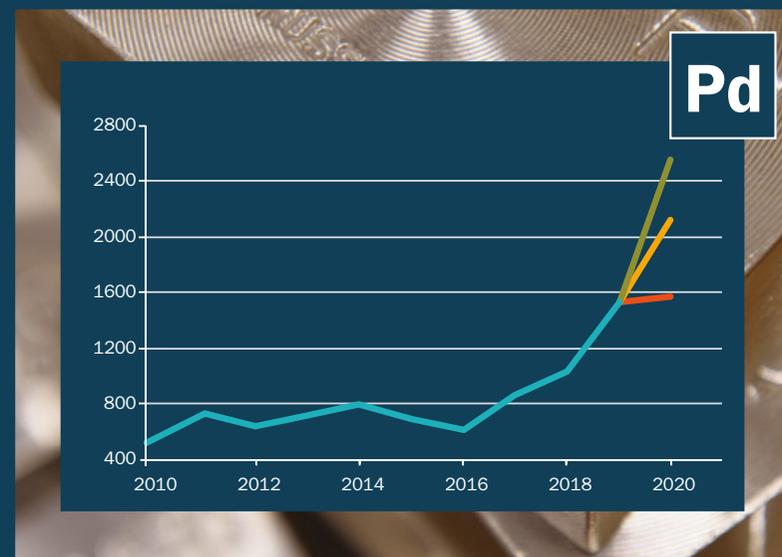
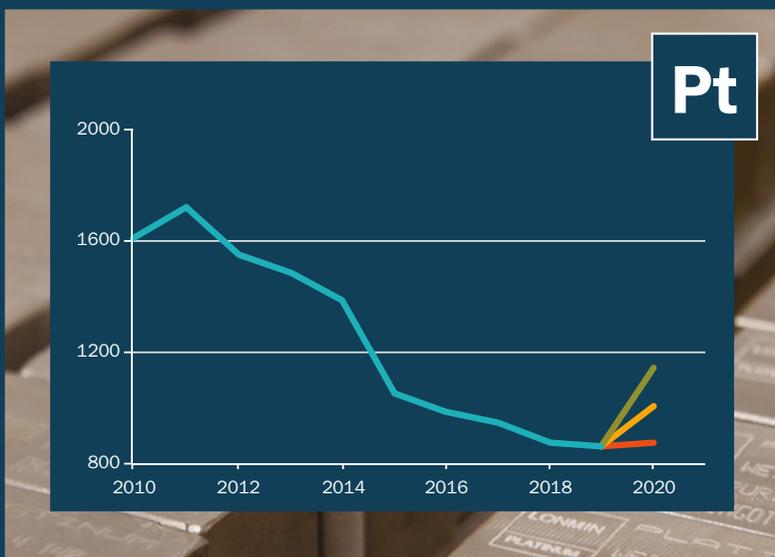
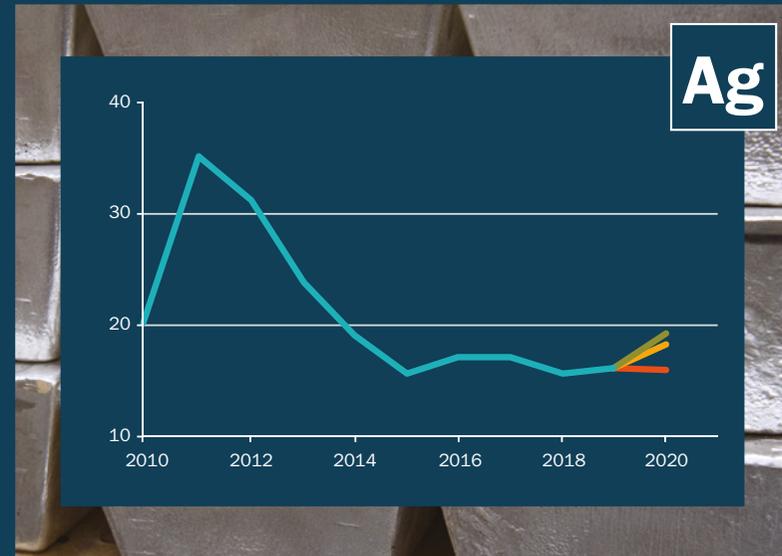
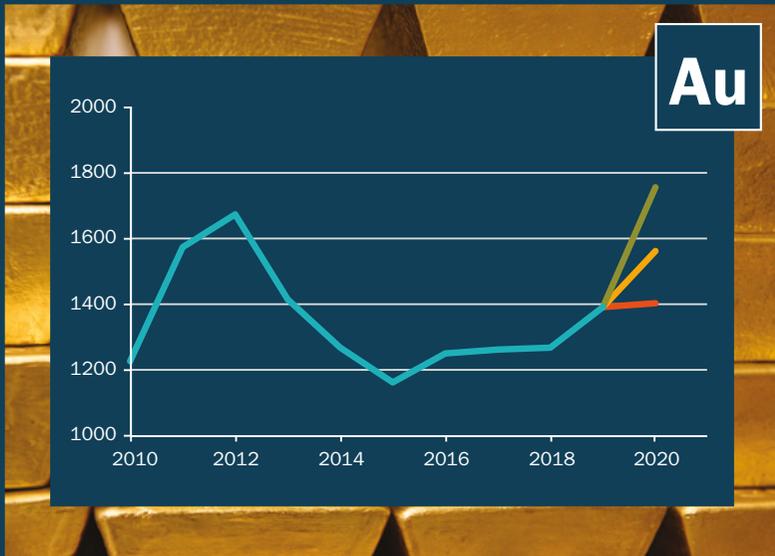


2020 PRECIOUS METALS FORECAST SURVEY



Actual Annual Prices 2010-2019 and Analysts' 2020 Average Forecasts (US\$/oz)



JUST WHO'S GOT 20/20 VISION FOR 2020?

Double-digit price rises forecast for all metals against 2019 averages, but only modest gains from early January levels.

As the price of palladium continues to hit what seems like a never-ending series of record highs, leaving many people with double vision, our attention switches to analysts' price forecasts for 2020. We ask whether anyone has 20/20 vision for 2020?

We've already seen a high degree of volatility during January, and in the case of gold and particularly palladium, some analysts' top-end price forecasts have already been breached. But all is far from lost, as it is the average price that takes priority when deciding the winners for each metal next New Year.

If we compare our analysts' average forecast for 2020 against actual 2019 prices (see Table 1), we find quite a bullish outlook, with the consensus predicting double-digit increases for all four metals (gold and silver +12%, platinum +16% and palladium standing out at +37%). But analysts are also expecting a year of heightened volatility, with the very lowest to very highest trading range significantly wider than those forecast last year for all metals, most especially gold and palladium, where the high-low more than doubles last year's survey range at \$780 and \$1,500 respectively.

Conversely, if we compare today's forecasts against the baseline of prices in the first half of January 2020 (see Table 2), we find a less bullish outlook, with a rather flat 12 months predicted to follow these New Year fireworks, most particularly for gold, up just 0.3%. Bullion analysts see slightly bigger rises for silver (up 0.7%), palladium (+2.5%) and platinum – forecast to be the best-performing metal, with a 3.2% annual average rise.

Turning to our analysts' reasons and comment, precious metals markets have factored in some of the downside risks from geopolitics (e.g. Brexit and the US-China trade war) as well as monetary factors such as the level of US real interest rates and strength/weakness in the dollar.

But the likely impact of geopolitical factors and the pace of global economic growth continues to provide uncertainty, helping to account for the 2020 survey's wide trading ranges.

Top 3 drivers for the gold price in 2020

Geopolitical and economic tensions e.g. US elections, Brexit, trade war

38%

We asked forecast contributors to indicate what they thought would be the top 3 drivers for the price of gold in 2020. The above table highlights the three most popular responses.

Monetary policy particularly US monetary policy (strength of dollar, weak real interest rates)

35%

Changes in demand, especially India and China

15%

Does that suggest tunnel vision for our 2020 forecasts? Perhaps, we will all continue to suffer double vision if palladium prices keep hitting further record highs. But to learn about the issues and factors seen to be driving the precious metals markets this year, read the commentaries behind the predictions and see who you think makes the most convincing case for their forecast.

Au Average: \$1,558.8 Range: \$780
Highest High: \$2,080 Lowest Low: \$1,300

Gold is expected to be in for a volatile year in 2020, with the widest forecasts predicting a range of \$780 compared to \$325 last year. Against the 2019 average, analysts are expecting gold's annual price to rise 12%, but that's just 0.3% above the price in the first half of January. Ross Norman (winner for palladium in the 2019 survey) is the most bullish analyst with his average of \$1,755 and Bernard Dahdah (winner for silver and platinum) sits at the opposite end of the spectrum with his annual average forecast of \$1,398.

Pt Average: \$1,005.1 Range: \$575
Highest High: \$1,350 Lowest Low: \$775

Platinum is forecast to be the best performing of the four metals, with analysts predicting an average price in 2020 of \$1,005, some 16.5% higher than the average 2019 price and 3.2% up on the price in the opening half of January 2020. However, with prices forecast to trade in a very wide range of \$775 (57% of the average price), our survey predicts a volatile year for the white metal.

TABLE 1 Average Forecasts Compared to Average Prices in 2019

Metal	2019 actual year average	Analysts' 2020 forecast average	% change
Gold	\$1,392.6	\$1,558.8	+11.9%
Silver	\$16.2	\$18.21	+12.4%
Platinum	\$862.9	\$1,005.1	+16.5%
Palladium	\$1,536.7	\$2,116	+37.7%

TABLE 2 Average Forecasts Compared to Average Prices in early January, 2020

Metal	Actual price first half of January 2020 ^(a)	Analysts' 2020 forecast average	% change
Gold	\$1,554.2	\$1,558.8	+0.3%
Silver	\$18.08	\$18.21	+0.7%
Platinum	\$973.6	\$1,005.1	+3.2%
Palladium	\$2,065.2	\$2,116	+2.5%

(a) 2-14 January 2020 inclusive (based on the pm \$ prices)

Ag Average: \$18.21 Range: \$8.05
Highest High: \$23.15 Lowest Low: \$15.10

With a trading range of \$8.05 (similar to last year), the overall consensus is that the average price of silver will end up somewhere in the middle at \$18.21, representing a 12.4% increase on the average price from last year but just 0.7% above prices in the first half of January.

Pd Average: \$2,116 Range: \$1,700
Highest High: \$3,200 Lowest Low: \$1,500

Palladium has already carried on where it left off in 2019, hitting a series of record highs and smashing through the \$2,500 ceiling this January, breaking a number of analysts' high-range forecasts for the full year. While it's hardly surprising to see analysts predicting strong gains, up 38% from last year's average, the increase from early January's level is more modest at 2.5%, and with the trading range forecast as \$1,700 (80% of the average price), it's a case of fasten your seat belts, we could be in for a bumpy ride in 2020.

We would like to thank all contributors for taking part in the 2020 survey. We see many familiar names and institutions participating, and also welcome new contributors in the shape of Afriforesight (Cape Town, South Africa), ED&F Capital Markets (Darien, Connecticut, USA) and ScotiaBank Metals Strategy (New York), all adding further to the international footprint of LBMA's Precious Metals Forecast Survey.

Rules of the Game: In each metal category, the analyst whose average price is closest to the actual average price in 2020 will win a 1oz gold bar. In the event of a tie-break, where two or more analysts are equally close to the average, our winner will be the one whose high-low forecast is most closely aligned to the actual price range for 2020.

Name	Low	Average	High
Adams, William Fastmarkets	\$1,365.00	\$1,430.00	\$1,635.00
Alexander, Cameron GFMS Refinitiv	\$1,435.00	\$1,558.50	\$1,705.00
Butler, Jonathan Mitsubishi Corporation	\$1,400.00	\$1,600.00	\$1,750.00
Clancy, Kieren Capital Economics	\$1,350.00	\$1,452.00	\$1,600.00
Cooper, Suki Standard Chartered	\$1,450.00	\$1,594.00	\$1,700.00
Dahdah, Bernard Natixis	\$1,300.00	\$1,398.00	\$1,450.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$1,390.00	\$1,525.00	\$1,675.00
Fritsch, Carsten Commerzbank AG	\$1,450.00	\$1,500.00	\$1,650.00
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$1,550.00	\$1,670.00	\$1,720.00
Kavalis, Nikos Metals Focus	\$1,420.00	\$1,515.00	\$1,650.00
Klapwijk, Philip Precious Metals Insights	\$1,470.00	\$1,554.00	\$1,650.00
Meir, Edward ED&F Capital Markets	\$1,450.00	\$1,589.00	\$1,675.00
Melek, Bart TD Securities	\$1,475.00	\$1,581.00	\$1,718.00
Nagao, Eddie Sumitomo Corporation	\$1,425.00	\$1,555.00	\$1,745.00
Norman, Ross Independent	\$1,520.00	\$1,755.00	\$2,080.00
O'Connell, Rhona INTL FCStone	\$1,480.00	\$1,590.00	\$1,675.00
Oliveri, Manuel Credit Agricole	\$1,470.00	\$1,560.00	\$1,640.00
Panizzutti, Frederic MKS PAMP Group	\$1,520.00	\$1,636.00	\$1,780.00
Ritter, Hans-Guenter Heraeus	\$1,400.00	\$1,500.00	\$1,700.00
Savant, Rohit CPM Group LLC	\$1,480.00	\$1,541.00	\$1,620.00
Schallenberger, Frank LBBW	\$1,455.00	\$1,545.00	\$1,633.00
Schieven, Chantelle Murenbeeld & Co	\$1,462.00	\$1,590.00	\$1,708.00
Shiels, Nicky Scotiabank Metals Strategy	\$1,500.00	\$1,600.00	\$1,700.00
Steel, James HSBC	\$1,475.00	\$1,613.00	\$1,705.00
Tchilinguirian, Harry BNP Paribas	\$1,425.00	\$1,520.00	\$1,680.00
Teves, Joni UBS Limited	\$1,445.00	\$1,600.00	\$1,700.00
Valdya, Bhargava B.N. Valdya & Associates	\$1,431.00	\$1,576.00	\$1,705.00
Venkatraman, S Foretell Business Solutions Pvt Ltd	\$1,400.00	\$1,504.00	\$1,690.00
Wang, Zhexing Bank of China	\$1,440.00	\$1,550.00	\$1,660.00
Welz, Jason Auriforesight	\$1,485.00	\$1,563.00	\$1,660.00
Averages	\$1,443.9	\$1,558.8	\$1,688.6

