



LBMA

2018

PRECIOUS METALS FORECAST SURVEY

2018 - FAR FROM AN AVERAGE YEAR

Overview

“It was the best of times, it was the worst of times, it was the age of wisdom...”

Strongly divergent views dominate this year’s forecasts with the 34 analysts divided on the paths that precious metal prices will take in 2018. Opinions differ as to the level of US real interest rates, the likely impact of geopolitical factors and the pace of global economic growth. Our contributors are divided as to what will have the greater impact and hence we have received forecasts for gold as high as \$1,510 and as low as \$1,120 and it’s a similar story for the other metals.

With gold forecast in a trading range of \$390, silver \$9, platinum \$518, palladium \$750 we could be in for a dramatic year in precious metals. Somewhat surprisingly the mean of all the contributors forecasts are rather more staid. The outliers cancel each other out leaving the average price for each metal in 2018 little different from those seen in the first half of January.

Ultimately though who will win the debate and take home the prize of a one ounce gold bar for each metal? Make up your own mind by reading the analyses behind the forecasts to see who you think makes the most convincing case for the key drivers and factors influencing prices in 2018.

Gold **Average:** \$1,318 **Range:** \$390
High: \$1,510 **Low:** \$1,120

Average gold prices range from \$1,215 to \$1,381, but the overall mean is expected to be broadly in line with the price in the first half of January. However, a trading spread of \$390 suggests that the gold price could be in for an interesting journey in 2018.

Platinum **Average:** \$1,000 **Range:** \$518
High: \$1,250 **Low:** \$732

Analysts forecast a bullish outlook for platinum prices in 2018, up 3.1% to an average price of \$1,000. As with gold and silver, the analysts sit firmly in two camps, with average price forecasts ranging from \$862 at the bottom end to \$1,140 at the top, with the overall average more or less in the middle.

Silver **Average:** \$17.81 **Range:** \$9
High: \$23 **Low:** \$14

Silver is forecast to be the best performing of the four metals. The most bullish forecast is for an average price of \$20 and the most bearish \$16. But the overall view is that the silver price will end up between the two extremes at \$17.81, representing a 4% increase on the average price in the first half of January.

Palladium **Average:** \$1,080 **Range:** \$750
High: \$1,500 **Low:** \$750

Palladium was the best-performing metal in 2017 with a 16.7% increase in price, but analysts do not foresee a similar outcome in 2018. Indeed, they forecast that palladium will be the worst-performing metal this year, 1.5% lower to an average price of \$1,080 in 2018.

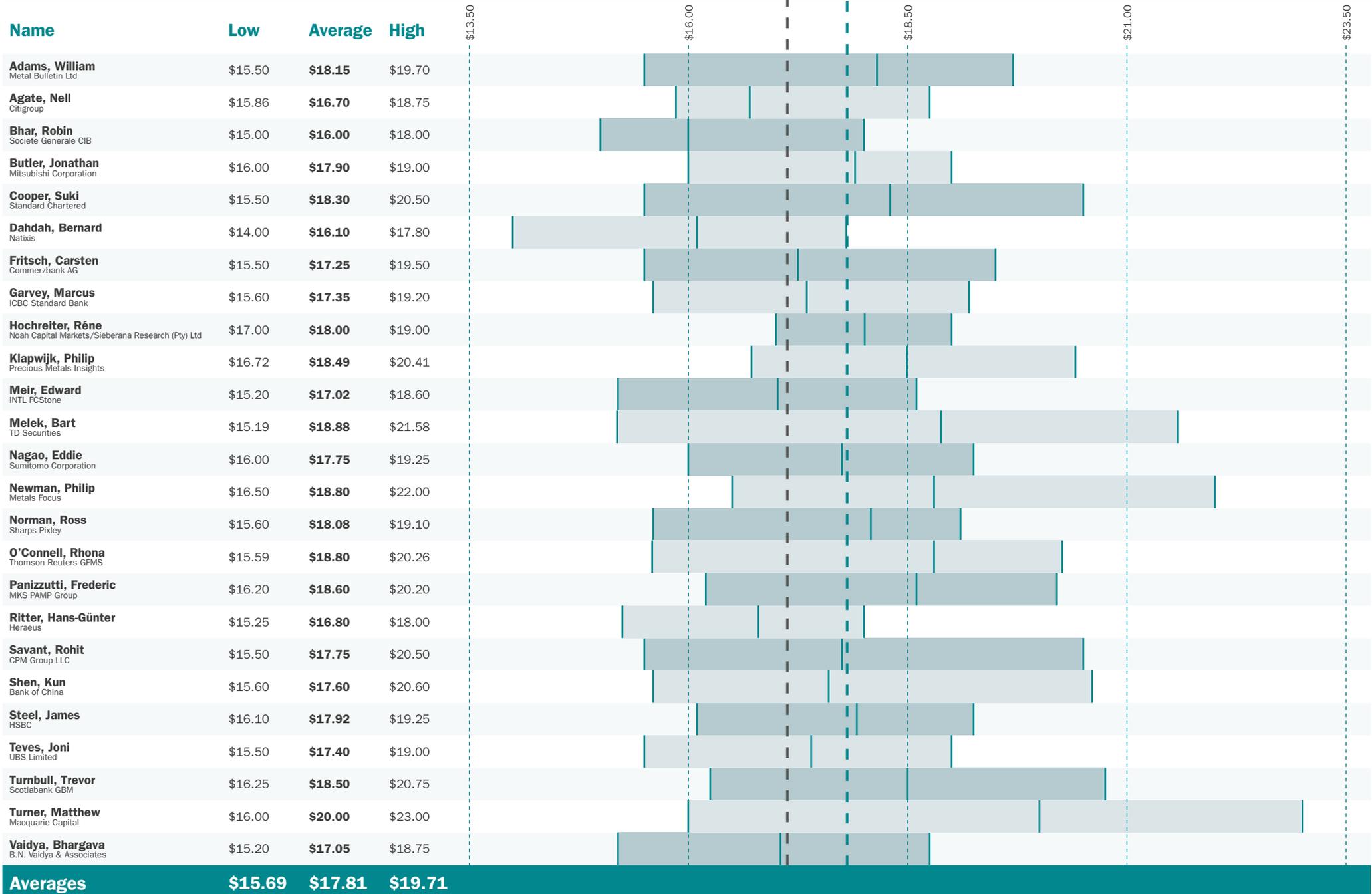
Metal	Actual price first half of January 2018 ^(a)	Analysts' 2018 forecast average	% change	2017 actual year average
Gold	\$1,320	\$1,318	-0.1%	\$1,257
Silver	\$17.13	\$17.81	+4.0%	\$17.05
Platinum	\$970	\$1,000	+3.1%	\$948.5
Palladium	\$1,097	\$1,080	-1.5%	\$869

(a) 2-15 January 2018 inclusive (based on the pm \$ prices)

Name	Low	Average	High
Adams, William Metal Bulletin Ltd	\$1,270	\$1,365	\$1,430
Bhar, Robin Societe Generale CIB	\$1,150	\$1,215	\$1,400
Butler, Jonathan Mitsubishi Corporation	\$1,250	\$1,350	\$1,450
Cooper, Suki Standard Chartered	\$1,200	\$1,324	\$1,450
Dahdah, Bernard Natixis	\$1,120	\$1,250	\$1,350
Doshi, Aakash Citigroup	\$1,168	\$1,270	\$1,420
Fritsch, Carsten Commerzbank AG	\$1,225	\$1,325	\$1,425
Garvey, Marcus ICBC Standard Bank	\$1,230	\$1,312.5	\$1,375
Hochreiter, Réne Noah Capital Markets/Sieberana Research (Pty) Ltd	\$1,250	\$1,360	\$1,430
Hong, Hao Bank of China	\$1,240	\$1,320	\$1,450
Kavals, Nikos Metals Focus	\$1,275	\$1,370	\$1,450
Klapwijk, Philip Precious Metals Insights	\$1,297	\$1,381	\$1,440
Meir, Edward INTL FCStone	\$1,240	\$1,310	\$1,400
Melek, Bart TD Securities	\$1,195	\$1,313	\$1,433
Nagao, Eddie Sumitomo Corporation	\$1,175	\$1,305	\$1,400
Norman, Ross Sharps Pixley	\$1,260	\$1,358	\$1,400
O'Connell, Rhona Thomson Reuters GFMS	\$1,210	\$1,360	\$1,510
Panizzutti, Frederic MKS PAMP Group	\$1,220	\$1,365	\$1,440
Ritter, Hans-Günter Heraeus	\$1,175	\$1,255	\$1,375
Savant, Rohit CPM Group LLC	\$1,250	\$1,288	\$1,400
Steel, James HSBC	\$1,161	\$1,284	\$1,355
Teves, Joni UBS Limited	\$1,220	\$1,285	\$1,380
Turner, Matthew Macquarie Capital	\$1,250	\$1,350	\$1,450
Vaidya, Bhargava B.N. Vaidya & Associates	\$1,201	\$1,321	\$1,410
Averages	\$1,218	\$1,318	\$1,418

Actual average price in
first half of Jan 2018
\$17.13

Analysts' 2018
forecast average
\$17.81



Actual average price in
first half of Jan 2018
\$970

Analysts' 2018
forecast average
\$1,000



Name	Low	Average	High	\$700	\$800	\$900	\$1,000	\$1,100	\$1,200	\$1,300	\$1,400	\$1,500
Adams, William Metal Bulletin Ltd	\$900	\$1,220	\$1,420									
Agate, Nell Citigroup	\$819	\$1,100	\$1,275									
Bahr, Robin Societe Generale	\$950	\$985	\$1,150									
Briesemann, Daniel Commerzbank AG	\$950	\$1,010	\$1,200									
Butler, Jonathan Mitsubishi Corporation	\$850	\$995	\$1,150									
Cheng, Tianze Bank of China	\$1,060	\$1,230	\$1,350									
Cooper, Suki Standard Chartered	\$900	\$1,038	\$1,250									
Dahdah, Bernard Natixis	\$750	\$1,040	\$1,100									
Garvey, Marcus ICBC Standard Bank	\$975	\$1,180	\$1,350									
Hochreiter, Réne Noah Capital Markets/Sieberana Research (Pty) Ltd	\$1,110	\$1,257	\$1,305									
Klapwijk, Philip Precious Metals Insights	\$913	\$1,091	\$1,204									
Liang, Junlu Metals Focus	\$900	\$1,045	\$1,180									
Meir, Edward INTL FCStone	\$890	\$910	\$1,250									
Melek, Bart TD Securities	\$982	\$1,019	\$1,139									
Nagao, Eddie Sumitomo Corporation	\$950	\$1,100	\$1,275									
Norman, Ross Sharps Pixley	\$800	\$1,355	\$1,500									
O'Connell, Rhona Thomson Reuters GFMS	\$890	\$1,120	\$1,240									
Panizzutti, Frederic MKS PAMP Group	\$950	\$1,230	\$1,420									
Ritter, Hans-Günter Heraeus	\$900	\$1,010	\$1,170									
Savant, Rohit CPM Group LLC	\$800	\$953	\$1,200									
Steel, James HSBC	\$925	\$1,009	\$1,145									
Stevens, Glyn Independent	\$794	\$948	\$1,168									
Teves, Joni UBS Limited	\$870	\$985	\$1,150									
Averages	\$906	\$1,080	\$1,243									

William ADAMS

Metal Bulletin Ltd, London

Au Range: \$1,270 - \$1,430
Average: \$1,365

Stronger and more concerted global growth, combined with a more stable Indian bullion market after years of government intervention recently, are likely to lead to a recovery in demand for gold jewellery. Concerted economic growth should ultimately boost inflationary expectations as well as lead to a return of investor interest in commodity baskets – base metals are already rallying strongly, as are oil prices and precious metals prices. On top of this, geopolitical issues remain and look set to escalate – it seems unlikely that the US and Japan will allow North Korea to continue to threaten their nations, while changes in Saudi Arabia may lead to greater friction between Saudi Arabia and Iran. With many other asset classes already at record price levels, there is a risk of corrections either while geopolitical developments unfold or as inflation and interest rates rise to the extent that investors take profits. Investors may well see gold as offering a relatively cheap safe haven while corrections unfold in other markets.

