

Market Overview



as of: 22nd May 2023

- **Copper:** The bill sets up a maximum tax rate of around 47% for companies that produce over 80,000 tonnes of fine copper a year, considered high by the industry. However mining association Sonami expressed relief that the measure ended uncertainty over the type of reform. (page 2).
- **Precious metals:** An additional 200 tons of gold reserves have been discovered at the Xiling Mine in Shandong Province, bringing the total reserves to 580 tons, with an estimated economic value of 200 billion yuan. The resources of the yellow metal in the Xiling Mine are among the largest in the world (page 4).
- **Euro zone:** China's credit figures are well below estimates, reinforcing concerns about the durability of the post-covid recovery. On the other hand, the overall dynamics of growth slows down significantly. Expectations for easing monetary policy are rising, and an interest rate cut in the second quarter seems imminent (page 5).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	8 222.00	-3.1%
▼ Nickel	21 465.00	-9.8%
LBMA (USD/troz)		
▼ Silver	23.66	-8.4%
▼ Gold (PM)	1 961.60	-2.0%
FX		
▼ EURUSD	1.0808	-1.9%
▼ EURPLN	4.5367	-1.1%
▲ USDPLN	4.2053	1.1%
▲ USDCAD	1.3503	0.6%
▼ USDCLP	796.04	-0.6%
Stocks		
▼ KGHM	112.70	-4.9%

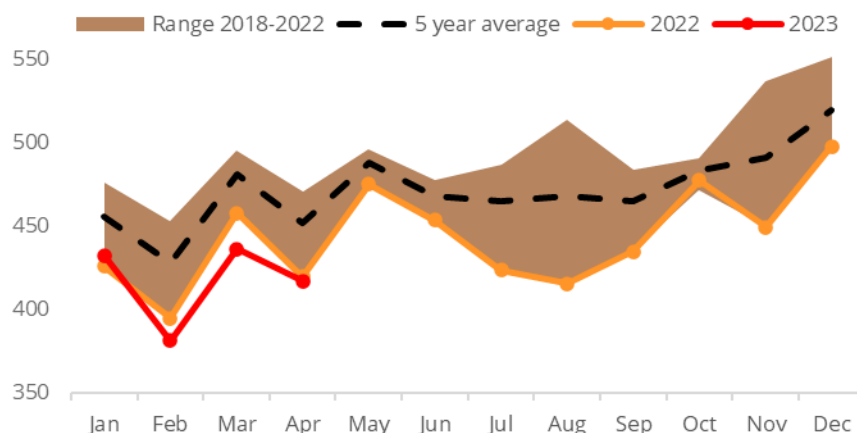
Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 9)

Important macroeconomic data

Release	For	
 CPI (yoy)	Apr	0.1% ▼
 Current account balance	Mar	1 643 ▲
 Capacity utilization	Apr	79.7% ▲
 GDP (sa, yoy)	1Q	1.3% ▲
 Copper exports (\$)	Apr	3 540 ▼

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

Chilean copper production below five-year minimum



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Miners in Chile to pay more taxes as long-awaited reform approved

The bill sets up a maximum tax rate of around 47% for companies that produce over 80,000 tonnes of fine copper a year, considered high by the industry. However mining association Sonami expressed relief that the measure ended uncertainty over the type of reform.

