

21st March 2022

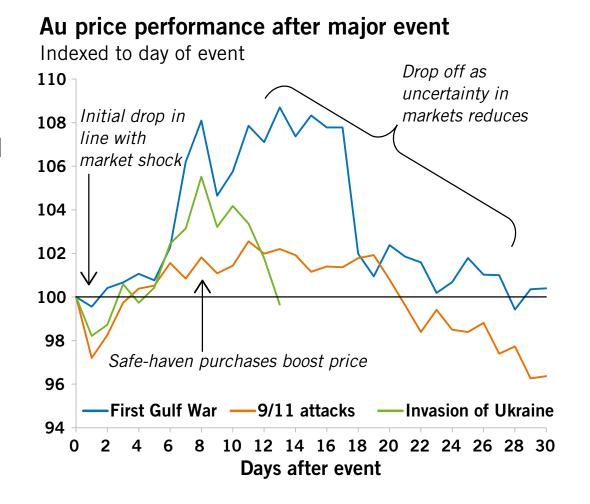
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MARKET SPOTLIGHT

RUSSIA-UKRAINE CONFLICT PUTS PALLADIUM AND RHODIUM AUTOMOTIVE DEMAND AT RISK

Gold, silver and PGM prices were boosted by the uncertainty around Russia's invasion of Ukraine. Palladium rallied from \$2,423/oz to an all-time high of \$3,440/oz a week into the conflict. All other PGMs saw smaller but still significant gains. The gold price tested its August 2020 all-time high of \$2,067/oz on 8 March, falling less than 2% shy at \$2,039/oz.



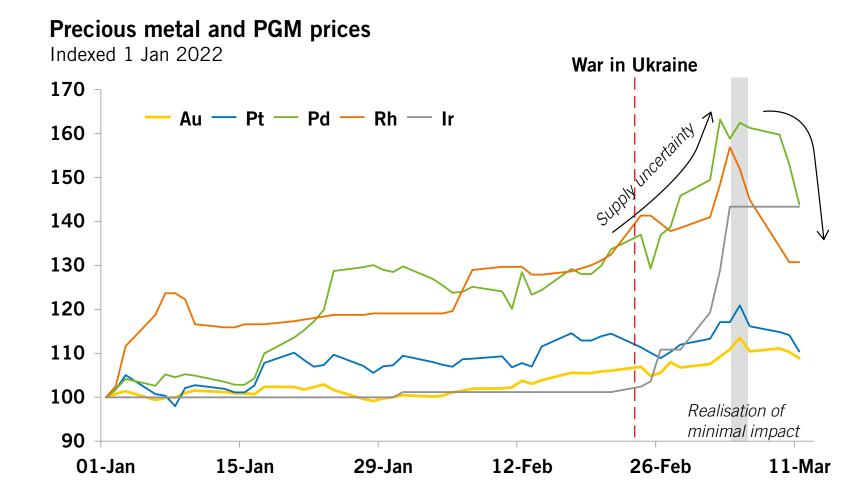
Source: SFA (Oxford), Bloomberg

However, uncertainty has receded and so have the prices. For gold and silver, the price driver in the first days of the conflict was safe-haven purchasing – similar to behaviour seen in the past following major geopolitical events. Historical data suggest that trading will return to pre-invasion levels or below by the end of the month following the event.

Sanctions have not targeted PGM supply from Russia. As sanctions were first being imposed on Russia, it was unclear whether Nornickel's exports would be targeted. Russia produces 38% of the world's primary palladium supply and 10% each of platinum and rhodium. This caused PGM prices to rise and saw palladium reach an all-time high, as end-users bought to ensure their supply. Now that several rounds of sanctions have been imposed, PGMs have still not been directly affected. The likelihood is that the metal will continue to reach the market. As uncertainty subsides and peace talks proceed, prices across the metals are falling.

Risks to the automotive demand recovery are to the downside, as expectations for light-vehicle production are being scaled back. The war has exacerbated component supply issues within European auto manufacturing, causing production to cease at some plants. An estimated 50,000 vehicles have been prevented from finishing completion thus far.