Name	Low	Average	High	\$14.50	\$16.00	\$17.50	\$19.00	\$20.50	\$22.00	\$23.50
Adams, William Fastmarkets	\$16.60	\$17.45	\$19.20							
Alexander, Cameron GFMS Refinitiv	\$16.65	\$18.55	\$23.15							
Butler, Jonathan Mitsubishi Corporation	\$17.00	\$19.00	\$21.50							
Clancy, Kieren Capital Economics	\$16.00	\$16.90	\$18.50							
Cooper, Suki Standard Chartered	\$15.90	\$18.28	\$21.25							
Dahdah, Bernard Natixis	\$15.50	\$16.10	\$17.50							
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$15.75	\$17.62	\$19.75							
Fritsch, Carsten Commerzbank AG	\$16.50	\$17.75	\$19.50							
Gu, Chen Bank of China	\$16.20	\$18.50	\$21.00							
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$18.70	\$19.20	\$19.70							
Klapwijk, Philip Precious Metals Insights	\$16.70	\$18.47	\$21.60							
Melek, Bart TD Securities	\$16.75	\$18.97	\$21.14							
Nagao, Eddie Sumitomo Corporation	\$16.20	\$18.40	\$20.50							
Newman, Philip Metals Focus	\$16.00	\$18.40	\$22.50							
Norman, Ross Independent	\$17.50	\$19.25	\$23.00							
O'Connell, Rhona INTL FCStone	\$16.82	\$18.93	\$20.43							
Panizzutti, Frederic MKS PAMP Group	\$17.50	\$18.62	\$21.00							
Ritter, Hans-Guenter Heraeus	\$16.25	\$17.25	\$21.00							
Savant, Rohit CPM Group LLC	\$15.25	\$17.75	\$19.50							
Schallenger, Frank LBBW	\$16.85	\$18.05	\$18.85							
Shiels, Nicky ScotiaBank Metals Strategy	\$17.50	\$19.00	\$21.00							
Steel, James HSBC	\$16.95	\$18.27	\$19.65							
Tchilinguirian, Harry BNP Paribas	\$16.00	\$17.55	\$19.50							
Teves, Joni UBS Limited	\$16.00	\$19.00	\$21.00							
Vaidya, Bhargava B.N. Vaidya & Associates	\$16.60	\$19.24	\$21.75							
Venkatraman, S Foretell Business Solutions Pvt Ltd	\$15.10	\$17.13	\$20.45							
Welz, Jason Afriforesight	\$17.44	\$18.08	\$19.21							
Averages	\$16.51	\$18.21	\$20.49							

Name	Low	Average	High							
Adams, William Fastmarkets	\$880.00	\$1,040.00	\$1,180.00							
Alexander, Cameron GFMS Refinitiv	\$840.00	\$965.00	\$1,200.00							
Briesemann, Daniel Commerzbank AG	\$850.00	\$900.00	\$1,050.00							
Butler, Jonathan Mitsubishi Corporation	\$800.00	\$1,020.00	\$1,150.00							
Clancy, Kieren Capital Economics	\$800.00	\$880.00	\$1,000.00							
Cooper, Suki Standard Chartered	\$850.00	\$993.00	\$1,115.00							
Dahdah, Bernard Natixis	\$880.00	\$978.00	\$1,000.00							
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$800.00	\$945.65	\$1,050.00							
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$970.00	\$1,007.00	\$1,064.00							
Klapwijk, Philip Precious Metals Insights	\$855.00	\$992.00	\$1,090.00							
Liang, Janlu Metals Focus	\$850.00	\$950.00	\$1,100.00							
Melek, Bart TD Securities	\$775.00	\$1,031.00	\$1,175.00							
Nagao, Eddie Sumitomo Corporation	\$910.00	\$1,145.00	\$1,290.00							
Norman, Ross Independent	\$954.00	\$1,110.00	\$1,350.00							
O'Connell, Rhona INTL FCStone	\$952.00	\$1,105.00	\$1,195.00							
Panizzutti, Frederic MKS PAMP Group	\$920.00	\$981.00	\$1,080.00							
Ritter, Hans-Guenter Heraeus	\$800.00	\$875.00	\$1,050.00							
Savant, Rohit CPM Group LLC	\$885.00	\$913.00	\$1,000.00							
Schallenberger, Frank LBBW	\$928.00	\$1,115.00	\$1,195.00							
Shiels, Nicky Scotiabank Metals Strategy	\$850.00	\$1,000.00	\$1,120.00							
Steel, James HSBC	\$890.00	\$941.00	\$1,025.00							
Stevens, Glyn MTSS UK Ltd	\$923.00	\$1,098.00	\$1,212.00							
Teves, Joni UBS Limited	\$800.00	\$975.00	\$1,075.00							
Wang, Pengfei Bank of China	\$880.00	\$1,080.00	\$1,200.00							
Welz, Jason Afriforesight	\$910.00	\$1,087.00	\$1,165.00							
Averages	\$870.1	\$1,005.1	\$1,125.2							

Name	Low	Average	High	\$1,500	\$1,750	\$2,000	\$2,250	\$2,500	\$2,750	\$3,000	\$3,250
Adams, William Fastmarkets	\$1,815.00	\$1,980.00	\$2,450.00								
Alexander, Cameron GFMS Refinitiv	\$1,810.00	\$1,995.00	\$2,310.00								
Briesemann, Daniel Commerzbank AG	\$1,500.00	\$1,575.00	\$2,200.00								
Butler, Jonathan Mitsubishi Corporation	\$1,800.00	\$2,350.00	\$2,600.00								
Clancy, Kieren Capital Economics	\$1,700.00	\$1,835.00	\$2,200.00								
Cooper, Suki Standard Chartered	\$1,820.00	\$2,163.00	\$2,310.00								
Dahdah, Bernard Natixis	\$1,580.00	\$1,698.00	\$2,200.00								
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$1,875.00	\$2,125.00	\$2,475.00								
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$2,200.00	\$2,250.00	\$2,400.00								
Klapwijk, Philip Precious Metals Insights	\$1,840.00	\$2,177.00	\$2,500.00								
Meader, Neil Metals Focus	\$1,930.00	\$2,200.00	\$2,500.00								
Melek, Bart TD Securities	\$1,698.00	\$1,888.00	\$2,615.00								
Nagao, Eddie Sumitomo Corporation	\$1,580.00	\$1,945.00	\$2,350.00								
Norman, Ross Independent	\$1,946.00	\$2,485.00	\$3,200.00								
O'Connell, Rhona INTL FCStone	\$1,900.00	\$2,550.00	\$3,200.00								
Panizzutti, Frederic MKS PAMP Group	\$1,940.00	\$2,288.00	\$2,450.00								
Ritter, Hans-Guenter Heraeus	\$1,700.00	\$2,000.00	\$2,500.00								
Savant, Rohit CPM Group LLC	\$1,750.00	\$2,039.00	\$2,300.00								
Schallenberger, Frank LBBW	\$1,908.00	\$2,265.00	\$2,515.00								
Shiels, Nicky ScotiaBank Metals Strategy	\$1,800.00	\$2,150.00	\$2,300.00								
Steel, James HSBC	\$1,955.00	\$2,294.00	\$2,494.00								
Stevens, Glyn MTSS UK Ltd	\$1,923.00	\$2,323.00	\$2,552.00								
Teves, Joni UBS Limited	\$1,800.00	\$2,200.00	\$2,500.00								
Wang, Zhexing Bank of China	\$1,610.00	\$2,200.00	\$2,500.00								
Welz, Jason Afriforeshight	\$1,630.00	\$1,924.00	\$2,440.00								
Averages	\$1,800.4	\$2,116	\$2,482.4								

William ADAMS

Fastmarkets, London

Au Range: **\$1,365 - \$1,635**
Average: **\$1,430**

The prolonged trade war between the United States and China undermined business confidence and economic growth in 2019, which led to central banks changing tack on monetary policy. The uncertainty on whether the trade war would tip the global economy into recession, combined with the fall in the opportunity cost of holding gold, as government bond yields fell and in many cases turned negative, all made gold an attractive asset to hold. In addition, strong central bank buying of gold, to diversify their reserves away from the dollar, added another bullish factor to the equation. For 2020, we expect a phase one trade agreement to boost business confidence and lead to stronger economic growth. In turn, this is expected to raise the opportunity cost of holding gold and dampen investor interest accordingly. Geopolitical tensions are running high, especially in the Middle East, and with many equity markets at record or multi-year highs, there is potential for a correction, but with it being a US presidential election year, President Donald Trump may avoid rocking the boat too much. Overall, the return to more concerted economic growth is expected to reduce demand for safe havens and see gold prices start to drift lower again in 2020.

Pt Range: **\$880 - \$1,180**
Average: **\$1,040**

In recent years, platinum prices have suffered as the auto industry has increasingly turned its back on diesel engines for passenger cars, but with palladium prices climbing so strongly, auto manufacturers are expected to start to use more platinum and less palladium in their petrol catalysts. The timing may be right for this shift – car manufacturers would not normally change the specifications of a vehicle mid-model, but now as stricter emissions standards have come into force in China and will do so in Europe this year and next, new models may well have more platinum in their catalysts. The technical picture supports this outlook – on the price chart, platinum's 2011 to 2018 downward trend has ended, so a recovery seems underway.

Ag Range: **\$16.60 - \$19.20**
Average: **\$17.45**

Silver prices are for the most part tracking gold prices and we expect that to remain the case in 2020. A better economic climate may boost industrial demand for silver and that could show up in a lower gold/silver ratio, but the overall direction is likely to be governed by gold's direction. Silver is also expected to benefit from the ever increasing interest in renewable energy, which is likely to grow hand-in-hand as energy storage systems become more mainstream. We remain bullish for industrial demand, less so for investment demand, unless stress returns to the financial markets.

Pd Range: **\$1,815 - \$2,450**
Average: **\$1,980**

We expected excessive moves in palladium last year and we saw them. We expect the market to remain strong as emission standards continue to tighten, but we do expect platinum to start to win back some market share in autocatalysts, especially given its \$1,160/oz discount to palladium. But any switch over is likely to take time. On balance, we expect the combination of tighter emission standards and a recovery in global auto sales to lead to continued strong demand for palladium. Just because palladium prices have rallied 370% since 2016 does not mean they cannot run further, as the metal is in a deficit and demand is expected to remain strong. Between 1997 and 2001, palladium prices rallied by almost 800%. That said, given the exponential gains, the market is also likely to experience increased volatility this year.

Cameron ALEXANDER

GFMS Refinitiv, Perth

Au Range: **\$1,435 - \$1,705**
Average: **\$1,558.50**

The weaker US dollar and a weaker macroeconomic environment will be the main drivers behind higher gold prices in 2020. We see the Fed rates largely neutral this year, with the possibility of at least a single rate reduction in the second half of the year should the US economy show signs of renewed stagnation. In addition, the pressure on the currencies of emerging economies is likely to abate, which should also benefit global gold demand. The numerous political and economic uncertainties likewise point to a higher gold price, as these can lead at any time to higher risk aversion and stock market volatility. Ongoing central bank purchases, and renewed investor interest will help drive ETP stocks higher, and this too will lend support for higher prices.

Pt Range: **\$840 - \$1,200**
Average: **\$965**

We anticipate that platinum prices will trade higher in 2020 although the market remains in a physical surplus, due largely to softer demand from the automotive and jewellery sectors, and a rise in mine production and scrap. Platinum sentiment remains poor given these unattractive fundamentals and it remains difficult to make a strong case for a platinum upside beyond any positive spillover from gold. The use of platinum in the automotive industry is predominately for diesel drive trains and the market share of these vehicles, especially in Europe, continues to decline, although aftermarket emission control for gasoline vehicles and a rise in higher standards of emission control for off-road vehicles in emerging economies is offsetting some of these falls. The recent surge in the palladium price may accelerate the shift from palladium into platinum in the autocatalyst sector, which would be highly supportive of higher prices for platinum, but this substitution on a mass scale is an expensive and time-consuming process, with the implementation of these measures more likely to take place in later years.

Ag Range: **\$16.65 - \$23.15**
Average: **\$18.55**

The GFMS team expects the silver price to strengthen this year, benefiting from renewed strength in gold. It is beginning the year at a relatively low starting level, as indicated by a gold/silver ratio above 85:1. While prices may be stronger in 2020, silver will continue to be hampered by the significant level of above-ground stocks and challenging market fundamentals. Some of the forces driving gold higher, such as concerns about the health of the global economy and the, as yet, unresolved trade tensions between the United States and China, may have possible negative consequences for the industrial metals and, by extension, silver. However, the weight of institutional money flowing into a relatively small market should help silver to outperform gold.

Pd Range: **\$1,810 - \$2,310**
Average: **\$1,995**

The GFMS team at Refinitiv expects palladium to stay strong in 2020 as the market remains in a sizeable deficit. Fundamentals are compelling and indicators suggest that the market is tight with a little relief on the horizon. Demand is healthy, hitting a new record high this year, as modest vehicle sales growth is augmented by higher loadings on the back of more stringent emissions standards emanating, most notably, from developing world markets, which also serves as a buffer for any potential slowdown in vehicle sales. On the supply side, we forecast a slight reduction in mine production this year, but this will be offset by a jump in autocatalyst scrap recovery, pushing total supply to record levels. In the short term, we think prices could drop back from the current highs, to below \$2,000/oz, as the price may have risen a little too aggressively in early 2020 and the market needs time to catch its breath. That said, after the current froth dissipates and the market stabilises, we would expect palladium prices to resume a more gradual uptrend thereafter, with bouts of significant volatility, as the market fundamentals are supportive and there remains little that might currently alter that situation.

Daniel BRIESEMANN

Commerzbank AG, Frankfurt

Pt

Range: \$850 - \$1,050
Average: \$900

The outlook for the platinum price remains cloudy in 2020. Demand from the automotive industry is still suffering from the continued decline in sales of diesel vehicles in the EU, even if some tentative signs of stabilising are evident. The platinum market was balanced in 2019 only thanks to record-high investment demand. It will be difficult to repeat this, so a sizeable supply surplus is on the cards for 2020. We therefore envisage little scope for significantly higher platinum prices unless there are substantial substitution effects in the automotive industry or production outages in South Africa. That said, the platinum price is likely to be pulled up by the rising gold price. The discount on platinum as compared with gold is likely to remain at its present high level.

Pd

Range: \$1,500 - \$2,200
Average: \$1,575



We expect palladium to come under pressure in 2020 as the high expectations for demand are likely to be disappointed. Tougher carbon emission regulations in Europe becoming effective in 2021 are expected to lower demand generated by the automotive industry already this year. Passenger car sales in China and the US are also likely to fall. Given the prominent role that the automotive industry plays in demand, it will not be possible for other sectors to absorb this. In the short term, the palladium price could rise even further in view of the existing supply tightness and its momentum. The higher the palladium price rises, the more pronounced the subsequent price slide is likely to be. It is not possible to predict the precise timing. We are confident that the palladium price will be significantly lower at the end of 2020 than it is now.