Pt Range: \$929 - \$1,240
Average: \$1,140

Platinum prices have really suffered relative to palladium and gold prices – palladium has stronger fundamentals, given it is primarily used in autocatalysts for petrol vehicles, and platinum has also suffered the double whammy of being used in diesel engines, which have become less popular, and in jewellery, where demand has been weak and where platinum's price discount to gold has made platinum look like a metal that has not held its value well. We expect some trend reversals. Given the tightness in the palladium market and upside price risk, we expect auto manufacturers to look at using more platinum in petrol autocatalysts, which will give platinum a boost. Once platinum prices are seen to have turned a corner, we would expect bargain hunting in jewellery to take advantage of platinum's discount to gold.

Ag Range: \$15.50 - \$19.70
Average: \$18.15

Concerted global economic growth, combined with higher energy prices, should underpin stronger industrial demand for silver, especially from the solar energy industry. In addition, while global growth picks up, demand for silver jewellery is likely to increase too. This, combined with our bullish outlook for gold, should be doubly bullish for silver demand at a time when by-product supply from the mining of base metals is only just starting to recover following the mine cuts and reduced capex in 2012-2015. Silver, as well as gold, is likely to face headwinds from higher interest rates, but rising inflationary expectations and the likelihood of raised geopolitical tensions may well see investors' interest in silver recover. Given a bullish outlook, the high gold to silver ratio at 78 also suggests silver prices may have some catching up to do.

Pd Range: \$900 - \$1,420
Average: \$1,220

Palladium's tight fundamentals are likely to endure throughout 2018 and, even if auto manufacturers start to plan to use more platinum and less palladium, this is only likely to take effect when the models currently being designed come into production, which may still be a few years down the road. The fact that ETF palladium holdings are falling while prices are rising suggests strong redemptions. At some stage, investors may decide palladium prices can still run higher due to the fundamentals and redemptions may tail off. Indeed, investors may start to buy again, both of which could reduce much-needed supply. We therefore remain bullish on palladium – taking a leaf out of platinum's book, which saw prices rise from an already high price of \$1,200/oz in 2006 to \$2,200/oz in 2008 when electricity shortages in South Africa threatened supply, we would not be surprised by some further excessive moves in palladium prices while an already tight market gets even tighter.

Neil AGATE

Citigroup, London

Ag Range: \$15.86 - \$18.75
Average: \$16.70

Silver spot prices are expected to maintain a fairly muted price trajectory and may struggle to break much further away from the 200-day simple moving average in H1 2018. The gold to silver ratio continues to grind closer to eight-year highs, and consistent with the declining silver price trajectory in H1 2018, we expect the ratio to maintain levels above 75x. However, in terms of the range in prices, we maintain a bias to upside price risks into 2018. Fundamentals still appear mixed as improving primary and by-product supply counter a supportive demand environment. In particular, we note industrial silver demand continues to grow, while other end-use sectors shrink in 2018. Per the latest available data, Japan exported 3.3kt of silver powder in the first nine months of 2017, akin to levels seen the year prior. As such, we expect industrial silver demand to continue to grow by ~5% y/y in 2018. Having said that, it is likely that a combination of thriftiness and improved recovery of industrial silver scrap could compensate for any outsized demand increase in H2 2018.

Pd Range: \$819 - \$1,275
Average: \$1,100

The best-performing precious metal for a second consecutive year sees limited downside into 2018. Unlike platinum, prices are expected to remain firm next year albeit to a lesser degree in terms of y/y growth. Tightening emissions policy and a shift towards the gasoline engine powertrain continues to support higher PGM loadings. Our bullish 2018 price forecasts for palladium reflect our expectation of sustained solid global demand growth resulting in a deficit market of 835koz. Improved autocatalyst scrap rates in developed markets may partially offset incremental demand while weaker than expected disposable income and passenger car sales may curb outsized gains in H2 2018. Crucially, we note speculation of fervent electric vehicle adoption will only meaningfully erode traditional ICE sales at the margin over the mid-term.

Pt Range: \$835 - \$1,035
Average: \$940

Markets are likely to be quick to cap any outsized price gains as sour sentiment ultimately remains stubborn in 2018. Continued demand destruction in Europe limits positive tailwinds this year and beyond. Absent a synchronised automaker substitution to platinum within gasoline engines, increasingly challenged South African mine supply is the only potential source for a genuine structural price recovery, which may occur in H2 2018 at best. Seasonally strong prices in Q1 may support a transitory undercurrent of bargain hunting, but prices may eventually stabilise in 2018. Looking further in the year, changing consumer preferences for experiences rather than luxury goods should keep metal demand range bound. As such, we hold a neutral outlook for platinum given a moderate surplus of 380koz.

Robin BHAR

Société Générale CIB, London

Au Range: \$1,150 - \$1,400
Average: \$1,215

US monetary policy is likely to prove a significant headwind for gold, as a rising interest rate environment and still-subdued inflation levels lower the real return on the precious metal. Geopolitical tensions, economic uncertainty and portfolio allocation into gold have provided some price support for gold, but its appeal is likely to dwindle given the current context of synchronised economic growth, risk-on markets and record-high stock markets. We expect the Fed to increase rates by 25bp at the upcoming March FOMC meeting, followed by two more rate hikes in 2018, increasing the opportunity cost of holding gold.

Ag Range: \$15.00 - \$18.00
Average: \$16.00

Like gold, investment flows should be a critical factor for determining the path of silver prices in 2018. Institutional investors appear cautious towards silver. This scepticism has been exacerbated by silver's relatively lacklustre response to the rally in the base metals complex. Demand and supply fundamentals on the silver market are improving, and we expect demand to exceed supply in 2018, primarily driven by a significant shortfall of primary mine production (-10%). However, like gold, the monetary environment is a significant headwind and investment flows will be critical in determining the path of silver prices in 2018.

Daniel BRIESEMANN

Commerzbank AG, Frankfurt

Pt Range: \$875 - \$1,100
Average: \$975

The platinum price should continue to follow the gold price. As we envisage a rising gold price, platinum should also make gains – though the fundamental data mean that platinum is hardly likely to develop any intrinsic strength. This would require an increase in investment demand, yet the WPIC expects it merely to stagnate. Platinum is likely to climb to \$1,000/toz by the end of 2018.

Pd Range: \$950 - \$1,200
Average: \$1,010

After soaring by more than 50% last year to a record high in early 2018, we believe that the upside potential for the palladium price is largely used up. Though a further rise cannot be ruled out in the short term, the substitution debate is likely to put the brakes on the high-flying prices. What is more, car sales in the US and China are hardly likely to maintain their high level of recent months, and dynamism will presumably abate in Europe. We see palladium at \$1,000/toz at the end of 2018.

Pt Range: \$900 - \$1,100
Average: \$950

The long-term price outlook for platinum aligns with current forward prices, and we see the precious metal fairly priced at current levels. More than palladium, platinum remains heavily correlated to gold prices, and current monetary trends will prove a headwind. Fundamentally, platinum remains exposed to diesel technology, and in spite of tightening regulations, diesel market share in Europe is on a structural downtrend. Jewellery demand has been weakening as Chinese consumers prefer gold and lower-purity items grow more widespread. Higher autocatalyst recycling and a weaker South African rand (ZAR) will further limit significant price rallies.

Pd Range: \$950 - \$1,150
Average: \$985

Given that palladium is widely regarded as the most 'industrial' metal within the precious metals complex and more closely linked to the business cycle, it is not surprising that its price is strongly correlated to the industrial metals complex. Palladium's demand and supply balance sheet is compelling, with positive demand growth in autos and electronics. Supply growth is challenging and global production is set to gradually decline over coming years. Although a weaker South African rand should make palladium production more attractive, in practice, the elasticity of palladium supply is much lower than that of platinum, since around 95% of its production is a by-product of either platinum or nickel mining.



Jonathan BUTLER

Mitsubishi Corporation, London

Au Range: \$1,250 - \$1,450
Average: \$1,350

As developed market monetary largesse is curtailed in 2018, gold will still find support from two main factors: a favourable real rate environment and a subdued US dollar. The US Federal Reserve is likely to raise interest rates slowly and conservatively, and be disinclined to get 'ahead of the curve' despite the US economy growing at full steam and signs of rising inflation beginning to emerge. As a result, though US government bond yields may begin to break out of a 30-year downtrend, yields are likely to remain subdued overall and real rates will be kept low if inflation picks up. Despite strong US GDP growth and some repatriation of cash back to the US under the new tax code, the dollar is likely to underperform relative to other major currencies as quantitative easing is dialled back and possibly ended in the eurozone. Coupled with concerns about the deterioration of the US fiscal position in the light of tax cuts and infrastructure spending, plus worries about downward corrections in toppy equity markets, gold will benefit from some risk hedging. Add to this, the myriad risks and uncertainties in the world economy, holding gold as a defensive play in 2018 may make sense for more investors.

Pt Range: \$890 - \$1,070
Average: \$1,015

Sentiment towards platinum may improve in 2018 as supply rationalisation begins to take place and fears over the death of diesel engines appear overdone. Though demand for platinum in autocatalysts is likely to continue to fall as the European diesel car share declines, there are however some mitigating factors: diesels continue to have an important role to play in carbon reduction, diesel hybrids contain higher loadings to cope with lower exhaust gas temperatures and heavy-duty vehicles will continue to be overwhelmingly diesel powered – this is especially important for emerging markets where heavy-duty emissions regulations are tightening. More significant upside for platinum may come with any supply rationalisation and reorganisations in South Africa, leading to tighter market conditions in future. Provided China successfully deflates its debt bubble while maintaining economic growth, jewellery and industrial demand for platinum should pick up. Platinum faces a broadly supportive set of macroeconomic conditions in the form of gradually rising inflation, a still favourable real rate environment and uncertainties over the US dollar. This may continue to be expressed in positive ETF inflows and start to influence positioning by hitherto cautious investors in the futures and OTC markets.

Ag Range: \$16.00 - \$19.00
Average: \$17.90

Several ingredients are there for silver to perform quite strongly this year: industrial demand is increasing globally and ought to benefit from the pro-growth agenda in the US. Strong growth in the solar PV sector and in new vehicle electronics applications will help offtake, and rising incomes in Asia should help drive up jewellery demand. Coupled with flat supplies, market conditions could get a little tighter as the year progresses. Provided Treasury yields creep up relatively slowly and are balanced to a degree by rising inflation, and the US dollar environment remains fairly benign, silver has the potential to perform reasonably well as a non-yielding asset and a semi-risk hedge alongside gold. While institutional investors may remain cautious on silver as they seek higher returns elsewhere, retail investors who were notably absent last year may be tempted back into silver as a gold-like safe haven if there are any bumps in the road in elevated equity valuations. Based on a long-term comparison relative to gold, silver still looks undervalued, and we expect silver will catch up to an extent against the yellow metal over the course of the year.

Pd Range: \$850 - \$1,150
Average: \$995

Palladium may continue to hit new all-time highs in the first quarter of 2018 as speculative investors chase prices even higher. Prices will pull back from these overstretched levels as investors take profit and reallocate portfolios, and as scrap supplies and above-ground stocks become mobilised. This will not be like the crash in prices post-2001 however, as the market will remain in a supply-demand deficit and a backwardation forward market is still likely to prevail. Primary supplies will remain tight as an increase in output from Russia is offset by declining underlying production in South Africa. It is the demand side that could see a more dramatic change: Chinese demand will be the swing factor this year as the removal of subsidies on new car sales damages autocatalyst offtake, which has underpinned the tighter market in recent years. If the US continues to show signs of the market having peaked, demand could fall there as well. Concerns that palladium is overwhelmingly dependent on the single demand area of autocatalysts, which may be in long-term decline, may increasingly weigh on investor sentiment for the metal as the year proceeds.

Tianze CHENG

Bank of China, Beijing

Pd Range: \$1,060 - \$1,350
Average: \$1,230

We expect the global palladium market to remain in deficit for the seventh straight year in 2018. Relatively inelastic mining supply, low above-ground stock levels after several years of running down inventories and strong autocatalyst demand are expected to support palladium prices, while speculative investment could lead to excessively overbuying palladium in the short term. As a result, palladium price is forecast to sustain its strong performance and probably strike its new historical highs in the year ahead.



