Heraeus

PRECIOUS APPRAISAL

Precious Metals



28th October 2024

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PRECIOUS METALS REVIEW Gold

	79 Au Gold 196.9665							
			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
		\$/oz	2,737	0.82%	2,758	23/10/2024	2,709	23/10/2024
		€/oz	2,532	1.21%	2,558	23/10/2024	2,509	21/10/2024

Newmont has improved its gold production. As the world's largest gold producer, Newmont refined 5.54 moz in 2023 and acquired Newcrest to boost production. In Q3'24, gold production increased by 4% to 1.67 moz, but all-in sustaining costs hit a record \$1,611/oz. Costs are 50% higher than in 2020, but gold prices have risen by ~80% since early 2020, providing a very healthy margin. Newmont expects an output increase of ~8% in Q4'24 to 1.8 moz, the highest since Q4'19. This implies total production of 6.46 moz of attributable production in 2024, 6% lower than guided at the beginning of the year. Barrick, the secondlargest gold miner, has yet to release Q3 results, but earlier guidance of 3.9-4.2 moz suggests anticipated growth. First-half production was 1.89 moz, meeting only 48% of the low-end and 45% of the high-end guidance, requiring a faster production rate to meet targets.

Gold started to feel the pressure from negative vectors last week as its rise was stalled. Former President Trump's odds of re-election have bounced in the last month to the highest level since July as the US readies itself for the polls next week. The 10-year Treasury yield and dollar strength have followed the odds higher. Yields rising in the Treasuries markets show traders are concerned that the result of the election could lead to economic policy that could re-ignite inflation. Until last week, gold had resisted the pressure from rising bond yields and elevated real interest rates. Technical indicators suggested that gold was due a period of consolidation, having become 'overbought' the previous Friday. By the end of last week's trading, the gold price had risen by just 0.82% after retreating from an all-time high of \$2,758/oz on Wednesday.





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PRECIOUS METALS REVIEW Silver

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	Ag Silver 107.8682		CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
	101.0002	\$/oz	33.80	3.51%	34.90	22/10/2024	33.09	25/10/2024
		€/oz	31.26	3.93%	32.39	22/10/2024	30.56	25/10/2024

The world's top silver producer, Fresnillo, expects output to grow this year. In Q3'24, silver production increased by 3.4% year-on-year despite reduced ore milling at the main Fresnillo mine. Year-to-date, silver output is up by 2.8% compared to 2023, surpassing 41 moz. The company aims to meet its 55-62 moz guidance but it is likely to be at the lower end, with around 3% growth year-on-year. Global primary silver supply is expected to remain stable in 2024 (source: The Silver Institute), despite a weak year-on-year comparison due to Mexican supply dropping over 10 moz last year following the suspension of Newmont's Peñasquito mine. Peru's struggling output is anticipated to offset Mexico's recovery.

The silver price is down but not out. Following its escalation on 18 October to a 12-year high of \$33.76/oz, silver continued to move up early last week, rising nearly as high as \$35/oz. The \$32/oz mark had been a resistance level that the price has had difficulty surpassing since May, and it seems this was the target traders were anticipating the price to exceed. It has also been the trigger point for investment demand. Silver-backed ETFs have seen 13 moz of inflows since the level was broken, taking total holdings to 740 moz, the most in more than a year. The region around \$32/oz may now be able to form a level of support for the silver price in a new trading range, above the trading range of the past few months.



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PRECIOUS METALS REVIEW Platinum

	78 Pt Platinum 195.084							
			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
	100.001	\$/oz	1,026	1.71%	1,045	24/10/2024	1,004	25/10/2024
		€/oz	949	2.08%	967	24/10/2024	928	25/10/2024

Anglo Platinum has raised its refined platinum production forecast for **2024.** Safety stoppages and operational issues at Mogalakwena led to a 9% year-on-year decrease in PGM+Au in concentrate to 552 koz in Q3'24. Despite this, refined production grew by 22% year-on-year to 1,107 koz PGMs, primarily thanks to an improved ability to refine workin-process (WIP) inventory. The absence of any impact from Eskom power curtailment since April has enabled producers in South Africa to refine WIP inventory faster than expected year-to-date. Anglo Platinum has consequently raised refined production guidance by 0.2 moz to 3.7-3.9 moz for 2024. If there are no power curtailments, Anglo Platinum is expected to produce between 800 and 1,000 koz of PGMs in the fourth quarter, with 380-475 koz of platinum, according to the new guidance. South African platinum production was forecast to fall by 2.7% year-onyear to 3.9 moz this year. However, if Anglo Platinum achieves its upper guidance for refined production, total South African output could be slightly higher. Other South African miners are also sitting with stockpiles of WIP PGMs, built up over the last couple of years. Northam Platinum intends to refine its remaining WIP stock in H1'25, and Impala Platinum is expected to draw down its inventory incrementally until 2027.

Platinum continued its steady rise higher last week, topping out at \$1,045/oz on Thursday, supported by the rise in the palladium price.



