# Market Overview

as of: 15th January 2024

- **Copper:** Huge capacity increase in Chinese smelters along with copper concentrate supply issue triggered TC charges to sink materially. Therefore, many smaller Chinese smelters may reduce or halt production in the near future *(page 2)*.
- **Precious metals:** Industrial demand for silver is forecast to increase by 46% by 2033, while demand for jewelry and silverware will increase by 34% and 30%, respectively *(page 4)*.
- **World Bank:** Global growth is expected to slow to 2.4 percent in 2024—the third consecutive year of deceleration—reflecting the lagged and ongoing effects of tight monetary policies to rein in decades-high inflation, restrictive credit conditions, and anemic global trade and investment *(page 5)*.

## Key market prices

| | | Close price | 2w chng. |
|---|---|---|---|
| | **LME (USD/t)** | | |
| ▼ | Copper | 8 289.00 | -2.2% |
| ▼ | Nickel | 16 075.00 | -1.4% |
| | **LBMA (USD/troz)** | | |
| ▼ | Silver | 23.06 | -3.1% |
| ▼ | Gold (PM) | 2 055.65 | -0.3% |
| | **FX** | | |
| ▼ | EURUSD | 1.0942 | -1.0% |
| ▲ | EURPLN | 4.3574 | 0.2% |
| ▲ | USDPLN | 3.9746 | 1.0% |
| ▲ | USDCAD | 1.3387 | 1.2% |
| ▲ | USDCLP | 911.37 | 3.0% |
| | **Stocks** | | |
| ▼ | KGHM | 111.05 | -9.5% |

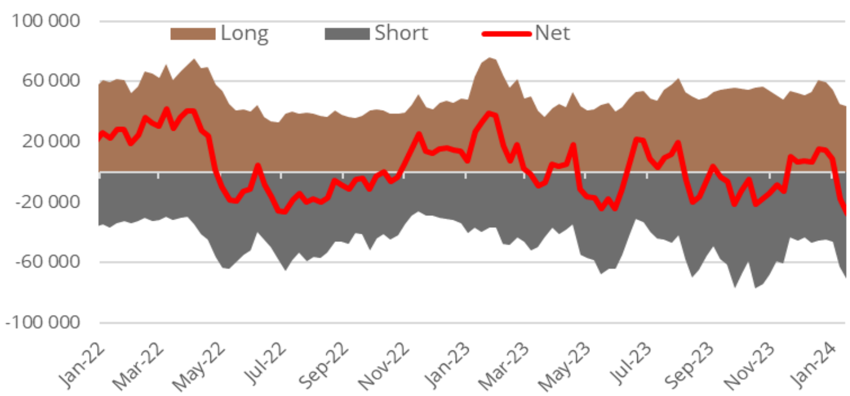
Source: Bloomberg, KGHM Polska Miedź S.A.; *(more on page 9)*

## Important macroeconomic data

| | Release | For | | |
|---|---|---|---|---|
| China | PPI (yoy) | Dec | -2.7% | ▲ |
| USA | Non-farm payrolls chng. | Dec | 216 | ▲ |
| Poland | Manufacturing PMI | Dec | 47.4 | ▼ |
| EU | PPI (yoy) | Nov | -8.8% | ▲ |
| Chile | Copper exports ($) | Dec | 4 162 | ▲ |

Source: Bloomberg, KGHM Polska Miedź S.A.; *(more on page 7)*

**At the turn of 2023 and 2024, the positioning of copper among investment funds dynamically changed from a net positive to a net negative**




*BBG index: CFFDTMML, CFFDTMMS

Source: Bloomberg, KGHM Polska Miedź S.A.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Please see important disclosures at the end of this document (page 11)

# Base and precious metals | Other commodities

## Copper

### China Copper Smelter Margins Squeezed By Tight Supply Of Raw Material

**Huge capacity increase in Chinese smelters along with copper concentrate supply issue triggered TC charges to sink materially. Therefore, many smaller Chinese smelters may reduce or halt production in the near future.**

Competition for mined copper supplies is expected to intensify, further eroding margins for Chinese firms that produce half the world's refined copper, but significant output cuts that tighten the metal market are unlikely. Chinese copper producers, mostly state-owned, are under pressure to maintain or raise production targets to shore up sluggish growth in the world's second-biggest economy. Tighter concentrate supplies are due to disruptions such as the closure of First Quantum's Cobre mine in Panama and Anglo American cutting production guidance. The scramble to secure supply has meant Chinese smelters have had to accept a cut in treatment charges (TCs), a fee for converting concentrate into refined copper, by nearly a third over the past month, according to data from pricing agency Fastmarkets. Chinese smelters told Reuters they are considering curbing refined copper production in the second quarter but did not give any details about the quantities involved. The squeeze on margins will likely force smaller, higher-cost smelters reliant on spot purchases of concentrate to cut or stop production in the coming months, said analyst Craig Lang at consultancy CRU Group. He added that TCs might bottom in the $40s this time before triggering smelter capacity cuts which will help ease the tightness. Spot TCs in China tumbled to $48.2 a metric ton on Jan. 5, the lowest since July 2021 and 40% below the annual benchmark of $80 a ton, which dropped for the first time in three years. TCs are the main source of income for smelters, falling when there is less available copper concentrate and rising when supplies are high. Another factor behind the drop in TCs is expansion in smelting capacity, implying a bigger appetite for concentrates. China's refined copper output surged 13% year-on-year in the first 11 months of 2023 to 11.8 million tons. Emily Brugge from Wood Mackenzie estimated that primary smelting capacity is expected to increase by almost 5% this year with key projects in China, Indonesia and India.

