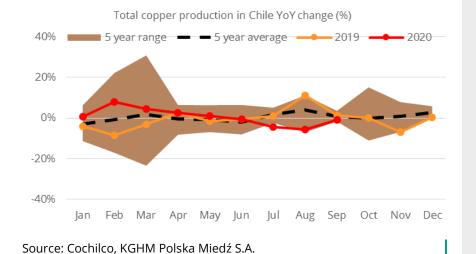


Market Overview

- Copper: First Quantum believes that due to the persistent threats related to e.g. with the COVID-19 pandemic, rising copper prices are not a sufficient reason to move away from the policy of using hedging (page 2).
- Precious metals: Due to the slowdown in stockpiling by investors and the sale of gold by central banks, the global demand for yellow metal in the third quarter of 2020 was the lowest in 11 years. In the period July-September, world demand for gold was 892.3 tonnes, 19% less than in the third quarter of 2019 and was the lowest since the third quarter of 2009 (page 5).
- China: According to analysts' expectations, China, the second largest economy in the world, will grow by 2.1% this year. This result makes the Middle Kingdom the only major economy to grow in 2020, albeit at the slowest annual pace since 1976, the last year of Mao Zedong's Cultural Revolution (page 6).

COVID-19 reversed upward trend from the beginning of the year but September could be the start of a rebound for Chilean copper production



as of: 9th November 2020

Key market prices

| | | Close price | 2w chng. | | | | | |
|---|-----------------|-------------|----------|--|--|--|--|--|
| | LME (USD/t) | | | | | | | |
| | Copper | 6 938.50 | 0.9% | | | | | |
| • | Nickel | 15 532.00 | -1.5% | | | | | |
| | LBMA (USD/troz) | | | | | | | |
| | Silver | 25.78 | 4.1% | | | | | |
| | Gold (PM) | 1 940.80 | 2.0% | | | | | |
| | FX | | | | | | | |
| | EURUSD | 1.1870 | 0.1% | | | | | |
| • | EURPLN | 4.5277 | -1.1% | | | | | |
| • | USDPLN | 3.8194 | -1.2% | | | | | |
| • | USDCAD | 1.3039 | -0.8% | | | | | |
| • | USDCLP | 752.01 | -3.8% | | | | | |
| | Stocks | | | | | | | |
| | KGHM | 137.85 | 9.0% | | | | | |
| Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 9) | | | | | | | | |

Important macroeconomic data

| | Release | For | |
|------------|------------------------------|---------|------------------|
| | GDP (annlzd., qoq) | 3Q | 33.1% 🔺 |
| ★ 注 | Trade balance (\$) | Oct | 58.4 |
| | GDP (sa, qoq) | 3Q | 12.7% 🔺 |
| * | Copper production (mt) | Sep | 484 768 ▼ |
| | CPI (yoy) | Oct | 3.0% ▼ |
| Source | e: Bloomherg KGHM Polska Mie | dź S.A. | (more on page 7 |

Market Risk Unit

marketrisk@kghm.com



Base and precious metals | Other commodities

Copper

Amid Soaring Copper Price, First Quantum To Stick With Hedging

First Quantum believes that due to the persistent threats related to e.g. with the COVID-19 pandemic, rising copper prices are not a sufficient reason to move away from the policy of using hedging.