Suki COOPER

Standard Chartered, New York

Au Range: \$1,200 - \$1,450
Average: \$1,324

Not only do we believe the price risks for gold are skewed to the upside in 2018, we think gold prices could test five-year highs amid continued geopolitical and political uncertainty. Gold has found support at increasingly higher levels, and the physical market has adapted to a higher price environment. The macro backdrop looks set to evolve favourably for gold given our expectations for the dollar to weaken further, the US Treasury curve to continue to flatten and the Fed to hike interest rates twice in 2018. We think the two key factors to watch are US retail demand, which has been a significant weak spot and, importantly, whether the physical market remains price elastic. Gold rallies are more likely to be sustained if investor demand is resilient and broad-based. The scope for rising inflation, the interest rate-hiking trajectory nearing the end of its cycle and a stock-market correction could reignite interest in gold. On the other hand, the absence of such broad support, further tightening regulations in India, continued outperformance of alternative assets and a tighter rate-hiking cycle without inflation remain headwinds that could cap prices again.

Pt Range: \$850 - \$1,100
Average: \$993

Although we expect the platinum market to remain modestly oversupplied in 2018, we continue to view price dips below \$900/oz as good buying opportunities, as the jewellery market has become increasingly price elastic and mine supply growth looks constrained. The cost curve is likely to offer more support now, given that the outlook for the oil market has improved and the South African rand has started to strengthen. Coupled with a more responsive jewellery market, a more solid floor should emerge. In turn, the platinum to palladium ratio should rise in the near term. Even though we do not expect switching between palladium and platinum in autocatalysts to occur in a meaningful way in 2018, it has become increasingly economically viable. Barring further negative diesel press, we believe two key longer-term factors to watch are fuel cells and growth of heavy-duty diesels in India and China.

Ag Range: \$15.50 - \$20.50
Average: \$18.30

Silver's supply and demand dynamics support higher prices in light of stagnating mine output and firming industrial demand. India's silver imports were up over 60% y/y, while China's were up around 30% y/y in 2017. Silver performs well when both industrial and investment demand are supportive. The gold to silver ratio is trading above the 20-year average, suggesting that silver is undervalued. In the absence of strong investor demand, we believe the fundamentals suggest that prices are well supported. End-use markets for silver show strong growth. Photovoltaic installation is set to scale new highs this year. Efforts to thrift silver content continue, but the pace of thrifting has slowed. Mixed investor appetite is the main area of concern. Exchange-traded product holdings suffered sizeable net redemptions in H2 2017 and, similar to gold, US retail demand remains weak. Speculative positioning is the largest driver of upside risk.

Pd Range: \$900 - \$1,250
Average: \$1,038

Palladium fundamentals remain the most constructive. Demand from China continues to grow, albeit at a slower pace, with car sales hitting a record high. Supply from the two largest countries looks set to rise modestly, but there is greater scope for palladium scrap to grow. We expect the market deficit to widen and 2018 to mark the seventh straight year of deficits. The outlook is not without risks; however: (1) speculative positioning is elevated for several months, scaling record highs, leaving prices prone to profit-taking in the near term, particularly around US rate hikes; (2) China's small vehicle tax rebate, which has provided a key boost to auto sales, expired in January; and (3) although higher prices make substitution more likely, we do not believe this is an imminent risk given higher rhodium prices and technological challenges. Slowing auto sales, coupled with elevated investor positioning, could pressure palladium prices in the near term; however, beyond this, we expect prices to continue to find fundamental support and scale new highs.

Bernard DAHDAH

Natixis, London

Au Range: \$1,120 - \$1,350
Average: \$1,250

We expect gold prices to come under pressure from a combination of an improving US and global economy. Our view is that the dollar will firm up during the current year and that the Fed will raise rates at least twice. This should be the main driver behind lower gold prices. That said, we do not see gold prices dropping considerably as we believe that geopolitical tensions will be of support and that global mined output will drop in 2018.

Pt Range: \$800 - \$1,150
Average: \$910

Platinum prices have considerably suffered from the flight away from diesel-powered cars and into gasoline-powered ones. We do not see this trend changing over the course of this year. Platinum has also increasingly become influenced by its correlation with gold and so we think that the lower gold prices will also weigh on platinum prices.

Ag Range: \$14.00 - \$17.80
Average: \$16.10

Silver prices are to continue being strongly correlated with gold, the latter being the main driver. The metal should be affected by the same forces behind gold prices. Our main concern for silver prices is a potential outflow from physically backed ETFs. At the start of 2018, 20,277 tonnes of silver were held in physically backed ETFs. This is equivalent to around 65% of global annual supply of the metal. Should investor demand turn into investor supply, then the price of the metal could come under considerable pressure.

Pd Range: \$750 - \$1,100
Average: \$1,040

In our view, palladium prices started the year at a higher price level than where our fundamental analysis suggests it should be. We think that the fundamentals are supportive for prices just above \$1,000/oz but do not expect to see a repetition in the price increase that we saw in 2017. Autocatalyst producers may be incentivised to alter their processes given palladium prices are above that of platinum. That said, this substitution effect is unlikely to establish during the current year as changes to products (and the related manufacturing processes) take time to materialise. Furthermore, management would need more confidence that these prices will persist over the long term before making such decisions.

Aakash DOSHI

Citigroup, New York

Au Range: \$1,168 - \$1,420
Average: \$1,270

In line with the short-term bearish forecasts on rates, we hold a neutral-bearish view on gold through into H2 2018. Relatively balanced investor positioning could allow a price trajectory in either direction into next year. The market continues to price a slightly more hawkish Fed in 2018, optimism for US tax cuts and sluggish Asian jewellery demand growth. Moreover, robust global GDP projections for 2018 in both developed and emerging economies should underpin a lower price path for the yellow metal. Our base case incorporates a back-up in US 10s to ~2.6-2.8% per our rates strategists, which should send 2018 gold trading near the \$1,200-\$1,225/oz range in fits and starts. But modest gold price weakness via the rates channel should be at least partially offset by a somewhat stable US dollar outlook alongside ongoing geopolitical tail-risk bids, which we see as a new normal for gold, amid sizeable central bank balance sheets that are only slowly unwinding. Hence, we assign a higher probability for a bull versus bear case path for gold.

Carsten FRITSCH

Commerzbank AG, Frankfurt

Au Range: \$1,225 - \$1,425
Average: \$1,325

The environment for gold will remain constructive in 2018. Although central banks are gradually scaling back their ultra-expansionary monetary policy, they are still far from becoming restrictive. A further moderate increase in key interest rates is on the agenda only in the US. This is not expected to happen next year in Europe, which should keep real interest rates at a low – and in some cases negative – level. The opportunity costs of holding gold thus remain close to zero or indeed negative, which points to stronger investment demand in the West. Numerous political uncertainty factors in Europe and the US, as well as a number of potential sources of geopolitical crisis, are likely to boost demand for gold additionally. Gold demand in Asia should bottom out and then increase moderately in 2018. The gold price is likely to rise during the course of the year and to be trading at \$1,350/toz by the end of 2018.

Ag Range: \$15.50 - \$19.50
Average: \$17.25

At a gold to silver ratio of more than 78, the silver price is low in historical terms. The positive economic development is likewise an argument in favour of silver because it means that industrial demand is likely to become even more dynamic – which accounts for more than half of total silver demand. Demand for bars and coins will probably recover, as well as demand from ETF investors. That said, silver mining production is also likely to increase. After all, most silver is produced as a by-product of copper, zinc and lead, and mining production of these base metals will probably be expanded in response to the much increased prices. Nonetheless, we see good chances of a market deficit which, in conjunction with the rise in the gold price we expect, should drive the silver price up to \$18 by the end of 2018 – in which case, the gold to silver ratio would decrease to 75.

Marcus GARVEY

ICBC Standard Bank, London

Au Range: \$1,230 - \$1,375
Average: \$1,312.5

We think that US inflation will continue to undershoot the Fed's forecasts and that the vulnerability of US consumers to higher real rates will give the FOMC pause in its pace of policy normalisation. The market's gradual repricing of this should allow gold prices to trend incrementally higher over the course of the year, but we do not see a significant break to the upside. Unless or until other asset classes suffer a major correction, there will be headwinds to gold's path going higher.

Pt Range: \$890 - \$1,100
Average: \$1,025

The market should return to balance or even record a small industrial deficit in 2018, but ample availability of above-ground stocks means the physical picture is unlikely to get particularly tight. This dynamic is reflected in the forward curve's structure and, absent a negative supply shock, we expect a continuation of recent underperformance.

Ag Range: \$15.60 - \$19.20
Average: \$17.35

After 18 months of underperformance and with investors underweight in silver, we believe there is some scope for it to play catch-up with gold. Nevertheless, the forward curve's contango remains a headwind and, for the most part, we expect the gold price to dictate overall performance.

Pd Range: \$975 - \$1,350
Average: \$1,180

Over time, prices will provide the incentive to right Palladium's balance – driving substitution in autocatalysts and industrial uses, as well as supporting the expansion of both recycling and new productive capacity. But these are multi-year processes and, in the meantime, prices will need to incentivise the release of sufficient inventory to plug a substantial deficit.

Réne HOCHREITER

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

Au Range: \$1,250 - \$1,430
Average: \$1,360

Our gold price forecast is up about 8% compared to last year as the main global economies see synchronised growth for the first time in many years but as investors become concerned with overvalued markets. After last years' weakness in the USD, there may be some strength counterbalancing market crash concerns. However, with the bitcoin frenzy, a bear market in these cryptocurrencies may see a move back to gold. Any global turmoil on the World stock markets, with interest rates still pathetically low in the US and Europe, there is no other option but the equity markets or gold as insurance. Any such correction in any of the big exchanges is closer than last year. It is difficult to see another GFC in 2018, but an improved gold price is more likely than not. Technically, a saucer formation and our indicators showing a buy on the gold price for many months, now, supports our forecast.

Pt Range: \$960 - \$1,120
Average: \$1,045

The platinum price is affected by algorithm trading between it and the gold price. Global economies are growing in sync with car sales expected to grow across all economies. Electric car sales are slowing across Europe and Seba-like forecasts of early 2016 are looking increasingly remote. A KPMG survey concludes that Electric cars will fail, as CEOs believe BEVs are a fool's errand. Most think Fuel Cell cars are the answer. Any strength in the Rand versus the US dollar will see better platinum prices. It is likely that Lonmin and Impala will see shaft closures in 2018. Industrial demand will likely be up in 2018. As palladium stocks deplete, so that price could drag platinum up along with it as it can be used one-one as a substitute in gasoline engines. Several bullish factors are emerging; and see price increases of 10% this year. Technically, the platinum price is bullish with a strong base formed the last 2 years.

Ag Range: \$17.00 - \$19.00
Average: \$18.00

As usual, the silver price will likely track the gold price with increasing accuracy. Widespread algorithm trading will most likely see silver rise or fall proportionately with the gold price as it has done for some time now. Fundamentals are fairly good with jewellery and silverware demand adding some support to the price. Chinese demand may see a resurgence of silverware consumption during 2016, possibly switching to silver chopsticks and bowls if a global ban on plastics gains momentum. Consumption in the electronics and super-conductor sectors could benefit silver demand. Technically, the silver price is in the same boat as the gold price, looking positive in 2018 and beyond.

Pd Range: \$1,110 - \$1,305
Average: \$1,257

Palladium prices are likely to do well again this year. We now have the view that it could be double the price of platinum by 2020. As palladium demand is outstripping supply by several hundred ounces a year the next many years, we see the price rising to perhaps \$2000/oz by the early 2020s. However, if the platinum price does not follow, there may be switching into this metal for use in gasoline autocatalysts. Gasoline vehicles popularity globally will see palladium benefit from this move in 2018 and beyond. Electric cars are not gaining the sales torque that many "Nostradamuses" predicted (see platinum comment). With the probability of South Africa cutting back on PGM production in 2018, the global shortage of palladium will worsen with our upper price range limit likely to be seen. Technically, the palladium price shows a move to \$1300/oz possibly during 2018.

Hao HONG

Bank of China, London

Au Range: \$1,240 - \$1,450
Average: \$1,320

The gold price is likely to rise in 2018 when the real interest rate is kept at a relatively low level. Investment demand will provide stable support for the yellow metal. In the first half of the year, the rise will be limited due to the expectation of Fed rate hikes and the launch of the US infrastructure construction plan. In the second half of the year, the gold price will have the opportunity to make breakthroughs as investors hedge the political uncertainty of the US mid-term election and the Fed's rate hike pace slows down. With a weakened dollar, we could expect a better year for gold in 2018.

Nikos KAVALIS

Metals Focus, London

Au Range: \$1,275 - \$1,450
Average: \$1,370

In a similar vein to the previous two years, gold has started 2018 on a positive note. We believe that this will set the tone for the market over the next 12 months, when we see prices make further gains, reaching \$1,450 before the end of the year and averaging \$1,370 overall. Once again, we believe that this will not be a one-way road, with both notable corrections and periods of range-bound conditions, similar to those seen over 2016 and 2017, taking some shine off the metal in the interim.

