

PRECIOUS APPRAISAL

No. 18
20th June 2022



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MARKET SPOTLIGHT

Falling truck sales show US economy is slowing, putting PGM demand at risk

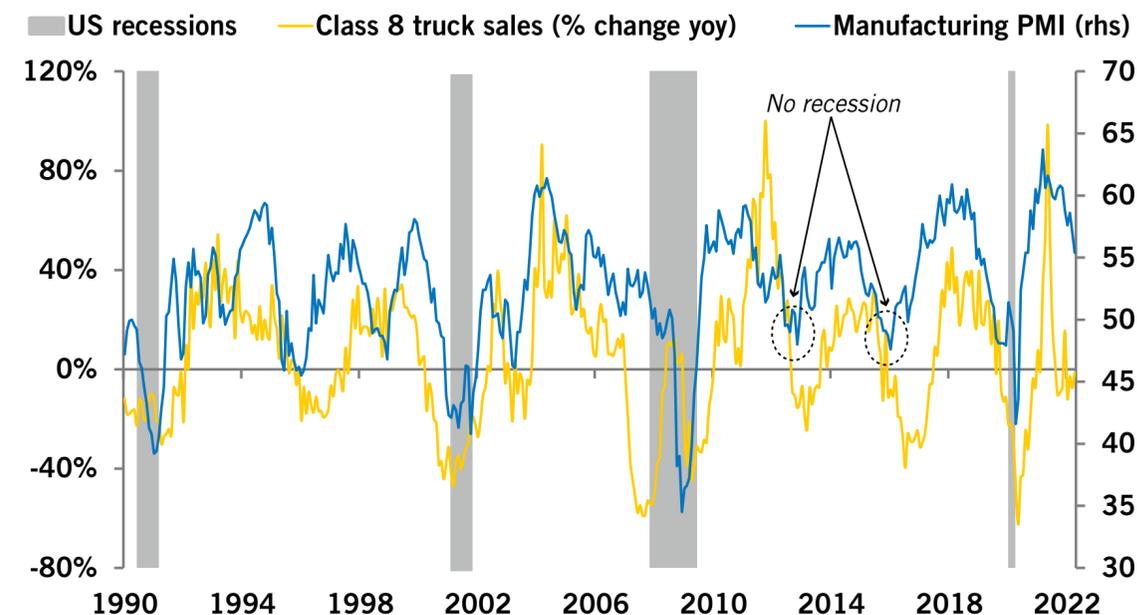
US heavy-duty truck sales are now shrinking. A sharp recovery in sales post-Covid was seen in 2021, thanks to an increase in goods demand. However, in Q1 of 2022, the North American market for heavy-duty trucks contracted by 7.5% year-on-year from 54,222 sales to 50,132, while new orders fell by 46%. Heavy-duty autocatalysts account for 30% of all US automotive platinum demand at 125 koz (incl. buses) and approximately 4% of worldwide automotive platinum demand.

The US economy is slowing down, and a recession is possible. Declining truck sales are a leading indicator for a downturn in business cycles as indicated by the manufacturing PMI. The measure of manufacturing activity fell to 55.4 in April, which still represents robust health and expansion in the sector, but further falls look likely. A sliding PMI does not guarantee a recession, as evidenced when it fell below 50 in both 2012 and 2016. This time however, other recession indicators are flashing red. The US Treasury’s 2- to 10-year bond yield curve experienced an intra-day inversion on Monday last week – the second time the short-term interest rates exceeded the longer-term this year. Oil price shocks such as the world is currently experiencing have also historically preceded recessions.

PGM demand is at risk. Declining truck sales will reduce platinum demand, but the implications of a falling PMI go beyond slowing truck sales and in a recession, wider PGM demand is affected. Palladium demand is already under pressure from poor auto sales owing to persistent chip problems and supply chain roadblocks constraining production. The limiting factor for auto sales could switch from component-limited production to being the consumer as economic growth is stunted and auto sales stall in a recession. The US is the second largest platinum jewellery market after China, consuming nearly 300 koz per year. Platinum jewellery sales bounced back to pre-pandemic levels in 2021. This momentum was carried over into Q1 2022, as sales from PGI partners withstood a 1.5% contraction in US real GDP to grow 23% year-on-year. Jewellery sales are unlikely to be able to continue this resilience in a protracted downturn, however.

