

SILVER OUTLOOK TO Q1 2022: AN INDUSTRIAL TAILWIND AND THE ENERGY TRANSITION TO BOOST SILVER DEMAND

April 2021

An appreciating US dollar and spiking bond yields have been significant headwinds for both gold and silver so far in 2021. As we discuss in "[Gold Outlook to Q1 2022: Down but not out](#)", we expect the US dollar to reverse course and thus to depreciate while bond yields are unlikely to continue to rise at the same pace as we have seen the last three months. We think therefore gold prices are likely to increase and silver will ride on his coattails higher. Additionally, continuous improvement in the industrial cycle and signs that supply may remain constrained in 2021, should bode well for silver.

Silver's growing use in electronics and in photovoltaics should buttress demand for the metal as the energy transition and electrification of our energy systems gathers pace.

FRAMEWORK

In "Gold and silver: similar, but different", we argued that silver's price performance is 80% correlated with gold. In our modelling framework, gold price is, therefore, the main driver of silver price. However, we also find the following variables as important drivers of silver price:

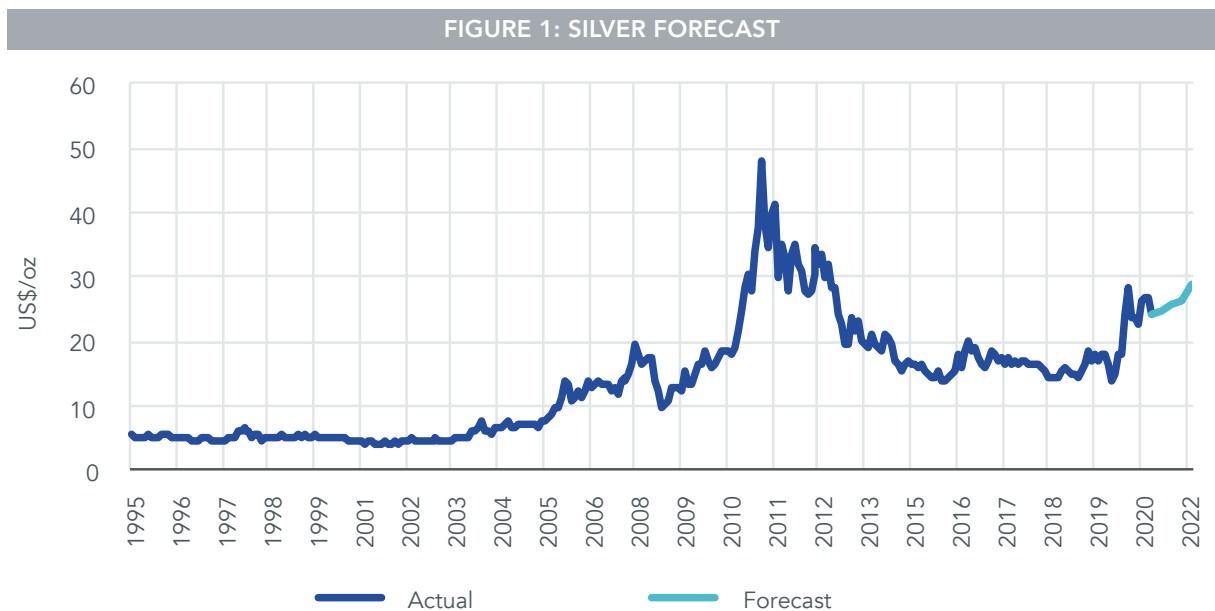
- + Growth in manufacturing activity – more than 50% of silver's use is in industrial applications (in contrast to gold where less than 10% comes from that sector). We use the global manufacturing Purchasing Managers Index (PMI) as a proxy for industrial demand.
- + Growth in silver inventory – rising inventories signal greater availability of the metal and hence is price negative. We use futures market exchange inventory as a proxy.
- + Growth in mining capital investment (Capex) – the more mines invest, the more potential supply we will see in the future. Thus, we take an 18-month lag on this variable. Given that most silver comes as a by-product of mining for other metals, we look at mining capex across the top 100 miners (not just monoline silver miners).

