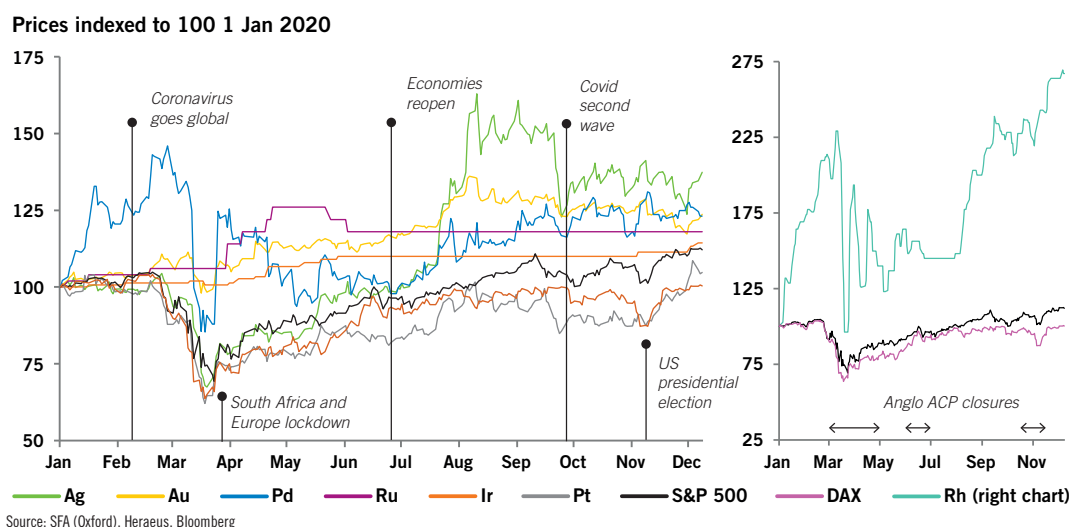




## MARKET SPOTLIGHT

### Hindsight is 2020

**In economic terms, 2020 has not turned out as the forecasts at the start of the year predicted.** The coronavirus pandemic has had a dramatic negative impact on economic growth. This caused a sharp and deep sell-off in many assets during March, but this was followed by a rapid recovery in prices. The surprise is, perhaps, how resilient PGM prices have been given the economic disruption. All the precious metals show a gain for the year and even though platinum has lagged the US stock market, it has beaten the DAX.



**The rhodium price has more than doubled so far this year**, rising 167% from \$6,250/oz to \$16,500/oz. Despite lower demand from the auto sector, the impact of supply cuts in South Africa has kept the market tight.

**Gold and silver prices performed even better than expected.** Governments and central banks launched massive fiscal and monetary measures to support their economies. This resulted in strong safe-haven investment demand. The sell-off saw the gold:silver ratio leap to a record 123.5 in March but silver has outperformed gold in the rebound. It is the second-best performing precious metal this year, pushing gold into third place. While contentious and much closer than the polls suggested, the US election did not change the trajectory of gold, or silver, prices, as previously noted.

**Palladium has performed almost as well as gold** and is up 23% this year. However, while auto sales have recovered in China, they are still struggling in Europe. **Iridium and ruthenium prices were not caught up in the volatility in March.** Both metals are up for the year but having made a new price high in April, ruthenium slipped back while iridium is still inching higher. **Platinum is the underperformer**, as anticipated, but has recovered to trade at a similar price to the start of the year. The industrial market has been in significant surplus which investment demand has soaked up. While there are moves to substitute platinum into autocatalysts and announcements about the hydrogen economy have been proliferating, it is too soon for either of these to have much impact on demand.

**Looking forward to 2021, prices are likely to be volatile.** Uncertainty remains regarding economic growth. It is unclear how long it will take to bring the pandemic under control and what additional measures governments and central banks may need to implement.



# PRECIOUS METALS REVIEW

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## Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,842	0.50%	1,875	08/12/2020	1,823	07/12/2020
€/oz	1,521	0.74%	1,548	08/12/2020	1,506	11/12/2020

**Central banks returned as net gold buyers in October**, after two consecutive months of net sales. Buying amounted to 25 tonnes, with five emerging market central banks almost solely responsible for the growth (Uzbekistan, Turkey, UAE, Qatar and India). The Turkish central bank has been the largest buyer in the period January-October, with 155 tonnes of gold, and is responsible for the majority of central bank demand this year. Russia was the largest buyer of gold before it stopped its purchases as of 1 April this year. Despite healthy demand elsewhere, Russia's departure means

annual central bank gold demand is likely to be far lower year-on-year. Central bank net gold demand stood at 195.2 tonnes in the first 10 months of the year, compared to the 624.2 tonnes recorded in the same period last year (source: World Gold Council). Purchases by central banks accounted for 15% of global gold demand last year (668.5 tonnes), roughly equivalent to the size of China's jewellery market. The gold price is entering a seasonally stronger period and so could continue to climb higher.