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PRECIOUS METALS REVIEW Palladium

	46 Pd Palladium 106.42							
			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
	100.12	\$/oz	1,197	11.02%	1,216	25/10/2024	1,048	21/10/2024
		€/oz	1,107	11.48%	1,121	25/10/2024	969	21/10/2024

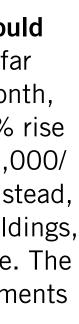
Slowing car sales add to pressure on automotive palladium demand in Europe. In September, new passenger car registrations in the EU continued on a negative trajectory, falling 6.1% year-on-year to 809,000 units across all powertrains. Total sales have been on this path since the middle of the year, having peaked at just under 1.1 million units in June. Western European automotive palladium demand is already expected to drop by 6% year-on-year from 2023 to just above 1 moz, though if car sales fail to meet expectations it could be an even larger drop.

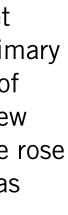
G7 sabre rattling launched palladium to a new year-to-date high last week. As the BRICs nations met in Russia last week, the US proposed that other G7 nations consider placing sanctions on Russian palladium. However, the US and other G7 nations are still importing hundreds of thousands of ounces of Russian palladium every year, in order to produce vehicle autocatalysts. Even with recycling, cutting out Russian palladium supply to the US, Germany, France and Italy would leave too big a hole to fill from other sources. South African palladium supply tends to be precontracted to end-users and is not necessarily available at short notice in large quantities. This aspect makes it highly unlikely that the G7 will go ahead with sanctioning Russian metal, given the severe disruption it would be likely to cause for their respective domestic automotive markets, particularly as primary US palladium production is forecast to drop by almost 50% year-on-year in 2025.

Palladium price inflection has led to investor interest, but bulls should **be cautious.** Investment demand for palladium has been strong so far in October. Total ETF holdings have risen by 119 koz in the last month, providing most of the year-to-date gains of 219 koz, totalling a 42% rise in global holdings. Notably, the palladium price dropping below \$1,000/ oz in recent months did not lead to anomalous ETF liquidations. Instead, investors have taken the opportunity to increase their palladium holdings, suggesting there is optimism with regards to palladium price upside. The recent rally, spurred on by the announcement of production curtailments at the Stillwater mine in Montana and short covering, appears to have added to this, despite the minimal expected impact on market fundamentals (~150 koz production curtailments vs. 6,400 koz primary supply forecast in CY'25). With production from Nornickel (~40% of global primary supply) forecast to improve in Q4'24 and into the new year, price risk remains skewed to the downside. However, the price rose more than 11% last week on the news from the G7, and support has been formed at \$1,000/oz.









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PRECIOUS METALS REVIEW Rhodium, Ruthenium, Iridium

44 Ir					
45 Rh Rhodium 102.9065		RHODIUM	RUTHENIUM	IRIDIUM	
102.9055	Reporting Week	\$5,225/oz	\$525/oz	\$5,100/oz	
	Previous Edition	\$5,225/oz	\$525/oz	\$5,100/oz	

Robust hard-disk drive demand continues to support ruthenium demand.

Seagate, one of the largest hard-disk drive (HDD) manufacturers globally, reported growth in HDD storage shipments in its results for the third quarter. In capacity terms, shipments rose 20% quarter-on-quarter and 54% year-on-year to 137.5 exabytes (1 exabyte = 1 million terabytes). This equates to approximately 1 million additional unit shipments yearon-year. The company suggests that much of the boost to shipments is due to an aggressive ramp-up of the latest generation of ruthenium-based storage technology. Additionally, the average capacity per drive has seen growth of more than 40% over the last four quarters, suggesting that the average number of disks (or platters) per drive has increased. This equals potentially higher PGM content per drive. Both ruthenium and platinum are used in the platters. A rise in HDD shipments and greater average capacity will be a positive driver for ruthenium demand, and HDDs are forecast to increase their share of total ruthenium demand to 7% this year, from 4% in 2023.

