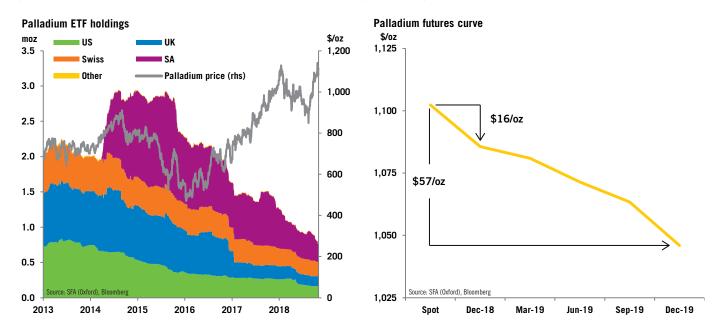


Palladium becoming a hand-to-mouth market

Palladium ETF holdings have fallen by 74% over the last four years. The first palladium ETF was launched in the UK in 2007 and subsequently the US, Switzerland and South Africa also listed ETFs. The creation of ETFs made a portion of the market's stocks visible. They initially proved popular and pulled in large amounts of investment, with ETF holdings peaking at a little below 3.0 moz in 2014. However, after holding at around that level through most of 2015, investors in all regions then started to take profits and sell their holdings.

During 2018 South African palladium ETF holdings have more than halved from 560 koz to 260 koz. At the height of their popularity in 2015 they held over 1.3 moz. Globally, ETF holdings have fallen by 495 koz this year. South African ETFs are obliged to hold bars made from metal produced in South Africa, so if those bars have been converted to sponge for industrial use they will not be available again should South African investors decide to move back into palladium ETFs. Bars are not made routinely by any of the palladium producers in South Africa.



Fundamentally, the palladium market is in deficit and this means that stocks need to be made available to make up the difference between supply and demand. The physical market is tight, with elevated lease rates, and the futures market is in backwardation. Investing in an ETF has a charge, but holders of palladium can make money leasing it out.

Large speculative investors hold a net long futures position of 1.32 moz, the highest level since March. This is far below the 2.76 moz in January, when the price first reached \$1,100/oz, leaving room for the net long position to be increased. If investors return to ETFs, or metal availability declines for any other reason, this could push the price to new highs.

PRECIOUS METALS REVIEW

79 **Au**

Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,221	1.12%	1,225	16/11/2018	1,196	13/11/2018
€/oz	1,071	0.44%	1,076	15/11/2018	1,060	14/11/2018

A trade deal at the G20 summit could send gold lower. Hopes of a resolution to the US-China trade conflict increased last week on news that dialogue between the two countries had resumed. Additionally, China outlined a number of concessions to the US. This is in anticipation of a meeting between Donald Trump and Xi Jinping at the G20 leaders' summit, which concludes on 1 December. If a deal is reached then the gold price could drop as reduced economic uncertainty leads to lower safe haven demand and allows for more risk-on investing.

Gold receives support from inflation. US inflation, as indicated by the core CPI, came in at 2.1%, down from 2.2% in September. Gold demand rises during inflationary periods as it is considered a store of value. In the US this has been largely counteracted by the Federal Reserve increasing interest rates. However, in the EU the ECB has not made any interest rates rises from its level of 0%. With German inflation reaching a 10-year high of 2.5% in October, gold could see increased demand in the region.



	Close	Weekly change	High	Date	Low	Date
\$/oz	14.35	1.53%	14.41	16/11/2018	13.90	14/11/2018
€/oz	12.59	0.84%	13.42	14/11/2018	11.36	14/11/2018

Silver hits a new year-to-date low and could be heading lower. The silver price reached a new two-year low of \$13.95/oz last week. The 100-day and 200-day moving averages show a clear downtrend and it has also not yet reached an oversold status, both bearish indications. The price rebounded off support around \$14/oz on Thursday. However, the weak technicals suggest that silver is likely to continue to underperform gold unless a much stronger recovery in the price is observed.

A tripling of global solar capacity by 2025 to support silver demand. The IEA has published the *World Economic Outlook 2018* and estimates that global photovoltaic power capacity was 398 GW in 2017. In its scenario based on currently known legislation, solar capacity in 2025 is 2.8 times that of 2017, but to meet environmental objectives that ratio needs to be 3.7. With the most likely outcome somewhere in the middle, this translates to average annual photovoltaic silver demand for 2018-2025 of~94 moz, the same as the record high level in 2017 (*World Silver Survey 2018*).

Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	845	-0.97%	857	12/11/2018	827	14/11/2018
€/oz	741	-1.58%	760	12/11/2018	732	14/11/2018

Regardless of the Competition Tribunal outcome, Sibanye-Lonmin output is likely to decline. Lonmin's largest miners' union, the AMCU, has told the Competition Tribunal that the planned job cuts are excessive and "warrant that the transaction be prohibited". The AMCU also claims that the weak rand means Lonmin could operate profitably. However, it is difficult to see how Lonmin could survive without making its own workforce cuts. The most likely result is that the deal will be approved but there may be some additional requirements on the level of job cuts allowed. If the AMCU is unhappy with the result then it is possible there could be strikes as well. Regardless of the outcome, supply from the two companies (which combined account for 23% of global platinum mine supply) is likely to decline but the cuts may take several years to implement.