GOLD OUTLOOK Q1 2022: DOWN BUT NOT OUT

In “[Gold Outlook to Q1 2022: Down but not out](#)” we laid out our forecasts for the metal under a “consensus scenario”, where we adopt the median forecasts based on a survey of economists by Bloomberg for the US dollar, US 10-year Treasury yields and inflation. When thinking about the sentiment towards gold, we have edged down speculative positioning in gold futures to 100K, reflecting all views that a continued economic recovery will drive investors away from defensive assets to cyclical assets. We stress though gold maintains its strategic role in a portfolio, even if tactical plays are muted. We allocate a 70% probability for this consensus scenario and uses forecasts as an input into our silver forecast.

SILVER FORECASTS

We believe that silver will outpace gold, to gain 19% over the coming year¹ versus 8% for gold. By Q2 2022, we expect silver prices may trade at US\$29.15/oz. A rebound in industrial activity will bode well for the demand for the metal. Meanwhile, a contraction in mining capital expenditure and a reduction in silver inventory on exchange, point to tightening supply.



Source: WisdomTree (forecasts), Bloomberg (historic data), data available as of close 31 March 2021. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

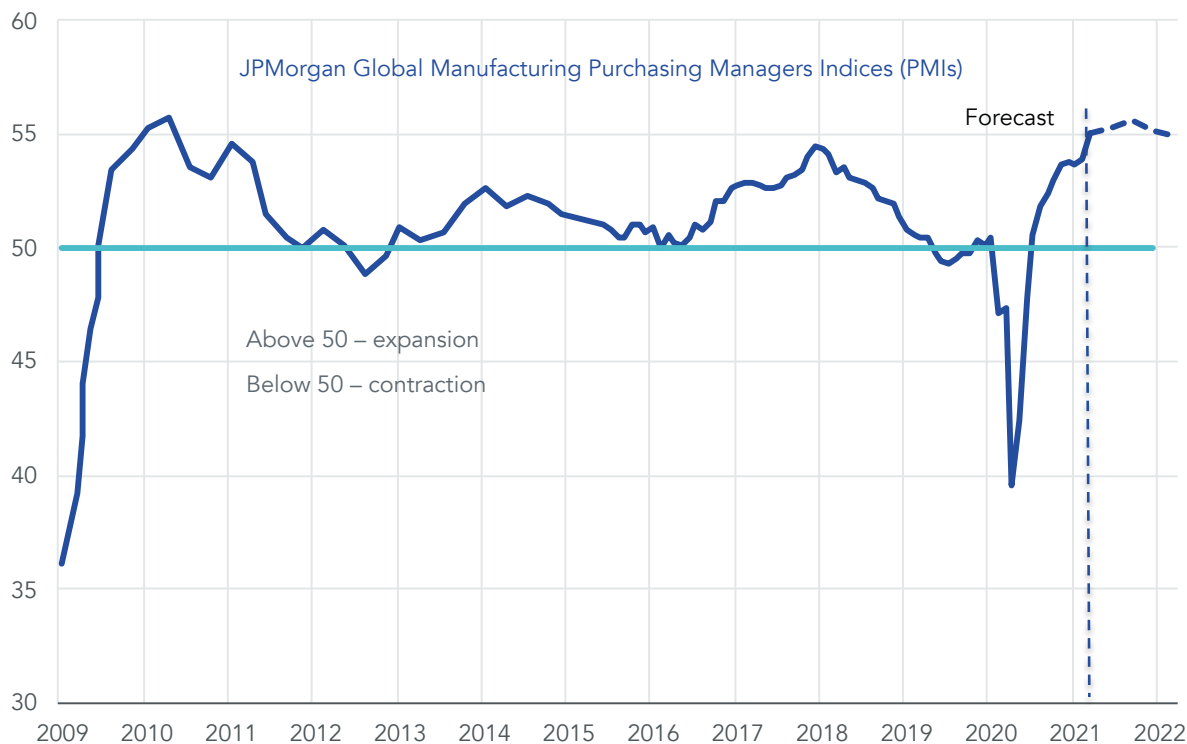
INDUSTRIAL DEMAND TO CONTINUE TO RECOVER

Manufacturing Purchasing Managers Indices (PMIs) have risen strongly in the past year and have been in the expansionary (post-50 region) for 9 consecutive months (Figure 2). The global manufacturing PMI is now at a decade high². Despite the renewed lockdowns across Europe, we believe global manufacturing activity will continue to recover as economies open up and pent-up demand drives a stronger manufacturing supply response. Rising industrial activity will be silver price positive.

