

# PRECIOUS APPRAISAL

No. 16  
23<sup>rd</sup> May 2022



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## MARKET SPOTLIGHT

### London Platinum Week returns to The City

Much of the platinum industry turned out in person for London Platinum Week last week. Geopolitical risks and ESG issues were topics of many of the conversations, as well as the shift in concerns towards the demand side from the supply of metals as real incomes begin to feel the squeeze of rampant inflation.

**Metal provenance matters.** Alongside the carbon intensity of their raw materials, end-users are considering the importance of the traceability of metal in their supply chains. Consumers are becoming increasingly aware of the source of the metal used in products and each ounce’s adherence to ESG standards. The Russia-Ukraine conflict has thrust metal that is potentially viewed as ‘unethical’ into the limelight, testing entities’ green credibility as non-Russian metal may start coming at a premium.

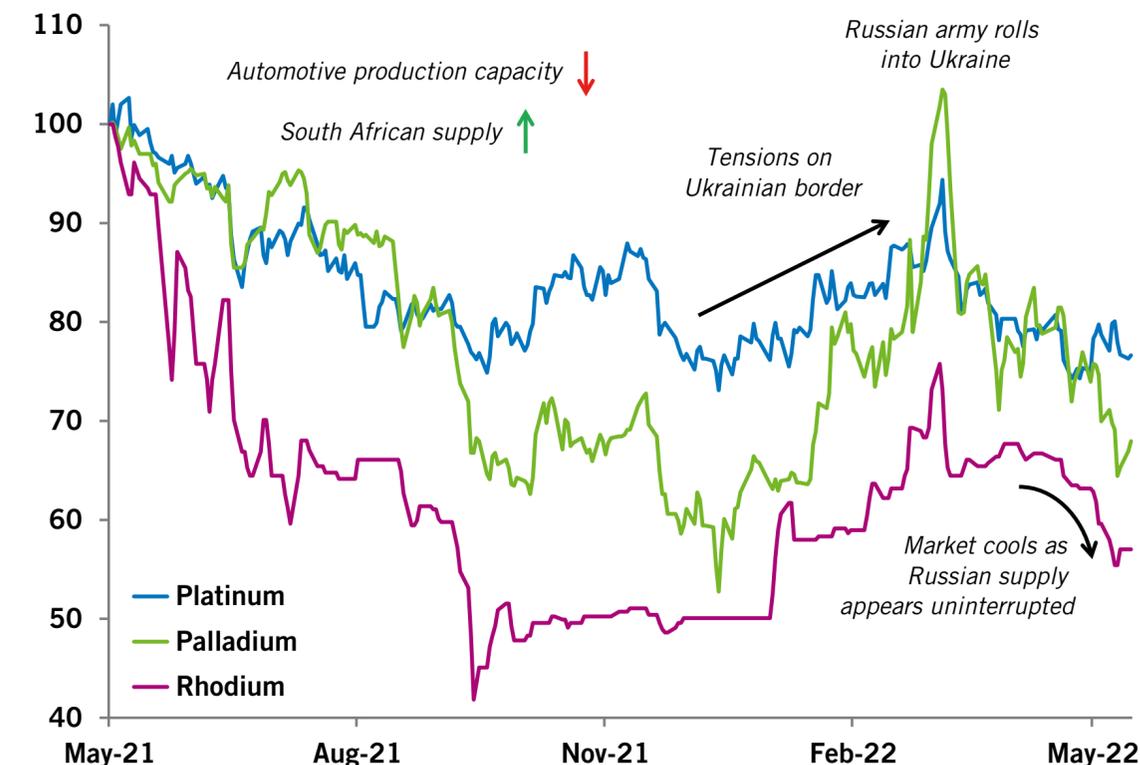
**BEVs and hydrogen fuel cell vehicles will share the green mobility space.** Automotive production forecasts for BEVs were detailed during the week. BEV fleet penetration is predicted to grow rapidly – a clear threat to future PGM automotive demand. It was stated that lithium supply will not be a limiting factor for BEV market share growth. To complement electric light-vehicle usage, hydrogen-powered, heavy-duty vehicle uptake was discussed as a growth area and a way of demonstrating the effectiveness of FCEVs. Coincidentally, Anglo Platinum has recently announced its new zero-emission fuel cell mine truck – a world first and potentially a snapshot of the future, as replacing diesel with fuel cells is more effective than batteries in large vehicles.

