

HERAEUS PRECIOUS APPRAISAL

Heraeus

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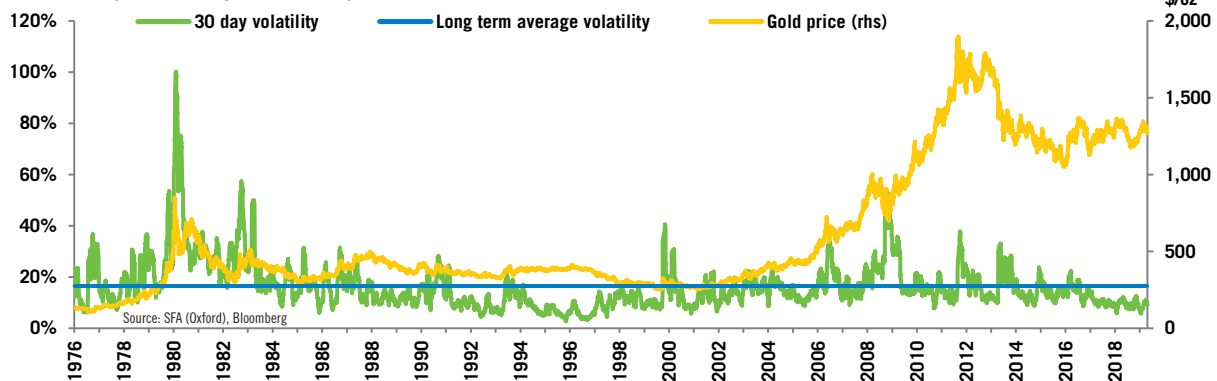
MARKET SPOTLIGHT

Gold price volatility lowest in almost 20 years but it will not stay low forever

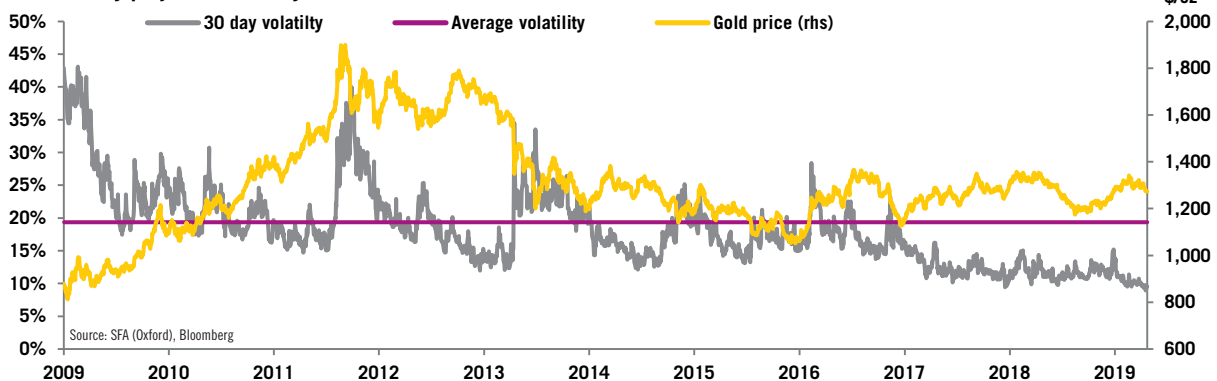
The gold price is now slightly below where it started the year. The price had managed to gain 5% (~\$65/oz) by mid-February, but has given that back and a bit more as the US dollar has firmed. There is seemingly a lack of investor interest, with global gold ETF holdings slipping 0.2 moz to 73.6 moz and speculative futures positions being cut by 60% to 5.6 moz so far this year.

Historical price volatility in January was at the lowest level since 2000. While historical price volatility has picked up, the projected 30-day volatility (as calculated from options on the SPDR GLD ETF) is now at its lowest level in more than 10 years. Both measures have been below their long-term average for over two years, which is very unusual. The last time price volatility was below average for this long was during the 1990s.

Gold 30 day historical price volatility



Gold 30 day projected volatility



However, volatility will not stay low forever and it can change rapidly. Falling bond yields, US dollar strength and the gold price holding up despite dollar strength all suggest an underlying safe-haven bid. The rally in the stock markets has grabbed investors' attention, but there are plenty of issues, from an unresolved Brexit to contentious US-EU trade talks, that could increase economic uncertainty and reignite interest in gold.



PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,288	0.93%	1,288	26/04/2019	1,266	23/04/2019
€/oz	1,154	1.78%	1,154	26/04/2019	1,129	23/04/2019

Gold down as equities and dollar gain. The dollar index reached a high of 98, the highest level since May 2017 as the US economy continues to outperform that of Europe. Strong results from US companies have lifted the S&P500 index to a new all-time high and many equity markets have had strong recoveries this year. As a result, gold has been getting less attention and it edged down to its lowest level of the last four months at \$1,266/oz

(intraday). Investors have been exiting long positions, ETF holdings are down 845 koz (-1.2%) so far in April and large speculators cut the net futures position almost in half to 5.6 moz on 16 April from a week earlier. The gold price did recover towards the end of last week as the dollar index dipped slightly despite the strong US Q1 GDP figure.