While Western European auto production has had its bounce-back dampened, the region's PGM demand is forecast to grow by 7% year-on-year, surpassing 1.3 moz of palladium and 240 koz of rhodium in 2022 as the semiconductor chip shortage is expected to be mostly overcome later this year. Taking the impact of the Ukraine conflict into account, both markets are predicted to have small surpluses this year. However, the chip shortage could get worse as 50% of neon supply (used in chip fabrication) comes from Ukrainian suppliers that are now non-operational, and Covid-related lockdowns continue in chip fabrication hubs in China. **That puts automotive palladium and rhodium demand at risk of weakening further and prices could decline.**



Source: SFA (Oxford), Bloomberg

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PRECIOUS METALS REVIEW Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,929	-2.89%	1,973	14/03/2022	1,895	16/03/2022
€/oz	1,744	-3.98%	1,805	14/03/2022	1,726	16/03/2022

Interest rates finally start to rise in the US. The Fed has hiked up rates for the first time in four years with a 25 basis point increase, and more increases are coming. In December, the committee's consensus was that by the end of 2022, the funds rate would be around 1.0%. In the dot plot released after last week's press conference, the participants have taken a far more hawkish view with the median projection for the funds rate nearly double that, at 1.9%, by the end of the year. One committee member placed the year-end rate above 3%. This adjustment to the Fed's outlook means it is now in line with the probabilities derived from interest rate futures, which show a 38.6% chance that the target rate will be between 2% and 2.25% at year-end (source: CME). As real interest rates creep up, appetite for gold as an inflation hedge could diminish. However, even if the Fed's upper estimates of rate raises become reality, inflation will still be ahead, and real interest rates negative, maintaining a positive environment for gold in the medium term.

The ECB is still trailing the Fed. Inflation in Europe increased to 5.8% in February. At its recent meeting, the ECB announced a faster winding down of net asset purchases in Q2. However, only once the Asset Purchase Programme has been halted will the ECB consider upping interest rates to start to steer inflation to its 2% target rate.

Gold demand in Russia has surged. On 9 March, President Putin signed into law a cancellation of the 20% Value-Added Tax on gold sales from banks to individuals. Since then, Russian consumers' demand for the metal has shot up. The ruble has weakened significantly against the dollar and Russians now have a tax-free safe haven. The ruble started the year at 75 per dollar and reached an intraday low of 177 on 7 March. It may be that the worst of the devaluation has already happened as it now trades at 104. The Russian central bank has stopped buying gold from credit institutions as of 15 March to facilitate this rising consumer demand.

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PRECIOUS METALS REVIEW

Silver

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			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
		\$/oz	24.96	-3.90%	25.65	14/03/2022	24.47	16/03/2022
		€/oz	22.57	-4.98%	23.46	14/03/2022	22.18	16/03/2022

Silver's popularity has jumped in the UK. The number of newly fabricated silver items hallmarked at the Birmingham Assay Office increased by 180% year-on-year in February. More than 500,000 pieces were hallmarked last month, representing the largest volume of hallmarked pieces across the precious metals. The jump in hallmarking adds to the gains of 2021, during which time the number of silver pieces hallmarked grew by 57%.

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PRECIOUS METALS REVIEW

Platinum

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			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE	
		\$/oz	1,033	-4.36%	1,058	14/03/2022	983	15/03/2022	
		€/oz	934	-5.42%	967	14/03/2022	897	15/03/2022	

Lockdowns in China threaten both jewellery fabrication and sales.

Shenzhen, a major Chinese jewellery fabrication and trading hub, was hit by lockdowns last week. The city processes and manufactures approximately \$12.5 billion of all jewellery annually. Much of what is manufactured in Shenzhen is sold in nearby Hong Kong, which is currently also under Covid lockdown. China is the largest platinum jewellery market at 870 koz, accounting for 50% of worldwide demand. Platinum jewellery demand in China has been contracting for several years and is predicted to slip by 1% this year. If China continues to pursue a zero Covid policy, the risk is that continued lockdowns in major industrial, manufacturing and population centres will reduce demand further.

Platinum coins remain popular with investors. The US Mint has sold 37 koz of platinum American Eagle bullion coins so far this year, surpassing the 35 koz sold in Q1 last year. In contrast, ETFs have seen a drop in holdings of 127 koz, or 3.5% since the beginning of the year.

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PRECIOUS METALS REVIEW

Palladium

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			CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
		\$/oz	2,497	-11.01%	2,674	14/03/2022	2,330	14/03/2022
		€/oz	2,258	-12.09%	2,449	14/03/2022	2,147	14/03/2022

February was the worst month for new passenger car registrations in Europe since records began. Car registrations for the first two months of the year were down 6.4% year-on-year, and down a record 6.7% in February, indicating that the impact of renewed supply chain issues is already hitting demand.