Jonathan BUTLER

Mitsubishi Corporation, London

Au

Range: \$1,400 - \$1,750
Average: \$1,600

Gold will have another chance to shine in 2020 provided US interest rates remain low and keep Treasury yields suppressed. The possibility of further rate cuts and quantitative easing to keep US growth on track, together with a high probability of fiscal stimulus in this election year, will help keep gold supported as a safe-haven asset. Even in a continued 'risk on' equity environment, there may be hedging in bullion for riskier trades. Co-ordinated global growth, trade tensions and possible Middle East oil supply disruption could bring some inflationary surprises, though the outperformance of the US compared with other major economies will mean that the strength of the US dollar remains a headwind for gold. Physical retail demand from emerging markets is likely to lag due to higher prices, though paper investment demand will continue to be strong. Sentiment towards gold is likely to be boosted by further central bank purchases.

Pt

Range: \$800 - \$1,150
Average: \$1,020

The platinum market could be in another substantial market deficit in 2020 if investor inflows into platinum ETFs and other physical products are maintained, which should give further upside to the price as above-ground stocks are drawn down. Demand for platinum in autocatalysts should benefit from the rise in average loadings in preparation for RDE conformity factor testing in Europe, plus a modest uptick in global vehicle sales. The decline in the European diesel market could even begin to reverse as OEMs face up to hefty fines for missing CO₂ targets. Mined supplies are likely to remain flat as South African operations defer major shaft restructuring as they benefit from strong by-product prices and a weak rand. Recycled supply growth is likely to continue to be constrained by refinery capacity limitations and prolonged lead times owing to the difficulty in processing certain spent autocatalyst substrates.

Ag

Range: \$17.00 - \$21.50
Average: \$19.00

Silver will continue to play catch-up to gold, helped by a generally positive industrial outlook and rising investor interest. Low real interest rates and periodic geopolitical and trade tensions will provide a positive gold-driven backstory for silver, and while dollar strength will continue to present headwinds, we see a chance for inflation hedging in silver and gold. Provided the US and Chinese economies perform well, industrial demand for silver is likely to continue to rise, particularly in the chemical and electronics sectors. A roaring US stock market could take the shine off silver for some investors; however, for the year as a whole, we believe silver will find its champions among those that see silver as undervalued in relative and absolute terms, with a strong pro-cyclical growth story of its own.

Pd

Range: \$1,800 - \$2,600
Average: \$2,350

Palladium could scale new heights this year driven by surging autocatalyst demand, a lack of near-market stocks and constraints in refining, especially of secondary material. Recycling lead times will be extended due to capacity limitations and difficulties in processing certain autocatalyst feeds. This will further compound periodic market tightness and add to the substantial supply/demand deficit. Growth in worldwide vehicle sales will benefit palladium demand generally, while specific markets will see an increase in average vehicle loadings to address tighter domestic emissions standards. The continued phase-in of China 6 emissions standards will result in higher palladium (and rhodium) demand especially. We do not expect much meaningful substitution of palladium with platinum even at our forecast relative spread between the two. Any short-term easing of the liquidity situation, for example from refined inventory releases, is likely to represent dip-buying opportunities for auto and industrial users, helping maintain the general upwards trend.

For each metal we've inserted a bull or a bear infographic against the analyst who has the highest or lowest forecast average in this year's Survey to highlight who is the most bullish or bearish relative to the other analysts.



Kieran CLANCY

Capital Economics, London

Au Range: **\$1,350 - \$1,600**
Average: **\$1,452**

Gold's sugar-high should come to an end in the second half of this year, as the global economy finds its feet. At the same time, we forecast a slightly stronger US dollar, as the US outperforms other developed economies and the Fed remains on hold. In addition, gold imports by key consumers, including China and India, should remain weak. And while we expect little progress beyond any initial deal between the US and China, we suspect trade tensions will increasingly take the form of non-tariff measures, which shouldn't spook the markets in the same way that highly publicised tariff measures did in 2019.

Pt Range: **\$800 - \$1,000**
Average: **\$880**

Another year of surplus in the platinum market should put the screws on the price of platinum. In fact, the market may be even more oversupplied than we currently anticipate, given the elevated prices of other metals mined alongside platinum, such as palladium and rhodium. Moreover, although there might be some cyclical recovery in European car sales, diesel cars are likely to remain out of favour.

Ag Range: **\$16.00 - \$18.50**
Average: **\$16.90**

We think that the silver price will decline in 2020 for many of the same reasons affecting gold. However, we don't forecast as large a fall as gold owing to our expectation of slightly stronger industrial activity, which accounts for roughly half of silver's demand.

Pd Range: **\$1,700 - \$2,200**
Average: **\$1,835**

After a barnstorming 2019, we think the price of palladium is vulnerable to a correction. We suspect palladium's positive fundamentals are already baked into the price, not least because much of the structural boost to palladium demand owing to tightening emissions regulation in the EU and China has already occurred. Therefore, we think prices will pull back a bit in 2020, but remain at an elevated level by past standards.

Suki COOPER

Standard Chartered, New York

Au Range: **\$1,450 - \$1,700**
Average: **\$1,594**

We expect gold prices to test seven-year highs in 2020, even though we see the Fed on hold throughout the year. Gold has re-established its safe-haven status and has proved to have many strings to its bow. While prices were buoyed in 2019 by central banks turning surprisingly dovish, this was not the only catalyst driving upside momentum. Falling UST yields and geopolitical uncertainty broadened gold's appeal to a wider audience, and gold ETPs set a new record high. We see scope for further growth in investor positioning and believe the next leg higher is likely to be led by retail investment demand. The physical market is likely to continue to set the floor, and demand has proved to be price elastic, which bodes well for prices. Central banks remain net buyers, but volumes have eased. Given that rate cuts usually have a positive impact on the economy with a lag of about one year, we believe investors are more likely to turn to gold in meaningful numbers towards the end of the year, in line with our expectations for UST yields to ease and for the Fed to cut rates in 2021.

Pt Range: **\$850 - \$1,115**
Average: **\$993**

Strengthening platinum prices are largely the result of positive sentiment driven by gold prices and investors taking a constructive longer-term view of the metal, rather than firming fundamentals. ETP inflows exceeded 900koz last year, the second-strongest year on record, helping to lift the price floor. It would take additional hefty inflows or a structural firming in fundamentals to lift prices further. The market swung into a deficit last year net of ETP inflows and would likely require another powerful swing in demand to drive prices substantially higher. We expect the market to swing back into a surplus in 2020 but expect fundamentals to improve at the margin as the demand decline slows down. Key factors to watch will be signs of potential substitution in the autocatalyst sector (it has already started to emerge in the glass industry), stabilisation of the diesel market, potential supply disruptions and investors continuing to position for the longer term.

Ag Range: **\$15.90 - \$21.25**
Average: **\$18.28**

Silver price action has been driven by the return of investor interest as opposed to strong industrial demand. This is a significant improvement on market dynamics from a year ago, when appetite was subdued across both sectors. Silver ETP holdings hit fresh record highs in November 2019. While we expect silver industrial demand to improve at the margin, particularly as semi-conductor shipments recover from pronounced weakness, investor demand is likely to remain in the driving seat. Silver remains significantly undervalued compared to gold. Thus, there is scope for the metal to outperform if it continues to ride on gold's coat-tails. However, we continue to believe that silver tends to outperform for prolonged periods when both industrial and investor demand are growing. Similar to gold, the macro environment is more likely to be supportive in the second half of the year.

Pd Range: **\$1,820 - \$2,310**
Average: **\$2,163**

Palladium prices have not only traded at a consistent premium to gold and platinum over the past year, but have also set fresh record highs, surpassing \$2,100/oz and the forward curve remains backwardated. The market is structurally undersupplied and we forecast more deficit markets in 2020 and 2021 in excess of 700koz. The market balance is being tightened by both subdued mine supply growth and continued strength in industrial demand. Indeed, we believe the upside pressure is being exerted by underlying strength in autocatalyst demand in light of limited appetite for substitution rather than significant investor appetite. We look for three factors to indicate the turn of palladium's fortunes: (1) substitution in autocatalysts, with platinum being replaced by palladium and softer rhodium prices, implying less incentive to switch to palladium; (2) a change in emissions technology that does not favour palladium's thermal conductivity properties; and (3) meaningful supply growth that starts to balance the market. For now, barring near-term profit-taking or corrections, the market looks set to keep dips well supported.

Bernard DAHDAH

Natixis, London



We see stronger growth in the US, which should lead to higher yields and drive investors into riskier assets. We see unemployment and low inflation persisting into 2020, with GDP growth rising to 2.5%. Moreover, we think that it is more likely than not that we will see further positive steps emanating from the US and Chinese negotiations as President Trump seeks to boost the economy ahead of elections.

The biggest downside risk in our view is if holders of physically backed gold ETFs offload investments. The total amount held is equivalent to 53% of the world's production.



Although over half of the world's demand for silver comes from the industrial sector, the metal remains strongly correlated with gold prices. As with gold, silver is perceived as a safe-haven asset and we see no reason why the correlation should breakdown this year. As such, we see silver prices retreating on the back of a strong performance of the US economy.

Similar to gold, the biggest downside risk is from potential outflows of silver held in physically backed ETFs (equivalent of almost 60% of the world's production).



We expect a rebound in growth of automobile sales in 2020. This will be led by sales in China, which should benefit from a base effect (2019 was an especially bad year). Platinum will particularly benefit from what we expect will be stronger automobile sales in Europe (the largest market for diesel-powered cars) as the economic situation in the continent improves.

A resurgence in platinum demand from the automobile sector will contribute to narrowing the spread between gold and platinum prices. As such, we see platinum outperforming gold.



The market will remain in deficit, leaving the annual average price at historic highs. Our view is that although there is clear supply squeeze in the market, physical demand from autocatalysts (which represents almost 80% of total demand for the metal) is not set to dramatically increase (despite an improvement in automobile sales) in a manner that would support another 50% increase in prices. We would expect to see a price correction in the first half of 2020 that will better reflect the current supply and demand picture, especially if we see a large inflow of scrap supply.

Peter FERTIG

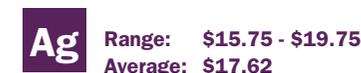
QCR Quantitative Commodity Research Ltd, Hainburg



Gold demonstrated last year its appeal as a safe haven as the main upswing set in when negotiations between the US and China turned negative. In calmer times, gold traded more sideways. Despite the US and China reaching an agreement for phase one, there are probably more reasons this year why gold might be sought as a safe haven. The tensions between the US and Iran are just one example. Also, the US presidential election in November might be an occasion where gold is in demand as a safe haven. The US economy is growing, but the industrial sector is in recessionary territory. The agreement with China, however, might lay the foundation for the ISM manufacturing PMI to return to above the 50 threshold. With an improvement of the PMI during the course of the year, the real yields of the US Treasury notes are likely to edge higher, which would increase the opportunity costs of holding gold. The Fed is not expected to move interest rates before the November election. However, if the US economy picks up growth momentum, the finance markets are likely to price in a rate hike. The ECB will reassess its monetary policy strategy, which could lead to speculations about a less expansionary stance. This might weigh on gold in the second half of 2020.



Only in the fourth year after Volkswagen's diesel scandal was platinum no longer the worst-performing precious metal in 2019. But it still lagged behind its sister PGM metal. Car sales in major countries were negative in the year-over-year comparison. However, the situation could improve this year, following the agreement between the US and China on a deal for phase one to end the trade war. As the Chinese government takes further measures to support the economy, lower interest rates could stimulate car sales in 2020. However, it remains questionable whether the share of diesel engines among total car sales will increase. Nevertheless, the total number of units might increase. Furthermore, supply might not grow at the same magnitude as demand. Therefore, platinum has a good chance to trade above the \$1,000/oz mark for the first time since March 2018.



Flights into safe haven usually also lift the price of silver. However, the industrial use of silver also plays a role. Last year, this was a burden on silver as prices edged relatively lower compared to gold, once the risk appetite of investors increased again. However, now that the US and China have reached a trade deal for the first phase, the foundation is laid for a recovery. One could expect that the conflict will not escalate further. Those fears weighed on spending decisions on durable goods. In addition, the Chinese government still takes measures to support the economy, which will also be beneficial for other Asian countries, and thus also for global economic growth. Therefore, industrial demand is expected to be supportive for silver prices in 2020. From this perspective, a recovery of industrial activity in the US is less negative for silver than for gold, despite the outlook that opportunity costs for holding positions might edge higher in the second half of 2020. Also in the final six months of the year, the US dollar might appreciate against the euro, which could become a headwind for silver.



As expected, palladium was the best-performing metal among the precious metals. With a rise of more than 50% from the start to the end of 2019, it was also among the top commodities last year. Even if the sky is not the limit, palladium still has the potential for further price increases in 2020 – especially in the event that car sales increase again, as we expect. The supply side remains the major driving force for higher prices and ETFs could no longer come to the rescue. However, depending on the ratio to platinum, a point might be reached where it gets more economical to switch from palladium to its sister metal in catalytic converters.

Carsten FRITSCH

Commerzbank AG, Frankfurt

Au

Range: **\$1,450 - \$1,650**
Average: **\$1,500**

In our opinion, the low and negative interest rate environment will remain in place for some time yet, thanks to the monetary policy pursued by major central banks. This, the unresolved US-Chinese trade conflict and the numerous geopolitical risks suggest that gold prices will rise further in 2020. The price rise following the escalating tensions in the Middle East in early January underscores this view. In addition, there is the risk of the overvalued US dollar and the highly valued stock markets correcting. The continued buying interest on the part of central banks should also lend further tailwind to gold. The already high optimism among speculative financial investors and the subdued demand in Asia due to record-high local prices will limit the price rise.

Ag

Range: **\$16.50 - \$19.50**
Average: **\$17.75**

Demand for silver ETFs is unlikely to reach last year's very strong level again. Growing silver demand in the area of automotive production won't be enough to push industrial silver demand up noticeably in 2020, as the photovoltaic sector is unlikely to provide any positive impetus for silver demand due to lower subsidies and continued thrifing. The outlook for the silver price in 2020 is therefore something of a mixed picture. Weaker investment demand due to lower ETF inflows, coupled with stagnating industrial demand at best, will preclude any significant rise in silver prices. Silver is likely to be helped upwards by gold's slipstream. The gold/silver ratio will remain at a high level.

Chen GU

Bank of China, Beijing

Ag

Range: **\$16.20 - \$21.00**
Average: **\$18.50**

Silver will tend to follow the trend of gold this year under most circumstances, just like it did in 2019. Therefore, we expect silver to benefit from the global low interest rates and the possible QE policy of the Fed, and maybe become an outperformer considering the current gold/silver ratio. Additionally, the US-Iran conflict at the very beginning of 2020 and uncertainty around a phase two deal indicate that risk-off sentiment will keep buoying silver. In the industrial aspect, the global supply will increase steadily as new mining projects launch, while silver will most likely see downward pressure from the weak industrial demand side. Overall, silver prices are likely to average at \$18.5/oz.

