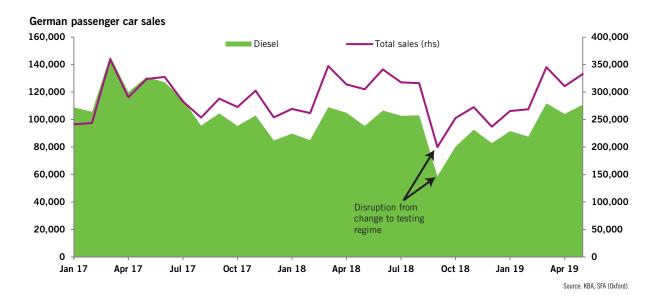


Has diesel turned the corner in Germany?

Diesel car sales jumped 16% year-on-year in Germany in May and are 4.5% higher year-to-date. Overall car sales were up 9% in May to over 330,000 (source: KBA). The diesel share of the market was 33.3% and appears to have stabilised at around 33% this year. It has recovered from a low of 29.3% in September 2018 when automakers had been unable to certify all their models in time for the introduction of real-world driving tests for emissions.



The latest diesels are clean and beat gasoline on CO2 emissions. Independent testing by ADAC (Allgemeine Deutsche Automobil-Club) showed that Euro 6c and Euro 6d-TEMP cars were well below the required NOX limits. Diesel vehicles have lower CO2 emissions per kilometre than equivalent petrol vehicles. From the automakers' point of view, diesel cars are necessary to help meet the emissions target of a fleet average of 95 g/km of CO2 in 2020. City bans may have discouraged some private buyers, but purchases for business fleets are around 60% diesel as it makes sense economically for high mileage users.

Western European platinum demand for cars peaked in 2016 at 1.2 moz, when the diesel share was 49.5%. With the decline in diesel car sales, platinum demand has now fallen by over 40% in Western Europe. Germany is the largest car market in Western Europe and the amount of platinum used for catalysts in cars is projected to be around 275 koz this year, assuming a 31.5% diesel share, which is down from 45.9% in 2016. If the diesel share were stable at 33%, it would add an extra 10 koz to platinum demand and double that next year, as the market share is currently forecast to continue to decline. The impact would be larger if the diesel share of the European market as a whole stabilised. However, the platinum market is oversupplied and it will need much more than a stabilisation in the European diesel car market share to balance the platinum market and lift the price.

PRECIOUS METALS REVIEW

⁷⁹ **Au**

Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,350	0.70%	1,358	14/06/2019	1,320	11/06/2019
€/oz	1,302	1.67%	1,204	14/06/2019	1,166	11/06/2019

Unpredictable tariff threats swing the gold price around. After receiving a boost from the threat of tariffs on Mexican imports to the US in the previous week, gold gave back some of those gains last Monday once there was a resolution. However, the trend is upward and the price then rallied again. Investors may well have concluded that unpredictable tariff threats will be an ongoing issue and that meant a safe haven was needed. ETF holdings gained 0.3 moz last week to 72.3 moz.

The markets say the Fed is behind the curve. The Federal Reserve Chairman sees a strong labour market and inflation near its 2% target so is not inclined to cut rates, but will act to sustain the economic expansion. However, with the Treasury yield curve inverted, the interest rate futures market projects a 22.5% chance of a 25 basis point cut in interest rates at the Fed meeting next week and an 81.4% chance of at least one cut in July. While unlikely, if the Fed does cut rates next week this would indicate a rapid shift in the view of the economy and could weaken the dollar and lift the gold price.

Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	14.92	-0.74%	15.12	14/06/2019	14.65	10/06/2019
€/oz	13.30	0.21%	13.44	14/06/2019	12.95	10/06/2019

Removal of tariff threat knocks silver price. With an agreement on some immigration issues reached with Mexico, the US President is no longer going to put a tariff on Mexican imports. The silver price gave back most of its gains from the previous week last Monday. Silver managed to underperform gold on the way up and the way down, which is not encouraging for silver bulls.

The gold:silver ratio is now over 90. However, the price managed to recover somewhat during the week and has held the breakout from its downtrend, which is a positive sign. The silver price will likely continue to follow gold, but given its recent performance it looks unlikely to outperform any time soon.

Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	807	0.19%	821	12/06/2019	798	10/06/2019
€/oz	719	1.15%	727	14/06/2019	706	10/06/2019

Indian car sales fell 26% year-on-year in May, for a seventh consecutive decline (source: Society of Indian Automobile Manufacturers). Car sales have been hindered by a slowing economy and political uncertainty, with voting for the general election taking up most of May. Unsold inventory has built up so much that manufacturers are cutting production. India is a 4 million unit car market with a diesel share of about 30%, although most of the cars sold tend to be smaller than those in Europe. Sales of commercial vehicles also fell by 10% in May. Even if vehicle sales slip 10% this year, the combined impact will only add up to a 20 koz reduction in platinum demand. However, this is another weak spot in a market that is already in surplus and the platinum price is expected to remain under pressure.

Store expansions should help platinum jewellery reach new customers. Chow Tai Fook, China's largest jewellery store chain, is planning to open 500 stores during its current financial year and intends to expand further in lower tier cities over the next five years. However, Chinese platinum jewellery sales are expected to decline again this year owing to changing consumer tastes and a more difficult economic environment. Sales have almost halved from the peak of 2 moz in 2013 and this has been a major contributor to the decline in platinum demand and the price.



