

PRECIOUS APPRAISAL

No. 6
28th February 2022



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MARKET SPOTLIGHT

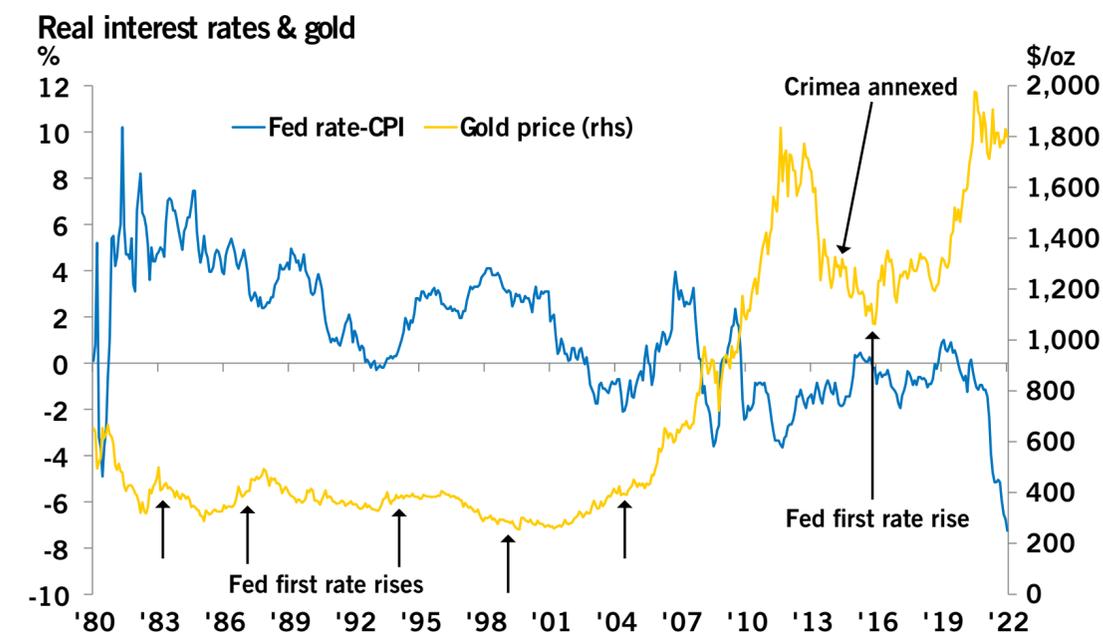
Powell vs. Putin: Whose influence is stronger for gold?

While geopolitical events can give the gold price a short-term boost, the effect can quickly wear off. Gold is seen as a safe haven, and while geopolitical tensions are high, gold can benefit. The gold price has moved ~\$100/oz higher this year as tension has built between Russia and the US and EU over Ukraine. The gold price jumped last Thursday as the situation escalated, but gave back those gains on Friday. There is still uncertainty over how long the crisis might last, and that could keep the gold price supported for a while. However, once the situation in Ukraine stabilises, the gold price could slip further. In 2014, when Russia annexed Crimea, the price rallied while tensions built, but declined once the annexation had occurred.

The Federal Reserve is expected to start raising interest rates at its next meeting in March. The market estimate is 67% for a 25 bp rise and 33% for a 50 bp rise. This slow move towards less accommodative monetary policy has allowed inflation to take off, with headline inflation reaching 7.5% in the US in January.

Monetary tightening might not be bad for gold. Previously, when the Federal Reserve has started to raise interest rates, gold has generally risen in price in the following 6 and 12 months. Since the 1980s, rate hiking cycles beginning in 1986, 1999, 2004 and 2015 were all followed by rising gold prices, with gains of 10-20% over the next six months. The exceptions were 1983 when the price fell by over 11% and 1994 when the price slipped by 3%.

Real interest rates are deeply negative, and are likely to stay negative even with the Fed raising rates. While inflation may ease, it is likely to stay well above the Fed's 2% target for some time. Escalating energy prices have contributed to high headline inflation and the year-on-year gains may become smaller as 2022 progresses. However, core inflation, which excludes food and energy, is also high at 6.0% in the US in January. This shows that the drivers of inflation are broader than just commodity prices. The gold price looks undervalued compared to how low real interest rates are, and this could support a higher gold price even without the safe-haven boost from geopolitical tensions.



