

PRECIOUS APPRAISAL

No. 6

12th February 2024

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MARKET SPOTLIGHT

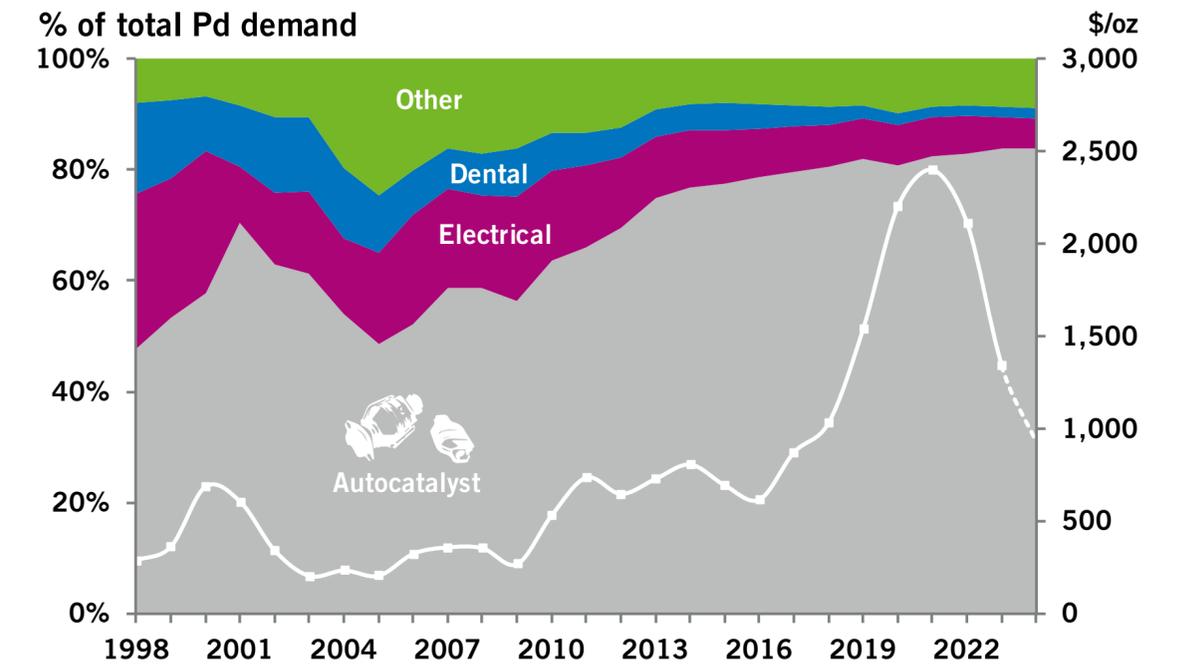
Platinum regains its premium over palladium

The palladium price fell below the platinum price for the first time since 2018 last Thursday. From a short-term, technical point of view the palladium price fell through support to below \$900/oz, dropping to a new low for the year. The \$900-\$920/oz area could now prove resistance to rally attempts since the price subsequently rallied but has so far failed to stay above that level. In the near term, price volatility could mean that platinum moves between premium and discount to the palladium price but in the longer term the trend appears to be set to a platinum premium.

No signs of significant production cuts (yet), despite much reduced profitability for mining companies. Companies' recent production reports for H2'23 show solid output, and guidance for this year is not much different from last year's output. So far, PGM production has been reduced by about 200 koz in South Africa. Sedibelo has closed the Pilanesberg mine, cutting about 50 koz (3E). Sibanye-Stillwater has announced some modest production cuts in South Africa but claims that its restructuring in the US will not significantly impact mine production, which is predominantly palladium. However, South African PGM producers will be reporting their results over the next few weeks which should include more detail on their plans.

Substitution back to palladium in autocatalysts will take time. Palladium first traded at a premium to platinum in late 2017, but it took until 2021 before the first vehicles appeared with the new tri-metal catalysts with some platinum used in them. The work to reverse that substitution could begin once companies are confident that platinum will continue to trade at a premium. Chinese automotive companies have the ability to self-certify their catalysts so they may be able to move faster than US or European automakers, but it could still be two years before changes to autocatalyst formulations appear on vehicles.

