.9	7.2	-21.4	83.3	331.1	64.9	-117.4	-37.6	61.6	70.0	na	14%
Market Balance less ETPs	**10.2**	**45.1**	**34.9**	**-73.5**	**-286.1**	**-144.3**	**-132.2**	**-163.0**	**-210.5**	**-187.6**	**29%**	**-11%**
Nominal Silver Price (US $/oz, London price)	17.14	17.05	15.71	16.21	20.55	25.14	21.73	23.35	28.27	-	21%	na

Source: Metals Focus

Material and statistics in this section were adapted in part from the Silver Institute's *World Silver Survey 2025*.

In 2024, global silver demand reached 1.16 billion ounces, exceeding the supply of just 1.0 billion ounces. This deficit, persisting for four consecutive years, totals approximately 500 million ounces, equivalent to 14,000 tonnes. The major silver supply sources include:

By-Product Mining (~58%)

This is the major source of silver supply. It involves the incidental extraction of silver during the mining of other base metals, such as zinc, copper, and gold. Consequently, silver output is significantly influenced by fluctuations in the markets for these primary metals. For example, if the demand and prices for copper or zinc decline, mining companies might reduce their operations, thereby indirectly decreasing silver production.

Primary Silver Mining (~22%)

Only a few countries are involved in direct mining of silver which Mexico, China, Peru, Chile, and Poland, with Latin America itself contributing half of the global output. India's only significant primary deposit, the Bharak Silver Deposit in Rajasthan, contributes minimally, making India heavily reliant on by-product mining. India has almost 5.5 lakh tonnes of silver deposits, out of which 85% comes from Rajasthan.

Recycling (~19%)

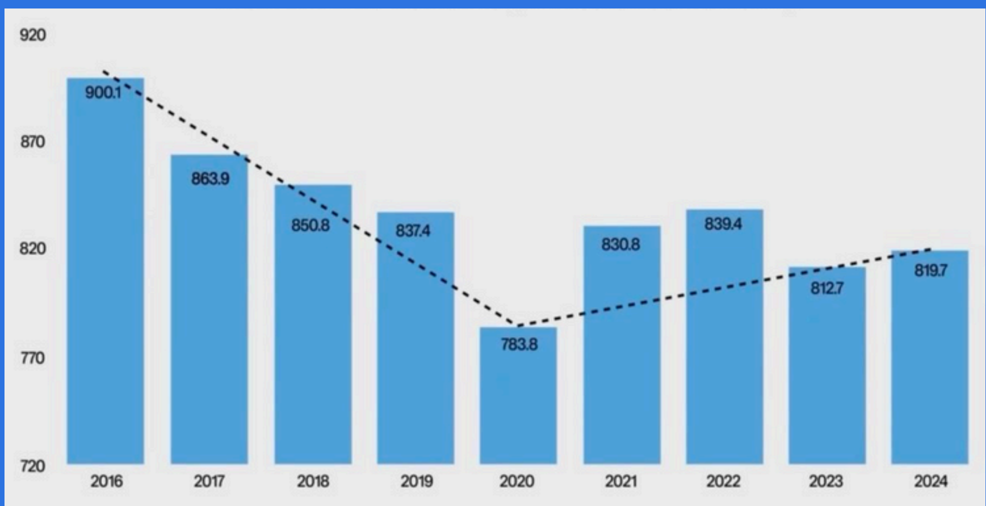
Although it is an environmentally friendly option, recycling produces lower-purity silver, which is not very viable for industrial use, thereby restricting its industrial applicability. Its contribution increased from 12% in 2016 to 18% in 2024.

Global annual silver production is approximately 800–835 million ounces but with 70% coming from by-product mining. Base-metal demand fluctuations directly impact silver output. Now silver prices will be highly dependent on the mining of other metals.

