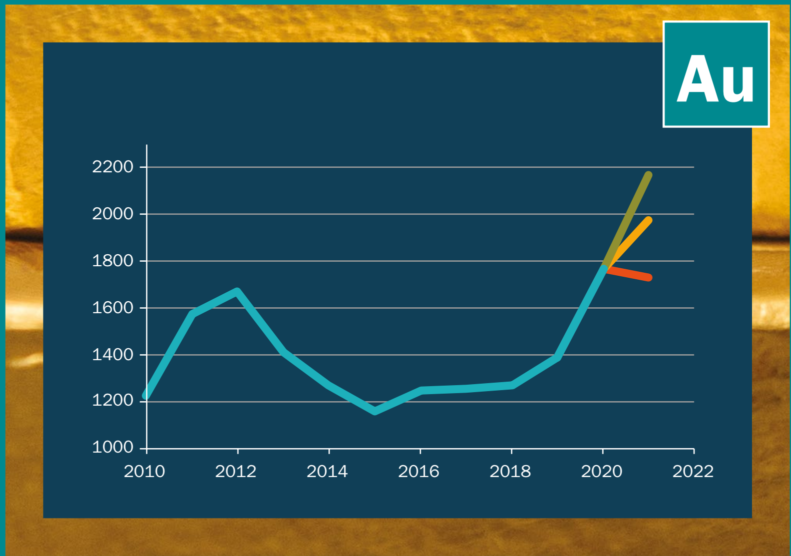
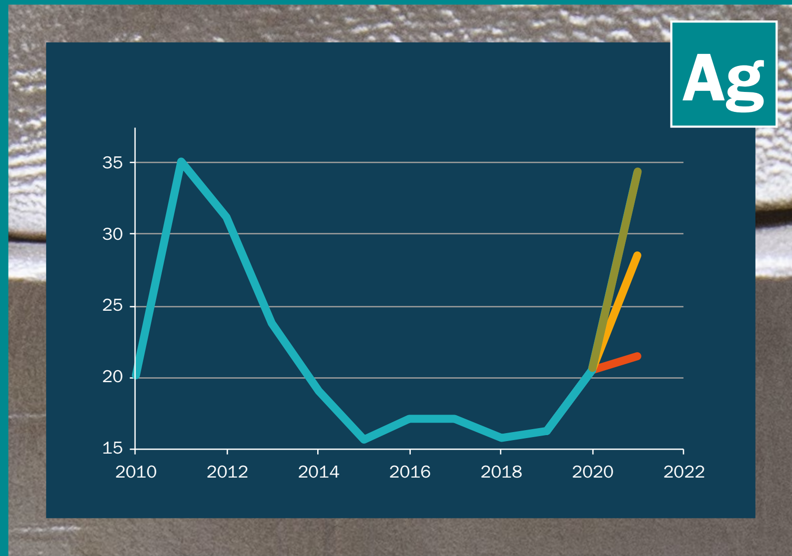
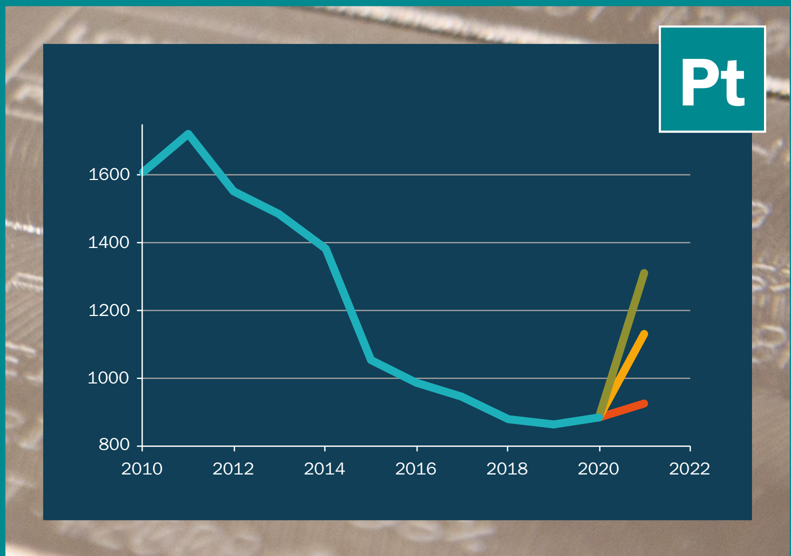
2021 PRECIOUS METALS FORECAST SURVEY

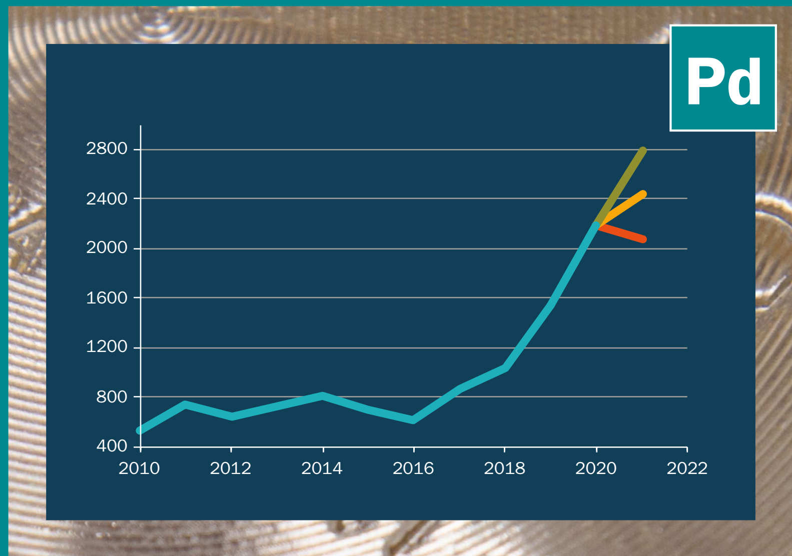
LBMA

Actual Annual Prices 2010-2020 and Analysts' 2021 Average Forecasts (US $/oz)









High
Average
Low

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'HI HO SILVER' SAY ANALYSTS FORECASTING PRICE GAINS TO OUTPACE GOLD BY OVER 3x IN 2021

Double-digit price rises are forecast for all metals against 2020 actual average prices, but only modest gains are expected from early January 2021 levels. Gold is set to increase by 11.5% on actual average prices in 2020, but see a more modest rise of 4.5% on actual prices in the first half of January 2021. However, gold's unloved sister, silver, is undoubtedly the star of the show, with analysts forecasting a price increase of 38% on 2020 prices and 8% higher than those in early January 2021. We could be looking for a silver lining in 2021.

In this year's forecast, we have 38 analysts from a record 21 cities in all corners of the globe offering their expert insight into the direction of precious metal prices in 2021. As usual, we have invited them to forecast the average price of each of the four metals in 2021 and to support their forecasts with insightful analysis.

If we compare our 2021 Survey's average forecast for 2021 against actual 2020 prices (see Table 1), we find quite a bullish outlook, with the consensus predicting double-digit increases for all four metals (gold and palladium +11%), with more significant increases predicted for platinum (+28%) and the stand-out performer silver (+38%). But analysts are also expecting a year of heightened volatility, with the very lowest to very highest trading ranges forecast as follows: $1,192 (gold), $38 (silver), $1,053 (platinum) and $1,500 (palladium). Again, silver stands out with its range 1.8 times its actual price in 2020.

Conversely, if we compare analysts' 2021 forecasts against actual prices in the first half of January 2021 (see Table 2), when they had the benefit of seeing how prices were unfolding in 2021, we find a less bullish outlook, with more modest price increases forecast for both gold and platinum of around 4.5%, and for palladium of just 1.4%, but with silver, again the stand-out performer, forecast to achieve an increase of 8%.

Turning to our analysts' commentaries, we see key factors driving prices including negative or falling US interest rates, US monetary and fiscal policy, as well as the weakness in the dollar.

Top 3 drivers for the gold price in 2021

Negative or falling US interest rates	Weaker US dollar	US fiscal/ monetary policy
25%	21%	16%

Read the commentaries behind the forecasts to see which of the analysts make the most convincing arguments to support their predictions for the likely path of prices in 2021.

But the likely impact of geopolitical factors, the impact of COVID-19 and the pace of global economic growth continues to provide uncertainty, helping to account for the wide trading ranges in this year's Survey.

Au

Average: $1,973.8 **Range:** $1,192
Highest High: $2,680 **Lowest Low:** $1,488

Gold is expected to be subjected to a high level of volatility in 2021, with the widest forecasts predicting a high/low range of $1,192 compared to $780 in 2020. Compared to the actual average price in 2020, analysts are forecasting the gold price to increase by 11.5% (broadly in line with last year), but just 4.6% up on the price in the first half of January 2021. Thorsten Polleit is the most bullish analyst with his average of $2,300, whilst René Hochreiter is the most bearish with his forecast of $1,650.

Pt

Average: $1,131.5 **Range:** $1,053
Highest High: $1,827 **Lowest Low:** $774

Analysts are predicting the average platinum price in 2021 to hit $1,131.5, 28.2% higher than its average 2020 price, albeit a more modest increase of 4.4% on its price in the first half of January 2021. However, with prices forecast to trade in a very wide range of $1,053, our Survey predicts a volatile year for the white metal, with a range 93% of its forecast average price.

TABLE 1 Average Forecasts in 2021 Compared to Average Prices in 2020

Metal	2020 actual average price[(a)]	Analysts' 2021 average forecast	% change
Gold	$1,769.6	$1,973.8	+11.5
Silver	$20.55	$28.50	+38.7
Platinum	$882.6	$1,131.5	+28.2
Palladium	$2,192.5	$2,439.1	+11.2

(a) Based on LBMA pm precious metal prices.

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

Metal	Actual average price in first half of Jan 2021[(b)]	Analysts' 2021 average forecast	% change
Gold	$1,887.5	$1,973.8	+4.6
Silver	$26.36	$28.50	+8.1
Platinum	$1,084.1	$1,131.5	+4.4
Palladium	$2,404.7	$2,439.1	+1.4

(b) Based on LBMA pm precious metal prices 4 January to 14 January 2021 inclusive.

Ag

Average: $28.50 **Range:** $38.5
Highest High: $55.0 **Lowest Low:** $16.51

Silver is forecast to be the best-performing metal in 2021, but with a trading range of $38.5, nearly five times its range forecast last year, it looks as if it's in for a real rollercoaster ride in 2021. Analysts are forecasting that the silver price in 2021 will average $28.50, representing a whopping 38.7% increase on the average price from last year but a more modest increase of 8.1% above prices in the first half of January 2021.

Pd

Average: $2,439.1 **Range:** $1,500
Highest High: $3,000 **Lowest Low:** $1,500

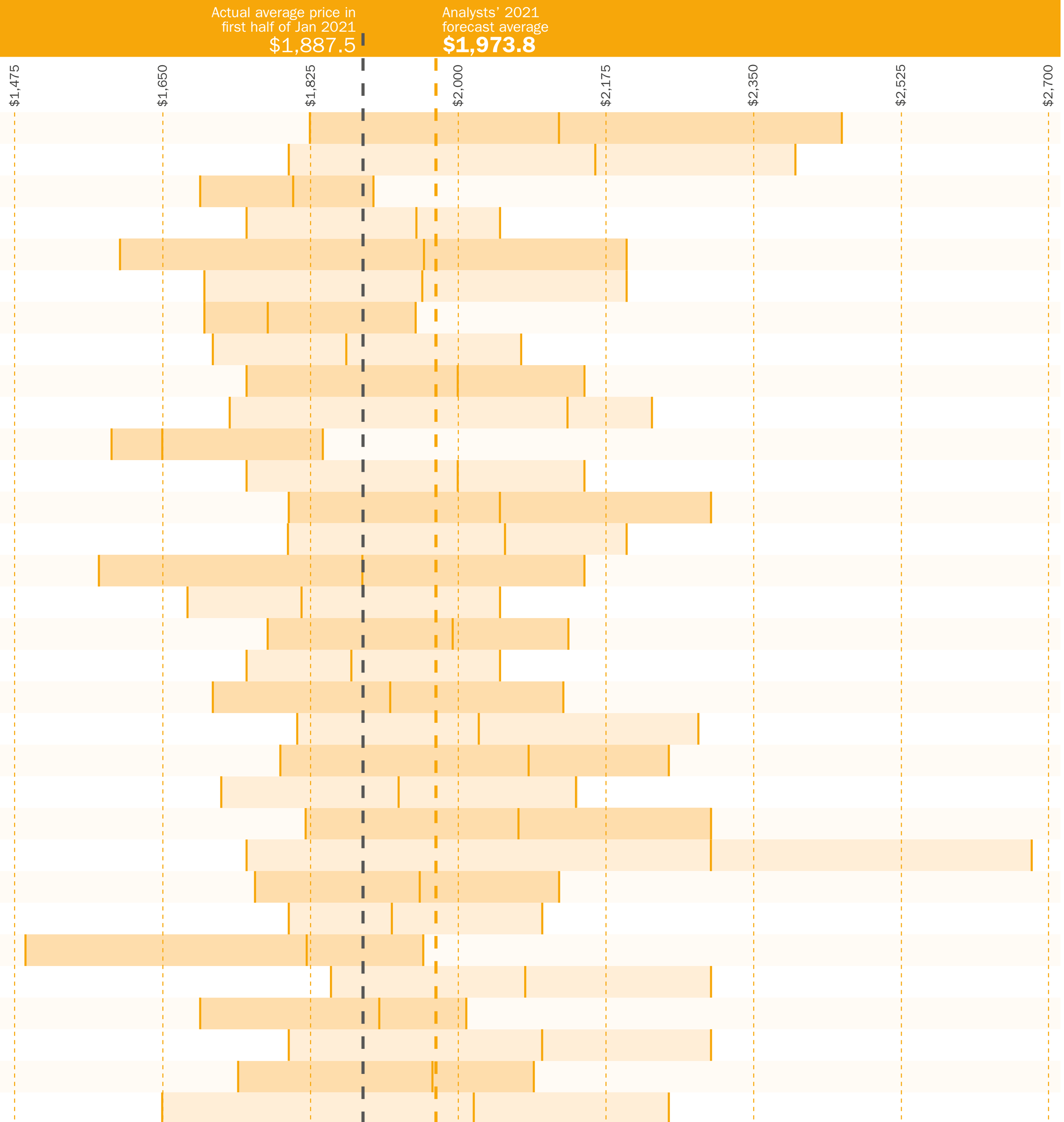
The market was in love with palladium last year and it proved the star performer, posting an impressive 52% increase in price in 2020. But analysts are predicting that it will be the worst-performing metal this year, relative to both its actual price in 2020 (+11.2%) and in the first half of January 2021 (+1.4%). It confounded the analysts last year and it will be interesting to see whether it will rise to the challenge again in 2021.

We would like to thank all contributors across the global precious metals market who took part in in the 2021 Survey.

Rules of the Game: In each metal category, the analyst whose average price is closest to the actual average price in 2021 will win a 1 oz 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 2021.

Au

Name	Low	Average	High
Adams, William Fastmarkets	$1,825.00	**$2,120.00**	$2,455.00
Bahr, Robin Robin Bahr Metals Consulting (RMBC)	$1,800.00	**$2,163.00**	$2,400.00
Bain, Caroline Capital Economics	$1,695.00	**$1,805.00**	$1,900.00
Boele, Georgette ABN AMRO	$1,750.00	**$1,951.00**	$2,050.00
Butler, Jonathan Mitsubishi Corporation	$1,600.00	**$1,960.00**	$2,200.00
Cooper, Suki Standard Chartered	$1,700.00	**$1,958.00**	$2,200.00
Dahdah, Bernard Natixis	$1,700.00	**$1,775.00**	$1,950.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	$1,710.00	**$1,868.00**	$2,075.00
Fritsch, Carsten Commerzbank AG	$1,750.00	**$2,000.00**	$2,150.00
Habluetzel, Andy Sharps Pixley	$1,730.00	**$2,130.00**	$2,230.00
Hochreiter, René Noah Capital Markets/Sieberana Research (Pty) Ltd	$1,590.00	**$1,650.00**	$1,840.00
Ikemizu, Bruce Japan Bullion Market Association	$1,750.00	**$2,000.00**	$2,150.00
Kavalis, Nikos Metals Focus	$1,800.00	**$2,050.00**	$2,300.00
Klapwijk, Philip Precious Metals Insights Limited	$1,799.00	**$2,056.00**	$2,200.00
Liu, Yufei Bank of China	$1,575.00	**$1,887.00**	$2,150.00
Meir, Edward ED&F Capital Markets	$1,680.00	**$1,815.00**	$2,050.00
Melek, Bart TD Securities	$1,775.00	**$1,994.00**	$2,131.00
Mururi, Pearson Afriforesight	$1,750.00	**$1,874.00**	$2,050.00
Nagao, Eddie Sumitomo Corporation	$1,710.00	**$1,920.00**	$2,125.00
Norman, Ross Metals Daily	$1,810.00	**$2,025.00**	$2,285.00
O'Connell, Rhona StoneX Financial Ltd	$1,790.00	**$2,084.00**	$2,250.00
Oliveri, Manuel Credit Agricole	$1,720.00	**$1,930.00**	$2,140.00
Panizzutti, Frederic MKS PAMP GROUP	$1,820.00	**$2,072.00**	$2,300.00
Polleit, Thorsten Degussa	$1,750.00	**$2,300.00**	$2,680.00
Ritter, Hans-Güenter Heraeus Metals GmbH & Co. KG	$1,760.00	**$1,955.00**	$2,120.00
Savant, Rohit CPM Group LLC	$1,800.00	**$1,922.00**	$2,100.00
Schallenberger, Frank LBBW	$1,488.00	**$1,821.00**	$1,959.00
Schieven, Chantelle Capitalight Research	$1,850.00	**$2,080.00**	$2,300.00
Steel, James HSBC Securities (USA) Inc	$1,695.00	**$1,907.00**	$2,010.00
Teves, Joni UBS Limited	$1,800.00	**$2,100.00**	$2,300.00
Vaidya, Bhargava B.N. Vaidya & Associates	$1,740.00	**$1,970.00**	$2,090.00
Venkatraman, S Foretell Business Solutions Pvt Ltd	$1,650.00	**$2,019.00**	$2,250.00
Averages	**$1,730.1**	**$1,973.8**	**$2,168.4**