First Quantum Minerals plans to stick with its copper-hedging policy given the economic uncertainty caused by the COVID-19 pandemic and to protect its ability to repay debt. "It's likely to continue for a bit longer," said First Quantum's president Clive Newall on an Oct. 29 earnings call. Copper prices, fueled by rebounding Chinese demand, have climbed in recent months from under \$5,000/mt in late March to over \$7,000/mt in recent trading. With that in mind, Newall has been asked if it was time for First Quantum to wind down the hedging policy, which covers about half First Quantum's copper sales over the next year. "The copper market is in a much more positive environment at the moment," Newall said. "However, there's still uncertainty around in the world just given the current state of COVID... We've got high leverage at the moment and we want to protect the downside risk in the company." First Quantum has net debt of about \$7.5 billion that partially stems from funding the massive Cobre Panama coppergold mine, which started commercial production in late 2019. Given the debt load, First Quantum management has said a key focus of capital allocation will be debt reduction, rather than acquisitions or shareholder returns. Eventually, however, the company expects to end the hedging program. Philip Pascall, First Quantum chairman and CEO, noted the miner used to have a no-hedging strategy but turned to one after major borrowing for mine building." And, of course, in a rising market, you're slightly behind it, Pascall said, referring to selling at a lower price than offered on the spot market. "But the key to it is to retain that until you've been past some peak along the way -- and you can't predict that until you've gotten past it." Pascall said in the next few years as debt obligations wane, First Quantum may be able to drop copper price protection. During the third-quarter First Quantum's net debt fell by \$113 million and on Oct. 1 it closed a \$1.5 billion offering of 2027 senior notes, which it used to repay a revolving credit facility and 2022 senior notes. As for operating costs, First Quantum's allin sustaining costs shrunk, falling 20% year on year to \$1.48/lb of copper in the third quarter. The drop drew analyst attention, with one asking a question over how sustainable the lower operating cost may be. In response, Tristan Pascall, said the company would hold to 2020 copper-cost guidance, which it has pegged between \$1.60/lb and \$1.70/lb in terms of all-in sustaining costs. But he also noted the lower costs showed how Cobre Panama could perform.



KAZ Minerals Plans Delisting To Pursue High-Risk Growth

Oleg Nowaczuk, CEO of KAZ Minerals, stated that the implementation of a higher risk, capital-intensive strategy remains the optimal long-term development path for KAZ Minerals, which, however, may not be compatible with the risk appetite of many investors in the mining sector.

KAZ Minerals chairman Oleg Novachuk and non-executive director Vladimir Kim, which together own 39.4% of Kazakhstan's largest copper producer, plan to buy the remaining shareholding in order to pursue a high-risk, capital-intensive strategy that they see as incompatible with the company's listed status. Nova Resources, which is affiliated to the businessmen, has reached agreement to pay \$3 billion to acquire the entire issued and to be issued share capital of KAZ Minerals. The cash consideration payable to KAZ Minerals shareholders values the company at a double-digit percentage premium to its share price on Oct. 27 and will be financed with a facility provided by Russia's VTB Bank. The deal, expected to complete in H1 2021, will see KAZ Minerals delist from the London Stock Exchange and become a private company, which Novachuk and Kim see as better suited to pursue a higher-risk strategy. "KAZ Minerals has made notable progress as a public company since listing on the London Stock Exchange in 2005. However, driven by the current market uncertainty and the corporate circumstances of sequential development projects, we believe that KAZ Minerals' long-term interests would be best served as a private company," Novachuk said. "We remain confident the execution of a higher-risk, capital-intensive strategy remains the optimal long-term path for KAZ Minerals, but we recognize that our risk appetite may be misaligned with the preference of many investors in the mining sector," he added. So far, KAZ Minerals' focus on developing and operating large-scale, low-cost copper mines in Kazakhstan and the CIS region has enabled it to progress a pipeline of growth projects, including its largest assets in Kazakhstan -- Aktogay and Bozshakol. The company's production has grown from 85,000 mt of copper in 2015 to 311,000 mt in 2019.

Other important information on copper market:

- A union of workers at Chile's Candelaria copper mine, owned by Canada's Lundin Mining Corp, said recently it had rejected yet another contract offer from the company and will push forward with a nearly month-long strike that has shut down the mine. Lundin said it had submitted a new contract offer in a bid to end the strike, which began on October 8. A second union joined in the walk-off later in the month, forcing the mine's closure. According to company statement, during the negotiation process, Minera Candelaria has submitted four improved offers. The company has alleged its operations were also being hampered by road blockades by striking workers. The union confirmed to Reuters its decision to reject the proposal and its intention to continue with the strike. Candelaria produced 111,400 tons of copper in 2019.
- BHP's Escondida, the world's largest copper mine, saw production fall in September while top miner Codelco saw output rise amid the ongoing coronavirus pandemic in the South American nation, according to government figures released Tuesday. The Chilean Copper Commission (Cochilco) reported



that Codelco - the world's largest copper mining company - boosted production by 9.6% year-on-year to 159,200 tonnes. The company ratcheted up output by 2.9% between January and September despite restrictions put in place to slow the spread of coronavirus. BHP's Escondida - the largest single copper deposit in the world - saw production drop off by 6% year-on-year, to 94,100 tons. Between January and September, the mine's output has nonetheless increased 2.4%.

