



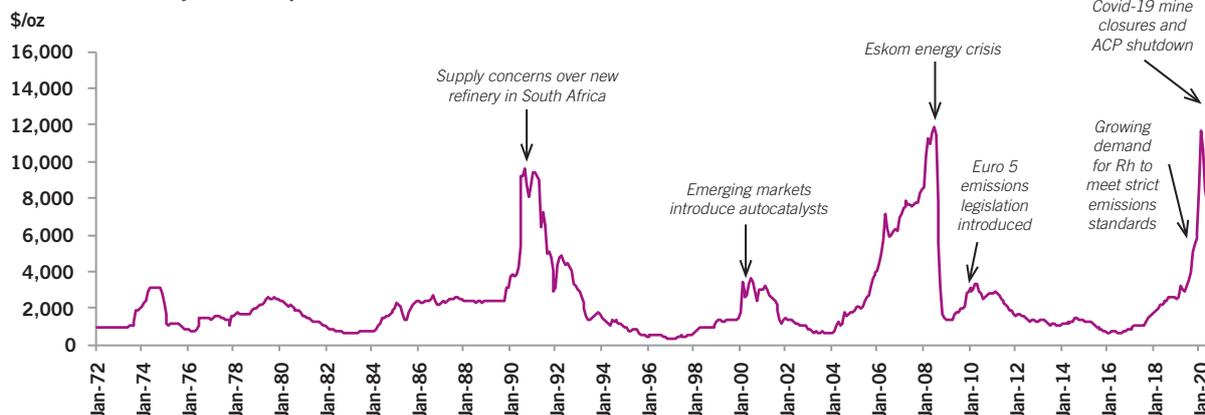
MARKET SPOTLIGHT

The rhodium rally - bucking the trend

Unlike in 2008, the global recession is not resulting in much easing of rhodium demand as the drive to reduce NO_x emissions in Europe and China is leading to a sharp increase in loadings, which is helping to offset the drop in auto sales. Car sales in China, the largest auto market and where the tightest standards are being promulgated, have rebounded faster than expected since the Covid-19-induced slump at the start of the year. Demand is expected to slip by 14% (-47 koz) this year, but with supply impacted more than demand, the rhodium market deficit is expected to widen.

Rhodium reached a record high price of \$14,750/oz last week, marking its third major price rally in recent history. Shown in the chart below, key upward movements occurred in 1990 and 2008, where the price peaked at \$9,655/oz and \$11,890/oz respectively. In 1990, the commissioning of a new refinery in South Africa drove the rhodium price up as industrial users began stockpiling the metal. In 2008, South Africa experienced widespread rolling blackouts and miners were forced to temporarily cease production, causing rhodium supply to fall -5% (-34 koz) year-on-year. However, in the same year, the financial crash led to a contraction in demand which reduced the rhodium market deficit significantly.

Historical monthly rhodium price



Source: SFA (Oxford), Bloomberg

The rhodium price started 2020 with a sharp increase, supported by strong consumer demand and tight physical availability. The impact of Covid-19 on the precious metals market saw an extreme sell-off in March but the price has recently rallied to higher highs as demand, particularly in China, has rebounded faster than metal supply. The impact of mine closures (owing to Covid-19) on metal supply was magnified by the temporary closure of Anglo American Platinum's ACP earlier in the year, which is likely to have led to a build-up of more than 30 koz rhodium in green matte. The build-up of stock is expected to be processed over the next 18 months, with the likelihood that it will be processed sooner rather than later. However, it will be a slow process before the metal is released from the refinery. The cumulative effect of mine closures and the ACP shutdown will still see South Africa's rhodium supply contract by an estimated ~20% in 2020.

History has shown that rapid price gains are unsustainable, but is this time different? Rhodium is integral to removing harmful NO_x emissions in autocatalysts, but supply is not expected to keep up with demand (unless mothballed mines in South Africa restart); moving forward, the rhodium market is expected only to tighten further. With no effort to balance the ratio of supply to demand, high prices will be sustained.



PRECIOUS METALS REVIEW

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Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,953	0.15%	1,974	16/09/2020	1,933	17/09/2020
€/oz	1,647	-0.07%	1,664	16/09/2020	1,634	14/09/2020

Bullish momentum in the gold price has paused after it reached record highs in early August. Inflows to gold ETFs have slowed but remain at a record high of 114 moz. The price has been trading sideways below \$2,000/oz but the range is narrowing which often precedes a sharp move. Rising Covid-19 cases increase the risk of a second wave of infections moving into winter in the northern hemisphere. This could prompt further government stimulus measures and give gold another boost.

