# Heraeus

# PREGIOUS APPRAISAL









No. 1
9th January 2023

9<sup>th</sup> January 2023

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## MARKET SPOTLIGHT

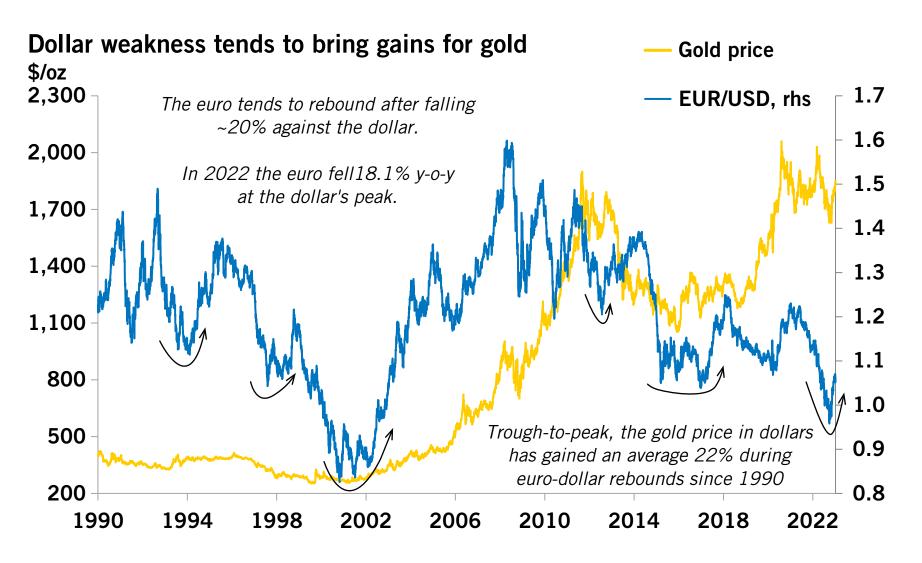
## 'Tables turning' in global currency markets may lead to further gains for gold

Precious metals prices rose in the final weeks of 2022 as the dollar began to weaken. Despite a boost from the heightened geopolitical uncertainty in Q1'22 and higher inflation than for several decades, by the end of 2022 the gold price in dollar terms finished near to where it began last January (\$1,810/oz vs. \$1,825/oz). In Europe, the euro gold price gained 6% on the year owing to a 6% depreciation of the EURUSD pair.

Monetary policy divergence could lead to further dollar depreciation. With inflation still high, the ECB President vowed in December to raise interest rates by 50 bp in February, with a further 50 bp possibly coming hot on its heels in March. This would add to the 250 bp cumulative hikes since July. Some forecasts predict the ECB could take the Bloc's deposit facility to 3.5% (currently 2.0%) by H2'23, implying a total of 150 bp in additional hikes this year. Taking the Fed's December median (dot plot) projection of 5.25% for the Federal Funds Rate by the end of 2023, further implied hikes in the US amount to 75 bp. The potential variance in monetary policies by the second half of the year could lead to the dollar weakening further.

Near term, the dollar could rebound before a further decline. After a rapid depreciation, the dollar index may test technical support at around 103 soon. If held, the dollar could rebound somewhat before falling again, potentially putting pressure on the gold price in the short term. Following this the dollar should weaken, as it has done since the Fed began to taper its rate hikes. Currently falling US inflation and weaker than expected manufacturing PMIs for December indicate a slowing economy, and increase the likelihood of smaller hikes or a pause in Q1'23. This would potentially undermine the dollar, providing support for the dollar gold price. The Fed's December meeting minutes do show the members' hawkish attitude for 2023, meaning a 50 bp hike may be expected again at the end of the month. However, the Federal Funds Rate is already above the US Treasury 2-year bond yield, also an indication of a weak economy. If economic indicators worsen, and the yield falls further, the Fed is likely to pause hikes and interest rates may not reach the 5.25% projection before a pivot.

