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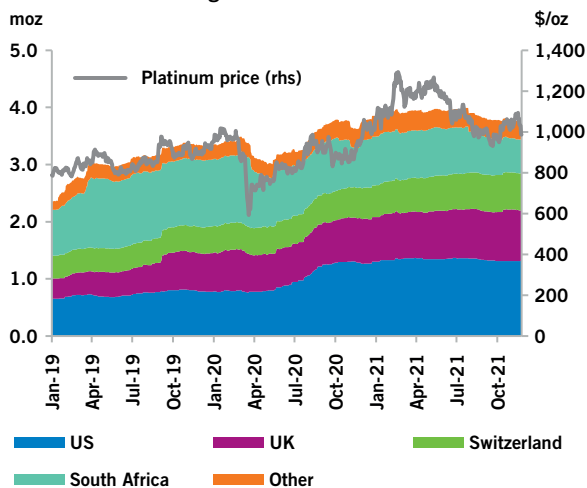
MARKET SPOTLIGHT

Platinum and gold ETFs retreat in 2021

Global platinum ETF holdings have slipped by 92 koz to 3.76 moz in the year-to-date. They were up 116 koz in the first half of the year and reached a record 3.99 moz in July but have since dropped back as the price declined. The largest drop was in South Africa, -263 koz to 591 koz in the year so far. Japanese investors also took profits in Q2 when the price was above ¥4,000/g. However, inflows to European and US-listed funds have been strong, perhaps encouraged by regular news on developments in the hydrogen economy.

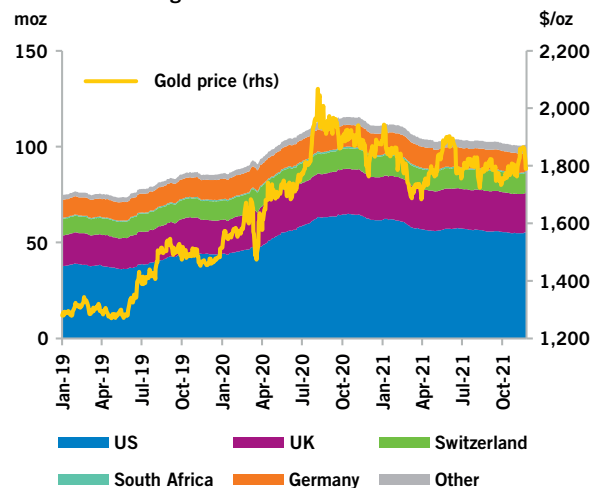
Palladium ETF holdings have risen by 66 koz year-to-date, taking global palladium ETF holdings to 567 koz. Investors have spent the last several years taking profits on their palladium investments as the price rose. ETF holdings are down from almost 3.0 moz in 2014 and provided an additional source of metal in deficit markets. However, the sharp fall in the price since May has resulted in some renewed interest. That may prove premature with the semiconductor chip shortage likely to restrain auto demand next year.

Platinum ETF holdings



Source: SFA (Oxford), Bloomberg

Gold ETF holdings



Gold ETF holdings have declined by 10 moz in the year-to-date to 101 moz, after reaching a record high with the gold price in Q3'20. Surprisingly, German-listed ETFs have recorded the largest decline on a percentage basis (-11%), losing 1.3 moz over the course of 2021 so far, as physical bar and coin purchases have been robust at 3.9 moz in the first three quarters (source: World Gold Council). Gold ETFs have a close correlation to the price, which has been weakened by rising yields and a stronger US dollar.

In contrast, silver ETF holdings are stickier having risen by over 80 moz so far this year, taking the global total to 1,108 moz. This is down just 5% from the peak achieved in February 2021 (1,168 moz) when retail traders tried to force a short squeeze on the silver market.

For gold, ETFs are a significant part of investment demand and lack of interest could hold back the price. With sales by ETF investors, total gold demand is expected to fall short of the long-term average (~ 4,380 tonnes) this year. In the past, investment has been important for platinum as it has soaked up some of the industrial surplus, but without that support the price could remain subdued.



PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,785	-3.87%	1,847	22/11/2021	1,779	24/11/2021
€/oz	1,579	-3.74%	1,639	22/11/2021	1,575	26/11/2021

Powell reappointment hits gold. The gold price tumbled last Monday when it was confirmed that President Biden would nominate Jay Powell for a second term as Federal Reserve Chairman. The other person in contention was Lael Brainard who is perceived as being more dovish. Treasury yields rose and gold sold off as policy tightening was now seen as more likely. In fact, the gold price was already weakening following comments from the Fed Vice Chair Richard Clarida that a faster taper might be

on the agenda at the next Fed meeting in December. The implication of this being that it would also mean raising interest rates earlier. The minutes of the last Fed meeting that were released last week confirmed that both a faster taper and raising interest rates sooner were possible if inflation remained high. Gold's breakout was short-lived and, even with a move back to safe havens at the end of the week, gold is going to have to do more to break out of its trading range.

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	23.07	-7.29%	24.89	22/11/2021	22.92	26/11/2021
€/oz	20.41	-7.15%	22.07	22/11/2021	20.27	26/11/2021

Environmental permits and social licence to operate are critical issues for miners. Following protests by locals against mining in the Ayacucho region, Peru's Prime Minister had said that several mines there would need to close. This included Hochschild Mining's Inmaculada and Pallancata mines (13 moz combined output in 2019). Subsequently, the government clarified that operations that fulfilled their legal obligations and had permits would not be forced to close. However, Fortuna Silver might

not be so fortunate, as the Mexican authorities have not renewed one of its environmental permits which may result in the San José mine being unable to operate. The mine produced 7.9 moz of silver in 2019. Mexico is the largest silver-producing country and Peru is the second-largest, with output of 188 moz and 136 moz respectively in 2019 (production was lower in 2020 owing to Covid restrictions). The silver price followed gold lower and also remains stuck in its trading range.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	956	-7.91%	1,043	22/11/2021	950	26/11/2021
€/oz	847	-7.67%	925	22/11/2021	841	26/11/2021

Eskom failings are paving the way for South Africa's green hydrogen economy. South Africa's energy crisis is expected to continue for at least two more years owing to ongoing operational problems at the state-owned utility, Eskom. Eskom supplies ~90% of South Africa's electricity, mostly generated by coal-fired power stations, but there is a critical shortage of generating capacity (4,000-6,000 MW). Power outages (blackouts) are forecast to reach record levels this year, with no sign of the problem easing in the near term. Electricity prices have increased more than six-fold over the past decade, and now represent the second-largest cost (after labour)

for deep-level and energy-intensive mines in South Africa. Member companies of the Minerals Council South Africa indicated they have 3,900 MW of renewable energy projects which, if built, would relieve pressure on Eskom and could account for around a third of the mining sector's annual electricity consumption. A shift to renewables would not only provide environmental benefits for South African producers, but also create a platform for domestic green industries, such as hydrogen, which would boost platinum demand. The platinum price also suffered a rapid sell-off last week, but the price found some support once it fell below \$1,000/oz.



PRECIOUS METALS REVIEW

⁴⁶ Pd **Palladium**

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,775	-14.66%	2,082	22/11/2021	1,700	26/11/2021
€/oz	1,547	-15.85%	1,847	22/11/2021	1,540	26/11/2021

Industrial palladium consumption is set to remain flat at 1.5 moz next year as the rate of expansion in certain chemical applications in China slows. Elsewhere, additional thrifting and substitution in various electrical components are predicted to continue to reduce palladium requirements in Asia. Ongoing substitution away from traditional precious metal alloys in dentistry could be accelerated, depending on prices, particularly if Japanese government subsidies are amended to favour non-palladium-based alternatives.

A risk-off end to the week. Palladium suffered the steepest decline last week as rising cases of a new coronavirus variant triggered risk-off sentiment across global markets. The price has been falling since it failed to push above resistance at \$2,220/oz earlier in the month, and last week's market anxiety saw its decline accelerate. While automotive demand remains constrained from the semiconductor chip shortage, the price is likely to remain under pressure.