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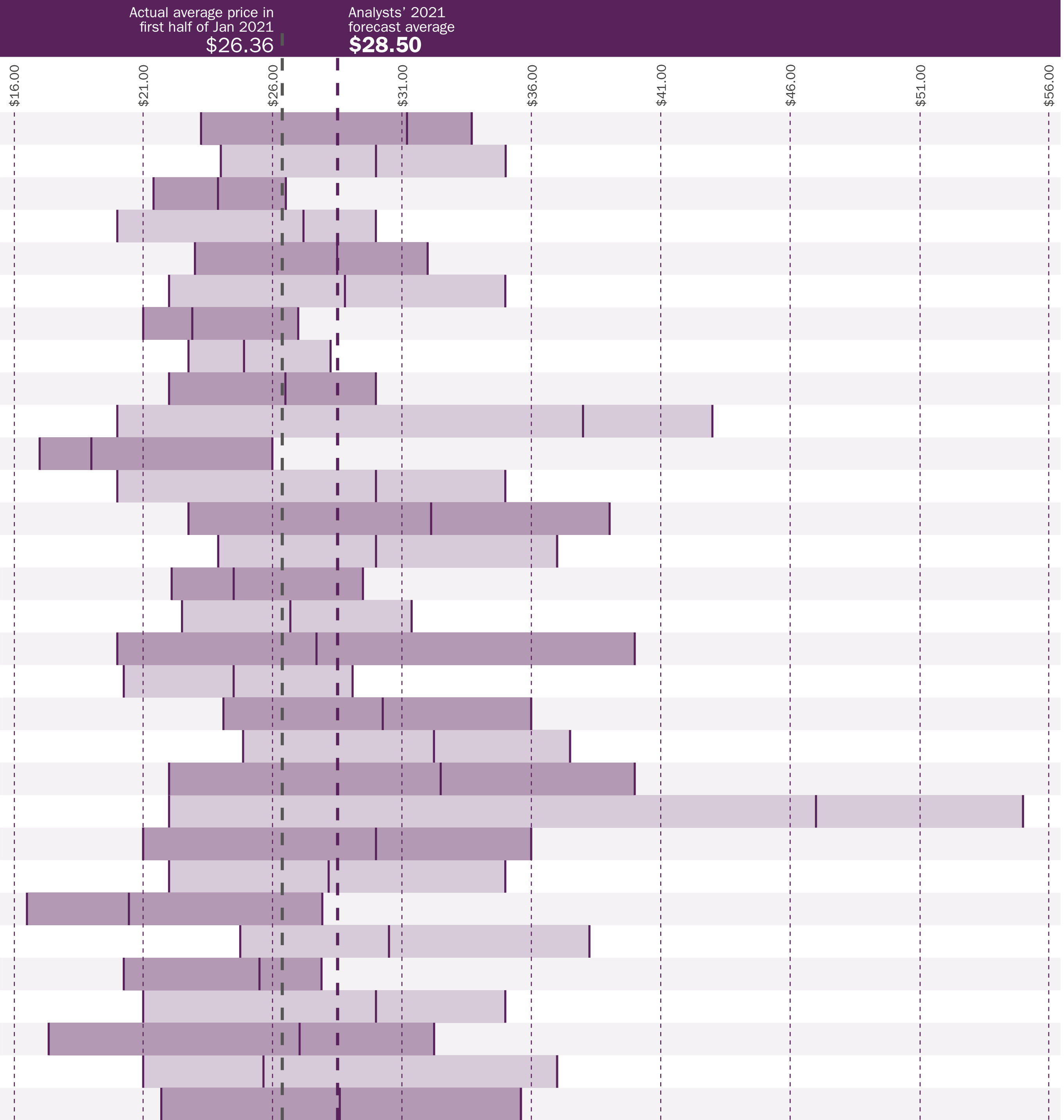
Ag

Name	Low	Average	High
Adams, William Fastmarkets	$23.20	**$31.20**	$33.70
Bahr, Robin Robin Bahr Metals Consulting (RMBC)	$24.00	**$30.00**	$35.00
Bain, Caroline Capital Economics	$21.40	**$23.90**	$26.50
Boele, Georgette ABN AMRO	$20.00	**$27.20**	$30.00
Butler, Jonathan Mitsubishi Corporation	$23.00	**$28.50**	$32.00
Cooper, Suki Standard Chartered	$22.00	**$28.80**	$35.00
Dahdah, Bernard Natixis	$21.00	**$22.90**	$27.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	$22.75	**$24.90**	$28.25
Fritsch, Carsten Commerzbank AG	$22.00	**$26.50**	$30.00
Habluetzel, Andy Sharps Pixley	$20.00	**$38.00**	$43.00
Hochreiter, René Noah Capital Markets/Sieberana Research (Pty) Ltd	$17.00	**$19.00**	$26.00
Ikemizu, Bruce Japan Bullion Market Association	$20.00	**$30.00**	$35.00
Klapwijk, Philip Precious Metals Insights Limited	$22.75	**$32.13**	$39.03
Meader, Neil Metals Focus	$23.90	**$30.00**	$37.00
Meir, Edward ED&F Capital Markets	$22.10	**$24.50**	$29.50
Melek, Bart TD Securities	$22.50	**$26.69**	$31.38
Mururi, Pearson Afriforesight	$20.00	**$27.70**	$40.00
Nagao, Eddie Sumitomo Corporation	$20.25	**$24.50**	$29.10
Norman, Ross Metals Daily	$24.10	**$30.26**	$36.00
O'Connell, Rhona StoneX Financial Ltd	$24.86	**$32.24**	$37.50
Panizzutti, Frederic MKS PAMP GROUP	$22.00	**$32.50**	$40.00
Polleit, Thorsten Degussa	$22.00	**$47.00**	$55.00
Ritter, Hans-Güenter Heraeus Metals GmbH & Co. KG	$21.00	**$30.00**	$36.00
Savant, Rohit CPM Group LLC	$22.00	**$28.17**	$35.00
Schallenberger, Frank LBBW	$16.51	**$19.71**	$27.93
Schieven, Chantelle Capitalight Research	$24.75	**$30.50**	$38.25
Steel, James HSBC Securities (USA) Inc	$20.25	**$25.50**	$27.90
Teves, Joni UBS Limited	$21.00	**$30.00**	$35.00
Vaidya, Bhargava B.N. Vaidya & Associates	$17.35	**$27.05**	$32.25
Venkatraman, S Foretell Business Solutions Pvt Ltd	$21.00	**$25.65**	$37.00
Wang, Zhexing Bank of China	$21.70	**$28.60**	$35.60
Averages	**$21.50**	**$28.50**	**$34.22**



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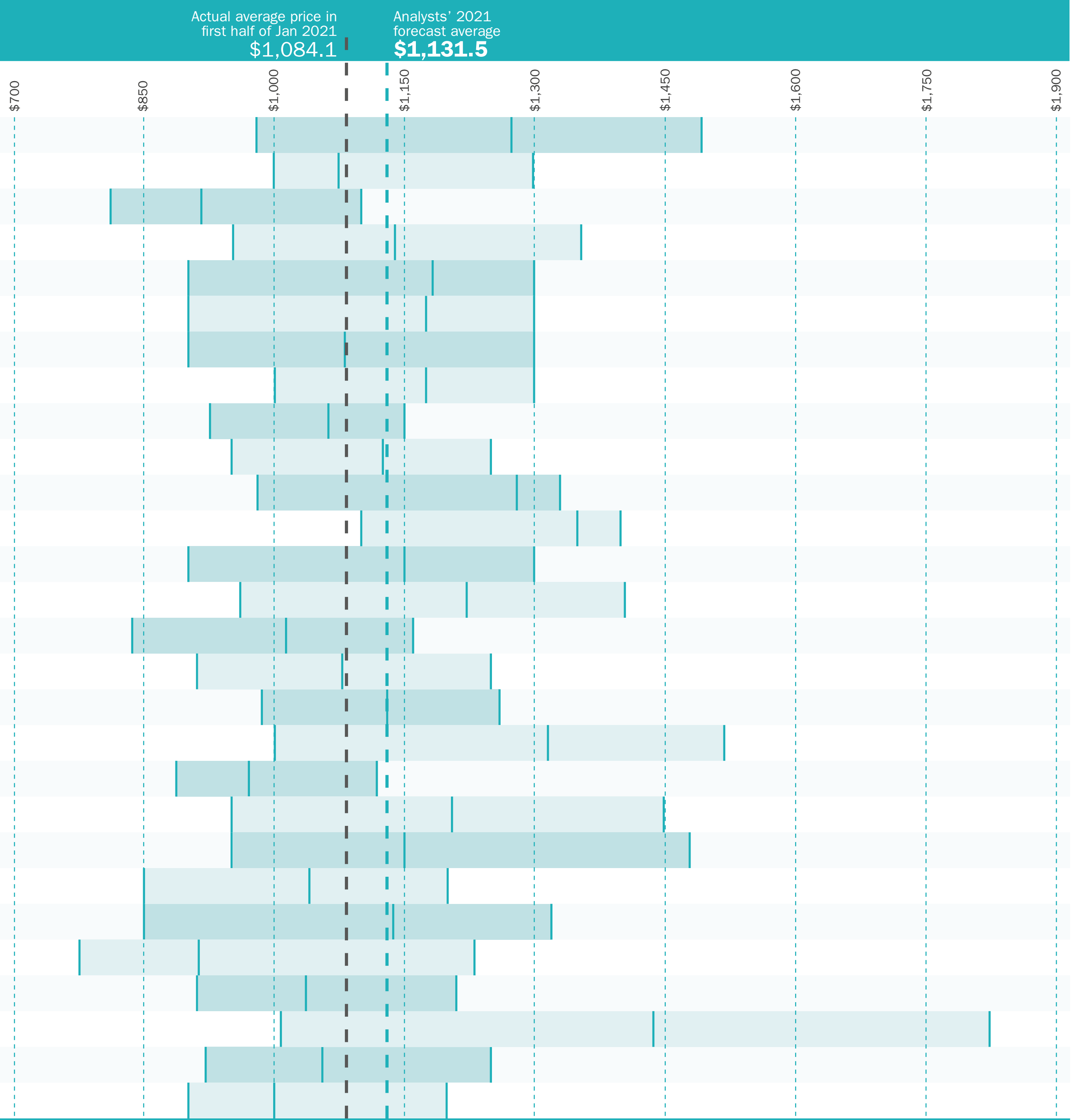
Pt



Name	Low	Average	High
Adams, William Fastmarkets	$980.00	**$1,275.00**	$1,495.00
Bahr, Robin Robin Bahr Metals Consulting (RMBC)	$1,000.00	**$1,075.00**	$1,300.00
Bain, Caroline Capital Economics	$810.00	**$915.00**	$1,100.00
Boele, Georgette ABN AMRO	$950.00	**$1,136.00**	$1,350.00
Butler, Jonathan Mitsubishi Corporation	$900.00	**$1,180.00**	$1,300.00
Cheng, Tianze Bank of China	$900.00	**$1,175.00**	$1,300.00
Cooper, Suki Standard Chartered	$900.00	**$1,081.00**	$1,300.00
Dahdah, Bernard Natixis	$1,000.00	**$1,175.00**	$1,300.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	$925.00	**$1,062.50**	$1,150.00
Fritsch, Carsten Commerzbank AG	$950.00	**$1,125.00**	$1,250.00
Habluetzel, Andy Sharps Pixley	$980.00	**$1,280.00**	$1,330.00
Hochreiter, René Noah Capital Markets/Sieberana Research (Pty) Ltd	$1,100.00	**$1,350.00**	$1,400.00
Ikemizu, Bruce Japan Bullion Market Association	$900.00	**$1,150.00**	$1,300.00
Klapwijk, Philip Precious Metals Insights Limited	$960.00	**$1,222.00**	$1,405.00
Melek, Bart TD Securities	$835.00	**$1,013.00**	$1,160.00
Mururi, Pearson Afriforesight	$910.00	**$1,078.00**	$1,250.00
Nagao, Eddie Sumitomo Corporation	$985.00	**$1,130.00**	$1,260.00
Norman, Ross Metals Daily	$1,000.00	**$1,316.00**	$1,520.00
O'Connell, Rhona StoneX Financial Ltd	$886.00	**$970.00**	$1,118.00
Panizzutti, Frederic MKS PAMP GROUP	$950.00	**$1,205.00**	$1,450.00
Polleit, Thorsten Degussa	$950.00	**$1,150.00**	$1,480.00
Ritter, Hans-Güenter Heraeus Metals GmbH & Co. KG	$850.00	**$1,040.00**	$1,200.00
Savant, Rohit CPM Group LLC	$850.00	**$1,137.00**	$1,320.00
Schallenberger, Frank LBBW	$774.00	**$912.00**	$1,231.00
Steel, James HSBC Securities (USA) Inc	$910.00	**$1,036.00**	$1,210.00
Stevens, Glyn MTSS UK Ltd	$1,007.00	**$1,438.00**	$1,827.00
Swarts, Wilma Metals Focus	$920.00	**$1,055.00**	$1,250.00
Teves, Joni UBS Limited	$900.00	**$1,000.00**	$1,200.00
Averages	**$927.9**	**$1,131.5**	**$1,312.7**

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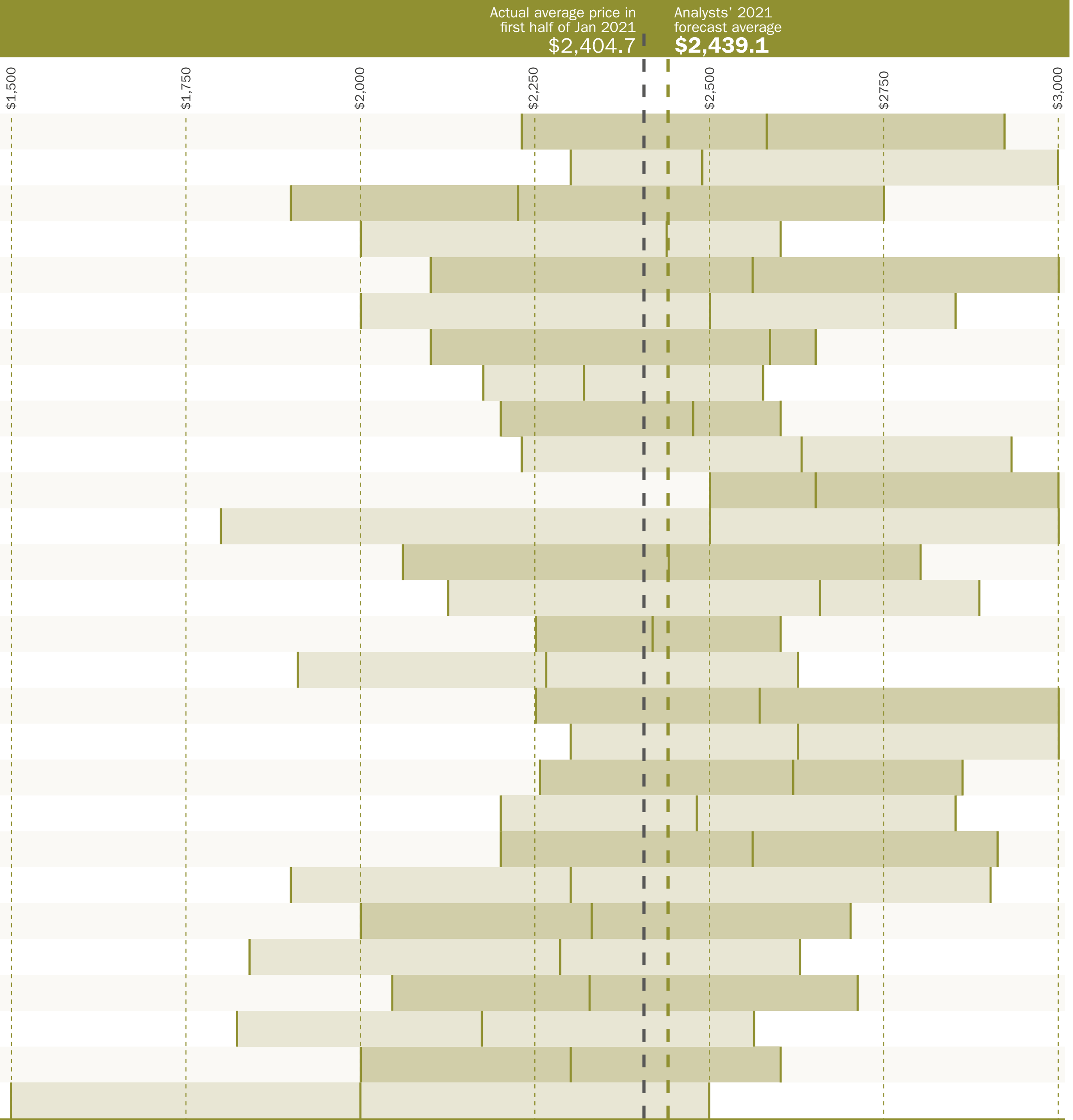
Pd



Name	Low	Average	High
Adams, William Fastmarkets	$2,230.00	**$2,580.00**	$2,920.00
Bahr, Robin Robin Bahr Metals Consulting (RMBC)	$2,300.00	**$2,488.00**	$3,000.00
Bain, Caroline Capital Economics	$1,900.00	**$2,225.00**	$2,750.00
Boele, Georgette ABN AMRO	$2,000.00	**$2,437.00**	$2,600.00
Butler, Jonathan Mitsubishi Corporation	$2,100.00	**$2,560.00**	$3,000.00
Cooper, Suki Standard Chartered	$2,000.00	**$2,500.00**	$2,850.00
Dahdah, Bernard Natixis	$2,100.00	**$2,585.00**	$2,650.00
Fertig, Peter QCR Quantitative Commodity Research Ltd	$2,175.00	**$2,319.00**	$2,575.00
Fritsch, Carsten Commerzbank AG	$2,200.00	**$2,475.00**	$2,600.00
Habluetzel, Andy Sharps Pixley	$2,230.00	**$2,630.00**	$2,930.00
Hochreiter, René Noah Capital Markets/Sieberana Research (Pty) Ltd	$2,500.00	**$2,650.00**	$3,000.00
Ikemizu, Bruce Japan Bullion Market Association	$1,800.00	**$2,500.00**	$3,000.00
Klapwijk, Philip Precious Metals Insights Limited	$2,060.00	**$2,440.00**	$2,800.00
Melek, Bart TD Securities	$2,125.00	**$2,656.00**	$2,884.00
Mururi, Pearson Afriforesight	$2,250.00	**$2,417.00**	$2,600.00
Nagao, Eddie Sumitomo Corporation	$1,910.00	**$2,265.00**	$2,625.00
Newman, Philip Metals Focus	$2,250.00	**$2,570.00**	$3,000.00
Norman, Ross Metals Daily	$2,300.00	**$2,625.00**	$3,000.00
O'Connell, Rhona StoneX Financial Ltd	$2,256.00	**$2,618.00**	$2,860.00
Panizzutti, Frederic MKS PAMP GROUP	$2,200.00	**$2,480.00**	$2,850.00
Polleit, Thorsten Degussa	$2,200.00	**$2,560.00**	$2,910.00
Ritter, Hans-Güenter Heraeus Metals GmbH & Co. KG	$1,900.00	**$2,300.00**	$2,900.00
Savant, Rohit CPM Group LLC	$2,000.00	**$2,330.00**	$2,700.00
Schallenberger, Frank LBBW	$1,841.00	**$2,285.00**	$2,628.00
Steel, James HSBC Securities (USA) Inc	$2,045.00	**$2,327.00**	$2,710.00
Stevens, Glyn MTSS UK Ltd	$1,823.00	**$2,173.00**	$2,562.00
Teves, Joni UBS Limited	$2,000.00	**$2,300.00**	$2,600.00
Wang, Zhexing Bank of China	$1,500.00	**$2,000.00**	$2,500.00
Averages	**$2,078.4**	**$2,439.1**	**$2,785.9**

Click on the name of a contributor and it will take you direct to the supporting commentary

William ADAMS

Fastmarkets, London

Au **Range: $1,825 - $2,455**
Average: $2,120

There are numerous factors supporting the view that we have entered another commodity super-cycle and, if that is the case, gold is likely to run higher too. Capex in metals mining has been falling, the COVID-19 pandemic has unleashed unprecedented amounts of government borrowing, pumping liquidity into the global markets and not just into the financial markets but at the household/retail level too, which might be more likely to be inflationary. This super-cycle will be driven by developed countries embracing electrification. Why will this be bullish for gold? As we saw in the 2000s, the commodity grab lifted all commodity boats, including gold. In addition, many government bond yields are still negative and central banks are likely to err on the side of caution and run their economies hot rather than tighten monetary policy too quickly. In addition, investors and creditors may well get increasingly worried about the implications of the huge surge in public debt and want to hold more gold as an insurance against a debt crisis.