Supply risks are receding so prices could have more near-term downside. Potential supply issues are reducing in magnitude and Russian supply of PGMs has been largely uninterrupted thus far in 2022. In addition, possible interruption to mining due to strikes in South Africa appears less likely since Anglo American Platinum signed a five-year wage deal with the two largest mining unions. Platinum is less exposed to the auto sector than palladium and rhodium, where automotive demand represents over 85% of total demand, but jewellery and industrial demand also drop under weaker economic conditions. Total North American demand for platinum, palladium and rhodium is 1.1 moz, 1.8 moz and 200 koz respectively, accounting for 16-19% of global demand for each metal. Reduced overall demand will result in lower prices, with palladium and rhodium particularly exposed.

Truck sales lead manufacturing downturns



Source: SFA (Oxford), Bloomberg

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PRECIOUS METALS REVIEW

Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,841	-1.41%	1,865	13/06/2022	1,805	14/06/2022
€/oz	1,758	-0.98%	1,779	13/06/2022	1,733	15/06/2022

Real yields remain deeply negative despite aggressive Fed tightening.

Following May’s FOMC meeting, Jay Powell expressed his preference for a 50 bp hike at the June meeting. However, following unexpectedly hot US inflation figures for May, the markets began to price in a greater hike of 75 bp and this proved to be the case in June. The 75 bp hike in federal funds rates is the largest single rise since 1994. At that time, the Fed was able to coordinate a soft landing for the economy and avoid triggering a recession by bringing the federal funds rate above inflation. In 1994, the hike was from a base of 4.75%, and was a move to tackle inflation at 2.6%, resulting in real rates of >2.5%. Now however, real rates are 7% negative and inflation is topping 8.5%. Even with aggressive hikes, real interest rates will likely stay negative into next year. Rapid rate rises tend to come before recessions, and if inflation maintains its momentum, similar hikes are a foregone conclusion in July and September, increasing the risk of economic contraction. Gold has a good track record during recessions when in a longer-term bull market. Currently, price momentum is not positive, but even in a recession the gold price tends to be much less volatile than other assets.

Central banks continue their affinity for gold. Rising inflationary pressure and anticipated tightening of financial conditions are prompting more central banks to consider increasing gold reserves than in the previous year (source: World Gold Council). A survey of central banks’ attitudes to

gold revealed that 24% of those surveyed intend to increase their gold holdings in the next 12 months, up from 21% in 2021. In 2021, central banks collectively increased their gold holdings by more than 400 t, but purchases may not reach that level again as this was mostly due to large one-off purchases, and year-to-date purchases total just 63 t. Emerging market banks tend to see gold more as a long-term store of value and for its performance during times of crisis than developed nations. Developing markets are prone to greater currency volatility and gold can offer a stable portfolio diversifier in times of geopolitical instability. Against a backdrop of more testing economic and geopolitical times, gold buying by central banks will likely be maintained, particularly in emerging markets with domestic gold production.

Consolidation across gold majors looks set to continue in 2022. Last year saw significant M&A among the major gold producers. Kinross acquired Great Bear Resources, Newcrest took over Pretium Resources and there was the \$10 billion merger of northern hemisphere producers Kirkland Lake and Agnico Eagle, creating the world’s third largest gold producer. Now South Africa’s Goldfields has proposed a buyout of Yamana. The two acquired companies produced 2.34 moz and 880 koz respectively in 2021 and the combined company could produce ~3% of global supply making it the fourth largest producer. The buyout would provide Goldfields with both producing assets and pipeline projects.

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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	21.65	-1.13%	21.97	16/06/2022	20.90	14/06/2022
€/oz	20.67	-0.67%	20.90	17/06/2022	20.06	14/06/2022

Brazing and soldering demand for silver is likely to be lower than projected. Initial demand projections for the sector this year were approximately 49 moz for joining metal tubes and fittings (source: Silver Institute). The actual figure is likely to be lower than this owing to slowing economic growth in the US and China in Q1. With a recession appearing more likely in the next 24 months, overall industrial activity could contract, reducing demand in the largest demand sector for silver. Total industrial demand for silver is forecast to be 540 moz in 2022, which accounts for 49% of global demand.

The silver price could decline further as we enter historically weak months. Silver had been trading in a range between \$21.50/oz and \$30/oz since August 2020, but recently the price moved out of that range, dipping below \$21/oz. Seasonality indicates that the next three months will typically see a weaker price, so the price could slip further.

