

PRECIOUS APPRAISAL

No. 32
10th October 2022

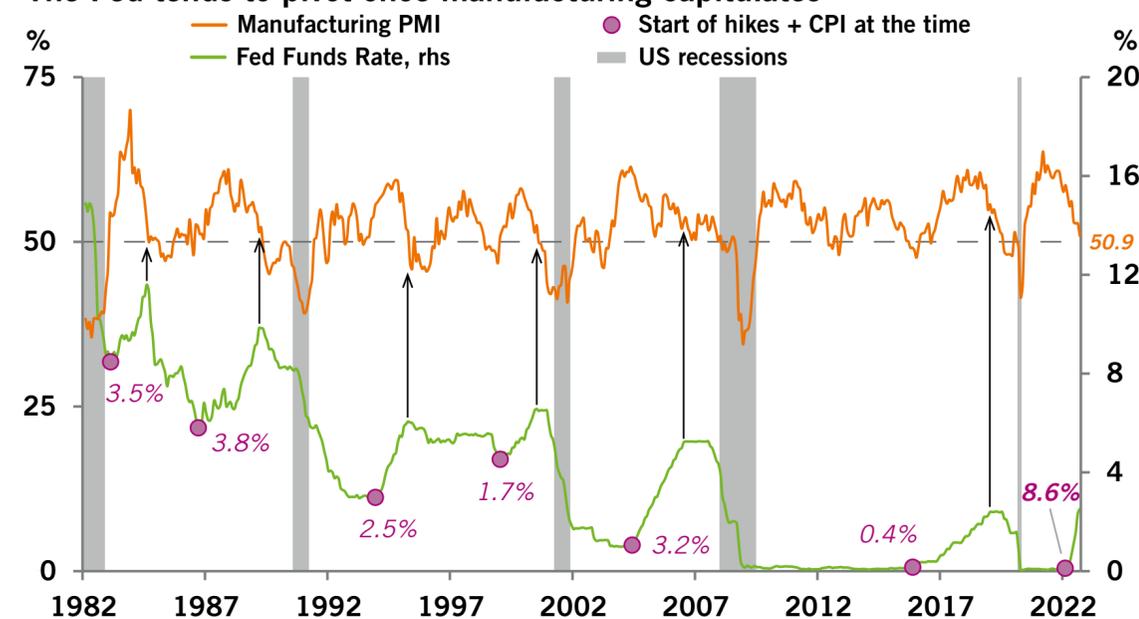


MARKET SPOTLIGHT

Gold could struggle to make headway until the Fed changes course

Manufacturing output in the US is slowing down and in the past the Fed has cut rates to support activity. The manufacturing PMI for September came in at 50.9, representing only slight growth in output. The prevailing trend indicates it could fall lower in Q4, adding to pressure on the Federal Reserve to alter its current strategy of large jumps in interest rates. This suggests that a pivot in policy to one that maintains or cuts rates could be imminent.

The Fed tends to pivot once manufacturing capitulates



Source: SFA (Oxford), Bloomberg

However, interest rates are unlikely to be cut soon. At the end of March 2022, the implied interest rate by the end of the year was just 2.4%. Now, as inflation has continued to rise, larger hikes are forecast to take the Federal Funds Rate to 4.5% by the middle of next year. The Fed is far behind the curve in combating inflation that is still well above its 2% target rate.

Inflation was also elevated when the first hike was made, as compared to previous inflation-busting cycles. In addition, the supply-side element of the current inflation crisis cannot be solved with rate hikes, meaning that demand-side inflation may need to be more firmly suppressed. The Fed must be willing to endure a significant contraction in manufacturing if it wants to bring down inflation to target levels. This is something it last had to do in the early 1980s.

The futures market sees a rate cut coming at the May 2023 FOMC meeting. The Fed's major metric to gauge the impact of its policy is the US jobs market. The 3.5% unemployment rate is still at a historically low level and indicates a continued robustness in the jobs market, and that further rate hikes can be accommodated by the economy.

A longer period before a change in the Fed's stance could mean that the gold price is pinned down for longer. Interest rate rises have been supporting the strength in the US dollar. As one of the primary drivers of the gold price, when the dollar rises the dollar price of gold tends to retreat and vice versa. Therefore, once a slowing US economy forces a Fed policy pivot, the dollar would be expected to begin depreciating, in turn boosting the gold price. The longer the Fed continues on its current path, the longer that a strong dollar will depress the gold price.