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	15.06	0.52%	15.08	26/04/2019	14.75	23/04/2019
€/oz	13.50	1.28%	13.51	26/04/2019	13.22	24/04/2019

Lacklustre silver fundamentals do not offer price support. The latest *World Silver Survey* predicts silver supply will increase in 2019 with a number of operations in the Americas and India ramping up, along with higher by-product output from zinc, gold and copper mines. At the same time demand remains under pressure. Anticipated declines in smartphone sales this year would impact the 250 moz of electrical and electronic silver demand. Uncertainty around China's industrial sector also puts a portion of the 150 moz of "Other" industrial silver use at risk. Silver tends to outperform gold in a bull market but

as gold is struggling to break out, silver's fundamentals do not provide sufficient support to suggest that the metal is likely to outperform this year.

The silver market was in a small deficit last year. In 2018, demand increased by 4% to 1,034 moz and supply declined by 2% to 1,004 moz, according to the *2019 World Silver Survey*. However, the silver price performed poorly in 2018, falling 8.6% over the course of the year compared to a 1.6% dip in the gold price. The more industrial metals struggled last year amid the US-China trade dispute and slowing global growth.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	898	-0.52%	914	22/04/2019	878	25/04/2019
€/oz	805	0.26%	811	22/04/2019	784	23/04/2019

Platinum ETF holdings start to decline. So far in April platinum ETFs have shed 39 koz of metal, as the firm dollar price prompted profit-taking in the US. It is a small change relative to the 692 koz increase in Q1'19, 60% of which took place in South Africa.

Key European diesel market is suffering. Car sales in Italy fell the most of any EU country year-on-year in Q1'19, down 38,000 (-6.7%) to 536,000 units, as the country faces a recession and a low 2019 GDP forecast. Italy is the last major market holding up diesel share at 44% in Q1'19, ahead of France with 35%. Italian car sales account for close to 0.25 moz of platinum demand so a full-year drop of 6.7% equates to 16 koz of lost demand. Across Western Europe car sales were down 3.2% in

Q1'19 from a year ago, to 4.15 million. A continuation of poor sales and loss of diesel share could see platinum demand drop by 120 koz (-10%) in 2019. The weak Q1'19 car sales performance means the platinum price could move back towards \$800/oz over the next few months. This is particularly likely if the market realises that substitution in place of palladium is not likely in the short term due to the risk of failing stricter emissions tests.

South African production being affected by Eskom power disruptions. Anglo American Platinum and Impala have reported that power disruptions have had a small negative impact on their output in Q1'19. Eskom has been struggling to provide sufficient electricity to meet demand owing to coal supply issues and power station failures.



PRECIOUS METALS REVIEW

⁴⁶ Pd **Palladium**

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,456	2.15%	1,457	26/04/2019	1,369	23/04/2019
€/oz	1,305	2.98%	1,305	26/04/2019	1,219	23/04/2019

US vehicle inventory hit a 21-month high as demand drops. At the end of March there were 4.2 million unsold light vehicles (70 inventory days) on dealer lots in the US, the highest since June 2017. Light vehicle sales fell 2.5% year-on-year in Q1'19 to 4.0 million units. IHS Markit and JD Power/LMC Automotive's forecasts for full-year sales are 16.8 million (-2.3%) and 16.9 million (-1.7%) units, respectively, from 17.2 million in 2018. Some of the decline in sales will be made up by marginally higher palladium loadings. The US light vehicle market accounted for around 2.3 moz of palladium demand in 2018, a quarter of total demand. The weakness in car sales in the US, and also China, was a

factor in palladium's price being range-bound at \$1,350/oz to \$1,430/oz but it broke out to the upside on Friday. The market remains in a large deficit and palladium could continue to move higher.

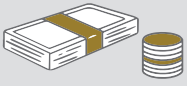
Palladium demand increasing from Europe's shift to petrol. Palladium demand from cars sold in the EU is expected to increase by 30 koz to 1.93 moz in 2019, based on flat sales and a growing market share of gasoline vehicles. However, if the Q1'19 sales performance of -3.2% continues for the whole year this could turn into a 35 koz drop.