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## Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	24.01	-0.39%	24.87	08/12/2020	23.52	07/12/2020
€/oz	19.82	-0.16%	20.50	08/12/2020	19.46	07/12/2020

**Silver supply from the world's largest producer is on track despite disruption from Covid-19.** Fresnillo maintains a silver production outlook of 51-56 moz this year, in line with forecasts set out at the beginning of the year. Production in the first nine months of the year stood at 40.1 moz, down 1.8% year-on-year due to lower ore grades. Global silver mine supply is forecast to contract by 6.3% to 780.1 moz this year (source: The Silver Institute), reflecting the impact of operational shutdowns in response to the pandemic. While this is a steeper

decline than in previous years, silver mine supply has been dropping since 2016 owing to falling ore grades across major silver operations and a lack of new projects. Despite silver's rally this year, producers will be hesitant to increase supply on the price alone. The majority of silver is mined as a by-product of other metals (such as gold), which is the main source of revenue for many silver producers. Silver, like gold, typically sees stronger prices from mid-December and into the first quarter. If the trend holds, silver can continue to outperform gold.

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## Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,013	-4.41%	1,049	07/12/2020	994	09/12/2020
€/oz	836	-4.26%	864	07/12/2020	825	09/12/2020

**Cheaper 'green' hydrogen production bodes well for platinum.** The UN has launched the Green Hydrogen Catapult initiative to halve the production costs of green hydrogen to \$2/kg by 2026. Partner companies, including wind turbine manufacturers and electricity companies, aim to achieve this with more than 25 GW of green hydrogen production by 2026, approximately 50 times more than is currently produced. Green hydrogen is produced by using renewable energy to power the electrolysis of water, using platinum and iridium catalysts.

\$2/kg represents a tipping point in the hydrogen economy when green hydrogen will be a cost-competitive choice of fuel across multiple sectors, including passenger cars (source: Hydrogen Council). Overall platinum demand in all electrolyser and fuel cell technologies is an estimated 60 koz this year, but this is another initiative that should help to lift demand over the next few years. The platinum price failed to hold above resistance at \$1,050/oz, which has been its highest level in the last four years, so it may slip further.



# PRECIOUS METALS REVIEW

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

	Close	Weekly change	High	Date	Low	Date
\$/oz	2,328	-1.31%	2,379	10/12/2020	2,263	09/12/2020
€/oz	1,920	-1.18%	1,958	10/12/2020	1,875	09/12/2020

**India's car market is forecast to contract by 21% to 2.79 million units in 2020** (source: LMC Automotive). Gasoline cars have a 74% share of the light-vehicle market in India, accounting for ~240 koz of palladium last year. Car sales are starting to improve after bottoming out in April, but the long-term outlook remains subdued. Demand over the 42-day festive period (including Diwali and Dhanteras) in India was positive, with passenger car sales up 13.6% year-on-year to 431,597 units (source: FADA). Pent-up demand played a key role but there is uncertainty over how long it will last owing to the weak economic outlook. Covid-19 has severely impacted India's

economy, and GDP is forecast to shrink by 10% this year. Car financing options also remain limited, with many institutions reluctant to lend. As a result, used cars will become an increasingly favourable option over expensive new models. While it is one of the smaller global car markets in terms of PGM demand, India is one of the few major regions predicted to see strong growth over the longer term, as ICE vehicles remain dominant and BEVs only slowly gain market share. Supply and demand for palladium are both forecast to improve in 2021 and the price is expected to remain elevated.

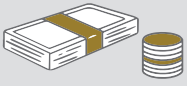
## <sup>45</sup>Rh <sup>44</sup>Ru <sup>77</sup>Ir **Rhodium, Ruthenium, Iridium**

	Rhodium	Ruthenium	Iridium
Reporting week	\$16,500/oz	\$295/oz	\$1,750/oz
Previous week	\$16,650/oz	\$295/oz	\$1,715/oz

**Refined supply from South Africa is on track to recover in Q1'21.** Anglo American Platinum has announced the completion of repairs to Phase A of the Anglo Converter Plant. The company can now begin working through the build-up of stock, which it has not been able to do since the company closed the Phase B unit for repairs in early November. Rhodium and iridium, in particular, take longer to process than platinum or palladium and so