Chilean lawmakers have approved an amended mining royalty bill, in the works for almost two years, which will require companies operating in the country pay more taxes and royalties to the government. The bill, endorsed by the Senate, was approved by a vote of 101 in favour to 24 against. It now requires only the signature of President Gabriel Boric, who has publicly backed it, to become law. The bill sets up a maximum tax rate of around 47% for companies that produce over 80,000 tonnes of fine copper a year, considered high by the industry. It also imposes a flat-rate ad valorem tax of 1% on miners that produce more than 50,000 tonnes per year, as well as an additional 8% to 26% tax depending on the miner's operating margin. Depreciation, as well as supply and work costs, would be taken into consideration in calculating a company's returns. Mining companies in Chile, the world's top producer of copper and the no.2 producer of lithium, currently have a tax burden of 41% to 44% which is what main competitors, such as Peru, impose on large producers. The tax ceiling for units of giant mining companies, including BHP, Anglo American and Teck Resources, was the focus of debate for months as Boric's administration attempted to increase its take of earnings, without undermining Chile's competitiveness. Mining association Sonami expressed relief that the measure ended uncertainty over the type of reform lawmakers would ultimately adopt. "It puts an end to a period of almost 5 years of uncertainty for the sector, which hurt the country's main productive activity," Sonami president Jorge Riesco said in a statement. The association described the final legislative language as "better" than what was initially proposed by the government, giving credit to Finance Minister Mario Marcel for introducing industry-friendly revisions. The divisive bill has not left everyone satisfied, with some criticizing the "ad valorem" clause. "It creates the obligation to pay the tax even when there are no profits," explained mining law advisor and academic Maria Paz Pulga. "If you sell in periods of low prices, you make a loss not only in terms of profit, but also because you have to pay the tax," Puga noted. The approved bill indicates that firms with negative operating profits will not have to pay the ad valorem component of the tax. Marcel applauded the vote result, highlighting that the higher government take required of miners would address past abuses. "With this legislation, we seek to avoid what happened many times with our country's natural riches: they were exploited, they disappeared, which left very little for the country and its future

development,” he said in a statement. The new tax scheme, effective on January 1st, 2024, would inject about \$1.5 billion a year into the state’s coffers, according to official figures. From that figure, nearly \$450 million will be distributed to regional governments for social spending.

Copper concentrate market to face steep deficit from 2025
China is expected to increase its smelting capacity by 2.6 million tons over the next five years. Large increases in refining capacity are also expected in Indonesia and India. However, the growing smelting capacity is not accompanied by a corresponding increase in mining projects that would provide the necessary raw material.

The global copper concentrate market will see a steep deficit during 2025-2027 as Asian smelters ramped up capacity amid a lack of matching mining projects in the pipeline, analysts said. China is expected to add 2.6 million tonnes of smelting capacity in the next five years, said Craig Lang, an analyst at consultancy CRU. Indonesia will add 725,00 tonnes of smelting capacity and India’s Adani smelter – first stage capacity at 500,000 tonnes and eventually hitting 1 million tonnes – is slated to start by the later half of 2024, Lang said. CRU saw the global surplus in copper concentrate this year to be 240,000 tonnes and extend to 243,000 tonnes in 2024 before flipping into a steep deficit during 2025-2027, with the shortfall in 2026 hitting 595,000 tonnes. Industry data provider SMM forecast a 216,000-tonne surplus in the global copper concentrate market this year to reduce to 107,000 tonnes in 2024, and switch to a deficit of 150,000 tonnes in 2025. As smelting capacity in top copper consumer China surges, refined copper imports will fall to around 150,000 tonnes a month by the middle of this decade, from 300,00 tonnes now, Lang said. China’s share of copper demand growth will fall, Lang said. Downstream copper users’ operating rate in China this year has not been strong enough to support prices, said Yanchen Wang, managing director at SMM UK. The State Grid Corporation of China’s focus on investing in ultra-high voltage projects will also see the company using more aluminum, Wang said. SMM forecast the Chinese copper cathode demand to grow 2.4% this year to 14.1 million tonnes, and global copper consumption to expand 2.9% to 25.2 million tonnes. Global copper cathode output is seen growing 3.5% in 2023 to 25.5 million tonnes, leaving a small market surplus of 300,000 tonnes, according to SMM.

Other important information on copper market:

- Peru’s March copper production leapt 20.4% from a year earlier to reach 219,275 tonnes. Its first quarter copper output rose 11.2% yoy, landing at 615,514 tonnes. Major mines such as China’s MMG Ltd’s Las Bambas and Glencore’s Antapaccay recorded sharp drops in February production due to a blockade of a key highway amid anti-government protests. Nevertheless, Southern Copper saw its production rise nearly 80% year-on-year in March, while Antapaccay’s rose 65% and Cerro Verde’s production grew 7.3%, the statement said. Anglo American’s Quellaveco, which began production halfway through last year, posted a March output of 22,153 tonnes, it added.