A heart of gold. Wholesale demand for gold in China increased last month as jewellery manufacturers prepared for Chinese Valentine's Day, Qixi, on 25 August (source:

World Gold Council). Indeed, jewellery sales finally saw positive year-on-year growth of 15.3% in August (source: National Bureau of Statistics of China). Sales in the first eight months of the year are still down -15.6% year-on-year, but August's growth is a positive sign that demand is slowly returning, around three months after the country's lockdown was eased. China is the largest gold jewellery market in the world and accounted for 638 tonnes gold last year, or 30% of global jewellery demand. Even if sales of jewellery are maintained until the end of the year, that is unlikely to offset the drop in demand from H1 and total gold demand is still expected to be lower year-on-year.

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Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	26.92	-0.02%	27.63	15/09/2020	26.30	17/09/2020
€/oz	22.71	-0.23%	23.23	15/09/2020	22.29	17/09/2020

Global holdings of silver ETFs have dropped back from the peak in August, with US funds accounting for the majority of outflows in September. Fed Chairman, Jerome Powell, reiterated on Wednesday that there is likely to be a need for more fiscal stimulus, which could renew investors' interest in silver if it happens. If silver breaks out to the upside it should resume its outperformance of gold.

The US installed 3.5GW of solar PV in Q2, a 52% increase year-on-year. Q2 was the first full quarter in which the US solar market was exposed to the impact of Covid-19,

yet installations slipped only 6% from Q1 (source: Solar Energy Industries Association). Around 18 GW of capacity is forecast to be installed in the US in 2020, 6% down from pre-pandemic expectations but still an impressive 35% growth year-on-year. The US is the second largest PV market after China, so strong growth in solar capacity bodes well for silver demand (18 GW = ~13 moz). The global PV market represents the largest industrial use for silver, accounting for 98.7 moz in 2019 (source: Silver Institute). Demand is expected to fall year-on-year, as the rate of PV installations in China and the EU slows.

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Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	934	-0.34%	984	16/09/2020	925	17/09/2020
€/oz	787	-0.66%	829	16/09/2020	783	17/09/2020

The European car market suffered a higher than anticipated decline in August, indicating the subsidy-driven recovery may already be coming to an end. Sales across the region fell by 18% y-o-y in total, led by Germany (-20.0%) and France (-19.8%). Sales had been gaining momentum since May, with July posting the strongest result of the year with just a 5.7% drop (source: ACEA). However, France's scrappage programme expired at the end of July, and cases of Covid-19 are also rising in several key European markets. If the demand bounce-back in June and July proves to be only a short-lived recovery

aided by pent up demand, the region could fare worse than expected by the end of the year. Despite the declining market share of diesel cars in Europe, the region is the largest consumer of platinum in autocatalysts (1,040 koz last year). Car sales are forecast to contract by 23.4% this year (source: LMC Automotive) and a further downward revision threatens platinum demand in an already surplus market. However, its relative cheapness seems to be keeping investors interested as ETF holdings continue to rise, which is supporting the price.



PRECIOUS METALS REVIEW

⁴⁶Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	2,350	0.44%	2,427	15/09/2020	2,300	17/09/2020
€/oz	1,979	0.05%	2,040	16/09/2020	1,943	14/09/2020

Tighter emissions targets will exclude palladium-rich hybrids in the long term. The European Commission has presented its plan to reduce greenhouse gas emissions in the EU by at least 55% by 2030. Under the proposal, by 2030 the average CO₂ emissions of new cars should be 50% below current levels, around 48g CO₂/km, which will exclude most hybrid cars. For example, the Toyota Prius, a popular hybrid electric vehicle in Europe, claims a rating of around 84g CO₂/km. If the plan comes into force OEMs will need to prioritise zero-emission vehicles

(BEVCs, FCEVs) in their fleets to ensure compliance closer to 2030. However, palladium and rhodium are expected to benefit from the growth of petrol-hybrid cars in the near-term. Global autocatalyst demand for palladium is expected to increase significantly in 2021 and 2022, as light vehicle sales recover and emissions standards continue to tighten in some of the world's largest markets. The market deficit is shrinking this year and palladium looks expensive at current levels.

⁴⁵Rh ⁴⁴Ru ⁷⁷Ir Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$14,450/oz	\$295/oz	\$1,650/oz
Previous week	\$13,650/oz	\$295/oz	\$1,650/oz

