HERAEUS Precious Appraisal

Ed. 32 16th September 2019

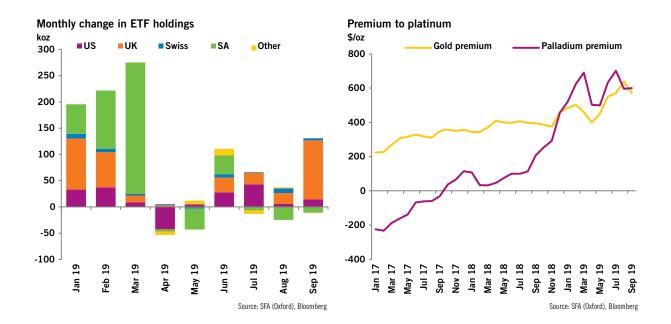
Heraeus



The platinum price is up, but the fundamentals point down

By the start of September, the platinum price had rallied \$100/oz (16%) in two weeks. There are a number of possible explanations for this rally.

Platinum ETFs have gained over 900 koz year-to-date. All the major regions have seen increases in ETF holdings and 120 koz have been bought in the first two weeks of September. Investors may now be considering that a mine strike is more likely in South Africa as an agreement has not been reached between the two largest producers and the mining unions, so talks have entered arbitration. However, in South Africa, ETF investors have been taking profits and selling some of their ETF holdings. In the first quarter, South African investors bought 418 koz, but since then they have sold just over 50 koz. The recent surge in ETF investment has been in the UK, with investors buying 112 koz in the first two weeks in September, and this may well be a reaction to the political turmoil around the UK's attempt to leave the EU.



Platinum certainly is very cheap relative to gold and palladium. The premium of gold over platinum reached a record \$678/oz in mid-August and is now \$540/oz. Palladium's premium reached \$761/oz in July and is currently \$648/oz.

Platinum's fundamentals are not good. Autocatalyst demand has been declining for some time, as has jewellery demand in China, but the rates of decline have eased this year. Perhaps the view of investors is that all the bad news has been priced in and \$800/oz is now a floor under the platinum price. Even with large flows into ETFs, the market is still expected to be in surplus this year.

Platinum's sharp price rally is most likely down to short covering. The jump in the platinum price in late August took it to new highs for the year and moved it out of its trading range. The talk during New York Platinum Week was that commodity trading advisor (CTA) trading triggered around 500 koz of short covering.

PRECIOUS METALS REVIEW

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		Close	Weekly change	High	Date	Low	Date
	\$/oz	1,491	-2.00%	1,524	12/09/2019	1,485	10/09/2019
4	E/oz	1,346	-2.28%	1,393	12/09/2019	1,344	10/09/2019

China's central bank continued buying gold in August.

The central bank's gold reserves increased by 0.19 moz to 62.45 moz in August, for a ninth consecutive monthly increase. Gold represents 2.8% of China's total foreign reserves, which is low compared to some other emerging economies such as India (6.5%), Russia (19.6%) and Turkey (16.3%) (source: World Gold Council). Gold purchases are expected to continue as the Chinese Central Bank continues to diversify its reserves away from US securities and increase the proportion of gold.

The ECB cut interest rates and gold jumped \$30/oz. The ECB also announced a return to bond buying, and bond

yields fell as bonds and gold rallied in response. However, after such a strong rally over the last few months, some caution may be needed. Gold speculative futures positions on COMEX rose to 30.1 moz net long as of 3 September, not far from the record level seen in 2016. This suggests that many traders are already very bullish on gold. Typical seasonality in the gold price also means that the price could move sideways to lower for the remainder of the year. However, the markets are predicting the Fed will cut interest rates again at its meeting this week, which should favour the upside for gold.

Ag Silver							
-		Close	Weekly change	High	Date	Low	Date
	\$/oz	17.64	-5.99%	18.47	12/09/2019	17.61	13/09/2019
	€/oz	15.93	-6.26%	16.85	12/09/2019	15.90	13/09/2019

New metallisation process for solar cells could cut PV silver demand. Fraunhofer ISE, working with German companies, has developed a new process that has reduced the width of the silver contacts in solar cells by 30-40%. Clearly, if this new process is widely taken up by the industry it will lower PV cell costs and also reduce the amount of silver per cell. Photovoltaics comprised 80.5 moz of silver demand in 2018 (source: Silver Institute). This year, thrifting looks set to reduce the amount of silver used to around 78 moz, despite an increase in the amount of solar power units installed.

