HERAEUS PRECIOUS APPRAISAL

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MARKET SPOTLIGHT

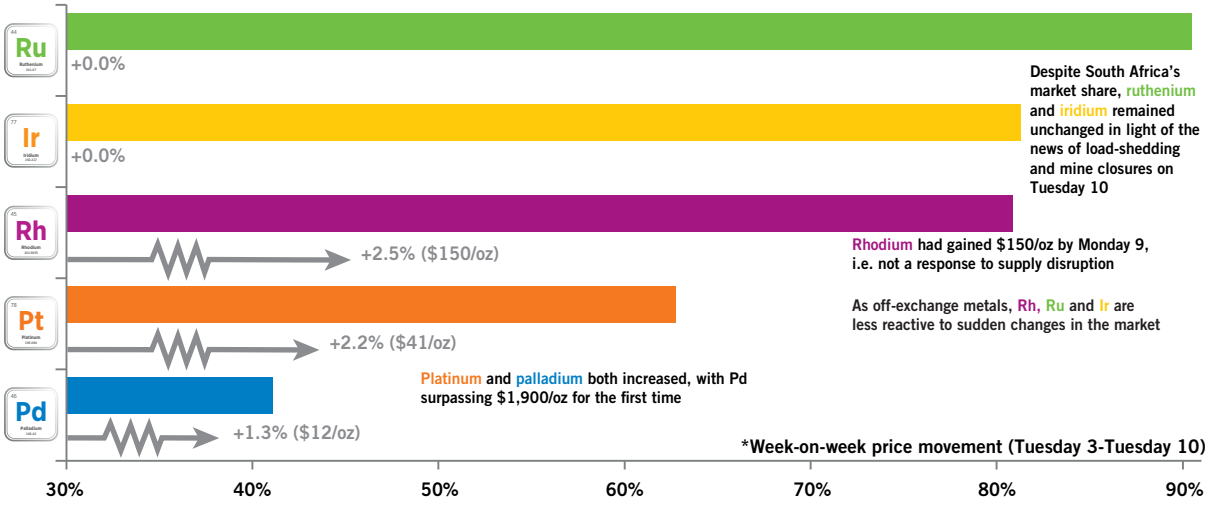
South African PGM supply short-circuits under Eskom

South Africa's electricity utility, Eskom, announced unprecedented Stage 6 load-shedding last week. The company cut 6,000 MW from the national grid, which is around 20% of the country's demand. Eskom provides 95% of South Africa's electricity, but plant maintenance and unplanned breakdowns meant the company was operating at just 55% capacity by Monday evening. The issue was compounded by wet coal as a result of very high rainfall.

South African PGM supply was reduced by 50% as producers suspended operations. South African 5E PGM (platinum, palladium, rhodium, ruthenium and iridium) mining capacity fell by almost a half on Tuesday after the escalation to Stage 6 load-shedding led to a one-day suspension of underground mining shifts. While load-shedding is not uncommon, it is the first time since 2008 that it has led to mine stoppages. **However, a backlog of existing concentrate stocks will minimise refined output losses for the year.**

Eskom is now a greater risk to South African PGM supply going forwards. South Africa accounts for more than half of the annual global 5E PGM supply, including around 4.5 moz of platinum and 2.5 moz of palladium. Eskom had previously considered Stage 4 the most extreme level of load-shedding; this is the first time in history that Stage 6 has been implemented. The escalation to Stage 6 represents a new level of threat to the industry.

South African PGM production as a % of global supply, and price response to mine stoppages*



Source: SFA (Oxford), Heraeus

The rhodium, iridium and ruthenium markets would be the worst affected by prolonged disruption to supply. South Africa accounts for 90% of the global mine supply of ruthenium (around 950 koz), and roughly 80% of both rhodium and iridium. As smaller markets, the effect of potential supply disruption will be more immediate for the minor metals than for platinum or palladium.

The price of platinum and palladium responded accordingly to the news on Tuesday (+2.2% and +1.3%). Rhodium gained $150/oz but ruthenium and iridium remained unchanged; price movement is expected in the future if disruption persists.

PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
$/oz	1,475	1.01%	1,487	12/12/2019	1,459	09/12/2019
$/oz	1,326	0.32%	1,335	12/12/2019	1,299	10/12/2019

Trump's tweets are moving the market, but not the Fed. The outcome of the latest Federal Reserve meeting was as expected, with no change to interest rates, but gold rallied anyway. Judging by the flurry of tweets this was not to the US president's liking. Another day, another tweet and gold gave the gains straight back. This was on optimism that an agreement would be reached with China on trade. Stocks climbed and investors ditched their safe-haven trades. For now, gold is stuck trading sideways, but on recent evidence a US-China trade deal would result in the price falling. However, that would put gold in a better position to rally in the New Year.

