

# HERAEUS PRECIOUS APPRAISAL

Heraeus

Ed. 12  
15<sup>th</sup> April 2019

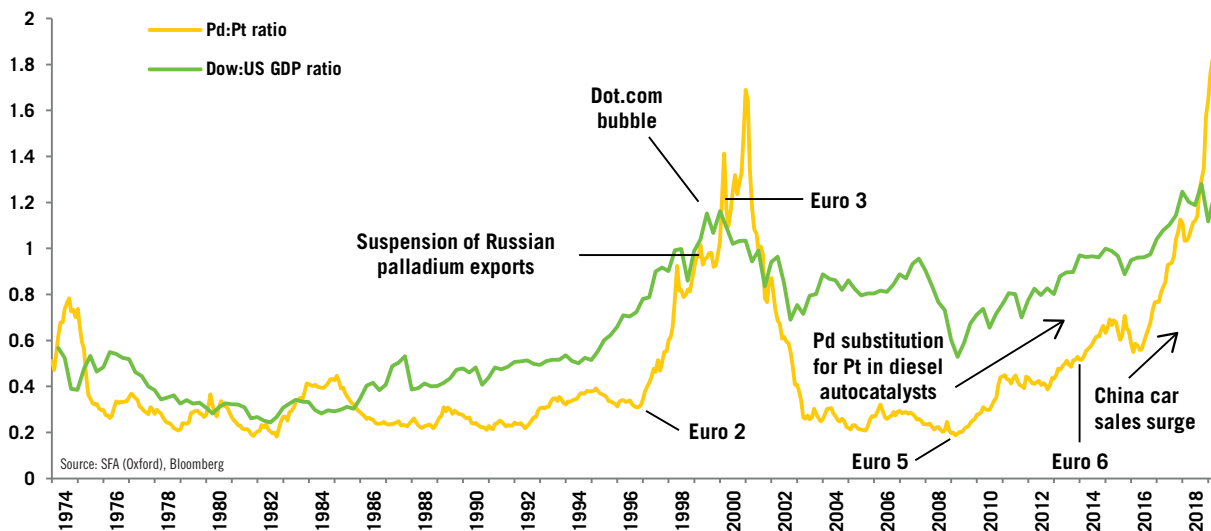


## MARKET SPOTLIGHT

### Is palladium's bull market over?

The fall in the ratio of US stocks to US GDP suggests that the palladium price might have peaked relative to platinum. The ratio of US stocks to US GDP reached a high point in Q3'18, which was higher than the peak in Q4 1999. The stock market has rebounded after a correction in Q4'18, but concerns of a recession are rising. China's influence is much greater as it represents 25% (2.1 moz) of automotive palladium demand compared to 1% in 2000, but a downturn in the US (24%) would dent palladium demand. If US stocks turn down again that may confirm that the Pd:Pt ratio has peaked.

Strength of US industry and the Pd:Pt ratio



In fact the Pd:Pt ratio has fallen to 1.6 in April following the sharp correction in the palladium price along with platinum recovering to over \$900/oz. Palladium's strong price-run up to its record high at \$1,604/oz in late March took the Pd:Pt ratio to over 1.8, which was higher than the peak reached in 2001, the last time palladium traded at a premium to platinum.

Indications of palladium market liquidity have eased. Lease rates have fallen back to single digits and normalised, with the longer-term rates now being higher than the shorter-term rates. Palladium futures are still in backwardation (spot is priced higher than the futures). If the palladium futures move into contango (futures priced higher than spot) that would signal a further easing of conditions. In 2001, the futures market remained in backwardation for a month after the palladium price peaked and then reverted to the more normal contango.

Notwithstanding the above observations, the palladium market is forecast to be in considerable deficit this year. Palladium demand is being driven by increasing global gasoline car sales and tightening emissions legislation. Meanwhile, the platinum market is projected to have a notable surplus this year even with all the ETF buying that has occurred. This should favour palladium over platinum in the medium term.



# PRECIOUS METALS REVIEW

## 79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,291	-0.04%	1,311	10/04/2019	1,290	11/04/2019
€/oz	1,143	-0.81%	1,163	10/04/2019	1,141	12/04/2019

**Escalating trade tensions can increase economic concerns and safe haven demand.** The US has proposed tariffs on \$11 billion of EU goods such as certain foodstuffs and plane parts, adding further uncertainty to the unresolved US-China trade dispute which started in early 2018. The ECB held the interest rate on main refinancing operations steady at 0% and indicated further patience was required as economic weakness will likely remain in H2'19. The ECB also views economic risks, such as trade and inflation, as "tilted toward the downside". This followed

the IMF revising global growth in 2019 down 0.4 percentage points to 3.3%, a drop from 3.6% in 2018. Growth had previously been forecast to be 3.7% for both years. In the US, inflation of 2.0% was the lowest in a year and so the Federal Reserve is also unlikely to raise rates. Financial markets put the likelihood of a rate cut this year at 50%. Lastly, US Treasuries and the gold price again ended the week close to where they started, but gains are likely if the global economy continues to slide and investors seek safe havens.

