

28th July 2025

		SPO		
01				

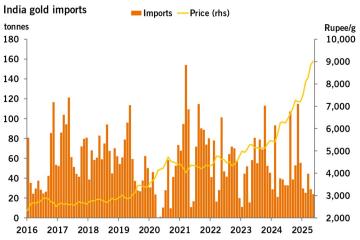
- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

MARKET SPOTLIGHT

High gold prices are crimping consumer demand

Asian gold demand tends to be weighted to the second half of the year.

The Golden Week holiday in China, the auspicious festivals of Dhanteras and Diwali and the Indian wedding season coincide and typically lead to consumer demand peaking later in the year. As the two largest sources of consumer demand for gold, China and India are key to global demand dynamics. Together they accounted for 58% of global consumer (non-industrial) demand in 2024 (source: World Gold Council). This phenomenon is mostly seen in India, where H2 consumer demand has, on average, been 35% higher than H1 since 2010, versus 4% on average in China.



Source: SFA (Oxford), Bloomberg Finance LP, India Ministry of Commerce and Industry

Backing India's demand seasonality is the monsoon season. India's gold demand is dominated by a large rural population, whose income is strongly tied to the success, or failure, of rainfall during the monsoon season (June-September). Good rainfall supports strong crop yields and incomes, which can translate to higher gold purchases. After a drier spell at the beginning of June, the monsoon has progressed well, with cumulative rainfall slightly above the long-term average to date, and the government is expecting record high wheat and rice production this year.

Incomes may rise, but the gold price has risen further. India's domestic gold price has risen by 32% this year so far, adding to the 30% rally in 2024, to reach nearly ₹9,500/g. Even with the expectation of a strong harvest, this is likely to be enough to reduce the level of gold purchases. Indian gold buyers tend to be relatively price sensitive, and this effect can be seen in both demand and import data. In 2024, imports were 13% below the five-year average, and so far this year imports of gold are 17% below this level. Gold jewellery demand in India fell by 25% year-on-year in Q1'25, and import data suggests that Q2'25 may have been similarly weak.

Positive seasonality may not be enough to see consumer gold demand grow this year, even with a rebound in Q3 and Q4. Jewellery demand in Q1'25 was weak in both India and China. Assuming total Q2'25 consumer demand was in line with Q1, as import data would suggest, and the seasonal rebound in consumption occurs as usual, total Indian demand would still be down ~30% year-on-year and at the lowest level since the pandemic. Investment demand has been driving gold demand, supported by central bank buying, and that is likely to remain the case in H2, offsetting consumer weakness.

28th July 2025

01	SPOTLIGHT	

02 GOLD

03 SILVER

04 PLATINUM

05 PALLADIUM

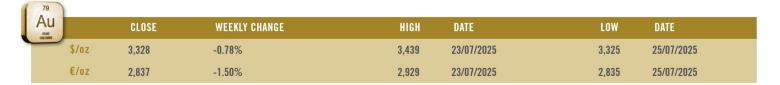
06 RHODIUM, RUTHENIUM, IRIDIUM

07 TRENDS AND INVESTMENTS

08 ABOUT HERAEUS

PRECIOUS METALS REVIEW

Gold



Interesting times for central banks. The ECB held interest rates at its meeting on Thursday. The euro has been strengthening despite the ECB cutting rates more than the Federal Reserve this year. The US administration is putting pressure on Fed Chairman Powell to cut rates and potentially step down before the end of his term. If Fed independence is threatened or a dovish new chairman is installed, that could lead to further dollar weakness. However, with US CPI coming in at 2.7% year-on-year in June, up from 2.4% in May, and well above the 2% target, the Fed is less likely to cut rates and that may support the dollar in the near term. The dollar index has swung from 110 at the start of the year to 97 as sentiment on the dollar has soured, but sentiment may have become too negative and a dollar bounce back could occur. Typically, that would be a headwind for the gold price. However, a stronger dollar in 2024 did not derail gold's price rally.

Looking at the price chart, gold is still consolidating after its strong gains but could be forming a bullish triangle. If that is the case, then a breakout to higher levels should follow in the not-too-distant future.

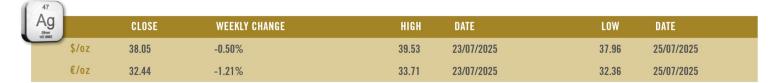
3

28th July 2025

- 01 MARKET SPOTLIGHT
- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

PRECIOUS METALS REVIEW

Silver



Mexican silver miners report uninspiring results for the second quarter. Fresnillo, the largest primary silver mining company, saw first-half silver production slip to 24.1 moz. Output in Q2'25 at Fresnillo was impacted by lower grades, with total quarterly production marginally up on Q1'25 at 12.1 moz. Group performance will need to improve in the second half to hit full-year guidance of 49.0 to 56.0 moz.