**Economic conditions begin to weigh on demand.** A potential problem identified for PGM demand was that inflationary pressure on consumers’ disposable income could overtake supply worries as the primary concern in H2’22. Global inflation indices edged up again in April, and with a global economic downturn appearing more likely in the next 12-24 months, a hit to automotive and jewellery demand should be expected as consumers tighten their belts.

Following last year’s Platinum Week, prices across the PGMs steadily declined to the end of 2021 as supply constraints in South Africa and Russia abated and the chip crisis impacted automobile production. This year, prices rallied early on, spiking in March owing to the war in Ukraine, but this has been followed by a two-month-long deflation of platinum (-19%), palladium (-34%) and rhodium (-22%) prices.

**Historical price seasonality would suggest more downside is to come for the platinum price.** Given the continuing monthly downgrades to light-vehicle production projections (down from initial forecasts of >90 m units to ~82 m units currently), the palladium and rhodium prices could follow suit as demand slips. However, events have had a habit of intervening and more price volatility cannot be ruled out

PGM prices indexed to Platinum Week 2021

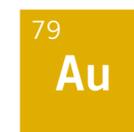


Source: SFA (Oxford), Bloomberg

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# PRECIOUS METALS REVIEW

## Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,843	1.83%	1,849	20/05/2022	1,787	16/05/2022
€/oz	1,745	0.43%	1,753	17/05/2022	1,716	16/05/2022

**Is gold losing its shine?** Inflation is hitting multi-decade highs in the US and Europe, but currently other drivers are dominant in the gold market. In the current economic climate of still elevated bond yields and sliding equities, the dollar has proved to be the safe haven of choice – as seen in its current strength compared to other major currencies. Last week, 30-year bond yields were still elevated but down from recent highs, and the S&P 500 Index is down 13.3% in the last month.

**For investors in non-dollar markets, gold has provided a better store of wealth** compared to other assets. At the beginning of the year, the gold price was moving sideways, but as the price rally took off in February the difference in performance began growing as the dollar strengthened. Now, the dollar gold price is close to its level at the start of 2022, whereas in euros gold has managed returns of around 8%. Gold has performed even better in other currencies. The relatively poor price performance of gold in dollars may explain why gold-backed ETFs (which are predominately US-based) have seen outflows on 17 out of 19 of the last trading days. These outflows totalled 2.1 moz in lost metal worth \$3.9 bn, compared to strong Q1 additions to funds of 7.8 moz. Gold did manage to find some respite late last week, with the price finishing up 1.8% on the week at \$1,843/oz.

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## PRECIOUS METALS REVIEW

### Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	21.75	3.64%	22.08	20/05/2022	20.85	16/05/2022
€/oz	20.60	2.15%	20.88	20/05/2022	20.03	16/05/2022

**Photovoltaic silver demand could receive a boost as Europe mandates solar roofs.** Last week, the European Commission president announced a mandate for solar panel requirements on public and commercial buildings in the next five years. Part of this programme is boosting the target for solar capacity in the European Union by 10% over base-case projections. The aim of the mandate is to help the region fulfil its new ambition to become independent of Russian fossil fuels as soon as possible. It could also boost silver requirements for fabrication of photovoltaic (PV) panels, which are primarily imported from China. Global PV demand (127 moz) is forecast to be 12% of total silver demand in 2022. Despite metal thrifting which has already reduced silver content in PV cells by 80% in the last decade, demand is set to grow over the next five years. After falling below a support level at \$22/oz, silver has followed gold higher but could not return to that level by close on Friday.