## 47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	15.01	-0.83%	15.34	09/04/2019	14.90	11/04/2019
€/oz	13.28	-1.58%	13.60	09/04/2019	13.24	11/04/2019

**Despite demand from solar climbing 20% in 2019, silver prices continue to underperform.** Installations in 2019 are now estimated to rise by 25% to 129 GW, revised up from 123 GW by IHS in its Q1 report. This is equivalent to an extra 5-6 moz of silver demand growth. Businesses have responded to various upcoming deadlines on solar power subsidies and announced new installations, lifting the number of solar panels expected to be installed this year. Solar demand accounted for around 100 moz of consumption in 2018 (10% of total demand), but is likely to grow over 20% this year to a new all-time high.

The amount of electronics being used in cars is rising due to the increasing automation, internet connectivity and features on cars. Electric vehicle powertrains have considerable silver content. Both of these trends are expected to continue as advanced technology trickles down to smaller cars and electric vehicle sales grow. Automotive demand for silver was estimated at 50 moz in the 2018 World Silver Survey, 5% of total silver demand, and is forecast to increase at an average 5% per year out to 2030. That said, the overall electronics market, which accounts for almost a quarter of silver demand, is showing some weakness, with total semiconductor shipments down 11% year-on-year in February. Whilst temporary, this could provide some explanation for silver's underperformance so far in 2019.

**Electronics growth in autos supports silver demand.** Sales of semiconductors for use in automotive applications were up 18.6% in 2018, the fastest growth of any end-use (source: Semiconductor Industry Association).

## 78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	893	-0.72%	916	08/04/2019	886	10/04/2019
€/oz	790	-1.50%	816	08/04/2019	786	10/04/2019

**Platinum affected by Indian car sales slowdown.** Preliminary data for March show passenger vehicle sales fell 1% and were down 4% for January and February combined (source: LMC Automotive) due to a slowing economy, a weak rupee and tight credit. Sales are expected to increase by 3% in 2019 due to a pick-up in the second half of the year once political uncertainty from the upcoming elections has ended. Diesel's market share in India was 33% in 2018, similar to that in Europe, but it

has dropped from 44% in 2015. The region accounted for 110 koz of automotive platinum demand in 2018 (4% of global automotive demand) but is forecast to be flat this year, after a rise of 14% in 2018. This is a platinum market which is already facing a record market surplus. The platinum price is expected to weaken over the next year and will struggle to maintain prices around current levels.



# PRECIOUS METALS REVIEW

## <sup>46</sup> Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,379	0.03%	1,402	09/04/2019	1,353	11/04/2019
€/oz	1,220	-0.76%	1,242	09/04/2019	1,202	11/04/2019

**Affordability of cars is likely to weigh on US automotive palladium demand.** The US light vehicle market accounts for 16% of the global 10 moz palladium market. The US car market shrank 3.2% year-on-year in Q1'19 but is expected to see a slow recovery later in the year for full-year growth of under 1% as high car prices limit sales. Auto loan interest rates are at the highest level since 2008. New vehicle prices have also been rising faster than disposable income. As a result of higher costs, more consumers are turning to used cars, reducing the demand for new cars. Consequently, palladium demand from the region is set to grow just 20 koz in 2019. Growth elsewhere keeps the market in a sizeable deficit.

**Chinese car sales weaken for the tenth consecutive month.** Retail sales of passenger vehicles fell 12% year-on-year in March to an annual sales rate of 17.8 million units, according to the Chinese Passenger Car Association (CPCA). The market has struggled with the impacts of the US-China trade war and reduced economic growth, and has underperformed the wider Chinese consumer market. The CPCA reported that it was the only consumer product group to have shrunk in January and February. There is potential for better results in April as tax cuts come into effect. The market constitutes 2 moz of palladium demand, 20% of the global total. If car sales remain flat this year, as is increasingly likely, palladium demand would rise by about 70 koz compared to 100 koz in a base case sales growth of +1.5%. This growth in demand is from higher loadings in autocatalysts due to tighter emissions standards.

## <sup>45</sup> Rh <sup>44</sup> Ru <sup>77</sup> Ir Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$2,950/oz	\$270/oz	\$1,460/oz
Previous week	\$3,000/oz	\$270/oz	\$1,460/oz