Other end-uses may not be any quicker to use more palladium. The high price has encouraged thrifting and the use of alternative materials for many years. Electrical usage dropped sharply after the palladium price first rose above \$1,000/oz in 2001. It did recover in the mid-2000s as the palladium price fell back but once the price climbed higher, demand destruction resumed. Dental usage has shrunk owing to the high price and the use of more cosmetically appealing materials. It is not clear how much of that lost market could be recovered with cheaper palladium.



Source: SFA (Oxford), Bloomberg

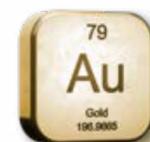
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PRECIOUS METALS REVIEW

Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	2,022	-0.72%	2,045	07/02/2024	2,015	05/02/2024
€/oz	1,875	-0.68%	1,898	07/02/2024	1,874	09/02/2024

Gold ETFs start 2024 on the back foot. Last week was slow in terms of important economic data releases and gold stayed in a relatively tight trading range. This week's US CPI reading could jolt gold to the downside if it comes in hotter than the 3.4% in December. Overall, the gold price has lacked impetus so far in 2024 and investors have continued in their negative attitude towards ETFs, particularly as upside price risk from an early-2024 interest rate cut has faded. Gold ETF products have seen net outflows of 1,932 koz since the beginning of the year, with only a couple of days with positive inflows to note. Outflows year-to-date are equal to 2% of total holdings at the end of 2023, and as of Friday stood at a four-year low. Positive price drivers are lacking at present, and thus the gold price is expected to stay at around \$2,000/oz for now. However, the outlook for 2024 as a whole remains bullish thanks to interest rate cuts that, although now likely to be farther away than initially thought, are still very much on the cards. When ETF investors do jump back in, this should provide a good tailwind for the gold price.

China's physical gold buyers are changing their strategy. Gold trading volumes and withdrawals from the Shanghai Gold Exchange in January were the largest since January 2016. Withdrawals totalled 271 tonnes, the second highest since 2008. This activity, as previously noted, is likely to be caused by wholesalers stocking up before the Lunar New Year holiday. Historically, spikes in withdrawals and retail demand typically coincide with dips in the gold price, yet January's activity spike comes with the local yuan gold price remaining stubbornly high. Despite some headwinds to demand, such as the forecast for fewer marriages, the fact that apparent demand is robust under this condition is a positive indicator for retail gold demand in China this year. As of Friday, the local gold price stood at CN14,564, just 1.9% below the record set in 2023.

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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	22.43	-0.99%	22.72	09/02/2024	22.14	08/02/2024
€/oz	20.81	-0.64%	21.08	09/02/2024	20.58	07/02/2024

Silver coin sales outperformed gold from major mints in January. January tends to be a strong month for both gold and silver bullion sales with the release of new-year mintages, and a 2.9% decline in the silver price seems to have helped. From the US Mint, American Eagle silver coin sales grew by 24% year-on-year to 4.9 moz. Meanwhile, sales of American Eagle gold coins fell by 25% against sales in January 2023, to 123 koz, the lowest sales volume in the post-Covid era. The Perth Mint reported lower demand for both its gold and silver bullion products, though silver outperformed gold. Sales of silver coins and minted bars fell by 38% year-on-year to 769 koz, but gold product sales dropped by 62% to a nine-year low for January of 24.7 koz. Demand from the Perth Mint has been shrinking since the second half of 2022, despite a decline in apparent premiums from bullion dealers in that time.

The silver price finished slightly lower last week, and on the weekly chart it needs to find support above \$22/oz in the next few weeks or it could fall further towards \$21.50/oz.