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# PRECIOUS METALS REVIEW

## Platinum



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	952	0.94%	972	20/05/2022	926	19/05/2022
€/oz	902	-0.41%	921	18/05/2022	884	19/05/2022

**Platinum lease rates ease from elevated levels.** Despite a sub-\$1,000/oz platinum price and a forecast market surplus of over 1.1 moz this year, 1-month lease rates for the metal have peaked in the last fortnight at more than 10%, while the 1-year rate broke through 6%. The platinum futures market has been in backwardation since 5 May, also implying tightness in the near-term physical metal market. There is low availability of platinum in ingot form compared to sponge and converting sponge to ingot incurs costs for reprocessing. Several theories have been suggested to explain the high lease rates, although none has been definitively proven. The tightness in the ingot section of the market may be due to buying from Chinese fabricators and banks. Newer, high-platinum content catalyst systems are being implemented and an uptick in heavy-duty vehicle production would require more platinum for diesel catalysts. Chinese demand for automotive platinum is currently ~800 koz and is forecast to grow, as platinum substitution for palladium in catalysts takes off and automotive sales rebound.

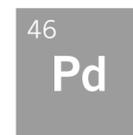
**Risks stemming from the Russia-Ukraine conflict are still a factor in the PGM markets.** The UK government announced on 8 May that a 35% hike in import tariffs will be applied to Russian platinum and palladium. Russian PGM refiners have already had their good delivery certification revoked by the LPPM which may have already reduced appetite for the metal from London traders. This will likely result in metal going

elsewhere, if the LPPM decision had not already done so. The continual changes to rules and regulations add to market uncertainty at a time when demand is also being reassessed owing to slowing economic growth.

**South African miners adding long-term supply.** Ivanplats' Northern Bushveld Platreef project successfully completed the blasting of its first production shaft. The Platreef project will produce around 50 koz of platinum p.a. in the initial phase of the mine, prior to two expansion phases which could lift output to 280 koz of platinum (680 koz 4E) at steady state by 2031. Platinum output from South Africa will not be boosted in the near term as production from the initial small-scale concentrator is not scheduled to begin until late 2024. Last week, Sibanye-Stillwater produced the first ore from the Marikana K4 shaft project, which was restarted in 2021, following the company's takeover of Lonmin in 2019. The shaft had been partially developed by Lonmin before being shut down and mothballed prior to initial production. After an eight-year ramp-up, the K4 shaft will produce 160 koz of platinum annually from around 2030, helping to offset declining output across some of Sibanye-Stillwater's other PGM assets in South Africa.

# PRECIOUS METALS REVIEW

## Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,958	0.10%	2,132	18/05/2022	1,915	16/05/2022
€/oz	1,853	-1.32%	2,019	18/05/2022	1,839	16/05/2022

**New energy vehicles bucked the downward sales trend in China.** Light-vehicle sales in China fell 45% year-on-year in April, worsening from the 2.7% decline year-on-year in March. In contrast, new energy vehicle (NEV) sales were up by the same amount for the month (source: China Association of Automobile Manufacturers), accounting for 280,000 units. The growth seen in NEV sales is primarily down to exceptional sales from Chinese OEM BYD. April was a record month for the company’s sales, totalling 105,475 units, including 57,403 BEVs, with the rest being PHEVs. The impact of lockdowns has been significant, curbing not only purchases but also automotive production and supply chains. Being a fully vertically integrated EV manufacturer may have helped BYD to avoid upstream disruption to production, and potentially the sales represent customers captured from other brands unable to fulfil orders.

**Will the palladium market be in deficit this year?** Platinum Week comes with the release of various market reports. The consensus among the most recent updates to supply and demand models is that the palladium market will be in a deficit this year. With less stock to process, supply from South Africa is projected to be lower compared to 2021; this is along with additional risks to Russian output. There is also a question mark over whether recycling will increase this year as high car prices may see old vehicles driven for longer. Automotive demand is expected to be higher than last year, even with the current difficulties faced by the auto industry (chip shortages, Russian supply risks). However, the impact of lockdowns in China has been considerable and that is likely to weigh on demand. There are significant risks to both supply and demand this year, but if Russian PGMs continue to reach the market it seems more likely that the palladium market will have a small surplus rather than a deficit and this would keep the price relatively subdued.