- Chinese state-run copper buyers have not accepted Chilean copper producer Codelco's offer to roll over the price premium for metal deliveries in 2021. The premium, which is paid on top of London Metal Exchange (LME) copper prices for physical delivery of copper cathodes and is a widely watched industry benchmark, has been at \$88 a tonne since 2019. China, the world's biggest copper consumer, is Codelco's most important market. Even as China's copper imports have boomed this year, propelled by an open arbitrage between Shanghai and LME prices following the coronavirus outbreak, another pricing indicator - the Yangshan copper premium has plummeted. This premium, paid on top of LME prices to import copper through the Yangshan bonded warehouse zone in China, fell to \$49 a tonne, its lowest since May 2019, indicating a decline in physical copper demand. It was above \$110 in May this year. One customer source described Codelco's offer as "very high" and said negotiations may be revisited, although he noted Codelco does not normally adjust its offer. Another customer source, said a premium below \$80 would be more reasonable.
- Shipments from MMG Ltd's Las Bambas copper mine in Peru have returned to normal after nearly a week of disruption. Trucking of concentrate from Las Bambas, one of the world's biggest copper mines, to the port of Matarani on the Pacific Ocean was affected as local communities blocked the area's main road. It had seen similar community disruption in January and February before coronavirus-related operating curbs led the company in April to officially withdraw its 2020 output guidance of 350,000-370,000 tonnes of copper in concentrate for Las Bambas. MMG now anticipates production of 305,000-315,000 tonnes this year, while cautioning that a "high degree of operational uncertainty remains". Las Bambas produced 84,086 tonnes of copper in concentrate in July-September, up 44% quarter-on-quarter but down 13% year-on-year. The mine's molybdenum output rose 153% year-on-year to 1,180 tonnes after work to reduce bottlenecks.



Precious Metals

Due to the slowdown in stockpiling by investors and the sale of gold by central banks, the global demand for yellow metal in the third quarter of 2020 was the lowest in 11 years. In the period July-September, world demand for gold was 892.3 tonnes, 19% less than in the third quarter of 2019 and was the lowest since the third quarter of 2009.

Gold Demand Fell To Its Lowest In 11 Years In The Third Quarter

Global demand for gold in the third quarter of 2020 was the lowest in 11 years, as a rush by investors to stockpile bullion slowed and central banks sold metal for the first time in a decade, the World Gold Council (WGC) said on Thursday. The coronavirus pandemic collapsed jewellery sales, usually the biggest source of gold demand, but this has been offset by investors looking for an asset they see as a safe store of value. The jewellery market recovered slightly in the third quarter, including in China and India, the largest, but not enough to compensate for the slower pace of stockpiling by investors in exchange traded funds (ETFs), the WGC said. Global gold demand was 892.3 tonnes over the July-September quarter, down 19% from the third quarter of 2019 and the lowest since Q3 2009, during the financial crisis, according to the WGC. Demand in the first nine months of the year, at 2,972.1 tonnes, was 10% lower than in 2019 and the least since 2009. Investor demand pushed gold prices from around \$1,500 an ounce in January to a record high of \$2,072.50 in August, putting off price-sensitive jewellery buyers. But reduced purchases since then by ETFs, which store gold for investors, have seen prices fall to around \$1,900. While ETFs slowed their growth, purchases of gold bars and coins increased in the third quarter as rising demand in China, India and Turkey added to high sales in Europe and the United States. Jewellery demand in China and India is likely to rise in the final quarter and central banks should again be buyers, said the WGC's Krishan Gopaul. But ongoing economic uncertainty, low interest rates and government stimulus mean investors will remain the driving force of the market, he said. "The environment we're in is unlikely to change significantly any time soon," he said.



Global economies | Foreign exchange markets

China's Economic Growth Seen Hitting 44-Year Low In 2020

According to analysts' expectations, China, the second largest economy in the world, will grow by 2.1% this year. This result makes the Middle Kingdom the only major economy to grow in 2020, albeit at the slowest annual pace since 1976, the last year of Mao Zedong's Cultural Revolution.