Réne HOCHREITER

Noah Capital Markets/Sieberana Research (Pty) Ltd, Johannesburg

Au

Range: **\$1,550 - \$1,720**
Average: **\$1,670**

Geopolitics and the danger that Trump does something really stupid to get re-elected will weigh heavily on investors this year. The yield curve inversion is now a year old and the dollar persists in its strength, but the first signs of weakness against gold are starting to show. Iran could be the spark that ignites the gold price, but then numerous factors could equally do the trick. It is now ten years since the gold price hit \$2,000/oz on intra-day trading and the likelihood of a run this year is quite high.

Technically, gold broke through resistance at around \$1,320/oz in June 2019 and is now in 'full bull' mode, trading a respectable \$130/oz above its 200 DMA. This could continue for some considerable time, perhaps most of 2020.

Pt

Range: **\$970 - \$1,064**
Average: **\$1,007**

Around 3moz of above-ground stocks of platinum (according to some guesses) will likely see the platinum price at just below 50% of the palladium price for most of this year. Switchability for palladium in gasoline engines on a 1:1 basis is now becoming very much clearer from the murkiness of OEM fake news and failure to mention certain facts about substitutability. The writing is, however, on the wall and substitution is inevitable after Q1 2020 as palladium stocks dry up.

Technically, platinum is in 'full bull' mode, with a trend developing which is adding around \$200/year to its previous year's price.

Ag

Range: **\$18.70 - \$19.70**
Average: **\$19.20**

The silver price will likely track the gold price with increasing urgency and may even outperform gold. If one of the 'algo gurus' puts in an escalation factor in their gold-silver trading algorithm, the dam will break and we will most likely see silver beat the gold price hands down on up days as it has been wont to do for some time now. Consumption in the electronics and super-conductor sectors will continue to benefit silver demand.

Technically, the silver price is in 'full bull' mode, breaking through resistance at around \$16/oz and looking set to stay above the 50 and 200 DMAs for some considerable time.

Pd

Range: **\$2,200 - \$2,400**
Average: **\$2,250**

Palladium prices are likely to do well again this year, as we have monotonously said for the last two years. Also we maintain our view (since May 2017) that it will be double the price of platinum by 2020 and now we think it could be there or thereabouts for another year as the platinum above-ground stocks deplete. As Pd demand will outstrip supply by several hundred thousand ounces a year for the next five years, we see the palladium price rising further and even breaking \$2,400/oz during 2020. Going forward, we see a \$2,250/oz average this year before OEMs finally convince themselves that substitution by platinum at half the price of palladium actually makes sense. If they do this, a China 6 catalyst may save them \$100/catalyst by 'going platinum'.

Technically, palladium is in 'full bull' mode and seems to be adding around \$500/oz/year to its previous year's price.

Nikos KAVALIS

Metals Focus, London

Au

Range: **\$1,420 - \$1,650**
Average: **\$1,515**

As we enter 2020, conditions seem ripe for gold to enjoy another good year, as risks abound across all major economies. An associated factor of great significance is US equities having posted consecutive all-time highs and bonds also being richly priced, making the case for diversification ever stronger. Perhaps most importantly, there are clear signs that professional investors are increasingly interested in gold allocations, whereas activity on the short side of the market is limited and largely tactical.

In the near term, there is some scope for price corrections and, as the typically seasonally strong first few weeks of the year pass, some liquidations seem likely. Improving sentiment towards US-China trade relations and the fact that the US economy is, at least for now, doing reasonably well may also act as a near-term headwind, as would any more signs that the Fed is unlikely to cut rates in the near future. Later in the year, however, we would expect the price to stage a strong recovery. Factors contributing to this will include the resurfacing of concerns about global markets, the realisation that the phase one trade deal is simply not enough to normalise trade relations between the world's two largest economies and speculation, or even news, about further cuts to US rates.

Philip KLAPWIJK

Precious Metals Insights, Hong Kong

Au

Range: **\$1,470 - \$1,650**
Average: **\$1,554**

Greater investor optimism lately regarding the US and global economy, US-China relations and the scope for further major gains in equity markets is likely to be disappointed before the year is over. By the end of 2020, the panorama could well be a lot more negative for risk assets in spite of the massive support provided by extremely loose monetary policy in the major economies. In the specific case of the US, this implies that current market expectations of only one 25bps interest rate cut by the Fed are wide of the mark. It is more probable that, by the end of the year, US short-term rates will be much lower and clearly negative in real terms. This, in turn, will be a factor in bringing down the US dollar, which has peaked on a cyclical basis and remains seriously overvalued. Slower growth and the heightened danger of recession will not only hit stock markets but also bubbly and mispriced debt markets, with this increasing the probability of a new financial crisis. Under these circumstances, gold will become more appealing to investors both as a defensive investment and because of its outperformance of most other assets.

Pt

Range: **\$855 - \$1,090**
Average: **\$992**

Platinum will benefit this year from the pull of higher gold prices plus occasional concerns about the sustainability of production in South Africa, particularly in light of the country's electricity supply problems. On the other hand, platinum will face some drag from its physical market being in a continued, albeit reduced, surplus. In this regard, ongoing weakness in light-duty diesel autocatalyst demand coupled with still lacklustre sales of platinum jewellery in China will be important handicaps, helping to limit price prospects for the metal in 2020.

Ag

Range: **\$16.70 - \$21.60**
Average: **\$18.47**

Silver has in the past tended to outperform gold during bull markets for both metals, although it significantly failed to do so last year. Moreover, when gold last was fixed above \$1,580 (in April 2013), silver was trading close to \$28/oz – quite a contrast to the \$18 handle for the white metal that one has seen recently. The explanation would seem to be a degree of self-fulfilling investor disappointment in silver's price performance over recent years coupled with some drag from its increasingly 'industrial' identity. Thus, whilst it is reasonable to expect that in 2020 silver will revert to its traditional mode of outperforming gold (especially given the currently very 'high' gold/silver ratio), optimism should be tempered by the probability of headwinds from renewed trade tensions and a further slowdown in global manufacturing as the year progresses.

Pd

Range: **\$1,840 - \$2,500**
Average: **\$2,177**

An ongoing and substantial physical market deficit coupled with much reduced availability of above-ground stocks will provide the conditions for even higher palladium prices this year. Supply from mines and recycling is likely to be flat, while demand will grow due to more palladium being used in autocatalysts because of stricter emission control regulations and larger-engined SUVs taking a higher share of auto sales. Meanwhile, available palladium inventories are dwindling, with the market reflecting this tightness in terms of upward pressure being the norm on both leasing rates and spot palladium prices. Some relief is perhaps foreseeable if a major drop in global GDP growth towards the end of this year results in auto production taking a large enough hit to compensate for higher palladium loadings in autocatalysts. Notwithstanding this possibility, for most of 2020, a trend higher in the palladium price is to be expected.

Janlu LIANG

Metals Focus, London

Pt

Range: \$850 - \$1,100
Average: \$950

Platinum's underperformance relative to palladium is expected to remain in place during 2020, as the former still needs to contend with another physical surplus. The supply side may have 'helped' through-problems at South Africa's power utility Eskom as it raised the risks of temporary supply disruptions. However, the relief provided by a weak rand and strong palladium and rhodium prices has helped stave off much needed supply cuts. Support from fundamental demand will also remain restrained. Even though platinum autocatalyst demand is expected to start improving, gains will be too modest to bring about a material change in the physical balance. Compounding this will be stagnant jewellery demand, which fell to a decade low in 2019. With rising above-ground stocks, a lack of true investor conviction in platinum is likely to persist for some time to come.

At first glance, the above contradicts our forecast for platinum prices to improve this year, by 10% y/y to an average of \$950. This is in turn based on platinum's positive correlation with gold and our constructive outlook for the latter, on the back of such drivers as accommodative monetary policies, an end to dollar strength, rising volatility in equities and widespread negative yields.

Neil MEADER

Metals Focus, London

Pd

Range: \$1,930 - \$2,500
Average: \$2,200

A forecast for palladium prices is in some ways easier than for the other three main precious metals, as much greater confidence can be shown in palladium's direction. This remains squarely based on its supply/demand fundamentals, in particular, strong autocatalyst offtake in the face of ever-tightening emissions standards and paltry evidence of substitution to platinum in gasoline any time soon.

That said, calling the top is extremely difficult given the speed of recent gains, the volatility of a relatively small market and low short-term price elasticity. At present, we are forecasting an annual average of 'only' \$2,200/oz this year, in part as we expect a pause for breath to occur before gains accelerate later in 2020. It is also worth bearing in mind that palladium did see \$200 corrections last year and that could well be repeated. We do not see a price fall any larger as likely, given the currently limited participation of speculators and the increasingly tight situation for above-ground stocks, which means that any dip is likely to be seized as an opportunity for 'bargain hunting'.

Edward MEIR

ED&F Capital Markets, Darien, Connecticut

Au

Range: \$1,450 - \$1,675
Average: \$1,589

This coming year promises to be another tumultuous one for gold. We say this in view of the fact that geopolitical tensions are running high across a number of areas (Iran, Saudi Arabia and Hong Kong) and no one knows how any of these will play out. More importantly, global growth is extremely sluggish, prompting most central banks to continue their easing policies. Declining real interest rates are shown to be the predominant driver for gold prices and so we think that this will be a formidable tailwind for a higher trading range for gold going into 2020. Finally, we find it hard to believe that the US stock market will post yet another 30% advance this year and the odds are good for much lower returns or even a modest decline, especially if recessionary fears grow. This is yet another variable in support of higher gold prices.



Bart MELEK

TD Securities, Toronto

Au

Range: **\$1,475 - \$1,718**
Average: **\$1,581**

Gold posted a stellar performance in 2019, moving from a low of \$1,266/oz in early May to finish the year at just below \$1,520/oz. More recently, the yellow metal is trading near \$1,550/oz, but in the relative near term, prices could still settle as low as \$1,515/oz amid a strong risk appetite that continues to push equity valuations toward record levels, lessening Middle East tensions and macro optimism radiating from more benign trade relations between the US and China, before a convincing and sustained rally is on the cards. The uncertain macroeconomic environment, strong central bank buying and somewhat lower volatility, which should keep CTAs maintaining their long tilt, should also serve to prevent a more significant correction.

As we move deeper into 2020, TD Securities projects that gold prices will trade north of \$1,650/oz due to a low real rate environment amid a relatively lacklustre macro environment, still low inflation expectations and an asymmetric Fed reaction function as hikes remain off the table. Record global debt levels and fears of monetisation, US election risks as we get closer to November, along with insurance buying by central banks, portfolio managers and individuals, should also help place a bid under the yellow metal.

Ag

Range: **\$16.75 - \$21.14**
Average: **\$18.97**

While a little delayed relative to gold, silver also rallied from a low of \$14.29/oz to trade not far off \$18.00/oz. And like gold, it dropped off its January high and may still have some additional downside in the relative near term. With the gold/silver ratio dropping from a high of 93.3 to 87 more recently, it can be said that the white metal has been outperforming gold this year as sentiment improved. The improvement in sentiment was driven by speculative money managers, CTAs and other traders who increased long exposure. At the same time, physical investors also aggressively bought ETP funds, which increased their silver holdings by 82.7moz since the beginning of the year.

Indeed, TD Securities analysis suggests that the outperformance trend will very much continue in the latter part of 2020. Like gold, rising macroeconomic uncertainties and an easy money environment are projected to resurrect the appeal of safe-haven assets from mid-2020 onwards, which, looking ahead, should continue to benefit precious metal prices. Historically, this means that silver will likely outperform, particularly since at a gold/silver price ratio of 87, it's extremely cheap by historic standards. TD Securities expects the silver price to average \$20/oz in the last three months of 2020. However, its link to gold and strong investor demand are not the only reasons — we also expect silver to see a deficit this year owing to improvements in both industrial, physical investor demand and a weak supply profile.

Pt

Range: **\$775 - \$1,175**
Average: **\$1,031**

As for platinum, whose future use has been put into question as a result of a structural decline in diesel sales, we believe that prices will still post a noteworthy performance as investment demand picks up the slack, above and beyond the production surplus. The combination of an ESG-driven impetus for higher loadings, driven primarily by China's 'Blue Sky Protection Plan', stricter emissions regulations in South Korea, India and Europe, along with a recovery in auto demand, will help platinum's industrial market shrink its surplus and inch closer to balance. The resulting deficit, however, should be more than absorbed by investment demand.

Indeed, we expect that we are at the early stages of a precious metals bull market. Investment demand in precious metals will continue to rise as money seeks optionality to further cuts, while benefiting from a trend of lower real rates, which will be prolonged by an asymmetric reaction function from the Fed. With interest rates at the lower bound, unconventional policies will also attract attention in an election year that will prove contentious. A spillover of investment demand into platinum is already observable in ETF data, with a one-year rolling correlation between gold and platinum's ETF holdings, which has now turned positive. Meanwhile, continued power outages in South Africa may well stem supply growth. In this context, we think investment demand will be ample and will drive platinum into a market deficit for the first time since 2016. This will support prices into the \$1,100/oz territory.

Pd

Range: **\$1,698 - \$2,615**
Average: **\$1,888**

Given the impressive rally palladium has experienced due to its ongoing chronic primary deficit, which is set to continue well into our forecast horizon, prices could well skyrocket further as available metal from ETF becomes increasingly less available and pollution regulations assure demand will stay strong. Limited Russian and South African supply growth and speculative interest may work together to tighten the market, as catalyst demand turns positive in China and around the world.

Given that the whole industry is operating beyond the primary mining production possibility frontier, where demand destruction and investor metal are required to balance the market, the current price, which is near an already extreme peak of \$2,200/oz, could well spike higher. At the same time, prices could drop sharply on any risk to demand, which would prompt profit-taking and tilt the market into a more extreme S-D imbalance. We believe lacklustre macro conditions and prospects of substitution may be the catalysts that bring prices to our annual average of \$1,888/oz.

Eddie NAGAO

Sumitomo Corporation, Tokyo

Au

Range: **\$1,425 - \$1,745**
Average: **\$1,555**

It is difficult to find a reason why the gold price doesn't rise. The US presidential election will be the event gazed at most in 2020 and an encouraging stimulant of the gold price. Any of the policies we expect from Mr Trump, who fights for re-election, will be favourable for the yellow metal. When there is a signal of deceleration in the US economy, some fiscal stimulus, large tax reductions and pressure on the Fed for rate cuts can be expected. The gold price will rise by the same logic as applies to the stock price. Also, in order to maintain the popularity of his main supporting groups in the election, Mr Trump will show a firm stance to China and Europe on trade talks or possibly make geopolitical problems escalate. Gold will be bought as a safe haven as happened in the previous confrontation in Iran. Due to the above reasons, I expect the gold price to maintain firmness throughout 2020. But because too many market participants are thinking in the same way already, I am making a moderate forecast.