Our constructive projections are premised on the view that pressure on the US dollar is likely to continue for the foreseeable future. A still accommodating interest rate environment also plays its part and it is worth noting that we believe that the two to three hikes that we are likely to see in US policy rates are effectively priced in. Last but not least, we believe that sooner or later equity prices in the US, but also elsewhere, are due a correction which should ultimately benefit gold.



Philip Klapwijk

Precious Metals Insights, Hong Kong

Au Range: \$1,297 - \$1,440
Average: \$1,381

Gold prices are forecast to trend higher in 2018 based upon a generally positive economic and political backdrop for the metal. The US Federal Reserve and other major central banks will only gradually tighten monetary policy and therefore risk being 'behind the curve' as inflation starts, at last, to rise a little more strongly than most expect. This will result in real interest rates remaining flat to negative in the major currencies, which should sustain investor interest in gold. Moreover, on the currency front, further, albeit moderate, US dollar depreciation this year will boost US dollar gold prices. Gold should also benefit from some investors looking for an alternative parking place to cash to protect themselves against the increasingly overvalued US stock market and a bond market that looks as if it is entering a long-term bear phase. Finally, elevated political risk would seem to be an ongoing concern, especially with US foreign policy these days a disruptive rather than stabilising force in international relations.

Pt Range: \$896 - \$1,075
Average: \$1,022

Platinum continues to be weighed down by its lacklustre supply/demand fundamentals and this picture will not change for the better in 2018. An expected reduction in mine supply will only be marginal and probably more than offset by higher recycling. Perhaps more ominously, demand for the metal is set to drop further. The use of platinum in autocatalysts is vulnerable to what now looks like an accelerating slide in the diesel-powered light vehicles' market share in Europe. In addition, a further marginal decline is on the cards for platinum's second-largest end-use in jewellery, as some slippage in key market China looks probable. That said, given expected gains in the gold price this year, it is difficult to see platinum being entirely left behind, although the spread between the two precious metals could well widen in 2018.

Ag Range: \$16.72 - \$20.41
Average: \$18.49

Silver is expected to follow gold higher in 2018, but the ratio between the two metals, while narrowing somewhat, may well remain fairly elevated by the standards of previous bull markets for gold and silver. A large structural supply 'surplus' in the silver market requires a high level of investment just to maintain prices. Besides the real hurdle this presents to higher prices, there is also the impact this fact may have on investor behaviour. Thus, while some may still be tempted by silver's traditionally higher volatility and theoretically greater scope for gains (than gold), others will be daunted by the metal's rather weak underlying fundamentals. In addition, silver will generally not be considered by those mainstream funds seeking an alternative asset to hedge their exposure to stocks and bonds. Furthermore, it appears that the 'bedrock' demand from private investors in physical bars and coins in the US and Asia may be eroding after several good years. In short, while silver is expected to enjoy a solid gain in 2018, a major resetting of the trading range is considered unlikely.

Pd Range: \$913 - \$1,204
Average: \$1,091

In 2018, palladium's very favourable supply/demand fundamentals will continue to provide a sound basis for price gains. The forecast of only a limited pick-up in supply due to higher recycling and little change to overall fabrication demand would see another year of substantial 'deficit' in the market. In recent years, falls in ETF holdings have at times played an important role in balancing the palladium market. Following the significant reduction in these bullion holdings, however, it is probable that in 2018 more metal will have to come from other, diversely held market stocks. Moreover, higher palladium prices will likely be required to mobilise this metal. Nevertheless, while the general direction of travel for the price should be upwards, this is almost certainly going to be accompanied by a high level of volatility. An important reason for expecting this is the scope for a major sell-off from the presently elevated level of long speculative positions in palladium. A potential trigger for this could be negative news on the demand front, such as a fall in US and/or Chinese car sales or, more generally, signs of a serious economic slowdown in either country.

Janlu Liang

Metals Focus, London

Pd Range: \$900 - \$1,180
Average: \$1,045

The palladium market is expected to remain in a sizeable structural deficit in 2018. However, we would caution that the extended rally the metal enjoyed last year and during early 2018 has been fuelled by speculative buying, including hefty inventory build in China during 2017.

With palladium posting all-time highs, the market is looking increasingly overbought, leaving it vulnerable to short-term profit taking. Moreover, given our expectations of a correction in US equities, investor sentiment towards pro-cyclical assets may weaken, which will inevitably affect palladium. At that point, we believe the palladium price could temporarily move back into a discount to platinum. Later in the year, we expect that palladium's solid fundamentals will once again reassert themselves and that this will also rekindle investor interest. This will help palladium to record a strong recovery and its price to return to a premium over platinum.

Yufei Liu

Bank of China, Beijing

Pt Range: \$930 - \$1,195
Average: \$1,077

A tighter platinum market is expected in 2018. On the one hand, initial platinum supply will slow down, since several PGM mines are scheduled to stop production due to maintenance. On the other hand, as palladium outperformed platinum last year, less expensive platinum may become a substitute for palladium in industry demand. Furthermore, dropping demand for catalysts caused by EV development may not be as pessimistic as previously anticipated. Lastly, investing demand will be stable as ETF holdings grow moderately. In sum, platinum will have a better performance than last year.

Neil MEADER

Metals Focus, London

Pt

Range: \$900 - \$1,100
Average: \$1,020

Metals Focus is cautiously optimistic about platinum prices in 2018, forecasting an average of \$1,020, although that would keep it at a discount to palladium. Prices are expected to trade between \$900 and \$1,100.

Rising prices have little to do with the fundamentals, as we forecast a sizeable and growing surplus in the market. Much of the blame for this lies with autocatalyst demand, as diesel's falling market share in Europe is outweighing gains in overall car sales. In addition, meaningful cuts in South African mine output remain unlikely, as political pressures militate against mine closure and as miners have benefited from surging palladium and rhodium prices.

Instead, we see platinum price gains based on a repeat of overspill from a gold rally. We could see short-term gains from an unwinding of recently established shorts on Nymex, but the main thrust is likely to occur later, should we see a correction in equities, liquidity scares in China and renewed geopolitical instability.

Edward MEIR

INTL FCStone, New York

Au

Range: \$1,240 - \$1,400
Average: \$1,310

What seems to be keeping gold well bid for now are rising inflation expectations as measured by the most recent TIPS rate (now at a 10-month high), coupled with the falling dollar. The greenback has been surprisingly weak ever since the tax legislation was passed, possibly telling us that investors think the bill may not supercharge the US economy as advertised and may lead to higher inflation instead.

Ag

Range: \$15.20 - \$18.60
Average: \$17.02

Silver pretty much tracked gold for much of the year, evidenced by the fact that the correlation between the two last year was running in the mid 90% range.

Pt

Range: \$875 - \$1,120
Average: \$982

Platinum could benefit from the fact that there could be some substitution away from high priced palladium towards platinum. In addition, there is a big push in the Indian markets to make platinum more the jewelry of choice, especially for wedding functions, as opposed to gold. We will see how all this plays out.

Pd

Range: \$890 - \$1,250
Average: \$910

Palladium has been the best performing metal in 2017, up some 55%. The metal is heading for a seventh year of deficit and this should keep trading ranges elevated. It is not possible to see where prices could technically go on the charts, as the upside is wide open.

Bart MELEK

TD Securities, Toronto

Au

Range: \$1,195 - \$1,433
Average: \$1,313

A gentle Fed tightening cycle, at a time when the ECB, PBoC and other central banks are set to start removing monetary accommodation should sap some strength from the US dollar and help gold into 2018. The still low global real interest rates, rising US budget deficits, along with investor desire to hedge in the face of fully valued equity markets and elevated geopolitical risks should also be supportive. Concerns surrounding Chinese purchases of US Treasuries are an additional factor prompting us to think that gold will move into \$1,325/oz-plus territory this year.

A flat yield curve, the lack of inflation pressure and growing conviction that President Trump's tax reforms will not overheat the economy suggest that the US central bank may well be slower in raising rates than suggested by the dot plots. Synchronised global growth is projected to lift industrial demand, while moderate mining supply is set to keep physical fundamentals relatively tight.

Pt

Range: \$873 - \$1,180
Average: \$1,056

An improving European autocatalyst demand environment and firming global industrial activity along with its high correlation to the well-performing gold should help support platinum prices in 2018. Its underperformance relative to palladium and gold suggests that platinum will likely play catch-up to its peers, at a time when the precious metals environment is positive. Its low price relative to other catalyst metals and palladium security of supply issues are likely to generate a market narrative exploring the substitution of other PGMs with platinum. This should help generate investor interest in platinum in the same way that higher future hybrid vehicle demand drove funds into palladium last year.

South Africa production growth weakness and prices that are below levels required to sustain the industry over the longer term are an additional set of factors that should see the metal move above the \$1,050/oz mark this year. The stronger South African currency will also make it more difficult for miners to keep the market supplied without higher prices. However, still ample above-ground inventories, lacklustre China jewellery demand and doubts surrounding the future of diesel engine-powered vehicles in Europe should keep platinum from posting a sustained rally above \$1,180 over the next 12 months.

Ag

Range: \$15.19 - \$21.58
Average: \$18.88

Considering silver's underperformance, its traditionally higher volatility and historic relative strength during periods when investors are building gold exposure, the white metal is on track to outperform. Tightening fundamentals owing to lacklustre mining output and strengthening global industrial activity are additional positives, along with supportive macroeconomic and monetary policy, which should prompt silver to move higher this year.

Synchronised global growth should lift industrial demand and, along with modest mining activity, tighten physical fundamentals and lift premiums. Large silver inventories are also likely to start unwinding amid supply/demand deficits, which may well generate more investor interest in 2018. Relative to global asset values, specs have plenty of room to lengthen exposure in the white metal.

Pd

Range: \$982 - \$1,139
Average: \$1,019

While the primary deficit over the next several years will continue to be quite deep, as Russian and South African supply growth remains challenged and consumption in the form of autocatalysts, electric/electronic devices and chemical catalysts is set to strengthen, prices seem a bit too high at the current \$1,090/oz. The tight S-D environment is projected to keep palladium well bid, but pressure should ease as US and Chinese auto demand softens. This, along with talk of possible substitution and more supply, should see prices ease but still remain at a high \$1,019 average over the next 12 months.

Eddie NAGAO

Sumitomo Corporation, Tokyo

Au Range: \$1,175 - \$1,400
Average: \$1,305

The gold market has already factored in the Fed's two to three rate hikes in 2018, meaning that the two-year yield may have more room to climb. Most of the positive factors, e.g. the impact of US tax reform, financial normalisation of ECB, strengthened leadership in China and further growth of emerging economies are taken into an account, while the flip side is less determined. The increase of debt globally is a worrying development. US government debt will increase as the tax income decreases. China's total borrowing to GDP ratio is going up significantly and is expected to surpass 300% by 2020. We expect the gold price to hold up well against interest rate rises and then move upwards as concerns on global debt emerge.

Pt Range: \$900 - \$1,250
Average: \$1,060

The price of platinum can climb up to narrow the gap with palladium. The key driver will be the mine supply concerns. South African miners are struggling to produce platinum at or above break-even cost. The situation makes it difficult for companies to invest in maintenance or production increases. Political instability in South Africa is another concern for investors. In 2017, platinum was one of the worst performers among market commodities, so it may be a circulatory selective market.

Ag Range: \$16.00 - \$19.25
Average: \$17.75

Silver will sit on the passenger seat of gold, but its price action may overreact due to lack of liquidity. Supply from mines and scraps will remain stable, whilst investment demand will see a modest recovery. On the industrial side, demand from the photovoltaic industry will continue to grow.

Pd Range: \$950 - \$1,275
Average: \$1,100

Palladium will remain tight both in terms of physical availability and market liquidity. Nevertheless, the demand-supply gap will widen moderately for two reasons. Firstly, advanced technology is allowing more efficient use of this valuable metal loaded on each autocatalyst. Secondly, higher prices will attract above-the-ground stocks, including recycling more spent autocatalysts into the market. The uptrend since the beginning of 2016 will continue but palladium may not be the best performer amongst the four precious metals as its price has already increased significantly.