### Less copper from Quebrada Blanca

**Teck’s copper production from Chile disappointed however the future forecast remains still strong.**

Canada’s largest diversified miner also said that 2023 production at Quebrada Blanca (QB), its flagship copper mine in Chile, was lower than expected. Teck had forecasted 80,000-tonne copper production for 2023 due to reliability and consistency issues at the operation in the fourth quarter. But output from QB only totalled 56,200 tonnes for the year. During the second half of 2023, each of the operations at QB, including mine operations, crushing, grinding, flotation, tailings, desalination and concentrate handling, all operated at or above design capacity. “Our focus in the fourth quarter was on achieving reliable and consistent operations. This took longer than expected to achieve and, as a result, production did not meet forecast,” it noted. The Vancouver-based miner in October hiked the cost of its expansion project at QB, known as QB2, for at least the third time since it began its construction. The project is now expected to require $8.6 billion-$8.8 billion to be completed. QB2, Teck’s key growth project, has faced rising costs and several delays. Initially, it was expected to begin production in 2021, but first copper was achieved by the end of March last year. At full tilt, QB2 is slated to double Teck’s copper production on a consolidated basis. The expansion has an initial mine life of 27 years using only about 18% of the 2022 reserves and resource tonnage with significant potential for future growth. QB2 is targeted to achieve 285,000 – 315,000 tonnes of annual copper production in 2024-2026, becoming Chile’s second-largest copper operation, after Escondida. Teck has a 60% interest in Teck Quebrada Blanca SA (QBSA), which is the mine’s owner. Japan’s Sumitomo Metal Mining and Sumitomo Corporation have a collective interest of 30% in QBSA, while Chilean state company Enami holds a 10% interest in the project.

## Other important information on copper market:

- A fire at the operations of Russian miner Udokan Copper on Dec. 30 damaged part of the plant but left copper concentrate production unaffected, the company told Reuters. Udokan Copper declined to comment on whether the damage would delay the start of copper cathode production at the plant. Udokan planned to launch the first stage of the plant in the second quarter of 2024 and produce up to 135,000 tons of copper in the form of cathode or metal in concentrate a year, according to its Dec. 20 statement. From 2026, the annual capacity was expected to rise to 150,000 tons. Russia's war with Ukraine and sanctions imposed on Moscow by the United States have complicated the process of importing mining and processing equipment to replace damaged machinery. Udokan, which has been also hit by Washington's sanctions, was Russia's largest undeveloped copper deposit until it started copper concentrate production in September. The sanctions effectively banned Udokan Copper from U.S. dollar transactions and curbed marketing of its copper to potential Western customers, cementing its dependence on proximity to China.

- Copper production in Peru rose 10.9% in November from the year-ago month to 253,582 metric tons, the Andean nation's mining ministry said. Peru's production boost in the month largely came from strong performance at Anglo American's Quellaveco mine, as well as Glencore's Antapaccay and the jointly controlled Antamina mine. Copper production through the first 11 months of the year was up 14% from the same period in 2022 to around 2,499,635 tons, the ministry added.

- Panama President Laurentino Cortizo said in an annual address the closure of First Quantum Mineral Ltd’s copper mine in the country is “definitive and cannot be appealed." All extraction, processing, sale, export and transport of minerals has ended and the government is forming a technical group of national and international experts to close the mine while protecting the environment, Cortizo said.

## Precious Metals

### Silver Demand in Key Sectors

**Industrial demand for silver is forecast to increase by 46% by 2033, while demand for jewelry and silverware will increase by 34% and 30%, respectively.**