Ag **Range: $23.20 - $33.70**
Average: $31.20

Silver prices are for the most part tracking gold prices and we expect that to remain the case in 2021. A better economic climate and governments' focus on green deals should push more investment into renewable energy and therefore solar panels. This combined with the trend of silver outperforming gold when gold prices are directional should see the gold:silver ratio fall further.

Pt **Range: $980 - $1,495**
Average: $1,275

A recovery in auto markets and ever tighter emissions regulations combined with the potential for mining and logistical disruptions in South Africa, now that a new variant of COVID-19 is spreading, are expected to lift prices. In addition, growing interest in hydrogen as a clean fuel, for vehicles and energy storage systems, should provide an avenue for faster growth for platinum. Platinum is also expected to take more market share from palladium in catalysts for petrol vehicles.

Pd **Range: $2,230 - $2,920**
Average: $2,580

A recovery in auto markets around the world as the year progresses and ever tighter emissions regulations are expected to underpin stronger palladium prices, as is another year of supply deficit.

Robin BAHR

Robin Bahr Metals Consulting (RBMC), London

Au **Range: $1,800 - $2,400**
Average: $2,163

The decline in real rates is being driven by a rise in inflation expectations, with investors betting that vaccine distribution, further central bank support and continuing government aid will see safe-haven demand supported. New debt financed economic aid under a Democrat-controlled Senate would drive up inflation expectations. Negative real interest rates is a key argument in favour of a rising gold price. Other supportive factors include currency debasement, ballooning deficits, the currency of last resort and supply has peaked.

Some 27% of the world's investment-grade debt is now sub-zero and should boost the wealth preservation and portfolio diversification benefits of gold, especially given low allocations in portfolios by investors. Regardless of the recovery type, the COVID-19 pandemic will likely have a lasting effect on asset allocation. It will also continue to reinforce the role of gold as a strategic asset.

Ag **Range: $24.00 - $35.00**
Average: $30.00

Silver will follow gold, while rebounding global growth/industrial activity is likely to boost jewellery demand, as well as industrial demand as the metal has more industrial applications and is critical to green technologies (solar PV, EVs, 5G networks, etc.).

The strength of global silver investment is expected to continue, comfortably absorbing a market surplus. The macroeconomic backdrop should continue to underpin silver investment demand for the rest of 2021. Dramatic monetary easing policies and fiscal stimulus measures seen in several key markets, and potentially again in the US before the end of 2021, could boost inflationary expectations and weigh on the US dollar, continuing to raise the appeal of safe-haven assets, including silver. More importantly, should the rally in gold resume later this quarter, silver's high beta relationship with gold is likely to encourage aggressive tactical buying.

Pt **Range: $1,000 - $1,300**
Average: $1,075

Two key end-use sectors for platinum, auto catalysts and jewellery, should see a robust rebound on the back of stronger global growth in 2020. Additionally, as its deep discount to palladium is likely to boost substitution, investors will increasingly consider platinum as a proxy for gold given its strong correlation to the yellow metal and the potential to outperform, while prices will be underpinned by a continued market deficit.

Pd **Range: $2,300 - $3,000**
Average: $2,488

An ongoing recovery in vehicle sales and tightening emissions standards will continue to boost palladium offtake, while supply will remain in a shortfall, keeping the metal in a structural deficit in 2021. This, along with falling above-ground stocks, bodes well for palladium prices, with the metal projected to hit new all-time highs during 2021.

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.

Caroline BAIN

Capital Economics, London

Au **Range: $1,695 - $1,900**
Average: $1,805

The price of gold is likely to continue to drift lower over the course of 2021 as global economic growth picks up, most notably in the second half of the year, and safe-haven demand wanes. Central bank demand is likely to remain subdued given that Russia has suspended its gold-buying programme. However, we expect prices to remain relatively high by recent past standards as we forecast some further depreciation of the US dollar and expect US Treasury yields to remain ultra-low. Indeed, we could even see a renewed decline in US real yields if, as we expect, inflation expectations start to pick up (in part owing to rising oil prices). This would offer some support to prices and prevent a deeper fall.

Ag **Range: $21.40 - $26.50**
Average: $23.90

We expect the silver price to fall in tandem with the gold price as it too bears the brunt of lower safe-haven demand. What's more, there will be additional downward pressure on the price of silver in the second half of the year as we expect the rally in industrial metals prices to have run its course. By mid-2021, we expect the lagged effects of policy stimulus in China to be fading and economic growth will be slowing, which will weigh on industrial metals demand. In addition, as vaccines are rolled out and restrictions lifted, we think there will be lower demand for metals-intensive consumer goods (electronics) as spending shifts back to the service sector (travel and hospitality). There will, however, be some support for silver prices from rising demand in the renewable energy and energy storage sectors.

Pt **Range: $810 - $1,100**
Average: $915

The platinum market was in a deep deficit in 2020 owing to lower production in South Africa (due to virus containment measures) and strong investment demand (for safe havens). However, we expect the market to swing into a small surplus this year. Barring a particularly severe outbreak of COVID-19, South African mines are now likely to stay open, particularly as the government is keen to prevent a costly closure and mining companies have been proactive in virus testing and quarantining. On the demand side, we expect there will be outflows from ETFs as economic uncertainty wanes and this will only be partially offset by higher demand because of new, tighter emissions standards in Europe (Euro 6d). There is also a risk that higher unemployment in Europe will weigh on consumer purchases of big-ticket items, such as cars. All told, we see the price of platinum easing back over the course of this year.

Pd **Range: $1,900 - $2,750**
Average: $2,225

We are more positive on the outlook for the price of palladium and do not expect it to fall by as much as the other precious metals. The palladium market looks set to remain in a deficit this year even though both mine and recycled supply should pick up. We have some doubts about the strength of growth in global vehicle sales this year – but there will at least be a recovery from 2020 levels – and stricter emissions standards will require more palladium to be used per vehicle.

Georgette BOELE

ABN AMRO, Amsterdam

Au **Range: $1,750 - $2,050**
Average: $1,951

We think that the outlook for gold prices is still positive. First, we expect the Fed to keep policy rates low in the coming years. The Fed will also limit the rise in US Treasury yields to support the economy. In fact, we expect lower US Treasury yields for 2021. If inflation expectations stay around the current level, lower US Treasury yields will result in lower US real yields. This is a clear negative for the dollar and a positive for gold prices. Second, in 2020, fiscal deficits rose substantially. In 2021, these deficits as a % of GDP will decline, but they will remain substantial. It is likely that the combination of monetary stimulus and large fiscal deficit will continue to be a concern for investors. So we expect higher gold prices versus the US dollar, based on these dynamics. The three factors supporting gold are: lower US real yields, the combination of a large fiscal deficit and monetary policy easing, and a lower dollar.

Ag **Range: $20.00 - $30.00**
Average: $27.20

Silver tends to profit from higher gold prices as both metals are bought as an investment, as a safe haven (gold more than silver) and for jewellery. Silver has another interesting dynamic. Silver prices tend to outperform gold prices if investors are more optimistic about global growth and trade, because silver has a substantial industrial demand component. Indeed, silver prices strongly outperformed gold prices in 2020 for this reason – and because silver was relatively cheap. We expect a further recovery in the industrial sector, a lower US dollar and lower US real yields. So we expect higher silver prices.

Pt **Range: $950 - $1,350**
Average: $1,136

We think that platinum prices have the largest upside potential in precious metals this year. First, a positive outlook for gold prices also supports the outlook for platinum. They are both used in jewellery and we expect a modest rise in jewellery demand, especially from China. Moreover, some investors buy platinum as an investment alternative to gold if gold prices become expensive. Second, we expect an ongoing recovery in the industrial sector, which will probably result in higher industrial demand for platinum. Third, we expect higher consumer demand for cars this year. Meanwhile, more stringent car emissions regulation results in more platinum content for car catalysts. So we expect platinum demand for car catalysts to rise. Fourth, fuel cell technology for cars will continue to get more attention. Platinum is used in hydrogen cars and the content needed in these cars exceeds what is needed in regular diesel car converters. Last but not least, platinum is the cheapest precious metal.

Pd **Range: $2,000 - $2,600**
Average: $2,437

We also expect higher palladium prices in 2021, but the rise will probably be modest. There is still a supply shortage because of higher palladium demand for car converters to meet the more stringent emissions standards in China and Europe in the future. We expect a rise in car sales in China, Europe and the US, and higher palladium loadings in converters. We also expect higher industrial demand because of the ongoing recovery in the global industrial sector. The positive trend in gold and the other precious metals will probably spill over to palladium as well. But it is unlikely that palladium will be used a lot in jewellery or as an investment vehicle. So palladium is mainly a cyclical play, but the market is very thin.

Jonathan BUTLER
Mitsubishi Corporation, London

Au **Range: $1,600 - $2,200**
Average: $1,960

2021 will be a year of two halves: the next several months will be marked by a worsening COVID-19 situation and associated negative economic impact globally, offset only by further massive fiscal and monetary stimulus. This will make for a gold-supportive macroeconomic environment of low yields, a weak dollar and safe-haven investment. Effective widespread roll-out of vaccines will see the lifting of various restrictions and is likely to see national economies roar back in the second half. The resulting risk-on environment could see gold lose ground, though inflationary tail risks and strong physical demand in Asia will still provide support.

Ag **Range: $23.00 - $32.00**
Average: $28.50

Silver will find support from a favourable macroeconomic environment in the months ahead as well as strong physical demand, although its attraction as a gold-like investment asset may fade in the second half as a synchronised global recovery gathers pace. Fiscal stimulus from the incoming US Biden administration will have a green tinge, which should benefit physical silver consumption in the solar photovoltaic industry, as will a de-escalation of trade tensions. Silver demand in plastics, electronics and biocide applications will continue to gain from the lifestyle changes prompted by COVID-19, which are likely to be longer lasting than the pandemic itself.

Pt **Range: $900 - $1,300**
Average: $1,180

A recovery on the demand side will help support prices this year, and platinum will be boosted by an increasing focus on clean energy and lower emissions by the incoming Biden administration, helping further improve investor sentiment. South African output will increase after a difficult year, but the mining and refining side will remain at the mercy of any further COVID-19 restrictions and possible operational issues. A rebound in the auto market will help lift demand in emissions control, and platinum will benefit from being substituted for palladium to a degree in some markets. Physical demand will also be lifted by a growing number of clean energy applications where platinum is a key catalytic component, including electrolysers and fuel cells.

Pd **Range: $2,100 - $3,000**
Average: $2,560

Restrictions designed to combat COVID-19 will negatively impact car sales and ultimately automotive palladium demand in the first half; however, the sector is poised for a strong recovery amid a wider economic rebound in H2. Palladium will benefit from rising car sales aided by pent-up demand and ultra-low interest rates, as well as higher loadings to meet tighter emissions standards in the US and China. The supply side will see a jump in output from both Russia and South Africa, and a return to normal life will lift the throughput of recycled autocatalysts. The palladium market will however remain in deficit, limiting physical availability and keeping palladium on its longer-term upwards trend for now.

Tianze CHENG
Bank of China, Beijing

Pt **Range: $900 - $1,300**
Average: $1,175

We expect the supply and demand in platinum markets to improve in 2021. With the production of vaccines and the loose monetary policies around the world, potential economic growth will probably support the automotive and industrial demand for platinum. As physical consumption improves, the main factor affecting the platinum price may likely undergo a process of transition from platinum investment such as ETF demand to physical supply-and-consumption dynamics. In particular, there is potentially some new demand emerging from platinum substitution for palladium in autocatalyst, sales of diesel engine hybrids and hydrogen economy. As a result, platinum is forecast to display a strong performance, with its yearly average price striking higher.

Suki COOPER

Standard Chartered, New York

Au **Range: $1,700 - $2,200**
Average: $1,958

We expect gold prices to retest all-time highs in 2021. Gold is caught between conflicting macroeconomic drivers amid a weak physical market. However, we believe investors will continue to allocate into gold given our expectations for the US dollar to weaken further, real yields to remain negative, accommodative monetary policy, and further fiscal stimulus and rising inflation. Key risks stem from earlier-than-anticipated QE tapering and faster-than-expected vaccine roll-out, which would boost economic and social confidence. In turn, we believe that the bulk of gold gains are likely to materialise in the first half of the year.

While ETP inflows set a fresh record in 2020, weak holdings liquidated exposure towards the end of the year, and given balance-sheet expansion and concerns around inflation, both tactical and strategic investors are likely to look for buying opportunities. Retail investors will continue to buy gold. In the absence of investor interest, physical demand should provide support for gold on dips below $1,800/oz.

Ag **Range: $22.00 - $35.00**
Average: $28.80

Silver's safe-haven and industrial usage attributes should see prices fare well in 2021, with scope to outperform gold. Retail investor interest in silver remains strong, with ETP flows recovering faster than those in gold. Similar to gold, a weaker US dollar and supportive monetary and fiscal policy are likely to support further investor interest in silver. However, silver's dual attributes – appealing to investors and industrial users – mean it is not only likely to see better support on the downside, but scope for substantial growth in industrial demand could drive additional upside risk. The 5G roll-out and vehicle electrification had already set in motion a demand recovery, but Biden's green energy plan is likely to boost growth prospects for silver consumption across the renewables sector, such as photovoltaic demand.

Faster-than-expected vaccine deployment could slow safe-haven interest in silver but buoy industrial consumption, and a slower vaccine roll-out would likely extend tactical investor interest during the industrial recovery. Silver prices look better supported this year compared to prior years.

Pt **Range: $900 - $1,300**
Average: $1,081

Platinum prices have started the year on a strong note amid supply-chain fears as the COVID-19 variant rekindled concerns over mine closures in South Africa. In the midst of the second wave of lockdowns, concerns materialised around slowing auto demand; however, supply weakness more than offset the decline in auto sales across the US and Europe. The slower-than-hoped-for roll-out of the vaccine is giving rise to a prolonged fragile demand recovery. In turn, we believe recent gains are likely to be short-lived, at least in the near term. However, the market balance is likely to tighten towards the end of the year as vaccines are rolled out, alongside limited supply growth opportunities as well as substitution risk supporting platinum. This will expose platinum to more sustained upside risk. The main risk for platinum stems around ETP flows. Strong inflows have tightened the market periodically but have proved to be less resilient than holdings across the other precious metals, and a fragile economic recovery could pressure platinum back below $1,000/oz. While positive developments across the hydrogen economy bode well for platinum over the longer term, demand from the sector is likely to be minimal in 2021.

Pd **Range: $2,000 - $2,850**
Average: $2,500

We expect the palladium market to deliver its 10th consecutive deficit in 2021. Despite the sharp decline in auto sales globally, the swift recovery across the sector in China and tighter emissions standards continue to support demand recovery. Market tightness is underscored by the fact that the decline in demand was sharper than the drop in supply last year, but we estimate the market was still structurally undersupplied. Further, reduced investor interest – with the decline in ETPs and tactical positioning – failed to hinder palladium's price recovery. We expect palladium to retest the 2020 intra-year highs and set a record annual average at $2,500/oz.

Key risks to our view stem from (1) a rise in infection rates in China derailing the local auto recovery; (2) accelerated and meaningful substitution of palladium with platinum; (3) a sharp correction in rhodium prices, reducing the incentive to switch to palladium; (4) a sharper-than-expected recovery in mine supply; and (5) accelerated electrification of vehicles.

Bernard DAHDAH

Natixis, Paris

Au **Range: $1,700 - $1,950**
Average: $1,775

Despite the vast amounts of government stimulus that will continue to accompany the post COVID-19 recovery and era, our view is that gold prices will find it hard to sustain the $2,000/oz level in the near term. As the global vaccinated population increases, especially in Europe and the US, where recovery continues to lag east Asia, the pressure on hospital beds should ease, allowing for countries to exit lockdown measures. The ensuing resumption of normal economic activity and stronger growth should increase investor risk appetite, at the expense of gold. Furthermore, with the Democrats winning both the House of Representatives and the Senate, it is increasingly likely that Biden's $2 trillion infrastructure plan will be passed, which in turn should raise yields and increase the opportunity cost of holding gold.