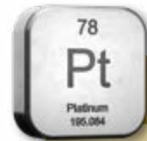
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Platinum



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	872	-2.69%	910	07/02/2024	870	09/02/2024
€/oz	809	-2.65%	847	06/02/2024	807	09/02/2024

A falling platinum price further dents South African miners' revenues, but so far output cuts have been minor. The South African PGM basket price declined 37% in rand terms by the end of 2023 and with prices falling further in 2024, the highest-cost mines are loss-making. In response, South African miners have cut costs outside the mine site but have so far shied away from any significant cuts to platinum production. Sibanye-Stillwater is rightsizing its Rustenburg and Marikana operations. However, this restructuring may not result in much more than 100 koz of lost production across all PGMs. Anglo American Platinum also confirmed 2024 total PGM production guidance last week of 3.3-3.7 moz, which translates to approximately 1,485-1,665 koz of platinum, including purchased concentrate. This is a slight reduction versus the 1,758 koz that the company produced in 2023. Total South African platinum production is forecast to fall marginally to 3.9 moz this year, the lowest level since 2020. The platinum market is predicted to be in deficit, albeit with significant stock available.

The platinum price finished last week in the 800s for a second consecutive week after declining more than 2.5%.

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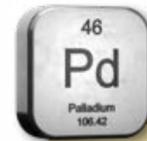
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Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	870	-7.16%	965	06/02/2024	860	09/02/2024
€/oz	806	-7.18%	898	06/02/2024	798	09/02/2024

Global palladium production is expected to slip slightly this year to below 6.3 moz, though this is forecast to be primarily the result of lower output from Russia. Nornickel is carrying out smelter maintenance this quarter, which could reduce its annual refined output by approximately 250 koz (9%). Anglo American Platinum has reiterated its production guidance for 2024. Anglo expects its palladium production to be in the range of approximately 1.2-1.3 moz this year, following a 5% decline in 2023 to 1.18 moz. This guidance is the same as that issued in December, which was lower than first announced earlier in 2023.

As forecast, palladium reached parity with platinum last week on Thursday. Both metals fell below \$900/oz – for palladium this was the first time since 2018 it has been this low. By Friday’s close, the price had recovered slightly, and the Pt:Pd ratio was 1.002.

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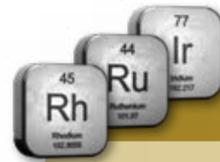
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PRECIOUS METALS REVIEW

Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$4,900/oz	\$455/oz	\$5,500/oz
Previous Edition	\$5,000/oz	\$455/oz	\$5,500/oz

South African supply cuts could have a greater effect on the small PGMs than on platinum or palladium. South Africa is the largest source of mined iridium, ruthenium and rhodium, and is forecast to produce 87%, 97% and 86% of global supply, respectively, this year. In contrast, South Africa is expected to produce 77% of primary platinum. Therefore, any further mine closures will have a proportionately larger impact on the smaller, less liquid markets. The iridium market is expected to be relatively tight this year, and thus the price could see increased volatility. However, the uncertain and potentially weak economic outlook could act as a dampener on demand.

The iridium and ruthenium prices both stayed stable last week, but the rhodium price fell to just below \$5,000/oz and has now declined by nearly 6% since 26 January.