Pt

Range: **\$910 - \$1,290**
Average: **\$1,145**



A decrease in market share of diesel engine cars in Europe will be tied to an occurrence of scrap as well as a reduction in platinum demand and, for a while, will be unfavourable news on the fundamentals. On the other hand, pessimism about the future of platinum will be eased. Due to the sharp rise in the palladium price, there are moves to look for switchback to platinum. It is also a good sign for platinum that a fuel cell seems to revive on the back of increasing environmental protection initiatives such as ESGs. As tail winds blow, platinum is starting to attract investors' interests. Buying by investors who missed a chance to invest in gold and buyers of the platinum/palladium spread may be accelerated.

Ag

Range: **\$16.20 - \$20.50**
Average: **\$18.40**

Since the end of 2015, silver has been following the gold price and its long-term uptrend. The trend will continue in 2020. The gold price achieved a more than 40% rise in the past for four years, but the increase rate of the silver price was only 30%. Taking that into consideration, I forecast the silver price in 2020 to be firmer than the gold price and expect the gold/silver spread to narrow. However, as ETP holdings stand at a historical high level and the physical demand is not strong in fundamentals, it is difficult to imagine a price above \$20/toz to be sustainable for long period of time.

Pd

Range: **\$1,580 - \$2,350**
Average: **\$1,945**

The current price of palladium is already exceeding the level that industrials can accept for any long-term consumption. Regardless of such circumstance, the price continues to rise, as a faster than expected shift from diesel to gasoline cars has occurred in Europe. In addition, introduction of tighter exhaust gas regulation has been faster in comparison to the pace of transition from conventional cars to less or zero emission vehicles. A situation seems to have escalated the building of strategic stockpiles, especially by Chinese car makers. While new car sales in China slowed down in 2019, stockpiling of storage could go ahead of schedule, and therefore, a panic will be eased in early 2020.

Philip NEWMAN

Metals Focus, London

Ag

Range: **\$16.00 - \$22.50**
Average: **\$18.40**

An increasingly supportive macroeconomic backdrop will be the chief driver of higher silver prices in 2020. In addition, this year, we expect silver to behave increasingly as a precious, rather than an industrial, metal and therefore avoid the undertow from economic concerns as seen in 2019 when the gold/silver ratio hit a multi-decade high. That said, there will be times when economic uncertainty weighs on silver. It will also have to contend with rising above-ground bullion stocks, reflected in another market surplus in 2020.

Overall, while there will be times this year when silver underperforms gold, these will be short-lived. In particular, silver's much smaller market relative to gold will see it start to outperform as investor inflows strengthen, as a response to weaker growth and falling equities. Initially, the silver price will benefit from positive spillovers from gold, but as silver gains momentum, this will also attract new institutional investment. We therefore expect the annual average silver price to rise by around 14% y/y to \$18.40 in 2020, reaching a high towards year-end of \$22.50.



Ross NORMAN

Independent, London

Au Range: **\$1,520 - \$2,080**
Average: **\$1,755** 

There is some irony in that 20/20 is meant to refer to perfect vision and yet markets have rarely been more opaque or difficult to divine.

Economic events are increasingly driven by political ones and these, in turn, are impossible to predict or indeed fathom – so it follows that gold prices by extension are largely unreadable within a 12-month time frame. That said, if financial markets are vulnerable, then that alone should justify a sizeable allocation to bullion.

2019 was the year we learned that central banks are locked into QE forever, and with global debt-to-GDP ratios hitting a record 322% and with equities massively overvalued, it just depends upon when and not if the proverbial hits the fan. Financial markets are trapped and we expect gold to respond by hitting an all-time high in H2 2020.

Ag Range: **\$17.50 - \$23.00**
Average: **\$19.25** 

Improving investor sentiment helped silver secure the strongest gains since 2010, with an increase of 15.2% in 2019, taking prices to a three-year high at \$19.65. We see 2020 looking like 2019, but a little more so. That is to say that silver prices will benefit from supportive factors such as macroeconomic and geopolitical uncertainties, coupled with fresh monetary easing, which will rejuvenate demand for safe havens such as gold and silver. However, being a quasi-industrial metal, silver should, by extension, fair a little less well than the yellow metal.

Meanwhile, investor demand in China has been strong (SHFE volumes were up 175% in 2019) and this is expected to remain a supportive feature of the market.

Above-ground stocks of silver remain large (at about 1,400 moz) in London and New York, and this physical surplus is again likely to account for silver's underperformance relative to other precious metals.

Pt Range: **\$954 - \$1,350**
Average: **\$1,110**

After a healthy 21.4% gain in 2019, platinum prices look set for further gains in 2020 as investor demand increases, but we foresee modest gains compared to its sister metals, palladium and rhodium.

On the negative side, net speculator positions are running at all-time record highs (and threefold the average net long position) and, meanwhile, there is the important backdrop of declining global auto sales. That said, platinum looks to be at peak supply surplus and likely ongoing Eskom power difficulties will see South African production curtailed and the market being roughly in balance. Meanwhile, there is little evidence of any price-related substitution away from palladium at this stage. Good but not stellar gains will be seen.

Pd Range: **\$1,946 - \$3,200**
Average: **\$2,485**

This is more a 'supply' story and less a 'demand' one.

A worsening eight-year supply deficit has seen a steady drawdown in above-ground stocks. Critically, as these near exhaustion levels, the impact on palladium prices will become disproportionate, by going exponential.

As the star performer in 2019, with a 52% gain, we see the bullish story continuing. Close attention needs to be kept on lease rates, which give a weather-eye to tightness in the physical markets and its concomitant impact on prices. This is a vulnerable market with deep risks to the upside and this is not a time to be short of this strategically important metal. Perversely, speculators have been entirely absent from this bull run, with ETF holdings sliding by about 1moz over the last two years. So prices have been rocketing despite ETF redemptions.

A caveat to this story is declining global auto sales, which is simply releasing some pressure on prices, but this 'win' is being offset by tighter global emissions standards.



Rhona O'CONNELL

INTL FCStone, London

Au

Range: **\$1,480 - \$1,675**
Average: **\$1,590**

By the time gold enjoyed its 15% rerating in the middle of 2019, it was discounting many supportive elements in the economic and geopolitical environment. Note, for example, how there was no price reaction to the change in the Syria-Turkey situation. The action early in January underscores this view. The attack in Iraq and subsequent retaliation saw a \$25-\$26 rally in thin conditions, but there was no follow-through and as tensions dissipated (for now?), all gains were reversed – although, in fairness, the protagonists did appear to be standing away from escalation.

This year sees both bullish and bearish influences. Bear notes include a likely reduction in official sector purchases, and although these are likely still to be high amid reserve diversification, a slowing in the trend would weaken both net offtake and sentiment. The CFTC figures in mid-January show a heavy speculative overhang and if gold fails to perform, then this is likely to generate stale bull liquidation.

If the United States and China continue to find common ground, then this will reduce tension and should help to stimulate the embryonic economic recovery in the emerging market economies and a potential longer-term turnaround in Europe.

On the bull side, European interest rates are likely to remain negative, while there are good arguments for a dollar weakening. Geopolitical risk has not gone away. Further, weak-handed holders largely cleared out positions in December, leaving scope to return for short bursts, while longer-term holders, hedging against a variety of risks, are forming a bedrock and are likely to provide a cushion of price support.

Additionally, the near-total lack of interest among the price-responsive retail elements, which has been a dampening factor, especially since September, points to a very substantial degree of pent-up demand waiting to be unleashed once retailers finally get used to higher prices, which is taking a lot longer than usual.

The key driver is likely to be the performance of the dollar tied in with risk assessment and this points to a gradually rising price.

Ag

Range: **\$16.82 - \$20.43**
Average: **\$18.93**

Silver has started 2020 uncertain as to which tune it wants to dance to. Renowned for its fickle tendencies, silver tends to think of itself as a precious metal unless gold is not showing much of a trend, when silver reverts to its second home and works more as a base metal. On the basis that gold is expected to strengthen, if only gradually punctuated by the occasional burst of activity, then silver prices are also likely to improve over 2020, but it may well be hard work. Improving economic activity and loose monetary policy suggest a better performance from the industrial metals also, which would reinforce a positive outlook.

Thus far this year, silver has failed to endorse gold's initial moves upwards, which tended to confirm the short-term nature of these rallies, but also suggested that silver was taking a dim view of the economic outlook. That is likely to change over the course of the year and if gold works higher as expected, then the silver price could well come to life, if only sporadically. The \$20 target is viable, although it would probably not be breached for long.

Pt

Range: **\$952 - \$1,195**
Average: **\$1,105**

Platinum started a recovery over 2019 after an effective eight-year bear market initiated by the financial crisis and exacerbated by the Volkswagen scandal. Interest was reawakened during 2019, probably as the markets realised that the metal was oversold and had too heavily underperformed. Part of the action last year was driven by the belief that platinum, going into ever deeper discounts against effervescent palladium, would start to benefit from the retooling of emission control catalysts in favour of platinum over palladium.

This is not likely to happen to any great extent as it takes a lot of time, research and investment to change the relative loadings on emission control catalysts, as well as the need for approvals. Given that the auto sector has been struggling and that investment funding has been at a premium, such recalibration is unlikely as the marginal cost of platinum and palladium on an emission control catalyst is below \$200 (rhodium is a different issue). It is highly unlikely then that auto companies would be spending much needed funds on retooling emission control catalysts. The electrification of the fleet is taking a much higher priority.

Whether work is being done because of fears of running out of palladium is a different matter, of course.

The market looks likely to be in a surplus this year, but with its oversold conditions, an expected weakening in the dollar and an economic recovery, platinum should maintain its bull run.

Pd

Range: **\$1,900 - \$3,200**
Average: **\$2,550**



After palladium's stellar performance since the start of 2016, when it was \$490/oz, palladium opened this year at \$1,946/oz and had breached \$2,120 within a week. The market is highly volatile – there are above-ground stocks, but they appear to be in firm hands. Zurich is yet again showing signs of tightness, with the market in a backwardation, and industrial demand is relentless.

On these simple bases, it is not difficult to make a case for yet stronger prices during 2020, with substantial bouts of volatility. Historically, palladium has been known as a by-product in the mining sector, either as a by-product of platinum in South Africa or of nickel in Russia, with the only primary palladium mines in the world located in North America. Co-product analysis shows that in virtually all of these operations, palladium is now the primary revenue earner, but we would have to aver that most mining companies will have built their mine plans around their then primary product and that there is no any immediate flexibility to expand output to meet the auto sector's voracious demand for the metal.

China seems to have an inexorable appetite for this metal (note that emissions standards for light vehicles will tighten again effective 2023 and it would be no surprise if the metal were being taken in ahead of the necessary loading changes) and we suspect that metal that may have been eased out of stockholders has gone to China.

The erosion in Exchange Traded Products, as holders have been taking profits for a long time now, means that the world's ETFs now only hold the equivalent to two weeks' global industrial demand, so the market cannot look there for a supplier of last resort.

This market is likely to be vicious this year, especially in the forwards, and it would be no surprise if it continued to outperform its peers.

Manuel OLIVERI

Credit Agricole, London

Au

Range: **\$1,470 - \$1,640**
Average: **\$1,560**

Unstable global risk sentiment coupled with a falling US dollar rate advantage, as driven by the Fed's dovish turn, were key in driving demand for hard assets such as gold higher last year. While elevated speculative long positioning combined with easing geopolitical tensions argue in favour of some caution, we believe that the yellow metal will still be able to experience another constructive year. After all, this year is likely to be characterised by continued uncertainty with respect to global trade, UK politics and the US presidential election. On top of that, the Fed is likely to continue doing its utmost in order to prevent liquidity conditions from deteriorating, while it cannot be excluded that further policy easing will be considered later this year. From that angle, the US dollar rate advantage has more room to fall and such prospects should put a floor below precious metals such as gold, keeping it a buy on dips. By year-end, we expect gold to trade towards \$1,580/oz, with upside risks.

Frederic PANIZZUTTI

MKS PAMP Group, Geneva

Au

Range: **\$1,520 - \$1,780**
Average: **\$1,636**

Gold ended the year 18.4% higher and is expected to remain on track in 2020. Global real growth is set to remain under pressure. Interest rates are not expected to change significantly and will likely remain negative in some parts of the world. The key factors moving gold this year shall be geopolitics and politics. The ongoing tensions in the Middle East need to be followed closely and shall remain one of the key drivers for gold. The US presidential election could trigger additional volatility to precious metals and to the US dollar, which could marginally weaken. We expect central banks to remain net buyers of gold again this year. In this complex environment, gold shall remain an asset of choice against market risks. We expect gold to move higher throughout the year and to trade with elevated volatility.

Pt

Range: **\$920 - \$1,080**
Average: **\$981**

After a 15% price decline in 2018, platinum recovered in 2019, ending the year at almost 22% higher. Platinum will be in a supply surplus throughout the year. The diesel automotive sector market continues to be under pressure and global growth is expected to slow down over the short to medium term, a few key factors that will prevent platinum from rallying substantially. On the other hand, we might face some increased investment and speculative demand, as platinum continues to trade at a large discount to palladium. We expect this non-industrial demand to keep the market nearly balanced. Platinum could move slightly higher over the course of the year, yet remain vulnerable should we experience a short-lived correction in palladium.

Ag

Range: **\$17.50 - \$21.00**
Average: **\$18.62**

Silver underperformed gold, ending the year around 16.90% higher. This year, we are mildly bullish and expect silver to attract some speculative interest and to gain some ground, building a solid base around the \$18.00/oz level. Silver could regain a bit of shine and move again in the shadow of gold. While fundamentals seem to be slightly brighter, they are still not shining. Silver will attempt to further recover, yet shall remain very volatile and prone to corrections on the back of speculative profit-taking as it moves higher. We expect a few erratic silver trading sessions during the course of 2020.

Pd

Range: **\$1,940 - \$2,450**
Average: **\$2,288**

Palladium was unstoppable in 2019, outperforming the other precious metals and closing the year over 52% higher. All key factors that propelled palladium to new highs in 2019 remain in place in 2020. The slower global growth and the declining global demand for cars shall be widely offset by the ongoing supply deficit, the increasing shift to petroleum cars, the more stringent regulations to reduce harmful emissions and the ongoing risk of further disruption in supply. We don't believe that the all-time high level will be a deterrent for fresh buying!

The risk on the downside lies with some speculative profit-taking, but any correction should be met with aggressive buying and remain short-lived. We expect palladium to remain in the spotlight again this year!

Hans-Günter RITTER

Heraeus, Hanau

Au Range: **\$1,400 - \$1,700**
Average: **\$1,500**

Gold will benefit as a safe-haven asset from geopolitical uncertainty this year, including US-Iran tensions, the US presidential election and trade talks. Sentiment is bullish, with speculative futures positions on NYMEX reaching a record high net long in December 2019 and the gold price reaching its most overbought level since 2010. A great deal is already priced in, however, which limits potential upside this year.

The Federal Reserve has signalled that rate cuts are on hold for now, but interest rate futures project an increasing probability of further cuts as the year progresses. An environment of declining real interest rates should be positive for gold.

Jewellery demand is expected to be weak, with the high price continuing to deter purchasing in the world's largest consumer markets. Central bank demand will be sustained, as countries move to diversify their reserves and reduce dependence on the US dollar.