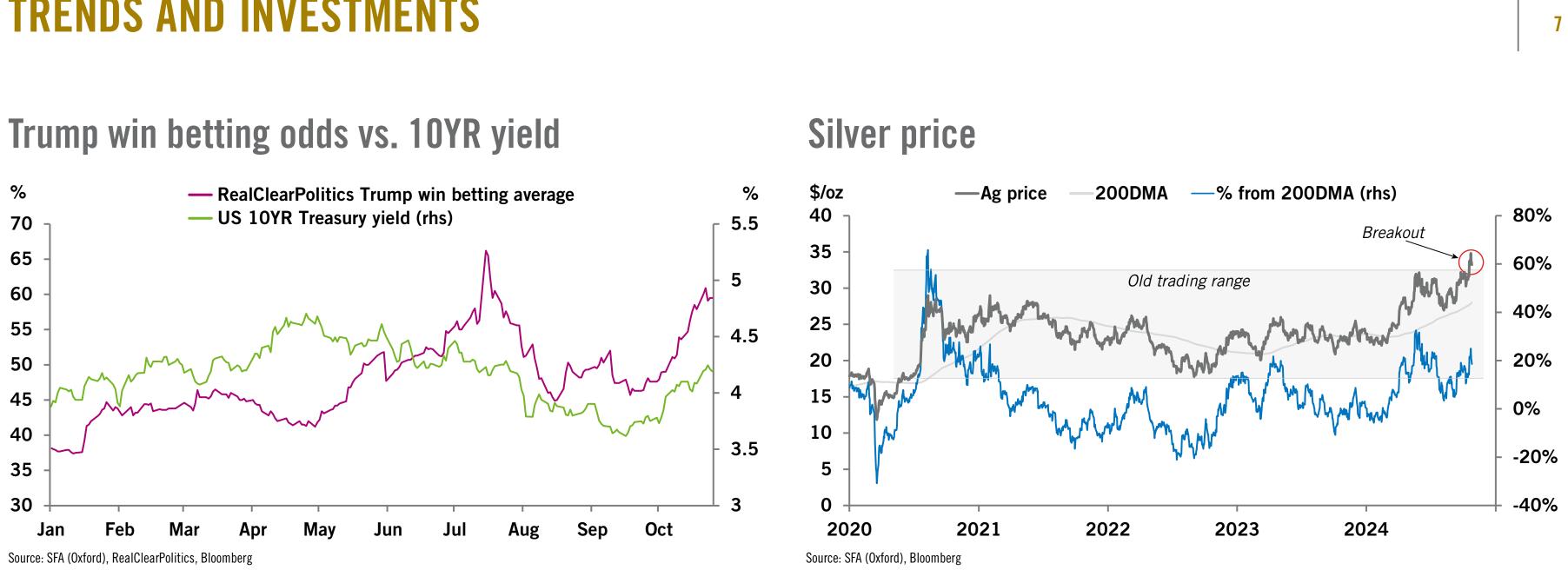
All three small PGM prices remained stable last week.



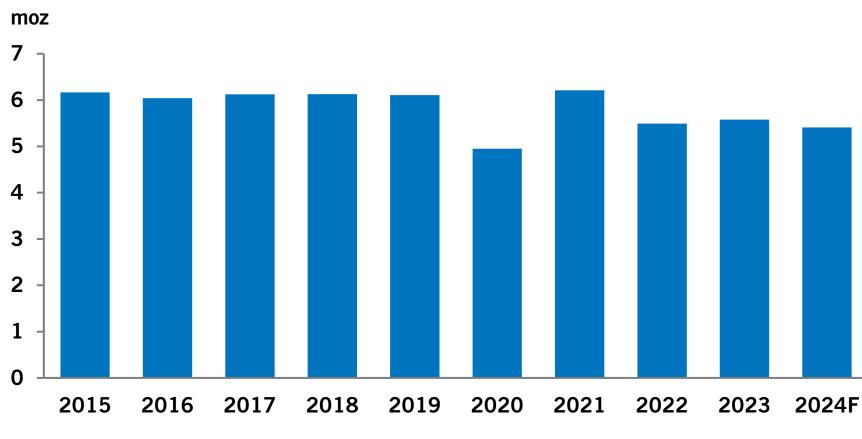
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TRENDS AND INVESTMENTS

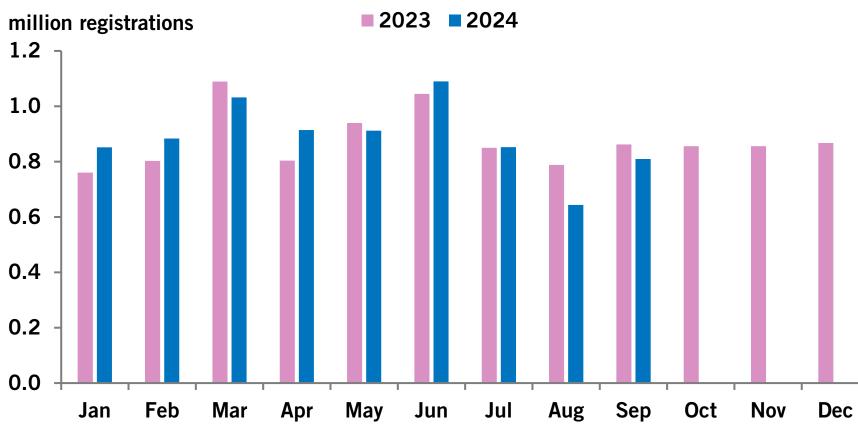


Global primary platinum production

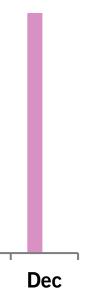


Source: SFA (Oxford)

EU passenger vehicle sales



Source: SFA (Oxford), ACEA



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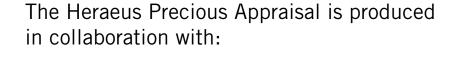
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Heraeus Precious Metals is globally leading in the precious metals industry. The company is part of the Heraeus Group and covers the value chain from trading to precious metals products to refining and recycling. It has extensive expertise in all platinum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





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