If the Fed pivots, then gold could rebound. The European Central Bank is also raising rates despite a weak economic outlook. It lags the Fed in its hikes, and even hotter inflation may mean an even longer process. If the Fed stops hiking before the ECB, the euro can be expected to appreciate versus the dollar, and that could see the dollar price rise and outperform gold priced in euros.

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PRECIOUS METALS REVIEW

Gold

| ⁷⁹ Au | CLOSE | WEEKLY CHANGE | HIGH | DATE | LOW | DATE |
|----------------------------|-------|---------------|-------|------------|-------|------------|
| \$/oz | 1,703 | 1.90% | 1,729 | 04/10/2022 | 1,660 | 03/10/2022 |
| €/oz | 1,741 | 1.89% | 1,753 | 07/10/2022 | 1,693 | 03/10/2022 |

Gold investors are winning in non-dollar currencies, but investors are still jittery. In dollar terms, the gold price has declined by 5.6% year-to-date, and 4.7% in the last quarter, as a result of the appreciating dollar. This also means that gold has yielded positive returns in all other major market currencies. Year-to-date returns for gold priced in pounds sterling are 11.4%, 7.5% in euro terms and 18.3% in yen. Comparatively, the S&P 500 is down more than 20% since January. Despite gold's outperformance, precious metal investment vehicles have been experiencing significant outflows in most regions as safe-haven demand continues to waver. Globally, more than 7 moz has been removed from gold-backed ETFs year-to-date. The gold price is expected to remain depressed in Q4'22 as the Fed continues to raise rates. Consequently, ETF outflows are likely to continue.

The gold price has rallied nearly €50/oz since the last trading days in September, regaining most of the losses experienced in the second half of the month to reach €1,741/oz.

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Silver



| | CLOSE | WEEKLY CHANGE | HIGH | DATE | LOW | DATE |
|-------|-------|---------------|-------|------------|-------|------------|
| \$/oz | 20.24 | 5.39% | 21.24 | 04/10/2022 | 19.22 | 03/10/2022 |
| €/oz | 20.69 | 5.38% | 21.33 | 04/10/2022 | 19.63 | 03/10/2022 |

India’s silver demand is bouncing back. The latest trade data shows imports of all forms of silver are returning to more normal levels following severe disruption from Covid in 2020-21. Prior to the pandemic, India imported an average of 5,700 tonnes of silver each year (since 2012). In 2019, imports of all forms of silver totalled 5,970 tonnes but this fell by 63% to 2,220 tonnes once lockdowns and restrictions were implemented in 2020. Imports remained low last year, particularly for bars and other unwrought metal. Implied demand for bars is on track to recover to 2018 levels this year. The relaxation of lockdowns in India and the introduction of domestic silver-backed ETFs have resulted in a marked demand recovery. August import data also suggests that domestic silver jewellery manufacturing could be growing. Import volumes of semi-manufactured silver are 7.5 times larger than pre-pandemic levels and account for 47% of total imports year-to-date, compared to just 7% in 2019. Wholesalers and fabricators may have taken advantage to restock in August as prices fell to a more than two-year low by the start of September. A weakened rupee may, however, help strengthen the local silver price, and thus imports may be lower in October.

Silver’s rally stalls at August high. The silver price jumped by more than 8% on Monday last week, to \$21.23/oz intra-day before finding resistance around the previous high from mid-August. Silver pared some gains towards the end of the week, but still closed the week up 5.39% at \$20.24/oz.

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Platinum



| | CLOSE | WEEKLY CHANGE | HIGH | DATE | LOW | DATE |
|-------|-------|---------------|------|------------|-----|------------|
| \$/oz | 925 | 6.46% | 941 | 04/10/2022 | 863 | 03/10/2022 |
| €/oz | 946 | 8.82% | 959 | 07/10/2022 | 882 | 03/10/2022 |

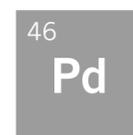
Risk of strike rises at South African PGM operations. Earlier this year most major platinum miners managed to secure new wage deals with no disruption to mine operations or industrial action. Sibanye-Stillwater (SSW) announced at the end of September that it had come to agreements with two of the smaller mineworker unions on deals broadly similar to its South African peers. However, the AMCU, the largest union at SSW’s Marikana and Rustenburg operations, declined the offer and has declared a dispute with the platinum miner. The dispute has been referred to the independent Commission for Conciliation, Mediation and Arbitration, which has the authority to issue a certificate of non-resolution in relation to the negotiations. This would permit the union to legally embark on a strike. Before this can happen, the parties normally undertake mediation with the commission to attempt to settle the dispute. Owing to the large number of AMCU members at SSW’s PGM operations, if negotiations fail and the union calls a strike, work at shafts would most likely be halted. SSW’s 1.7 moz of platinum production in 2021 accounted for 39% of South Africa’s platinum output and a quarter of global supply. Cuts to South African refined production this year, including the delayed Polokwane smelter rebuild, are forecast to tighten the market in 2022. The risk of additional production losses from SSW’s operations in Q4’22 could add additional upward pressure to the platinum price, although the market is likely to remain in surplus.