Ag **Range: $21.00 - $27.00**
Average: $22.90

The strong correlation with gold should also put some pressure on silver. That said, silver prices could hold better as the US infrastructure plan and the European Green stimulus plan are focused on boosting renewable energy, which should create additional demand for silver. Similarly, the Chinese 'new infrastructure' plan, which is focused on tech, should also be a source of silver demand given the importance of the metal in electronics.

Pt **Range: $1,000 - $1,300**
Average: $1,175

We expect to see platinum prices perform well this year as the global economy recovers, especially in the second half of the year as most major economies achieve a higher rate of vaccination and allow for further lockdown easing. This recovery should increase demand for platinum from various sectors such as jewellery, automobile and refineries. There should also be a pent-up demand element as luxury purchases such as jewellery and automobile purchases were delayed due to the COVID-19 pandemic. That being said, our view is that the majority of the expected increase in consumption has been priced in.

Pd **Range: $2,100 - $2,650**
Average: $2,585

Similarly to platinum, palladium prices are also expected to have a good year as strong automobile demand emerges. Automobile sales will benefit from both pent-up demand and low financing rates in Europe and North America. Stronger Chinese economic growth and the potential introduction of stricter emissions in the US (as part of Biden's plan to achieve a carbon neutral economy by 2050) will also support prices. However, the increasing penetration of Battery Electric Vehicles (BEV) is starting to bite PGMs, with almost 10% of European car sales late last year being BEVs.

Peter FERTIG

QCR Quantitative Commodity Research Ltd, Hainburg

Au **Range:** **$1,710 - $2,075**
Average: **$1,868**

The emergence of COVID-19, only a few days after the poll for precious metals prices in 2020 was published, has been a game-changer for gold, too. Its economic impact will remain a relevant factor for the price development in 2021, and possibly beyond. The current second or even third wave of rising COVID-19 infections and the imposed lockdown measures by various countries is delaying economic recovery. Therefore, global GDP is expected to remain below potential, which will limit inflation risks in the short run. Thus, real yields of inflation-protected US Treasury notes have fallen to record negative levels, which led to the rise of the gold price last year. The Fed and other major central banks are likely to keep short-term interest rates unchanged this year. Incoming US President Biden plans further economic stimulus. Furthermore, vaccinations are expected to support a quicker economic recovery and some economists predict rising inflation in the medium term. Thus, gold might be torn between its appeal as a hedge against inflation and rising opportunity costs. Also the US dollar could turn into a headwind.

Ag **Range:** **$22.75 - $28.25**
Average: **$24.90**

Silver is usually more volatile than gold and that was also the case last year, which made silver one of the best-performing commodities in 2020. Thus, a further consolidation in the gold market will probably also have a dampening impact on silver this year. The expected headwinds of rising opportunity costs and a recovery of the US dollar are likely to limit the upside for silver in 2021. However, many fiscal stimulus measures include higher spending in green infrastructure to reach climate goals as promised in the Paris Agreement. Silver is used for example in solar panels. Therefore, industrial demand for silver should provide support for silver, which gold is lacking. Thus, silver might outperform gold again this year, even if both markets were to trade sideways.

Pt **Range:** **$925 - $1,150**
Average: **$1,062.50**

Due to the use in catalytic converters for diesel engines, platinum suffered for almost five years from the Diesel scandal of Volkswagen. As demand switched to vehicles with a gasoline engine or even to e-mobility, the lack of demand weighed on platinum prices. Also weaker car sales in China contributed to the downturn. However, China came first out of the COVID-19 crisis and new car sales turned positive again in the year-over-year comparison. Also industrial metals record brisk demand from the automotive sector. This development ended the doldrums for platinum, which managed to surpass the $1,000/tonne mark again. While a temporary decline below this level cannot be ruled out, stronger demand from car manufacturers should lead to higher average prices compared to 2020.

Pd **Range:** **$2,175 - $2,575**
Average: **$2,319**

A recovery of car sales and higher automobile production should also be supportive of the demand for palladium used in vehicles with gasoline engines. Even higher sales of diesel cars would probably not weigh on demand for palladium. Therefore, prices are expected to consolidate around the current level, but last year's high could be exceeded.

Carsten FRITSCH

Commerzbank AG, Frankfurt

Au **Range:** **$1,750 - $2,150**
Average: **$2,000**

The underlying conditions should continue to give gold a tailwind in 2021. Even if, as we expect, the COVID-19 pandemic is largely brought under control in the second half of 2021 through sufficient immunisation of the population, the enormous increase in sovereign debt caused by the COVID-19 policies and the inflated balance sheets will prevent central banks from returning to a 'normal' monetary policy in the foreseeable future. Real yields are therefore likely to remain clearly negative. Investment demand will thus remain robust, even if it is unlikely to return to the record levels of the previous year. We expect the gold price to resume its upward trend due to the positive environment.

Ag **Range:** **$22.00 - $30.00**
Average: **$26.50**

As the vaccination roll-out progresses, the risk of renewed lockdowns and supply disruptions should decrease significantly. Industrial demand is therefore expected to pick up in 2021. A recovery is also expected in jewellery demand, whereas demand for coins and bars as well as ETFs is likely to cool after the exceptional year in 2020. However, a collapse in investment demand is unlikely. In our view, the arguments for a further rise in the silver price are overwhelming. The flood of cheap money should cause silver to rise as well, which also has catch-up potential compared to gold. A recovery in the economy should also boost industrial demand. We therefore expect silver to resume the upward trend that was interrupted in the fall.

Pt **Range:** **$950 - $1,250**
Average: **$1,125**

Mine production in South Africa and investment demand are expected to normalise this year. On the other hand, demand from the automotive industry is expected to increase significantly. As jewellery demand is also set to make up most of last year's decline, the platinum market should show a supply deficit for the third year in succession in 2021, according to the WPIC forecast. However, this is expected to be significantly smaller than last year. This means that there is no longer any talk of a structural oversupply in the platinum market, which was still being discussed a year ago. In our opinion, the significantly tighter market situation speaks for a rising platinum price.

Pd **Range:** **$2,200 - $2,600**
Average: **$2,475**

In 2021, the palladium market should again show a supply deficit, which could also be somewhat larger than last year. Palladium supply should increase noticeably, as mine production in South Africa is expected to normalise for the most part after last year's outages. This will be offset by much stronger demand from the automotive industry, which should continue to recover from the COVID-19-induced decline. The expected renewed supply deficit should cause the palladium price to rise moderately. However, the already high price level, both in absolute terms and relative to platinum, and the substitution effects expected from auto producers, will limit the upside potential in our view.

Andy HABLUETZEL

Sharps Pixley, London

Au **Range: $1,730 - $2,230**
Average: $2,130

Gold will again show us its shiny side in 2021. Based on strong investment demand, ongoing expansionary monetary policies around the world, low interest rates and growing uncertainty over the global economic situation, we expect another strong price increase during 2021.

In addition, fundamental factors such as industrial and jewellery demand can be expected to improve going forward, while the supply side will expand only moderately. Overall, gold will retain its safe-haven status for investors and offers significant price upside potential. Retail and professional investors are likely to ramp up their demand for the yellow metal, driving the price to new record highs.

Ag **Range: $20.00 - $43.00**
Average: $38.00

Silver will outperform gold in 2021. We expect to see very strong investment demand as well as increased demand from industrial applications. Strong demand from the ETF and ETP investors during the last few years has shown that investors are increasingly embracing silver as an alternative asset class to gold. In addition, retail investor demand for coins and bars looks set to continue apace with 2020 demand, which was the highest level seen in the last four years, according to the US Mint.

Furthermore, we expect refiners to face mounting pressure, as the growing divergence between production capacity shortages and increasing demand for physical silver bars and coins will intensify, leading to higher silver prices.

Pt **Range: $980 - $1,330**
Average: $1,280

Ongoing supply side shortages of platinum from the mining sector combined with limited refining capacity and continued processing disruptions in South Africa will result in an increasing deficit in the platinum market. On the other hand, lower automotive demand from fuel cell, electric and depressed diesel car sales, along with weaker demand in the jewellery and industrial sectors, will offset and more or less balance out the supply shortages, resulting in only a moderate price increase when compared to other precious metals.

Pd **Range: $2,230 - $2,930**
Average: $2,630

The rising palladium price over the last five years was mainly driven by increasing palladium demand from the automotive sector. This year, we expect to see constrained demand in that sector due to ongoing travel restrictions, lower plant capacity as a result of continued COVID-19 workplace requirements and the current economic crisis. However, in 2021, mine supply growth will remain low and result in a market deficit due to strong investment demand from ETFs and new financial investment products created around ETPs.

René HOCHREITER

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

Au **Range: $1,590 - $1,840**
Average: $1,650

With vaccines being rolled out, 9.1% GDP forecast for China, 5.4% forecast globally, a good recovery in equity prices and the economy in the US (markets generally look a year ahead), inflation of prices unlikely in the near future with the emergence of scarred businesses from the pandemic nightmare, rates rising in the US (they can't go any lower in all seriousness), a possibly strengthening dollar (it has already weakened 14% since March 2020, so the next move would be a reversal) despite all the bad news on the dollar, everyone will continue to run to this perceived safe-haven currency, despite the red-hot printing presses. After the fastest recovery in the history of the global equity markets, gold may see an equally sharp decline as risk and volatility fall. Technically, gold has not convincingly broken out of the bear market it has been in since August 2020 and seems intent on not doing so.

Ag **Range: $17.00 - $26.00**
Average: $19.00

The gold:silver price ratio may return to its longer-term average of 85x the gold price as it seems to have overshot its average ratio mark in the recent market frenzy. The price will likely track the gold price, but the recent ratio of 70x may revert to the 85x level quickly in a bear market. The Au/Ag ratio went all the way up to 122.75 last year before the algo gurus woke up and then overshot on the upside. We will most likely see the silver trading algos stick to 70x and go to 85x when the gold price weakens. This is because silver will likely hold up a little longer than gold as the silver exuberance runs its course. Industrial consumption in the electronics and super-conductor sectors will likely see a drop in the current high price environment.

Pt **Range: $1,100 - $1,400**
Average: $1,350

A global platinum deficit of circa 5%, rampant jewellery demand in China (see Tiffany's 4Q 20 results) and HDV emissions compliance in China 6 could see an extra 300 to 500,000 ounces of demand for trucks in China alone. Together with rising fuel cell, H_2 generation and substitution of Pt for Pd in autocatalysts will result in a 5% deficit in 2021. CO_2 emissions compliance will likely see the diesel engine make a comeback as it produces half the CO_2 and has twice the efficiency and is much cleaner than a petrol car. The '3 Moz of above-ground stocks' of platinum (really guesses) may evaporate in this bull market. Rampant jewellery demand in China and strong auto sales globally have set up Pt as maybe the stellar performer of 2021 (right alongside rhodium). Technically, platinum is in full bull mode, with a trend developing that is adding around $300/oz this year to its 2020 average of $885/oz.

Pd **Range: $2,500 - $3,000**
Average: $2,650

Palladium prices are likely to do well again this year as we have monotonously said for the last three years. As Pd demand outstrips supply in 2021 by a good margin, we see the palladium price rising further and even breaking $3,000/oz during the year. Going forward, we see a $2,650/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 Pt/Rh catalyst will cost them $150/cat – less than the $550/cat Pd/Rh catalyst by 'going platinum'. Though we see only a 1% deficit in Pd in supply over demand, we think that prices will stay strong and that it will be pulled along in the tailwinds of rhodium and platinum during the year. Technically, palladium has entered a correction pattern and does not look as good as this time last year.

Bruce IKEMIZU

Japan Bullion Market Association, Tokyo

Au **Range: $1,750 - $2,150**
Average: $2,000

Gold has the strongest support from the world financial situation. Against the economic backdrop of COVID-19, major economic powers have already been pumping money into their markets and giving aid to people who have lost their income due to the pandemic. Most of the governments are already debt-ridden and those debts are increasing at an unprecedented rate as they finance the aid with even more debt. US national debt is now close to 130% of the GDP and that results in debasement. US dollar has been losing its value and this is expected to continue. Gold, as the king of commodities, is natural hedge against inflation and the essential alternative asset in a market situation like this. However, this traditional role of gold is now partly moving to crypto assets like bitcoin. In the first week of January, bitcoin surged to $40,000, while gold collapsed from $1,950 to $1,830 with the 10-year interest rates going up to 1.1%. If gold has anything to worry about regarding price movement, its biggest worry is the price of bitcoin. Otherwise, I expect gold will test the historical high of $2,075 reached in August 2020 and could go higher. Even if the vaccination roll-out makes things better in latter half of the year, a vaccine cannot undo what governments have done with their financial markets.

Ag **Range: $20.00 - $35.00**
Average: $30.00

Silver has the strongest upward possibility of all four metals. The main driver is the same as that of gold as a monetary metal – monetary easing and fiscal stimulus around the world will be a strong support for the silver as well. In addition, silver as a physical industrial metal has another potential. Most countries are heading towards a carbon neutral world and silver being an important material in solar panels, the demand for the metal could increase dramatically. While the mining supply of silver has been decreasing for the last four consecutive years. The tighter supply and demand situation as a result of investors' interest from the financial market will possibly boost the silver price by the highest percentage compared to other precious metals.

Pt **Range: $900 - $1,300**
Average: $1,150

Among the four metals, platinum was the only one that stayed at the almost same price level while the other three metals skyrocketed. However, the situation has changed with the world move from carbon to hydrogen society. Platinum is used as a catalyst in water electrolysers to get hydrogen from water and that is part of the key technology for the hydrogen society. Also, the COVID-19 situation in South Africa could result in a serious supply problem. Being the only underdog among the precious metals in previous years also makes platinum quite attractive for investors in terms of price, as the other three are already quite hefty. 2021 will probably be a good year for platinum for a change.

Pd **Range: $1,800 - $3,000**
Average: $2,500

Palladium is under pressure from major countries that are moving away from combustion engine vehicles to EVs. But the reality is still far from the target. Gasoline engine cars are by far the most popular vehicles at the moment and probably will continue to be so for at least several more years. Palladium has been in short supply for the last 10 years and that status will not change in foreseeable future. That alone could support the palladium price. With other PGMs such as rhodium and iridium going much higher, palladium could also be supported by its sister metals' price rises.

Nikos KAVALIS

Metals Focus, London

Au **Range: $1,800 - $2,300**
Average: $2,050

Following last year's sensational performance, we expect that gold will remain strong in 2021. The COVID-19 vaccine roll-out gives cause for optimism; however, the road to recovery will be long and bumpy. Crucially, authorities around the world will almost certainly maintain policy accommodation for the foreseeable future. Low policy rates, negative real sovereign yields, richly priced bonds more generally and continued fiscal stimulus should all help maintain investor inflows into gold. Importantly, much of the positioning should be sticky, being part of strategies to protect portfolios from systemic risks linked to ballooning government debt, as well as possible higher inflation. Last but not least, US dollar weakness should also help gold over the next 12 months.

Having said this, the scope for growth to return to key economies and the boost this would give to equity prices could limit gold's upside. In addition, although we are convinced that rate hikes and quantitative easing will continue, there will at times be talk of future tapering and/or higher rates, which will weigh on gold.

We therefore expect the price rally will slow over the course of 2021 and we may well see the peak of the current cycle in the second half of the year.

Philip KLAPWIJK

Precious Metals Insights, Hong Kong

Au

Range: $1,799 - $2,200
Average: $2,056

Gold prices are set to rise this year driven by nominal interest rates being kept at record low levels across the curve, an increase in inflation and, even more so, in inflation expectations, plus a further drop in the US dollar.

Central banks in the major economies can be expected to maintain policy interest rates at close to or below zero. They will prioritise economic recovery and a reduction in unemployment over the control of inflation, even if inflation were comfortably to exceed target levels.

Likewise, the monetary authorities will take steps to prevent any excessive rise in long-term rates because that would not only directly threaten the recovery but would also likely prompt a melt-down in bond and stock markets, and a financial crisis. US and Europe are likely to follow Japan and institute yield curve control.

Meanwhile, central banks will be under pressure, perhaps especially in the US, to finance directly governments' planned fiscal expansions. The massive increase in central bank holdings of government debt that this will require should undermine investors' faith in these supposedly ultra-safe assets and, specifically, in the currency of the world's largest debtor, the United States.

These trends will play out over several years and ought to result in a substantial move higher in the gold price, with 2021 representing a year of relatively modest beginnings in this process.

Ag

Range: $22.75 - $39.03
Average: $32.13

Silver should move higher this year due to the positive impact from both economic recovery and the same financial factors that will favour gold.

Besides increased industrial demand for the metal, silver ought to benefit from the reflationary tide and weakness of the US dollar, which will tend to lift commodities in general. Investors should also be attracted to silver as a more leveraged play on gold's expected run higher.

Although the current gold:silver ratio has fallen sharply from its March 2020 peak to around 73:1 lately, it is still very high compared to the sub-60 levels seen during much of the bull market a decade or more ago.

Moreover, whilst gold printed a fresh all-time high last year, silver remains a long way short of its close to $50 peaks in 1980 and 2011.

Pt

Range: $960 - $1,405
Average: $1,222

A return to a physical surplus this year after last year's modest COVID-related deficit might on the face of it spell bad news for the platinum price.

However, the surplus in 2021 is forecast (by Metals Focus) to be very small, certainly compared to the substantial one recorded in 2019, which is the better benchmark. Moreover, the prospect of a switch back to modest deficits in the medium term, due to little scope for growth in mine production and rising fabrication demand, particularly from HDD autocatalysts, may also encourage a bid from investors, especially under expected conditions of rising gold and commodity prices plus platinum's still very low absolute level compared to its past peaks.

Pd

Range: $2,060 - $2,800
Average: $2,440

A rebound in global auto production, coupled with a higher share of SUVs and hybrids within the total number of cars produced and the positive impact of tighter emissions controls means that palladium autocatalyst demand will recover very strongly this year and comfortably exceed 2019's record level. Although the outlook for most other areas of palladium consumption is less positive, overall growth in fabrication demand will probably exceed the expected recovery in supply from mine production and recycling.

The physical palladium market will therefore remain in a fairly substantial deficit, with a further decline this year required in already much-diminished inventories. Notwithstanding currently high prices, the tightness in the physical market is likely to provide an upwards bias to palladium during 2021.