Net purchases by central banks were 41.8 t in October, according to the World Gold Council. Russia and Turkey increased their reserves by 10.2 t and 12.8 t respectively, making Turkey the largest net purchaser of gold for the year-to-date at 144.8 t. China made no purchases in October. Uzbekistan is the largest net seller for the year-to-date, down 16.5 t. Net central bank purchases for the year from January to October stand at 564.7 t, which is 17% higher than the same period last year.

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
$/oz	16.94	2.17%	17.12	12/12/2019	16.57	09/12/2019
€/oz	15.22	1.45%	15.37	12/12/2019	14.97	09/12/2019

Silver managed to outperform gold, if only for a week. The gold:silver ratio edged down from 88 to 87. The price is likely to underperform while gold is not trending higher.

The future of the European solar market looks bright. The solar market in Europe accounted for around 8% of silver PV (photovoltaic) demand last year (6.3 moz). Collectively, countries in the EU are predicted to install 16.7 GW in 2019, which is 104% higher than the 8.2 GW installed in 2018 (source: SolarPower Europe). Total installed PV capacity in the region is now around 132 GW. Spain was the largest solar market this year, overtaking Germany and installing 4.7 GW. However, grid connection is expected to restrict growth in the future; Germany is still expected to add the largest PV capacity until 2023 (~26.7 GW). The growth of the solar industry in Europe is supported by a 2020 deadline for EU Member States to meet their renewable energy targets. As a result, installations are expected to increase to 21 GW in 2020, using around 16 moz of silver.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
$/oz	929	3.69%	949	12/12/2019	888	09/12/2019
€/oz	835	2.93%	852	12/12/2019	803	09/12/2019

Expanding industrial capacity is supporting platinum chemical demand in China. Shandong Binhua is building a new polypropylene plant which uses a platinum catalyst for propane dehydrogenation. Globally, platinum's use in the chemical industry is around a third of overall industrial use (1.9 moz) and is set to expand by 1-2% next year.

Tiffany & Co sales declined in Q3. Worldwide net sales decreased by 2% in the period January-September of this year, compared to 2018. A 4% fall in sales in the Americas further compounded slow growth for the year-to-date. Platinum jewellery demand in the US has been stagnant since 2017, and is estimated to decline slightly this year. Tiffany has previously announced plans to accelerate its expansion into the Chinese market, and recently opened its flagship Asia store in Hong Kong. This may not be much help for platinum, as platinum jewellery sales in China are still shrinking and could drop below 1 moz this year.

PRECIOUS METALS REVIEW

46 Pd Palladium

	Close	Weekly change	High	Date	Low	Date
$/oz	1,928	2.67%	1,982	13/12/2019	1,876	09/12/2019
€/oz	1,733	2.00%	1,777	13/12/2019	1,696	09/12/2019

Vehicle sales in China forecast to drop in 2020 (source: CAAM). The Chinese auto market has continued its decline in November, with sales falling 3.6% year-on-year. Vehicle sales are down 9% in the first 11 months of 2019 and so China is on track for a second consecutive annual contraction in sales. CAAM projects a 2% decrease in vehicle sales to 25.3 million units next year, down from around 26 million units this year. New energy vehicle (NEV) sales are falling even faster, -44% in November, so they are no longer gaining market share at gasoline's expense.

However, automotive palladium demand in China is expected to grow next year to over 2 moz due to the implementation of China 6 emissions legislation nationwide. The associated increase in autocatalyst loadings is expected to offset declining vehicle sales. The market is set to remain in deficit next year which should keep the price elevated.

Palladium marked another record high last week and closed at $1,928/oz, exceeding the highest ever price of gold ($1,897/oz). Palladium has rallied 53% so far this year.

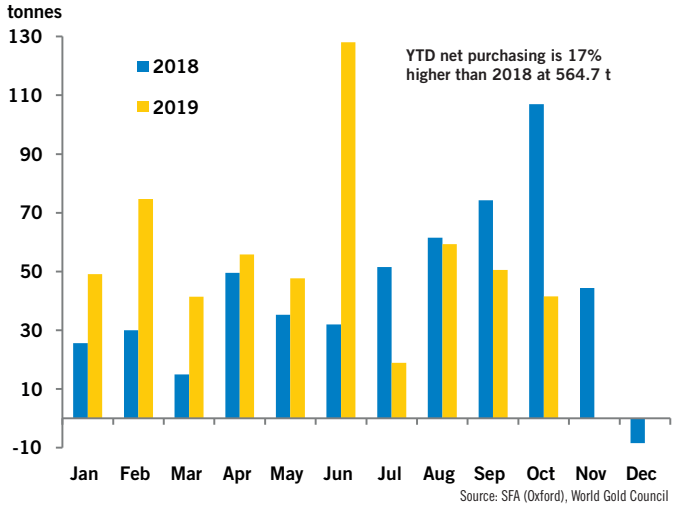
77 Ir 44 Ru 45 Rh Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	$6,250/oz	$250/oz	$1,500/oz
Previous week	$6,050/oz	$250/oz	$1,500/oz