India’s Customs Office says not all that glitters is gold. As of last week, India raised the import duty on platinum from 10.75% to 15% to bring it in line with gold’s import tax, and close a loophole that allowed gold to be imported as platinum when alloyed with as little as 2% platinum. As a result, in advance of the new duty official reported platinum imports for September were reported as 790 koz, more than double India’s total estimated demand for 2022.

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Palladium



| | CLOSE | WEEKLY CHANGE | HIGH | DATE | LOW | DATE |
|-------|-------|---------------|-------|------------|-------|------------|
| \$/oz | 2,239 | 2.41% | 2,350 | 04/10/2022 | 2,164 | 03/10/2022 |
| €/oz | 2,291 | 2.32% | 2,361 | 04/10/2022 | 2,208 | 03/10/2022 |

The East Coast-West Coast alliance against the combustion engine.

The New York State Governor has instructed the state agencies to take regulatory action to systematically reduce the sales of internal combustion engine (ICE) vehicles to zero by 2035. The proposed action includes funding for charging infrastructure and subsidising electric vehicle procurement. The announcement follows California’s decision earlier this year to ban the sale of pure-ICE vehicles. Combined, the two states contribute ~18% of total new light-vehicle sales in the US. New York’s action will require 35% of all new light-vehicle sales to be zero emission from 2026. By this time, this could be equivalent to approximately 350,000 battery electric vehicles (BEVs) per year. Currently, there are 115,000 plug-in-hybrid vehicles and BEVs on the roads in New York State. Country-wide BEV market penetration was 6.3% in July.

In the near term, although increasing BEV sales are eroding demand for PGM-bearing autocatalysts, ICE vehicles still dominate the market. US automotive palladium demand was forecast to grow by 5% this year to 1.5 moz, though production downgrades due to semiconductor chip supply problems and other issues will mean this growth is unlikely to be realised. Palladium supply issues mean that the market is likely to be in a deficit this year, which has kept the price above \$2,000/oz.

Demand for new light vehicles may struggle in 2023. Higher borrowing costs and inflated sticker prices are driving up monthly payments for car buyers in the US, where more than 88% of new light-vehicle sales are financed. A record-high 14% of US car loans now have monthly repayments of more than \$1,000. Higher repayments put many new vehicles out of reach for many potential buyers, effectively reducing demand for new vehicles. The palladium market may return to a significant surplus in 2023, pushing the price lower, if supply recovers as expected and automotive demand falls in the US, as economic growth slows and rising costs take new cars out of the reach of more people.

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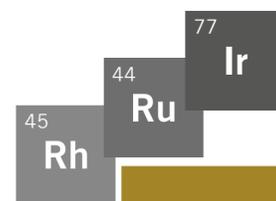
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Rhodium, Ruthenium, Iridium



| | RHODIUM | RUTHENIUM | IRIDIUM |
|----------------|-------------|-----------|------------|
| Reporting Week | \$15,450/oz | \$515/oz | \$4,250/oz |
| Previous Week | \$14,950/oz | \$515/oz | \$4,250/oz |

Governments are backing low-cost green hydrogen production, potentially benefitting iridium demand. Nel Hydrogen has been granted \$5.6 m from the US government to accelerate PEM electrolyser stack development. This will include development to optimise electrolysis membranes for hydrogen production. This process could involve the fine tuning of the ratio of iridium and platinum in the membrane catalyst and the reduction of loadings to cut costs. In Europe, the French government has offered a subsidy of up €86 m for Elogen's electrolyser factory with a view to begin shipping units in Q4'23. The funding is part of the European Commission's Hy2Tech programme to enable the expansion of domestic green hydrogen production to allow a greater degree of energy independence. Currently, iridium used in the hydrogen sector accounts for only a small proportion of overall demand. Initiatives such as Hy2Tech and funding from governments can potentially allow the sector to expand and increase the sectoral demand for iridium.