Philip NEWMAN

Metals Focus, London

Ag Range: \$16.50 - \$22.00
Average: \$18.80

Metals Focus expects the silver price to strengthen this year, by 10% y/y to an annual average of \$18.80. Much of this will be driven by gains that we forecast for gold. Furthermore, because silver is characterised by a much smaller and illiquid market, we expect the price to outperform gold, albeit modestly, generating a trading range of \$16.50 to \$22.00. As a result, we could see the gold to silver ratio improve, from around 76:1 during Q4 2017 to 70:1 by Q4 2018.

Silver's upside would have been even stronger, if the metal were not held back by broadly unsupportive supply/demand fundamentals. Mine supply may edge higher (following last year's sharp fall), while physical investment could remain close to 2017's subdued level. Even though we forecast a fourth successive year of rising industrial offtake, overall, the silver market is still on course to generate another massive physical surplus.



Ross NORMAN

Sharps Pixley, London

Au Range: \$1,260 - \$1,400
Average: \$1,358

Perversely, we see only modestly higher gold prices, yet believe gold has rarely been more important to own. Why so?

2016 and 2017 saw gold higher on strong spec buying in Q1, taking the market above the level of most physical buyers, before retracing in Q4 as the stale specs bailed out, but still ending up about 10% on the year.

2018 is starting much the same, but at a higher price level and with a larger spec position. If gold follows form then this should suggest another impasse between the paper and physical markets as prices range-trade once again. Even if volatility falls, it does not negate the reason for owning the physical as the tail risks are arguably greater than ever as the Fed tightens.

Gold has become price elastic just as it was in the 1990s. And then there was 2000. The best is yet to come, but not just yet. Patience.

Pt Range: \$815 - \$1,045
Average: \$884

Platinum as a metal is highly resistant to tarnishing. The same cannot be said of some of its applications, which are starting to look distinctly unappealing. Prices of commodities in the short term are driven by sentiment and sentiment is driven by fast news flows and expectations. Sadly, there is not much there to support this ailing metal. Many demand-side applications are struggling from both thrifting and substitution, giving investors little to look to.

Jewellery demand has fallen four years in a row and the outlook in the auto sector from diesel engines is not promising. With total demand in decline and the market set to move to a supply surplus in 2018, we see ongoing downside pressure on prices. Once the shiniest of all precious metals, platinum is struggling to find friends.

On a positive note, we are seeing mine production down and at levels last seen in 2009. While technically on the charts, platinum is distinctly oversold.

Sadly, one of the strongest arguments in its favour is that so many people think poorly of it.

Ag Range: \$15.60 - \$19.10
Average: \$18.08

If silver was a dog, it would be a Labrador. Quiet, obedient, submissive even – until it's not. That is to say, it follows patiently behind gold on a leash and then outshines when things kick off.

Much loved by the speculator community, silver surprises every now and then – much like a decent fellow with one sherry too many who becomes unexpectedly garrulous, only to suddenly retreat into the shadows to nurse a hangover. If we expect gold to notch up an 8% gain then silver should score 12%. That would give it an average price of \$18.08 in 2018.

Trading ranges for silver are becoming compressed, with support and resistance levels rapidly converging to form a large pennant on the charts. We see support back to 2003 at \$15.60 and resistance back to 2016 at \$17.58. A break-out is coming in the next few months and we think it will be to the upside.

Unlike gold, the speculative overhang in silver is not burdensome, so there is scope for silver to outperform gold, making it our favourite performer for 2018.

Crufts here we come.

Pd Range: \$800 - \$1,500
Average: \$1,355

With a trajectory that looks like a cryptocurrency and not an industrial commodity, it is tempting to think palladium's rally cannot be sustained. Platinum's loss has been palladium's gain.

Maybe we have been watching bitcoin and find ourselves asking 'why not higher still?' Total demand is topping 10 million and auto demand is growing; in fact, palladium saw good demand from most sectors except surprisingly from investors. The last three years have seen investors selling into price strength perhaps believing the rally cannot be justified. But after six years of supply deficits, stocks are thin and pipeline metal is scarce. Happily for industrial users, there was also weakness in the price-sensitive jewellery sector.

Meanwhile, we witness declining Russian mine supplies and evidence that stocks are depleted. An eye on palladium lease rates will warn you of extreme tightness and this market has the potential to earn the name the Ford Motor Company once gave it – 'un-obtainium'.

The stage is set for an encore in 2018.

Rhona O'CONNELL

Thomson Reuters GFMS, London

Au Range: \$1,210 - \$1,510
Average: \$1,360

For the professional investor, equities, the dollar and geopolitical risk remain gold's key drivers. Our forecast discounts three fed rate hikes, although any overheating may prompt additional tightening and constrain gold's upside. Equities are supportive, correction fears point to defensive gold positions, while perceived strength prompts purchases for the Efficient Frontier. An equities slump would bring a short-lived gold fall as investors liquidate for cash, but would reinforce gold's longer-term role as a risk hedge. We see a continued bull market but with the chance of at least one sizeable correction.

There is an argument that cryptocurrencies have undermined gold investment in some quarters. It is debatable whether this will persist given the price action in at least one cryptocurrency and this ultimately may benefit gold as a tangible asset.

In the physical markets, Indian demand is expected to be comparable to 2017, as a stronger rupee constrains local prices and the economy improves, while the government is likely to take a more benign view towards the market. Middle Eastern tensions may encourage the local wealthy to retain gold, possibly in safe and liquid locations such as Singapore. There is pent-up demand in China. It may need a good early price performance for it to be unleashed, although the possibility of property and inheritance taxes would be gold-friendly.

Ag Range: \$15.59 - \$20.26
Average: \$18.80

Silver is likely to be in for a volatile year in 2018. The fundamental supply and demand components are expected to be broadly balanced (lower mine supply, higher scrap and steady physical offtake. Photovoltaic will again show the highest growth rate, with a mild improvement in jewellery and elsewhere. Interestingly, there are signs of a small revival in silver film in the United States, while electronics in vehicles is also supportive). This is before the impact of physical investment or disinvestment in bullion bars or Exchange Traded Instruments. With physical gold investment likely to be robust via risk hedging, silver should benefit by proxy, given the propensity of professional speculators to leverage gold exposure through silver and private investors to buy silver instead of gold if they cannot afford the latter. Even though there are plentiful above-ground stocks, notably in China, silver's volatility means that it is likely to outperform gold this year, propelled not least by the likely covering of shorts. Indeed, the first weeks of January have already seen substantial gains under some fresh buying and short-covering. Hold on for a bumpy ride.

Pt Range: \$868 - \$1,110
Average: \$1,020

Despite platinum's dim auto-related future, much of the bad news is already priced in, although there is not much upside as the shift from diesel to gasoline will continue. Palladium has now established a likely persistent premium over platinum, raising suggestions that automakers may revert to platinum, but the time and costs incurred in retooling, recalibration and approvals are high, and vehicle makers without dual certification are generally more interested in the hybrid sector. Despite the possibility of reduced subsidies in the United States for electrified vehicles, this industry has developed its own momentum. There are signs of improvements in North American jewellery demand due to improved margins (sticker prices broadly unchanged), while the medical sector remains a bright spot. The market is expected to post a small global deficit this year and the outright shorts on NYMEX have started to contract, while there is some nibbling from the long side. We are expecting a marginal uplift in platinum's range this year against 2017, but it will remain the underperformer in the sector.

Pd Range: \$890 - \$1,240
Average: \$1,120

We are expecting 2018 to see the peak in palladium's price. Amid investor and speculative fervour on NYMEX (but profit-taking already setting in within the ETF sector over Q4 2017), this year opened in excess of \$1,050/oz and points to a four-figure average, more than 25% above that of 2017. Just as much bad news is in the platinum price, much good news is priced into palladium. Industrial demand will certainly grow apace in the absence of alternatives (hybrid vehicles will need gasoline and thus palladium), as will automotive scrap while mine supply is also rising. The market will remain in a deep deficit, but with relatively tightly held above-ground stocks bouts of volatility, and continued periods of backwardation are inevitable (although forward spread has eased at the start of this year). Nonetheless, it is very doubtful that the current upward momentum can be sustained and investors are expected to start taking profits.

Frederic PANIZZUTTI

MKS PAMP Group, Geneva

Au Range: \$1,220 - \$1,440
Average: \$1,365

In 2017, gold further recovered, ending the year 12% higher. In 2018, we expect gold to climb moderately. On one side of the argument, there is a general expectation for a 50bp Fed interest rates hike and the recent US corporate tax cut, which in theory could be in favour of a stronger US dollar on the back of assets repatriation. On the other side, the tax cut could result in lower US Treasury income and, logically, a widening budget deficit, putting pressure on the US dollar. A further risk is a major correction in global stock markets. Jewellery and industrial demand are set to be on the rise on improving global growth. As the demand side is set to improve, the supply side will remain under pressure. This combined with ongoing geopolitical tensions and the official sector expected to be a net buyer prompts us to set the yearly average at \$1,365.00/oz.

Pt Range: \$920 - \$1,100
Average: \$1,008

Platinum rose by 2.32% in 2017, sharply underperforming the three other precious metals. Several factors shall contribute in a more substantial upside swing in 2018. We are taking into consideration a possible decrease in mining supply as a result of South African mine closures in H2 2017. Some other mines have reduced production, stating they prefer to focus on value over volumes and to remove unprofitable ounces from production. A partial shift from palladium into platinum in the autocatalyst sector remains likely over time as palladium rockets and its supply deficits widen. On the demand side, we expect the global growth recovery to prompt more demand in the jewellery and autocatalyst car industry. Considering those factors, we predict platinum to average \$1,008.00/oz in 2018.

Ag Range: \$16.20 - \$20.20
Average: \$18.60

Silver rose by 5.74% in 2018, underperforming gold. Silver has uncoupled from its big brother and shall continue to trade on its own path. After having been somewhat neglected the past year, we expect silver to attract more interest in 2018. Improving global growth will spur more demand from the industrial and jewellery sector. New technologies containing silver, even if marginal at this stage, shall add to the demand.

Mine output is set to decline as some mines producing silver as a by-product have cut down their production. We do expect more speculative buying to kick in over the course of the year providing some short to medium-term support and an acceleration in the upside swing. Erratic and volatile sessions are likely. We expect silver to average at \$18.60/oz and to peak at \$20.20/oz.

Pd Range: \$950 - \$1,420
Average: \$1,230

Palladium was the top performer in 2017, closing the year 54% higher, and we expect palladium to be the top performer again in 2018. The already massive years-long supply deficit is set to further increase this year. The China Passenger Car Association expects China car sales to grow by 4 % in 2018, which will be partially offset by US sales expected to decline 2%. Still there is a slow but certain shift from diesel into gasoline cars, especially in Europe. Jewellery and industrial demand are also set to recover further. On the other hand, the car industry will probably attempt to start shifting from palladium to platinum in autocatalysts, but this will not happen overnight. We expect palladium to attract decent speculative interest and to trade in very volatile sessions with ample moves. We see a high at \$1,420/oz and the average at \$1,230/oz in 2018.

Hans-Günter RITTER

Heraeus, Hanau

Au Range: \$1,175 - \$1,375
Average: \$1,255

While geopolitical issues could support a safe-haven bid for physical gold this year, reduced central bank liquidity and rising bond yields, along with the flattening US Treasury yield curve and potential for a rebound in the dollar, all suggest that the gold price will struggle.

The Federal Reserve is expected to continue to raise rates and reduce its balance sheet, while the ECB is reducing its monthly asset purchases, and with the Bank of Japan also making some adjustments to its asset purchases, central bank liquidity is being reined in. The US Treasury yield curve is flattening as rates rise at the short end while the long end is declining, implying no bond market worries about a pick-up in inflation or expectations of any improvement in the growth outlook either. Sentiment swung strongly against the US dollar in 2017 and this looks overdone, so a return to a somewhat stronger dollar in the second half of the year will also restrict gold's upside.

Ag Range: \$15.25 - \$18.00
Average: \$16.80

With limited industrial demand growth anticipated, investment demand will be a more significant driver for the silver price this year. However, this leaves silver at the mercy of the same trends as gold, where upside appears limited by less central bank liquidity and the potential for a rebound in the US dollar. The price is expected to remain range bound in 2018 and it is estimated that the gold to silver ratio will average about 75, a similar level to that seen in 2017.