Source: SFA (Oxford), Bloomberg

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PRECIOUS METALS REVIEW

Gold

79 Au	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,884	-0.63%	1,974	24/02/2022	1,878	24/02/2022
€/oz	1,674	-0.04%	1,768	24/02/2022	1,662	21/02/2022

Investors and speculators have returned to gold. Speculators' net position of gold futures has risen by 18.6% to 23.9 moz since the beginning of February (prior to the Ukrainian invasion). Daily average trading volume for gold ETFs was up 49% for January compared to the average for FY'21 and is higher still for the month to date in February (January: \$2.39 bn, February MTD: \$2.82 bn) (source: World Gold Council). The largest market for gold ETF trading is North America, where US-based funds have 56.6 moz of ETF-held gold. Germany is in second place with gold ETFs that boast combined holdings of just over 10.5 moz. German and US ETF holdings have risen by 325 koz and 1.9 moz, respectively, since the start of the year.

Preferential access for gold exports from the UAE to India. India and the UAE have agreed to cut tariffs on gold trade across the Arabian Sea. According to the terms of the agreement, Indian jewellery exports to the UAE will have zero duty access into the trading hub, where currently the UAE charges 5%. Importantly, gold exportation from the UAE to India will see a 1% tariff advantage over imports from the rest of the world, up to 200 tonnes. This move is unlikely to increase Indian demand for the metal but should encourage Indian buyers to preferentially import from the UAE. India is the second-largest gold jewellery market, with demand of 611 tonnes last year.

Safe-haven gold showing its mettle. Financial markets have reacted violently to the Russian actions in Ukraine with equities selling off, the dollar strengthening, and the gold price rising. The oil price jumped higher despite a US State Department official saying that any sanctions against Russia will not include oil or gas. In euros, the gold price reached a new record of €1,768/oz, but gold's gains on Thursday were more than reversed on Friday.

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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	23.90	-0.19%	25.63	24/02/2022	23.71	21/02/2022
€/oz	21.23	0.43%	22.92	24/02/2022	20.89	21/02/2022

Global silver demand to increase in 2022 as auto sales shift up a gear.

Total silver demand for 2022 is projected to reach 1.1 billion ounces, up by 8% year-on-year (source: The Silver Institute). With growing electrification of light-duty vehicles (LDVs) comes greater consumption of silver. Silver usage in ICE vehicles varies depending on the complexity and extent of the electrical components used, and thus a single LDV can contain 0.5-0.9 oz of silver. Full hybrids can contain 0.6-1.1 oz of silver per LDV and BEVs more still, in the range of 0.8-1.6 oz. This year, BEV and full hybrid vehicle sales are forecast to increase globally by 53% and 39%, respectively. Assuming these sales are displacement of pure-ICE sales, the higher demand due to sales of electrified LDVs in the personal auto sector will be between 0.7 moz and 1.5 moz. The total growth in silver demand in the auto sector will be higher as electrification of models in the commercial sector is also forecast to increase, incrementally adding to the 300+ moz electrical demand for silver.

The US's largest silver producer manages to expand output despite Covid workforce issues. Hecla's total silver production in 2021 was 12.9 moz, 300 koz higher than in the previous year. The mining company is the largest US producer of silver and was responsible for 40% of the country's output last year. The biggest development came from the implementation of new mining techniques at the Lucky Friday Mine in Idaho where production grew by 75% year-on-year. However, these gains were largely offset by a poor Q3 production number from Hecla's Alaskan operation caused by operational disruption due to Covid, resulting in only a modest rise in the year's total silver output. The company's guidance for the next three years includes a steady ramping up of production from 2021's numbers to a top-end guidance figure of 15.1 moz of silver by 2024.

The silver price has been following gold, surging higher on Thursday and then falling back on Friday.

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Platinum

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Pt

	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,055	-1.81%	1,130	24/02/2022	1,041	24/02/2022
€/oz	937	-1.16%	1,009	24/02/2022	930	24/02/2022

Opportunistic platinum purchases from China resulted in record imports last year. Trade data show that exports of platinum to China and Hong Kong reached a record of 2.9 moz in 2021. Chinese buying increased significantly in August and December when the platinum price fell below \$1,000/oz. The imports were higher than estimated demand of 2.4 moz, but now the price is rallying imports could drop back while the stock is used. Chinese buyers had similarly stocked up in March 2020, when the price fell as low as \$600/oz, and again in September and October 2020, when the platinum price retreated to below \$900/oz after rallying to \$1,000/oz in August. The platinum price has benefitted least from the rally in metal prices over tensions around the Ukraine situation. This is unsurprising considering the market has an industrial surplus of 1 moz forecast for this year, which is even larger than Russian supply (670 koz), and surpluses in previous years mean that stocks are plentiful.

