

Our operating context

Market review

A more favourable outlook for the global economy in 2017

According to the International Monetary Fund (IMF), in 2016 the global economy experienced the weakest growth since 2008, at 3.2%. This was due to a challenging first half marked by turmoil in global financial markets. The IMF raised its projection for 2017 global growth to 3.5%, up from their January forecast of 3.4%, largely as a result of a resilient China, rising commodity prices and sturdy financial markets that are offering a brighter outlook for the global economy.

The IMF does warn of risks to its optimistic forecast, which include the threat of deepening geopolitical tensions, the possibility of rising US interest rates which will squeeze economic growth, and the threat that protectionist measures may damage global trade.

The overall demand for PGMs from major sectors remained stable during 2016 and, thanks to the favourable outlook, continued to hold its ground during the first half of 2017. Demand for platinum came from the combination of rising vehicle sales and loadings in Western Europe and increased industrial requirements in both North America and China. Palladium demand remained healthy on the back of increasing vehicle sales in China and the US. The rhodium price performance was due to limited availability (from mines and secondary suppliers) and increased demand from automotive and chemical industries.

Secondary PGM supply was low for most of 2016, however, it recovered in the last few months of 2016 on the back of higher steel, palladium and rhodium prices. In the case of platinum, secondary supply saw an unusual hike as a consequence of the Chinese stocks being recycled as retailers returned pieces to manufacturers, looking for new designs and more gem-set.

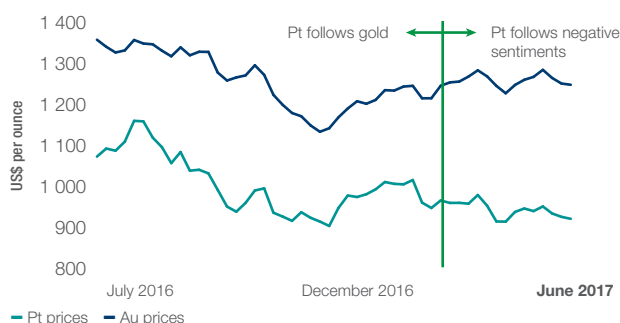
Even though there has been some dollar price increase for PGMs over the reporting period, the rand strength negatively affected the rand basket price, further challenging a supply environment under continued risk due to lack of capital investment. Together with challenges related to safety incidents as well as increasing production costs, the low rand basket prices continue to place shafts at closure risk.

Market performance

The platinum and palladium markets remained in fundamental deficit in 2016, while the rhodium market was in small surplus.

Even though the platinum price closed FY2017 11% lower at US\$922 per ounce, compared to the start of the financial year (US\$1 033 per ounce), the average price for the year was 4% higher at US\$988 per ounce compared to the previous financial year.

Pt and Au prices



Platinum price movements during FY2017 continued to show a disconnect to its fundamentals, which made platinum pricing susceptible to investor sentiment around global risk. Additionally, anti-diesel sentiment in Europe/India and the fall in Chinese jewellery continue to weigh on platinum prices.

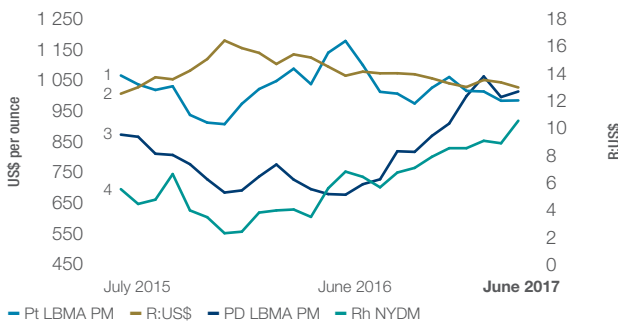
Negative sentiment towards the internal combustion engine, and diesel in particular, has increased over the last 12 months. Much is being made of battery electric vehicles as the solution to effective carbon dioxide and NO_x reduction. However, to be truly effective, these will require a significant increase in renewable energy generation, which is potentially decades away. It is interesting to note that the reduction in diesel vehicle share in the Western European market has been offset by an increase in sales of gasoline vehicles, not battery. Growth in the electric vehicle space has been via hybrid vehicle sales, which do provide a more immediate answer to emissions reductions. Given the introduction of Real Driving Emissions (RDE) testing, these will require higher loadings of PGM's to negotiate the more frequent 'stop-start' conditions.