Gold could benefit from a weaker dollar in 2023. In a reversal of the trend of the last 12 months, other currencies are expected to strengthen as the dollar weakens in 2023, largely due to monetary policy. Further dollar weakness should lift the gold price. However, if the euro strengthens simultaneously, the gains seen for gold priced in euros will be smaller.



Source: SFA (Oxford), Bloomberg

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# PRECIOUS METALS REVIEW Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,863	2.60%	1,865	04/01/2023	1,825	05/01/2023
€/oz	1,755	3.37%	1,762	06/01/2023	1,713	02/01/2023

#### China's central bank resumes gold buying after three-year hiatus.

November saw the resumption of gold buying by the People's Bank of China. An addition of 32 tonnes of gold to domestic reserves was the first reported official gold buying since 2019 and is approximately three times larger than average monthly purchases that year. The latest statistics for December confirm that buying continued for a second consecutive month as reserves were topped up by a further 30 tonnes to end the year. China's total official gold reserves now stand at approximately 2,010 tonnes, up 3.2% from 1,948 tonnes at the end of October. In the first three quarters net central bank gold purchases have totalled 673 tonnes, including 399 tonnes in the third quarter, of which three-quarters was estimated to come from unreported buyers (source: World Gold Council). The continued buying will take the total for the year to a record.

Covid fears could result in lower-than-normal gold demand over Chinese **New Year.** One of the largest Chinese jewellery retailers, Chow Tai Fook, reported a 5.3% jump in revenue for the six months to September 2022. The growth was supported by strength in its gold jewellery products including new lines centred on 'heritage' gold, utilising traditional designs and higher purities. In Q3'22, gold jewellery demand saw a 56% quarteron-quarter gain from 109 tonnes in Q2'22 to 171 tonnes as Covid restrictions eased and economic growth recovered (source: World Gold Council). It is expected that Q4'22 saw weaker demand as Covid cases rose again in November. The easing of Covid restrictions in December also likely had a negative effect on retail sales. Subway ridership declined 40% in ten major cities in the two weeks following the easing as people tended to avoid crowded spaces, thus depressing in-person sales. Data show that public transport use is slowly returning following the break over the calendar new year, but January may see a second month of lowerthan-normal demand if cases rise again and consumers stay cautious in the run-up to Chinese New Year. With little improvement in China's economic growth expected for 2023, annual gold jewellery demand could be suppressed below last year's demand.

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# PRECIOUS METALS REVIEW

## Silver

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		CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE	
	\$/oz	23.84	0.50%	24.55	03/01/2023	23.12	05/01/2023	
	€/oz	22.45	1.22%	23.19	03/01/2023	21.27	06/01/2023	

#### Cheap polysilicon should help photovoltaic sales and silver demand.

Since a peak in November 2022, polysilicon prices have fallen by 42%. Lower component costs should be positive for silver paste demand in solar cells as the economics of new installations are improved and thus more likely to reach completion. This year is forecast to be the best year in terms of volume of new industrial and domestic photovoltaic (PV) installations globally. China's domestic installations are estimated to have reached approximately 70 GW in 2022, and China's National Energy Agency expects growth of 33% in 2023, potentially taking the cumulative domestic installed capacity to 490 GW by year-end. Thrifting of silver paste loadings may offset some gains in solar cell demand, but overall silver PV demand is expected to grow from the estimated global demand of 150 moz in 2022.

US Mint silver coin sales slumped at the end of 2022. Annual sales fell back to par (16 moz) with pre-pandemic levels in 2022 after two stronger years. December sales totalled 59 koz, 85% lower than the five-year average for the month. Sales in December have tended to be lower than in the rest of year over this time period, so weaker sales are not necessarily representative of a large drop in overall coin demand. Conversely, January sales tend to be strong owing to the popularity of the new mintage release. In the last five years, an average of 22% of annual sales are made in January. This proportion is also trending higher. Consequently, sales could be as high as 4-5 moz this month alone.