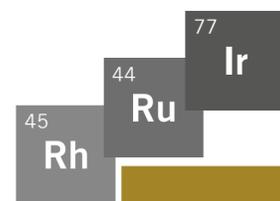
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## Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$16,450/oz	\$695/oz	\$5,350/oz
Previous Week	\$17,650/oz	\$695/oz	\$5,550/oz

**Green hydrogen providing demand growth for iridium.** The largest electrolyser in the world (1 GW) is to be installed in Denmark and will produce 100 kt of green hydrogen for powering fuel cell vehicles in Northern Europe from 2025. Large electrolysis plants are also being planned and constructed in India and the Middle East. PEM hydrogen electrolyzers contain iridium (and platinum). Currently, approximately 45% of a PEM stack's cost comes from the electrolyser's raw materials. Metal loadings will need to be thrifted to restrain costs and enable the growth in electrolyser capacity. Iridium is a small market (~300 koz) and a by-product, making its production reliant on platinum output. Currently, electrolyser demand is a small section of the iridium market, but use in hydrogen production is forecast to grow significantly year-on-year.

The iridium price remained stable last week, as did ruthenium. The rhodium price slid for a second consecutive week on a weakening automotive demand outlook for the year, finishing the week at \$16,950/oz.

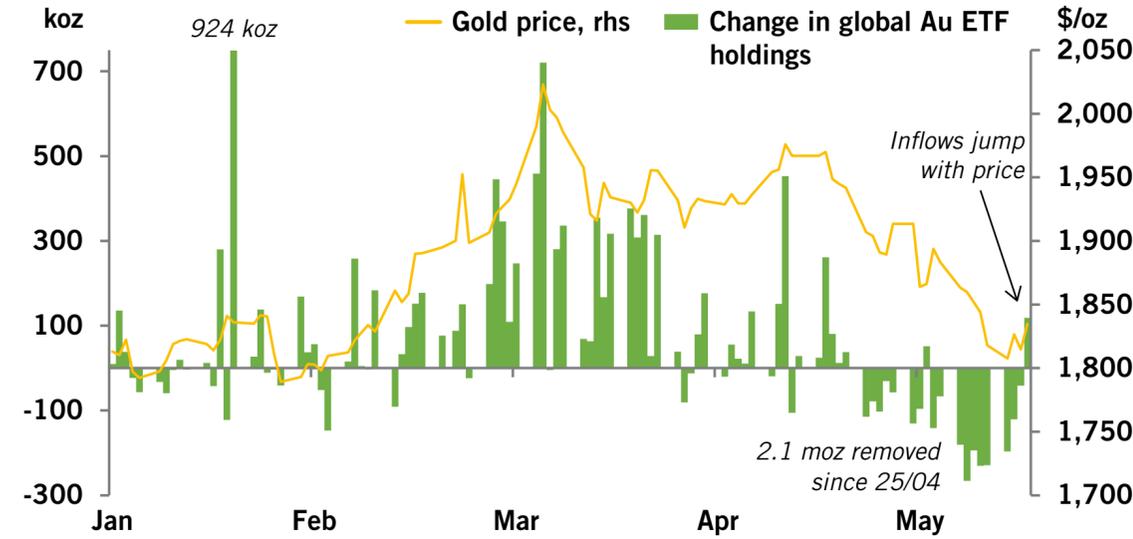
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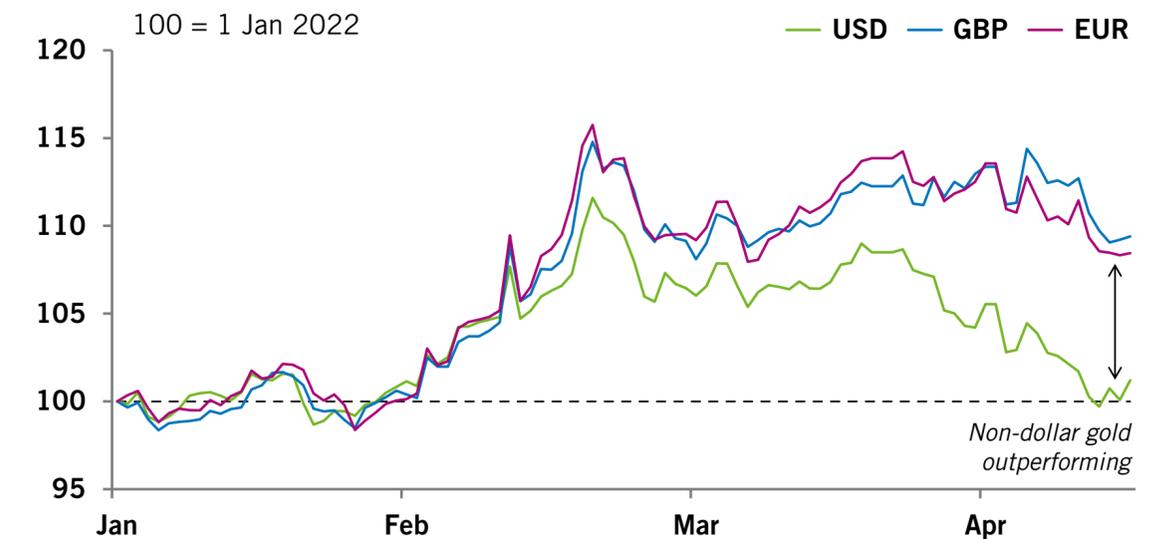
# TRENDS AND INVESTMENTS