¹ 31 March 2021 to March 2022

² <https://www.markiteconomics.com/Public/Home/PressRelease/554af55a0ce14a068e2c8c8bc5972120>

FIGURE 2: GLOBAL PMIs

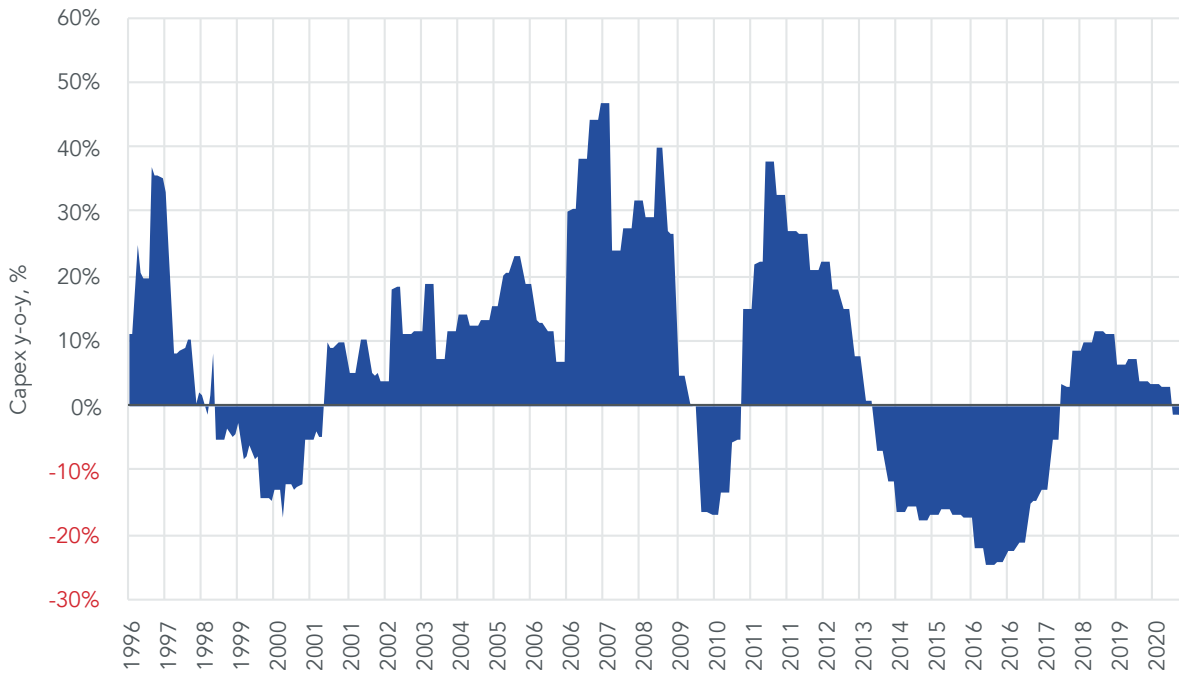


Source: WisdomTree, Bloomberg. Actual data: January 2009 to March 2021. **Forecasts are not an indicator of future performance and any investments are subject to risks and uncertainties.**

MINING CAPITAL EXPENDITURE

Capital expenditure in mining industry has been declining in the face of the pandemic. That should help tighten the supply of silver. We acknowledge there will be a rebound of mining activity in 2021 after social distancing slowed production in 2020. However, we believe that aspect is already priced in.