Yufei LIU
Bank of China, Beijing

Au **Range: $1,575 - $2,150**
Average: $1,887

Policy guidance and reflation expectation are expected to be main drivers of global gold market in 2021. Both depend on the aftermath of COVID-19. Even with the vaccine roll-out, it is too early to say that the pandemic is nearing its end. Thus, further stimulus will continue to support gold and even to refresh the record high. On the other hand, Fed's potential tapering purchases may put pressure on the yellow metal. As the expectation of tapering accumulates, real interest rates will rebound and give gold a blow, which might be a similar story to 2013.

Neil MEADER
Metals Focus, London

Ag **Range: $23.90 - $37.00**
Average: $30.00

Silver's correlation with gold is forecast to remain strong in 2021 and this, together with the macroeconomic forces supporting the yellow metal, should sustain heavy investor inflows into silver. The 46% rise this year to a forecast annual average of $30 means that both an acceleration on silver's rally in 2020 of 27% and faster gains than for gold. This in turn reflects silver's higher gearing, support from strength in base metals and the fact that silver is still some way below its all-time high, unlike gold.

Silver is also supported by its fundamentals, as demand is forecast to recover at a faster pace than supply. Much is due to a bounce back from COVID-19 damage, such as the forecast increase in silver automotive demand, but there are clear structural forces at work boosting industrial fabrication, such as investment in green infrastructure (most obviously photovoltaic installations). All this helps explain a market becoming comfortable with a gold:silver ratio in the low 70s and our expectations are that this will narrow further in 2021 into the low 60s.

Edward MEIR
ED&F Capital Markets, Darien, Connecticut

Au **Range: $1,680 - $2,050**
Average: $1,815

We think gold will have trouble duplicating the same bullish backdrop that drove prices higher in 2020. In light of a recovering global economy, we see investors bidding up rates from current levels (note the current highs on the US 10-year), meaning that the dollar's sharp 2020 slide will likely start to ease over the course of 2021. Although excessive stimulus should theoretically keep the greenback under pressure, we think that this will be offset by the fact that the US economy could rebound rather quickly, especially if the vaccine roll-out starts to push beyond a critical mass, say around 60-70 million people. We estimate that this will become a reality in three to four months' time.

Ag **Range: $22.10 - $29.50**
Average: $24.50

We think that silver will trade in relatively firm fashion during 2021, but just like gold, we do not expect a major breakout beyond the 2020 highs. This is on account of the fact that gold could exert downward pressure on silver, as should a somewhat more stable dollar. In addition, we could see a slight shift in global consumption in 2021 – away from semiconductors and electronics (less metals/silver intensive) and more towards leisure and travel as people start to emerge from their homes.

Bart MELEK

TD Securities, Toronto

Au

Range: $1,775 - $2,131
Average: $1,994

After a year of violent price swings, the gold market seems to be in a volatile mood in 2021 too. Despite policy rates set to be at the zero bound for years, record global debt, unprecedented central bank asset purchases, negative interest rates and only modest physical supply, the yellow metal dropped over $100 following its early 2021 rally.

Sharply higher Treasury yields, a backup in real rates and a firm risk appetite in response to expectations of trillions of dollars of additional fiscal spending coming from the Biden administration are responsible for gold's recent poor performance. A firmer US dollar and a steeper yield curve due to increased inflation expectations and higher-term premiums associated with possible massive new debt issuance created a less friendly environment for gold, which has prompted specs to shed recently accumulated longs. This, and wide gaps between technical support levels help to explain the outsized slide lower, and the speculation that the gold bull market is coming to an end. There is a risk that prices will drop to below $1,800/oz should the curve steepen and the US dollar rally amid unexpectedly aggressive stimulus from the Biden White House.

However, with the Fed comfortable in allowing its policy rates to stay in the zero bound, even when inflation moves above its 2% target, and its intentions to keep real rates across the yield curve in very accommodative territory, gold will have plenty of support to move higher. It is also likely that the market will help to keep rates low and the yield curve relatively flat, as government and consumer spending may disappoint. While the two Democratic wins in Georgia's Senate run-offs in January gave US President Joe Biden control of both Houses of Congress, it is by no means certain whether he can manage to pass the additional trillions in income support or infrastructure spending that the markets have been reacting to recently. Many of the more expensive and controversial spending initiatives could well fall victim to the filibuster in the Senate or may never be put forth to a vote due to a lack of broad support.

Even if they do pass, the output gap will be very large for a prolonged period and it is likely inflation will not materialise much after oil and used auto prices flatten into 2021, which should suggest that the nominal yield curve will also need to be flat in order to keep real funding costs in accommodative territory for a prolonged period. Record and growing federal debt and funding requirements also likely mean that the central bank will keep buying paper to prevent rates from spiking. This, along with central bank bullion buying, limited physical supply growth, a weaker US dollar and fiat currency debasement fears should propel the yellow metal above $2,000 during the next 12 months.

Ag

Range: $22.50 - $31.38
Average: $26.69

Silver tends to do well when there is a favourable environment for gold. Considering that the white metal has a historical volatility roughly double that of gold, it should outperform the yellow metal when it once again follows an upward price. At the current 73 gold:silver ratio, it has a long way to go based on its relative value over time.

We expect investors to favour silver for the same reason as they do gold. In 2020, the investment community and traditional buyers of physical metal purchased some 515 million ounces of the metal. In addition to benefitting from the big monetary, FX and macroeconomic drivers like gold does, silver will get a helping hand from its industrial metal characteristics. Since some 60% of demand comes from the industrial sector, silver should benefit from firmer industrial uptake, as the global economy recovers after the COVID-19-inspired deep global recession last year. Expenditures on green energy infrastructure, decarbonisation and electrification should also help silver to rally, as it is intensively used in solar panels and electrical circuits. The intensity of silver use in the general economy is set to start moving sharply higher this year – a trend that should continue for well over a decade. Green initiatives under the Biden presidency, the European Green Deal and China's 2060 carbon neutral goal are all initiatives which should increase demand and likely attract investment ahead of the pending supply-demand tightening.

A weak supply side in 2020, after production dropped some 60 Moz, and a relatively modest recovery this year and only limited supply growth after that, along with strong investment interest suggests tight physical markets and robust silver prices. Given supply is constrained and considering our improved demand projections, there should be pressure on the existing supply, which should see silver trade above $30/oz over the next 12 months.

Pt

Range: $835 - $1,160
Average: $1,013

The post COVID-19 economic recovery and tightening environmental regulations should continue to fuel a recovery in industrial demand, with platinum especially well positioned to benefit. Firming auto production around the world, particularly diesel-intensive Europe should help drive demand. Meanwhile, the introduction of RDE standards and lower conformity factors should provide substantial tailwinds for loadings, which are expected to discourage European automakers from thrifting PGM content and help lift platinum uptake by the autocatalyst sector. Tightening standards, notably for heavy-duty vehicles, will also contribute to higher platinum loadings as emissions regulations in China, the US and other regions continue to support mid-single-digit growth in the average loadings.

A technological breakthrough in 2020 for close-coupled catalysts allowed a 30% substitution of palladium for platinum. This is expected to contribute to substantial tailwinds to platinum demand growth over the coming years. While it still remains too early for this to impact year-ahead physical demand expectations, it may drive investors to buy ahead of the actual tightening.

Industrial demand trends and a likely jump in investor interest should drive the platinum market into a deficit in 2021, despite a recovery in South African production. While speculative demand for platinum has not benefitted from the surge in appetite for gold and silver, it will likely benefit from speculative interest in the reflationary tailwinds expected for next year as the vaccine deployment helps the global recovery, which should see prices continue to trend at around $1,100/oz for most of 2021.

Pd

Range: $2,125 - $2,884
Average: $2,656

Despite the COVID-19 pandemic, palladium continued to have an impressive performance 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 ETFs becomes increasingly scarce and pollution regulations assure demand will firm. Indeed, autocatalyst demand will benefit from higher gasoline vehicle production in China, which is almost back to normal following the pandemic, and in other parts of the developing world and North America in 2021. Higher loadings per unit should serve as a double positive in 2021. Relatively modest Russian and South African supply growth and speculative interest may work together to tighten the market, lifting prices as we saw in March 2020.

Given that the whole industry is operating beyond the primary mining production possibility frontier, where demand destruction and investor metal is required to balance the market, the current price, which is near an already extremely high $2,400/oz, could well spike higher. At the same time, prices could also drop sharply on any sharp drop in demand, which would prompt profit-taking and tilt the market into a less extreme supply-demand imbalance. An uncontrolled release of large amounts of work-in-progress metal available in South Africa also represents a possible correction risk.

Our base case is that improving macroeconomic conditions and tighter pollution regulation amid a supply constrained market should bring palladium prices to average a record $2,656/oz in 2021, with an upside risk should the global recovery surprise to the upside or if there are any unexpected production disruptions.

Pearson MURURI

Afriforesight, Cape Town

Au **Range:** **$1,750 - $2,050**
Average: **$1,874**

The price is expected to see some downwards correction in the near term as improved US growth prospects support the dollar and safe-haven demand tapers as COVID-19 vaccine development and roll-outs drive expectations of an improving outlook for the global economy. Expectations of improved growth in the US due to anticipated major economic support measures should put upwards pressure on US market yields, further reducing gold investment growth to some extent.

The price should however trend upwards over 2021, assuming the low global interest rate environment remains, central bank purchases continue, financial market risks and geopolitical tensions persist and, later in the year, jewellery demand and inflation expectations increase.

Ag **Range:** **$20.00 - $40.00**
Average: **$27.70**

We expect silver to trend upwards with gold in 2021, supported by investment demand drivers (driven by low global interest rates and persisting financial market and COVID-19 uncertainties) and rising industrial demand. The use of silver in auto manufacturing should continue to rise with the move to electric and self-driving vehicles – which consume more silver per vehicle than conventional vehicles. Demand for solar electricity generation capacity should rise as more governments include funding for greener technologies in stimulus packages.

Supply should grow only slowly as expansions and new projects from North America are offset by falling reserves in Peru and Chile. By-product production from copper, lead and zinc mines should rise as high prices incentivise production.

Pt **Range:** **$910 - $1,250**
Average: **$1,078**

Platinum's supply deficit widened in 2020, despite lower demand due to COVID-19 disruptions, as refining bottlenecks in South Africa persisted throughout the year. Anglo American Platinum suffered multiple breakdowns on both the main and back-up converter plants at its Waterval smelter in 2020, greatly reducing South African refined capacity. Supply should recover in 2021 as Anglo American Platinum ramps up refined output after successfully repairing its main converter plant in late 2020. Supply from Russia and Zimbabwe should also rise from COVID-19-impacted 2020 levels.

Platinum prices should be volatile in the near term as autocatalyst demand growth slows as some automakers cut back vehicle production due to a shortage of semiconductor chips. However, platinum prices should rise from the second quarter encouraged by rising autocatalyst demand as auto manufacturing revives with easing semiconductor supply constraints and global vehicle sales improve, especially in the US and the EU, supported by low interest rates. Tightening emissions standards in the developed world should further support autocatalyst demand growth. We expect the US to announce more stringent emissions standards under President Biden.

Other expected positive price drivers include higher jewellery sales due to platinum's discount to gold and rising investment demand on expectations of increased substitution of palladium and hopes of future fuel cell demand.

Pd **Range:** **$2,250 - $2,600**
Average: **$2,417**

Palladium demand should be constrained by lower vehicle production in the near term due to shortages of semiconductor chips but should rise thereafter as shortages ease. Palladium prices should increase over 2021 as vehicle sales recover with global growth as COVID-19 impacts ease with the roll-out of vaccines. Tightening emissions standards in China, the US and the EU should support demand growth. However, we expect increased substitution of palladium by platinum in autocatalyst manufacturing to gradually temper price increases.

BASF (in partnership with Sibanye-Stillwater and Impala Platinum) announced in March 2020 success in developing tri-metal autocatalyst technology, which enables the use of platinum in place of palladium. This should pave the way for some autocatalyst manufacturers to switch to using more platinum. However, due to the impact of COVID-19 on the auto-industry, we have relatively tame expectations for substitution over the next two years, where we expect about 2% of palladium autocatalyst demand to be replaced with platinum in 2021, rising to 5% in 2022.

Eddie NAGAO

Sumitomo Corporation, Tokyo

Au **Range: $1,710 - $2,125**
Average: $1,920

The value of hard currencies are depreciating due to inexhaustible issuance of government bonds, money supplies and falling interest rates. The US dollar real interest rate, which has barely maintained positive since the previous global financial crisis, has now turned to negative, raising skepticism about the currency itself. A large amount of cash flowed into the stock market to avoid cash depreciation under this circumstance. Investments have extended to hard assets such as commodities and virtual assets such as Bitcoin. The correlation between gold and commodities over the last six months has never been high, so gold appears to be rather the leading indicator of US dollar, the retracement in the gold price suggests that US Dollar will be purchased. Inflation concerns are expected to raise long-term interest rates, but the BOJ, the Fed and the ECB have already bought large amounts of government bonds, so if they tolerate interest rates to rise, the central banks' finances will deteriorate significantly.

In the future, there is no choice but to maintain low interest rates for a long period of time. Gold prices will not fall significantly and the dollar is unlikely to rise in the long run.

Ag **Range: $20.25 - $29.10**
Average: $24.50

Since late last year, silver has outperformed gold due to expectations for clean energy policy in the new Biden administration. There is no doubt that silver demand for photovoltaics will remain strong over the next few years, not only in the US but also in other regions due to various economic recovery programmes and ESG investments. On the other hand, however, the spread of COVID-19 has reduced opportunities for social events worldwide, reducing the demand for jewellery and silverware. Investment demand in the Middle East, where revenues from crude oil sales have fallen sharply, is also down and will recover only slowly. The depreciation of the US dollar will not significantly reduce the US dollar-denominated silver price, but the gold:silver ratio is expected to gradually increase again.

Pt **Range: $985 - $1,260**
Average: $1,130

Platinum, which has had the worst performance of any precious metal in the last few years, was finally showing signs of recovery towards the end of 2020. The main background was the speculation about the re-shift from palladium to platinum in the gasoline automobile catalyst field and the expectation that fuel cell vehicle development will re-accelerate. The impact on actual demand will not be significant at least as of 2021, but platinum is to be an attractive theme for environmental investment. Continuation of investment demand is expected, including switching from palladium investment. Due to the limitation of supply sources, there are concerns about supply chain constraints due to COVID-19, and it will be a difficult metal to sell.

Pd **Range: $1,910 - $2,625**
Average: $2,265

Given that it may still take a considerable amount of time to resolve the COVID-19 problem, and that even if it converges, lifestyle changes will be significant, global automobile sales are not expected to recover rapidly to their pre-COVID-19 level. In such scenario, palladium demand will be affected more than platinum. That the lease rate has remained stable and low for some time reflects the improvement in the supply and demand balance. Although there remains concerns about supply chain constraints due to the pandemic, palladium is less likely to hit its high of 2020 during 2021.

Philip NEWMAN

Metals Focus, London

Pd **Range: $2,250 - $3,000**
Average: $2,570

In 2021, we expect palladium to benefit from strong underlying fundamentals. This will occur even though global mine production is forecast to recover to near record levels, following a year when South African mining was marred by COVID-19-related and other operational disruptions. Meanwhile, autocatalyst recycling is expected to achieve a new all-time high in 2021. Both sectors will benefit from elevated platinum and record palladium and rhodium prices.

However, a strong supply-side performance will be eclipsed by the recovery in palladium demand. In particular, autocatalyst fabrication is projected to set a record total, driven by strong gains in China and the US, where the use of palladium will benefit from the ongoing recovery in vehicle production. Tighter emissions legislation will also help demand, through further gains in PGM loadings. Although substitution and thrifting efforts by the automotive industry will continue, we do not expect these to materially affect demand over the next 12 months.

Palladium will therefore achieve its 10th successive physical deficit. As a result, above-ground stocks will be further depleted this year. To put this into context, by the end of 2021, these are expected to be around one-third lower than at the end of 2010. The market tightness this will help create will fuel palladium's price rally.

Ross NORMAN

Metals Daily, London

Au **Range: $1,810 - $2,285**
Average: $2,025

We expect gold to perform well in 2021, although at a slightly more subdued rate compared to 2020.

Specifically, we see ongoing US dollar weakness, deeper negative real rates in the treasury markets and a significant rise in unproductive debt as the Democrats open the spigots with fiscal stimulus as supporting factors. With the economy still contracting in Q1, we expect a bounce in H2 as the vaccine roll-out frees up the economy. With the recovery comes demand-pull as well as cost-push inflation, further fuelled by the higher velocity of money, leading to expectations of much higher inflation, notwithstanding the weak labour markets.

As in 2008, central banks are doing whatever it takes to save the economy, but the second order consequences of the measures put in place will weigh on markets. As such, we see concerns shifting from herd immunity to herd insolvency.

Financial markets remain vulnerable and we think investors will continue to see gold as the near perfect antidote. In short, the bull run that dates from mid 2018 still looks very much in place and we see good gains ahead, albeit at a slightly slower pace.

Ag **Range: $24.10 - $36.00**
Average: $30.26

As one of the best-performing metals in 2020, we see silver maintaining that outperformance.

Investment demand for both physical silver coins and bars as well as the ETF (now at over 1 billion ounces) is likely to continue showing impressive gains and reflects strong demand for safe-haven assets in these troubled times. As the silver bull run continues, we expect the gold:silver ratio to continue to decline as silver outpaces gold. Silver bar demand is likely to be led again by the US and Germany, and may be partly offset by weaker demand in price-sensitive India on record prices in rupee terms.

Improving investor demand is however being offset by weaker demand in some key industrial applications including thrifting in the photovoltaic and automotive sectors.

Pt **Range: $1,000 - $1,520**
Average: $1,316

We foresee good gains for the broad commodity complex in 2021, but for platinum in particular.

In a post COVID-19 world, we forecast a solid recovery in global auto sales, with the implementation of Euro 6d and China 6b emissions regulations for light-duty vehicles seeing higher loadings, with Chinese auto sales looking at a 23% gain to 27 million vehicles and with US sales up 14% to 16.3 million units. Perhaps more importantly, there is good momentum being built with investors through ETFs as well as coin and bar demand (in Japan in particular), especially with a wider awareness of platinum's key strategic role in the growth of the hydrogen economy.

2021 is likely to see platinum in a supply deficit for the third consecutive year, with demand outpacing supply by about 240,000 ounces. Although there is a smaller deficit than we saw in 2020, there is nevertheless a cumulative effect. A rising tide lifts all boats and platinum, like its sister metal rhodium has shown, looks fully prepared to benefit.