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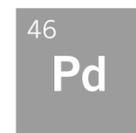
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Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	2,347	1.27%	2,715	24/02/2022	2,318	25/02/2022
€/oz	2,084	2.09%	2,424	24/02/2022	2,041	21/02/2022

Sanctions have not hit Russian palladium output in the past. Russia is the largest producer of palladium, with output predicted to be 2.7 moz this year (38% of global primary supply). So far in response to Russian actions regarding Ukraine, US and European sanctions have targeted financial institutions and people in government and close to Putin. Neither Nornickel nor PGMs have been targeted by sanctions previously, and currently there is no suggestion that they would be included in any further sanctions. If they were targeted, short-term disruption to supply could occur, but it seems unlikely that sanctions would prevent the metal from leaving the country. Exports to China would still be possible, and China uses more PGMs than Russia produces (~3.2 moz of palladium, ~2.5 moz of platinum and ~370 koz of rhodium).

The palladium price surged on concerns around supply. Given the Russian actions in Ukraine, the worry is that sanctions could curb palladium availability, but, as discussed above, that seems unlikely at the moment. However, amid heightened uncertainty buyers were not taking any chances, pushing the price above \$2,700/oz last Thursday. The palladium price has already given back some of those gains. An improving outlook for auto production has tightened the palladium market this year and that helped to lift the price above \$2,000/oz, so the price could stay elevated once the situation stabilises.

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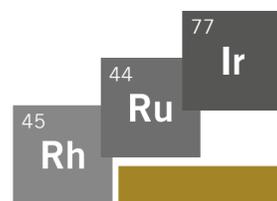
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Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$21,450/oz	\$575/oz	\$4300/oz
Previous Week	\$19,550/oz	\$575/oz	\$4,200/oz

Rhodium tops the podium for Anglo. This week Anglo American Platinum released its yearly revenue for 2021, including production results for the South African PGM mines. With strong price performances, the small PGMs' revenue contribution increased. Rhodium was the stand-out performer, overtaking palladium to become the element generating the largest revenue for the company. This is due to the significant price gains rhodium made in 2021, despite palladium also reaching all-time highs during the period. Guidance for 2022 takes into account the impacts of planned maintenance of concentrator and smelter facilities and forecasts a total refined PGM production of 4.1-4.5 moz, of which 0.9-1.0 moz is small PGMs plus gold.

Russia is a small, but still important, source of small PGMs. As discussed above for palladium, it currently seems unlikely that PGM output will be impacted by sanctions. However, should there be any supply disruptions, the rhodium and iridium markets are more likely to be affected than ruthenium, with the risk being to the upside for prices. Russia produces about 10% of global primary rhodium supply, and 8% and 4% of iridium and ruthenium, respectively.

The rhodium price rose by \$1,900/oz last week, iridium was up \$100/oz, and the ruthenium price held steady.

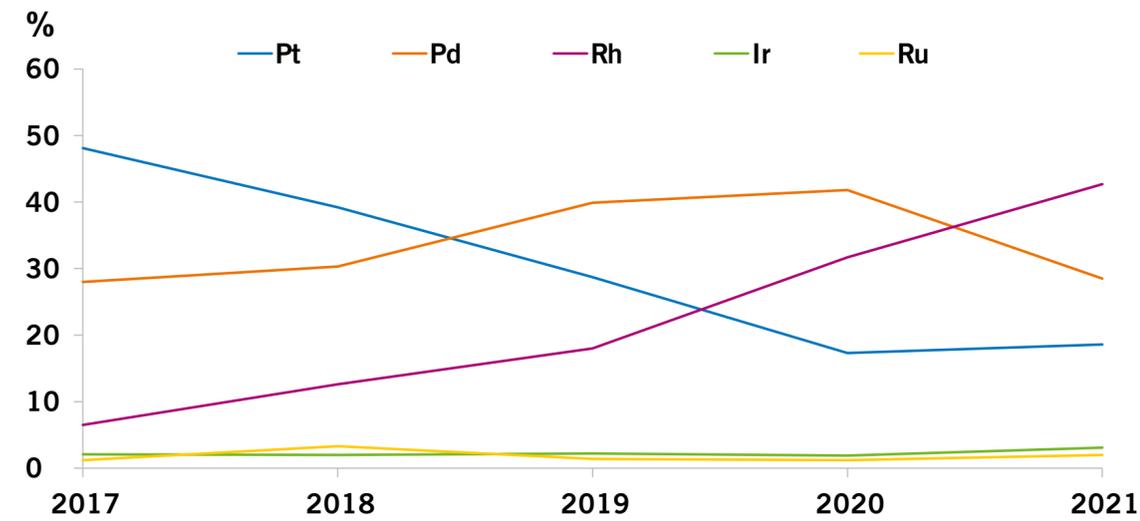
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TRENDS AND INVESTMENTS