FIGURE 3: MINING CAPITAL EXPENDITURE



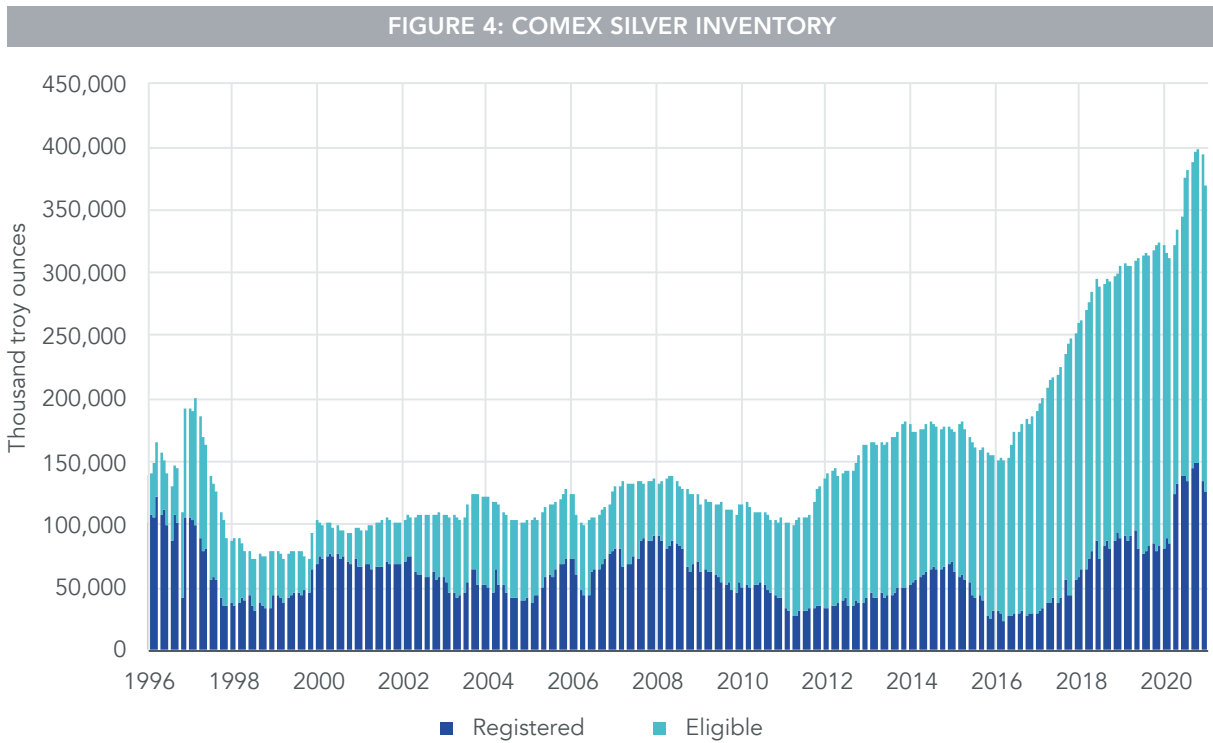
Source: Bloomberg, data available as of close 31 March 2021. **Historical performance is not an indication of future performance and any investments may go down in value.**

SILVER INVENTORY

In 2020, inventory of silver held at Comex rose. That in part was driven by the exchange trying to pad out inventory to assure investors that there is plenty of the metal available at a time when some investors were concerned about there being sufficient gold at the exchange when planes were grounded, and refineries were shut. Although the concerns were not directed at silver, the exchange increased silver inventory alongside gold.

Since peaking at the end of December 2020, silver inventory on exchange has been declining. We expect that inventory will continue to decline. After accounting for the demand from exchange traded commodities, silver demand outstripped silver supply by 319 million ounces in 2020, outpacing the supply deficit of 56 million ounces in 2019 and marking the second consecutive year of a supply deficit³.

