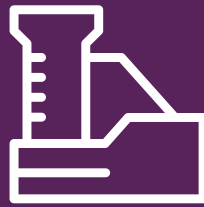


FACING FACTS



Precious Metals Shine Brighter Than Ever

BY FEDERICO GAY, PRECIOUS METALS SUPPLY ANALYST, GFMS, REFINITIV

2019 was indeed a great year for precious metals.

Worries about the health of the global economy, rising geopolitical tensions, continued high uncertainty for businesses due to the Brexit negotiations between the United Kingdom and the European Union, the protests in Hong Kong, and an intensifying and ongoing trade war between the United States and China during the year all acted as fuel for higher prices, especially during the second half of the year. By the end of the year, however, some of those tensions eased and markets calmed somewhat. This was reflected by Boris Johnson and his party securing a landslide electoral victory and strong majority in parliament in the UK, in combination with an agreement reached between the United States and China on 13 December, where the former acknowledged to suspend tariffs of another \$160 billion on Chinese goods and further the negotiations. Be that as it may, gold prices were practically unaffected by those recent developments, indicating that investors are particularly unimpressed with the so-called progress on the trade deal and remain wary the current fragile agreement could easily fall apart again.

RHODIUM HAS BEEN LEADING THE PACK RISING 146% SINCE THE BEGINNING OF LAST YEAR WHILE PALLADIUM HAS COME IN SECOND SPOT AT A GAIN OF 52%

PGM (platinum, palladium and rhodium) prices remain supported by developments in the automotive sector. While sales are decreasing, tightening emission standards and emission testing procedures across the various regions, such as China, Europe and the United States mean that more metal is required for use in autocatalysts.

Of the main five precious metals, rhodium has been leading the pack, rising 146% since the beginning of last year, while palladium has come in second spot at a gain of 52% over the same period. Both metals are heavily used in the aftertreatment of gasoline-driven vehicles, with rhodium being an absolute champion in dealing with the NOx.

Following three years of struggles, platinum finally started to recover, ending 2019 with a price of \$957/oz, 22% higher compared to January. That increase was not only on the back of gold's and silver's gains last year, rising by 19% and 17% respectively, but also a reflection of particularly supply-side developments in the sector's largest producing country, South Africa.

Indeed, long-awaited platinum mine supply consolidation efforts continued in 2019, disrupted by re-emerged strike action, all supporting the price. These developments, however, were in turn counterbalanced by increased production incentives, with some of the primary platinum producers turning to primary palladium and rhodium producers digging up platinum out of the ground as a by-product. Despite all the challenges still present in the country, it was mostly all precious metals but especially platinum that made South African miners finally make money again last year and, as such, there was a strong incentive to keep platinum supply elevated even if the market in the short term would be better off with less.

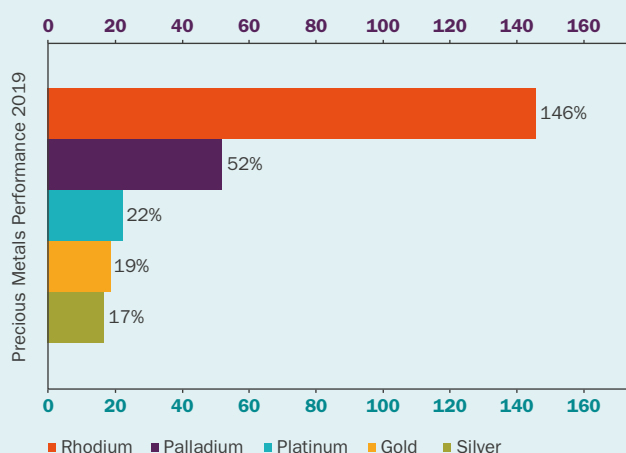
WHAT IS IN STORE FOR 2020?

While we expect these events will continue to play a major role in determining precious metals prices in 2020, there are, of course, other variables to consider as well, particularly the underlying fundamentals of supply and demand.

According to our newly launched mine production database, we anticipate that gold mine production will rise by 2.4% in 2020, to 3,448 tonnes, as considerable output increases are expected in Russia and Canada, mainly. While acute losses are forecast due to mine depletion in Australia and Indonesia, we estimate net regional growth in the Americas and Africa, representing a global increase of around 100 tonnes. Higher gold prices will boost scrap supply by an additional 50 tonnes.