Pt Range: \$860 - \$1,050
Average: \$960

The platinum market's fundamentals should improve in 2018 as it moves into a small deficit. Cuts to production in South Africa announced in 2017 will reduce mine supply, while industrial demand will recover ground lost in 2017. Jewellery demand looks set for a modest rise in 2018 and automotive demand is forecast to drop only slightly. However, the demand recovery could be fragile as negative diesel sentiment in Europe is still resulting in falling diesel car sales. Growth of platinum jewellery in India and a slow recovery in China are important to keep jewellery consumption positive this year.

Supply cuts could put a floor under the price, but demand growth is not seen as being strong enough to drive significant price appreciation.

The rand has strengthened over the last two years, but expectations may have run ahead of political reality for the new ANC president, and any disappointment could result in a weaker rand, which would limit platinum's upside.

Pd Range: \$900 - \$1,170
Average: \$1,010

The palladium price could peak in 2018. Lease rates remain high and the futures curve is in backwardation, while automotive demand remains strong, supporting the price near term.

The ongoing shift in automobile purchases away from diesel to gasoline has been positive for palladium. However, US auto sales are expected to decrease this year, so quite a lot is relying on the emerging markets and, in particular, China's auto demand continuing to grow despite the end of a tax cut on smaller vehicles from the beginning of 2018, which may have brought forward some purchases.

A great deal of positive news is already in the palladium price and has lifted it to a record high, so it may only need some slightly less good news to induce profit taking and a pull-back.

Rohit SAVANT

CPM Group LLC, New York

Au Range: \$1,250 - \$1,400
Average: \$1,288

Gold prices are expected to rise modestly during 2018 on an annual average basis from levels observed in 2017. CPM Group expects global political conditions to remain volatile but economic and financial markets to continue to move steadily forward as they have through most of the past year. At some point, economic and financial markets are expected to become more volatile, but it may be late 2018 or beyond before that happens. In such an environment, gold prices are expected to tread sideways to slightly higher as market participants use the relatively low prices to add to their inventories.

Ag Range: \$15.50 - \$20.50
Average: \$17.75

Silver prices are forecast to average \$17.75 in 2018, up 3.8% over 2017. While growth in silver prices is forecast to outpace growth in gold prices during 2018, the relative value of silver is expected to continue lagging that of gold. At the end of 2017, the gold to silver ratio stood at 77. This ratio is expected to decline over the course of 2018 to 72.6 on an annual average basis. This is still well above the historical average of 56, however. A combination of this volatility, near 30% premium in the 2018 projected gold to silver ratio to the historical ratio, coupled with improving fundamentals, are all factors that make silver a compelling investment at present levels.

Kun SHEN

Bank of China, Beijing

Ag Range: \$15.60 - \$20.60
Average: \$17.60

We think silver has the opportunity to move higher and behave even better than gold in 2018. We expect silver supply to fall short of demand against a background of rising demand from industry and decreasing silver production. Also we expect investment demand to return after last year's depressed state. Comparatively low price will stimulate bargain hunting. Also after the cool-down of digital currencies, silver might catch more attention. During an upward trend of gold, silver usually behaves better. This was no longer true last year. But we think this rule might apply in 2018.

Pt Range: \$800 - \$1,010
Average: \$960

Platinum prices are likely to move sideways with limited downside over the course of 2018. On the upside, prices may be capped by ongoing adverse fabrication demand trends, which have been in place for the past few years. On the downside, prices should be supported by an expected slowdown in mine supply growth starting in 2018 and continuing for several years thereafter. In addition, any positive spillover effects from the price movements of gold also could provide support to platinum prices.

Pd Range: \$800 - \$1,200
Average: \$953

Palladium prices are expected to extend last year's strong performance in early 2018 as investors tend to build on an existing trend. Expectations of seasonal price strength in the precious metals complex in the first quarter also should help support palladium prices at elevated levels. However, an expected slowdown in the US and Chinese auto markets, an increase in palladium secondary supply and large investor inventory may weigh on prices later in the year. Palladium prices could come down from their elevated levels but should be expected to remain higher than 2017 levels on an annual average basis.



James STEEL

HSBC, New York

Au Range: \$1,161 - \$1,355
Average: \$1,284

We anticipate only moderately firm gold prices in 2018, based mostly on expectations of greater safe-haven buying and recovering jewellery demand. A stable US dollar should not weigh on prices, but may limit the upside. Tightening by the Fed and other major central banks lends a potentially negative backdrop for gold, but impact is largely priced. However, as rates rise, forward guidance may become more uncertain, which could aid gold demand in the long term. Strong paper markets are negative for gold, but any sustained equity market weakness would encourage safe-haven demand, as would geopolitical risks and higher global trade tensions. We look for both ETF and Comex demand to build in 2018. Jewellery purchases and bar demand may increase, but coin sales may stay weak. Prices above \$1,300/oz may discourage emerging market buying. Mine output may be plateauing and scrap supply looks limited. Central bank demand should increase.

Pt Range: \$825 - \$1,105
Average: \$1,055

We look for higher platinum prices in 2018. Low prices have crimped mine investment, and limited production should eventually support prices. Concerns of loss of market share in the auto sector, notably in diesel vehicles, while valid, may be exaggerated. Tight emissions legislation may keep platinum loadings firm even if diesel vehicles continue to lose market share. Platinum is likely to benefit from its association with gold as well as any rise in demand for hard assets linked to increased volatility or financial market weakness. Low investor participation in platinum has left the market under-invested and even a modest increase in long positions or ETF holdings could have a notable impact on prices. The stellar Japanese bar demand of 2015 and 2016 fell significantly in 2017, but may recover in 2018. Low prices may aid a recovery in China jewellery demand, while North American and Indian demand looks set to expand.

Ag Range: \$16.10 - \$19.25
Average: \$17.92

We anticipate stronger silver prices in 2018. While strong financial markets may present headwinds to silver rallies, any resurgence in risk may spark safe-haven demand. We believe tighter Fed policies are largely priced into the market. HSBC FX strategists anticipate a broadly neutral euro versus the US dollar, which should relieve silver of a potential negative FX influence. Industrial demand is rebounding, led by photovoltaic and electronic offtake. HSBC's economists forecast positive global industrial growth, which should support silver offtake. After falling in 2017, mine supply is forecast to grow only very slightly this year. Recycled supply is low, but may increase moderately due to greater industrial supply. Tighter supply/demand balances are an important factor in our mildly bullish outlook. There is room for both ETFs and net long positions on the Comex to rebuild. Coin and bar demand remains very weak, but should recover from low levels.

Pd Range: \$925 - \$1,145
Average: \$1,009

We look to palladium prices to remain high. Palladium trades pro-cyclically and will benefit from forecast strong industrial and economic growth. Our supply/demand model suggests a wide structural deficit, which is likely to keep prices high. We expect strong prices based on the twin pillars of limited mine supply and ongoing auto demand. Projected growth in gasoline vehicles, largely underwrites palladium consumption. The outlook for mine supply is limited, even at high prices. Years of persistent production/consumption deficits have translated into noticeable physical tightness and concerns over the levels of available stockpiles will support prices. We believe the deficits to be structural in nature and will not be easily closed or quickly narrowed. Underlying tightness and further depletion of above-ground stocks should provide a price floor. Investor participation on the long side has been robust, and although we remain price-positive, a shift in investor sentiment could weigh on prices.

Glyn STEVENS

Independent, London

Pt Range: \$732 - \$1,038
Average: \$862

Pd Range: \$794 - \$1,168
Average: \$948

Whilst it may be premature to herald the beginning of an oil-free future and the death of the internal combustion engine, the transition from gasoline and diesel to electric and even fuel cell vehicular transportation truly stepped up a gear in 2017. With autocatalysts the major determinant of PGM demand, the effect on both platinum and palladium prices will continue to be felt in 2018. Diesel's image worsens day by day. Gasoline engines remain the popular choice, but hybrid and ultimately electric cars will keep gaining market share. Greater PGM demand as a result of stricter emissions standards should be more than counter-balanced by accelerated recycling of hoarded spent catalysts. As global industrial production in general stagnates, so will Chinese and European car sales level off, whilst those in the US and the developing world decline further.

If the above proves to be correct and the auto sector treads water at best, from where can PGM bulls take solace? The second-largest user, the jewellery sector, fails to impress. Rising US interest rates and a consequent firmer dollar should be a negative influence. Speculative investment in precious metals ETFs may have peaked. South African production looks set to decline and the Russians continue to stockpile their palladium, but the overall supply/demand fundamentals seem destined to deteriorate, especially for platinum. The latter's best bet remains gold. However, the yellow metal may not help in 2018, geopolitical catastrophes notwithstanding. The recent and somewhat meteoric rise of the 'insolubles' that are iridium, rhodium and ruthenium surely cannot be the answer.

The end result? Lower prices for both of the major PGMs following the usual New Year cheer. However, going against historical precedent, palladium should remain the metal of choice throughout 2018.

Glyn only participated for the platinum and palladium price forecasts.

Joni TEVES

UBS Limited, London

Au Range: \$1,220 - \$1,380
Average: \$1,285

We've taken a more neutral stance in gold for 2018, expecting an average of \$1,285. We find it difficult to see strong catalysts in either direction against the backdrop of a broadly stable macro outlook. We expect gold to trade within a broad range, not too different from H2 2017 levels. Steady growth, higher equities, modest inflation, moderate real rates and lower macro risks suggest that the gold market is likely to be capped. But at the same time, gold should remain relevant as investors recognise lingering 'known unknowns' and 'unknown unknowns'. Combined with a soft dollar and a flatter yield curve, we don't think a sell-off in gold is justified either. On balance, we think the risks to our gold forecast are skewed to the upside, which could be triggered by a spike in inflation that is not backed by growth or a perceived policy misstep that raises concerns of a correction in equities.

Pt Range: \$870 - \$1,100
Average: \$980

Platinum sentiment remains challenged amid pressure from themes in the auto sector, but we think there's room for this to moderate. We maintain a positive price profile over the medium to long term. Platinum is likely to get support from its strong correlation with gold and could attract interest from a value perspective around the lows. Moreover, some encouraging developments have gone under the radar, such as potential for platinum demand from heavy-duty diesel in China to pick up and stabilising jewellery consumption. Platinum positioning is quite lean relative to its peers, allowing room for adjustments to be made. Additionally, our forecast also reflects the expectation that, while the discount to palladium may linger for some time, the gap should eventually narrow, especially as the auto industry starts to consider changes on gasoline vehicle loadings.

Ag Range: \$15.50 - \$19.00
Average: \$17.40

Our silver price forecast is largely influenced by our more modest price expectations for gold. Global growth should help at the margin, but we think a much stronger silver fundamental catalyst would be needed to attract investor interest. Our forecast also reflects the view that in a relatively low volatility environment, more active participation from short-term players is also likely going to remain a challenge. Given our more neutral stance on gold, it is similarly difficult to see a strong catalyst for silver to move significantly in either direction. We also think that a significant shift in its relative performance to gold is likely to be a challenge and silver is likely to remain on the back foot, considering it doesn't attract strategic or safe-haven interest. However, it is worth noting that given upside risks for gold, the impact of a rally in prices on silver should be particularly amplified given silver's underperformance in 2017 – there should be more catching up to do in this case.

Pd Range: \$870 - \$1,150
Average: \$985

We remain long-term palladium bulls, as the fundamental backdrop remains compelling; however, we think it makes sense to exert some caution here. We are reluctant to chase the market higher aggressively given the strong build in positioning and the sharp rally in 2017. We anticipate the pace of the uptrend to slow up ahead. Some factors that could aid this moderation include slower car sales out of key markets such as the US and China, as well as potential discussions around the prospect of the substitution of palladium loadings in gasoline vehicles. Although palladium's strength is ultimately backed by fundamentals, speculative interest has also increased as market participants have taken note of the price action (e.g. palladium trading activity has picked up considerably in China in the past year, albeit coming from a very low base). The challenge for palladium is that the market is small and liquidity can become an issue, making prices vulnerable to sharp moves. In spite of these concerns, we still see risks as skewed to the upside.

Trevor TURNBULL

Scotiabank GBM, Toronto

Ag Range: \$16.25 - \$20.75
Average: \$18.50

We believe there is upside for silver given the relatively small speculative net long positions and historically high gold to silver ratio even as base metal demand rises. We predict that late 2018 may finally bring risk-off catalysts as uncertainty, even more so than the past year, builds into the US mid-term elections.

Mine supply declined very slightly in 2016 and was expected to shrink a bit more in 2017. With 70% of silver sourced as a by-product, the trend is likely to reverse and mine supply should resume its inexorable growth trend, with stronger base metal fundamentals driving exploration and development.