China's economy is expected to grow at its weakest pace in over four decades even as it steadily recovers from a coronavirus-induced dive earlier this year, but overall output could rebound sharply in 2021, a Reuters poll showed. The world's second-biggest economy is now expected to expand by 2.1% in 2020, according to the median of 37 analysts surveyed by Reuters, down slightly from the 2.2% growth projected in the last poll in July. That would make China the only major economy to grow in 2020, albeit at the slowest annual pace since 1976, the final year of Mao Zedong's Cultural Revolution. China's economic recovery accelerated in the third quarter as consumers shook off their coronavirus caution, although the weaker-than-expected headline growth highlighted some persistent risks including from resurgent COVID-19 cases globally and ongoing tensions with the United States over a range of issues. The poll forecast fourthquarter GDP to rise 5.8% year-on-year, quickening from 4.9% in July-September. Growth is projected to pick up to 8.4% in 2021, as the global economy is set to recover from the health crisis, according to the poll. "With exports strong and domestic consumption and investment both improving, Q4 could be one of the best quarters for overall growth in a few years," analysts at research firm Gavekal Dragonomics said in a note. "Growth momentum should peak in the first half of 2021." The economy has been recovering steadily from a steep 6.8% slump in the first quarter. But China faces long-term obstacles to maintain its ascent, analysts say. Its top leaders are holding a key meeting to chart the country's economic course for 2021-2025, amid rising tensions with the United States on trade, technology and other fronts, threatening a decoupling of the world's two largest economies. China will strike a balance between stabilizing economic growth and preventing risks, even as debt was allowed to temporarily rise this year to support the coronavirus-hit economy, central bank chief Yi Gang said. The government has rolled out a raft of measures including more fiscal spending, tax relief and cuts in lending rates and banks' reserve requirements to revive growth and support employment. While the central bank stepped up policy support after widespread travel restrictions choked economic activity, it has more recently held off on further easing. Analysts expect China will keep its oneyear loan prime rate (LPR) steady at 3.85% until the end of 2021. The poll also predicted no change to the benchmark deposit rate until the end of 2021. The PBOC has kept it untouched at 1.5% since October 2015. China's consumer price index (CPI) in 2020 will likely rise 2.7% from the previous year, slowing from a 2.9% rise in 2019, according to the poll.



Macroeconomic calendar

Important macroeconomic data releases

| Weight | Date | Event | For | Reading ¹ | Previous | Consensus ² |
|--------|--------|--|-----|----------------------|----------|------------------------|
| | | China | | | | *2 |
| 00 | 27-Oct | Industrial profits (yoy) | Sep | 10.1% | 19.1% | |
| 000 | 31-Oct | Official manufacturing PMI | Oct | 51.4 | 51.5 | 51.3 |
| 000 | 02-Nov | Caixin's manufacturing PMI | Oct | 53.6 | 53.0 | 52.8 |
| 00 | 07-Nov | Trade balance (USD bn) | Oct | 58.4 | 37.0 | 46.3 |
| 00 | 07-Nov | Exports (yoy) | Oct | 11.4% | 9.9% | 9.2% |
| 0 | 07-Nov | Foreign reserves (USD bn) | Oct | 3 128 | 3 143 | 3 143 👅 |
| | | Poland | | | | |
| 0000 | 30-Oct | Consumer inflation CPI (yoy) - preliminary data | Oct | 3.0% | 3.2% | 3.1% |
| 000 | 02-Nov | Manufacturing PMI | Oct | 50.8 - | 50.8 | 51.0 |
| 00000 | 06-Nov | NBP base rate decision | Nov | 0.10% = | 0.10% | 0.10% |
| | | US | | | | |
| 0 | 26-Oct | Dallas Fed manufacturing activity | Oct | 19.8 | 13.6 | 13.5 |
| 00 | 27-Oct | Durable goods orders - preliminary data‡ | Sep | 1.9% | 0.4% | 0.5% |
| ٥ | 27-Oct | Richmond Fed manufacturing index | Oct | 29.0 | 21.0 | 18.0 |
| 0 | 27-Oct | S&P/CaseShiller home price index‡ | Aug | 229 | 227 | |
| 00000 | 29-Oct | GDP (annualized, qoq) - estimation | 3Q | 33.1% | -31.4% | 32.0% |
| 0000 | 30-Oct | Consumer spending inflation PCE (mom) | Sep | 0.2% | 0.3% | 0.2% |
| 0000 | 30-Oct | Consumer spending inflation PCE (yoy)‡ | Sep | 1.5% | 1.4% | 1.7% |
| 00 | 30-Oct | Personal income (sa, mom)‡ | Sep | 0.9% | -2.5% | 0.4% |
| 00 | 30-Oct | Personal spending (sa, mom) | Sep | 1.4% | 1.0% | 1.0% |
| 00 | 30-Oct | University of Michigan confidence index - final data | Oct | 81.8 | 81.2 | 81.2 |
| 000 | 02-Nov | Manufacturing PMI - final data | Oct | 53.4 | 53.3 | 53.3 |
| 00 | 02-Nov | ISM Manufacturing | Oct | 59.3 | 55.4 | 56.0 |
| 00 | 03-Nov | Durable goods orders - final data | Sep | 1.9% = | 1.9% | 1.9% |
| 000 | 04-Nov | Composite PMI - final data | Oct | 56.3 | 55.5 | |
| 000 | 04-Nov | PMI services - final data | Oct | 56.9 | 56.0 | 56.0 |
| 00000 | 05-Nov | FOMC base rate decision - upper bound (Fed) | Nov | 0.25% = | 0.25% | 0.25% |
| 00000 | 05-Nov | FOMC base rate decision - lower bound (Fed) | Nov | 0.00% = | 0.00% | 0.00% |
| 00 | 06-Nov | Change in non-farm payrolls (ths)‡ | Oct | 638 | 672 | 580 |
| 00 | 06-Nov | Underemployment rate (U6) | Oct | 12.1% | 12.8% | |
| 00 | 06-Nov | Unemployment rate | Oct | 6.9% | 7.9% | 7.6% |
| ٥ | 06-Nov | Average hourly earnings (yoy)‡ | Oct | 4.5% | 4.6% | 4.5% |