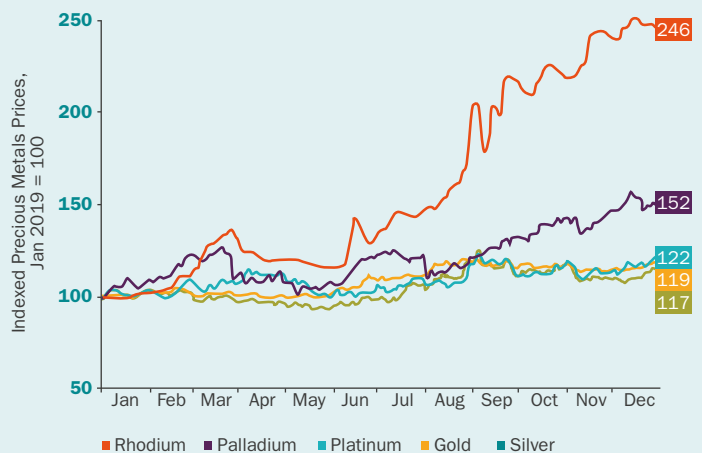
Turning to demand, our estimations suggest that jewellery will rebound this year, after a tough 2019, especially in India. Retail investment demand is also forecast to rise by almost 100 tonnes, mainly in gold bars, and net official purchases will continue to remain robust for the year to come, particularly in the first half of the year, while gross sales levels (which have remained far below 2010 levels) are expected to remain weak.

PRECIOUS METALS PRICES ANNUAL PERCENTAGE CHANGE



Source: Refinitiv, Datastream

PRECIOUS METALS PRICES INDEXED 2019



Source: Refinitiv, Datastream



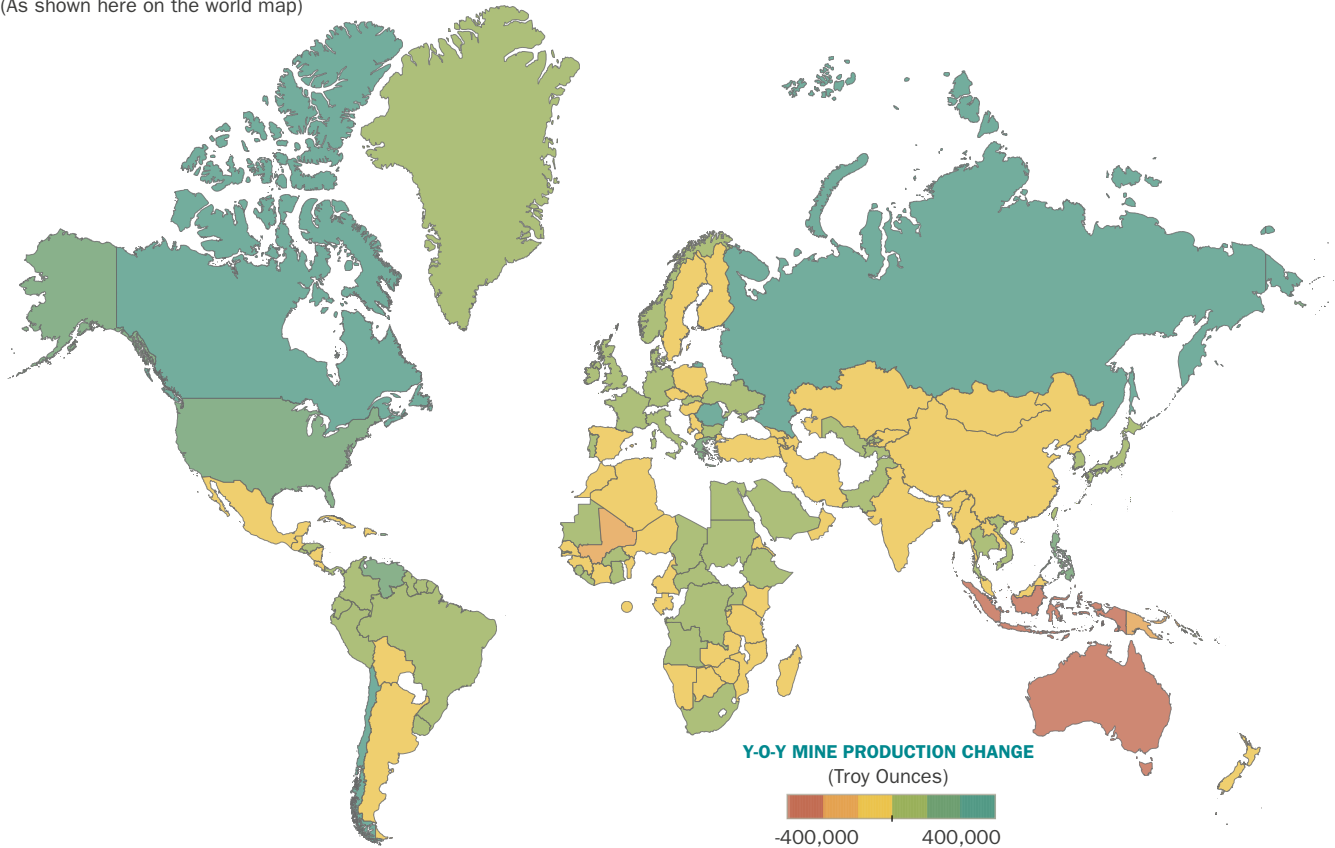
4.4%
SILVER MINE PRODUCTION IS EXPECTED TO INCREASE BY 4.4%, TO TOTAL 27,868 TONNES