The silver price reached a 9-month high of \$24.55/oz last week before dropping to \$23.84/oz following the release of decisively hawkish Fed meeting minutes that strengthened the dollar somewhat.

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## PRECIOUS METALS REVIEW

## **Platinum**

70	Pt								
			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE	
		\$/oz	1,088	2.24%	1,099	04/01/2023	1,050	06/01/2023	
		€/oz	1,024	2.57%	1,037	04/01/2023	1,000	06/01/2023	

South Africa's platinum production outlook worsens. Anglo American Platinum (AAP), the world's largest platinum producer, has revised down its 2023 refined PGM production guidance by 200 koz to 3.6-4.0 moz, of which approximately 95 koz will be lost primary platinum supply. This downgrade to refined output includes the additional input of 250 koz of the 350 koz total PGMs built up during Eskom power curtailment and the Polokwane smelter rebuild in 2022. The remaining 100 koz work-in-progress stock will likely be carried over into 2024. This lower production in 2023 could reduce the forecast market surplus for the year to just over 300 koz from approximately 400 koz (excluding investment), keeping in line with 2022. The anticipated reduction to refined output will be the result of mining lower-grade zones at Mogalakwena mine plus the end of life-of-mine and closure of the Merensky Reef processing plant at Amandelbult mine.

Chinese platinum jewellery demand could see a short-term boost from delayed marriages. Economic and demographic factors tend to drive jewellery demand in China. The number of marriages is falling and China's economy and consumer confidence have suffered owing to its prolonged zero-Covid rules. As such, platinum jewellery demand may have dropped by more than 10% to 774 koz in 2022. Demand is forecast to continue to decline by 12% overall in 2023 to 680 koz, the lowest level in more than 20 years, as a preference for gold further curbs demand. However,

the late-2022 relaxation of zero-Covid restrictions may spur some pent-up wedding jewellery demand later in 2023. Platinum jewellery fabrication continued to fall year-on-year in Q3'22 (source: Platinum Guild International), but the fall slowed by three percentage points quarter-on-quarter to 20%, indicating a minor uptick in fabricator and retailer optimism.

A rally in the rand has pushed platinum to a three-quarter high in the new year. As the dollar fell back further in late December, the South African rand strengthened to 16.80 against the greenback. This boosted the platinum price to an intraday high of \$1,099/oz last week, though it did pull back to \$1,050/oz temporarily. However, the dollar may weaken further, potentially pushing platinum above \$1,100/oz.

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# PRECIOUS METALS REVIEW

## **Palladium**

46	Pd								
			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE	
		\$/oz	1,802	1.64%	1,830	05/01/2023	1,682	03/01/2023	
		€/oz	1,697	2.37%	1,727	05/01/2023	1,610	03/01/2023	

New vehicle sales in China failed to hold their momentum in November.

After five months of a strong rebound from severe Covid restrictions in Q2'22, new vehicle sales fell 8% year-on-year to 2.33 million units (source: CAAM). Covid cases began to rise and hit new records during the month, resulting in sporadic lockdowns and protests in major cities including Guangzhou and Chongqing. Sales were disrupted, with a large number of national dealerships having to close at some point in the month. China was forecast to reach record levels of palladium autocatalyst demand in 2022 of 2.65 moz as manufacturers began to recover from chip and supply chain disruption. Tax relief for hybrid vehicles that was intended to end on 31 December was also extended for a further 12 months, potentially delaying some new vehicle purchases into 2023, rather than pulling them forward into 2022. This may have tempered annual palladium autocatalyst demand from the anticipated record levels as sales may now be spread over a longer time horizon into the new year.

Electric vehicles drive away with potential palladium demand. Despite lower overall new vehicle sales in China in November, new energy vehicle (NEV) sales (incl. full electric, plug-in hybrid and fuel cell powertrains) grew 58% year-on-year, making up 29% of all passenger vehicle sales (source: LMC Automotive). In the UK, battery electric vehicles also increased their market share at the end of 2022, reaching 21% in November and improving to 33% of new registrations in December.