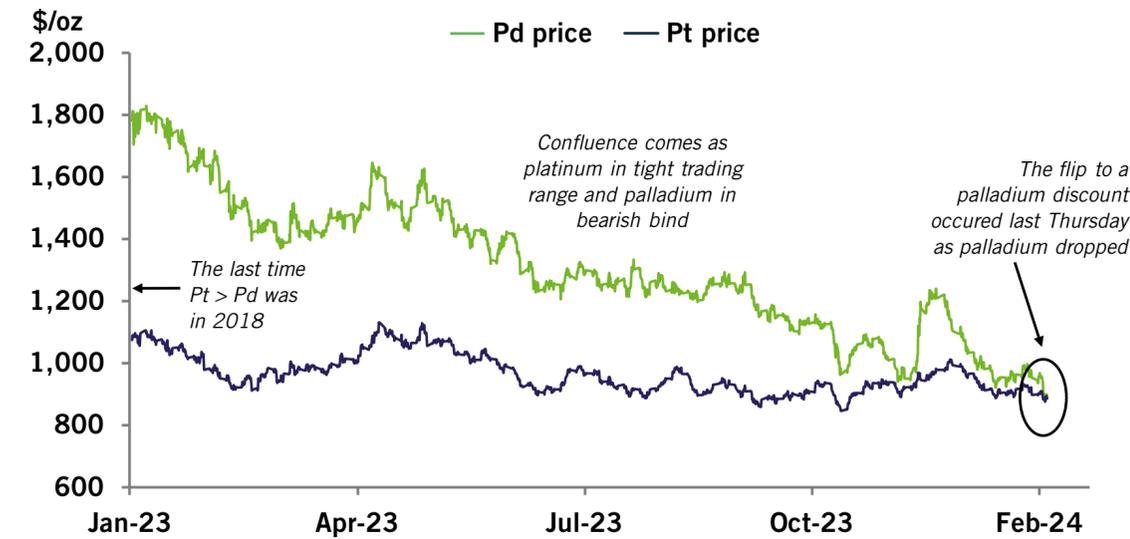
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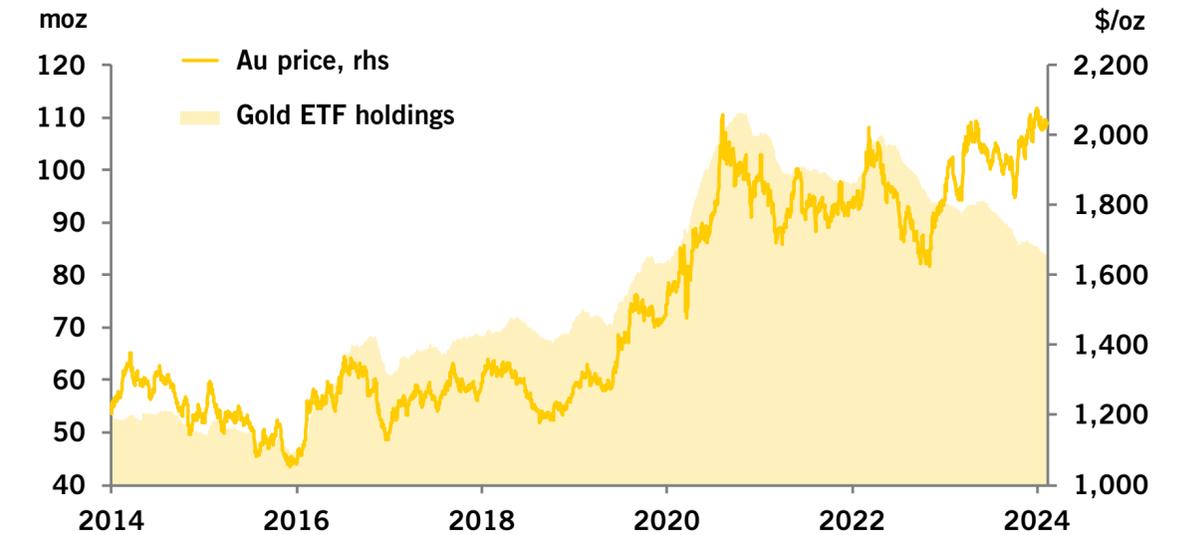
TRENDS AND INVESTMENTS