The auto industry's struggles are far from over. The impact from recent component supply issues in Europe is beginning to materialise in long-term forecasts. S&P Global Mobility slashed its 2022 global car production projections by 2.6 million units for both 2022 and 2023, to 81.6 m units and 88.5 m units respectively. For the European market, the projection is that 1.7 million fewer vehicles will be produced in 2022, a potential loss of 14%. Of that number, 700,000 lost units are the result of continuing semiconductor supply issues combined with the need to find alternative sources for Ukrainian-made wiring harnesses for European OEMs. The largest portion of the shortfall is lost demand in Russia and Ukraine. This forecast loss to production numbers could result in a reduction of around 250 koz in global palladium demand in 2022. That could move the palladium market further into surplus this year and see the price pull back further.

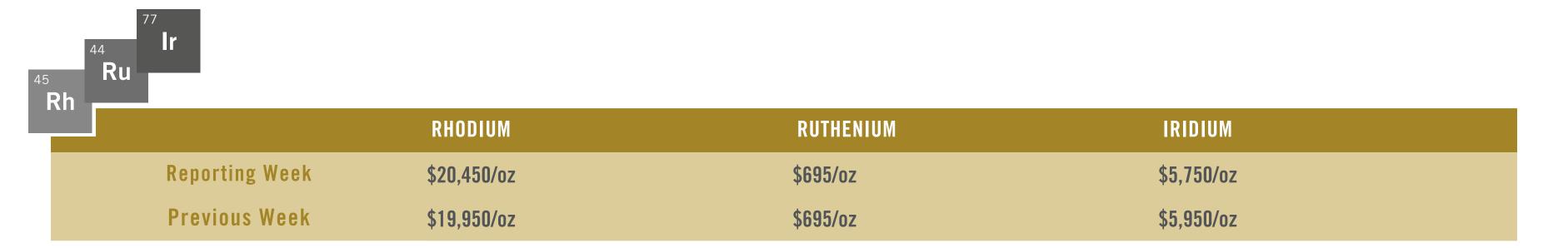
Investors take profits and sell palladium ETF holdings. Total ETF holdings of palladium fell by 6.1% last week, a total loss of 36 koz, to 544 koz. Prices dropped sharply and lease rates pulled back last week after Nornickel's company president confirmed that alternative routes to market have been secured for palladium shipments, alleviating supply uncertainty.

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PRECIOUS METALS REVIEW

Rhodium, Ruthenium, Iridium



Developments in high-temperature fuel cells support the hydrogen economy. US hydrogen power start-up Advent announced the availability of next-generation, high-temperature PEM fuel cells with samples sent to selected major OEMs. High-temperature units are more suitable for heavy-duty applications. Another upside to high-temperature units is the ability to utilise multiple fuel types including low-grade hydrogen. The company predicts its fuel cells will be in mass production by 2024. The hydrogen economy is expanding and iridium demand is growing rapidly from a low base.

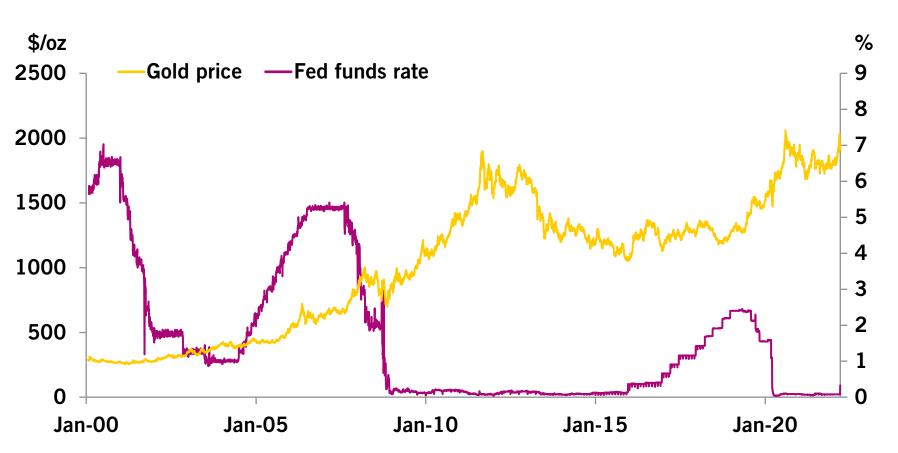
The rhodium price gained marginally to reach \$20,450/oz last week while ruthenium stayed stable, finishing at \$695/oz. Iridium retreated by \$200/oz to end the week at \$5,750/oz.