Precious Metals

China discovers largest gold mine in Shandong with 580 tons of reserve

An additional 200 tons of gold reserves have been discovered at the Xiling Mine in Shandong Province, bringing the total reserves to 580 tons, with an estimated economic value of 200 billion yuan. The resources of the yellow metal in the Xiling Mine are among the largest in the world.

The accumulative gold metal reserve of Xiling gold mine in Laizhou, East China's Shandong Province reached 580 tons after latest detection, becoming China's largest single structured gold mine, local media press Qilu Evening News reported on Thursday. The Natural Resource Department of Shandong Province recently discovered an additional 200 tons of gold resources in the mine, bringing the total accumulative gold reserve to 580 tons, with an estimated economic value of 200 billion yuan. The gold metal reserve of Xiling gold mine was also in the front tier in the world, indicating a breakthrough in Shandong's mineral exploration, said the report. Shandong Gold Group Co (SD-Gold), the owner of the Xiling gold mine, had announced in March 2017 that the company detected a huge gold mine with estimated gold metal reserve of over 550 tons, referring to the Xiling gold mine, as confirmed by the China Gold Association (CGA). The northeastern region of Shandong Province is home to the largest gold mine reserves in China, with the highest gold output and reserves nationwide, according to the CGA. In the first quarter of 2023, China produced 84.97 tons of raw gold, representing a 1.88 percent increase compared to the previous year. Additionally, China's gold consumption volume reached 291.58 tons, indicating a 12 percent year-on-year growth, as reported by the CGA. Furthermore, data from the State Administration reveals that China has increased its gold reserves for six consecutive months, with the central bank's gold reserves reaching 66.76 million ounces by the end of April, an increase of 260,000 ounces compared to the end of March.

Global economies | Foreign exchange markets

China's Weak Inflation, Borrowing Show Economic Recovery Waning








China's credit figures are well below estimates, reinforcing concerns about the durability of the post-covid recovery. On the other hand, the overall dynamics of growth slows down significantly. Expectations for easing monetary policy are rising, and an interest rate cut in the second quarter seems imminent.





According to Bloomberg China's consumer prices barely grew in April, while borrowing slumped, providing further evidence the economy's recovery is waning and fueling expectations of more central bank stimulus. Consumer inflation weakened to a two-year low of 0.1% in April, the National Bureau of Statistics, as food and energy costs eased. The figures were partly affected by the base of comparison from last year. Producer prices fell 3.6%, largely due to lower commodity costs. Separately, data from the People's Bank of China showed credit and new loans were much worse than expected in April as consumers and businesses curbed their borrowing. "China's credit data came in well below estimates, reinforcing the concerns over the sustainability of post-Covid recovery," said Zhou Hao, chief economist at Guotai Junan International Holdings Ltd. Overall growth momentum "has been slowing significantly," he said. Expectations of policy easing has been growing, and a "policy rate cut looks imminent in the second quarter," he added. China's economic growth accelerated to a one-year high in the first quarter after pandemic restrictions were dropped, led by stronger consumers spending on travel and shopping. Recent data has been more mixed though, with manufacturing activity contracting in April and imports plunging. Thursday's figures added to the gloom. Core CPI, which excludes volatile food and energy costs, was unchanged at 0.7%, suggesting there's very little demand-driven inflation in the economy. Food inflation weakened to 0.4% in April from 2.4% in March. "There is still a big gap between demand and its pre-pandemic trend," said Xing Zhaopeng, senior China strategist at Australia & New Zealand Banking Group Ltd. "We do not think domestic demand can improve significantly in the near-term," estimating it will take three to five years to rebound. The yield on 10-year government bonds fell 1 basis point to 2.7% as of 5:47 p.m. local time, set for the lowest level since November. The PBOC's figures showed lending weakened across the board. Growth of M2, the broadest measure of money supply, moderated to 12.4% year-on-year in April, the slowest pace seen this year. Aggregate financing, a broad measure of credit, reached 1.22 trillion yuan (\$176 billion) in April, much lower than the 2 trillion yuan median estimate in a Bloomberg survey of economists. Financial institutions offered 718.8 billion yuan worth of new loans, about just half of what economists had forecast. New household mid and long-term loans, a proxy for mortgages, posted its first decline in a year, suggesting residents repaid more than they borrowed. New household short-term loans, usually used for big-ticket purchases like cars, also contracted for the first time in four months.