³ <https://www.silverinstitute.org/wp-content/uploads/2020/11/SilverInstitute2020InterimPR.pdf>



Source: WisdomTree, Bloomberg. January 1996 to March 2021. Comex is a futures and options trading market, now owned by Chicago Mercantile Exchange. **Historical performance is not an indication of future performance and any investments may go down in value.**

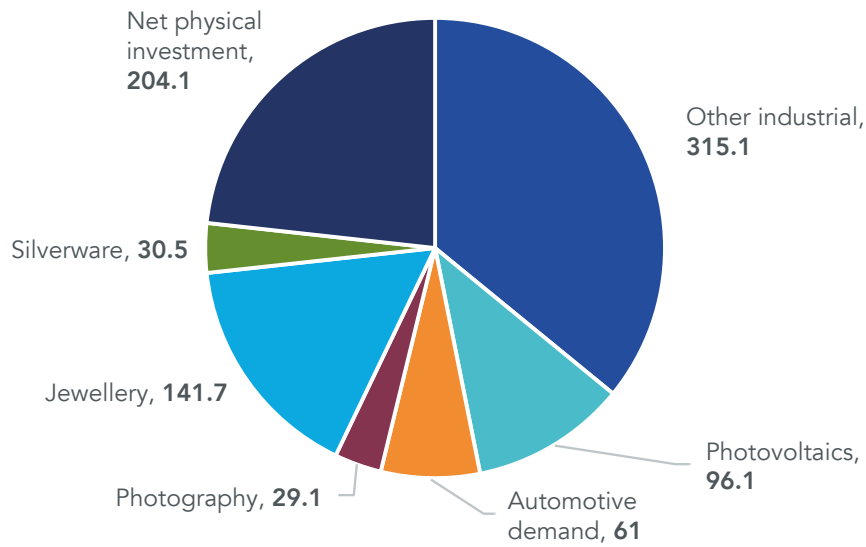
ENERGY TRANSITION AND ELECTRIFICATION TO BOOST SILVER DEMAND

One of the major themes that we at WisdomTree have been highlighting for 2021 and beyond is that the energy transition is intensifying. We are moving away from the use of hydrocarbons towards more renewable sources of energy, and we are rotating towards electric vehicles, away from internal combustion engine vehicles.

Focusing on renewable sources of energy, silver is a key component of photovoltaics (solar panels). Around 10% (96 million ounces) of all silver uses in 2020 was in photovoltaics and its use in this category has doubled since 2014⁴. There is more silver been used in photovoltaics than in the silverware and photography categories combined. Given the commitments to net zero emissions by 2050 from European Union, United States, Japan, South Korea, and similar commitments by China by 2060, we expect the use of photovoltaics to expand. Despite the trend of thrifting – applying less quantity of silver per solar application – we expect the volume of solar installations to expand aggressively over the coming decades given the renewable aspirations.

⁴ World Silver Survey 2020, Silver Institute, Metals Focus

FIGURE 5: SILVER SOURCES OF DEMAND, 2020, MILLION OUNCES



Source: WisdomTree, Metals Focus, Silver Institute. Excludes exchange inventory changes and Exchange Traded Commodity flows. **Historical performance is not an indication of future performance and any investments may go down in value.**

Silver’s use in renewable power generation doesn’t stop at photovoltaics. Silver-bearing sensors are used in turbines, grid management systems, smart switches. Silver oxide batteries can also be used for energy storage systems.

Silver’s use in vehicles has been expanding in general with greater use of electric components such as semiconductors, sensors, harnesses, controls, fuses, switches and displays. That is being accelerated by electric vehicles. Electric vehicles have a greater need for sensors to monitor battery usage and the functioning of other electrical components. Additionally, there is a role for silver in the charging infrastructure. As vehicles become more autonomous, the electrification and demand for silver in cars is likely to continue to grow.

According to the Silver Institute, silver’s use in the automotive industry was around 61 million ounces in 2020. That is similar to the amount of silver that was used in photovoltaics back in 2015. The Silver Institute expect silver usage in the automotive sector to reach 88 million ounces by 2025, which is only 8 million ounces shy of the size of the photovoltaic industry today.

CONCLUSIONS

We expect silver to ride gold’s coattails higher. In addition, continuous improvement in the industrial cycle will boost demand for the metal. Furthermore, the energy transition will benefit silver both in power production and use in vehicles.

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