PGM contribution to Amplats net Revenue



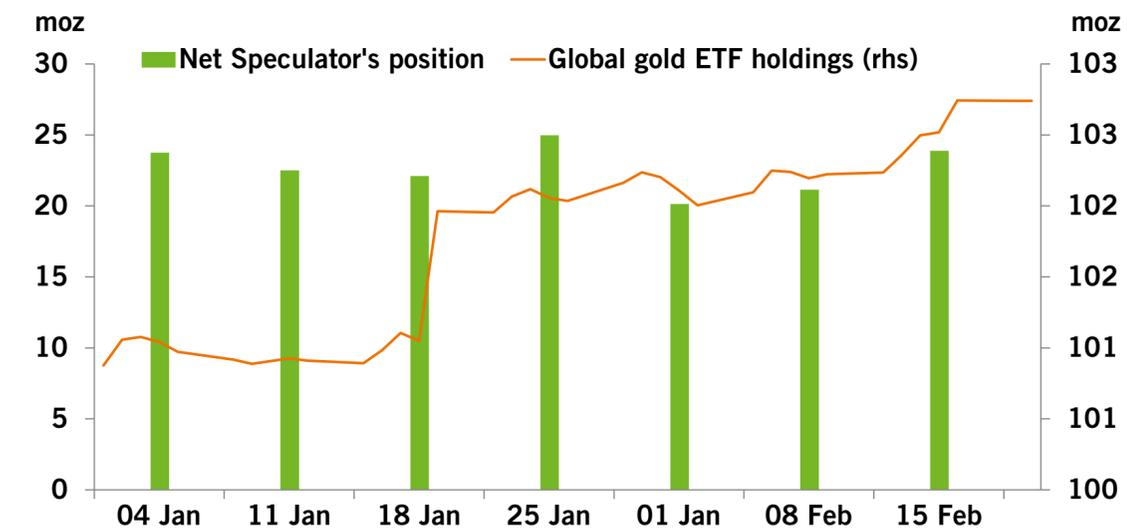
Source: SFA (Oxford), Anglo American Platinum

Palladium price



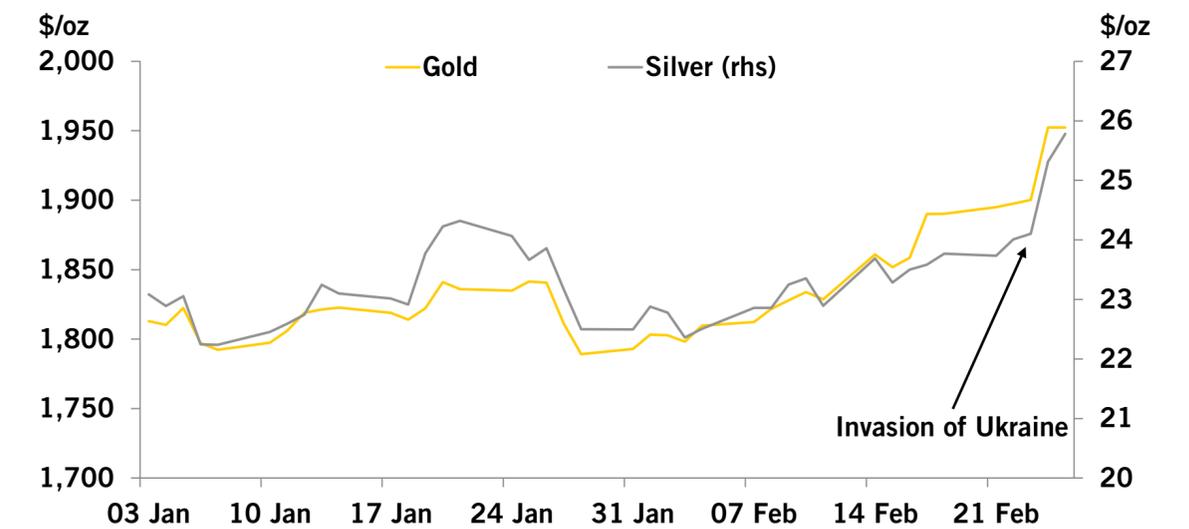
Source: SFA (Oxford), Bloomberg

Investor and speculator positions



Source: SFA (Oxford), Bloomberg

Gold vs. silver price YTD



Source: SFA (Oxford), Bloomberg

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