Pt Range: **\$800 - \$1,050**
Average: **\$875**



The platinum market (excluding investment) is projected to remain oversupplied this year, but platinum's discount to gold and palladium could keep investors interested.

Global demand is projected to decline slightly, owing to reduced automotive demand (Western Europe) and a shrinking jewellery market (China). Substitution of palladium by platinum in autocatalysts is unlikely to have any influence on the platinum market this year. An increase in industrial uses will not be enough to offset losses in other areas.

Global mine production is forecast to fall marginally. The high prices of palladium and rhodium have enabled mature mines in South Africa to remain in operation, which will contribute to the significant market surplus and continue to keep the platinum price depressed. The impact of load-shedding by South Africa's state electricity utility, Eskom, is a threat to PGM supply this year, although mine stoppages may only provide temporary upside for the platinum price.

Ag Range: **\$16.25 - \$21.00**
Average: **\$17.25**

Silver will continue to benefit alongside gold from safe-haven demand, but its industrial exposure means it faces more potential headwinds from trade tensions and slow economic growth.

Industrial demand could see modest growth in 2020, supported by a positive outlook for photovoltaic demand and a rebound in electronic and electrical uses. Global photovoltaic installations are forecast to grow, although thriftiness will see reduced levels of silver per cell. The widespread implementation of 5G technology will be the driving force behind electronic and electrical demand this year.

The gold/silver ratio remains high, but investment demand is unlikely to be strong enough to prevent the silver price underperforming gold for another year.

Pd Range: **\$1,700 - \$2,500**
Average: **\$2,000**

A sizeable market deficit is likely to keep the palladium price at record levels for another year.

Despite a deteriorating global car market in terms of sales, automotive demand is expected to remain buoyant through the implementation of stricter emissions legislation, which requires higher loadings of palladium per vehicle. Demand is likely to be driven by several key markets such as China and Europe, which will expand the scope of emissions legislation this year (China 6a, Euro 6d).

Global primary supply is forecast to remain stable, provided any disruptions associated with South Africa's electricity supplier, Eskom, are kept to a minimum. In such a tight market, any interruptions to supply could increase price volatility. Higher yield from North America is projected to offset reduced production from South Africa and Russia in 2020.

Rohit SAVANT

CPM Group LLC, New York

Au Range: **\$1,480 - \$1,620**
Average: **\$1,541**

Gold prices are forecast to rise this year aided by healthy central bank demand and an increase in investor demand. While central banks are expected to continue adding to their holdings as a way of diversifying their reserve assets, investor interest in gold should be supported by various factors, which include loose monetary policy around the world, elevated equity values, a potential return of inflation, disruptive trade policy, elevated geopolitical risk, Brexit and its aftermath, and the US presidential election.

Pt Range: **\$885 - \$1,000**
Average: **\$913**

Platinum prices are expected to move sideways to higher during 2020. There is a lot of investor interest in platinum at present price levels and its deep discount to palladium makes it that much more appealing to investors. In addition to the healthy investor interest in the metal at this time, which is an important factor in keeping platinum prices supported, there also are other factors that are expected to positively affect the platinum price. These include supply side concerns out of South Africa, where electricity load shedding could disrupt mine supply, and improved market sentiment following a scaling back of trade tensions, which could boost platinum demand.

Ag Range: **\$15.25 - \$19.50**
Average: **\$17.75**

Silver prices are expected to remain at elevated levels during 2020. The gold/silver ratio is forecast to remain high, however, with silver prices not fully reflecting the various risks in the market. This is expected to continue making silver a value investment. An improvement in manufacturing activity during 2020 relative to 2019 should help to increase silver fabrication demand during the year.

Pd Range: **\$1,750 - \$2,300**
Average: **\$2,039**

Palladium prices are forecast to remain firm during 2020, with the greatest gain in prices expected to occur during the first quarter of the year. Palladium prices could be vulnerable to pullbacks given the rapid increase in prices experienced at the beginning of the year. These pullbacks are expected to be used as a buying opportunity by both investors and fabricators given the tight market conditions and expectations for fundamentals to remain supportive of prices in the medium term.

Frank SCHALLENBERGER

LBBW, Stuttgart

Au Range: **\$1,455 - \$1,633**
Average: **\$1,545**

Gold demand seems to get weaker because of higher prices. ETFs stopped buying since the beginning of November, gold buying from central banks is getting slower and demand for bars, coins and jewellery was weaker in the last few months. Also speculators seem to hold very high long positions at the moment. If it wasn't for political tensions and low interest rates, gold should drop. So I think we will see a sideways trend in 2020!

Ag Range: **\$16.85 - \$18.85**
Average: **\$18.05**

Demand will stay weak and ETFs have stopped buying. So silver will see no more than a sideways trend in 2020.

Pt Range: **\$928 - \$1,195**
Average: **\$1,115**

I think one of the main drivers for platinum will be the hope that there will be substitution from palladium to platinum and demand will pick up in this way.

Pd Range: **\$1,908 - \$2,515**
Average: **\$2,265**

What goes up must come down, but fundamentals are still bullish for palladium! Demand will be strong again and supply will be a problem again. The supply deficit is here to stay and the high level of palladium prices as well!

Chantelle SCHIEVEN

Murenbeeld & Co, Victoria

Au Range: **\$1,462 - \$1,708**
Average: **\$1,590**

We are quite bullish on the gold price. The three main factors that we think will impact the gold price in 2020 are low real interest rates, the US dollar and geopolitical events. The Fed is unlikely to raise interest rates in 2020. Gold will not be held back by Fed policy in 2020 and could well profit from further rate cuts. We think the US dollar is ready to decline in 2020 and will be encouraged to do so as negative interest rates abroad turn less negative while the Fed holds pat (or cuts). The global environment is volatile, and the US administration is unpredictable – two good reasons to expect sudden crises-induced flare-ups in the gold price. Indeed, it is hard to see how there will not be more geopolitical crises as 2020 unfolds.



Nicky SHIELS

ScotiaBank Metals Strategy, New York

Au

Range: **\$1,500 - \$1,700**
Average: **\$1,600**

Despite a resiliently strong and compressed US dollar in 2019, gold made a statement breakout from its six-year bear trend in the summer, as it became sensitive to geopolitical and trade risk with a repricing that was (smartly) aligned with a shift in Fed policy. Technically, it has entered a new bull market without the 'help' from potentially two other bullish drivers (sustained equity market volatility and systematic US dollar weakness). Gold remains an investment story (driven by Western investment flows of ~30moz and central bank buying of 22moz) and less so a commodity story (driven by Eastern physical flows). We don't see this participation mix and rate changing much in 2020 as central banks and Eurasia continue to 'de-dollarise' into the current mature business cycle and given the increasingly more fraught geopolitical and trade regime.

Gold prices in 2020 will be driven by: (1) the US election cycle (a highly tradeable theme especially after Super Tuesday); (2) trade and geopolitics (expect a series of 'mini-wins' and positive trade rhetoric within a broader framework of global protectionism, ultimately eroding the appeal of the safe-haven US dollar, less so gold); and (3) the US dollar and a Fed on a dovish hold (continuing to provide a liquidity backstop throughout H1 2020). Super bullish gold drivers (resilient repricing above \$1,600) could emerge from sustained macro fear/equity volatility and inflation risks. Overweight (but increasing) gold investor positioning showcases that it is earning some respect across broader markets given the rethink around negatively yielding European debt, which ultimately undermines their safe-haven appeal. Contrary to consensus, gold positioning is underweight (on the basis of its share in equity portfolios). 2020 will be another defining year for gold, as the increasing frequency of 'off-calendar' geopolitical events, US politics, a weaker US dollar and slower growth simply lift the gold floor.

Ag

Range: **\$17.50 - \$21.00**
Average: **\$19.00**

Silver remains very inexpensive versus gold, despite 15% gains in 2019 as geopolitical uncertainty, growth fears and a dovish Fed pause boosted the appeal of all precious metals. The structurally large physical overhang, and a mini manufacturing recession ensured that any silver outperformance (versus gold) remained short-lived. That performance trend should continue into 2020, with another fundamental surplus expected. While the bottoming out in manufacturing PMIs should provide tailwinds to industrial demand in 2020, multiple years of sustained fundamental deficits are required for record known inventories (~380moz) to be drawn down and prices to outperform. Its inherent by-product nature (the difficulty in self-regulating supply) complicates that, since the higher gold climbs, the more the silver fundamental picture softens.

Silver's attraction is, however, through a tactical lens – it's a cheap high beta gold proxy for investors in the short term, and it's still partly a precious metal that has proven itself as a currency, interest rate or equity inflation hedge. Its best friend is gold strength not fundamentals.

Pt

Range: **\$850 - \$1,120**
Average: **\$1,000**

Platinum's fundamental surplus (excluding investment demand) has likely peaked in 2019, with South African supply declines and a rebound in auto demand likely over the next two years. After years of persistent declines in the European diesel market share, green shoots have emerged as manufacturers prepare for stringent CO₂ limits from 2021.

However, above-ground stocks, persistently weak jewellery demand and producer-related flows (due to a buoyant rand PGM basket price) ensure outsized rallies remain structurally capped. Upside risks are both seasonal (historical Q1 strength) and event-driven (escalating Eskom-driven supply risk, any OEM confirmation or substitution). Similar to the silver outlook, tactical rallies – which are increasingly outsized given the disconnect between strong investor inflows versus market size (due to continued availability of liquidity and lower rates) – will continue to exist in 2020, especially on expected gold rallies. Platinum is simply 'high beta gold', with an opportunistic risk-reward profile on any upside European data and growth surprises currently forming. Prices should reset higher above \$1,000, somewhat reflective of the parabolic rise in its PGM peer prices.

Pd

Range: **\$1,800 - \$2,300**
Average: **\$2,150**

Palladium is unquestionably the best-performing (listed) metal this decade, clearly highlighting structural deficits and under-hedged market participants. China's 'car crash' in 2019 proved that the complexity of catalyst technologies and emission regulations is real, where changes are occurring faster than supply responses.

While the fundamental market balance is due to marginally shrink in 2020, (1) palladium remains in a structural deficit for the foreseeable medium term (at a time when above-ground stocks are minimal); (2) supply risk from South Africa (Eskom power cuts) and trade uncertainty are major growing risks that will continue to upend consumer buying trends; and (3) rhodium has broken up and out, serving as a bullish reminder and could drive potential substitution (of 5x-6x palladium for 1 part rhodium) in gasoline vehicles. Overall, there'll be a continued affinity for prices to bust into new higher ranges (albeit a less bullish performance is expected) until the next recession, but major and painful intermittent price flush-outs and unusually volatile forward rates will remain a key feature for 2020.

James STEEL

HSBC, New York

Au Range: **\$1,475 - \$1,705**
Average: **\$1,613**

We are positive on gold prices for 2020. Any uptick in trade or fresh geopolitical tensions have the potential to buoy prices. Gold may also benefit from investor hedge purchases, triggered by high equities. The main obstacle to rallies is likely to be a firm US dollar, as forecast by HSBC FX research. Fed policy is more neutral but still mildly gold-friendly. The prospect for increased fiscal spending globally may also aid gold. We expect net long Comex positions and Comex and ETF holdings to rise, but at a more modest pace from the robust 2019 levels. Strong central bank demand is likely to be key in sustaining high prices. Price-sensitive emerging market demand, mostly for jewellery, is weak but may recover. Coin and bar demand may rise from low 2019 levels, but is also sluggish, largely in response to high prices. Weak EM physical demand is likely to put a ceiling on rallies.

Pt Range: **\$890 - \$1,025**
Average: **\$941**

We look for platinum to hold steady in 2020. As with silver, our positive gold view plays a role in our platinum forecasts. Demand has been constrained by sluggish underlying physical demand due mostly to uninspiring auto and jewellery sectors, which make up the bulk of physical demand. Automotive demand may edge lower in 2020 due to market share loss of diesel vehicles, while jewellery may rise slightly on value-conscious purchases. Mine output is fairly steady, but scrap supplies are rising. The market is likely to register a supply/demand surplus this year, which may limit rallies. Robust 2019 investment demand may moderate this year. Platinum's best chance of a rally lies in firm gold prices and safe-haven demand generated by trade and geopolitical risks. Platinum has fallen to a very steep discount to both gold and palladium. The wide discount to gold may prompt price-conscious purchases.

Ag Range: **\$16.95 - \$19.65**
Average: **\$18.27**

Firm gold prices figure prominently in our view for higher silver prices in 2020. Gold strength and any resurgence in geopolitical risks or economic uncertainty may trigger investor appetite for silver. While Fed policy may be only moderately silver-supportive, loose global monetary policies and fiscal stimulus could aid silver prices more. Exchange Traded Fund holdings have surged, but offtake may moderate this year. The impact of trade risks, although good for investment demand, has weighed on industrial silver consumption. Mild global industrial growth in 2020 should aid demand and photovoltaic demand looks promising. Bar and coin demand may recover somewhat from low levels. Jewellery offtake is rising notably in India as it wins market share from gold. Mine supply is likely to edge higher. HSBC FX strategists forecast a firm US dollar, which is likely to be silver's greatest headwind. High stocks may also present limits to rallies.

Pd Range: **\$1,955 - \$2,494**
Average: **\$2,294**

We are bullish on palladium based largely on our expectations of ongoing wide structural deficits. Likely robust automotive demand (despite weak global auto production) will help keep the market tight. Tighter emissions regulations globally imply heavier palladium autocatalyst loadings. High prices have not yet led to substitution with platinum in autos. Meanwhile, the prospects for greater mine supply from the major producers, South Africa and Russia, look limited despite a recovery in the ZAR PGM price basket. Prospects for higher North American mine output look good. Recycling rates are rising sharply but are unlikely to meet the deficit. Also ETF stocks, which have greatly contributed to supply, no longer appear sufficient to fill the shortfall, while available above-ground stocks appear stretched. In recognition of rising deficits and likely depleted stocks, we are positive for palladium and expect the rally to continue, albeit at a more modest rate than in 2019.

Glyn STEVENS

MTSS UK Ltd, London

Pt Range: **\$923 - \$1,212**
Average: **\$1,098**

Pd Range: **\$1,923 - \$2,552**
Average: **\$2,323**

A bullish argument for both platinum and palladium seems to be the order of the day. To state the obvious, the major PGMs depend on the automotive sector to survive. In this regard, car saturation seems to have been reached in wealthier regions, sales in developing markets continue to disappoint, whilst the inexorable growth of electric vehicles is here to stay. The one positive is that even if the absolute number of automobiles sold globally were to plateau or actually decline during 2020, the ever more stringent environmental legislation will require greater loadings of precious metal per catalytic converter. Hence, it is necessary to look elsewhere for encouragement.