We would like to think that industrial demand will start to increase in line with base metal prices, but solar panel manufacturing, a strong growth area for silver, may have peaked as China reaches its solar generating capacity targets and subsidies start to wane. Hence, our bullishness is tempered.

Scotiabank GBM only participated in the silver price forecast.

Matthew TURNER

Macquarie Capital, London

Au Range: \$1,250 - \$1,450
Average: \$1,350

Five years after its 2013 annus horribilis gold is slowly heading upwards, posting two consecutive annual gains. We see another, more impressive one, this year on the back of a much weaker US dollar. But dollar-led rallies are hard to love, and general economic optimism will limit investor interest in the absence of meaningful inflation and with a backdrop of steady central bank tightening.

Ag Range: \$16.00 - \$23.00
Average: \$20.00

Steadfast silver. No one has ever called it that before, but that describes the last two years – averaging \$17.1/oz in both 2016 and 2017, with a trading range in the latter at a multi-decade low. It has also lagged gold, as its investor base seems to have gone in search of something a Bit more lively. But we think 2018 could be the year in which it finally recovers its mojo. The dollar will fall, helping gold. We expect the world economy to have another good year, sufficient for silver to re-rate against gold in line with its historical relationship to the strong performance from other industrial metals. Investors won't come flooding back, but neither will they disappear in such numbers again.

Pt Range: \$915 - \$1,200
Average: \$1,063

With diesel's decline continuing, platinum's main demand hope lies in it now being cheaper than palladium and the potential for its substitution into gasoline autocatalysts. An analysis of the last time this happened, around the turn of the century, suggests that substitution takes a while and back then the price differential was bigger. But announcements can come before actual flows and no one wants to see palladium spike.

Macquarie Capital did not participate in the palladium price forecast.

Bhargava VAIDYA

B.N. Vaidya & Associates, Mumbai

Au Range: \$1,201 - \$1,410
Average: \$1,321

Gold will retain its old straits of 'store of value' and 'a safe-haven investment'. With the US Fed hinting at a steady increase in interest rates, gold's upward movement is capped. Geopolitical tension round the gold will keep people interested in gold.

Ag Range: \$15.20 - \$18.75
Average: \$17.05

Silver will remain within last year's range. No major change in the demand/supply scenario is expected.

Investment demand has been reducing every year and this would mean no major change in price range.



WINNERS OF THE 2017 PRECIOUS METALS FORECAST SURVEY

Rules Must be Obeyed

The aim of the annual survey is to predict the average, high and low price range for the year ahead in each metal as accurately as possible. The prediction closest to the average price wins (based on the average \$ daily LBMA pm prices). In the event of a tie, the forecast range is taken into account.

And the 2017 winners are...

The LBMA is delighted to congratulate the four winners in the 2017 Forecast Survey. Glyn and William are pictured collecting their winning prize of a 1oz gold bar from LBMA Chief Executive, Ruth Crowell. Bart and Tom were unable to attend in person so token photos of them on their lonesome have been inserted. The LBMA would like to thank PAMP for the generous donation of the winning prizes.



In a tight finish, **Bart Melek, TD Securities**, held off all challenges with his forecast of \$1,256, just over a \$1 below the actual average price. In a close second was Ross Strachan (Thomson Reuters, GFMS) with his forecast of \$1,259 and in third place was Bhargava Vaidya (B.N Vaidya & Associates) with \$1,260.



It paid to take a bearish outlook for platinum, and **Glyn Stevens, Independent**, was one of the few who did, and he scooped first prize courtesy of his forecast of \$935, \$13.49 below the actual average price. Eddie Nagao took his second runners-up spot with his forecast of \$928. Bart Melek, supplementing his first prize for gold, took third place with his forecast of \$984.



For silver, **Tom Kendall, ICBC Standard Bank**, secured first prize with his forecast of \$17.10, an impressive performance being just five cents off the average price of \$17.05. However, it was a very close call as Eddie Nagao (Sumitomo Corporation) also forecast the same price, but Tom came out in the photo finish courtesy of a narrower forecast range. In third place, to bag his second third place finish was Bhargava Vaidya with his forecast of \$17.25.



Collecting first prize was **William Adams, Metal Bulletin Ltd**, with his forecast of \$850, \$19 below the actual average price. Taking second place was Thorsten Proettel (LBBW) with his forecast of \$840 and in third place was Ross Norman (Sharps Pixley) with his forecast of \$828.

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



MKS PAMP GROUP

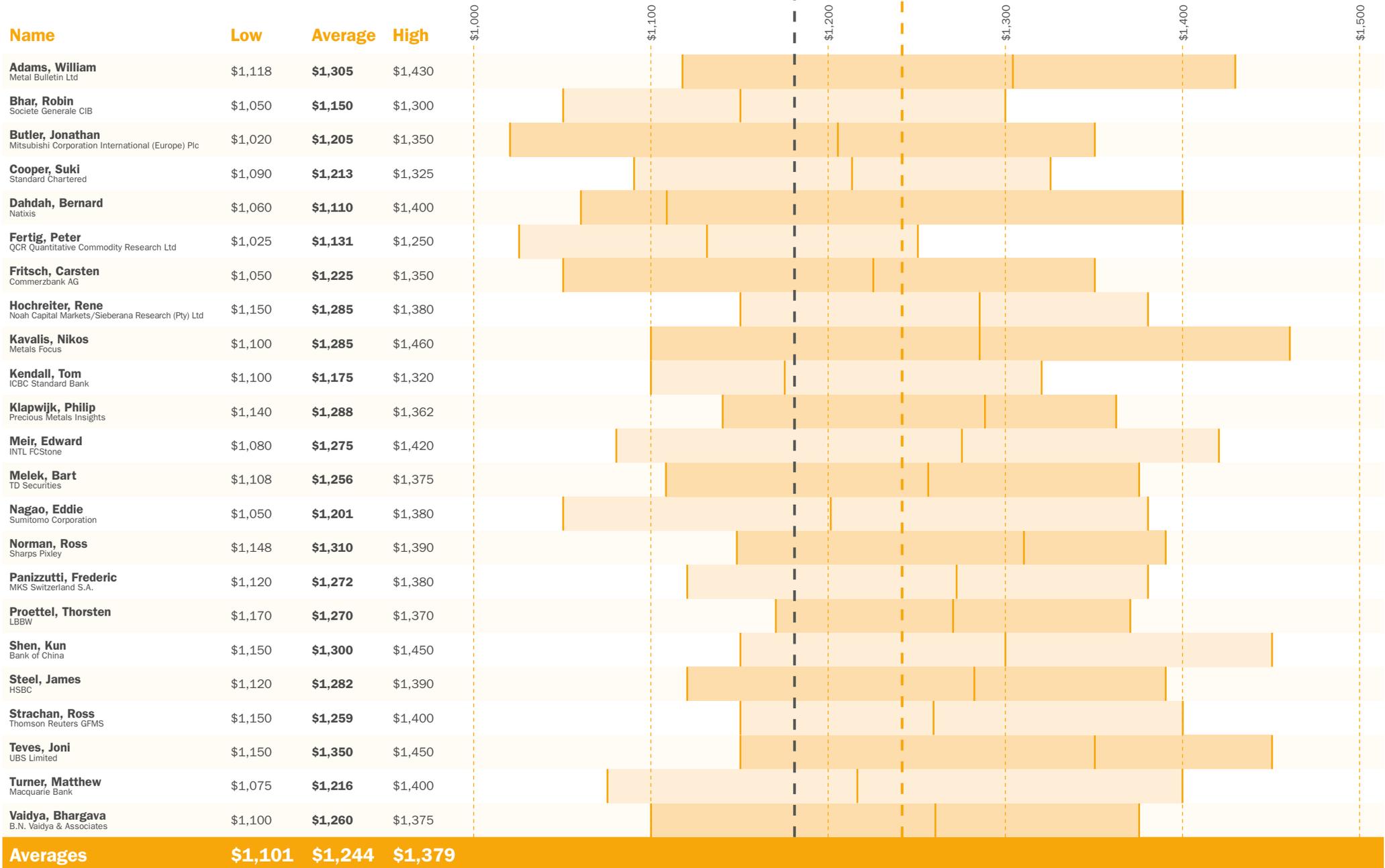
2017 LBMA Forecast Survey Winners						
Metal	Actual average price in first half Jan 2017 ^(a)	Analysts' 2017 forecast average	Actual 2017 average price	Winning forecast	2017 winning analyst	Company
Gold	\$1,181	\$1,244	\$1,257	\$1,256	Bart Melek	TD Securities
Silver	\$16.59	\$17.77	\$17.05	\$17.10	Tom Kendall	ICBC Standard Bank
Platinum	\$967	\$1,014	\$948.49	\$935	Glyn Stevens	Independent
Palladium	\$744.30	\$762	\$868.96	\$850	William Adams	Metal Bulletin Ltd

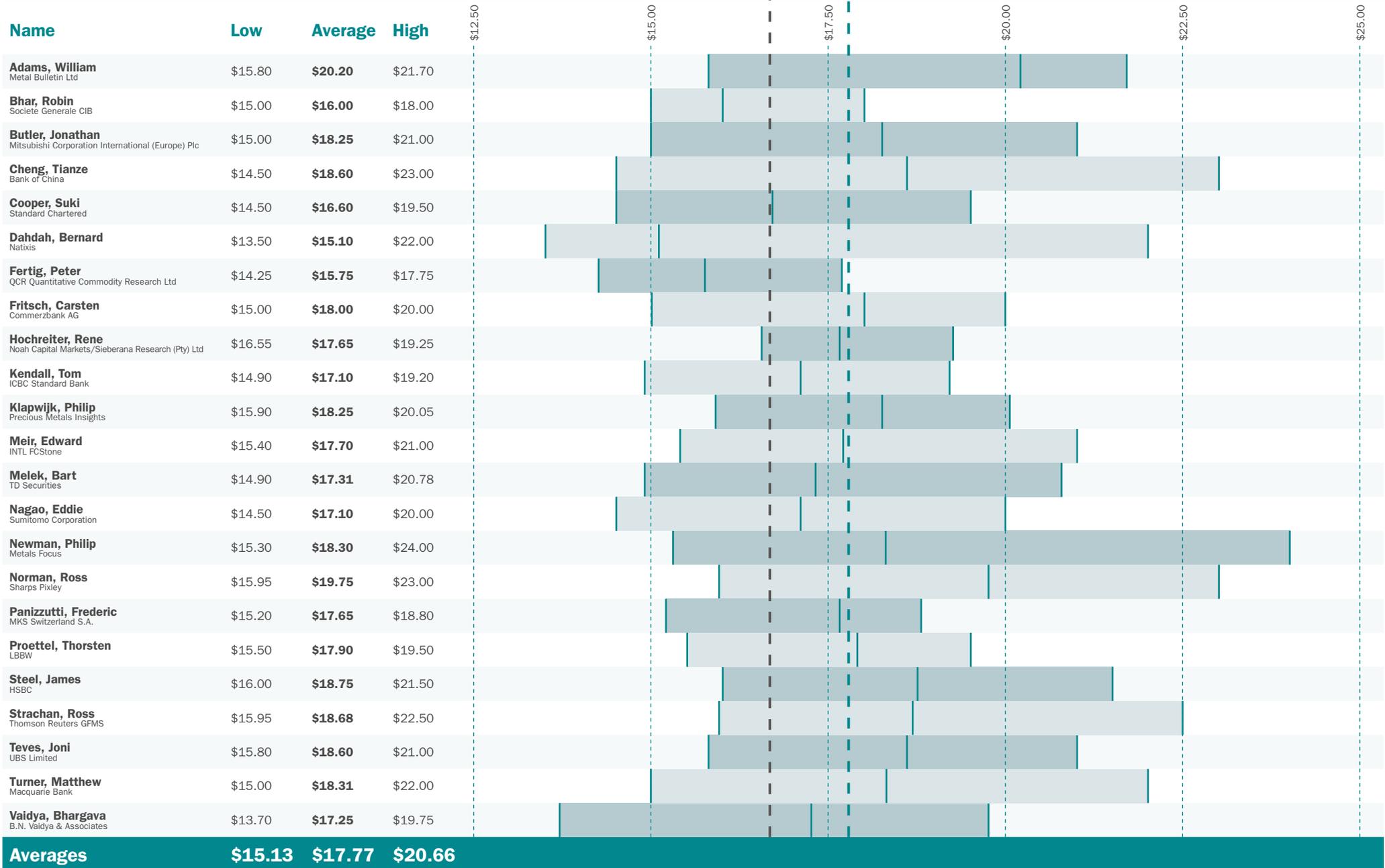
(a) 3-16 January 2017 inclusive.