New corporate medium and long-term loans, which reflects companies' willingness to expand investment, was 667 billion yuan, the smallest since October. The PBOC has refrained from cutting interest rates this year although it lowered the reserve requirement ratio for banks in March, providing lenders with more cash to give out loans. Credit growth spiked in January-March, helping drive the economy's debt ratio to a record high. China's top political leaders have so far stuck to their pro-growth policy stance this year, suggesting they'll keep monetary and fiscal policy supportive. Still, they're wary of flooding the financial system with cheap liquidity. Economists say the PBOC has scope to cut interest rates if needed. The Federal Reserve signaled a potential pause in interest rate hikes recently and latest data showed US inflation cooled somewhat in April. Chinese banks may also have room to lower lending rates going forward after some of them cut their deposit rates recently. The PBOC probably won't take any immediate action, said Bruce Pang, chief economist for Greater China at Jones Lang LaSalle Inc. There's "less urgency for large-scale monetary easing" in the short term, he said. "Securing income growth and improving consumer confidence remain key policy priorities for delivering a more sustainable consumption recovery," he said.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
🔴🔴	09-May	Trade balance (USD bn)‡	Apr	90.2 ▲	88.2	71.3	🟢
🔴🔴	09-May	Exports (yoy)	Apr	8.5% ▼	14.8%	8.0%	🟢
🔴🔴🔴🔴	11-May	Consumer inflation CPI (yoy)	Apr	0.1% ▼	0.7%	0.3%	🔴
🔴🔴	11-May	Producer inflation PPI (yoy)	Apr	-3.6% ▼	-2.5%	-3.3%	🔴
🔴	11-May	New yuan loans (CNY bn)‡	Apr	719 ▼	3 888	1 400	🔴
🔴🔴🔴🔴	16-May	Industrial production (yoy)	Apr	5.6% ▲	3.9%	10.9%	🔴
🔴🔴	16-May	Fixed assets investments (ytd, yoy)	Apr	4.7% ▼	5.1%	5.7%	🔴
🔴	16-May	Retail sales (yoy)	Apr	18.4% ▲	10.6%	21.9%	🔴
Poland							
🔴🔴🔴🔴🔴	10-May	NBP base rate decision	May	6.75% -	6.75%	6.75%	🟡
🔴🔴🔴🔴	15-May	Consumer inflation CPI (yoy) - final data	Apr	14.7% -	14.7%	--	🟡
🔴🔴	15-May	Trade balance (EUR mn)‡	Mar	608 ▼	1 102	1 401	🔴
🔴🔴	15-May	Exports (EUR mn)‡	Mar	30 012 ▲	27 352	28 595	🟢
🔴🔴	15-May	Current account balance (EUR mn)‡	Mar	1 643 ▲	1 410	2 465	🔴
🔴🔴🔴🔴🔴	16-May	GDP (yoy) - preliminary data‡	1Q	-0.2% ▼	2.3%	-0.9%	🟢
🔴🔴🔴🔴🔴	16-May	GDP (qoq) - preliminary data‡	1Q	3.9% ▲	-2.3%	0.8%	🟢
🔴🔴🔴🔴	16-May	Core CPI (excluding food and energy, yoy)	Apr	12.2% ▼	12.3%	12.2%	🟡
US							
🔴🔴🔴🔴	10-May	Consumer inflation CPI (mom)	Apr	0.4% ▲	0.1%	0.4%	🟡
🔴🔴🔴🔴	10-May	Consumer inflation CPI (yoy)	Apr	4.9% ▼	5.0%	5.0%	🔴
🔴🔴	12-May	University of Michigan confidence index - preliminary data	May	57.7 ▼	63.5	63.0	🔴
🔴🔴🔴🔴	16-May	Industrial production (mom)‡	Apr	0.5% ▲	0.1%	0.0%	🟢
🔴🔴	16-May	Retail sales (excluding autos, mom)‡	Apr	0.4% ▲	-0.8%	0.4%	🟡
🔴	16-May	Capacity utilization‡	Apr	79.7% ▲	79.5%	79.7%	🟡
🔴🔴	18-May	Philadelphia Fed business outlook	May	-10.4 ▲	-31.3	-20.0	🟢
Eurozone							
🔴🔴🔴🔴	15-May	Industrial production (sa, mom)‡	Mar	-4.1% ▼	1.4%	-2.8%	🔴
🔴🔴🔴🔴	15-May	Industrial production (wda, yoy)	Mar	-1.4% ▼	2.0%	0.1%	🔴
🔴🔴🔴🔴🔴	16-May	GDP (sa, yoy) - preliminary data‡	1Q	1.3% ▲	1.0%	1.3%	🟡
🔴🔴🔴🔴🔴	16-May	GDP (sa, qoq) - preliminary data‡	1Q	0.1% ▲	-0.1%	0.1%	🟡
🔴	16-May	Trade balance (EUR mn)‡	Mar	25.6 ▲	2.8	--	🟡
🔴	16-May	ZEW survey expectations	May	-9.4 ▼	6.4	--	🟡
🔴🔴🔴🔴	17-May	Consumer inflation CPI (yoy) - final data‡	Apr	7.0% ▲	6.9%	7.0%	🟡
🔴🔴🔴🔴	17-May	Core CPI (yoy) - final data	Apr	5.6% -	5.6%	5.6%	🟡
Germany							
🔴🔴🔴🔴	08-May	Industrial production (wda, yoy)‡	Mar	1.8% ▲	1.0%	1.8%	🟡
🔴🔴🔴🔴	10-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	7.6% -	7.6%	7.6%	🟡
🔴🔴🔴🔴	10-May	Consumer inflation CPI (yoy) - final data	Apr	7.2% -	7.2%	7.2%	🟡
France							
🔴🔴🔴🔴	12-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	6.9% -	6.9%	6.9%	🟡
🔴🔴🔴🔴	12-May	Consumer inflation CPI (yoy) - final data	Apr	5.9% -	5.9%	5.9%	🟡
Italy							
🔴🔴🔴🔴	10-May	Industrial production (wda, yoy)	Mar	-3.2% ▼	-2.3%	-1.7%	🔴
🔴🔴🔴🔴	16-May	Harmonized consumer inflation HICP (yoy) - final data‡	Apr	8.7% ▲	8.6%	8.8%	🔴