Platinum's saviour in 2019 came from a source not seen for many a year – the once terminally declining investment sector. This boost was in the form of funds piling into platinum ETFs. This looks set to continue into 2020, if only to protect the significant long positions established the previous year. Hence, in terms of price direction, speculation could well once again outweigh the significant headwinds against automotive advancement. The rebirth of the fuel cell alone cannot stem the tide of declining platinum demand.

In terms of palladium, it is difficult to look beyond a well-documented supply shortage. If this supposed dearth of physical material continues throughout 2020, then the price can move in only one direction and hence attain even dizzier heights than in 2019. The ever-present geopolitical uncertainty in the major region of production simply strengthens that assertion.

The one fly in the ointment, especially for platinum, may be the influence of gold. However, despite a low inflationary environment, the yellow metal should be well supported throughout the year. A weak dollar and mounting US/Middle East tensions should see to that.

Harry TCHILINGUIRIAN

BNP Paribas, London

Au Range: **\$1,425 - \$1,680**
Average: **\$1,520**

Gold will attract investor interest in 2020 in a low-yield environment and trade higher. Geopolitical tensions in the Middle East and economic uncertainties related to US trade policy with China and the EU will draw safe-haven demand to the metal as a hedge against potential downside in riskier assets held in investors' portfolios. Given our current economic views, notably a slowdown in the US activity by the end of Q1, we expect the Fed to ultimately deliver additional rate cuts, which underpins our view that gold prices are likely to peak in Q2. The second half of the 2020 is less supportive from a safe-haven demand point of view as central bank monetary easing earlier in the year eventually buoys economic activity. Our view for the US dollar in 2020 is one of modest depreciation, limiting the tailwinds the currency can provide gold.

Ag Range: **\$16.00 - \$19.50**
Average: **\$17.55**

No commentary provided.

Joni TEVES

UBS Limited, Singapore

Au Range: \$1,445 - \$1,700
Average: \$1,600

Gold has room to rally as investors build strategic allocations as the case for holding gold remains intact amid lingering uncertainty and low rates. Weaker data and/or re-escalation of trade and geopolitical tensions would push prices higher. However, we are cautious about the volatility of geopolitical risk as a price driver. More broadly, we think soft patches in growth, policy easing and a softer dollar would provide more sustainable support. A move higher would potentially be amplified by momentum buyers and other segments of the market becoming more active. We think the recent consolidation is healthy and prepares the market for another leg higher in the year ahead. That said, we acknowledge that downside risks to our view are also building. Trade progress, better growth, the Fed on hold and higher rates would make our base case ambitious.

Pt Range: \$800 - \$1,075
Average: \$975

Platinum has likely found a base and offers long-term value, but there is no urgency to get involved. We think the market is still a few years away from seeing a notable improvement in supply/demand fundamentals, remaining in surplus given falling demand and resilient supply. Despite lingering challenges in South Africa, platinum mine supply has broadly held, to a large extent cushioned by a strong PGM basket price. Demand is likely to remain under pressure until some substitution in the auto sector starts to trickle in and/or the jewellery sector – particularly in China – shows improvement. Our base case is that the market is unlikely to tighten until towards the end of our forecast period as substitution becomes more feasible and tighter emissions, such as in the heavy-duty diesel sector in China, helps boost demand.

Ag Range: \$16.00 - \$21.00
Average: \$19.00

Stronger conviction in gold's uptrend is helping silver attract interest as a cheaper way to express views. We think silver has scope to continue performing well in 2020, benefiting from gold's uptrend. Easy monetary policy also supports risk, appealing to silver's industrial properties. That said, we do not expect the gold/silver ratio to fall significantly. Gold's journey higher is unlikely to be a straight path and silver tends to underperform when the complex comes under pressure. Additionally, although silver is attracting more interest, we expect many participants to maintain a healthy dose of cautiousness such that positions are relatively short term in nature and profits are booked swiftly.

Pd Range: \$1,800 - \$2,500
Average: \$2,200

We expect palladium's deficit to persist on a combination of growing demand and constrained supplies, which implies diminishing above-ground inventories. Auto sector demand should continue to grow despite weak car sales as loadings increase alongside tightening emissions regulations globally. Additional primary supply is probably a few years away, while secondary supplies face bottlenecks. Within an overall bullish backdrop, there is potential for the market to overshoot and become vulnerable during periods of risk-off, particularly in the context of trade tensions and slowing global growth.

Downside risks to our base case include: (1) significant and persistent weakening in car sales; (2) evidence of substitution; and (3) the risk of an unexpected release of sizeable stocks. That said, we think dips should ultimately be viewed as strategic buying opportunities.

Bhargava N. VAIDYA

B.N. Vaidya & Associates, Mumbai

Au Range: \$1,431- \$1,705
Average: \$1,576

Gold will attract attention due to geopolitical tensions. Iran and oil supply route tension will keep gold in a higher bracket. Brexit and the trade war angle between the US and China will also keep gold at a higher level.

Gold will retain its old trait as a 'store of value'.

Ag Range: \$16.60 - \$21.75
Average: \$19.24

Geopolitical tensions and trade war fears between the US and China will keep investors interested in silver.



Subramanian VENKATRAMAN

Foretell Business Solutions Pvt Ltd, Bangalore

Au

Range: **\$1,400 - \$1,690**
Average: **\$1,504**

Gold overall bullish tone intact

In 2019, gold traded in the region of \$1,266.1 and \$1,557.1/oz.

In 2019, the US Federal Open Market Committee (FOMC) cut the key interest rate by 75 bps to a target range of 1.5% to 1.75%. US economic growth is forecast to slow down further to 1.9% in 2020, as against the estimated growth of 2.3% and 2.9% seen in 2019 and 2018 respectively. In December 2019, the US and China formally agreed on phase one of a trade deal and the details will emerge after 15 January 2020. We believe there will be a further thaw on the US-China trade front and more deals are likely to be announced in phases in the coming months.

2020 happens to be the US presidential election year. It remains to be seen whether Mr Trump will triumph once again. With a slowdown in global economic growth, the US election outcome and geopolitical tensions may aid gold to consolidate its 2019 gains.

Gold has peaked out temporarily in the initial days of 2020 thanks to the stand-off between the US and Iran, when it hit an almost seven-year high of \$1,611.35/oz on 8 January. The recent high is unlikely to be breached any time soon unless something happens dramatically on the geopolitical front. Gold is likely to retest \$1,445-\$1,435/oz, most probably in early Q2 2020, before it moves higher. One can anticipate the gold price to touch as high as \$1,665-\$1,690/oz during Q4 2020. In any case, gold is unlikely to drop below \$1,400/oz and may trade in the broader region of \$1,400-\$1,690/oz during 2020, but is likely to average \$1,504/oz during 2020.

Ag

Range: **\$15.10 - \$20.45**
Average: **\$17.13**

Silver may see slight increase in prices in 2020.

In 2019, silver traded in the region of \$14.25-\$19.64/oz. In 2020, silver is unlikely to drop below \$15.10/oz. On the higher side, silver is expected to trade towards \$19.64-\$20.45/oz. In 2020, silver prices are likely to average at \$17.13/oz. Silver industrial demand is on the rise, particularly in solar panels and electronics, which may aid the prices to stay higher. Moreover, a decline in silver production is a concern.

Pengfei WANG

Bank of China, Beijing

Pt

Range: **\$880 - \$1,200**
Average: **\$1,080**

After chasing the rebound of gold in 2019, platinum is expected to rise at a faster pace in 2020. Though the substitution of palladium in gasoline cars is not likely to change much in the short term, the high spread between platinum and palladium is unsustainable. On a fundamental basis, recovering European diesel car sales and increasing fuel-cell electric vehicles demand will drive platinum physical demand in 2020, while mining and recycling supply will remain stable with high probability. Moreover, investment demand is also expected to keep growing. We are optimistic about the performance of platinum in future.

Zhexing WANG

Bank of China, Shanghai

Au

Range: **\$1,440 - \$1,660**
Average: **\$1,550**

Over the past year, we have seen a shift from Fed rate hike expectations to rate cut expectations, as well as gold bottoming out. Given the current global macro environment and the direction of monetary policy, we believe that the macro factors that support the gold price rising in the next year still exist. There could be a QE policy in the future, which will lead to a sharp rise in inflation indicators in turn. That is an important factor in determining the longer-term trend of gold prices.

Pd

Range: **\$1,610 - \$2,500**
Average: **\$2,200**

As one of the major raw materials for automotive catalysts, the price of palladium has risen substantially due to its scarcity and low stock in recent years. Primarily, taking the potential increase of palladium loadings per vehicle into account, we predict that palladium will continue to outperform within this year. On the other hand, the stagnant sales of automobiles worldwide might place downward pressure on the price of palladium in the long run.

Jason WELZ

Afriforesight, Cape Town

Au

Range: **\$1,485 - \$1,660**
Average: **\$1,563**

Despite expected headwinds in the form of easing US/China trade tensions and a resulting shift to risk assets, we expect gold to continue performing well during 2020.

Safe-haven demand should be supported by simmering US/Iran tensions, rapidly expanding and record global debt levels, and an expected continuation of the surge in anti-establishment protests (as seen in Chile and France last year) fueled by slowing growth and further increasing inequality in many regions (consistent with age-old sociological and economic theory). Other expected positive drivers include a slowly weakening dollar, reviving PCE inflation in the US (with CPI already in excess of 2%) and continued robust emerging market central bank purchases (particularly from sanction-hit Russia and Turkey, as well as China, as they all look to continue diversifying away from the dollar).

Notable price volatility is expected, driven predominantly by fluctuating geopolitical tensions in hotspots such as the Middle East, Eastern Europe and the South China Sea.

Ag

Range: **\$17.44 - \$19.21**
Average: **\$18.08**

We expect the silver price to mostly track movements in the price of gold. However, after underperforming relative to gold over 2019, we expect the improved global growth outlook in the wake of phase one of the US/China trade deal to support industrial demand generally – benefiting silver comparatively more than gold. In particular, accelerating global investment in solar electricity generation capacity, encouraged by growing global awareness of climate issues, should boost demand for silver-containing photovoltaic cells.

As a result, silver is expected to mildly outperform gold this year – with all of the drivers mentioned for gold applicable (barring central bank demand).

Pt

Range: **\$910 - \$1,165**
Average: **\$1,087**

We forecast 2020 to be the end of platinum's woes, on the back of Southern African supply constraints and major investment inflows. Investment should be supported by expectations of the inevitability of substitution in place of palladium in vehicle autocatalysts (due to concerns over palladium supply and the large price differential), as well as some safe-haven demand in line with our gold view. Prices should also find support from rebounding autocatalyst demand on tightening emission standards, recovering global car sales, a slowdown of diesel's declining market share in the EU and, later in the year, the start of actual substitution by autocatalyst manufacturers. On the supply side, with the lion's share of global output being from South Africa and Zimbabwe, production will be under pressure from intermittent electricity shortages that are expected to persist in the region over the medium term (South Africa is of most importance, owing to a greater share of global production and the fact that South Africa refines much of Zimbabwe's production).

A weaker South African rand precipitated by an expected downgrade of the country's debt to junk status by Moody's should keep price appreciation in check (South African miners' costs are largely rand-based, while revenue is dollar-denominated, thus a weakening rand tends to support mine profitability and supply even with lower dollar-denominated product prices).

Pd

Range: **\$1,630 - \$2,440**
Average: **\$1,924**

Palladium prices are expected to face increasing downwards pressure over the year as it becomes evident that some end-users and speculators have built up significant stockpiles of the metal in anticipation of a looming supply crunch that is also expected to encourage partial replacement with platinum in diesel and larger-engine petrol vehicles.

We believe some substitution is inevitable as a result of significantly constrained new palladium supply, limited liquid above-ground stocks and the high price premium over platinum (which will only continue widening without a switch). Some PGM producers are already collaborating with autocatalyst manufacturers on R&D in this direction, and we expect an announcement of some limited level of success from a large OEM sometime this year, weakening palladium's currently robust demand outlook.

We expect this to shift sentiment over the future of demand drastically, encouraging investors to take profits and release previously illiquid holdings to the market (potentially even Russia's unquantified central bank holdings). This should bridge the supply shortfall and cause prices to fall (despite recovering global car sales and further tightening of emission standards in key regions continuing to boost autocatalyst demand) before physical substitution begins taking place late in the year.

Preventing prices falling too far, however, are electricity-driven supply constraints in South Africa and Zimbabwe, which should curb supply somewhat over the medium term.

WINNERS OF THE 2019 PRECIOUS METALS FORECAST SURVEY

THE RULES OF THE COMPETITION

The aim of the annual survey is to predict the average, high and low price range for the year ahead in each metal as accurately as possible. The prediction closest to the average price wins a 1oz gold bar. In the event of a tie, the forecast range is taken into account.



The LBMA is delighted to congratulate the winners in the 2019 Forecast Survey.

Many thanks to all the forecast contributors and once again to PAMP for the generous donation of the winning prizes.



Au

Analysts were relatively bullish for gold in 2019 but their average

forecast still fell \$80 short of the actual average price for the year of \$1,392.6. It's not surprising therefore that the most bullish analysts battled out the finish. Vying for the first prize were **Rene Hochreiter (Noah Capital Markets/Sieberana Research Pty Ltd)** and **Rhona O'Connell (INTL FCStone)** with their forecast of \$1,365. We couldn't split them even after taking into account their ranges, so they shared first place and each secure a 1oz gold bar.

For Rene this represented his seventh winning prize, which puts him alongside Ross Norman as the analyst with the highest number of first place finishes.

Breathing down their necks in third place, closely following up on his second place finish in the 2018 Survey, was Hans-Guenter Ritter (Heraeus) with his forecast of \$1,355.



Ag

The actual average price out turned at \$16.20 not far off the \$16.28 which analysts had on average forecast. Out in front was **Bernard Dahdah (Natixis)**

whose forecast was spot on the money at \$16.20, which was certainly impressive forecasting. Stealing second place was James Steel (HSBC), who was just seven cents away with his forecast of \$16.27. In third spot was Matthew Turner (Independent) with a forecast of £16.10. It was fitting to see Bernard scoop first prize here as he narrowly missed out last year by 10 cents to finish runner-up.



Pt

Of the prospects for the four metals in 2019, analysts were most bullish about platinum with an average forecast of \$850.71 against an

actual price of \$862.90, so they were only \$12 off-track. In one of the tightest-ever finishes, two analysts, **Frederic Panizzutti (MKS PAMP Group)** and **Bernard Dahdah** could not be separated. With the same forecast of \$855, a dead heat was the only fair outcome and so they both receive a 1oz gold bar. In a close call for third place was Suki Cooper (Standard Chartered) with her forecast of \$874.



Pd

Surprisingly, given what happened to palladium in 2019, analysts took a bearish view of its prospects in 2019. They forecast prices to fall 3.1% to an

average of just \$1,267.68. How wrong they were, with palladium being the best performing metal, ending the year at \$1,920, nearly \$700 up on 2019. With the average price in 2019 of \$1,536.74, the finish was dominated by those analysts who adopted a bullish forecast.

