



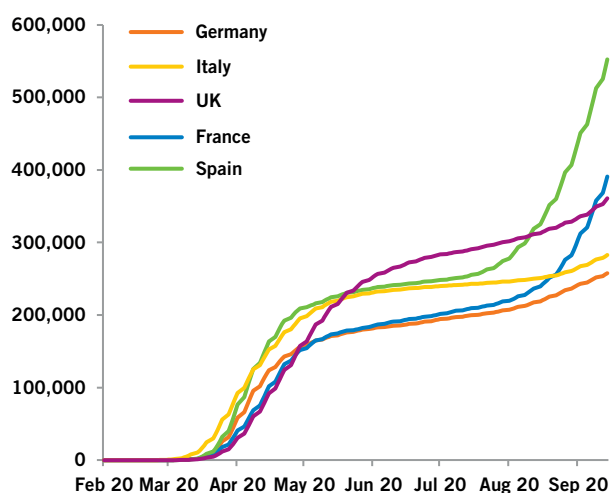
MARKET SPOTLIGHT

PGM price hazard ahead: will a coronavirus second wave crash auto sales?

In Europe, governments are introducing more restrictions which will impact the economy and car sales. Hokusai's famous woodblock print, *The Great Wave*, should be viewed from right to left. The small fishing boats are heading into the wave not away from it. That is the situation in which Europe now finds itself with the coronavirus pandemic. Coronavirus cases are rising rapidly in the five largest European car markets, with France and Spain leading the way. In response, governments have started to reintroduce restrictions on the public and businesses. So far, the new measures are not as tough as during the first wave, but that could change. In the UK, the Prime Minister has said the new restrictions could be in place for six months. Full lockdowns remain unlikely but more restrictions could seriously impact the already fragile economy and car sales.

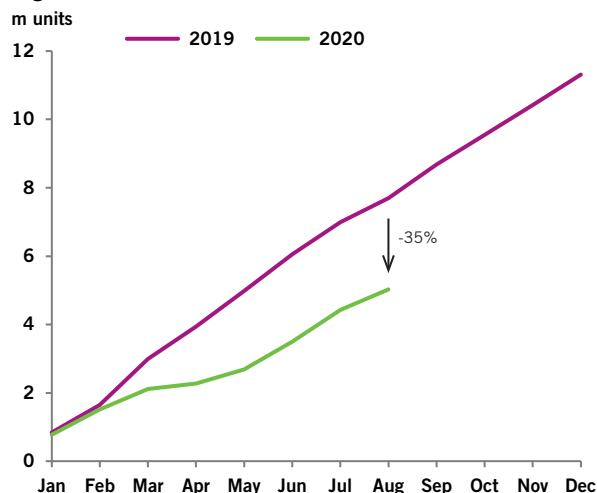
European Union car sales were down by 48% in the first half of 2020 (source: ACEA). The second half of the year started relatively well with EU car sales down just 5.7% year-on-year in July. However, they fell 19% in August as pent-up demand eased and incentives ran out. Sales for the first eight months in the 'Big 5' markets are down 35%. Light-vehicle production is predicted to drop by 23% in Western Europe this year, equating to a fall in demand of 330 koz of platinum, 440 koz of palladium and 70 koz of rhodium compared to 2019.

Coronavirus cases



Source: SFA (Oxford), Bloomberg, SMMT, KBA, CCF, ANFAC, ANFIA

Big 5 cumulative car sales



Note: The 'Big 5' markets are Germany, France, Italy, Spain and the UK.

A further drop in car production in Western Europe could balance the rhodium and palladium markets. If light-vehicle production declines by 35% to match potentially lower sales, then that will result in a further loss of 95 koz of platinum, 190 koz of palladium and 35 koz of rhodium demand. This would narrow the rhodium market deficit and bring it close to balance. It would push the palladium market into surplus. The large platinum market surplus (ex. investment) would grow even larger. South African PGM mine output is approaching full capacity operation. Restrictions have been eased as the number of new Covid-19 cases is declining. Processing backlogs are being worked through and palladium lease rates are back in single digits, indicating improved metal availability. The risk for the rhodium and palladium prices appears to be to the downside.



PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,860	-4.75%	1,955	21/09/2020	1,849	24/09/2020
€/oz	1,601	-2.79%	1,649	21/09/2020	1,586	24/09/2020

Gold's correction has continued. Real interest rates edged up and the dollar strengthened modestly which pushed down the gold price last week. US investors took advantage on Monday and increased their ETF holdings by over 1.1 moz in a single day, but ETF holdings slipped back along with the price later in the week. The Federal Reserve chairman testified before Congress and noted that the economy needs more fiscal support. However, any additional funds are now unlikely to be agreed by Congress before the election. With fiscal and monetary stimuli unlikely to change in the near term in the US, gold could struggle to make up its lost ground in the short term. However, with the economy in a fragile state further support could be agreed after the election and that could help to lift gold.

Some positive signs for Indian jewellery. A good monsoon, with rains above average in August, along with the pull back in the gold price could help to revive gold jewellery demand in Q4. The fourth quarter includes the festival of Diwali in November which is considered an auspicious time for buying gold. If limits to the number of people that can gather are lifted later in the year, that could support a pick-up in weddings. During the first half of the year, which covered a period with a lockdown, gold jewellery demand fell by 60% year-on-year, so even with the gradual reopening of the economy and a good Q4, demand will be significantly lower than the 545 t in 2019 (source: World Gold Council).

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	22.90	-14.94%	26.76	21/09/2020	21.68	24/09/2020
€/oz	19.71	-13.22%	22.56	21/09/2020	18.59	24/09/2020

Silver has slumped, following gold lower. Unlike gold investors, silver investors did not immediately add to their ETF holdings when the price dropped on Monday. Silver had outperformed gold since the March low. However, now that prices are declining silver is underperforming

again and the gold:silver ratio has moved up to 80. With the price down over 25% from its August high, this correction may be nearing an end. If that is the case then silver's outperformance could resume as the price rallies.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	846	-9.41%	943	21/09/2020	828	24/09/2020
€/oz	728	-7.48%	795	21/09/2020	712	24/09/2020

China has announced a new fuel cell subsidy. The programme will replace purchase subsidies with funding for fuel cell electric vehicle (FCEV) technology developers and last for four years. FCEV sales in China have mostly been for commercial vehicles so far. If the redirection of funds enables more price-competitive cars as well, this should benefit FCEV sales in the medium term.

Is the hydrogen economy about to take off? Airbus is looking at developing zero-emission aeroplanes powered by hydrogen. To enable full decarbonisation, the hydrogen would need to be generated via electrolyzers from renewable energy. Unfortunately, a real plane powered

this way is a long way off and it will require significant further work to get it off the ground. Current fuel cell and electrolyser production uses a few tens of thousand ounces of platinum, but if the many plans for creating and using hydrogen in the future come to fruition, it could be a much larger amount in the longer term. The platinum price fell sharply last week along with the other precious metals. With a large surplus expected this year (ex. investment), a price above \$900/oz looked expensive. In the short term, the trend is down but the price could find support around \$800/oz as it did earlier in the summer.



PRECIOUS METALS REVIEW

⁴⁶Pd **Palladium**

	Close	Weekly change	High	Date	Low	Date
\$/oz	2,207	-6.11%	2,389	21/09/2020	2,188	24/09/2020
€/oz	1,900	-3.97%	2,017	21/09/2020	1,871	23/09/2020

Climate action is bad news for palladium in the long term.

The governor of California has signed an executive order to stop the sale of new cars with internal combustion engines in 2035. Fortunately for the state that buys the most F150 pickups, Ford has recently announced that it will be putting an electric model on sale in 2022. Ford claims the lifetime running costs will be half those of the current model. It will be interesting to see whether F150 drivers will make the switch to electric considering the

low gasoline price. The US is the second-largest user of palladium in autocatalysts and as EVs have only a small market share, the recovery in overall light-vehicle sales in the US next year is predicted to see automotive palladium demand rise by 15%. In the near term, improving palladium production in South Africa as mines reach full operating capacity could see the price continue to slide lower.

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

	Rhodium	Ruthenium	Iridium
Reporting week	\$14,000/oz	\$295/oz	\$1,650/oz
Previous week	\$14,450/oz	\$295/oz	\$1,650/oz

The rhodium price dipped to \$14,000/oz last week.