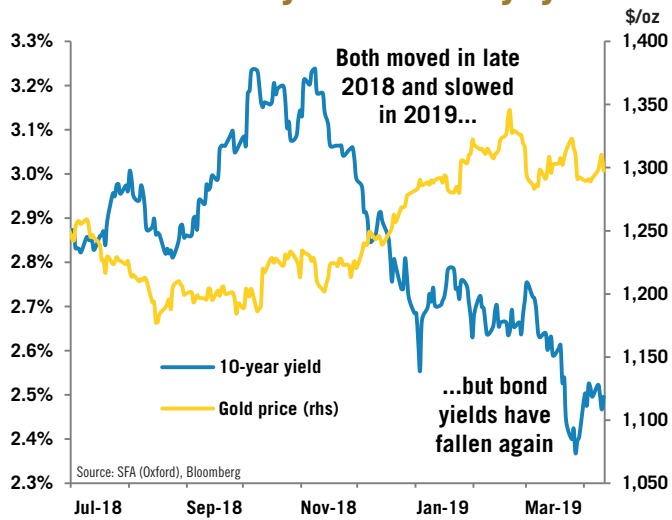
**Falling car sales could limit rhodium price upside.** The three largest regions by rhodium demand are the US, China and Western Europe, which have seen Q1 sales fall by 3%, 6% and 4%, respectively, and account for 21%, 20% and 14% of total global rhodium demand. Supply is also seeing a one-off boost this year owing to a release of inventory that was locked up in the production pipeline

in South Africa. These factors contribute to the forecast for 2019 that rhodium will see a surplus, from being balanced in 2018. Therefore, the rhodium price could hold around current levels for most of 2019 before rising as the market tightens again next year. Ruthenium and iridium prices are unchanged as their markets remain calmer than those of rhodium and palladium.

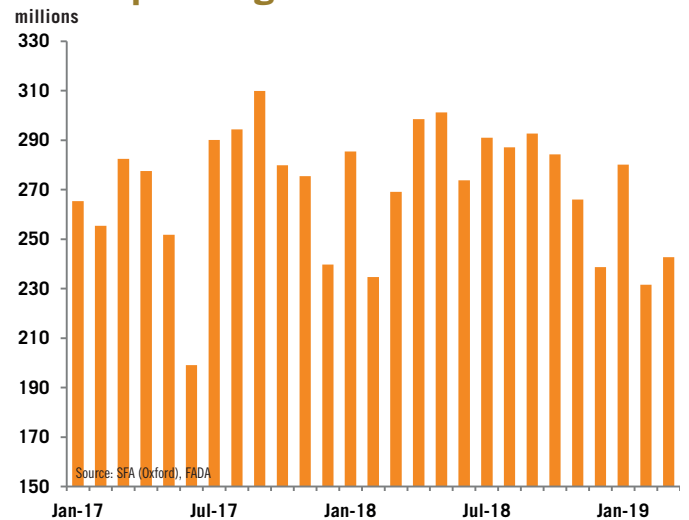


# TRENDS AND INVESTMENTS

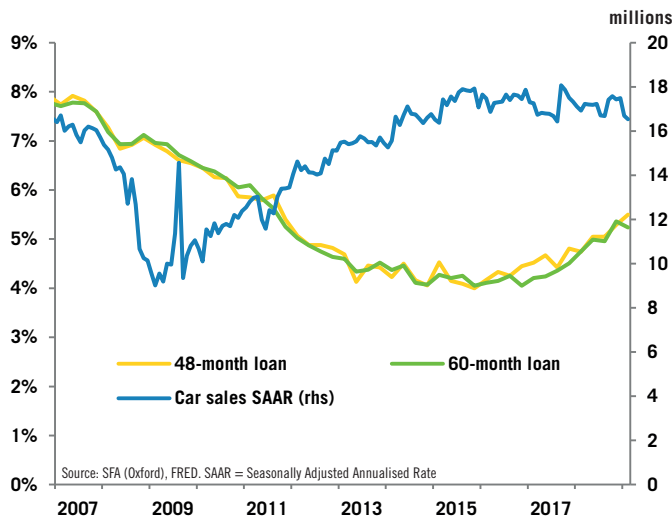
## Gold and US 10-year Treasury yield



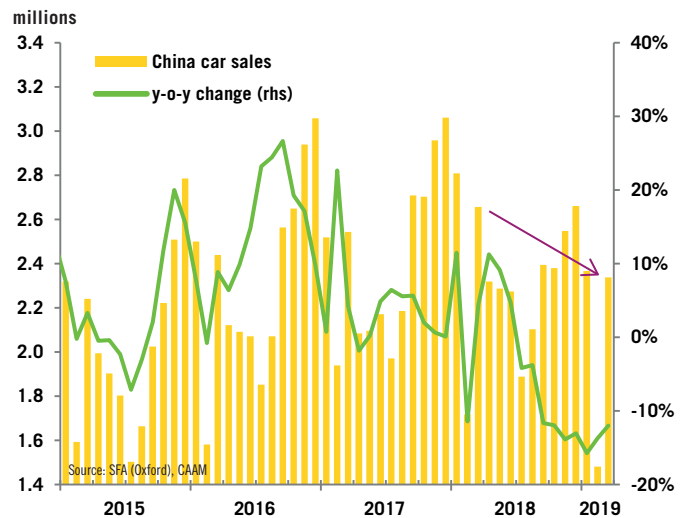
## Indian passenger vehicle sales



## US auto loan interest rates and sales



## China vehicle 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](http://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

The HERAEUS PRECIOUS APPRAISAL produced in collaboration with:

**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

## 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.