First Majestic's attributable production was flat in the second quarter at 3.7 moz, as higher yield at Los Gatos and La Encantada more than offset lower output at San Dimas and Santa Elena. In the first half of the year production was 7.4 moz, which puts it at the bottom end of guidance for the year of 14.8 to 15.8 moz. Meanwhile, Endeavour Silver's production went up to 1.5 moz in Q2'25 following the acquisition of the Kolpa mine, but excluding that, output fell to 1.1 moz from 1.2 moz in Q1'25. Global primary silver supply is forecast to rise to 1,050 moz in 2025 (source: The Silver Institute).

Silver has continued to outperform gold, with the price falling by just 0.5% last week.

4

28th July 2025

- 01 MARKET SPOTLIGHT
- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

PRECIOUS METALS REVIEW

Platinum



Further consolidation in the US recycling industry. Sibanye-Stillwater has added Metallix Refining to its recycling business, after branching out beyond PGMs with the acquisition of Reldan in 2024. In addition to gold, silver and base metals, Metallix produced 48 koz each of platinum and palladium last year, roughly twice the amount that Reldan produces. Sibanye-Stillwater also recycles autocatalysts at the Columbus Metallurgical Complex in Montana. Recycled volumes have been lower in the last couple of years (316 koz 3E in 2024), after being boosted by record palladium and rhodium prices in 2020 and 2021. Consolidation in the US has been a trend, with Elemental, which is based in Poland, also acquiring several recycling businesses in the US over the last few years.

Light-vehicle sales are expected to drop in the US this year owing to the 25% import tariff which is likely to increase the cost of new cars in the US that were already becoming increasingly expensive. The average price of a new car in the US was \$48,700 in June (source: Kelly Blue Book). This is anticipated to have an adverse effect on the number of older vehicles that are scrapped and impact the volumes of autocatalysts available for recycling, even with higher PGM prices incentivising material flows to the recyclers. It is possible that secondary supply in the US may not recover much this year after a couple of tough years.

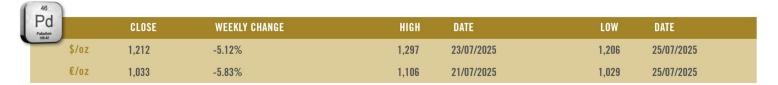
The platinum price has pulled back to around \$1,400/oz. The market is not quite as tight as it was earlier last week with lease rates pulling back from extreme levels to be merely high at the end of the week. Metal has poured back into NYMEX vaults with ~210 koz reappearing last week, presumably on revived tariff fears. However, since mid-June, when the price was around \$1,250/oz, global ETF holdings have declined by ~400 koz which should have added some liquidity. For now, platinum is finding support around \$1,400/oz but the divergence between the price and the daily RSI indicates waning momentum and a rising chance of a larger correction.

28th July 2025

- 01 MARKET SPOTLIGHT
- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

PRECIOUS METALS REVIEW

Palladium



Stillwater is back in the black as the 2E basket price moves above the all-in sustaining costs (AISCs) level. Since the start of Q2'25, the rally in platinum and palladium prices means that Stillwater's 2E basket price has increased by almost a third, and since the end of last week it has exceeded \$1,300/2E oz. According to Sibanye-Stillwater's Q1'25 results, AISCs were \$1,284/2E oz, having come down from \$1,560/2E oz in Q4'24 owing to the significant restructuring of operations at the mine which were completed during Q4'24. Furthermore, including the effect of the S54X tax credit, in reality Q1'25 costs were likely to have been closer to \$1,200/2E oz. Consequently, Stillwater is now likely to be at least at breakeven at current prices, assuming costs for Q2'25 were broadly in line with those in Q1'25, to some extent alleviating fears that the mine would have to close if it could not prevent further losses. Stillwater's palladium production is expected to come in at around 200 koz this year which, along with lower output from Impala Canada, means that North American palladium output is set to fall by almost 200 koz to around 550 koz this year.

Minor downgrade to Nornickel's PGM production guidance for 2025. Nornickel has reported a decrease in ore output during Q2'25 due to the transition to new mining equipment. In addition, capital repairs are planned for H2'25 with the aim of improving the reliability of existing equipment and the transition across to new sources of machinery over the longer term. Consequently, PGM production guidance has been brought down slightly by between 1% and 2% at the top range of guidance, with palladium guidance now between 2.68 moz and 2.73 moz, representing a marginal decline compared to 2024. That said, historically, Nornickel typically exceeds its production guidance by the end of the year.

The palladium price turned around mid-week and ended the week sharply lower. Similarly to platinum there is a divergence between the price and the daily RSI so the price is at risk of a larger correction.

28th July 2025

0.4	BAADICE	CDOTLIGHT
01	NIVIVE	SPOTLIGHT

- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

PRECIOUS METALS REVIEW

Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$6,750/oz	\$860/oz	\$4,950/oz
Previous Edition	\$6,100/oz	\$860/oz	\$4,950/oz

Ruthenium prices held steady last week but remain at an 18-year high.