The growing proportion of electric vehicle registrations is partially down to total annual passenger vehicle sales falling 2% year-on-year, marking the lowest level since 1992, when the UK population was 13% smaller than today. The expansion of electric vehicles is forecast to continue in 2023, contributing to a small overall decline in global automotive palladium demand year-on-year to 7.6 moz, despite an increase in new cars expected on the roads across all markets.

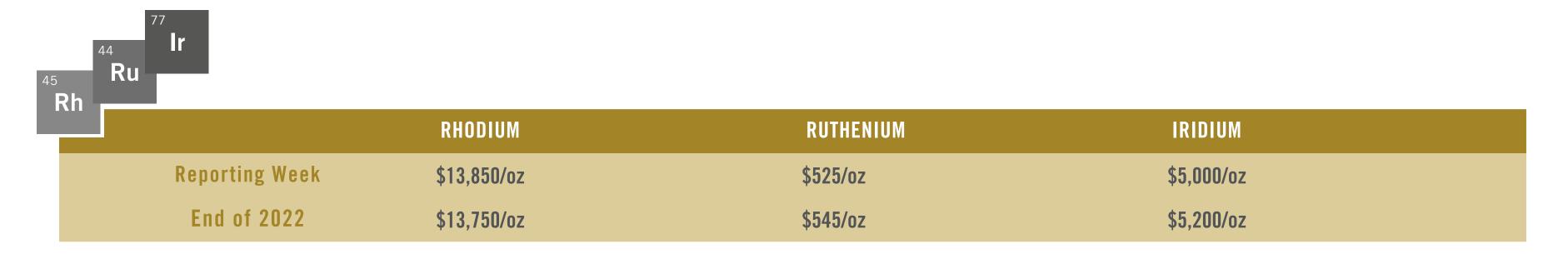
South Africa's largest palladium mine's future expansion delayed. AAP has redefined its resources at Mogalakwena mine with a lower average grade than previously thought. The mine is forecast to produce 21% of the country's projected 2.4 moz of primary supply in 2022. The lower average grade potentially shrinks future palladium supply from AAP as Mogalakwena also provides approximately 36% of the company's refined palladium output. The company has also delayed a decision on building a third concentrator at the mine, which would help to boost output, by 18-24 months as the development of underground resources continues. Eventually, the mine will transition from open-pit to underground mining.

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## PRECIOUS METALS REVIEW

## Rhodium, Ruthenium, Iridium



**Supply issues shock the small PGMs.** The price hikes seen at the end of the year in the iridium and ruthenium prices may have been due to buying from downstream users in tight iridium and ruthenium markets following the Polokwane smelter shutdown. The ruthenium price jumped 21%, but was trumped by the gains in iridium, which rose 33% to \$5,400/oz. These prices have now begun to decline, however, as seen in previous price shocks in the last two years, and they could take a number of months to return to equilibrium – excluding any further supply shocks.

The reheat of the Polokwane smelter began at the beginning of December, with first matte expected to be produced in early January. This should begin to help the market tightness of the small PGMs. However, owing to processing complexities, iridium is often the final metal to be separated and refined from the other PGMs, so it could be a number of weeks before new iridium supply from AAP reaches the market.