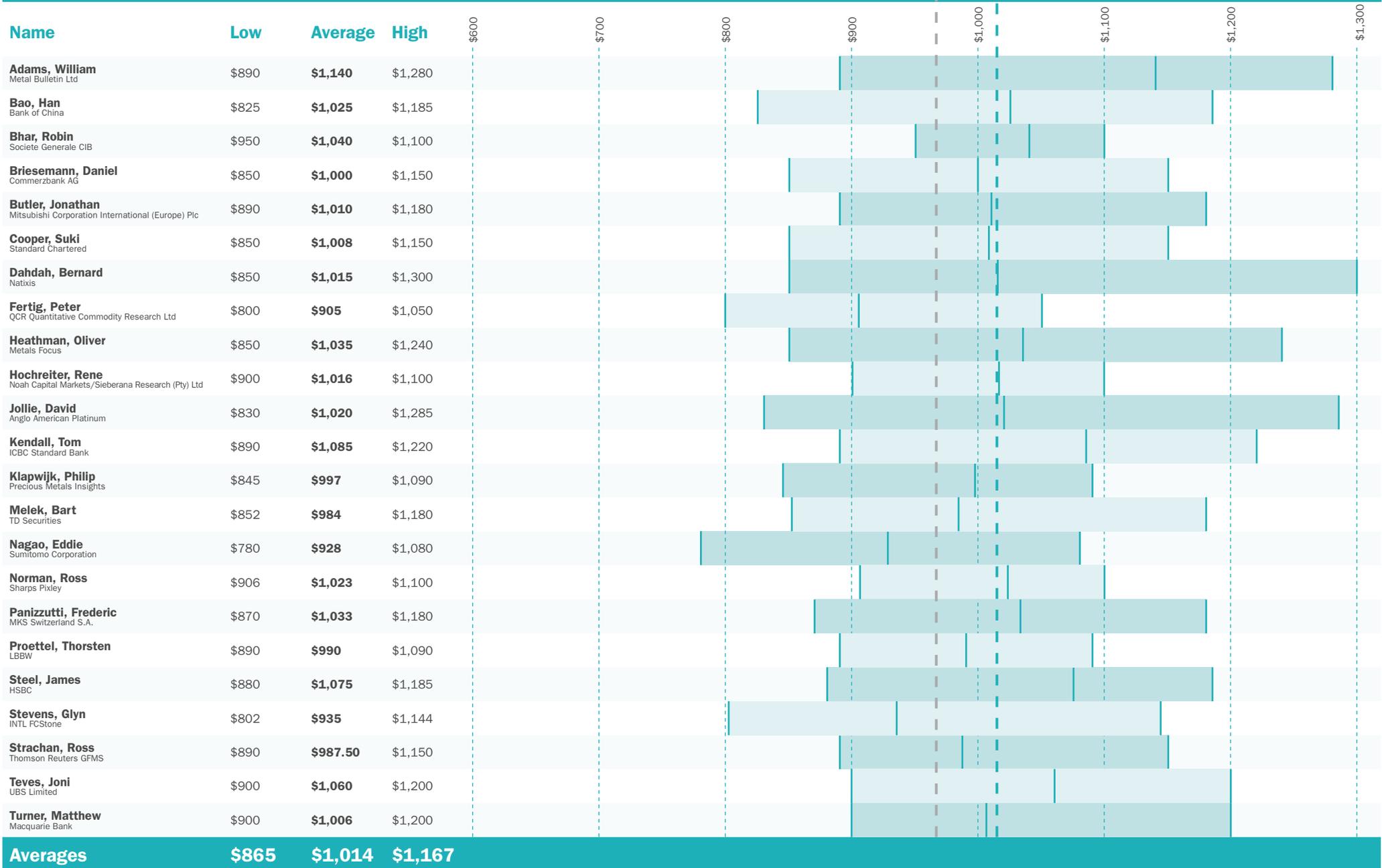
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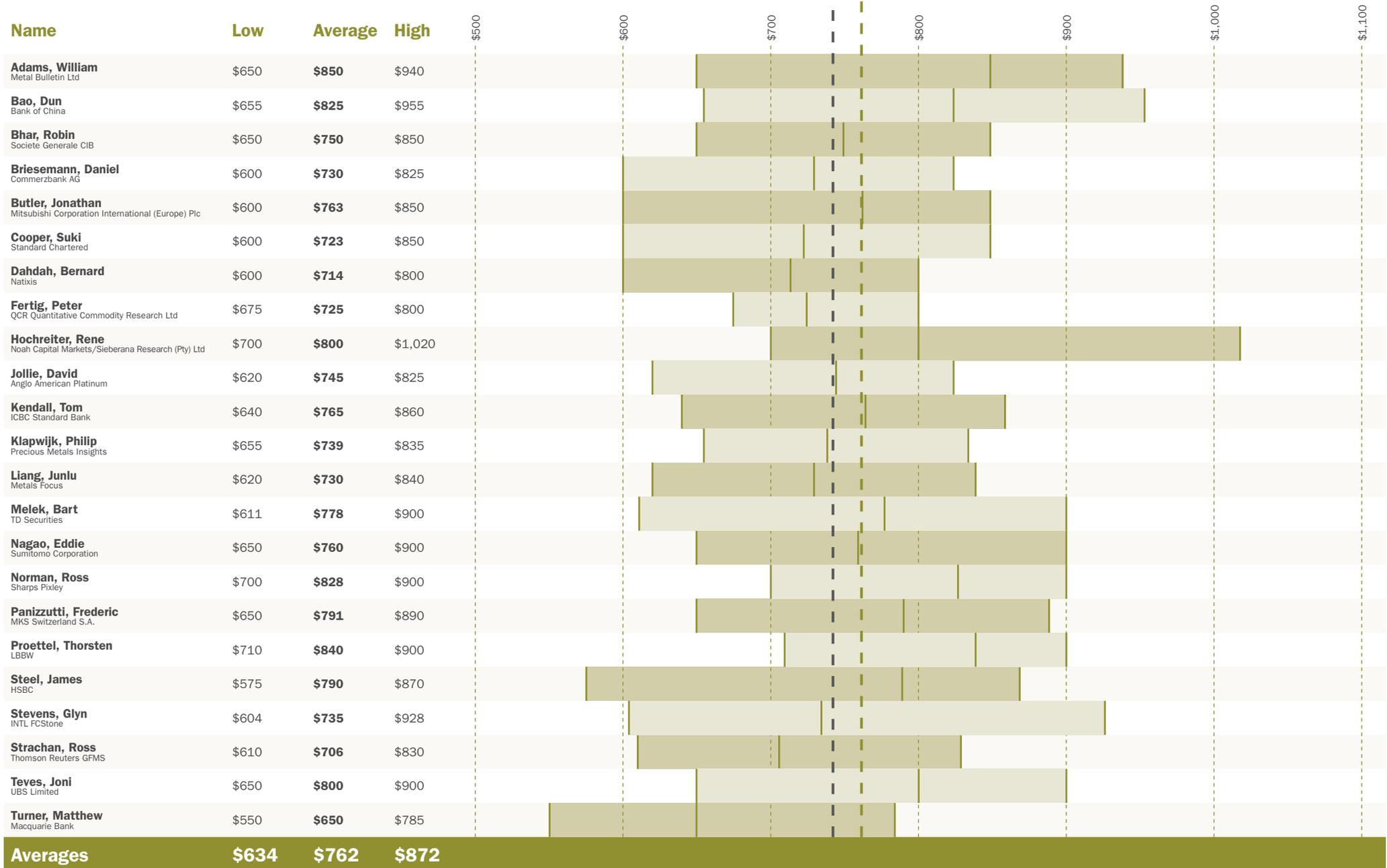
Actual average price in
first half of Jan 2017
\$1,181

Forecast Average
2017
\$1,244



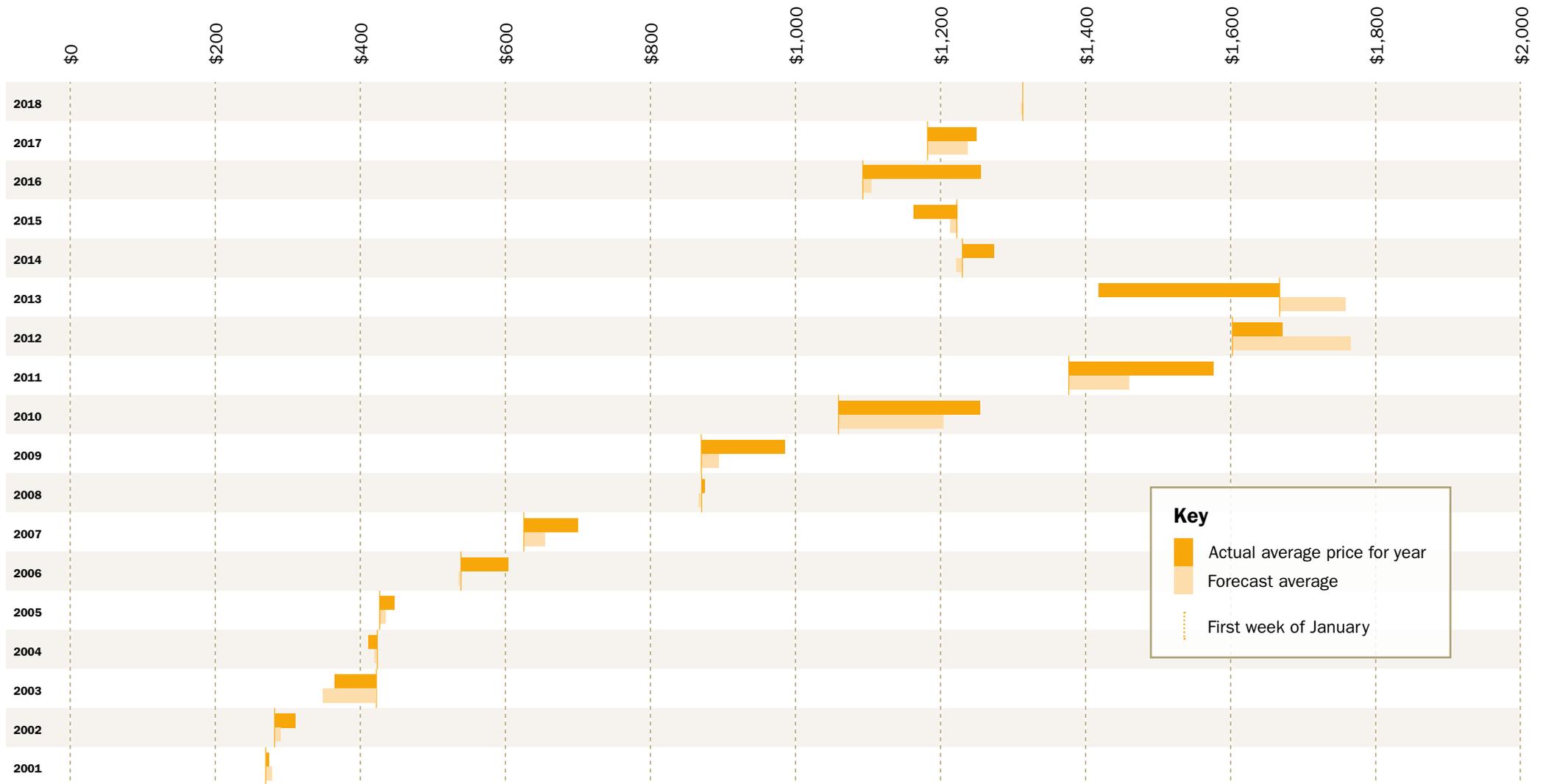






FORECAST 2001-2018 REVIEW

In the 2017 forecast survey analysts' forecast that the average gold price in 2017 would be \$1,244/oz, representing an increase of 5.3% against the actual average price in the first half of January 2017. As it transpired the actual average price in 2017 out-turned at \$1,257/oz, so analysts correctly predicted the price direction and were just 1% below the actual price, which amounts to an impressive performance. In the 2018 forecast, forecast contributors are not bullish as they were last year, predicting that the gold price will average \$1,318/oz in 2018, which is broadly in line with the average actual price in the first half of January 2018.





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