India's Sindesar Khurd mine, the world's second-largest silver mine, is leased to Hindustan Zinc and contributes approximately 25–30% of India's silver production. As a result, Hindustan Zinc has emerged as the world's third-largest silver producer, according to the World Silver Survey 2024. The company is now in the process of nearly doubling its silver output.

However, a major concern is that many of the world's leading silver mines are reaching maturity, and even the Sindesar Khurd mine is expected to cease its operations by 2029. Given its status as the second-largest silver-producing mine globally, its closure would pose a significant threat not only to India but also to global silver supply.

Developing new mines is a slow process typically it takes 8–10 years from discovery to production. As a result, new supply is slow and far from execution. Global silver production has already declined, from meeting about 90% of demand in 2016 to roughly 80% in 2024 and is projected to fall further. While recycling may offset some of the shortfall, overall production is expected to continue its downward trend.



■ Mine Production (in million ounce)

Correlation and Market Dynamics: Silver vs. Gold

Although gold and silver share common attributes as precious metals, inflation hedges, stores of value, and safe-haven assets, their market dynamics differ considerably. Gold demand predominantly arises from jewelry (50%) and central banks (24%), with only 10–12% industrial use. Conversely, silver's demand is 60% industrial, making it both a precious metal and a crucial industrial commodity, resulting in greater price volatility.

Silver and gold historically exhibit a strong positive correlation (~0.90), primarily due to their legacy as precious metals and safe-haven status. Gold typically dictates market trends, influenced significantly by inflation, interest rates, and geopolitical factors, whereas silver is strongly influenced by industrial demand.

Impact of Economic Indicators

Inflation

Generally beneficial for silver, evidenced by historical gains during inflationary episodes like the 1970s. Even recent inflationary waves have shown the same trajectory.

Interest Rates

Higher rates typically pressure silver prices due to increased opportunity costs. Recently, central banks have cut repo rates; this can also be a contributor to the rally.

Stock Market

Silver tends to positively correlate with equity markets during economic expansions but occasionally diverges during market downturns, demonstrating residual safe-haven behaviour and market complexity.

Impact of Economic Indicators

Silver ETFs in India have surged, May 2025 itself saw net inflows of ₹292 crore, which is three times those of gold ETFs, as per the Association of Mutual Funds in India. In India, there are many investment options in silver, which include:

- Physical silver (higher storage costs)
- Digital silver (app-based, with vault storage or leasing facility)
- Silver ETFs (launched in January 2022 by ICICI Mutual Fund)
- Silver mutual funds (SIPs & lump sum options are available)

India imports most of its silver from the UK, China, and Hong Kong. In the Union Budget last year, the import duty cut from 15% to 6% led to a 111% jump in imports to 7,669 tonnes in 2024. Also, silver is a dollar-priced commodity, while we Indians buy in INR, so currency fluctuations also affect the cost, if the rupee depreciates, silver prices will further get a boost.

A key valuation metric is the gold-to-silver ratio—the number of ounces of silver needed to buy one ounce of gold. Historically, this ratio tends to be 80:1. If this ratio increases, either silver is undervalued or gold is overvalued, and vice versa. In June 2025, it was 92:1, and analysts expect silver to outperform gold. Similar expectations are in line with the World Silver Survey.

Future Outlook: The conclusion

Silver's future growth prospects are robust, primarily driven by industrial applications. Increasing global adoption of EVs, solar panels, and AI-driven data centers (anticipated growth from 60 GW to 180 GW by 2030) strongly positions silver demand on an upward trajectory. On the contrary, supply constraints from maturing mines and slow development processes further pressure prices upward.

Silver remains an asset of strategic importance, balancing dual roles as an industrial metal and a precious investment commodity. Investors and stakeholders should monitor industrial trends, economic indicators, and supply dynamics closely, given silver's inherent volatility and promising growth prospects. Whether silver sustains its upward momentum or becomes just another commodity will be significantly influenced by these critical factors.

—

By Prakhar Kothari

Achintya Securities Private Limited

Member: NSE, BSE, MCX | DP:NSDL,CDSL