⁴⁵ Rh ⁴⁴ Ru ⁷⁷ Ir **Rhodium, Ruthenium, Iridium**

	Rhodium	Ruthenium	Iridium
Reporting week	\$15,050/oz	\$595/oz	\$4,300/oz
Previous week	\$15,600/oz	\$620/oz	\$4,350/oz

As 'off-exchange' metals, the small PGMs were less affected by the sharp price drop in other precious metal markets last week. Rhodium, ruthenium and iridium prices did edge lower, but this was more of a continuation

of the trend from the past six months as South African supply normalises. With producers likely to be maximising refined output for calendar-year-end targets, liquidity is expected to increase moving into December/January.



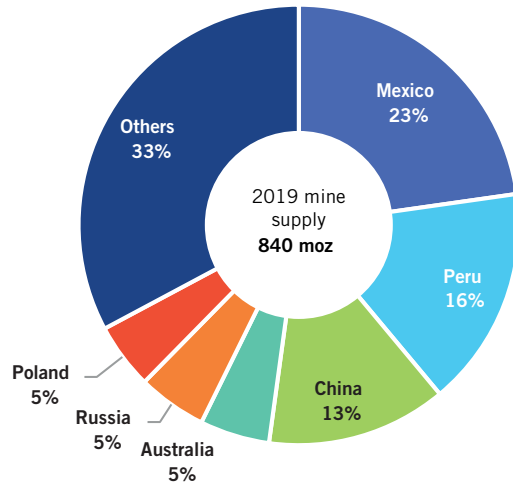
TRENDS AND INVESTMENTS

Gold price



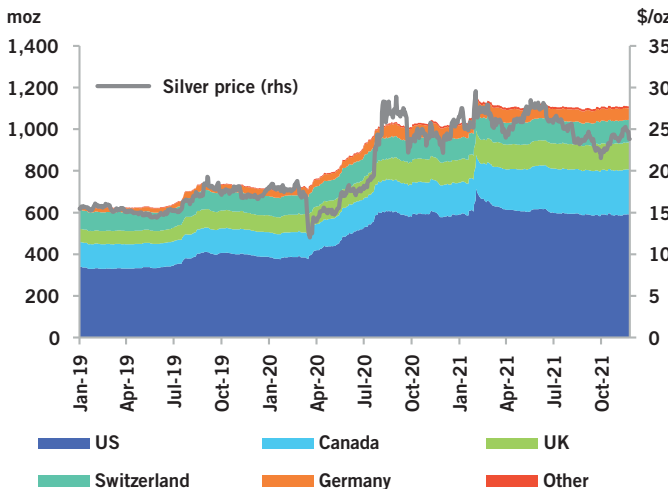
Source: SFA (Oxford), Bloomberg

Silver mine supply



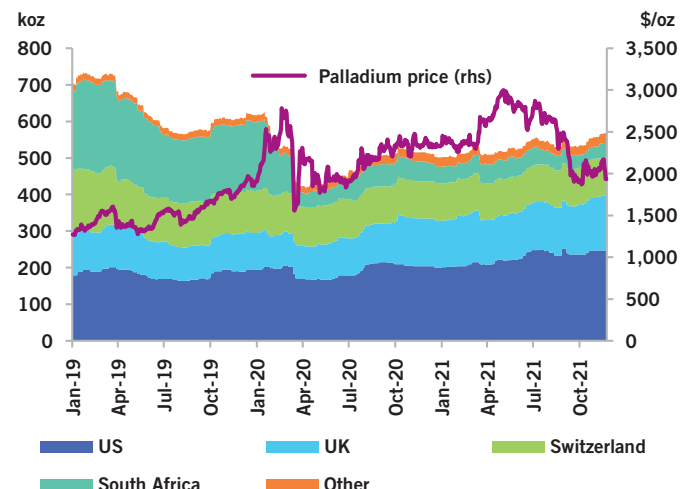
Source: SFA (Oxford), Bloomberg

Silver ETF holdings



Source: SFA (Oxford), Bloomberg

Palladium ETF holdings



Source: SFA (Oxford), Bloomberg

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