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

	Rhodium	Ruthenium	Iridium
Reporting week	\$2,950/oz	\$260/oz	\$1,460/oz
Previous week	\$2,925/oz	\$270/oz	\$1,460/oz

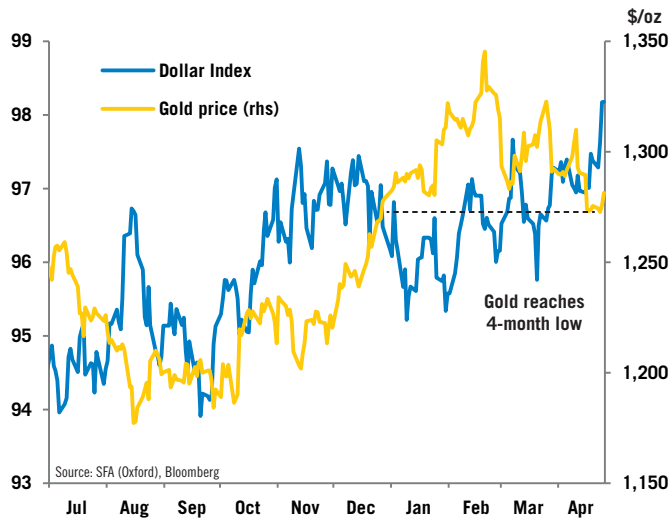
High rhodium price incentivises more production. Royal Bafokeng Platinum (RBP) is restarting the South Shaft at the BRPM mine. Notably, this is a particularly rhodium-rich UG2 operation and RBP is currently targeting production by Q4'19. This is on top of a ramp-up in production at Styldrift mine due to be completed in 2020. Between the two, they could add up to 10 koz of annual rhodium supply, a 1% increase on global supply.

The rhodium price has been recovering since reaching a low of \$2,900/oz on 17 April, showing a stabilisation similar to that of palladium. After being overbought in March, the rhodium price now appears to be around a more justifiable level. Ruthenium's price dipped to \$260/oz amid light trading while iridium ended the week unchanged.

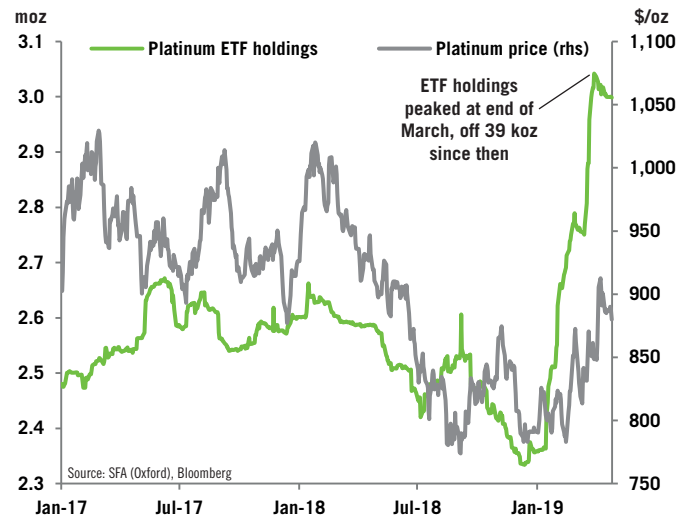


TRENDS AND INVESTMENTS

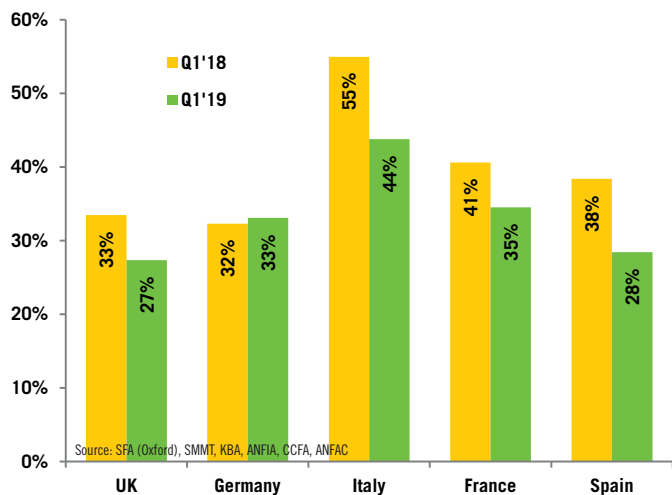
Gold and the US dollar



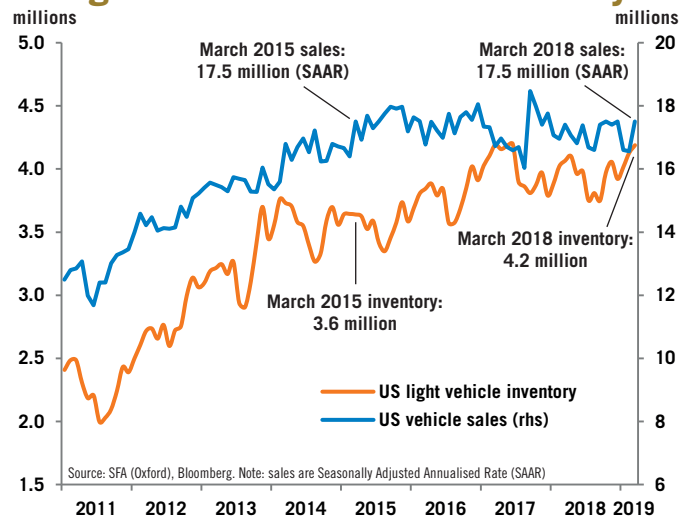
Platinum ETFs



Diesel share in major EU markets



US light vehicle sales and inventory



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