Silver could continue to underperform gold. The

silver price peaked on the same day as gold and has underperformed during the subsequent decline, which is typical during a correction. The gold:silver ratio has edged up to 82 from just under 80. As with gold, the silver price tends move lower in the last few months of the year so silver could underperform for a while.

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2			Close	Weekly change	High	Date	Low	Date
	\$/	'oz	951	-1.37%	965	13/09/2019	929	10/09/2019
	€/	'oz	859	-1.63%	875	12/09/2019	841	10/09/2019

Diesel shares still sliding lower in Europe. In the second quarter of 2019, sales of diesel cars in the European Union made up 31.3% of the market (source: ACEA). This was down from a 32.2% share in the first quarter. The diesel shares in the five largest markets (France,

Germany, Italy, Spain, and the UK) were lower in July and August than in Q2, so, while the rate of decline may be slowing, the EU diesel share in Q3 is likely to dip lower again. The fundamental picture for platinum remains weak and so the price is expected to trend lower.

Platinum

PRECIOUS METALS REVIEW



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		Close	Weekly change	High	Date	Low	Date	
\$/	0Z	1,599	2.98%	1,624	12/09/2019	1,539	10/09/2019	
€/	0Z	1,444	2.74%	1,470	12/09/2019	1,393	10/09/2019	

EU petrol car sales rose in H1'19. Petrol car sales reached 4.8 million units in the EU in H1'19, up 1.7% from 4.7 million in H1'18. While the market share for electric vehicles has been growing, reaching 2.4% in Q2'19, the drop in diesel sales has meant that petrol car sales have continued to increase. Western Europe is the third largest automotive market after China and the US. Solid car sales, along with higher loadings on autocatalysts as emissions legislation is tightened, will keep palladium firmly in demand and support the high price.

Wage talks have stalled in South Africa, but there is a long way to go before a strike might be called. The mining union, AMCU, has formally declared wage negotiations with Anglo Platinum and Sibanye-Stillwater to be deadlocked. The next stage is for talks to be overseen by internal arbitrators. If a resolution is not reached then the discussion would move to the Commission for Conciliation, Mediation and Arbitration. Anglo Platinum and Sibanye-Stillwater's South African mines together produce around 2.0 moz of palladium, or approximately 27% of global mine production.

Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$5,100/oz	\$250/oz	\$1,460/oz
Previous week	\$4,450/oz	\$250/oz	\$1,460/oz

Rising sales of petrol cars in the EU support rhodium

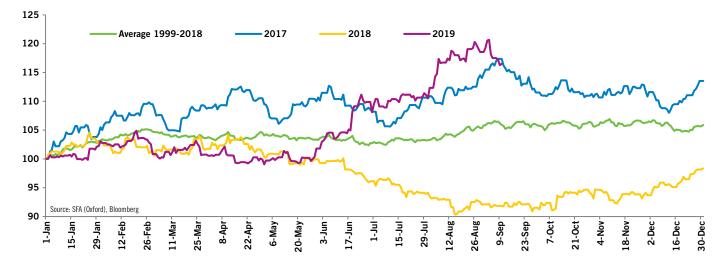
demand. As an important component in the autocatalysts for petrol cars, rhodium demand is expected to continue to rise as emissions legislation is tightened in the major petrol car markets. While the price is currently going through a correction after a sharp rally, in the medium term rhodium use is projected to increase which means higher prices can ultimately be expected.

While rhodium recovered most of its lost ground, climbing \$650/oz last week, the ruthenium and iridium prices were unchanged.

How high can the rhodium price go? That was the question attendees at New York Platinum Week last week were asking. Having reached \$5,000/oz at the end of August, the price pulled back briefly, but is climbing again. The rhodium price exceeded \$10,000/oz in 2008 and that caused substitution out of gasoline autocatalysts. Even if the price were to get that high, it is hard to envisage much substitution occurring, because the tightening emissions legislation that is driving demand means it is much more difficult to change autocatalyst formulations.

TRENDS AND INVESTMENTS

Gold price seasonality



Silver price seasonality



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