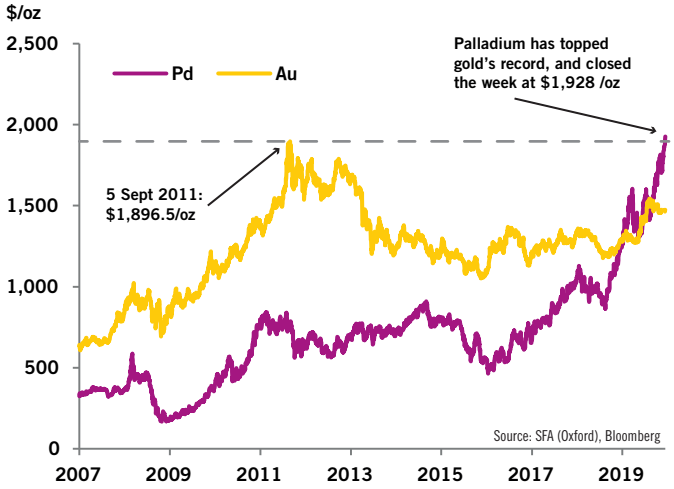
Rhodium demand growth does not solely depend on China, but a decline in Chinese vehicle sales next year would have a similar implication for rhodium as for palladium. Demand could still edge up and the market would still be in deficit, but not by as much as it would if car sales were to rebound. The rhodium price rose by $200/oz last week, but ruthenium and iridium prices remain unchanged.

TRENDS AND INVESTMENTS

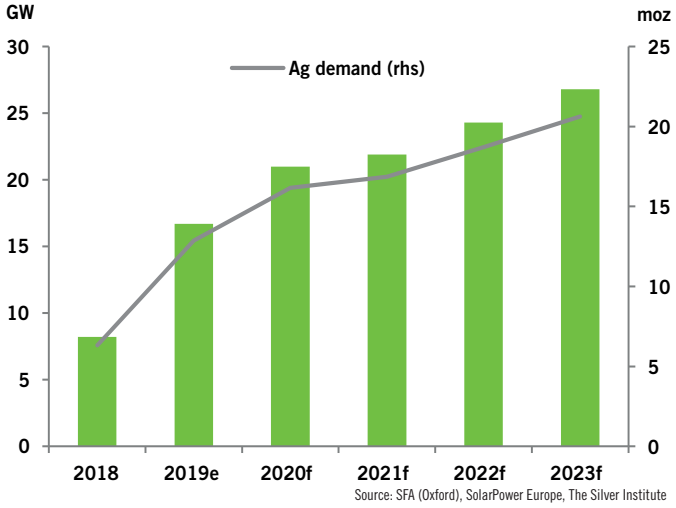
Central bank net gold purchases



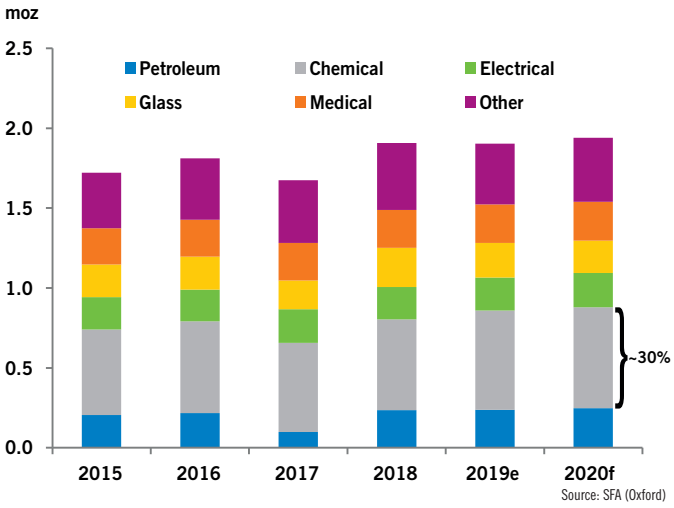
Palladium's premium over gold



EU solar installations and silver demand



Industrial platinum demand



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