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
UK 						
☆☆☆☆☆	11-May	BoE base rate decision	May	45.0 ▲	42.5	45.0 ○
☆☆☆☆☆	12-May	GDP (yoy) - preliminary data	1Q	0.2% ▼	0.6%	0.2% ○
☆☆☆☆☆	12-May	GDP (qoq) - preliminary data	1Q	0.1% -	0.1%	0.1% ○
☆☆☆☆	12-May	Industrial production (yoy)‡	Mar	-2.0% ▲	-2.7%	-2.9% ▲
☆☆	16-May	Unemployment rate (ILO, 3-months)	Mar	3.9% ▲	3.8%	3.8% ▲
Japan 						
☆☆☆	08-May	Composite PMI - final data	Apr	52.9 -	52.9	--
☆☆☆☆☆	17-May	GDP (annualized, qoq) - preliminary data‡	1Q	1.6% ▲	-0.1%	0.8% ▲
☆☆☆☆☆	17-May	GDP (qoq, sa) - preliminary data	1Q	0.4% ▲	0.0%	0.2% ▲
☆☆☆☆	17-May	Industrial production (yoy) - final data	Mar	-0.6% ▲	-0.7%	--
☆☆☆☆	19-May	Consumer inflation CPI (yoy)	Apr	3.5% ▲	3.2%	3.5% ○
Chile 						
☆☆☆	08-May	Copper exports (USD mn)‡	Apr	3 540 ▼	4 558	--
☆☆☆☆☆	13-May	BCCh overnight rate target	May	11.25% -	11.25%	11.25% ○
☆☆☆☆☆	18-May	GDP (yoy)	1Q	-0.6% ▲	-2.3%	-0.9% ▲
Canada 						
☆☆☆☆	16-May	Consumer inflation CPI (yoy)	Apr	4.4% ▲	4.3%	4.1% ▲