Since the last edition, the rhodium price has gained \$500/oz while the iridium and ruthenium prices have stayed flat.

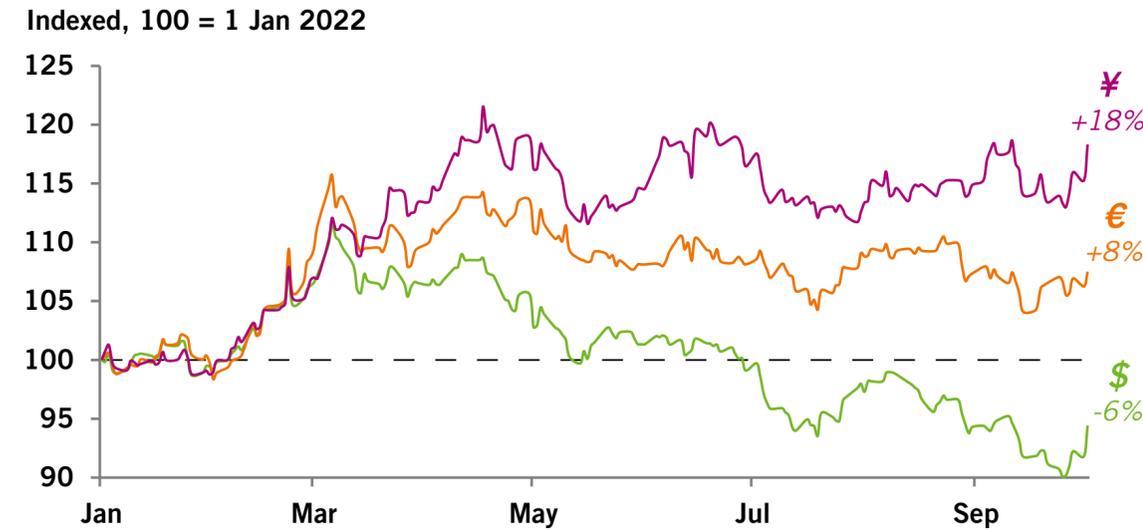
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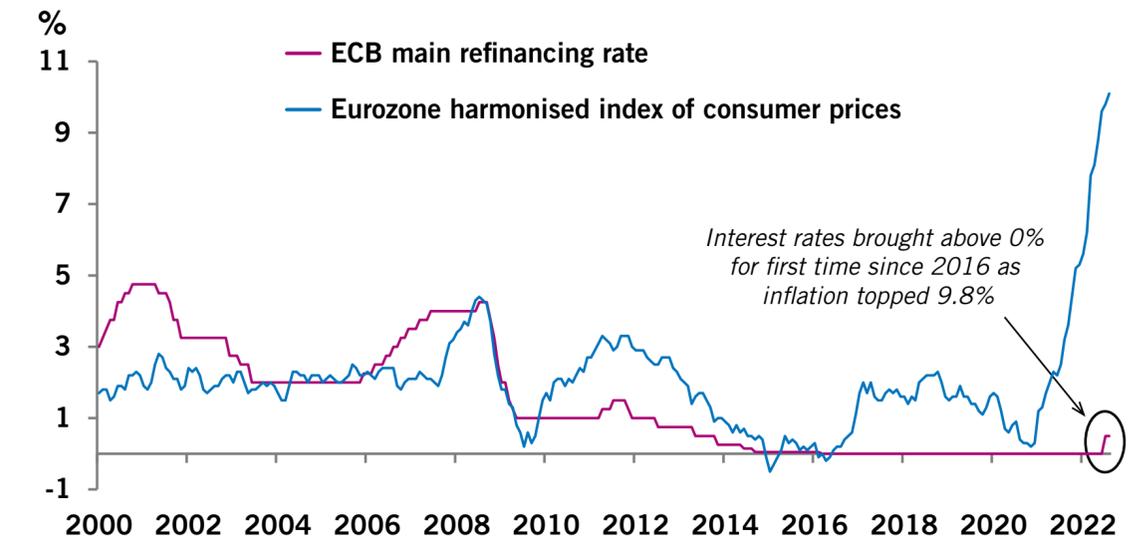
TRENDS AND INVESTMENTS