Industrial, Jewelry and Silver Expected to See Robust Future Silver industrial demand is forecast to increase 46 percent through 2033, while jewelry and silverware demand is projected to rise 34 and 30 percent respectively, with all three sectors already accounting for nearly three-quarters of the world's demand for silver in 2022. The investment sector comes in with a healthy 27 percent of overall silver demand last year, according to a report from Oxford Economics, a London-based economic advisory and consultancy firm.Their report, Fabrication Demand Drivers for Silver in the Industrial, Jewelry and Silverware Sectors Through 2033, was commissioned by the Silver Institute to forecast the growth rates of key sectors of global silver manufacturing demand, and to gain insight into how demand will change over the next decade. One of the main drivers of industrial demand will come from the electrical and electronics applications industry, which is forecast to grow by 55% over the decade, the report noted. Also expected to grow is jewelry fabrication: 34% in real terms between 2023 and 2033. Moreover, silverware fabrication is forecast to increase by 30% over the next decade. "Combined, the output of industrial, jewelry and silverware fabricators is forecast to increase by 42% between 2023 and 2033. This is roughly double the rate of growth of their demand for silver over the previous decade," the report stated. As for specific countries, Oxford noted that India will lead the world in jewelry demand over the next ten years but that it may lose some of its silver jewelry dominance to China. India will continue to lead silverware demand but perhaps with a lower market share than it recorded in 2022. "The report concluded that long-term forecasting for the silver production industry, "should help them decide how best to target growing industries and where to locate their logistics, marketing, and sales efforts. There may however be unforeseen challenges to these forecasts," the report warned. "This may occur if the different fabricator industries undergo structural change (such as thrifting) or there are unforeseen economic shocks."

# Global economies | Foreign exchange markets

## Global Economic Prospects – World Bank Report

**Global growth is expected to slow to 2.4 percent in 2024—the third consecutive year of deceleration—reflecting the lagged and ongoing effects of tight monetary policies to rein in decades-high inflation, restrictive credit conditions, and anemic global trade and investment.**

Global growth is expected to slow to 2.4 percent in 2024—the third consecutive year of deceleration—reflecting the lagged and ongoing effects of tight monetary policies to rein in decades-high inflation, restrictive credit conditions, and anemic global trade and investment. Near-term prospects are diverging, with subdued growth in major economies alongside improving conditions in emerging market and developing economies (EMDEs) with solid fundamentals. Meanwhile, the outlook for EMDEs with pronounced vulnerabilities remains precarious amid elevated debt and financing costs. The recent conflict in the Middle East, coming on top of the Russian Federation's invasion of Ukraine, has heightened geopolitical risks. Conflict escalation could lead to surging energy prices, with broader implications for global activity and inflation. Other risks include financial stress related to elevated real interest rates, persistent inflation, weaker-than-expected growth in China, further trade fragmentation, and climate change-related disasters.

Against this backdrop, policy makers face enormous challenges and difficult trade-offs. International cooperation needs to be strengthened to provide debt relief, especially for the poorest countries; tackle climate change and foster the energy transition; facilitate trade flows; and alleviate food insecurity. EMDE central banks need to ensure that inflation expectations remain well anchored and that financial systems are resilient. Elevated public debt and borrowing costs limit fiscal space and pose significant challenges to EMDEs—particularly those with weak credit ratings—seeking to improve fiscal sustainability while meeting investment needs. Commodity exporters face the additional challenge of coping with commodity price fluctuations, underscoring the need for strong policy frameworks. To boost longer-term growth, structural reforms are needed to accelerate investment, improve productivity growth, and close gender gaps in labor markets.

Although some improvements in growth are expected in most EMDE regions, the overall outlook remains subdued. Growth this year is projected to soften in East Asia and Pacific—mainly on account of slower growth in China—Europe and Central Asia, and South Asia. Only a slight improvement in growth, from a weak base in 2023, is expected for Latin America and the Caribbean. More marked pickups in growth are projected for the Middle East and North Africa, supported by increased oil production, and Sub-Saharan Africa, reflecting recovery from recent weakness. In 2025, growth is projected to strengthen in most regions as the global recovery firms.

Investment powers economic growth, helps drive down poverty, and will be indispensable for tackling climate change and achieving other key development goals in emerging market and developing economies (EMDEs). Without further policy action, investment growth in these economies is likely to remain tepid for the remainder of this decade. But it can be boosted. Investment accelerations—periods in which there is a sustained increase in investment growth to a relatively rapid rate—are crucial to development of EMDEs. During these episodes over the past seven decades, investment growth typically jumped to more than 10 percent per year, which is more than three times the growth rate in other (non-acceleration) years. Countries that had investment accelerations often reaped an economic windfall: output growth increased by about 2 percentage points and productivity growth increased by 1.3 percentage points per year. Other benefits also materialized in the majority of such episodes: inflation fell, fiscal balances improved, and the national poverty rate declined. Most accelerations followed, or were accompanied by, policy shifts intended to improve macroeconomic stability, structural reforms, or both. These policy actions were particularly conducive to sparking investment accelerations when combined with well-functioning institutions. A benign external environment also played a crucial role in catalyzing investment accelerations in many cases.

Fiscal Policy in Commodity Exporters: An Enduring Challenge. Fiscal policy has been about 30 percent more procyclical and about 40 percent more volatile in commodity-exporting emerging market and developing economies (EMDEs) than in other EMDEs. Both procyclicality and volatility of fiscal policy—which share some underlying drivers—hurt economic growth because they amplify business cycles. Structural policies, including exchange rate flexibility and the easing of restrictions on international financial transactions, can help reduce both fiscal procyclicality and fiscal volatility. By adopting average advanced-economy policies regarding exchange rate regimes, restrictions on cross-border financial flows, and the use of fiscal rules, commodity-exporting EMDEs can increase their GDP per capita growth by about 1 percentage point every four to five years through the reduction in fiscal policy volatility.