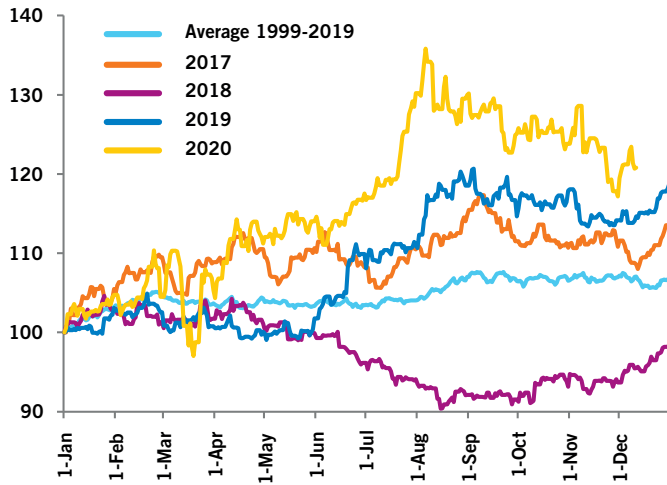
refined production of these metals is expected to return to normalised rates somewhat later. Anglo estimates that it will be able to gradually draw down the excess PGM stocks over the next 24 months.

The iridium price nudged 2% higher last week, while rhodium pulled back to \$16,500/oz and ruthenium held steady.



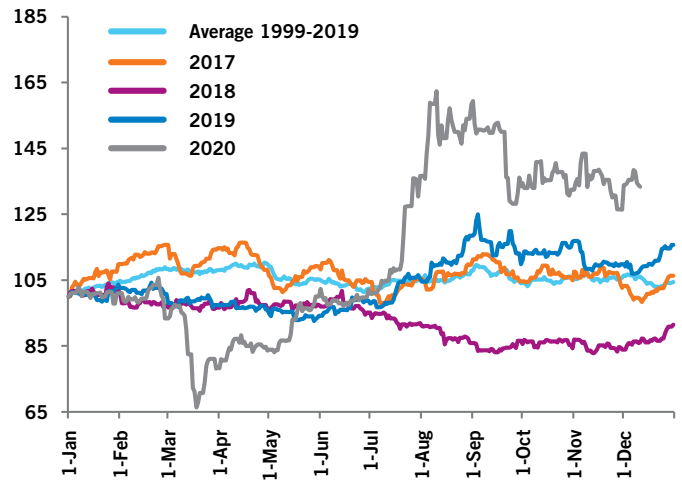
# TRENDS AND INVESTMENTS

## Gold price seasonality



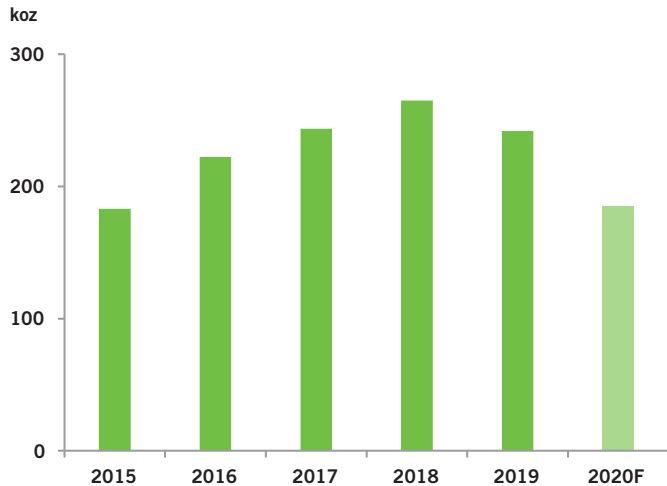
Source: SFA (Oxford), Bloomberg

## Silver price seasonality



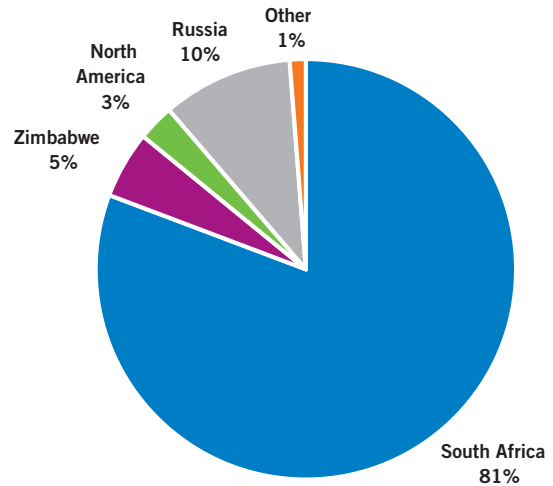
Source: SFA (Oxford), Bloomberg

## Palladium autocatalyst demand: India



Source: SFA (Oxford)

## Rh mine supply by region



Source: SFA (Oxford)

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