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

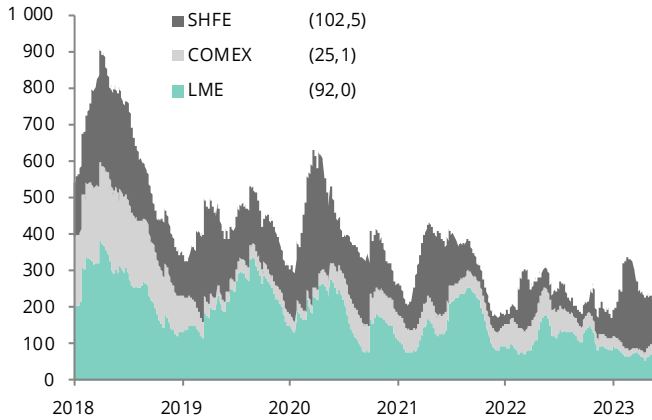
Key base & precious metal prices, exchange rates and other important market factors

(as of: 19-May-23)		Price change ¹				From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max
LME (USD/t; Mo in USD/lbs)								
Copper	8 222.00	▼ -3.1%	▼ -8.0%	▼ -2.0%	▼ -11.5%	8 826.85	8 076.00	9 436.00
Molybdenum	21.21	▲ 1.0%	▼ -29.2%	▼ -18.8%	▲	29.20	17.86	38.28
Nickel	21 465.00	▼ -9.8%	▼ -7.1%	▼ -29.4%	▼ -17.8%	25 136.05	21 275.00	31 200.00
Aluminum	2 300.00	▲ 1.0%	▼ -1.6%	▼ -2.6%	▼ -18.6%	2 369.65	2 229.00	2 636.00
Tin	25 550.00	▼ -2.9%	▼ -2.0%	▲ 3.0%	▼ -24.6%	26 176.37	22 225.00	32 050.00
Zinc	2 491.00	▼ -5.3%	▼ -14.3%	▼ -17.7%	▼ -31.7%	2 981.19	2 473.50	3 509.00
Lead	2 096.00	▼ -0.4%	▼ -2.3%	▼ -10.2%	▲ 3.1%	2 136.79	2 034.00	2 331.00
LBMA (USD/troz)								
Silver	23.66	▼ -8.4%	▼ -0.9%	▼ -1.2%	▲ 9.7%	23.29	20.09	26.03
Gold ²	1 961.60	▼ -2.0%	▼ -0.9%	▲ 8.2%	▲ 6.4%	1 926.78	1 810.95	2 048.45
LPPM (USD/troz)								
Platinum ²	1 071.00	▲ 2.6%	▲ 9.2%	▲ 0.6%	▲ 12.7%	1 016.28	912.00	1 128.00
Palladium ²	1 518.00	▲ 4.3%	▲ 1.9%	▼ -15.1%	▼ -23.3%	1 547.05	1 361.00	1 802.00
FX³								
EURUSD	1.0808	▼ -1.9%	▼ -0.6%	▲ 1.3%	▲ 2.7%	1.0805	1.0500	1.1074
EURPLN	4.5367	▼ -1.1%	▼ -3.0%	▼ -3.3%	▼ -2.3%	4.6736	4.4904	4.7895
USDPLN	4.2053	▲ 1.1%	▼ -2.1%	▼ -4.5%	▼ -4.9%	4.3252	4.1228	4.4888
USDCAD	1.3503	▲ 0.6%	▼ -0.2%	▼ -0.3%	▲ 5.4%	1.3512	1.3312	1.3807
USDCNY	7.0120	▲ 1.5%	▲ 2.0%	▲ 1.6%	▲ 4.5%	6.8708	6.7010	7.0375
USDCLP	796.04	▼ -0.6%	▲ 0.9%	▼ -7.4%	▼ -6.3%	807.76	781.49	856.31
Money market								
3m LIBOR USD	5.393	▲ 0.06	▲ 0.20	▲ 0.63	▲ 3.89	5.042	4.782	5.393
3m EURIBOR	3.415	▲ 0.14	▲ 0.38	▲ 1.28	▲ 3.76	2.844	2.170	3.415
3m WIBOR	6.900	- 0.00	▲ 0.01	▼ -0.12	▲ 0.45	6.921	6.890	7.010
5y USD interest rate swap	3.798	▲ 0.28	▲ 0.16	▼ -0.22	▲ 0.92	3.773	3.418	4.408
5y EUR interest rate swap	3.140	▲ 0.18	▲ 0.09	▼ -0.10	▲ 1.74	3.042	2.672	3.479
5y PLN interest rate swap	5.483	▲ 0.26	▼ -0.02	▼ -0.68	▼ -0.77	5.489	5.040	6.125
Fuel								
WTI Cushing	71.55	▲ 0.3%	▼ -5.4%	▼ -10.9%	▼ -36.2%	75.97	66.74	83.26
Brent	75.75	▲ 0.2%	▼ -4.9%	▼ -10.9%	▼ -32.7%	81.01	71.87	88.37
Diesel NY (ULSD)	236.60	▲ 2.0%	▼ -11.6%	▼ -29.7%	▼ -41.1%	277.64	223.48	358.84
Others								
VIX	16.81	▼ -0.38	▼ -1.89	▼ -4.86	▼ -12.54	19.61	15.78	26.52
BBG Commodity Index	101.07	▼ -1.8%	▼ -4.2%	▼ -10.4%	▼ -22.9%	106.35	100.97	112.52
S&P500	4 191.98	▲ 1.3%	▲ 2.0%	▲ 9.2%	▲ 7.5%	4 045.13	3 808.10	4 198.05
DAX	16 275.38	▲ 2.0%	▲ 4.1%	▲ 16.9%	▲ 17.2%	15 411.15	14 181.67	16 275.38
Shanghai Composite	3 283.54	▼ -1.5%	▲ 0.3%	▲ 6.3%	▲ 6.0%	3 273.35	3 116.51	3 395.00
WIG 20	1 992.31	▲ 4.2%	▲ 13.3%	▲ 11.2%	▲ 12.2%	1 851.93	1 670.18	1 992.31
KGHM	112.70	▼ -4.9%	▼ -7.8%	▼ -11.1%	▼ -15.5%	128.43	111.35	153.80