# Macroeconomic calendar

## Important macroeconomic data releases

| Weight | Date | Event | For | Reading ¹ | | Previous | Consensus ² |
|---|---|---|---|---|---|---|---|
| | | **China** | | | | | |
| ✪✪✪ | 02-Jan | Caixin's manufacturing PMI | Dec | 50.8 | ▲ | 50.7 | 50.3 |
| ✪ | 07-Jan | Foreign reserves (USD bn) | Dec | 3 238 | ▲ | 3 172 | 3 199 |
| ✪✪✪✪ | 12-Jan | Consumer inflation CPI (yoy) | Dec | -0.3% | ▲ | -0.5% | -0.4% |
| ✪✪ | 12-Jan | Trade balance (USD bn)‡ | Dec | 75.3 | ▲ | 69.5 | 75.0 |
| ✪✪ | 12-Jan | Exports (yoy)‡ | Dec | 2.3% | ▲ | 0.7% | 1.5% |
| ✪✪ | 12-Jan | Producer inflation PPI (yoy) | Dec | -2.7% | ▲ | -3.0% | -2.6% |
| ✪ | 12-Jan | New yuan loans (CNY bn)‡ | Dec | 1 170 | ▲ | 1 089 | 1 350 |
| | | **Poland** | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI | Dec | 47.4 | ▼ | 48.7 | 48.4 |
| ✪✪✪✪ | 05-Jan | Consumer inflation CPI (yoy) - preliminary data | Dec | 6.1% | ▼ | 6.6% | 6.5% |
| ✪✪✪✪✪ | 09-Jan | NBP base rate decision | Jan | 5.75% | ▪ | 5.75% | 5.75% |
| ✪✪ | 12-Jan | Trade balance (EUR mn)‡ | Nov | 230 | ▼ | 1 287 | 990 |
| ✪✪ | 12-Jan | Exports (EUR mn)‡ | Nov | 29 748 | ▼ | 29 886 | 30 550 |
| ✪✪ | 12-Jan | Current account balance (EUR mn)‡ | Nov | 1 325 | ▼ | 2 119 | 1 440 |
| | | **US** | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI - final data‡ | Dec | 47.9 | ▪ | 47.9 | 48.4 |
| ✪✪ | 03-Jan | ISM Manufacturing‡ | Dec | 47.4 | ▲ | 46.6 | 47.1 |
| ✪✪✪ | 04-Jan | Composite PMI - final data‡ | Dec | 50.9 | ▪ | 50.9 | -- |
| ✪✪✪ | 04-Jan | PMI services - final data‡ | Dec | 51.4 | ▪ | 51.4 | 51.3 |
| ✪✪ | 05-Jan | Change in non-farm payrolls (ths)‡ | Dec | 216 | ▲ | 173 | 175 |
| ✪✪ | 05-Jan | Durable goods orders - final data‡ | Nov | 5.4% | ▼ | 5.5% | 5.4% |
| ✪✪ | 05-Jan | Underemployment rate (U6) | Dec | 7.1% | ▲ | 7.0% | -- |
| ✪✪ | 05-Jan | Unemployment rate | Dec | 3.7% | ▪ | 3.7% | 3.8% |
| ✪ | 05-Jan | Average hourly earnings (yoy) | Dec | 4.1% | ▲ | 4.0% | 3.9% |
| ✪✪✪✪ | 11-Jan | Consumer inflation CPI (mom) | Dec | 0.3% | ▲ | 0.1% | 0.2% |
| ✪✪✪✪ | 11-Jan | Consumer inflation CPI (yoy) | Dec | 3.4% | ▲ | 3.1% | 3.2% |
| | | **Eurozone** | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI - final data‡ | Dec | 44.4 | ▪ | 44.4 | 44.2 |
| ✪ | 02-Jan | M3 money supply (yoy) | Nov | -0.9% | ▲ | -1.0% | -1.0% |
| ✪✪✪ | 04-Jan | Composite PMI - final data | Dec | 47.6 | ▪ | 47.6 | 47.0 |
| ✪✪✪ | 04-Jan | Services PMI - final data‡ | Dec | 48.8 | ▪ | 48.8 | 48.1 |
| ✪✪✪✪ | 05-Jan | Core CPI (yoy) - preliminary data | Dec | 3.4% | ▼ | 3.6% | 3.4% |
| ✪✪✪✪ | 05-Jan | CPI estimate (yoy) | Dec | 2.9% | ▲ | 2.4% | 2.9% |
| ✪✪ | 05-Jan | Producer inflation PPI (yoy) | Nov | -8.8% | ▲ | -9.4% | -8.6% |
| ✪✪ | 08-Jan | Retail sales (yoy)‡ | Nov | -1.1% | ▼ | -0.8% | -1.5% |
| ✪ | 08-Jan | Economic confidence‡ | Dec | 96.4 | ▲ | 94.0 | 94.2 |
| ✪ | 08-Jan | Industrial confidence | Dec | - 9.2 | ▲ | - 9.5 | - 9.5 |
| ✪ | 08-Jan | Consumer confidence - final data | Dec | - 15.0 | ▲ | - 15.1 | -- |
| ✪✪ | 09-Jan | Unemployment rate | Nov | 6.4% | ▼ | 6.5% | 6.5% |