## Gold ETF in/out-flows vs gold price



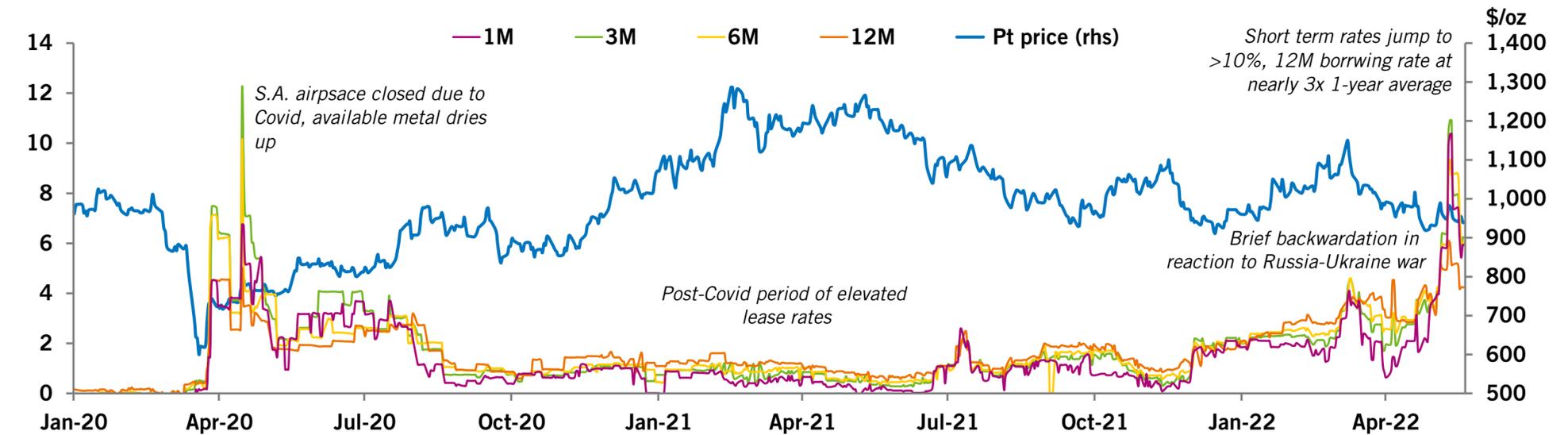
Source: SFA (Oxford), Bloomberg

## Gold price in major currencies



Source: SFA (Oxford), Bloomberg

## Platinum lease rate indicator vs price



Source: SFA (Oxford), Bloomberg

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