The most bullish of all was **Ross Norman (Independent)** whose forecast of \$1,505 was just \$30 off the actual average. This represented Ross's second first prize in the last two Surveys and his seventh first prize overall, which puts him alongside Rene as the analyst with the highest number of first place finishes. It was fitting therefore that second place should go to no other than Rene with his forecast of \$1,418, followed closely by William Adams (Fastmarkets) in third place with his prediction of \$1,410.

2019 LBMA Forecast Survey Winners

Metal	Actual average price in first half Jan 2019 ^(a)	Analysts' 2019 forecast average	Actual 2019 average price	Winning forecast	2019 winning analyst	Company
Gold	\$1,288.85	\$1,311.71	\$1,392.60	\$1,365	Rene Hochreiter Rhona O'Connell	Noah Capital INTL FCStone
Silver	\$15.63	\$16.28	\$16.20	\$16.20	Bernard Dahdah	Natixis
Platinum	\$809.50	\$850.71	\$862.90	\$855	Frederic Panizzutti Bernard Dahdah	MKS PAMP Group Natixis
Palladium	\$1,308.40	\$1,267.68	\$1,536.74	\$1,505	Ross Norman	Independent

(a) 2-15 January 2019 inclusive (based on the pm LBMA Gold Price).

Name	Low	Average	High
Adams, William Fastmarkets	\$1,180.00	\$1,242.00	\$1,355.00
Alexander, Cameron GFMS Refinitiv	\$1,168.00	\$1,292.35	\$1,415.00
Bhar, Robin Societe Generale CIB	\$1,200.00	\$1,325.00	\$1,400.00
Butler, Jonathan Mitsubishi Corporation	\$1,200.00	\$1,305.00	\$1,425.00
Cooper, Suki Standard Chartered	\$1,170.00	\$1,305.00	\$1,440.00
Dahdah, Bernard Natixis	\$1,270.00	\$1,330.00	\$1,380.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$1,150.00	\$1,250.00	\$1,375.00
Fritsch, Carsten Commerzbank AG	\$1,200.00	\$1,300.00	\$1,400.00
Garvey, Marcus ICBC Standard Bank	\$1,225.00	\$1,293.00	\$1,375.00
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$1,275.00	\$1,365.00	\$1,420.00
Kavalls, Nikos Metals Focus	\$1,235.00	\$1,300.00	\$1,400.00
Klapwijk, Philip Precious Metals Insights	\$1,259.00	\$1,319.00	\$1,402.00
Meir, Edward INTL FCStone	\$1,195.00	\$1,302.00	\$1,405.00
Melek, Bart TD Securities	\$1,227.00	\$1,313.00	\$1,374.00
Nagao, Eddie Sumitomo Corporation	\$1,175.00	\$1,315.00	\$1,475.00
Norman, Ross Sharps Pixley	\$1,280.00	\$1,337.00	\$1,410.00
O'Connell, Rhona Independent	\$1,276.00	\$1,365.00	\$1,450.00
Oliveri, Manuel Credit Agricole	\$1,260.00	\$1,320.00	\$1,380.00
Panizzutti, Frederic MKS PAMP Group	\$1,240.00	\$1,335.00	\$1,460.00
Ritter, Hans-Günter Heraeus	\$1,225.00	\$1,355.00	\$1,450.00
Savant, Rohit CPM Group LLC	\$1,200.00	\$1,295.00	\$1,400.00
Schallenger, Frank LBBW	\$1,250.00	\$1,326.00	\$1,375.00
Schieven, Chantelle Murenbeeld & Co	\$1,215.00	\$1,330.00	\$1,446.00
Steel, James HSBC	\$1,211.00	\$1,314.00	\$1,372.00
Strachan, Ross Capital Economics	\$1,275.00	\$1,325.00	\$1,410.00
Subramanian, Venkatraman Foretell Business Solutions Pvt Ltd	\$1,180.00	\$1,250.00	\$1,355.00
Teves, Joni UBS Limited	\$1,200.00	\$1,300.00	\$1,400.00
Tong, Tong Bank of China	\$1,220.00	\$1,315.00	\$1,420.00
Turner, Matthew Macquarie Bank	\$1,225.00	\$1,320.00	\$1,425.00
Vaidya, Bhargava B.N. Vaidya & Associates	\$1,221.00	\$1,308.00	\$1,361.00
Averages	\$1,220.23	\$1,311.71	\$1,405.17

Name	Low	Average	High
Adams, William Fastmarkets	\$13.90	\$15.15	\$16.80
Alexander, Cameron GFMS Refinitiv	\$15.10	\$16.75	\$18.35
Bhar, Robin Societe Generale CIB	\$15.00	\$16.50	\$18.00
Butler, Jonathan Mitsubishi Corporation	\$15.00	\$16.50	\$18.00
Cooper, Suki Standard Chartered	\$14.00	\$16.10	\$17.75
Dahdah, Bernard Natixis	\$15.20	\$16.20	\$17.50
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$12.75	\$14.90	\$16.75
Fritsch, Carsten Commerzbank AG	\$14.25	\$15.25	\$17.25
Garvey, Marcus ICBC Standard Bank	\$14.90	\$16.60	\$17.70
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$15.00	\$16.00	\$17.00
Klapwijk, Philip Precious Metals Insights	\$15.19	\$16.71	\$19.18
Liu, Yufei Bank of China	\$14.50	\$15.60	\$17.90
Meador, Neil Metals Focus	\$14.50	\$16.50	\$19.00
Meir, Edward INTL FCStone	\$14.00	\$15.65	\$17.30
Melek, Bart TD Securities	\$14.75	\$17.00	\$18.22
Nagao, Eddie Sumitomo Corporation	\$14.50	\$16.60	\$18.75
Norman, Ross Sharps Pixley	\$14.10	\$17.26	\$18.55
O'Connell, Rhona Independent	\$15.30	\$17.55	\$19.30
Panizzutti, Frederic MKS PAMP Group	\$15.00	\$16.63	\$17.50
Ritter, Hans-Günter Heraeus	\$14.50	\$17.00	\$20.00
Savant, Rohit CPM Group LLC	\$14.00	\$15.91	\$17.50
Schallenberger, Frank LBBW	\$14.00	\$15.57	\$18.20
Steel, James HSBC	\$14.65	\$16.27	\$18.05
Strachan, Ross Capital Economics	\$15.30	\$16.50	\$17.75
Subramanian, Venkatraman Foretell Business Solutions Pvt Ltd	\$13.50	\$16.60	\$18.50
Teves, Joni UBS Limited	\$13.90	\$15.80	\$17.70
Turner, Matthew Macquarie Bank	\$14.50	\$16.10	\$17.50
Vaidya, Bhargava B.N. Vaidya & Associates	\$14.15	\$16.52	\$17.75
Averages	\$14.48	\$16.28	\$17.99

Name	Low	Average	High	\$600	\$675	\$750	\$825	\$900	\$975	\$1,050
Adams, William Fastmarkets	\$780.00	\$877.00	\$960.00							
Alexander, Cameron GFMS Refinitiv	\$760.00	\$895.30	\$960.00							
Bao, Dun Bank of China	\$800.00	\$890.00	\$950.00							
Bhar, Robin Societe Generale CIB	\$800.00	\$900.00	\$1,000.00							
Briesemann, Daniel Commerzbank AG	\$750.00	\$875.00	\$950.00							
Butler, Jonathan Mitsubishi Corporation	\$750.00	\$910.00	\$950.00							
Cooper, Suki Standard Chartered	\$720.00	\$874.00	\$1,000.00							
Dahdah, Bernard Natixis	\$800.00	\$855.00	\$950.00							
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$650.00	\$725.00	\$900.00							
Garvey, Marcus ICBC Standard Bank	\$725.00	\$775.00	\$875.00							
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$790.00	\$850.00	\$900.00							
Klapwijk, Philip Precious Metals Insights	\$775.00	\$843.00	\$914.00							
Meir, Edward INTL FCStone	\$730.00	\$885.00	\$1,050.00							
Melek, Bart TD Securities	\$775.00	\$913.00	\$954.00							
Nagao, Eddie Sumitomo Corporation	\$650.00	\$830.00	\$1,050.00							
Newman, Philip Metals Focus	\$750.00	\$850.00	\$980.00							
Norman, Ross Sharps Pixley	\$620.00	\$735.00	\$1,000.00							
O'Connell, Rhona Independent	\$778.00	\$845.00	\$940.00							
Panizzutti, Frederic MKS PAMP Group	\$750.00	\$855.00	\$900.00							
Ritter, Hans-Günter Heraeus	\$700.00	\$780.00	\$950.00							
Savant, Rohit CPM Group LLC	\$750.00	\$830.00	\$900.00							
Schallenberger, Frank LBBW	\$740.00	\$774.00	\$910.00							
Steel, James HSBC	\$775.00	\$886.00	\$931.00							
Stevens, Glyn MTSS UK Ltd	\$703.00	\$888.00	\$1,012.00							
Strachan, Ross Capital Economics	\$775.00	\$825.00	\$905.00							
Teves, Joni UBS Limited	\$770.00	\$910.00	\$1,050.00							
Turner, Matthew Macquarie Bank	\$750.00	\$894.00	\$975.00							
Averages	\$745.00	\$850.71	\$956.00							

Name	Low	Average	High	\$900	\$1,000	\$1,100	\$1,200	\$1,300	\$1,400	\$1,500	\$1,600	\$1,700
Adams, William Fastmarkets	\$1,150.00	\$1,410.00	\$1,550.00									
Alexander, Cameron GFMS Refinitiv	\$1,080.00	\$1,222.45	\$1,465.00									
Bhar, Robin Societe Generale CIB	\$1,100.00	\$1,250.00	\$1,400.00									
Briesemann, Daniel Commerzbank AG	\$950.00	\$1,075.00	\$1,450.00									
Butler, Jonathan Mitsubishi Corporation	\$1,050.00	\$1,150.00	\$1,350.00									
Cheng, Tianze Bank of China	\$1,200.00	\$1,260.00	\$1,380.00									
Cooper, Suki Standard Chartered	\$950.00	\$1,206.00	\$1,450.00									
Dahdah, Bernard Natixis	\$900.00	\$1,120.00	\$1,400.00									
Fertig, Peter QCR Quantitative Commodity Research Ltd	\$1,075.00	\$1,325.00	\$1,475.00									
Garvey, Marcus ICBC Standard Bank	\$1,190.00	\$1,350.00	\$1,490.00									
Hochreiter, Rene Noah Capital Markets/Sieberana Research (Pty) Ltd	\$1,250.00	\$1,418.00	\$1,475.00									
Klapwijk, Philip Precious Metals Insights	\$1,095.00	\$1,267.00	\$1,361.00									
Liang, Junlu Metals Focus	\$1,150.00	\$1,330.00	\$1,450.00									
Meir, Edward INTL FCStone	\$1,050.00	\$1,325.00	\$1,550.00									
Melek, Bart TD Securities	\$982.00	\$1,175.00	\$1,443.00									
Nagao, Eddie Sumitomo Corporation	\$950.00	\$1,245.00	\$1,450.00									
Norman, Ross Sharps Pixley	\$1,261.00	\$1,505.00	\$1,715.00									
O'Connell, Rhona Independent	\$1,250.00	\$1,330.00	\$1,450.00									
Panizzutti, Frederic MKS PAMP Group	\$1,250.00	\$1,360.00	\$1,420.00									
Ritter, Hans-Günter Heraeus	\$1,130.00	\$1,325.00	\$1,650.00									
Savant, Rohit CPM Group LLC	\$1,000.00	\$1,226.00	\$1,450.00									
Schallenberger, Frank LBBW	\$1,230.00	\$1,316.00	\$1,435.00									
Steel, James HSBC	\$1,195.00	\$1,256.00	\$1,405.00									
Stevens, Glyn MTSS UK Ltd	\$1,013.00	\$1,228.00	\$1,402.00									
Strachan, Ross Capital Economics	\$1,000.00	\$1,150.00	\$1,400.00									
Teves, Joni UBS Limited	\$1,000.00	\$1,240.00	\$1,400.00									
Turner, Matthew Macquarie Bank	\$1,000.00	\$1,163.00	\$1,400.00									
Averages	\$1,091.00	\$1,267.68	\$1,454.00									

ACTUAL AVERAGE PRICE VS ANALYSTS' FORECAST AVERAGE

2010-2020

Au



Ag



Pt



Pd





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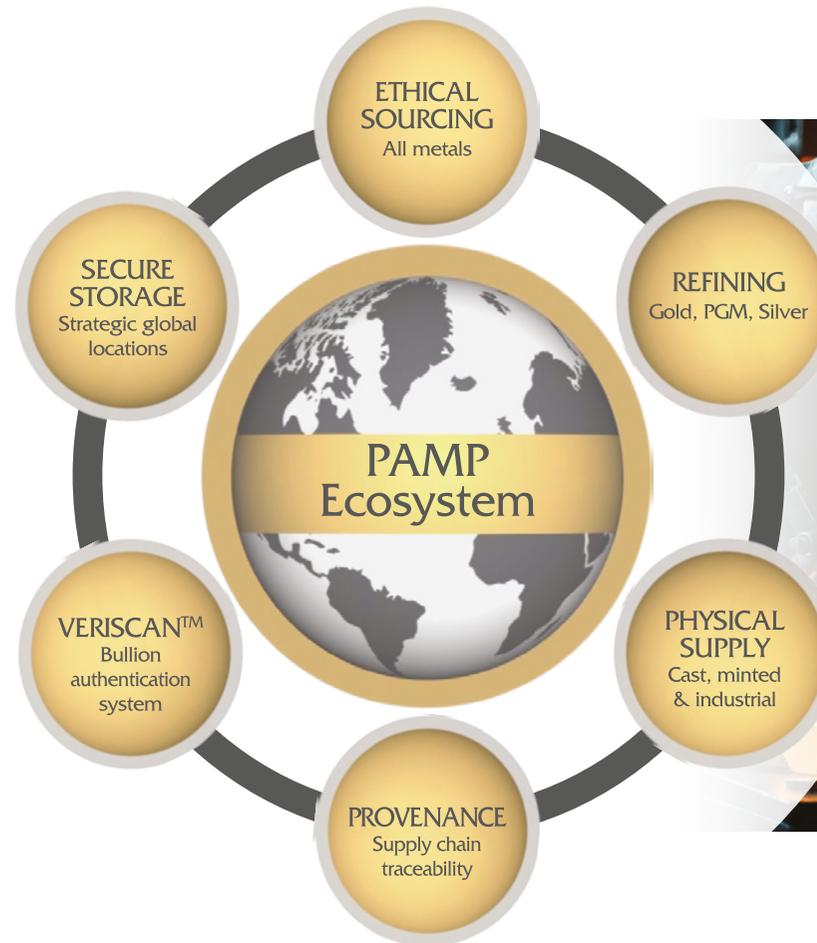
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