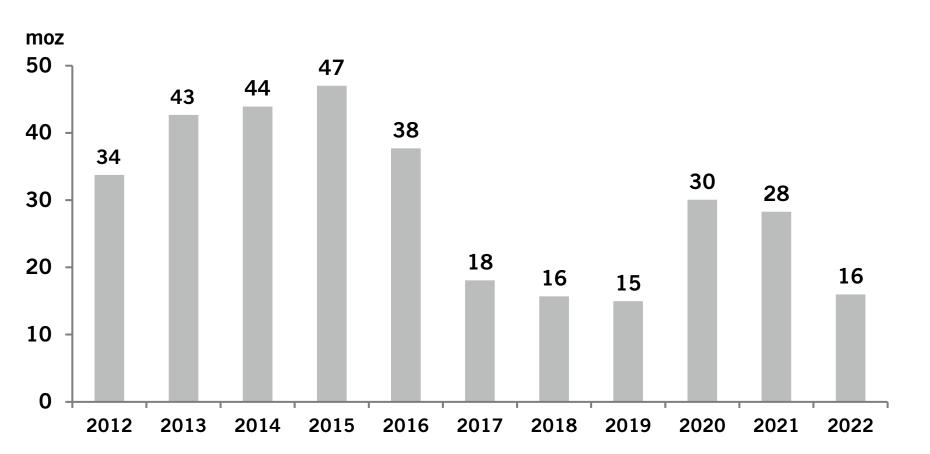
Since the end of December, the rhodium price has gained 0.73%, while iridium and ruthenium have fallen by 3.8% and 3.7%, respectively.

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## TRENDS AND INVESTMENTS

## **US** Mint annual silver coin sales



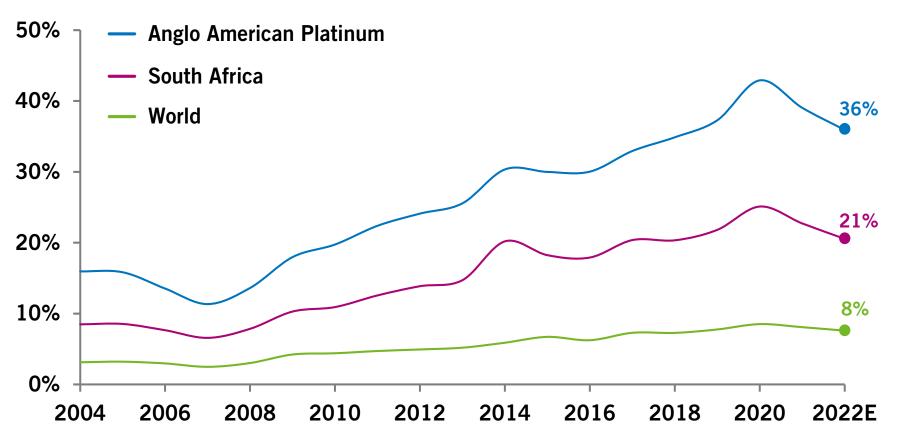
Source: SFA (Oxford), US Mint

## Platinum price



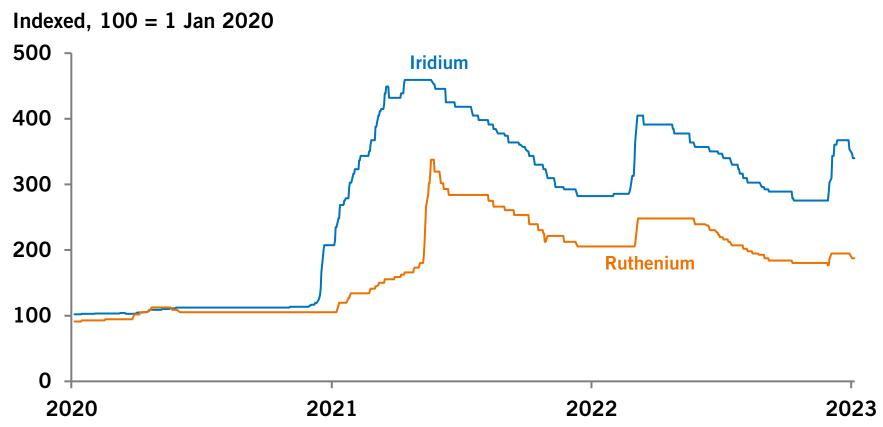
Source: SFA (Oxford), Bloomberg

## Proportion of Pd supply from Mogalakwena mine



Source: SFA (Oxford), Anglo American Platinum

## Ruthenium & iridium prices, indexed



Source: SFA (Oxford), Heraeus Precious Metals

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