In contrast, palladium prices closed FY2017 42% higher, at US\$841 per ounce, compared to the start of the financial year (US\$593 per ounce). Palladium prices reached a high of US\$900 per ounce during June 2017 while the average price for the year was US\$737 per ounce or 27% higher than the previous comparable period. Support for palladium was driven by robust demand from autocatalyst fabricators, positive sentiments towards the automobile sector and expectations of further palladium price gains.

Rhodium was a star performer in the PGM complex, with the largest rally during the financial year. Rhodium prices closed the financial year 60% higher at US\$1 018 per ounce after opening the financial year at US\$638 per ounce. The average price for the year, at US\$803 per ounce, was 13% above the comparable period. This was on the back of the absence of liquidity and the increasing demand from both the automotive and industrial sectors.

The South African rand strengthened against the US dollar during FY2017, gaining on average 14% of its value and closing at R13.11. The strength of the rand eroded some of the gains made in US dollar prices.

US\$ per ounce



Automotive

2016 was another positive year for the automotive industry, with global light duty vehicle sales estimated to have reached 93 million units on the back of continued growth in the US, Western Europe and China, offsetting reduced sales in Japan, Eastern Europe and Latin America, relative to the previous year.

Platinum demand continued to benefit from both increased light and heavy-duty diesel vehicle sales, and higher vehicle loadings globally. For 2016, platinum usage amounted to 3.3 million ounces. Similar to platinum, palladium requirements benefited from increased loadings and vehicle sales and usage reached 7.8 million ounces. Rhodium usage in autocatalysts amounted to 0.825 million ounces during 2016, with most of the additional requirements seen during the last quarter.

In the first half of 2017, automotive sales in major markets have been mixed. After a record 2016, sales in the US were expected to decline by more than 2% in 2017, reaching 17.1 million units. In line with this forecast, US sales in the first half of 2017 were down by 2.3% at 8.4 million units. However, US consumers continued to favour heavily PGM-loaded pickup trucks, SUVs and crossovers.

In contrast, Chinese light duty vehicle sales were resilient in the first half of 2017, up 3.8% after recording a 14.9% year-on-year growth in 2016. This figure was impacted by the increased tax incentive for small-engine cars (from 5% in 2016 to 7.5% in January 2017). Full year sales are still estimated to increase by 5%.

After three years of declining sales in Japan, the recovery seen during the last two months of 2016 has continued in 2017. Japanese new car sales surged in the first half of 2017, increasing by 9.2% year-on-year to 2.8 million units. Full year sales are expected to reflect the first increase in three years.

Western Europe saw a decline in the light duty diesel market in 2016. However, a combination of growing vehicle sales and higher loadings saw platinum demand actually increase in this sector by close to 100koz for the year. This growth has continued in the first half of 2017 as sales increased by 3.7% to 7.8 million units. Increased anti-diesel

sentiment in this market continues to pose a significant threat to platinum demand, however, consumers are not switching from diesel to battery or hybrid vehicles but to gasoline. This is compounding the CO₂ compliance issues for manufacturers, as gasoline engines emit around 20% more CO₂.

Infrastructure and, more importantly, consumer acceptance does not seem to be moving fast enough for penetration in the electric vehicle market to meet fleet compliance to CO₂ emissions regulations in 2020. This may yet provide the opportunity for manufacturers to promote available “clean” diesel vehicles, and initiatives such as the German Ministry of Transport’s ‘National Diesel Forum’ provide platforms to do this.

Increasing vehicle sales in other regions are expected to offset the decline in the US market, with estimated global light duty vehicle sales in 2017 forecast to reach a new record of more than 94 million units.

