

HERAEUS PRECIOUS APPRAISAL

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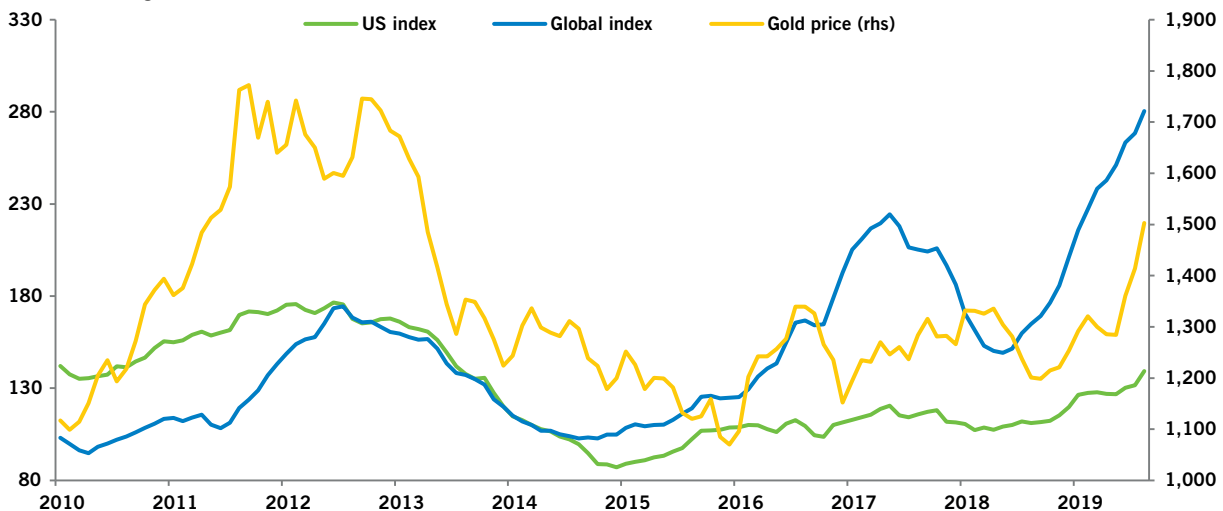
MARKET SPOTLIGHT

Precious metals outshine industrials

Weakening global trade and economic growth, as well as distinct political risks, could boost precious metal prices. The impacts of these issues were central to discussions among attendees at New York Platinum Week.

Gold, silver and platinum are the winners. The general view was that global growth is slowing and the political outlook in the US and elsewhere is not necessarily conducive to improving the situation, so safe haven buying would continue to lift the gold price. Silver should benefit as a cheaper alternative to gold. The gold:silver ratio has narrowed to 84, but is still well above its long-term average of 63. Platinum's low price could also see it perform well, as its discount to gold remains around \$560/oz. The price has broken out of its trading range, possibly owing to concerns about a strike in South Africa if arbitration over wage negotiations fails. The fundamental picture looks weak, but ETFs have absorbed the excess stock. ETF investors that bought earlier this year have made a positive return.

Economic Policy Uncertainty
(12 month average)



Source: SFA (Oxford), Bloomberg, 'Measuring Economic Policy Uncertainty' by Scott Baker, Nicolas Bloom and Steven J. Davis at www.PolicyUncertainty.com

However, the high palladium and rhodium prices are exposed if the economic outlook deteriorates. Current forecasts for auto sales suggest palladium and rhodium demand will keep growing and support the high prices, but concerns about a recession are rising in the US and Europe.

The Fed has cut rates again citing "the implications of global developments for the economic outlook". Furthermore, in the US, the presidential election next year will increasingly become the focus. Whether that is a positive or not could depend on whether President Trump thinks his re-election chances are better if he closes a trade deal or continues to talk tough and raise tariffs. China-US trade talks appear to be moving forward, but could easily break down again. The US is also engaged in trade talks with the EU. Brexit – the UK's attempt to leave the EU – still has an uncertain outcome and if the UK were to leave without an agreement in place then trade would suffer.



PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,502	0.78%	1,512	18/09/2019	1,484	18/09/2019
€/oz	1,366	1.43%	1,369	16/09/2019	1,346	18/09/2019

Gold fell on Fed rate cut. Gold dropped \$18/oz on the announcement, despite the cut being widely expected, but recovered some of those losses in later trading. Possibly, traders' thinking was that the rate cut would support the US economy and the dollar, which would on the news, and make gold less attractive. The speculative futures net long position has dropped, but is still relatively high and, if it continues to shrink, gold could struggle to make much headway in the near term.

The high gold price is incentivising mine expansions, but it will take some time before supply increases. Kinross is proceeding with an expansion that will lift

annual gold production at the Tasiast mine by 45% to 563 koz/a from 2022-2028. Northern Star Resources is raising processing capacity at its Pogo mine by 30%. Pogo is forecast to produce 200-240 koz this financial year, which should increase to over 300 koz/a once the expansion reaches completion in January 2021.

Amusingly, America has been stolen. A fully-functional, solid gold toilet, valued at up to \$6 million, was stolen from Blenheim Palace in the UK. The artwork by Maurizio Cattelan, entitled "America", had only been in place for a few days as part of a display of the artist's work.

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	17.78	0.83%	18.09	17/09/2019	17.52	18/09/2019
€/oz	16.17	1.50%	16.36	16/09/2019	15.90	18/09/2019

Mexico's second largest silver mine suspends operations. Newmont-Goldcorp's flagship gold-silver mine in Mexico suspended operations as locals blockaded the mine in a dispute over water use. The Penasquito mine produced 18.3 moz of silver last year, about 9% of Mexican output. Mexico is the largest silver producer in the world, representing 23% of global mine supply.

Silver fell less than gold at the Fed's rate cut announcement. The silver price dropped 1.0% in the hour after the Fed announced its latest rate cut, whereas the gold price fell 1.2%. Silver also recovered strongly, but the gold:silver ratio remained at 84.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	942	-0.91%	960	16/09/2019	922	18/09/2019
€/oz	856	-0.29%	870	16/09/2019	836	18/09/2019

Platinum-based technology selected for a new PDH plant. Globally, PDH plant catalyst requirements account for roughly 20 koz of platinum demand per annum. Oil majors, Sonatrach and Total, have announced a new joint-venture propane dehydrogenation (PDH) plant in Algeria. The project plans to use platinum-based catalysts to convert propane into polymer-grade propylene, which is a common precursor (via polypropylene) to a variety of plastic products. Overall industrial demand for platinum

is holding steady at around 1.9 moz this year, whereas both jewellery and automotive demand are falling.

There has been some profit taking by Japanese ETF investors as the price has reached its highest level in 18 months, but most ETF investors are holding on. However, the platinum price still seems high considering the weak demand outlook.



PRECIOUS METALS REVIEW

⁴⁶ Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,646	2.97%	1,656	20/09/2019	1,574	18/09/2019
€/oz	1,495	3.49%	1,502	20/09/2019	1,425	18/09/2019

The threat to palladium is increasing with falling EU demand. New car registrations in the European Union have fallen 3.2% to 10.5 million units year-to-date, when compared to the same period last year (source: European Automobile Manufacturers Association). Slowing demand in a market that is now dominated by petrol cars represents a risk to palladium demand. Automotive demand for palladium in Europe is predicted to fall around 2% year-on-year in 2019. The European autocatalyst market accounts for 16% of global palladium demand.

Attempts to stimulate car sales in China are limited in scale. In the year to August, new vehicle sales fell by 11% to 16,104,000 units (source: Chinese Association

of Automobile Manufacturers). In an attempt to boost sales in the world's largest auto market, the capital of China's Guizhou province, Guiyang, which has around 5 million residents, has become the third city to end restrictions to new vehicle sales. Licence plates for vehicles permitted to drive in downtown Guiyang were previously capped at 24,000 units annually in a bid to ease congestion. Guangzhou and Shenzhen agreed in June to allow an additional 100,000 and 80,000 new vehicles to be sold, respectively. Together these measures amount to around 1% of annual car sales. The automotive sector in China represents around 2 moz of palladium demand, 20% of global demand. Car sales are expected to pick up next year, which will keep the palladium price well supported.