| Weight | Date | Event | For | Reading ¹ | Previous | Consensus ² |
|--------|--------|---|-----|----------------------|--------------|------------------------------|
| | | Eurozone | | | | (0) |
| 0 | 27-Oct | M3 money supply (yoy) | Sep | 10.4% | 9.5% | 9.6% |
| 00000 | 29-Oct | ECB main refinancing rate | Oct | 0.00% = | 0.00% | 0.00% |
| 00000 | 29-Oct | ECB deposit facility rate | Oct | -0.5% = | -0.5% | -0.5% |
| 0 | 29-Oct | Economic confidence‡ | Oct | 90.9 = | 90.9 | 89.6 |
| 0 | 29-Oct | Industrial confidence‡ | Oct | - 9.6 🛕 | - 11.4 | - 10.9 |
| 0 | 29-Oct | Consumer confidence - final data | Oct | - 15.5 = | - 15.5 | |
| 00000 | 30-Oct | GDP (sa, yoy) - estimation‡ | 3Q | -4.3% | -14.8% | -7.0% |
| 00000 | 30-Oct | GDP (sa, qoq) - estimation | 3Q | 12.7% | -11.8% | 9.6% |
| 0000 | 30-Oct | Core CPI (yoy) - preliminary data | Oct | 0.2% = | 0.2% | 0.2% |
| 0000 | 30-Oct | CPI estimate (yoy) | Oct | -0.3% = | -0.3% | -0.3% |
| 00 | 30-Oct | Unemployment rate‡ | Sep | 8.3% = | 8.3% | 8.2% |
| 000 | 02-Nov | Manufacturing PMI - final data | Oct | 54.8 | 54.4 | 54.4 |
| 000 | 04-Nov | Composite PMI - final data | Oct | 50.0 | 49.4 | 49.4 |
| 000 | 04-Nov | Services PMI - final data | Oct | 46.9 | 46.2 | 46.2 |
| 00 | 04-Nov | Producer inflation PPI (yoy)‡ | Sep | -2.4% | -2.6% | -2.4% |
| 00 | 05-Nov | Retail sales (yoy)‡ | Sep | 2.2% | 4.4% | 2.8% |
| | | Germany | | | | |
| 00 | 26-Oct | IFO business climate‡ | Oct | 92.7 | 93.2 | 93.0 |
| 0000 | 29-Oct | Harmonized consumer inflation HICP (yoy) - preliminary data | Oct | -0.5% | -0.4% | -0.4% |
| 0000 | 29-Oct | Consumer inflation CPI (yoy) - preliminary data | Oct | -0.2% = | -0.2% | -0.3% |
| 00 | 29-Oct | Unemployment rate | Oct | 6.2% | 6.3% | 6.3% |
| 00000 | 30-Oct | GDP (yoy) - preliminary data | 3Q | -4.1% 🔺 | -11.3% | -5.2% |
| 00000 | 30-Oct | GDP (sa, qoq) - preliminary data | 3Q | 8.2% | -9.7% | 7.3% |
| 000 | 30-Oct | Retail sales (yoy)‡ | Sep | 6.5% | 3.0% | 6.5% |
| 000 | 02-Nov | Manufacturing PMI - final data | Oct | 58.2 | 58.0 | 58.0 |
| 000 | 04-Nov | Composite PMI - final data | Oct | 55.0 | 54.5 | 54.5 |
| 000 | 05-Nov | Factory orders (wda, yoy)‡ | Sep | -1.9% | -1.7% | -1.2% |
| 0000 | 06-Nov | Industrial production (wda, yoy)‡ | Sep | -7.3% 🛕 | -8.7% | -6.5% |
| | | France | | | | |
| 00000 | 30-Oct | GDP (yoy) - preliminary data | 3Q | -4.3% | -18.9% | -7.3% |
| 00000 | 30-Oct | GDP(qoq) - preliminary data‡ | 3Q | 18.2% 🔺 | -13.7% | 15.0% |
| 0000 | 30-Oct | Harmonized consumer inflation HICP (yoy) - preliminary data | Oct | 0.0% = | 0.0% | 0.1% |
| 0000 | 30-Oct | Consumer inflation CPI (yoy) - preliminary data | Oct | 0.0% = | 0.0% | 0.1% |
| 000 | 02-Nov | Manufacturing PMI - final data | Oct | 51.3 | 51.0 | 51.0 |
| 000 | 04-Nov | Composite PMI - final data | Oct | 47.5 | 47.3 | 47.3 |
| 00000 | 20.0 | Italy CDR(vale van) and indicate data to | 20 | 470/ | 47.00/ | 0.407 |
| 00000 | 30-Oct | GDP (wda, yoy) - preliminary data‡ | 3Q | -4.7% | -17.9% | -8.4% |
| 00000 | 30-Oct | GDP (wda, qoq) - preliminary data‡ | 3Q | 16.1% | -13.0% | 11.1% |
| 0000 | 30-Oct | Harmonized consumer inflation HICP (yoy) - preliminary data | Oct | -0.6% | -1.0% | -0.8% |
| 00 | 30-Oct | Unemployment rate - preliminary data | Sep | 9.6% | 9.7% | 10.1% — 53.7 ^ |
| 000 | 02-Nov | Manufacturing PMI | Oct | 53.8 | 53.2 | |
| 000 | 04-Nov | Composite PMI | Oct | 49.2 ▼ | 50.4 | 49.2 |
| 000 | 02 No. | Manufacturing PMI (ca), final data | Oct | 52.7 | E2 2 | 522 |
| 000 | 02-Nov | Manufacturing PMI (sa) - final data | Oct | 53.7 A | 53.3 52.0 | 53.3 |
| 000 | 04-Nov | Composite PMI - final data BoE base rate decision | Oct | 52.1 | 52.9 | 52.9 |
| 00000 | 05-Nov | | Nov | 0.10% = | 0.10% | 0.10% |
| 0000 | 30-Oct | Japan Industrial production (vov) proliminary data | Con | 0.004 | -13.8% | -9.8% |
| 0000 | | Industrial production (yoy) - preliminary data | Sep | -9.0% <u></u> | | -9.8% |
| 000 | 02-Nov | Manufacturing PMI - final data | Oct | 48.7 | 48.0 | - |
| 000 | 05-Nov | Composite PMI - final data | Oct | 48.0 | 46.7 | |