Pd Palladium

Rh

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,463	7.01%	1,469	14/06/2019	1,348	10/06/2019
€/oz	1,304	8.03%	1,305	14/06/2019	1,194	10/06/2019

Chinese palladium demand under threat from falling car sales. Chinese car sales fell 12.5% to 1.6 million units last month (source: China Passenger Car Association), the 12th consecutive month of falling sales. Slower economic growth and concerns over the impact of the US-China trade dispute have caused some consumers to hold off from making purchases. The government has introduced some modest measures to support sales, but these have not had much impact so far. At the start of the year, projections were for flat to slightly higher car sales in China this year. However, it is looking increasingly likely that sales forecasts will be downgraded. As the largest car market in the world, China is responsible for over 2 moz of palladium demand, so a 10% fall in car sales would cut over 200 koz of palladium demand.

Declining car sales in India will hit palladium consumption. Year-to-date passenger car sales are down 9%, in a market that was expected to grow by 5% this year. With manufacturers cutting production owing to an

excess of unsold stock, palladium demand could ease. The Indian car market is less than a quarter the size of the Chinese market, but a 10% decrease in sales this year would still cut around 30 koz from palladium demand.

Palladium price rallies above \$1,400/oz despite shrinking car sales figures. The market is showing some signs of tightening as short-term lease rates have edged up recently, but they are much lower than in February when the price first rallied through \$1,400/oz. If the poor auto sales continue then the price could pull back again during the seasonally weak summer period. On a medium-term view, the market is expected to remain in deficit which will lead to a higher palladium price.

Rhodium, Ruthenium, Iridium

 Rhodium
 Ruthenium
 Iridium

 Reporting week
 \$3,500/oz
 \$250/oz
 \$1,460/oz

 Previous week
 \$2,925/oz
 \$250/oz
 \$1,460/oz

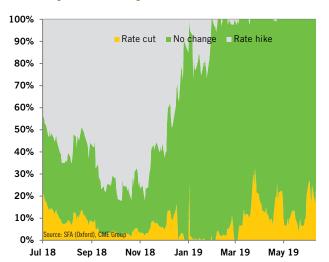
Rhodium rockets through \$3,000/oz. Rhodium is used in gasoline autocatalysts along with palladium and the price gained 20% last week, despite the news of poor car sales in China, and other countries, in May. Continued buying in the spot market was met by a lack of offers, resulting in a strong rally.

The ruthenium and iridium prices were unchanged last week.

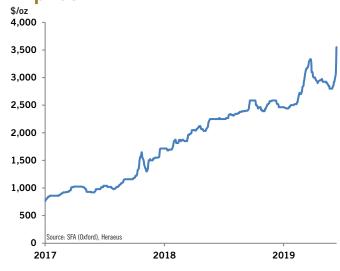
Pd lease rates vs. price chart



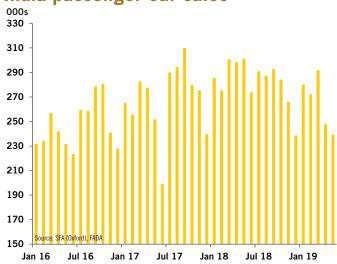
Rates probability after Fed June meeting



Rh price



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

China

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

The **HERAEUS PRECIOUS** APPRAISAL produced in collaboration with:

SFA (Oxford) Ltd United Kingdom Phone: +44 1865 784366

www.sfa-oxford.com



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

www.herae.us/trading-market-report

DISCLAIMER

This document is being supplied to the recipient only, on the basis that the recipient is reasonably believed to be a professional market participant in the precious metals market. It is directed exclusively at entrepreneurs and especially not intended for the use of consumers. The material contained in this document has no regard to the specific investment objectives, financial situation or particular need of any specific recipient or organisation. It is not provided as part of a contractual relationship. It is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment or as advice on the merits of making any investment. This report has been compiled using information obtained from sources that Heraeus and SFA (Oxford) Ltd ("SFA") believe to be reliable but which they have not independently verified. Further, the analysis and opinions set out in this document, including any forward-looking statements, constitute a judgment as of the date of the document and are subject to change without notice.

There is no assurance that any forward-looking statements will materialize. Therefore,

neither SFA nor Heraeus warrants the accuracy and completeness of the data and analysis contained in this document. Heraeus and SFA assume no liability for any losses or damages of whatsoever kind, resulting from whatever cause, through the use of or reliance on any information contained in this document. However, in so far as a liability claim exists under German law, Heraeus and SFA shall have unlimited liability for willful or grossly negligent breach of duty. Unless expressly permitted by law, no part of this document may be reproduced or distributed in any manner without written permission of Heraeus. Heraeus specifically prohibits the redistribution of this document, via the internet or otherwise, to non-professional or private investors and neither Heraeus nor SFA accepts any liability whatsoever for the actions of third parties in reliance on this document.

Prices quoted are interbank (offer) prices for gold, silver, platinum and palladium. Rhodium, ruthenium and iridium quotes reflect the Heraeus offer price at the time of writing.