Light-duty vehicle sales

Units: Millions	Forecast 2016	Forecast 2017
North America	17.51	17.10
Western Europe	13.95	14.23
China	24.38	25.60
Japan	4.97	5.00
Rest of the world	32.40	32.30
	93.2	94.22

Source: Reuters, CAAM, Nikkei, LMC

Jewellery

Although the 2016 Platinum Guild International (PGI) retail barometer showed that Chinese demand declined by 8.3% for the year on the back of changing consumer preferences, the Chinese market remained the major consumer of platinum jewellery in 2016 consuming 1.83 million ounces. In the past, jewellery purchases were mainly value-driven, however today, distinctive design, branding and emotional relevance are as important, with jewellery competing with other discretionary items, such as the latest smartphones, and experiential spending such as travel.

The Chinese decline was partially offset by growth in other regions. Even though India had a challenging 2016, as a result of floods, changes in legislation, a jewellery retailers’ strike and demonetisation, the platinum jewellery market remained resilient and grew by 11.4% on the back of successful campaigns by the PGI. In the US, manufacturers and retailers alike attributed the 5.4% growth in their platinum business in 2016 to favourable pricing (relative to gold), an appealing sales story to the trade. Japanese growth of 2% was driven by Japanese society preference for platinum and high disposable income, making non-bridal jewellery the biggest demand driver. The combination of these factors meant global platinum jewellery demand declined by only 117koz, reaching 2.9 million ounces in 2016.

Our operating context

For the first half of 2017, Chinese retail sales decreased but at a slower rate than 2016. The Indian market has bounced back and all of PGI's retail partners report strong growth in the first half of 2017 when compared to 2016. The US and Japanese markets are recording similar growth to 2016.

Industrial

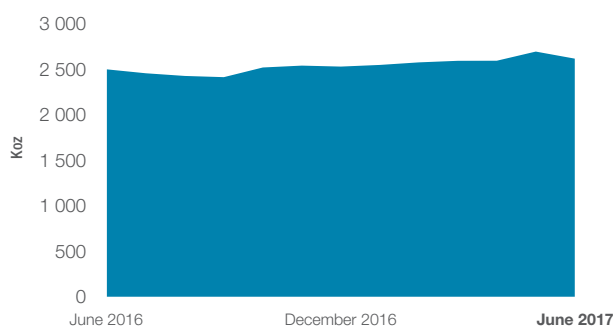
The low prices of palladium, and more so platinum and rhodium, generated some additional industrial interest in these metals in 2016. In the case of platinum, the main drivers for this growth were an increase in capacity expansions for paraxylene production and steady growth within the silicone industry, offsetting a global contraction in nitric acid production. Demand for platinum in the petroleum industry saw moderate gains in the first half of 2016, largely driven by growth in new plants and plant expansions in North America. Meanwhile, China continued with previously planned projects in the chemicals and glass sectors.

For the first half of 2017, demand for platinum and rhodium in the industrial sector saw moderate gains driven by the chemical and glass sectors. Palladium demand during the first half of the year declined slightly compared to first half 2016 as a result of higher prices.

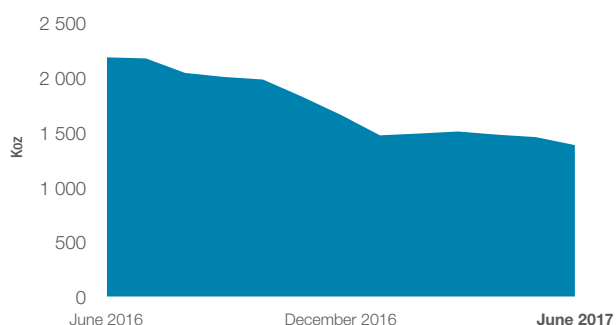
Investment

After a decline of 9koz in 2016, the global platinum exchange traded fund (ETF) holdings increased by 87koz to 2.62 million ounces during the first half of 2017. In contrast, palladium ETF holdings continued their decline, decreasing by 276koz in the first half of 2017, following a decline of 640koz in 2016. Palladium liquidations were driven by profit taking on the back of higher palladium prices.