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; •= equal to previous.

Source: Bloomberg, KGHM Polska Miedź



Key market data

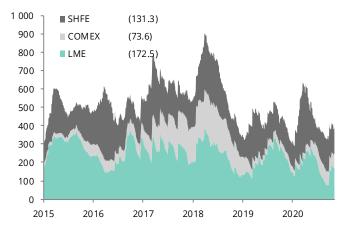
Key base & precious metal prices, exchange rates and other important market factors

| (as of: 06-Nov-20) | | Price change ¹ | | | | | | From year beginning ² | | | | |
|----------------------------|-----------|---------------------------|-------|----------------|-------|----------------|--------|----------------------------------|--------|-----------|-----------|-----------|
| | Price | | 2W | | QTD | | YTD | | 1Y | Average | Min | Max |
| LME (USD/t; Mo in USD/lbs) | _ | | | | | | | | | | | |
| Copper | 6 938.50 | | 0.9% | | 5.0% | | 12.7% | | 16.8% | 5 957.03 | 4 617.50 | 6 953.00 |
| Molybdenum | 8.87 | | 2.5% | | 8.8% | \blacksquare | -3.6% | | | 8.58 | 7.00 | 10.90 |
| Nickel | 15 532.00 | • | -1.5% | | 8.0% | | 10.9% | • | -4.7% | 13 339.50 | 11 055.00 | 16 064.00 |
| Aluminum | 1 891.50 | | 3.4% | | 8.9% | | 5.1% | | 4.1% | 1 655.53 | 1 421.50 | 1 891.50 |
| Tin | 18 385.00 | • | -0.8% | | 5.3% | | 9.1% | | 10.8% | 16 796.22 | 13 400.00 | 18 750.00 |
| Zinc | 2 614.50 | | 1.9% | | 8.4% | | 14.0% | | 2.9% | 2 185.08 | 1 773.50 | 2 614.50 |
| Lead | 1 838.00 | | 2.5% | | 2.1% | • | -4.4% | • | -12.7% | 1 798.04 | 1 576.50 | 2 027.00 |
| LBMA (USD/troz) | _ | | | | | | | | | | | |
| Silver | 25.78 | | 4.1% | | 8.7% | | 42.9% | | 47.1% | 19.88 | 12.01 | 28.89 |
| Gold ² | 1 940.80 | | 2.0% | | 2.9% | | 27.4% | | 30.8% | 1 756.30 | 1 474.25 | 2 067.15 |
| LPPM (USD/troz) | _ | | | | | | | | | | | |
| Platinum ² | 911.00 | • | -0.7% | | 3.1% | • | -6.2% | • | -1.9% | 867.06 | 593.00 | 1 017.00 |
| Palladium² | 2 450.00 | | 2.3% | | 4.9% | | 27.6% | | 35.8% | 2 166.82 | 1 557.00 | 2 781.00 |
| FX ³ | _ | | | | | | | | | | | |
| EURUSD | 1.1870 | | 0.1% | | 1.4% | | 5.7% | | 7.2% | 1.1315 | 1.0707 | 1.1987 |
| EURPLN | 4.5277 | • | -1.1% | | 0.0% | | 6.3% | | 6.2% | 4.4391 | 4.2279 | 4.6330 |
| USDPLN | 3.8194 | • | -1.2% | \blacksquare | -1.2% | | 0.6% | \blacksquare | -0.8% | 3.9282 | 3.6707 | 4.2654 |
| USDCAD | 1.3039 | • | -0.8% | \blacksquare | -2.2% | | 0.4% | \blacksquare | -1.0% | 1.3499 | 1.2970 | 1.4496 |