German court rulings against cities adds more fuel to the diesel fire. Courts ruled that the cities of Essen, Cologne and Bonn must implement diesel bans in certain areas to counter excessive NO2 levels. For the first time, this includes a section of autobahn. The ban will affect Euro 4 diesels from April 2019 but will expand to newer Euro 5 diesels, sold as recently as 2014, in September. This adds to previous rulings against the cities of Stuttgart, Aachen, Frankfurt and Berlin. Although not directly impacting new diesel cars, these events hurt consumer confidence and have been a key factor in the decline of the fuel's popularity. Germany's diesel market share fell to 33% in October 2018 from 45% in October 2016 (KBA), and it accounts for 21% of all diesel car sales in the EU (ACEA). Western European automotive platinum demand is expected to fall by almost 20% this year from 1.5 moz in 2017.



Pd Palladium

Rh

_	Close	Weekly change	High	Date	Low	Date	
\$/oz	1,179	6.14%	1,187	16/11/2018	1,096	12/11/2018	
€/oz	1,034	5.45%	1,042	15/11/2018	977	12/11/2018	

China's vehicle sales are firmly on course for the first annual contraction since 1995, when the market was just 4% of its current size. Year-to-date vehicle sales in China are down 0.1% following a 12% year-on-year drop in sales in October, the largest decline since January 2012, according to the China Association of Automobile Manufacturers (CAAM). The weakness in the market looks likely to continue as Chinese retail sales growth also slowed in October to 8.6%, down from 9.2% in September and the second-lowest level of the last 15 years. Growth will also be difficult to achieve as November and December 2017 were two of the three highest months for sales ever recorded as consumers bought ahead of the sales tax increase at the beginning of 2018. CAAM originally forecast 3% growth for 2018 but at the October briefing conceded that "there could be negative growth". If 2018 sales were to drop by around 3%, this would equate to over 100 koz of lost palladium demand compare to 3% growth. Furthermore, China has contributed 51% of the growth in automotive palladium demand over the last five years, so even the simple lack of growth has significant implications for the palladium market.

No US tariffs on car imports...for now. The Trump administration met last week to discuss the report on the national security implications of foreign car imports to the US. It was decided that no action would be taken at this point but the investigation would continue with a deadline of February. Tariffs could then be introduced on car imports under the same powers used to tariff steel and aluminium. The tariffs could increase the cost of US-made cars by \$2,270 and imports by \$6,875, according to the National Automobile Dealers Association, and would reduce vehicle sales in the US. Each percentage point that sales drop would lead to approximately 20 koz less palladium demand.

Palladium prices break higher. The price of palladium has reached a new all-time high and ended the week at \$1,179/oz, a clear break above the previous high of \$1,140/oz. Palladium is on a strong uptrend as the 100-day average crosses above the 200-day and looks set to go higher as the market is tight and lease rates remain high.

Rhodium, Ruthenium, Iridium

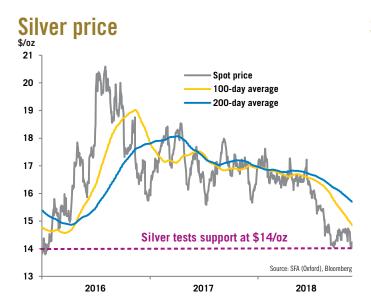
 Rhodium
 Ruthenium
 Iridium

 Reporting week
 \$2,515/oz
 \$285/oz
 \$1,480/oz

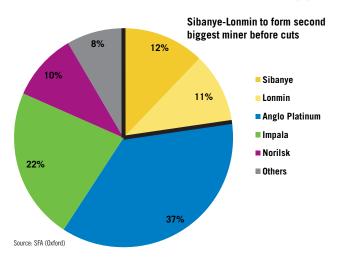
 Previous week
 \$2,450/oz
 \$285/oz
 \$1,480/oz

A ruthenium-coated gold coin has been created in the UK to mark the 100-year anniversary of the Armistice and the end of World War I. Two versions of the coin are being made: a sovereign coin of which 2,018 will be made, and a quarter sovereign of which there will be 4,999. Hattons of London, which commissioned the coin, says ruthenium was chosen as it "produces a more respectful, darkened finish".

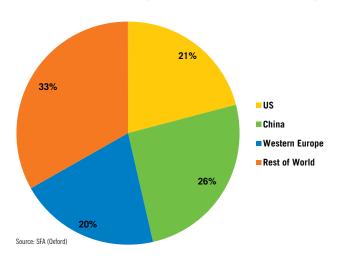
The rhodium price has recovered another \$65/oz to \$2,515/oz and is now up \$125/oz over the last two weeks, the highest point for over a month. If the gains of the last two weeks are repeated for another week, the price would reach a new 2018 high. There was no change in the ruthenium and iridium prices from the previous week.



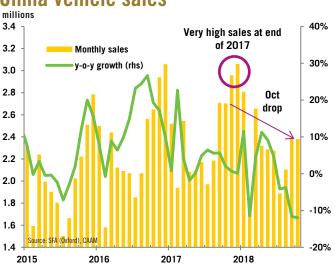
Sibanye and Lonmin share of Pt supply



2017 automotive palladium demand split



China vehicle sales



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