Platinum ETF investment June 2016 – June 2017



Palladium ETF investment June 2016 – June 2017



Source: HSBC

Unlike the last two years' higher platinum investment inflows in Japan, the first half of 2017 has seen some profit taking by the Japanese market, with the net purchases amounting to only 68koz.

The World Platinum Investment Council (WPIC) market development programmes have continued with the launch of two significant new initiatives in the first quarter of 2017. In March, the WPIC announced the addition of platinum to the Bullion Vault online precious metals platform. The partnership means 65 000 private investors using this marketplace now have access to platinum. Also, the WPIC supported the launch of India's first non-jewellery platinum product with partner, Muthoot Exim. The launch of the Anantavarsham Platinum Series of deities is the first of a number of initiatives planned for India, a market that has enjoyed significant growth in the last two years. At this stage, the WPIC is ahead of its forecast of additional demand generated, with more than 60koz bought.

Platinum net long positions on NYMEX (-683koz) and TOCOM (+166koz) declined by an average 517koz in the first half of 2017, closing at 1.23 million ounces. The net change in NYMEX positioning was driven by a 934koz increase in gross shorts, partially offset by 251koz increase in long positions. The increase in shorts is largely as a result of the lack of confidence in diesel automotive demand, increasing discussions on battery electric vehicles and declining Chinese jewellery demand.

Changes in palladium positioning on NYMEX were largely positive during the first half of 2017. A 582koz increase in longs outweighed the 281koz increase in shorts, resulting in a 301koz increase in net length, highlighting a positive outlook by investors on palladium fundamentals.

2017 outlook

The gradual recovery of the global economy, with the anticipated revival in industrial production and consumer demand, is expected to be the biggest driver of increased PGM demand in the medium to long term. In our view, both the platinum and palladium markets will remain in a fundamental deficit in 2017, whilst rhodium is expected to remain in a small surplus.

We expect a slight decline in the use of platinum in the automotive industry in 2017, in favour of palladium and driven by an increasing share of gasoline vehicle sales. However, with increasing palladium prices, we expect that research into the back substitution of platinum in three-way catalysts will result in increased usage of platinum in gasoline engines in the coming years.

Platinum

Platinum supply/demand outlook

'000toz	SFA/WPIC		Impala	
	2016	2017 (Forecast)	2016	2017 (Forecast)
DEMAND				
Automotive	3 435	3 405	3 300	3 295
Jewellery	2 565	2 530	2 905*	2 865*
Industrial	1 775	1 610	1 970	2 035
Investment	505	250	420	150
Total demand	8 280	7 795	8 595	8 345
SUPPLY				
Primary supply	6 055	5 970	5 630	5 830
Recycling	1 865	1 760	2 225	2 035
Total supply	7 920	7 730	7 855	7 865
Movement in stocks	(360)	(65)	(740)	(480)

* PGI retail barometer estimates used for platinum jewellery demand

Palladium

Palladium supply/demand outlook

'000toz	SFA/WPIC		Impala	
	2016	2017 (Forecast)	2016	2017 (Forecast)
DEMAND				
Automotive	8 000	8 110	7 775	7 905
Industrial	2 050	1 930	1 940	1 930
Investment	(640)	*	(640)	(275)
Jewellery	240	215	100	100
Total demand	9 650	10 255	9 175	9 660
SUPPLY				
Primary supply	6 800	6 930	6 180	6 525
Recycling	2 225	2 230	2 545	2 735
Total supply	9 025	9 160	8 725	9 260
Movement in stocks	(625)	(1 095)	(450)	(400)

* Information not yet available

Rhodium

Rhodium supply/demand outlook

'000toz	SFA/WPIC		Impala	
	2016	2017 (Forecast)	2016	2017 (Forecast)
DEMAND				
Automotive	835	830	825	840
Industrial	185	165	155	160
Investment	5	*	*	*
Total demand	1 025	995	980	1 000
SUPPLY				
Primary supply	765	735	770	795
Recycling	285	295	290	320
Total supply	1 050	1 030	1 060	1 115
Movement in stocks	25	35	80	115

* Information not yet available

Our operating context

The realisation of value is also dependent on successfully negotiating a challenging operating environment where various issues have important implications for our business model.