| USDCNY | 6.6125 | • | -1.1% | \blacksquare | -2.6% | \blacksquare | -5.0% | \blacksquare | -5.2% | 6.9621 | 6.6065 | 7.1671 |
| USDCLP | 752.01 | _ | -3.8% | \blacksquare | -4.1% | | 1.0% | | 1.1% | 800.09 | 748.74 | 867.83 |
| Money market | _ | | | | | | | | | | | |
| 3m LIBOR USD | 0.206 | • | -0.01 | \blacksquare | -0.03 | \blacksquare | -1.70 | \blacksquare | -1.70 | 0.722 | 0.206 | 1.900 |
| 3m EURIBOR | -0.513 | • | 0.00 | \blacksquare | -0.02 | \blacksquare | -0.13 | \blacksquare | -0.11 | -0.409 | -0.523 | -0.161 |
| 3m WIBOR | 0.220 | - | 0.00 | - | 0.00 | \blacksquare | -1.49 | \blacksquare | -1.49 | 0.733 | 0.220 | 1.710 |
| 5y USD interest rate swap | 0.423 | • | -0.02 | | 0.08 | \blacksquare | -1.31 | \blacksquare | -1.28 | 0.612 | 0.243 | 1.693 |
| 5y EUR interest rate swap | -0.486 | • | -0.03 | \blacksquare | -0.06 | \blacksquare | -0.38 | \blacksquare | -0.32 | -0.326 | -0.490 | -0.090 |
| 5y PLN interest rate swap | 0.520 | | 0.00 | | 0.01 | \blacksquare | -1.26 | \blacksquare | -1.34 | 0.871 | 0.443 | 2.050 |
| Fuel | _ | | | | | | | | | | | |
| WTI Cushing | 37.14 | • | -6.4% | \blacksquare | -7.7% | | -39.2% | • | -35.0% | 38.25 | -37.63 | 63.27 |
| Brent | 38.82 | • | -5.5% | \blacksquare | -5.2% | \blacksquare | -41.6% | \blacksquare | -38.1% | 41.31 | 17.32 | 69.02 |
| Diesel NY (ULSD) | 114.26 | • | -1.2% | \blacksquare | -0.4% | \blacksquare | -43.6% | \blacksquare | -40.7% | 122.30 | 60.67 | 206.01 |
| Others | _ | | | | | | | | | | | |
| VIX | 24.86 | • | -2.69 | \blacksquare | -1.51 | | 11.08 | | 12.13 | 30.38 | 12.10 | 82.69 |
| BBG Commodity Index | 72.82 | • | -1.0% | | 2.8% | • | -10.0% | • | -9.0% | 69.05 | 59.48 | 81.64 |
| S&P500 | 3 509.44 | | 1.3% | | 4.4% | | 8.6% | | 13.8% | 3 143.44 | 2 237.40 | 3 580.84 |
| DAX | 12 480.02 | • | -1.3% | \blacksquare | -2.2% | • | -5.8% | \blacksquare | -6.1% | 12 177.51 | 8 441.71 | 13 789.00 |
| Shanghai Composite | 3 312.16 | | 1.0% | | 2.9% | | 8.6% | | 11.2% | 3 079.23 | 2 660.17 | 3 451.09 |
| WIG 20 | 1 697.49 | | 3.2% | • | -0.9% | • | -21.1% | • | -25.3% | 1 774.30 | 1 305.73 | 2 200.10 |
| KGHM | 137.85 | | 9.0% | | 16.8% | | 44.2% | | 42.6% | 99.46 | 49.40 | 139.35 |