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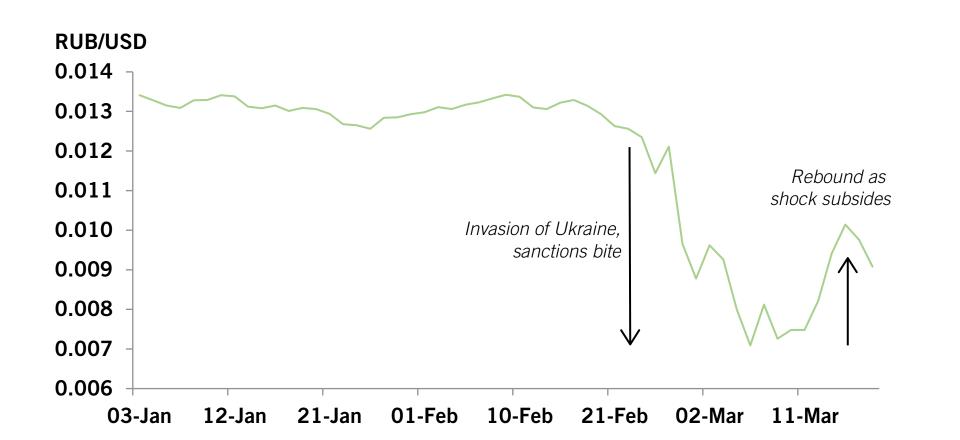
TRENDS AND INVESTMENTS

Gold price vs Fed funds rate



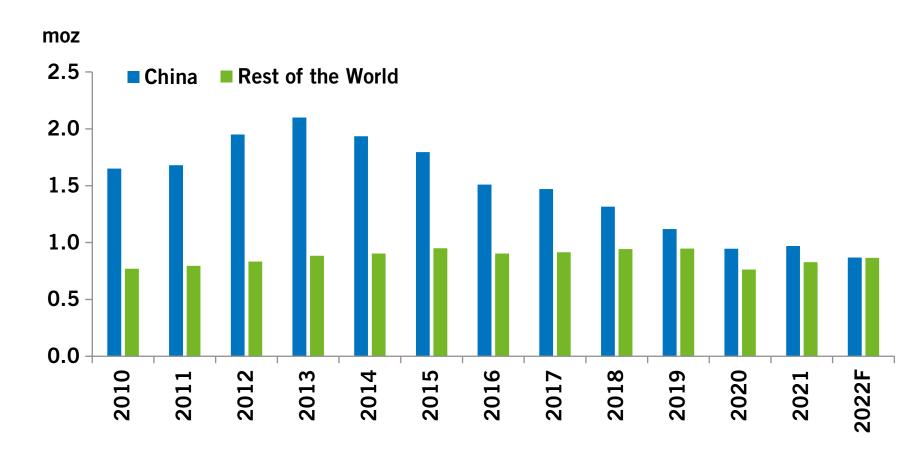
Source: SFA (Oxford), Bloomberg

Ruble-US dollar



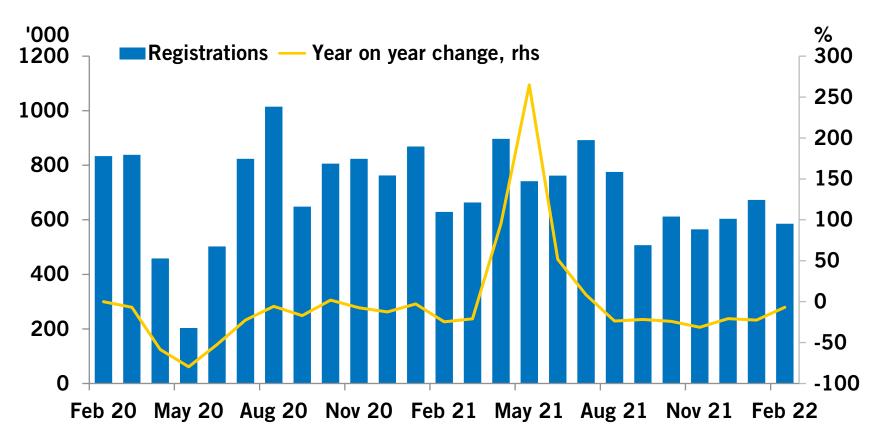
Source: SFA (Oxford), Bloomberg

China platinum jewellery sales vs rest of the World



Source: SFA (Oxford)

Eurozone new passenger car registrations



Source: SFA (Oxford), Bloomberg

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