Macro-economic factors

Over the last year we have witnessed increasing political and economic uncertainty globally, evidenced by, amongst others, the Brexit vote in the UK; weaker-than-expected economic growth in the US and China; structural adjustments by commodity exporters to a long-term decline in their terms of trade; demographic and labour market adjustments; and a protracted slowdown in productivity, which in turn have fuelled protectionist policy positions and political discontent.

In South Africa, these factors were further compounded by recessionary trends, credit rating downgrades, allegations of state capture, growing unemployment, and increasing political and social tension.

Impact on value: A negative macro-economic outlook inevitably impacts GDP growth expectations and the demand for natural resources globally, including the demand for PGMs, which is closely linked to vehicle sales.

Our response: We remain sceptical of a near-term PGM price recovery in the face of lingering political and economic uncertainty. To this end, we:

- actively and continuously assess conditions in the countries where we sell our metals across all the key demand sectors
- tailor our market development activities to support key market segments and grow new areas of demand
- align and support key institutional partners (such as WPIC, PGI, IPA)
- grow and sustain relationships with key customers globally.

Prices

Despite continued strong PGM demand, metal prices have remained muted for some time with increased uncertainty on near-term price recovery and longer-term price expectations. Negative sentiment related to anticipated weaker supply/demand fundamentals has been largely informed by the recent Volkswagen diesel scandal, which has impacted diesel vehicle growth expectations and the projected rate with which the vehicle fleet could be electrified, slowing jewellery sales in China and the view that substantial above-ground metal stocks remain available to cap any near-term price recovery.

Impact on value: Low metal prices have a direct impact on profitability, the generation of shareholder returns and our ability to fund and grow the business into the future.

Our response: Implats began positioning itself for a “lower-for-longer” price environment in 2015 through targeted cost containment measures, focused productivity enhancement initiatives, rationalising and prioritising capital allocation, and maintaining a strong balance sheet.

We continue to critically review strategic cost containment and cash preservation measures. To this end, we successfully issued a new R6.5 billion five-year convertible bond in May 2017 to re-finance the bonds that were due for repayment in February 2018 and we maintain unutilised debt facilities of R4 billion available to 2021.

We are focused on fostering closer relations with key customers globally to build a common understanding of medium to longer-term pricing scenarios to enhance accuracy for planning purposes, strategic decision-making and optionality.

Supply/demand fundamentals

While sentiment towards platinum has weakened over the past five years, palladium fundamentals have strengthened significantly. Palladium is principally used to clean exhaust emissions in gasoline vehicles, which experienced strong sales growth over the period. Platinum, on the other hand, has lost market share to palladium in this key application, based on a lower palladium price and more diversified global supply. Platinum also experienced lower jewellery demand recently from the key Chinese market.

Impact on value: Supply/demand fundamentals have a direct impact on metal prices and market sentiment, which has resulted in platinum prices remaining relatively subdued over the past five years, with palladium prices growing strongly over the same period, particularly more recently. The potential for prolonged, relatively flat platinum prices remains strong, while palladium, already in an unsustainable deficit, should continue to receive strong price support, ultimately incentivising a switch back to platinum use in the auto sector.

Flat prices will result in further postponement of capital investment in the mining sector in the short term, ultimately impacting platinum and palladium primary supply globally. The socio-political environment in southern Africa is likely to further constrain primary supply growth. Allied to this, we have also seen secondary supply struggling to maintain projected growth, necessitating a drawdown from available above-ground inventories, which is anticipated to become even more pronounced in future.

Both platinum and palladium will continue to receive demand support from increasing emission regulations and growth in the global vehicle fleet in the short to medium term.