Gold price return in different currencies, YTD



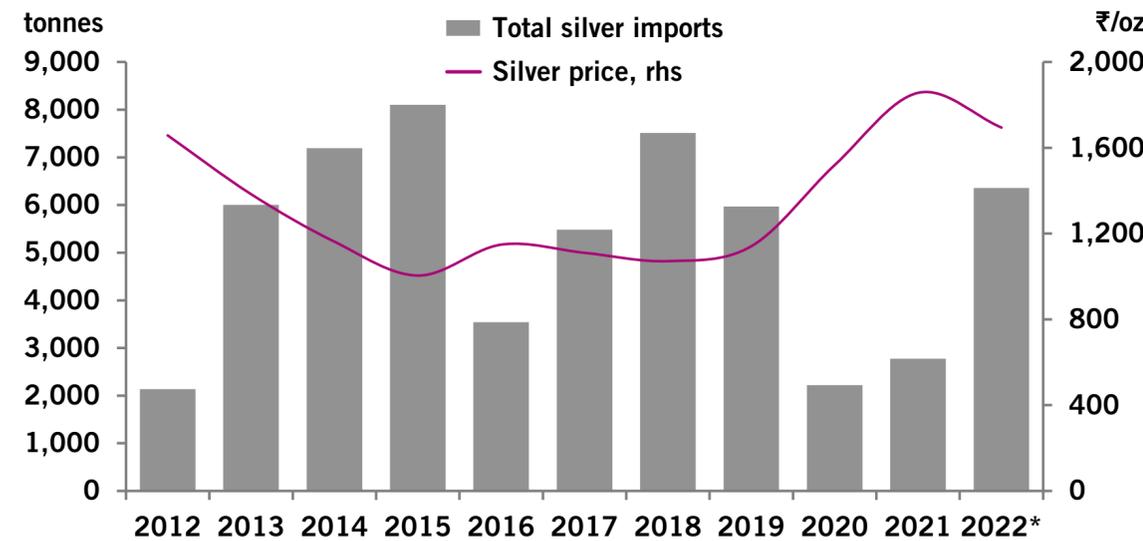
Source: SFA (Oxford), Bloomberg

ECB refinancing rate and Eurozone inflation



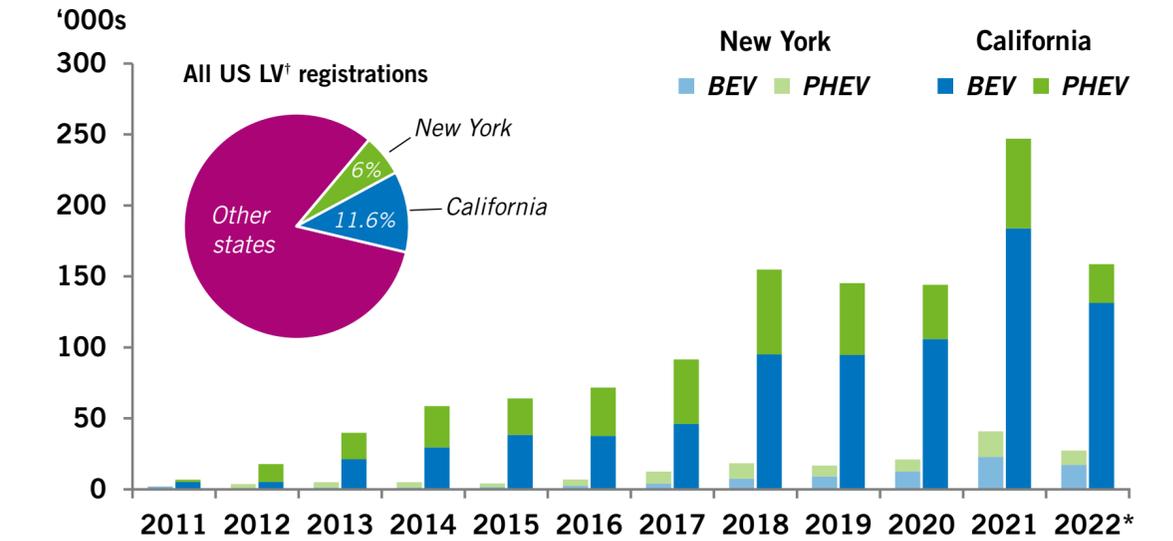
Source: SFA (Oxford), Bloomberg

India silver imports



Source: SFA (Oxford), Bloomberg, India Ministry of Commerce and Industry. *year-to-date

Zero-emission vehicle registrations



Source: SFA (Oxford), Charge NY, California Energy Commission. *year-to-date ¹light-vehicle

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