Recent platinum and palladium price action



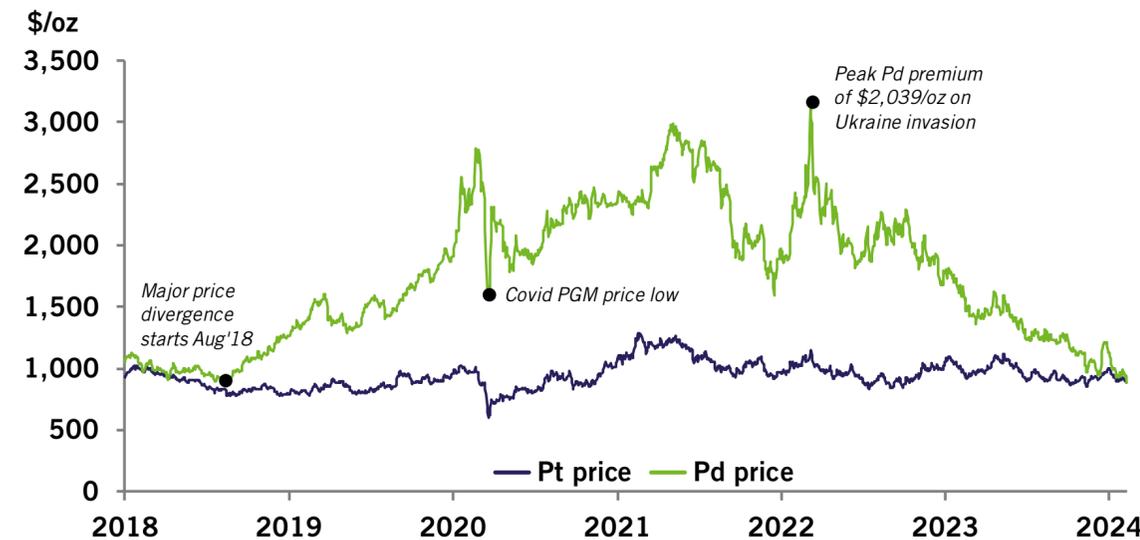
Source: SFA (Oxford), Bloomberg

Gold ETF holdings vs. gold price



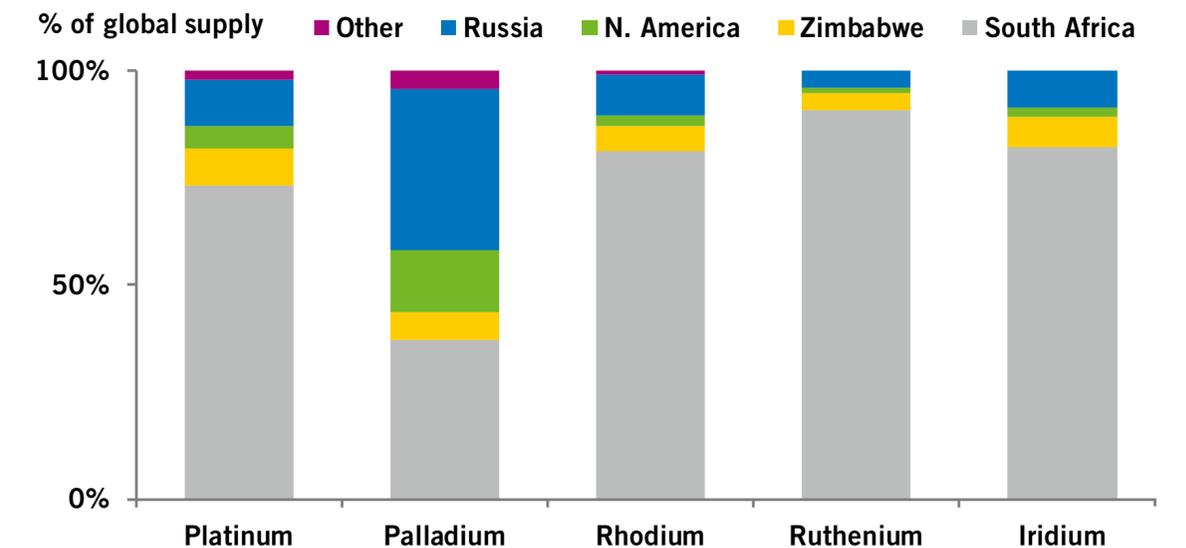
Source: SFA (Oxford), Bloomberg

Long-term platinum and palladium price action



Source: SFA (Oxford), Bloomberg

Global PGM production, 2024



Source: SFA (Oxford)

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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



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SFA (Oxford) Ltd

United Kingdom

Phone: +44 1865 784366

www.sfa-oxford.com

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



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