| Weight | Date | Event | For | Reading [1] | | Previous | Consensus [2] | |
|---|---|---|---|---|---|---|---|---|
| | | **Germany** | | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI - final data‡ | Dec | 43.3 | - | 43.3 | 43.1 | ◠ |
| ✪✪ | 03-Jan | Unemployment rate‡ | Dec | 5.9% | ▲ | 5.8% | 5.9% | ○ |
| ✪✪✪✪ | 04-Jan | Harmonized consumer inflation HICP (yoy) - preliminary data | Dec | 3.8% | ▲ | 2.3% | 3.9% | ◡ |
| ✪✪✪✪ | 04-Jan | Consumer inflation CPI (yoy) - preliminary data | Dec | 3.7% | ▲ | 3.2% | 3.7% | ○ |
| ✪✪✪ | 04-Jan | Composite PMI - final data‡ | Dec | 47.4 | - | 47.4 | 46.7 | ◠ |
| ✪✪✪ | 05-Jan | Retail sales (yoy)‡ | Nov | -2.0% | ▼ | 0.3% | -0.5% | ◡ |
| ✪✪✪ | 08-Jan | Factory orders (wda, yoy) | Nov | -4.4% | ▲ | -7.3% | -3.4% | ◡ |
| ✪✪✪✪ | 09-Jan | Industrial production (wda, yoy)‡ | Nov | -4.8% | ▼ | -3.4% | -4.0% | ◡ |
| | | **France** | | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI - final data‡ | Dec | 42.1 | - | 42.1 | 42.0 | ◠ |
| ✪✪✪✪ | 04-Jan | Harmonized consumer inflation HICP (yoy) - preliminary data | Dec | 4.1% | ▲ | 3.9% | 4.1% | ○ |
| ✪✪✪✪ | 04-Jan | Consumer inflation CPI (yoy) - preliminary data | Dec | 3.7% | ▲ | 3.5% | 3.7% | ○ |
| ✪✪✪ | 04-Jan | Composite PMI - final data‡ | Dec | 44.8 | - | 44.8 | 43.7 | ◠ |
| ✪✪✪✪ | 10-Jan | Industrial production (yoy)‡ | Nov | 0.6% | ▼ | 2.0% | 0.3% | ◠ |
| | | **Italy** | | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI | Dec | 45.3 | ▲ | 44.4 | 44.2 | ◠ |
| ✪✪✪ | 04-Jan | Composite PMI | Dec | 48.6 | ▲ | 48.1 | 48.3 | ◠ |
| ✪✪✪✪ | 05-Jan | Harmonized consumer inflation HICP (yoy) - preliminary data | Dec | 0.5% | ▼ | 0.6% | 0.5% | ○ |
| ✪✪ | 09-Jan | Unemployment rate‡ | Nov | 7.5% | ▼ | 7.7% | 7.8% | ◡ |
| ✪✪✪✪ | 11-Jan | Industrial production (wda, yoy) | Nov | -3.1% | ▼ | -1.1% | -- | |
| | | **UK** | | | | | | |
| ✪✪✪ | 02-Jan | Manufacturing PMI (sa) - final data | Dec | 46.2 | ▼ | 47.2 | 46.4 | ◡ |
| ✪✪✪ | 04-Jan | Composite PMI - final data‡ | Dec | 52.1 | - | 52.1 | 51.7 | ◠ |
| ✪✪✪✪ | 12-Jan | Industrial production (yoy)‡ | Nov | -0.1% | ▲ | -0.5% | 0.7% | ◡ |
| | | **Japan** | | | | | | |
| ✪✪✪ | 04-Jan | Manufacturing PMI - final data | Dec | 47.9 | ▼ | 48.3 | -- | |
| ✪✪✪ | 05-Jan | Composite PMI - final data | Dec | 50.0 | ▲ | 49.6 | -- | |
| | | **Chile** | | | | | | |
| ✪✪✪✪ | 02-Jan | Economic activity (yoy) | Nov | 1.2% | ▲ | 0.3% | 1.0% | ◠ |
| ✪✪ | 05-Jan | Nominal wages (yoy) | Nov | 8.2% | ▼ | 8.7% | -- | |
| ✪✪✪ | 08-Jan | Copper exports (USD mn) | Dec | 4 162 | ▲ | 3 956 | -- | |
| | | **Canada** | | | | | | |
| ✪✪✪ | 05-Jan | Net change in employment (ths) | Dec | 0.1 | ▼ | 24.9 | 15.0 | ◡ |

[1] Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; -= equal to previous.
[2] Reading difference to consensus: ◠ = higher than consensus; ◡ = lower than consensus; ○= equal to consensus.
mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.
Source: Bloomberg, KGHM Polska Miedź