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Platinum



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\$/oz	938	-3.89%	957	13/06/2022	920	14/06/2022
€/oz	896	-3.49%	914	13/06/2022	883	14/06/2022

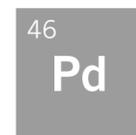
China’s platinum jewellery sales were predictably weak in Q1; the US shone through. Jewellery demand in China was heavily impacted by Covid measures during the first quarter. Sales from PGI partners in the country were down by 20% as retail consumption fell. The Chinese market is the largest for platinum jewellery at more than 750 koz, representing 45% of jewellery demand worldwide. The latest consumer data suggests that the trend of lower sales will continue in Q2 and beyond. Retail sales fell 6.7% year-on-year in May, a symptom of fears of relapsing into strict lockdowns keeping people in their homes. Longer-term, Chinese jewellery demand is forecast to weaken as demographic changes erode the main market for platinum products. Conversely, platinum jewellery sales have been booming in the US, continuing the momentum seen in the last months of 2021. Fewer Covid restrictions in the US have resulted in retail sales growth (1.4% month-on-month in March) and increased demand for jewellery. Despite a GDP contraction in Q1, PGI partner sales were up 23% year-on-year, indicating healthy consumer demand. This is likely to wane though, as economic pressures mount in the coming months and prices come off further from highs in March.

A large project is delayed as Russian stakeholders pull out. Potentially Zimbabwe’s largest PGM mine, the Darwendale project situated on the Great Dyke, could have produced ~170 koz at steady-state once in production. This would have accounted for approximately 34% of Zimbabwe’s platinum production. Currently, the platinum market is predicted to have a surplus of more than 600 koz this year, which should keep the price subdued.

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Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,827	-4.96%	1,918	17/06/2022	1,790	13/06/2022
€/oz	1,744	-4.54%	1,827	13/06/2022	1,717	13/06/2022

The impacts of flooding will reduce US PGM output this year. Heavy rain and warm weather melting snow resulted in flooding in southern Montana last week around the palladium-rich Stillwater PGM mine. Although the mine itself has not been flooded, sections of the access road and bridges have been damaged. The Stillwater and East Boulder mines produced 441 koz of palladium in 2021, accounting for 44% of Sibanye-Stillwater’s global palladium production and nearly 100% of US domestic supply. Currently, Stillwater mine (~60% of deposit production) is not operational, while East Boulder (~40% of production) is fully functional. The company has yet not released an estimate of the time needed to repair the road. A month’s delay to production would reduce palladium output by ~25 koz and less than 10 koz of platinum. That would modestly tighten the palladium market which is expected to be in surplus this year. However, there was little reaction from the price, which may remain subdued as consumers struggle with rising inflation that, along with higher interest rates, could stifle light-vehicle sales and reduce demand from the auto sector.

Palladium demand continues to be hit by declining car sales. US light-vehicle sales fell by 29% in May to 1.1 million from 1.6 million the previous year. This resulted from a combination of headwinds, including still very low vehicle inventory (around 25 days’ supply) and fewer selling days compared with 2021. European Union new car registrations were similarly down in May, decreasing 11.2% year-on-year. Combined, the automotive palladium demand of these markets exceeds 35% of global demand at around 2.9 moz. Adding to vehicle inventory woes are the significant downgrades to production already seen, owing to component shortages and other issues related to the Russia-Ukraine conflict. In 2022, global light-vehicle production is expected to be around 80 million, up 6% year-on-year, but still ~10 m units below average production in 2018 and 2019 and below expectation. This adds to last year’s production losses of 2.6 million units in Europe and 2.3 million units in North America, together costing the palladium market over 1.1 moz in lost demand.

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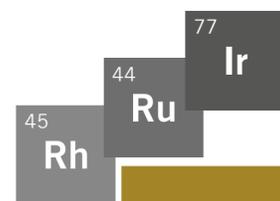
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Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$15,100/oz	\$645/oz	\$5,150/oz
Previous Week	\$15,550/oz	\$670/oz	\$5,250/oz