Chemical production capacity in China is expected to continue to rise in 2025, particularly in ruthenium-catalysed processes such as caprolactam (a nylon-6 precursor) and acetic acid. China's caprolactam production capacity is estimated to reach 8 million tonnes this year, reflecting a shift from being a net importer to a net exporter. While the use of ruthenium catalysts in caprolactam production outside of China is uncommon, newer integrated petrochemical plants within the country are increasingly adopting ruthenium-based hydrogenation catalysts owing to their superior activity and selectivity. Similarly, ruthenium-promoted acetic acid capacity in China is set to grow significantly, with 6 million tonnes of new capacity under development to meet downstream demand. Chemical demand is roughly 30% of total ruthenium demand and is expected to increase this year.

Bucking the trend for platinum and palladium, the rhodium price jumped to \$6,750/oz while iridium held steady last week.

7

28th July 2025

- 01 MARKET SPOTLIGHT
- 02 GOLD
- 03 SILVER
- 04 PLATINUM
- 05 PALLADIUM
- 06 RHODIUM, RUTHENIUM, IRIDIUM
- 07 TRENDS AND INVESTMENTS
- 08 ABOUT HERAEUS

TRENDS AND INVESTMENTS

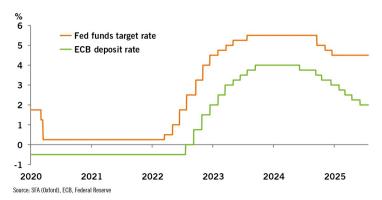
Rhodium price



Ruthenium price



Central bank interest rates



Stillwater AISCs vs. 2E basket price



28th July 2025

- MARKET SPOTLIGHT
- 02 GOLD
- SILVER 03
- PLATINUM
- PALLADIUM
- RHODIUM, RUTHENIUM, IRIDIUM 06
- TRENDS AND INVESTMENTS
- **ABOUT HERAEUS**

ABOUT HERAEUS

Learn more about important trends in the precious metals markets on a weekly basis with our Heraeus Precious Appraisal. Please subscribe: www.herae.us/trading-market-report.

Heraeus Precious Metals

Europe, Middle East, Africa & other regions

Phone: +49 6181 35 2750 tradinghu@heraeus.com

South East Asia Phone: +852 2773 1733 tradinghk@heraeus.com

USA

Phone: +1 212 752 2180 tradingny@heraeus.com

China

Phone: +86 21 3357 5658 tradingsh@heraeus.com



Heraeus is a family-owned global technology group headquartered in Hanau, Germany. The company's roots go back to a family pharmacy started in 1660. With its expertise and resources, Heraeus has been making meaningful contributions over generations and is committed to do so in the future. Today, the group bundles diverse activities in four Business Platforms: Metals and Recycling, Healthcare, Semiconductor and Electronics, as well as Industrials, Customers benefit from innovative technologies and solutions based on broad materials knowledge and technological leadership.

Heraeus Precious Metals is globally leading in the precious metals industry. The company is part of the Heraeus Group and covers the value chain from trading to precious metals products to refining and recycling. It has extensive expertise in all platinum group metals as well as gold and silver.

The Heraeus Precious Appraisal is produced in collaboration with:

SFA (Oxford) Ltd

United Kingdom Phone: +44 1865 784366

www.sfa-oxford.com

The Oxford Science Park, Oxford, United Kingdom, OX4 4GA



Disclaimer

This document is being supplied to the recipient only, on the basis that the recipient is reasonably believed to be a professional market participant in the precious metals market. It is directed exclusively at entrepreneurs and especially not intended for the use of consumers.

The material contained in this document has no regard to the specific investment objectives, financial situation or particular need of any specific recipient or organisation. It is not provided as part of a contractual relationship. It is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment or as advice on the merits of making any investment.

This report has been compiled using information obtained from sources that Heraeus and SFA (Oxford) Ltd ("SFA") believe to be reliable but which they have not independently verified. Further, the analysis and opinions set out in this document, including any forward-looking statements, constitute a judgment as of the date of the document and are subject to change without notice.

There is no assurance that any forward-looking statements will materialize. Therefore, neither SFA nor Heraeus warrants the accuracy and completeness of the data and analysis contained in this document.

Heraeus and SFA assume no liability for any losses or damages of whatsoever kind, resulting from whatever cause, through the use of or reliance on any information contained in this document. However, in so far as a liability claim exists under German law, Heraeus and SFA shall have unlimited liability for willful or grossly negligent breach of duty.

Unless expressly permitted by law, no part of this document may be reproduced or distributed in any manner without written permission of Heraeus. Heraeus specifically prohibits the redistribution of this document, via the internet or otherwise. to non-professional or private investors and neither Heraeus nor SFA accepts any liability whatsoever for the actions of third parties in reliance on this document.