⁴⁵ Rh ⁴⁴ Ru ⁷⁷ Ir Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$5,450/oz	\$250/oz	\$1,480/oz
Previous week	\$5,100/oz	\$250/oz	\$1,460/oz

The rhodium price dipped mid-week last week, but recovered and gained \$350/oz.

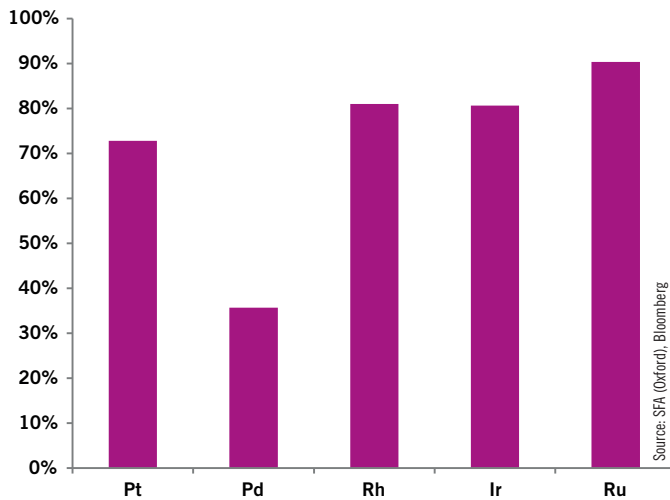
The rhodium price seems to be factoring in the chance of a strike in South Africa in an already tight market. A strike would have greater impact on the supply of rhodium than platinum or palladium because South African operations provide 81% of the global supply of rhodium.

South Africa's mines also produce the vast majority of ruthenium (90%) and iridium (81%), meaning any strike could have significant implications for these metals as well. Despite this, ruthenium and iridium prices are likely to remain less volatile than rhodium owing to ample metal availability currently. Consequently, the ruthenium price was unchanged last week, although iridium gained \$20/oz.



TRENDS AND INVESTMENTS

South Africa % of PGM mine supply



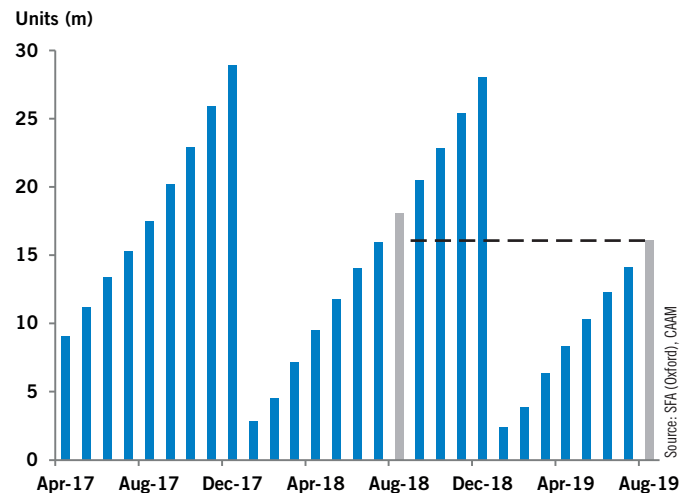
Gold:silver ratio



Platinum ETF holdings



China cumulative car sales



Heraeus Precious Metals

Europe, Middle East, Africa & other regions
 Phone: +49 6181 35 2750
 edelmetallhandel@heraeus.com

South East Asia
 Phone: +852 2773 1733
 tradinghk@heraeus.com

www.herae.us/trading-market-report

United States of America
 Phone: +1 212 752 2180
 tradingny@heraeus.com

China
 Phone: +86 21 3357 5658
 tradingsh@heraeus.com

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SFA (Oxford) Ltd
 United Kingdom
 Phone: +44 1865 784366
 www.sfa-oxford.com



consulting analysts in tomorrow's commodities and technologies

The Oxford Science Park, Oxford,
 United Kingdom, OX4 4GA

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