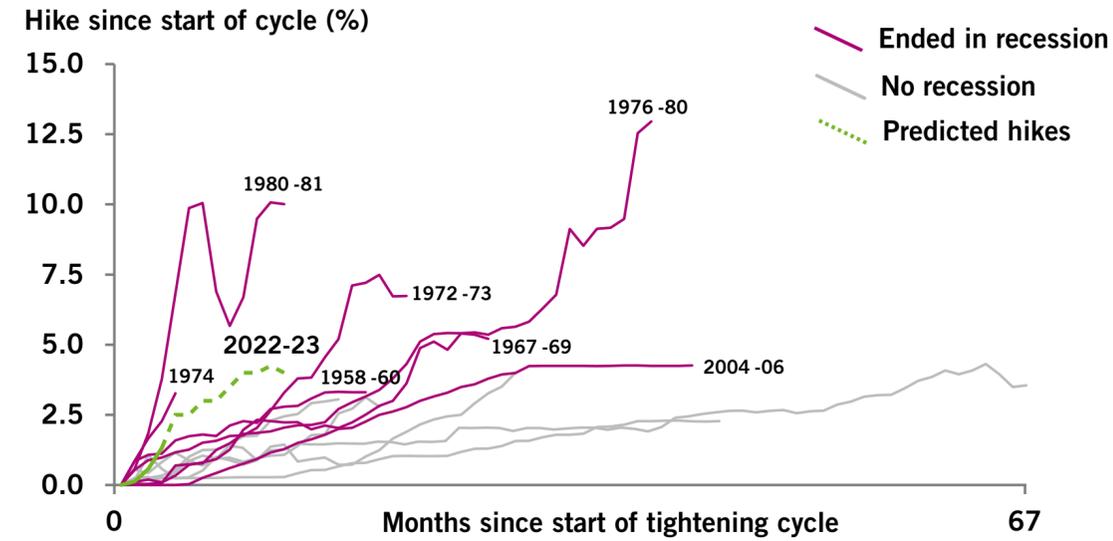
The Stillwater shutdown has little impact on minor PGM supply. As the Stillwater mine ore contains only very small quantities of rhodium, iridium and ruthenium, the shutdown of the mine for a period will likely have little influence on the market balance of the minor PGMs.

All the minor metal prices fell last week. The ruthenium price decreased by \$25/oz, following the rhodium price down after trading flat for two weeks. Since the last edition of the Precious Appraisal, rhodium has plummeted \$1,450/oz, finishing the week at \$15,100/oz, the lowest price since November 2021. Given the uncertain economic outlook, there is further downside risk to the minor PGMs in the medium term.

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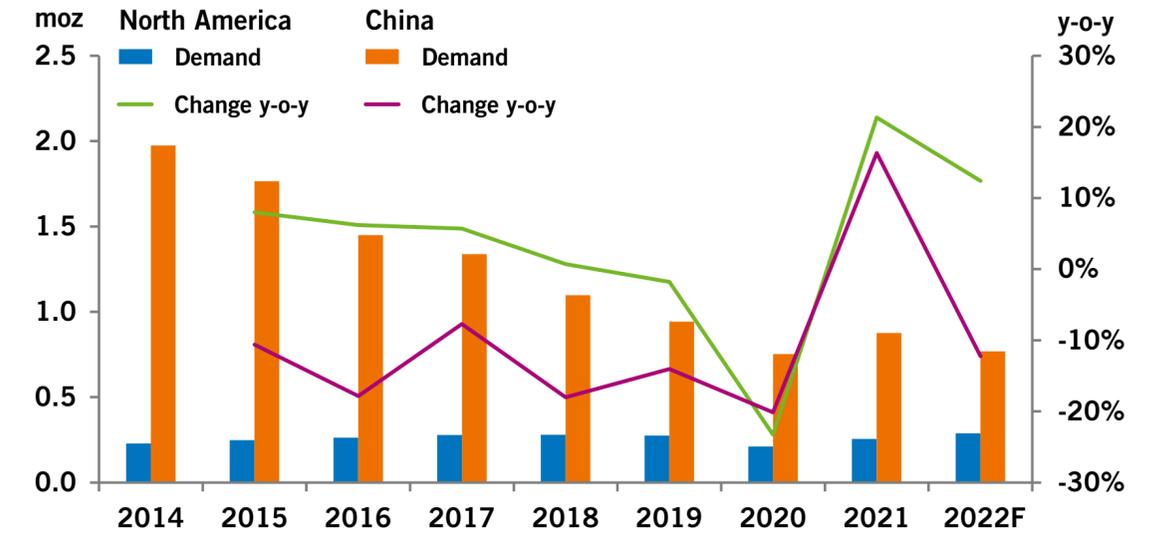
TRENDS AND INVESTMENTS