[°] 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

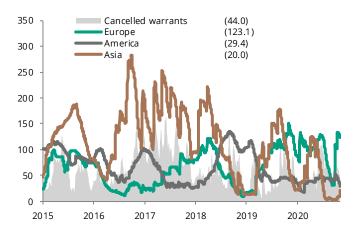


Copper: official exchange stocks (thousand tonnes)



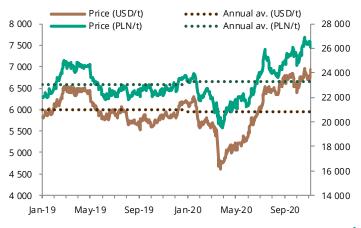
Note: Latest values in brackets. Source: Bloomberg, KGHM

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

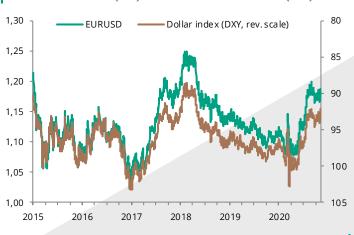
Source: Bloomberg, KGHM Polska Miedź

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

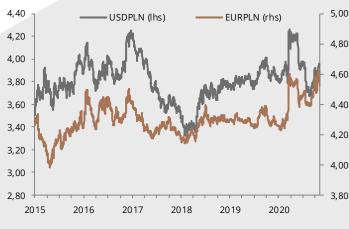


Source: Bloomberg, KGHM Polska Miedź

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



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: **26th October – 8th November 2020.**

- 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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In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.

Departament Ryzyka Finansowego i Rynkowego (Financial and Market Risk Department)

Wydzial Ryzyka Rynkowego (Market Risk Unit)

ul. M. Sklodowskiej-Curie 48

59-301 Lubin, Poland