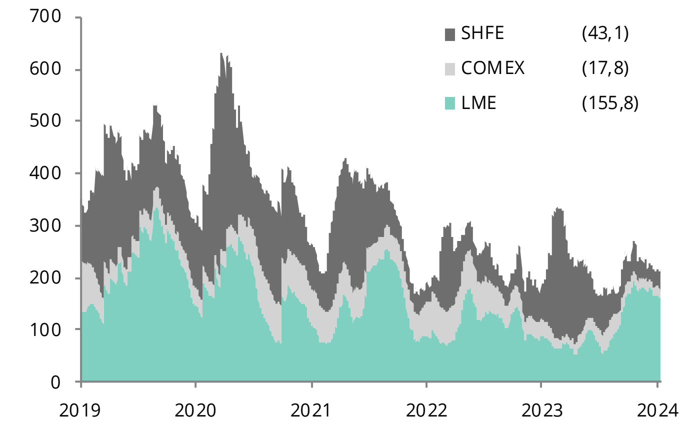
# Key market data

## Key base & precious metal prices, exchange rates and other important market factors

| *(as of: 12-Jan-24)* | Price | Price change[1] 2W | QTD | YTD | 1Y | From year beginning[2] Average | Min | Max |
|---|---|---|---|---|---|---|---|---|
| **LME (USD/t; Mo in USD/lbs)** | | | | | | | | |
| Copper | 8 289.00 | ▼ -2.2% | ▼ -2.2% | ▼ -2.2% | ▼ -8.6% | 8 337.22 | 8 285.00 | 8 430.00 |
| Molybdenum | 20.16 | ▲ 8.8% | ▲ 8.8% | ▲ 8.8% | ▼ | 20.28 | 19.62 | 20.72 |
| Nickel | 16 075.00 | ▼ -1.4% | ▼ -1.4% | ▼ -1.4% | ▼ -39.3% | 16 102.78 | 15 705.00 | 16 600.00 |
| Aluminum | 2 175.00 | ▼ -6.9% | ▼ -6.9% | ▼ -6.9% | ▼ -11.1% | 2 225.61 | 2 175.00 | 2 336.50 |
| Tin | 24 350.00 | ▼ -3.3% | ▼ -3.3% | ▼ -3.3% | ▼ -11.4% | 24 522.22 | 24 025.00 | 25 150.00 |
| Zinc | 2 480.00 | ▼ -6.1% | ▼ -6.1% | ▼ -6.1% | ▼ -22.9% | 2 521.44 | 2 480.00 | 2 607.00 |
| Lead | 2 058.00 | ▲ 1.3% | ▲ 1.3% | ▲ 1.3% | ▼ -4.5% | 2 040.06 | 2 012.00 | 2 095.00 |
| **LBMA (USD/troz)** | | | | | | | | |
| Silver | 23.06 | ▼ -3.1% | ▼ -3.1% | ▼ -3.1% | ▼ -2.7% | 23.13 | 22.85 | 23.95 |
| Gold[2] | 2 055.65 | ▼ -0.3% | ▼ -0.3% | ▼ -0.3% | ▲ 9.2% | 2 041.91 | 2 025.10 | 2 067.55 |
| **LPPM (USD/troz)** | | | | | | | | |
| Platinum[2] | 928.00 | ▼ -7.8% | ▼ -7.8% | ▼ -7.8% | ▼ -14.2% | 950.11 | 924.00 | 988.00 |
| Palladium[2] | 996.00 | ▼ -11.0% | ▼ -11.0% | ▼ -11.0% | ▼ -44.0% | 1 027.89 | 985.00 | 1 101.00 |
| **FX [3]** | | | | | | | | |
| EURUSD | 1.0942 | ▼ -1.0% | ▼ -1.0% | ▼ -1.0% | ▲ 1.6% | 1.0946 | 1.0919 | 1.0987 |
| EURPLN | 4.3574 | ▲ 0.2% | ▲ 0.2% | ▲ 0.2% | ▼ -7.1% | 4.3498 | 4.3351 | 4.3646 |
| USDPLN | 3.9746 | ▲ 1.0% | ▲ 1.0% | ▲ 1.0% | ▼ -8.7% | 3.9709 | 3.9432 | 3.9909 |
| USDCAD | 1.3387 | ▲ 1.2% | ▲ 1.2% | ▲ 1.2% | ▲ 0.1% | 1.3368 | 1.3316 | 1.3409 |
| USDCNY | 7.1675 | ▲ 1.0% | ▲ 1.0% | ▲ 1.0% | ▲ 6.5% | 7.1586 | 7.1432 | 7.1727 |
| USDCLP | 911.37 | ▲ 3.0% | ▲ 3.0% | ▲ 3.0% | ▲ 10.4% | 896.27 | 877.12 | 919.07 |
| **Money market** | | | | | | | | |
| 3m LIBOR USD | 5.578 | ▼ -0.01 | ▼ -0.01 | ▼ -0.01 | ▲ 0.75 | 5.586 | 5.576 | 5.592 |
| 3m EURIBOR | 3.932 | ▲ 0.02 | ▲ 0.02 | ▲ 0.02 | ▲ 1.64 | 3.928 | 3.905 | 3.942 |
| 3m WIBOR | 5.860 | ▼ -0.02 | ▼ -0.02 | ▼ -0.02 | ▼ -1.09 | 5.872 | 5.860 | 5.890 |
| 5y USD interest rate swap | 4.219 | - 0.00 | - 0.00 | - 0.00 | ▲ 0.64 | N/A | N/A | N/A |
| 5y EUR interest rate swap | 2.536 | ▲ 0.11 | ▲ 0.11 | ▲ 0.11 | ▼ -0.23 | 2.544 | 2.406 | 2.629 |
| 5y PLN interest rate swap | 4.370 | ▼ -0.02 | ▼ -0.02 | ▼ -0.02 | ▼ -0.82 | 4.405 | 4.315 | 4.525 |
| **Fuel** | | | | | | | | |
| WTI Cushing | 80.08 | ▼ -9.9% | ▼ -9.9% | ▼ -9.9% | ▼ -27.6% | 85.08 | 80.08 | 88.96 |
| Brent | 88.11 | ▼ -11.0% | ▼ -11.0% | ▼ -11.0% | ▼ -24.9% | 93.28 | 88.11 | 96.91 |
| Diesel NY (ULSD) | 3.56 | ▼ -22.1% | ▼ -22.1% | ▼ -22.1% | ▼ -2.5% | 3.85 | 3.56 | 4.17 |
| **Others** | | | | | | | | |
| VIX | 12.70 | ▲ 0.25 | ▲ 0.25 | ▲ 0.25 | ▼ -6.13 | 13.15 | 12.44 | 14.13 |
| BBG Commodity Index | 97.96 | ▼ -0.7% | ▼ -0.7% | ▼ -0.7% | ▼ -11.7% | 98.02 | 97.40 | 98.63 |
| S&P500 | 4 783.83 | ▲ 0.3% | ▲ 0.3% | ▲ 0.3% | ▲ 20.1% | 4 744.57 | 4 688.68 | 4 783.83 |
| DAX | 16 704.56 | ▼ -0.3% | ▼ -0.3% | ▼ -0.3% | ▲ 10.9% | 16 651.72 | 16 538.39 | 16 769.36 |
| Shanghai Composite | 2 881.98 | ▼ -3.1% | ▼ -3.1% | ▼ -3.1% | ▼ -8.9% | 2 915.57 | 2 877.70 | 2 967.25 |
| WIG 20 | 2 248.58 | ▼ -4.0% | ▼ -4.0% | ▼ -4.0% | ▲ 16.5% | 2 276.56 | 2 246.21 | 2 303.41 |
| KGHM | 111.05 | ▼ -9.5% | ▼ -9.5% | ▼ -9.5% | ▼ -26.5% | 114.81 | 110.85 | 120.15 |

