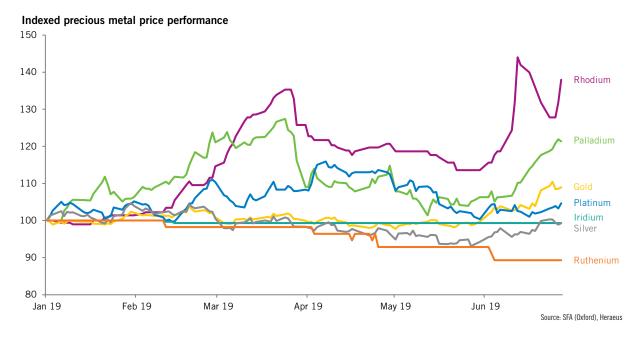


Rhodium outperforms in H1'19, ruthenium underperforms

Rhodium and palladium were the top price performers in the first half of 2019, with prices climbing by 38% and 22% respectively. The metals, used mainly in gasoline autocatalysts, did well despite poor car sales figures for China and the US. China 6 emissions standards have been brought forward by a year in some regions to this month, which has hit sales of China 5-compliant cars. The palladium price has gained as the market is in deficit, and rhodium buying may reflect concerns over a possible strike in South Africa during wage negotiations. However, auto sales in China are now expected to fall 5% this year, so it could be tougher to maintain such strong price performance in the second half.



Gold has gained 9%, mostly in June. Concerns over weaker economic growth and ongoing trade tensions were a factor in driving safe-haven demand, but the real boost was from central banks shifting tone and considering looser monetary policy. If the Federal Reserve cuts interest rates, a weaker dollar and higher gold price look likely.

Silver has continued to lag gold. Moves in the silver price have followed gold, but even after rallying at the end of June it failed to put in a positive performance. The price fell 1% in the first half as investment demand has been lacklustre. This took the gold:silver ratio to 92, its highest level since 1992.

Platinum managed a positive return, ending the first half of the year up 5%. Having started the year below \$800/oz and not far off its lowest level in 2018, platinum rallied in the first quarter as ETF buying surged. Despite the jump in investment demand, the market surplus is growing so the price is expected to decline further.

Iridium and ruthenium bring up the rear, with declines of 1% and 11% respectively. This is in stark contrast to last year when they were the best performers. Strong buying last year has very likely left users with high inventories, which has resulted in ruthenium purchasing easing this year.

PRECIOUS METALS REVIEW

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Gold

		Close	Weekly change	High	Date	Low	Date
\$/0	0Z	1,397	-1.04%	1,438	03/07/2019	1,382	01/07/2019
€/(0Z	1,245	0.36%	1,273	03/07/2019	1,220	01/07/2019

Gold price volatility has picked up. Following Trump's announcement that trade talks are resuming between the US and China, the gold price took a hit last Monday, falling back below \$1,400/oz. That was short-lived, however, as weak economic data led to increased expectations of monetary easing and gold rebounded strongly. Priced in euros, gold reached €1,258/oz, the highest level since 2013.

Easier monetary policy is on the way. Former IMF president Christine Lagarde has been nominated as the next ECB president. Should growth continue slowing in the Eurozone, the next ECB president is going to be expected to follow through on Mario Draghi's promise

to "do whatever it takes". However, there is limited room to use traditional monetary policy methods. The ECB already has a negative deposit rate and its balance sheet has nearly doubled in size since Draghi arrived. If negative interest rates are used more widely, this could see gold demand pick up in Europe.

However, a strong jobs number reduces the chance of a Fed rate hike. The markets are convinced that the Fed will cut interest rates later this month, but that may be wide of the mark as unemployment remains low, jobs growth recovered in June and the inflation rate is not far from 2%. If the Fed holds rates it will likely strengthen the dollar and the gold price will weaken.

Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	15.00	-2.04%	15.47	03/07/2019	14.90	05/07/2019
€/oz	13.37	-0.65%	13.70	03/07/2019	13.29	05/07/2019

Silver coin sales are outperforming gold. US Mint American Eagle silver coin sales were up 48% at 10.1 moz in the first half of the year, whereas gold American Eagle sales were down 7.4% at 107 koz. However, silver coin sales are still relatively low. Last year was the weakest year for silver coin sales since 2007 and this year is the second-lowest in the last 10 years. Perth Mint silver bullion sales were flat year-on-year in the first half,

but again this was a better performance than for gold where sales were down 4.7%. Silver ETF holdings have also been climbing, adding 8.9 moz (\pm 1.7%) to 535.5 moz last week. This is against the backdrop of stagnant industrial demand (\pm 580 moz), although demand for solar panels may rebound, with 100 GW p.a. of new capacity expected between 2018 and 2022.

Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	806	-3.79%	847	01/07/2019	805	05/07/2019
€/oz	719	-2.30%	748	03/07/2019	718	05/07/2019

Sales of diesel cars in Germany were up 3% in the first half of the year, and the diesel share was 32.9%. However, the diesel share was 31.6% in June. This is the lowest since last September when sales were negatively impacted by the introduction of the Worldwide harmonized Light vehicles Test Procedure (WLTP) and real-world driving tests. As Germany is the largest car market in Western Europe, a stabilisation in its diesel share will help to support platinum demand. Automotive platinum demand in Western Europe is estimated to decline by around 100 koz to 1.1 moz this year.

Cheap platinum attracts more ETF investment. Platinum ETF holdings reached a new record at 3.1 moz last week. After falling below 3.0 moz in April, ETF holdings have 2 I HERAEUS PRECIOUS APPRAISAL

been gradually growing through June and July, adding 110 koz in June and 26 koz in the first week of July. The price has traded in a range between \$800/oz and \$850/oz which is close to the lowest levels seen over the last 15 years.

The platinum price has been holding above support, but the second half of the year is a seasonally weaker period for platinum. Even with the gradual build in ETF holdings, the market is significantly oversupplied. This will remain the case going forward, as South African producers are restarting mothballed mines owing to the high rhodium and palladium prices, so the platinum price is expected to decline further.



Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,569	1.21%	1,578	05/07/2019	1,533	01/07/2019
€/oz	1,398	2.60%	1,403	05/07/2019	1,356	01/07/2019

US auto sales fell 1.8% in the first half of 2019. The trend of higher sales of trucks and SUVs and lower sales of passenger cars remains firmly in place. Light truck sales edged up by 1% in the first six months of the year, whereas car sales contracted by 7%. For June, auto sales were also down year-on-year at 17.3 million units on a seasonally adjusted annual rate (SAAR) (source: BEA). This was the same rate as in May, but slightly lower than the 17.38 million SAAR in June 2018.

Petrol car sales dropped 5.4% in Germany in the first half of the year. Overall sales of passenger cars in Germany edged up 0.5% in the first six months of the year to 1.85 million units owing to a recovery in diesel car sales and continued growth in battery electric vehicles (BEVs) and hybrids. Growth in hybrid sales, which are mostly petrol vehicles, has not been enough to lift the combined hybrid

and petrol powered vehicle sales, which showed a 1.7% decline in H1'19. In June, petrol car sales were similar to those in May, but 10% lower year-on-year. Hybrid sales, which have been growing rapidly from a small base, were down from May, but up 64% year-on-year in June. Overall car sales are expected to decline by 1-2% in Western Europe this year, with the shift to more petrol and petrol hybrid vehicles at the expense of diesel keeping palladium demand stable at 1.7 moz.

If petrol vehicle sales fail to live up to expectations then this would reduce palladium demand. However, with the price over \$1,500/oz, lease rates have been edging up, indicating the market remains tight. The palladium market is in deficit and so the price is expected to remain high.

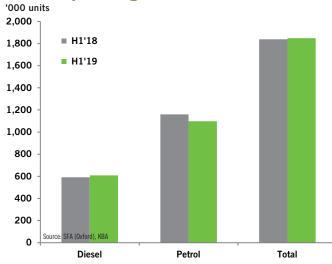
Rhodium, Ruthenium, Iridium Reporting week \$3,425/oz \$250/oz \$1,460/oz Previous week \$3,400/oz \$250/oz \$1,460/oz

The high rhodium price supports miners' revenues, but gives unions an excuse to demand higher wages. The Association of Mineworkers and Construction Union (AMCU) plans to meet Anglo American Platinum, Impala and Sibanye-Stillwater this week to begin wage negotiations. High rhodium and palladium prices have helped to improve PGM miners' revenues and profitability, and the union's starting position is ZAR17,000/month which is a 48% increase. However, the higher-cost

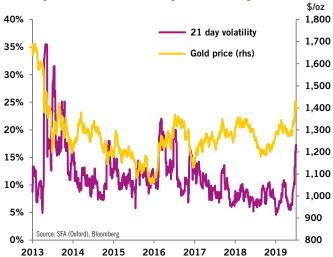
mines are still marginal or unprofitable even at the current strong rhodium price, so the mining companies will want to contain wage increases to avoid any further deterioration in their profitability.

The rhodium price rose by \$25/oz last week, while the ruthenium and iridium prices were unchanged.

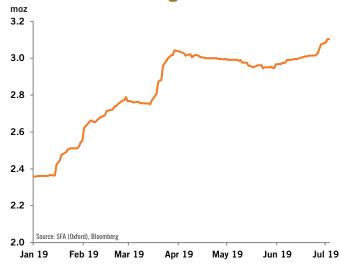
German passenger car sales



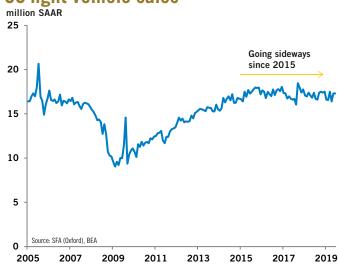
Gold price and 21 day volatility



Platinum ETF holdings



US light vehicle sales



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