Fed tightening cycles and recessions



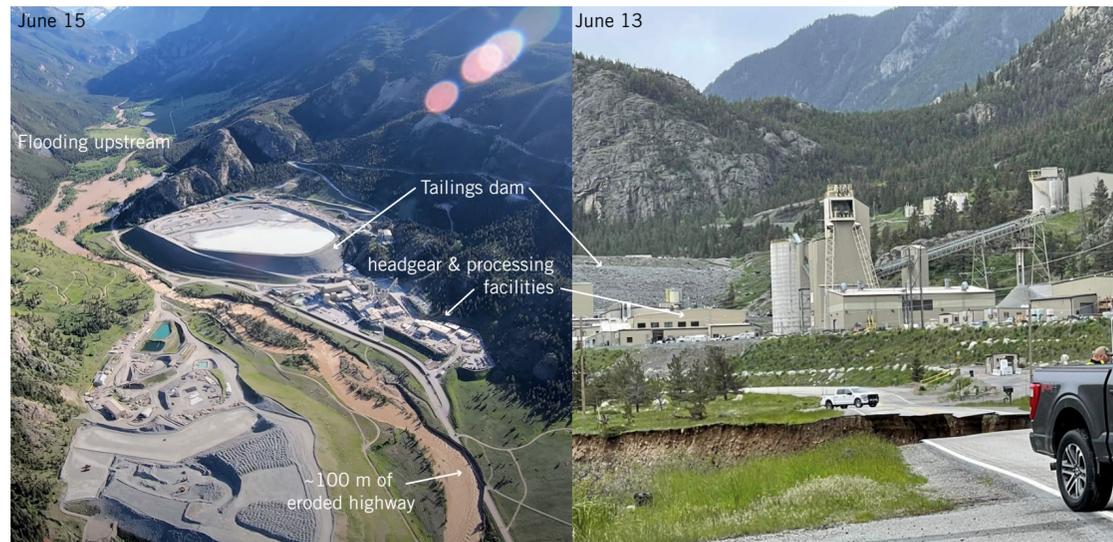
Source: SFA (Oxford), Bloomberg

China and N. America platinum jewellery demand



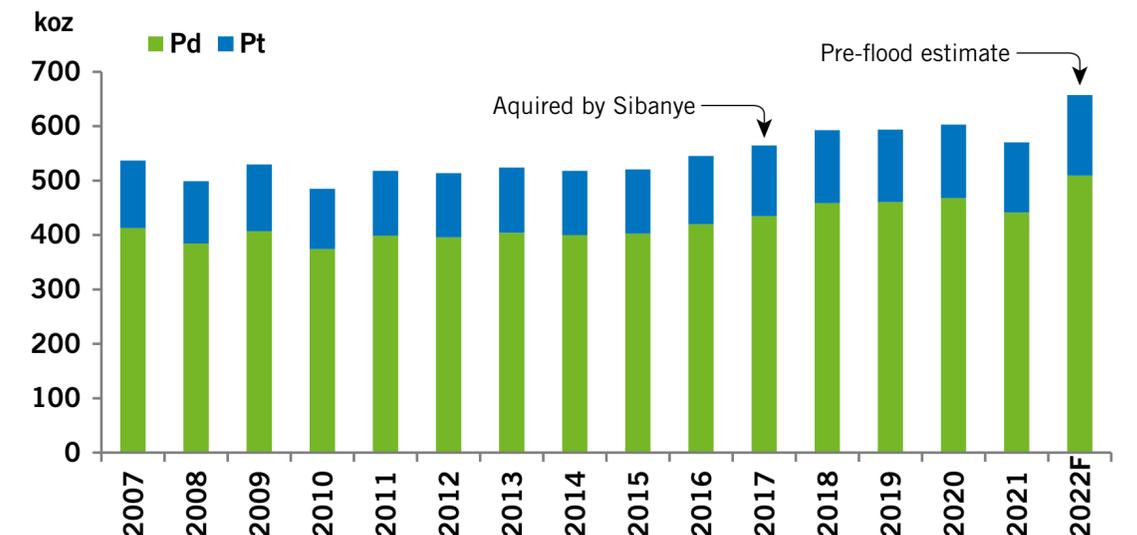
Source: SFA (Oxford)

Flooding around Stillwater mine, Montana



Source: SFA (Oxford), Youtube, Stillwater County MT DES

Stillwater and East Boulder PGM production



Source: SFA (Oxford)

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