Pd **Range: $2,300 - $3,000**
Average: $2,625

With rhodium on a trajectory to challenge bitcoin, it raises the possibilities that palladium, and indeed platinum, could become the beneficiaries of greater investor appetite. There is then of course the danger that price strength begets price strength, but we are in a bull cycle for commodities with a number of tailwinds.

On the fundamental front, we see good gains for palladium on a good recovery – especially in Asia – in auto sales, with off-take enhanced of course by the new emissions standards. Palladium is seeing strong gains despite relatively light investor interest.

Successive years of supply deficit have helped a lot, and we expect this to continue in 2021 and palladium, like the other white metals, to continue to see impressive gains.

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 1 million ounces over the last two years. So prices have been rocketing despite ETF redemptions.

Rhona O'CONNELL

StoneX Financial Ltd, London

Au **Range: $1,790 - $2,250**
Average: $2,084

The key gold drivers point to a bull market for much of 2021, but as and when the virus becomes manageable, there is a strong likelihood of professional investors lightening risk hedge holdings and moving into value. The question is "when?" When it does happen, the internal dynamics of the gold market will change as the professionals bail out and private consumers, with refreshed confidence, start spending again, and so the jewellery market should become more robust.

The three key elements here are:

- **Continued geopolitical risks**, with the EU/China trade agreement and subsequent rhetoric pointing towards a toughening stance from China towards the United States, and domestic political polarisation within the United States itself. Economic activity still struggling in the near term globally, with the possible exception of China.
- **Considerable increase in economic stimulus** leading to additional excess liquidity searching for a home.

All of which are encapsulated by:

- **Persistent negative real interest rates**, especially when some consumer-led inflation finally works its way through.

The key here is not gold as a hedge against rampant inflation, but that the need for economic stimulus and the average inflation targeting mean that real rates are going to go further into negative territory before they reverse.

Ag **Range: $24.86 - $37.50**
Average: $32.24

Silver is expected to outperform gold until the latter comes down when confidence finally comes back into the market. At that stage, it would underperform, but the potential for increased industrial activity, especially in solar and electric vehicles, suggests that underperformance in those circumstances would be less severe than historically. Silver's market is largely price-inelastic on both the supply and demand sides, so gold will be the primary driver, but when the situation turns around, the relationship with copper is likely to strengthen once more.

Pt **Range: $886 - $1,118**
Average: $970

It looks as if platinum's outperformance in late 2020 and the start of 2021 was partly driven by index rebalancing, some bargain hunting and concerns over consistency of mine supply in the face of lockdowns, and potential logistical problems with shipping metal. There may also have been some rebalancing of forward books. But, in 2021, mine supplies look to be increasing again and this will throw the market back into surplus. In addition, at least one large mining company has in-process inventory to work off. As do the auto companies, several which are looking to work on the basis of market purchases rather than long-term contracts.

Pd **Range: $2,256 - $2,860**
Average: $2,618

Palladium is expected to work higher this year as the market moves back into a deficit, but any record highs are unlikely to be seen until towards the end of the year, and that is assuming that the virus is brought under control and the auto sector gets back on its feet. The auto industry is likely to have inventory that it can use this year, but conditions should start tightening in the final few months. As with platinum and gold, there is still the possibility of logistical problems with transport, which may lead to price and forward rate dislocations. It will also be interesting to see what impact the Norilsk tokenisation programme has on the market's dynamics.

Manuel OLIVERI

Credit Agricole, London

Au **Range: $1,720 - $2,140**
Average: $1,930

Gold has been well supported for most of 2020, mostly on the back of falling US dollar rate advantage. Even though there is limited scope for major central banks such as the Fed lowering rates even further, this does not exclude a further downside to real interest rates. This makes sense when considering that the central bank is prepared to let inflation overshoot and that the improving growth outlook globally should help inflation improving more sustainably. On top of that, liquidity conditions should stay ample in an environment where there remains a strong focus on liquidity measures. All of the above are likely to help gold advance further, albeit a more stable risk sentiment, and therefore reduced demand for safe-haven assets, suggests such upside will improve gradually at best.

Frederic PANIZZUTTI

MKS PAMP Group, Geneva

Au **Range: $1,820 - $2,300**
Average: $2,072

Gold closed the year over 24% higher. We expect 2021 to be another bullish year. While the global economic recovery shows some positive signs, we will continue to face uncertainties, especially in the first half of the year. In the context of low global real interest rates, a slow recovery in growth, higher market volatility and a weakening US dollar, gold shall remain an asset of choice in investors' portfolios as a safe heaven and insurance against disruptions. More inflows into ETFs and increased physical demand, especially towards the second half of the year, shall comfort the upside trend.

We expect gold to hit a new all-time high at $2,300/oz.

Ag **Range: $22.00 - $40.00**
Average: $32.50

Silver was the top-performing precious metal, closing the year at over 47% higher. We expect the silver price to climb further in 2021 as gold is set to move higher. Some gold:silver ratio play may result in speculative silver buying accelerating the upside trend momentum. The expected mild global economic recovery in the second half of the year could further benefit silver industrial demand, particularly in China.

As we expect gold to move towards new all-time highs, investors might be tempted to diversify into silver. 2021 could be another volatile trading year for silver.

We see silver averaging $32.50/oz and to peak at $40.00/oz in 2021.

Pt **Range: $950 - $1,450**
Average: $1,205

Platinum underperformed compared to other precious metals in 2020, closing the year just 10% higher. The large supply deficit in 2020 is expected to narrow in 2021, but demand is still expected to exceed supply. Further recovery in the automotive sector and increased interest in green hydrogen technologies and fuel cells in electric vehicles shall provide some decent support. Demand from the jewellery sector, especially in China, is set to grow after several years of modest demand.

We expect investment demand to increase throughout the year as platinum is almost half the price of gold and far behind palladium, and will remain an attractive and relatively 'inexpensive' alternative. All parameters are pointing towards a perfect storm for platinum.

We see platinum averaging $1,205/oz and to peak at $1,450/oz in 2021.

Pd **Range: $2,200 - $2,850**
Average: $2,480

Palladium closed the year 21.5% higher. 2021 shall be another year of supply deficit. The automotive sector shall further recover and the catalytic demand for palladium is set to further increase especially with the ongoing tightening of emissions standards.

On the investment side, we don't expect to see much inflow into the metal as the already high prices make it less attractive than silver or platinum.

Still, some speculative, sporadic, short-lived interest could result in sharp rallies followed by corrections. We expect 2021 to be another very volatile year for palladium.

We see palladium averaging $2,480/oz and to peak at $2,850/oz in 2021.

Thorsten POLLEIT

Degussa, Frankfurt

Au **Range: $1,750 - $2,680**
Average: $2,300

The gold bull market can be expected to continue not only in 2021 but well beyond. A great number of factors are at work for pushing the price of gold further up. To fend off the consequences of the politically dictated lockdown crisis, central banks around the world will keep interest rates artificially low and expand the money supply at unprecedented growth rates. Unfortunately, it is far from certain that an extremely easy monetary policy will pave the way towards a sustainable economic recovery. In any case, price inflation – be it in the form of consumer and/or asset price inflation – will be the result, causing the purchasing power of the US dollar, the euro and other currencies to decline. The rationale for holding gold remains intact. In July 2019, investor legend Ray Dalio put it succinctly, when he said: "I believe that it would be both risk-reducing and return-enhancing to consider adding gold to one's portfolio."

Ag **Range: $22.00 - $55.00**
Average: $47.00

The price of silver can be expected to benefit from several factors in 2021. Silver can be expected to benefit from a further rise in the price of gold – as investor demand for safe-haven assets is likely to go up, benefitting silver prices. Improving industrial demand, accompanied by a restricted supply side, also argue for higher silver prices in 2021. What is more, in the last two years, the price of silver has benefitted as investors have increasingly built up their silver exposure via ETPs. This trend is most likely to continue – especially so as in the ultra-low interest rate environment, silver ETPs offer institutional investors return and diversification opportunities. The physical investment demand for silver should also benefit from an ongoing rise in the retail market demand for bars and coins – a trend that can be expected to gain momentum once savers really start feeling the heat from the combination of ultra-low interest rates and rising price inflation.

Pt **Range: $950 - $1,480**
Average: $1,150

The outlook for a recovering global economy can be expected to positively impact the price of platinum, which is largely used for automotive catalytic converters and industrial purposes. The ongoing COVID-19 pandemic in South Africa poses a substantial risk to the platinum supply side, in addition to mine shaft closures and rolling blackouts due to electricity supply shortages. While palladium has seen substantial price increases since 2016, the platinum price has remained fairly subdued. From this, one may conclude that platinum is underpriced compared to palladium, especially given its potential to substitute for palladium in some catalytic converter applications. Furthermore, the platinum price can be expected to benefit from a recovering demand for platinum jewellery and, even more importantly, from rising demand for platinum ETPs, as investors want to take advantage of the favourable price trend in the white metal space.

Pd **Range: $2,200 - $2,910**
Average: $2,560

No doubt, the price of palladium has had a truly great run since the beginning of 2016, especially compared to platinum. The rising palladium price was largely driven by the growing use of palladium for cars with petrol engines in Europe and China. While industrial palladium demand suffered in the politically dictated lowdown crisis in 2020, the cyclical recovery of the world economy in 2021 will most likely keep palladium demand ahead of its supply, arguing for a higher palladium price. Given the growing price gap between palladium and platinum, however, a 'substitution effect' is likely to kick in at some point, limiting the upside of the palladium price. Especially in light of the underperformance of the price of platinum over the past years, investor demand for palladium ETPs may well remain relatively contained.
That said, palladium is unlikely to continue its outperformance in 2021.

Hans-Güenter RITTER

Heraeus Metals GmbH & Co, Hanau

Au **Range: $1,760 - $2,120**
Average: $1,955

Gold should continue to benefit from safe-haven demand. Some political risks have receded (e.g. Biden as US president, Brexit agreement), but economic risks have increased with a resurgence in COVID-19 cases in many countries happening before vaccines can be widely rolled out. In addition to economic uncertainty, there are massive ongoing asset purchases by central banks, low or negative interest rates, and huge increases in government spending and debt, all of which can keep investors interested in gold. China and India, the two largest regions for consumer demand, are expected to see improving jewellery demand this year. Inflation expectations have risen, the yield curve is steepening, and real interest rates are firmly negative, all of which are supportive of further price gains.

Ag **Range: $21.00 - $36.00**
Average: $30.00

Inflation expectations have risen, and silver tends to perform better than gold when inflation picks up. The ECB and Fed are expected to keep rates low or negative into 2023 even if there is a vaccine-enabled economic recovery later this year. Silver's industrial demand is expected to recover this year. Photovoltaic demand could increase by more than 20% as governments continue to support the expansion of renewable energy. Electronic and electrical silver demand should be supported by the roll-out of 5G phones. Silver is still relatively cheap compared to gold and with industrial demand improving and continued investor interest, silver's outperformance of gold is expected to continue.

Pt **Range: $850 - $1,200**
Average: $1,040

Recovering economic growth should help lift jewellery, industrial and automotive demand this year. The growing use of electrolysers and fuel cells, and the substitution of platinum into some gasoline autocatalysts will only provide a small boost to demand. However, rebounding supply means that the market is expected to have an industrial surplus well in excess of 1 Moz, which will need to be absorbed by investment for a third consecutive year. That may be possible since platinum still looks relatively good value with its large discount to both gold and palladium.

Pd **Range: $1,900 - $2,900**
Average: $2,300

Supply is predicted to increase by more than demand this year, taking the market much closer to balance than in recent years. With the restart of Anglo Platinum's converter, refined output will recover and some stockpiled material can be processed, which should put some downward pressure on the price later in the year. Automotive demand is projected to exceed 2019 levels owing to a combination of a recovery in light vehicle sales and some further increases in loadings. The current resurgence in COVID-19 cases increases the downside risks for demand more than supply. Given the fragile state of the economy, mine closures in South Africa are less likely this year.

Rohit SAVANT

CPM Group LLC, New York

Au **Range: $1,800 - $2,100**
Average: $1,922

Gold prices are forecast to remain at elevated levels, driven by investor interest in the metal. Ample liquidity as a result of accommodative monetary and fiscal policy amid improving economic conditions is expected to underpin gold prices during the year. Tense relations between the US and China, top-heavy equity markets, and a soft dollar are other factors that should keep investors interested in buying and owning gold. Central bank demand also should improve relative to 2020, adding support to high gold prices.

Ag **Range: $22.00 - $35.00**
Average: $28.17

Silver prices are forecast to rise strongly during 2021. Even though silver prices rose in 2020, they still remain undervalued relative to gold and even relative to its own price levels in the last bull market. Given the improving fundamentals of the silver market, coupled with its relative undervalued status, positions the metal well for moving up sharply during 2021. Joe Biden, with support for the Senate and House, is likely to push forward more forcefully with an agenda for producing more green energy, which should help silver due to its use in solar panels.

Pt **Range: $850 - $1,320**
Average: $1,137

Platinum prices are expected to perform strongly during 2021 helped by a variety of factors; namely, the metal's undervalued status relative to palladium, which positions it well as a substitute for palladium, a potential disruption to South African mine supply driven by either an increase in infection rates or electricity outages and, finally, overall optimism toward industrial precious metals based on improving economic conditions driven by the availability of vaccines to treat COVID-19 are all factors expected to support higher platinum prices.

Pd **Range: $2,000 - $2,700**
Average: $2,330

Palladium prices are forecast to rise during 2021 on an annual average basis; however, the gains in palladium prices are expected to be relatively lacklustre compared to other metals in the complex. A combination of stronger passenger vehicle demand, tighter emissions standards in China and investors continuing to hold on to their metal inventories are all factors expected to play an important role in keeping palladium prices at elevated levels.

Frank SCHALLENBERGER

LBBW, Stuttgart

Au **Range: $1,488 - $1,959**
Average: $1,821

Gold will not reach new record highs in 2021. The COVID-19 crisis will end this year – and so gold as a safe haven will lose its shine! The ETCs won't come close to the record buying of 2020, the central banks haven't even started selling and jewellery demand will need some time to come back. So, gold will go down this year, even though interest rates will remain low and will prevent prices from dropping too far.

Ag **Range: $16.51 - $27.93**
Average: $19.71

The reason for the good performance of silver in 2020 was the extreme buying of ETCs. This will not be repeated this year. And the fundamentals of silver don't look too good. Industrial demand as well as jewellery demand will take some time to come back, so I think in 2021 silver will drop even further than gold. At the end of the year, we will see silver prices well below the $20 mark!

Pt **Range: $774 - $1,231**
Average: $912

Fundamentals still don't look too good for platinum! The supply surplus in the market is here to stay and the triumphant advance of electric vehicles will make platinum demand for catalysts even smaller. So platinum won't be able to stay above the mark of $1.00.

Pd **Range: $1,841 - $2,628**
Average: $2,285

Fundamentals are still bullish for palladium! Supply will be a problem once again in 2021. The supply deficit is here to stay, and so is the high level of palladium prices! But more and more electric vehicles will slowly but surely lead to lower dynamics on the demand side!

Chantelle SCHIEVEN

Capitalight Research, Victoria

Au **Range: $1,850 - $2,300**
Average: $2,080

Many of the factors that supported the rise in the gold price in 2020 will continue to support the price in 2021. The key factors include a further decline in the US dollar, additional fiscal stimulus in the US and elsewhere, low interest rates and very accommodative monetary policy. The Biden administration has pushed a new round of fiscal stimulus to the top of its agenda, and we could see at least one more fiscal stimulus package thereafter to support the economy before the vaccine is fully rolled out. The Biden administration should also encourage the US dollar to decline in order to help reduce the massive trade deficit. Central bank forward guidance suggests that rates will not increase until 2023 and that asset purchase programmes will stay in place for the foreseeable future. And global debt levels will become increasingly worrisome, which will continue to encourage investors to seek out gold.

Ag **Range: $24.75 - $38.25**
Average: $30.50

Silver, like gold, has benefitted from a declining US dollar, new fiscal stimulus, low interest rates and very accommodative monetary policy in 2020. And like gold, silver will continue to benefit from these factors in 2021. The bonus for silver is that as the economy kicks into full drive once the vaccine roll-out has reached critical mass, it will also benefit from increased industrial demand.

James STEEL
HSBC Securities (USA) Inc, New York

Au Range: $1,695 - $2,010
Average: $1,907

Monetary and fiscal policies are providing gold with the two requirements of a bull market: debt and liquidity. This is likely to continue for the foreseeable future and remain supportive. Vaccine roll-outs and economic recovery, however, will restrain investment demand. A Biden administration may be gold-positive from a fiscal spending perspective, but could work against gold via lower geopolitical and trade risks. Mine supply is rebounding after COVID-19-led lockdowns and recycling rates are rising, stimulated by higher prices. But high prices have led to a corresponding erosion in underlying physical demand, notably for jewellery. This means that investment demand has to remain at very high levels to absorb market supplies. Coin and bar demand may ease from 2022 levels. Central bank demand is down, but we believe ETF liquidation poses the biggest threat to prices. A weaker US dollar in 2021 is likely to be gold-friendly and may provide important support.

Ag Range: $20.25 - $27.90
Average: $25.50

Silver is both an industrial and a precious metal, with each aspect impacted differently. The global recovery will aid demand by stimulating industrial offtake after steep reductions in 2020. Silver has a variety of industrial applications ranging from autos and electronic to high tech and biosciences, with photovoltaic demand rising especially fast. On the investment side, the strong pull of firm gold prices should be a distinct positive for silver. But silver is no longer attractively priced relative to gold, and the vaccine roll-out and global recovery may limit investment interest somewhat. Therefore, heretofore very strong ETF and coin and bar demand may ease this year from high 2020 levels, but still remain supportive. Jewellery demand, which weakened in 2020, may make some recovery. On the supply side, mine output will grow visibly, with some increase in scrap. We forecast supply/demand deficits, but prices should moderate as the global economy stabilises.

Pt Range: $910 - $1,210
Average: $1,036

2021 is seeing recovery in both platinum's supply and demand. South African PGM mines were impacted by shut-ins in Q2 2020, but are bouncing back. But so too is consumption. The introduction of vaccines, which will become more widely disseminated as the year unfolds, and continued global monetary and fiscal stimulus, should boost demand across the board. Auto demand should rise strongly and we may see some marginal substitution from higher-priced palladium. Jewellery demand may finally be bottoming out and shows promise of recovery. Scrap auto supply is rising as improving auto sales allow for the handing-in of greater numbers of older vehicles for recycling. Investment demand, including coins and bars, as well as ETFs, has been robust for two years, but may soften in line with the global recovery. We anticipate a shift from deficit to surplus in 2021, but we still expect price gains this year.