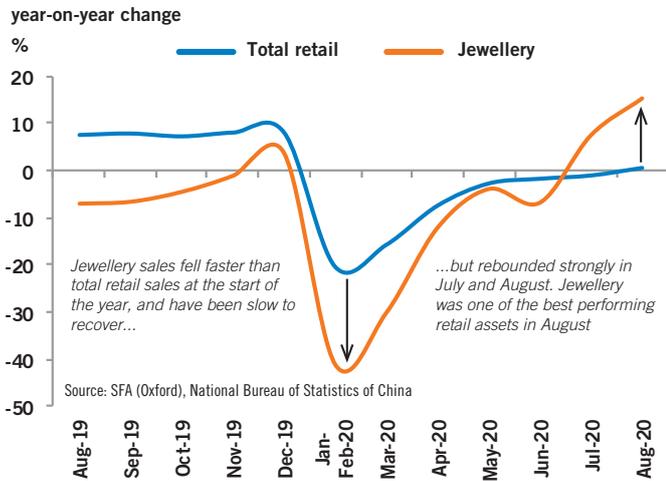
Ruthenium's catalytic properties are motivating industrial and academic research. At one-third of the price of platinum and one-eighth of the price of palladium, it is the cheapest of the PGMs, but is less well-known for its catalytic properties. A multi-catalyst system, including ruthenium, has been developed by chemists at Boston College in the US which can convert CO₂ to methanol, a useful and renewable fuel. Methanol is already produced industrially from CO₂ and hydrogen, but at high

temperatures and pressures with significant by-products. This new process, which is still at the laboratory-stage, runs at lower temperatures with high activity and selectivity. Chemical uses for ruthenium, such as CO₂ hydrogenation to methanol, accounted for around 290 koz of ruthenium demand last year. The ruthenium and iridium prices remained unchanged last week. Rhodium hit a record high of \$14,750/oz but closed the week slightly lower.

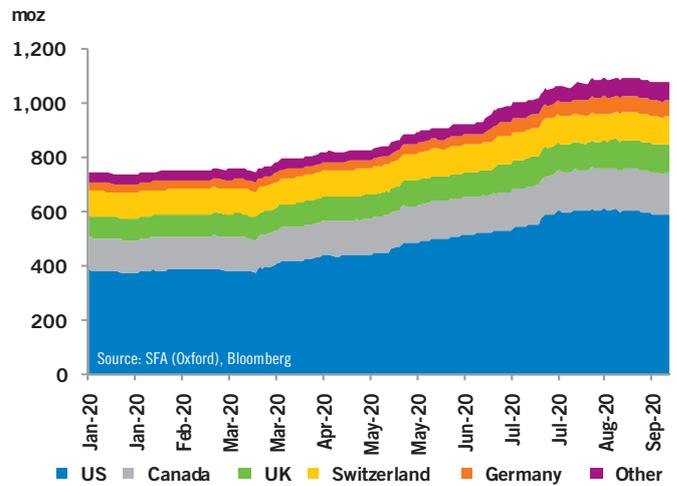


TRENDS AND INVESTMENTS

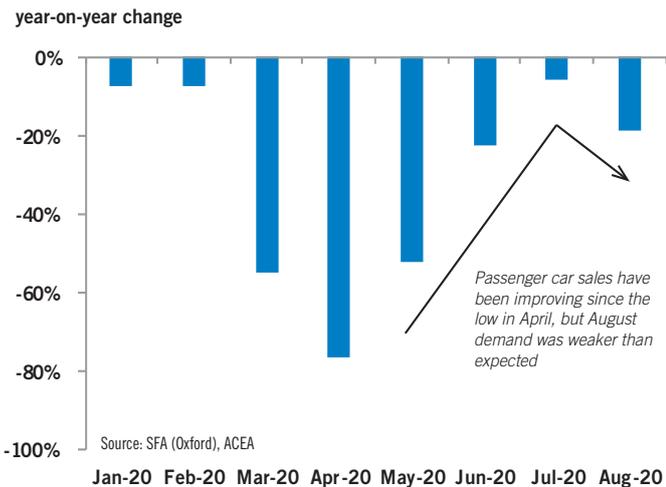
China monthly jewellery sales



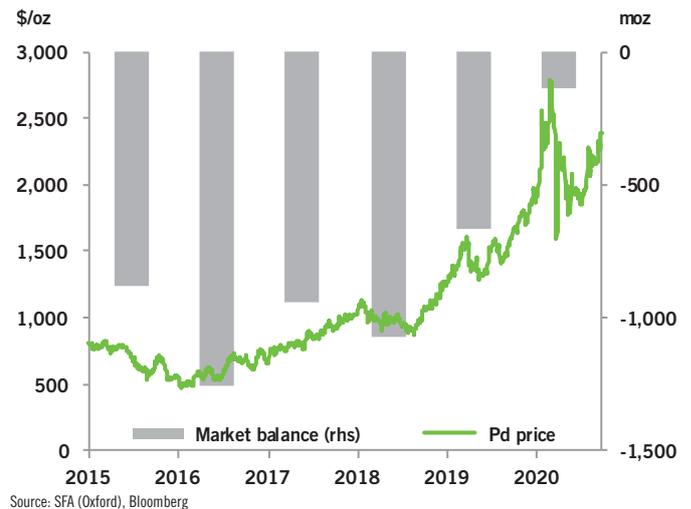
Silver ETF holdings



European passenger car sales



Palladium market balance



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