ETP inventory build will likely continue to play a key role in the gold market and absorb a considerable amount of metal as the sector is forecast to require an additional 465 tonnes of gold in 2020, a 7% increase compared to the previous year. Our reasoning behind this continued strong source of demand will be particularly driven by the unfolding of the events on the macroeconomic front, which will likely stimulate investors large and small to either opt to hold more physical metal and/or raise their stakes in ETPs.

A slightly different scenario will rule over silver pricing. Both supply and demand will rise in 2020, totalling in a physical deficit of around 6 tonnes. On one hand, mine production is expected to increase by 4.4%, to total 27,868 tonnes, and on the other, larger demand from the industrial sector and retail investment will boost prices to an average of \$17.1/oz during 2020. A significant amount of above-ground stock will likely keep any considerable price increases in check, although you never really know with silver – just when you believe you have figured it out, it reverts back to its volatile and erratic behaviour, overshooting or lagging gold price moves to the upside as well as downside.

Platinum and palladium prices are strongly correlated with the automotive sector, representing around 43% and 83% of their respective annual downstream demand.

GOLD MINE PRODUCTION CHANGES (2020 vs 2019)
 (As shown here on the world map)



Even though we expect a positive net balance of 400 tonnes this year, this does not necessarily mean gold prices will fall. Fundamentals do play a role in the determining of the gold price, but since gold is a highly leveraged traded commodity on COMEX, a big part of price discovery takes place there, with traders in particular focused on what is happening on a macro scale in the global (financial) markets. Based on that view, we believe gold will have room for an additional 5% gain this year, with among many other things, President Trump hinting towards a cheaper dollar and hence a higher gold price.

WE ANTICIPATE THAT GOLD MINE PRODUCTION WILL RISE BY 2.4% IN 2020 TO 3,448 TONNES AS CONSIDERABLE OUTPUT INCREASES ARE EXPECTED IN RUSSIA AND CANADA

What is more, the recent increase of unrest in the Middle East is slowly building in a premium in precious metals prices, first and foremost supporting gold and silver as a hedge against increases in systemic risks. The political rhetoric is surely heating up in Iran and Iraq following the US attack on a high military Iranian official and, together with the ongoing trade deal saga, these two events could well be the main catalyst for higher precious metals prices in 2020.

As stricter emissions legislation is being pursued in various parts of the world, palladium use in autocatalyst applications is set to post an 11th successive record in 2020, growing by around 3%, to total 281 tonnes, while platinum demand by this sector will increase by 1%. Fundamentals are of course a major factor in these markets and, despite their similar characteristics, both markets could not be further apart. Platinum is forecast to record another stonking deficit present in an incredibly tight market, while palladium has had to deal with various demand-side disappointments in the recent past stretching across two of its major downstream segments, jewellery and diesel-based autocatalysts.