Pd Range: $2,045 - $2,710
Average: $2,327

As with platinum, steep declines in palladium mine production and auto demand stemming from 2020 are being reversed. Auto demand in particular is surging this year, notably in China. Much of the auto increase is in palladium gasoline-fired engines. This, plus the impact of tight emissions regulations, which imply heavier palladium autocatalyst loadings per vehicle, will boost palladium auto demand this year. Auto recycling will also recover as new sales allow for older palladium-rich models to be recycled. South African mine output is bouncing back after the 2020 COVID-19 shut-ins. Russian output will be steady, largely due to maintenance. But mine and recycling increases will not match auto and other demand growth. Thus, we expect supply/demand deficits to widen sharply in 2021. This will raise pressure on limited ETF and other above-ground stocks and be a significant factor in supporting prices.

Glyn STEVENS
MTSS UK Ltd, London

Pt Range: $1,007 - $1,827
Average: $1,438

Pd Range: $1,823 - $2,562
Average: $2,173

2021 could well be the year for platinum to take centre-stage in the world of precious metals. Not only is demand set to outstrip supply, but the green hydrogen revolution is coming and platinum's role in this revolution is crucial. It is used in the production of green hydrogen and in the fuel cells themselves. The latter are deployed not only in the transport sector, but also a whole host of industrial, mining, commercial and residential applications. The impact of green hydrogen policies on global platinum demand will clearly be sizeable over the longer-term and this will increase as governments introduce further subsidies in the drive towards carbon neutrality. Add to this the fact that the link between platinum and the hydrogen economy has yet to be made by many investors, and the potential impact on price becomes huge.

The rise of platinum may well be to the detriment of its sister palladium. The latter has already enjoyed a meteoric rise over the past few years and is due, if not a massive correction, then at least a pause for breath. Substitution by platinum in the auto sector coupled with an end to recent supply shortages should temper any remaining rallies.

The fly in the ointment is obviously COVID-19. Whether or not this pandemic can be controlled, and in what timeframe, will impact heavily on mine production, economic growth and investor sentiment. This is one unknown for which I cannot account.

Wilma SWARTS
Metals Focus, London

Pt Range: $920 - $1,250
Average: $1,055

There are several reasons for optimism when looking at what is in store for platinum this year. Most important will be the positive spill-overs from gold. Furthermore, demand gains in heavy-duty applications, increasingly positive sentiment towards the use of platinum in green hydrogen solutions and the substitution, albeit only modest, of palladium by platinum in autocatalysts, should all be supportive of a stronger platinum price in 2021.

However, the price upside will be capped by lacklustre fundamentals. Even though we expect global platinum demand to comfortably recover all of the losses sustained in 2020, led by a three-year high for automotive fabrication, this will be eclipsed by a stronger supply response from both mine production and autocatalyst recycling. As a result, platinum is forecast to return to a modest surplus this year, having posted a small deficit in 2020 for the first time in five years.

Overall, we forecast platinum prices to improve by 19% year-on-year to a full-year average of $1,055. Although some of the early momentum, provided by short-term supply constraints, will dissipate, the impact of this on the platinum price will be largely offset as gold strengthens. That said, we expect platinum to underperform gold from current levels, with the spread between the two forecasts to average around $1,000 this year.

Joni TEVES

UBS Limited, Singapore

Au **Range: $1,800 - $2,300**
Average: $2,100

Gold remains attractive given accommodative monetary policy, negative real rates, a weaker US dollar and lingering uncertainty. Looking ahead, we expect the dollar to reassert its influence on gold and the recent dominance of real rates to ease back to the more 'normal' conditions that prevailed between 2010 and 2018. Further dollar weakness and only a modest rise in real rates therefore imply higher gold, other things being equal. We think the consolidation in H2 last year was healthy, forming a foundation for further gains in 2021. The reflation theme amid prospects of large fiscal stimulus holds upside risks to the extent that inflation expectations will compress real rates. Conversely, a key downside risk is if persistently strong data – potentially brought about by positive vaccine developments and fiscal stimulus – bring forward Fed policy normalisation and real rates move higher at a faster pace. This will likely trigger a reversal of diversification flows as holding gold will become more expensive.

Ag **Range: $21.00 - $35.00**
Average: $30.00

Silver should continue to take cues from gold in 2021, with the potential to outperform. Strong gold convictions are likely to encourage investors to view silver as an alternative way to express positions, especially given that the gold:silver ratio remains at historically high levels. Silver should be underpinned by improving fundamental demand, which also contributes to investor interest alongside stronger industrial metals. Environmentally-oriented policies could be a long-term theme that additionally attracts investor interest, despite what we expect to be limited impact on industrial demand.

Pt **Range: $900 - $1,200**
Average: $1,000

We expect platinum to benefit from higher gold prices. Improving long-term investor sentiment towards platinum should also support the market. However, the extent of anticipated supply recovery and growth presents considerable downside risks. Following a sizeable deficit in 2020, we expect the platinum market to move into a surplus in the year ahead. We expect autocatalyst demand to improve after persistent declines in recent years as falling diesel shares in Europe moderate. That said, we anticipate only modest gains over the next few years. Jewellery demand should also improve. More recently, investors have started considering platinum's potential to benefit from the hydrogen business amid increasing focus on green policies, albeit we don't expect much impact on fundamental demand. All things considered, platinum's price path is unlikely to be straightforward, with market participants having to weigh supply headwinds on one hand against long-term demand potential on the other.

Pd **Range: $2,000 - $2,600**
Average: $2,300

Robust demand should support palladium, but caution is eventually warranted as market conditions begin to ease. Looking ahead to the coming year, we expect palladium to trade within a similar range to the second half of 2020. A recovery in demand should help offset the rebound in supply, keeping the market tight. Nevertheless, we think that conditions should start to ease later, limiting palladium's upside and ultimately weighing on prices.

Bhargava N. VAIDYA

B.N. Vaidya & Associates, Mumbai

Au **Range: $1,740 - $2,090**
Average: $1,970

The global economy is still under the impact of the COVID-19 pandemic. Low interest rates and relief packages round the globe will ensure an interest in gold. Gold will retain its traditional reputation as a 'store of value' and 'a safe-haven investment'. Gold will continue to be an important store of value in all portfolios. With the announcement of the vaccine programmes and other recovery signs, the gold bull run will be checked.

Ag **Range: $17.35 - $32.25**
Average: $27.05

The use of silver in the clean energy drive would help silver prices. Volatility will remain due to uncertainty in economic conditions.

Subramanian VENKATRAMAN
Foretell Business Solutions Pvt Ltd, Bangalore

Au **Range: $1,650 - $2,250**
Average: $2,019

The gold dream continued without any major correction until the first week of August 2020, when it hit an all-time high of $2,075/oz. In 2020, gold delivered a 25% return for investors, the best annualised return since 2010.

Gold has moved higher as a safe haven against the unprecedented COVID-19 pandemic, which has halted the global economy like never before. When the US election outcome made clear that Mr. Trump was unlikely to be re-elected, gold declined significantly from its all-time high of $2,075/oz (August 2020) to test the lows of $1,764.1/oz at the end of November 2020.

Now let us analyse how gold is going to behave in 2021. The global economy was recovering faster than anticipated after the COVID-19 fall-out. But now the second wave of COVID-19 with a mutated variant has spread to 20+ countries across the globe within a short span of time. Whether the economic pace will continue for a few more quarters will depend on how the governments across the world are going to contain the spread of the mutated variant of COVID-19, although multiple vaccines are in place and a few are already approved by various nations for a vaccination roll-out.

The US dollar index settled the 2020 on a weak note, suggesting room for further decline. Usually, gold has a tendency to move in the opposite direction of the US dollar as a proxy currency and thus has the potential to move higher in 2021. Interest rates across the globe are likely to remain lower and the recent stimulus by the US is likely to result in additional liquidity, increasing the debt level across the globe, which may also worry the markets.

Ag **Range: $21.00 - $37.00**
Average: $25.65

In 2020, silver spot prices climbed back resoundingly from the decade low of $11.62/oz to touch the high of $29.84/oz. Overall, the silver spot price settled during 2020 with a gain of 48%. From its lowest to highest point in 2020, silver climbed an impressive 128%.

Silver industrial demand is expected to fall by 9% in 2020 due to the effect of COVID-19 according to the Silver Institute. Silver is a key component in the solar industry, which is poised for big growth. Solar investments account for 18% of silver industrial demand and about 10% of overall demand for the metal.

By contrast, physical investment demand is expected to surge 27% to 236.8 Moz in 2020, to a five-year high.

The most significant driver in silver investment demand in 2020 was the strength of silver-backed exchange-traded products, and demand is expected to reach 350 Moz.

In 2021, one can also expect more investment demand in silver. Moreover, the revival of the automobile sector and jewellery, which was affected due to COVID-19 in 2020 will also help silver industrial demand.

Zhexing WANG
Bank of China, Shanghai

Ag **Range: $21.70 - $35.60**
Average: $28.60

It may be subject to negative and positive factors in a balanced year. On the one hand, it is going to be boosted by the rising prices of commodities, which has led to higher prices under the effect of inflation expectations; on the other hand, it was affected by the monetary nature of gold, which will be under pressure following the discussion of FOMC's monetary easing policy returning to normal. Generally speaking, silver price may fluctuate upwards, and the two-way fluctuation range will continue to increase.

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

Palladium is still facing great uncertainty in 2021. Palladium is more expensive than platinum, but it is likely to be replaced by platinum in industrial use, and the price difference between palladium and platinum may continue to narrow. In addition, the recovery of auto consumption can support palladium prices, which will be affected by the progress of global pandemic control, employment and consumption recovery. Palladium prices are likely to fall first and then rise, and platinum's replacement progress is an unknown factor.

WINNERS OF LBMA'S 2020 PRECIOUS METALS FORECAST SURVEY

In mid-January 2020, analysts provided their forecasts for what they thought the average price in 2020 would be for each of the four metals (gold, silver, platinum and palladium).

Four 1 oz gold bars kindly donated by **MKS PAMP GROUP** are the reward for the analyst in each of the four metal categories whose forecast is closest to the actual average price in 2020. In the event of a tie, we take into account the analysts' forecast ranges, with the one with the range closest to the actual range during 2020 taking precedence.

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MKS PAMP GROUP

Congratulations to the winning analysts and commiserations to the runners-up.

Au

Analysts were forecasting the gold price to be $1,558.8, 12% up on the average price in 2019, but their average forecast undershot the actual price ($1,769.59) by more than $200. It's not surprising therefore that the most bullish analysts featured in the first three places with **Ross Norman (Metals Daily)** taking the first place prize with his forecast of $1,755, just $14 shy of the actual price.

Taking second place was René Hochreiter (Noah Capital Markets/Sieberana Research Pty Ltd) with his forecast of $1,670 followed in third by Frederic Panizzutti (MKS PAMP GROUP) with his forecast of $1,636. All three are worthy of a special mention as they all secured first place finishes in last year's Survey.

Ag

Analysts had forecast that the silver price would average $18.21 in 2020, a rather bullish forecast compared to the actual average in 2019 of $16.2. However, the actual average price out turned at $20.55, and so again it paid to be at the bullish end of the spectrum.

In a photo finish with just five cents separating the first three, **Ross Norman** snatched first place with his forecast of $19.25. This represents Ross's ninth first place finish since the Survey began, so congratulations to him for such an impressive haul.

Commiserations must go to the two runners up, particularly Bhargava Vaidya (B.N. Vaidya & Associates) who was just one cent behind with his forecast of $19.24. With his second top three finish in the 2020 Survey in third spot was René Hochreiter a whisker away with his forecast of $19.20.

Pt

Analysts had forecast a bullish outlook for platinum prices in 2020 with an average forecast of $1,005.1, compared to the actual average price in 2019 of $862.9. However, the actual average price in 2020 was $882.63, just over $90 below its price in the first half of 2020.

Taking first place was **Kieran Clancy (Capital Economics)** with his forecast of $880, which was less than $3 from the actual average. So congratulations to Kieran for such an impressive prediction.

Not lurking far behind in second place was Hans-Güenter Ritter (Heraeus) with his forecast of $875 and in third place was Daniel Briesemann (Commerzbank AG) with his forecast of $900.

Pd

In the first half of January 2020 palladium prices hit a succession of record highs to an average price of $2,065.2. Analysts forecast average prices for 2020 to be just $50 higher at $2,116. The actual average price for the year was $2,192.54 and three analysts with a more bullish outlook fought out the tightest of finishes. In a three way tie for first place all three forecast that prices would be $2,200 just $7 away from the actual price.

They could only be separated by comparing their high and low ranges against the actual high and low for 2020. Snatching first prize was **Zhexing Wang (Bank of China)** by virtue of his low/high ranges of $1,610 and $2,500, which were closest to the actual low/high range of $1,557 and $2,781.

Desperately unlucky in second and third place were Joni Teves (UBS Limited) and Neil Meader (Metals Focus), and our commiserations go out to them both for missing out by the finest of margins.

2020 LBMA Forecast Survey Winners

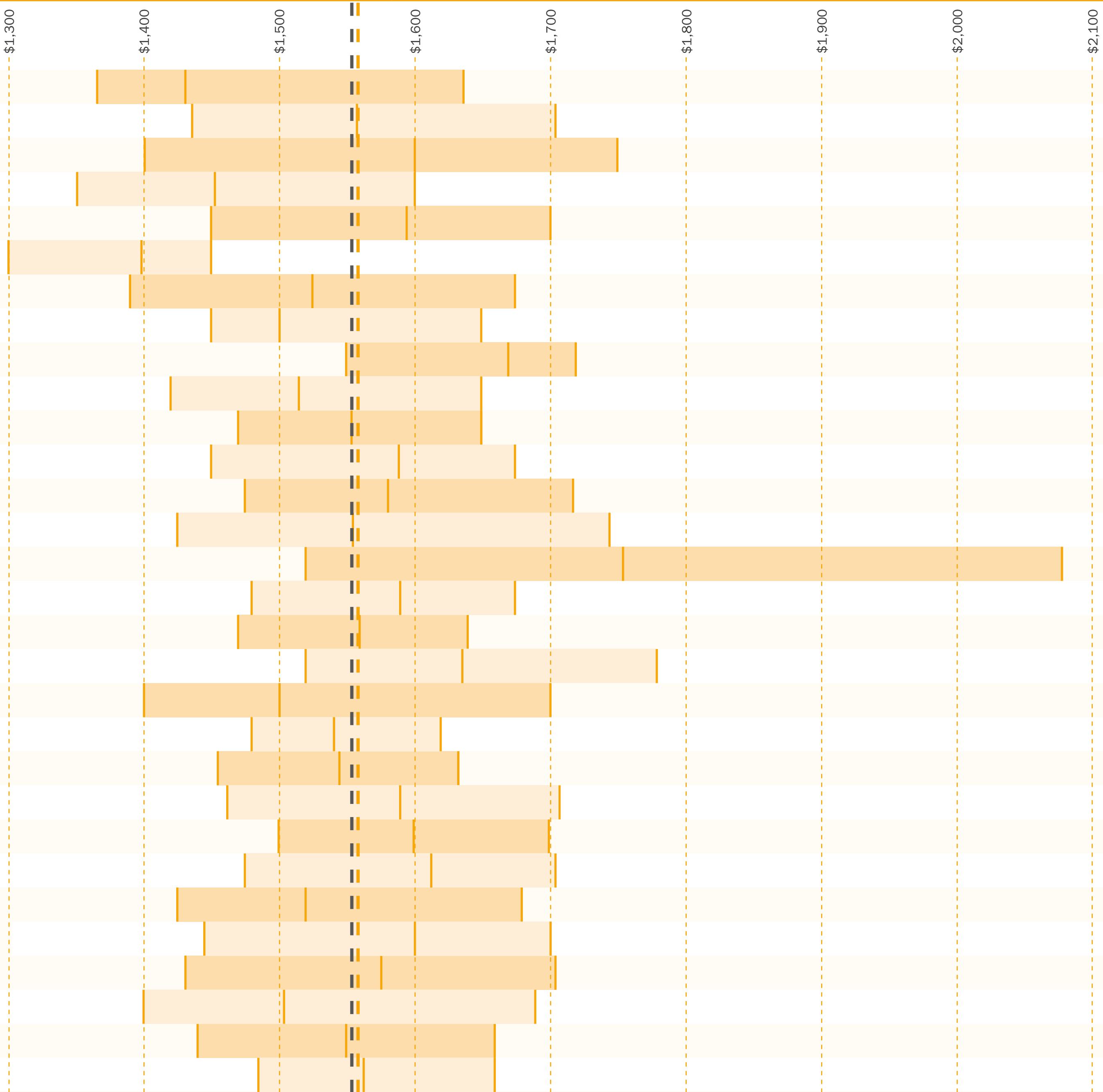
Metal	Actual average price in first half Jan 2020[a]	Analysts' 2020 forecast average	Actual 2020 average price	Winning forecast	2020 winning analyst	Company
Gold	$1,554.2	$1,558.8	$1,769.59	$1,755	Ross Norman	Independent Consultant
Silver	$18.08	$18.21	$20.55	$19.25	Ross Norman	Independent Consultant
Platinum	$973.6	$1,005.1	$882.63	$880	Kieran Clancy	Capital Economics
Palladium	$2,065.2	$2,116	$2,192.54	$2,200	Zhexing Wang	Bank of China

(a) 2-14 January 2020 inclusive (based on the pm LBMA Gold Price).