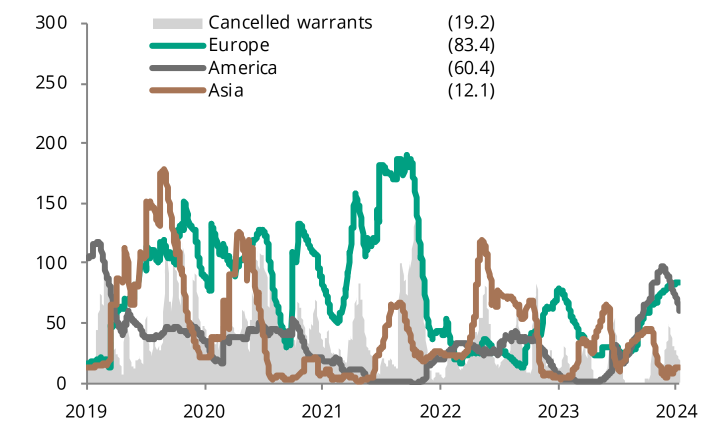
° change over: 2W = two weeks; QTD = quarter-to-day; YTD = year-to-date; 1Y = one year. [1] based on daily closing prices. [2] latest quoted price. [3] central banks' fixing rates (Bank of China HK for USD/CNY). [4].
Source: Bloomberg, KGHM Polska Miedź