Turning to supply, palladium mine production, as reflected in our mine production database, is expected to marginally fall in 2020, as Russian, Canadian and US output is expected to contract. Partially offsetting these losses, South African production is expected to grow for the second consecutive year.

Platinum mine supply, on the other hand, is expected to rise by 3%, as South African miners, responsible for over 80% of platinum production worldwide, are set to have a great year, even though power supply disruptions are deepening.



Federico Gay, Senior Analyst, Refinitiv, GFMS. Federico is a geologist with a BSc from the National University of the South, Argentina. He joined Refinitiv in London in November 2019, focused on precious metals supply modelling. Prior to Refinitiv, he worked over seven years in Chile in a wide range of assignments, including exploration, ore control, geological modelling and resource estimation for a Copper-Gold-Molybdenum mine in the Atacama Desert. He completed a master's program in Economic Geology from the Catholic University of the North, Chile.

The so-called 'load shedding', which is the interruption or reduction of voltage, has been frequently used in South Africa since the end of 2014 to prevent the collapse of the power system, which is currently being pushed to its limits after years of problems in its infrastructure. This process consists of different stages, allowing 1,000 megawatts of power per stage to be shed. In most power shortage situations, it is enough to apply Stages 2 to 4 (meaning the shedding of between 2,000 and 6,000 megawatts).

However, after floods occurred last December, the disruptions required Eskom to escalate to Stage 6, meaning that 6,000 megawatts were being rotationally cut between the users daily, demonstrating the fragile situation the country is in.

On the other hand, during the last few years, South African miners have turned to the mechanisation and modernisation of several important shafts to counterweight mine depletion, which has started to pay off.

This positive scenario for precious metals supply is expected to continue for some time, as companies and shareholders have raised their interest again in investing in mining.

Indeed, according to our deal analytics tool in Eikon, M&A activity during 2019 broke the record achieved in 2011, surpassing \$21 billion in deal value, which is twice the size recorded in 2018.

Silver, platinum and palladium M&A activity didn't hold back either, with many new deals made, the last being Impala Platinum acquiring North American Palladium, announced in December 2019. Capital expenditure also considerably increased during last year, particularly in gold and silver mines and projects.

Last year, the precious metals industry seemed to have really turned the corner. This was obviously reflected in the underlying prices and, as such, the mood of many participants in the market improved considerably on more sustainable margins all around.

Demand for the various precious metals in 2020 is expected to continue to remain robust, driven particularly by healthy private, institutional and central bank investment demand in the case of gold, as well as robust fabrication volumes for the rest of the sector. On the supply side, despite the challenges of electricity shortages and mine closures remaining present, the appetite to invest has considerably increased as well, which we expect to have further positive ramifications for underlying equity valuations.

2019 made the start, 2020 will likely continue that momentum.



MARKET MOVES



ANDREW MATTHEWS JOINS UBS

Andrew Matthews has joined UBS in London as Global Head of Precious Metals Distribution. He had previously spent twelve years at HSBC, where he was responsible for Precious Metals Sales within EMEA.

ADAM WEBB JOINS METALS FOCUS

Metals Focus is pleased to announce that Adam Webb has joined the company as Head of Mine Supply. Prior to this, Adam worked at S&P Global Market Intelligence where he was Head of Mine Economics in their Metals & Mining Research Division, while earlier in his career he worked as a geologist in Western Australia's mining industry.

BRANDON LLOYD JOINS BNP PARIBAS

Brandon Lloyd joined BNP Paribas in November and has been tasked with a global structured metals origination mandate with London acting as the hub. He joins from Société Générale in New York where he was head of Corporate Sales and Origination for the Americas.

THOMAS WEISS JOINS HEIMERLE UND MEULE GMBH

Thomas Weiss joined Heimerle und Meule GmbH, Pforzheim/Germany, on January 1, 2020, as Director Sales Trading and Industrial Recycling.

He started his career at Sparkasse Pforzheim in 1997, being responsible for the bank's precious metals trading activities, then joined Agosi, Allgemeine Gold- und Silberscheideanstalt AG, working as Director of Sales and Precious Metals Services for 15 years.

Within Heimerle and Meule Group, he will be responsible for the further development of the groups precious metals trading activities, the expansion of international sales and the transformation and implementation of sales strategies.