Au

Actual average price in first half of Jan 2020 $1,554.2

Analysts' 2020 forecast average **$1,558.8**

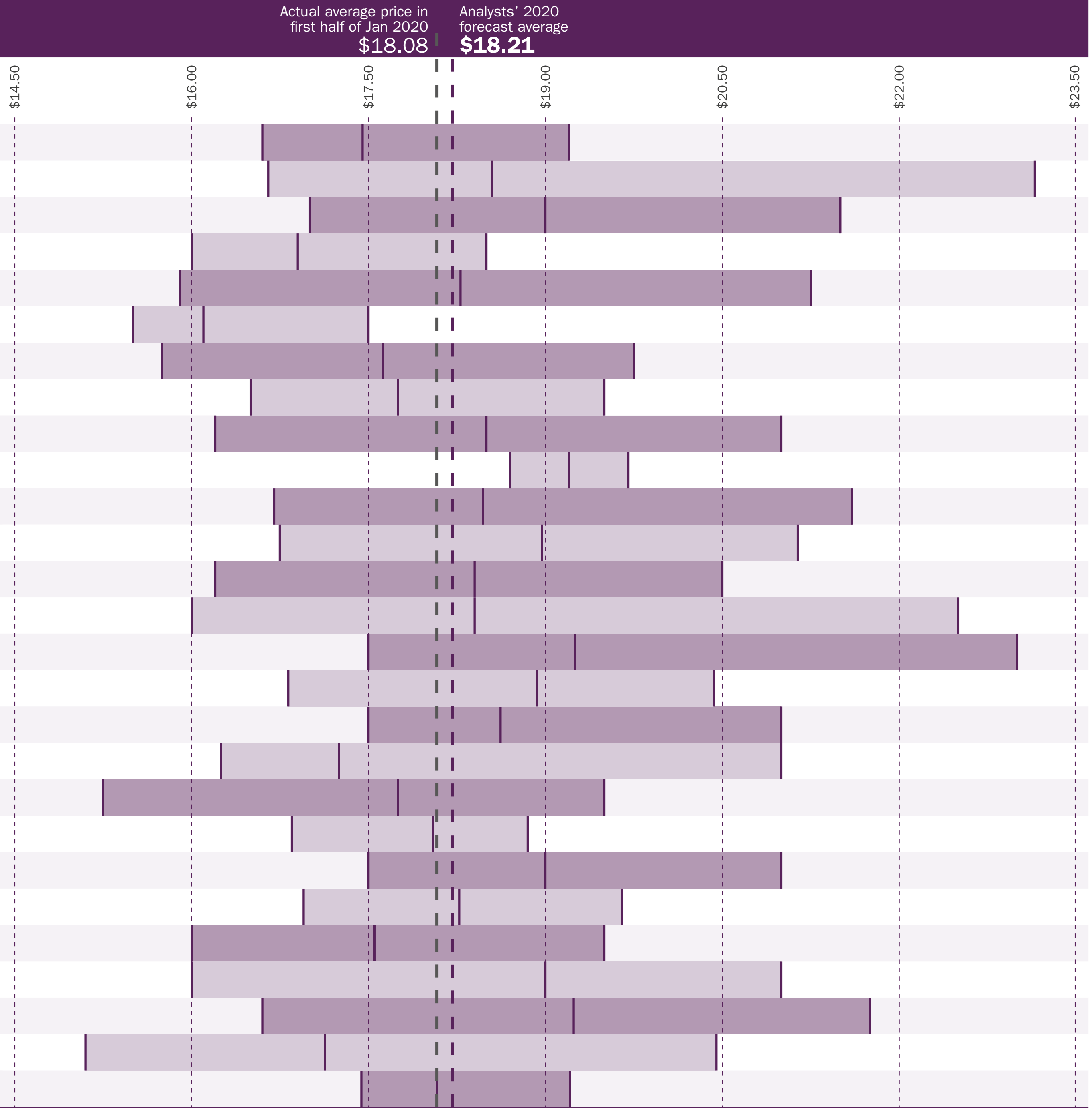


Name	Low	Average	High
Adams, William Fastmarkets	$1,365.00	**$1,430.00**	$1,635.00
Alexander, Cameron GFMS Refinitiv	$1,435.00	**$1,558.50**	$1,705.00
Butler, Jonathan Mitsubishi Corporation	$1,400.00	**$1,600.00**	$1,750.00
Clancy, Kieren Capital Economics	$1,350.00	**$1,452.00**	$1,600.00
Cooper, Suki 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, René 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-Güenter 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
Vaidya, Bhargava B.N. Vaidya & 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 Afriforesight	$1,485.00	**$1,563.00**	$1,660.00
Averages	**$1,443.9**	**$1,558.8**	**$1,688.6**

Click on the name of a contributor and it will take you direct to the supporting commentary

Ag

Name	Low	Average	High
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, René 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-Güenter Heraeus	$16.25	**$17.25**	$21.00
Savant, Rohit CPM Group LLC	$15.25	**$17.75**	$19.50
Schallenberger, 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**



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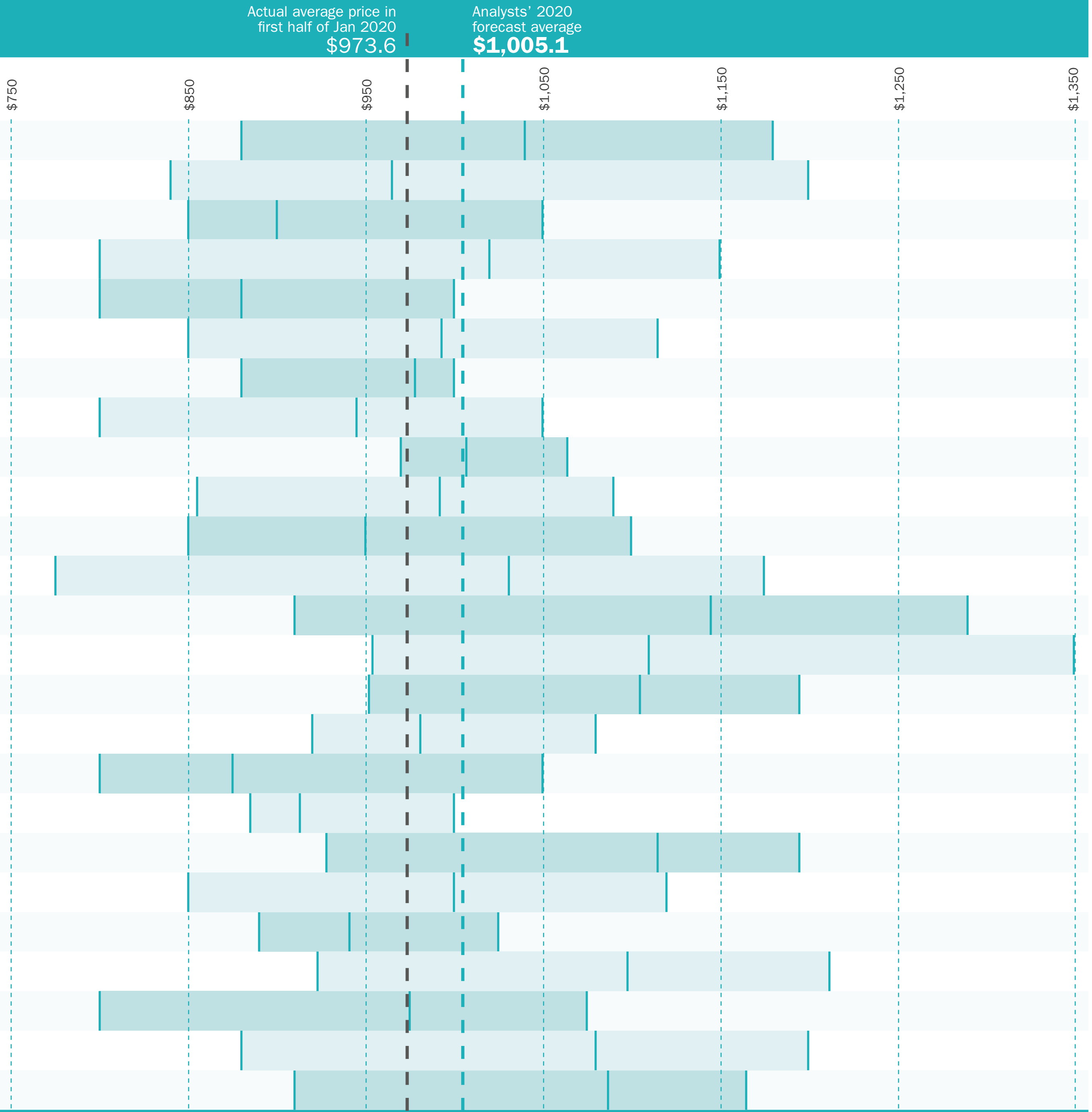

Name	Low	Average	High
Adams, William Fastmarkets	$880.00	**$1,040.00**	$1,180.00
Alexander, Cameron GFMS Refinitiv	$840.00	**$965.00**	$1,200.00
Briesemann, Daniel Commerzbank AG	$850.00	**$900.00**	$1,050.00
Butler, Jonathan Mitsubishi Corporation	$800.00	**$1,020.00**	$1,150.00
Clancy, Kieren Capital 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, René 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-Güenter 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**

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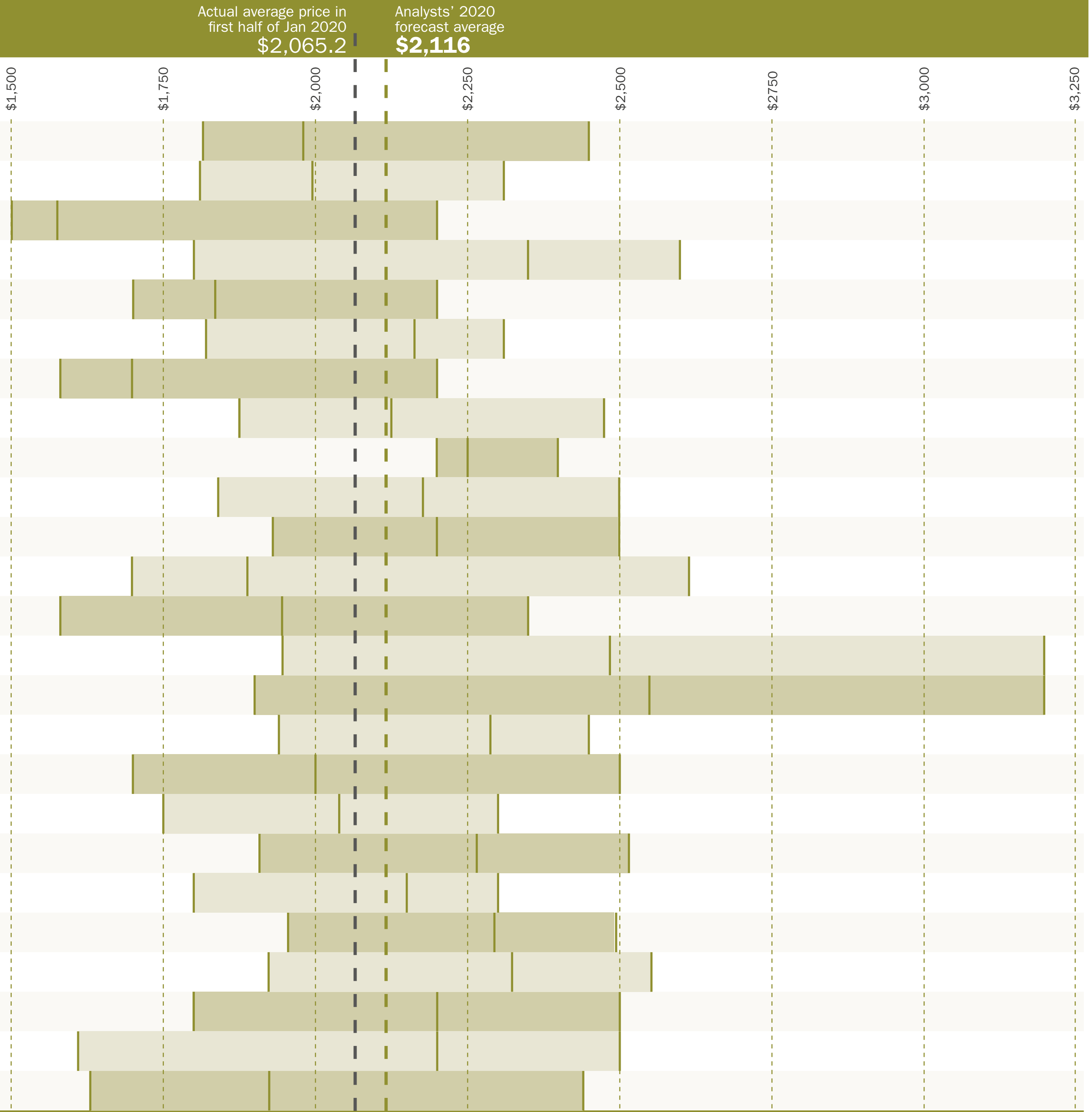
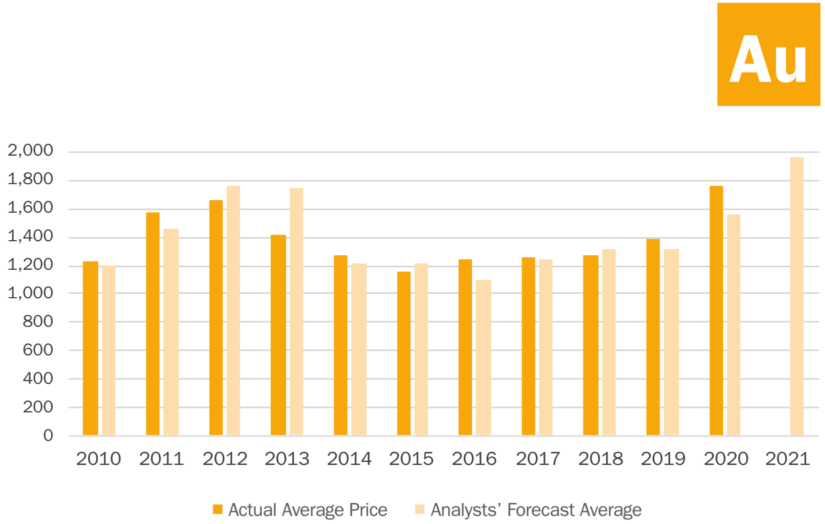
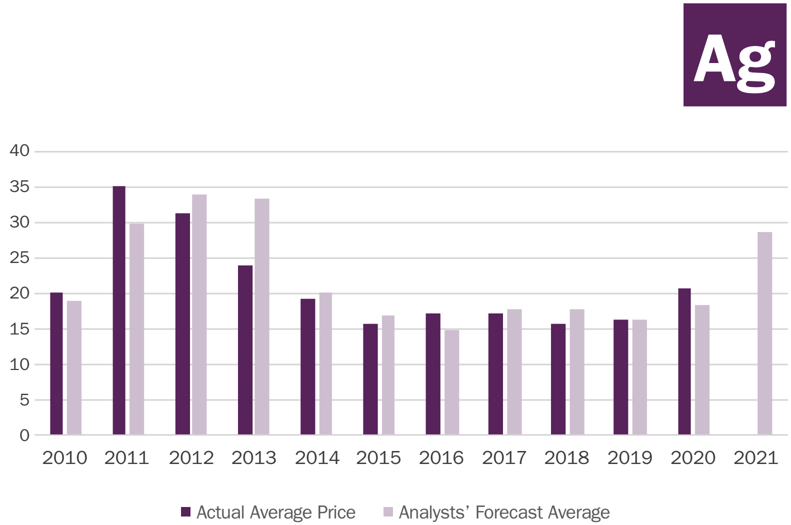
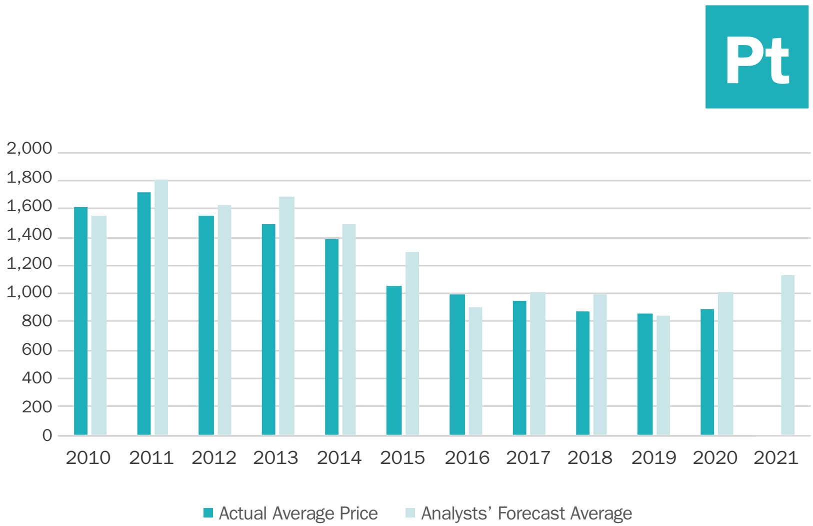
Name	Low	Average	High
Adams, William Fastmarkets	$1,815.00	**$1,980.00**	$2,450.00
Alexander, Cameron GFMS Refinitiv	$1,810.00	**$1,995.00**	$2,310.00
Briesemann, Daniel Commerzbank AG	$1,500.00	**$1,575.00**	$2,200.00
Butler, Jonathan Mitsubishi Corporation	$1,800.00	**$2,350.00**	$2,600.00
Clancy, 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, René 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-Güenter 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 Afriforesight	$1,630.00	**$1,924.00**	$2,440.00
Averages	**$1,800.4**	**$2,116**	**$2,482.4**

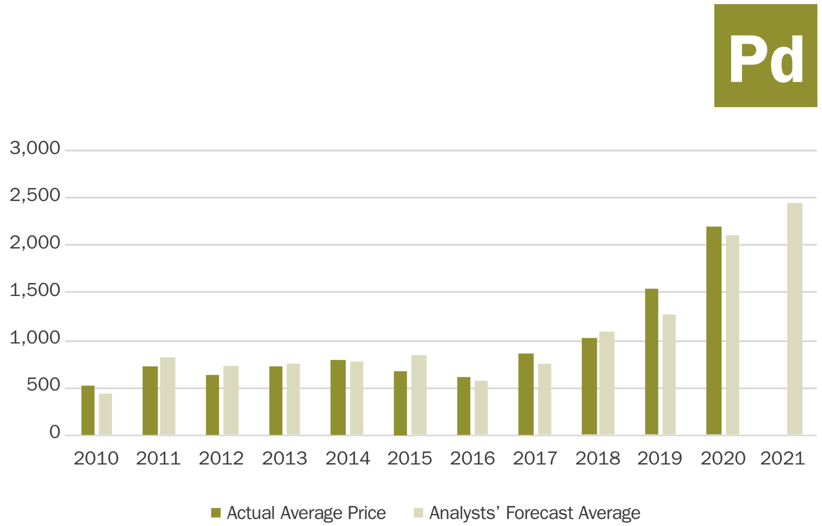


ACTUAL AVERAGE PRICE VS ANALYSTS' FORECAST AVERAGE 2010-2021









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