## Copper: official exchange stocks (thousand tonnes)



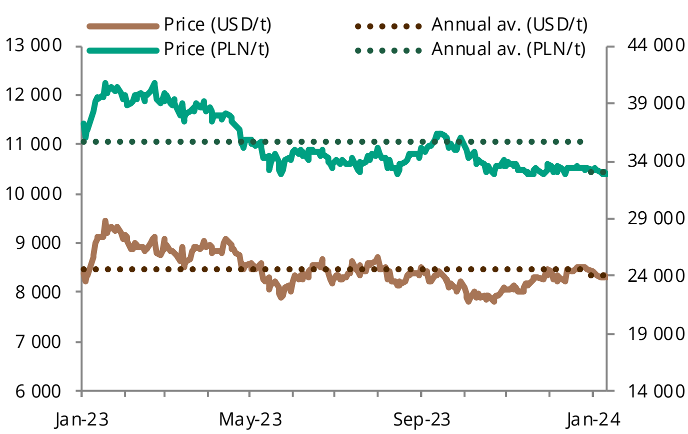

Note: Latest values in brackets. Source: Bloomberg, KGHM

## Copper: official LME stocks (thousand tonnes)



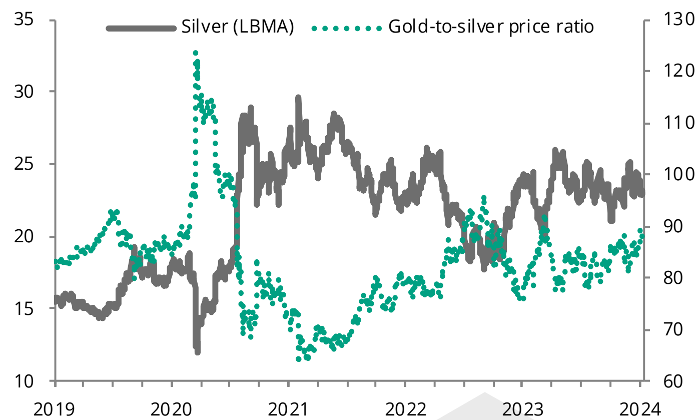

Note: Latest values in brackets. Source: Bloomberg, KGHM

## Copper: price in USD (lhs) and PLN (rhs) per tonne



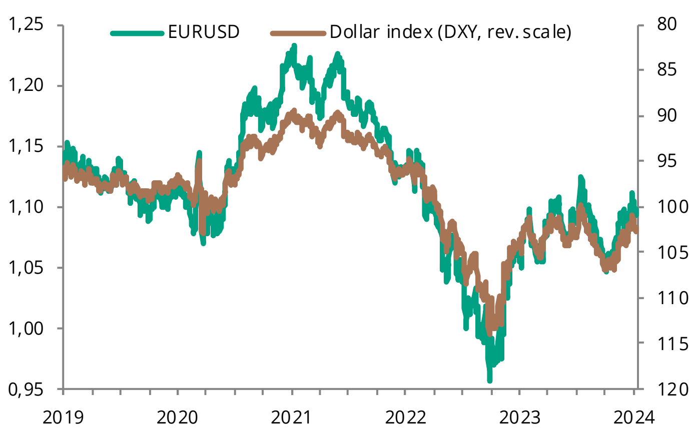

Source: Bloomberg, KGHM Polska Miedź

## Silver: price (lhs) and gold ratio (rhs)



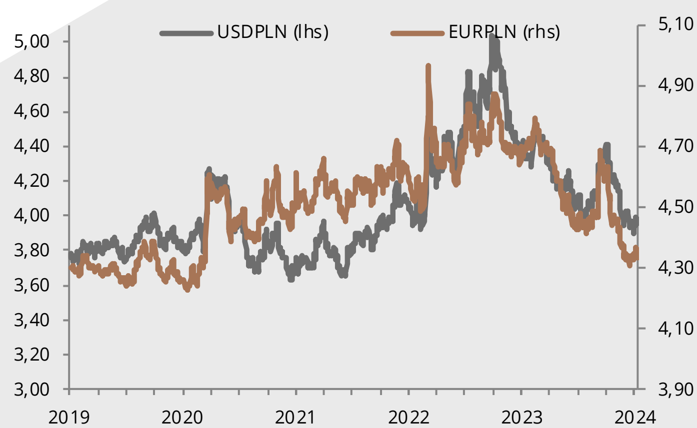

Source: Bloomberg, KGHM Polska Miedź

## USD: dollar index (lhs) and ECB-based EURUSD (rhs)




Source: Bloomberg, KGHM Polska Miedź

## PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs)




Source: Bloomberg, KGHM Polska Miedź

# Legal note

This document has been prepared based on the below listed reports, among others, published in the following period: **1 -14 January 2024.**

▪ Barclays Capital, ▪ BofA Merrill Lynch, ▪ Citi Research, ▪ CRU Group, ▪ Deutsche Bank Markets Research, ▪ GavekalDragonomics, ▪ Goldman Sachs, ▪ JPMorgan, ▪ Macquarie Capital Research, ▪ Mitsui Bussan Commodities, ▪ Morgan Stanley Research, ▪ SMM Information & Technology, ▪ Sharps Pixley.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ thebulliondesk.com, ▪ lbma.org.uk, ▪ lme.co.uk, ▪ metalbulletin.com, ▪ nbp.pl, , also: Bloomberg and Thomson Reuters.

Official metals prices are available on following websites:

- base metals: www.lme.com/dataprices_products.asp (charge-free logging)
- silver and gold: www.lbma.org.uk/pricing-and-statistics
- platinum and palladium: www.lppm.com/statistics.aspx



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