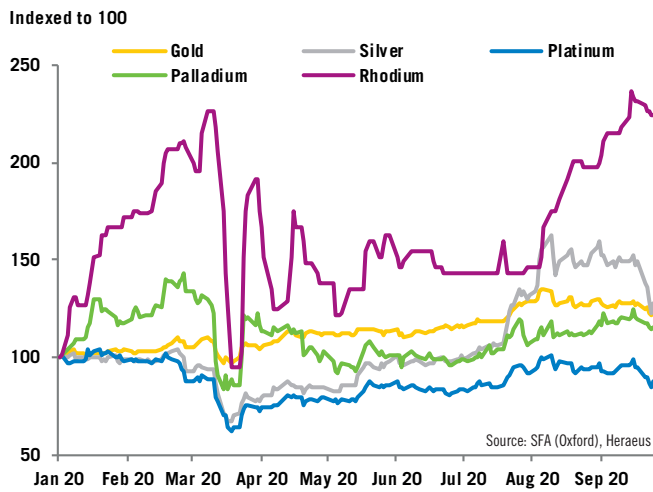
Metal availability is improving with production climbing in South Africa, as the recovery from mine lockdowns continues and processing problems are overcome. There is a build-up of work-in-progress stock which includes rhodium that will be processed over the coming months. This may depress the price further in the near term. Next year, the rhodium market deficit is expected to widen as auto sales recover further, so this may be only a temporary dip.

As shown by China's fuel cell subsidy strategy, the development work being supported now should result in greater use of fuel cell vehicles in the future. With iridium and ruthenium being used in PEM-based electrolyzers and fuel cells, respectively, the ongoing interest and support in developing a hydrogen economy will ultimately add to demand. The ruthenium and iridium prices continued to trade sideways last week.

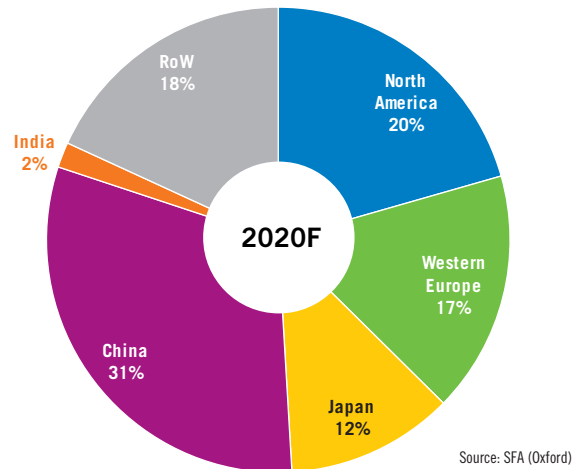


TRENDS AND INVESTMENTS

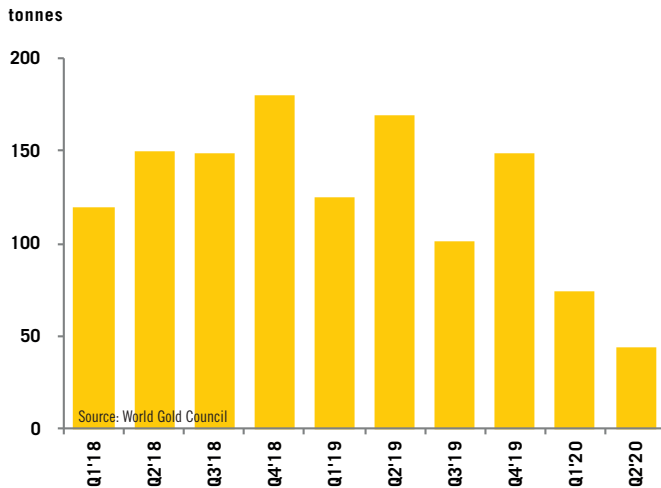
Metal prices



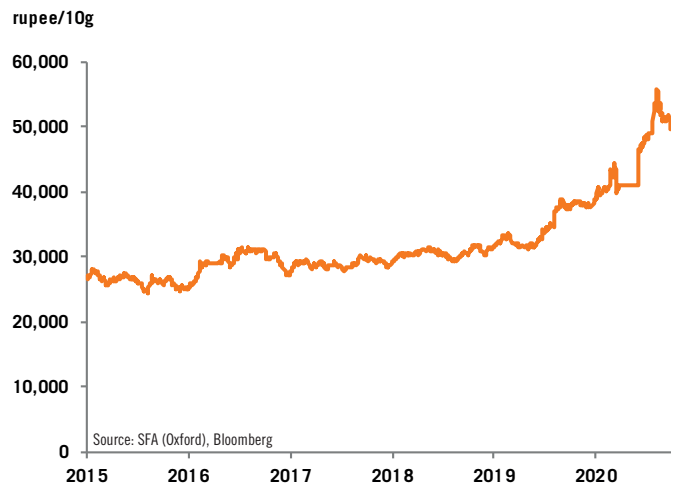
Automotive palladium demand by region



Indian gold jewellery demand



Gold price in India



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