¹ 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

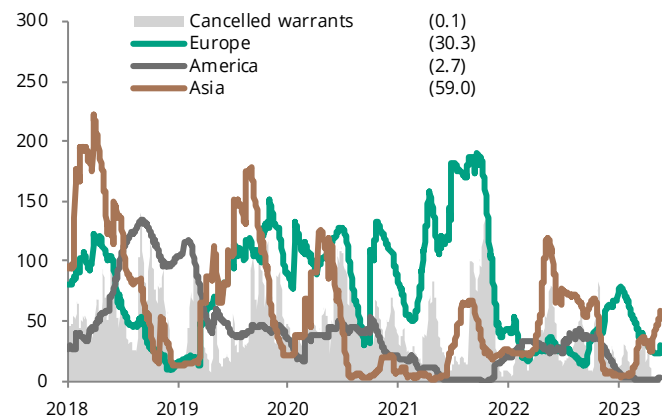
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



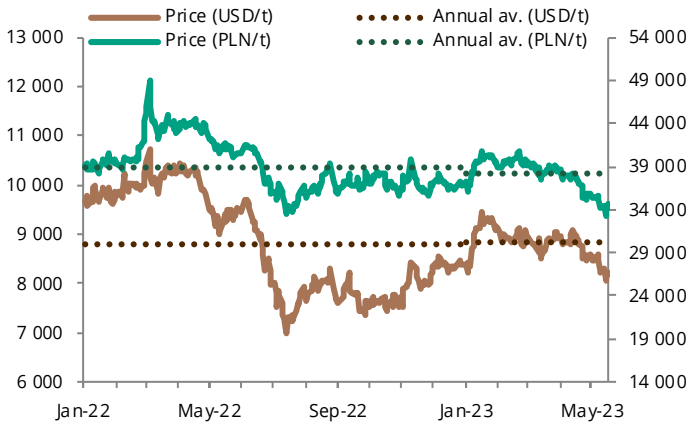
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



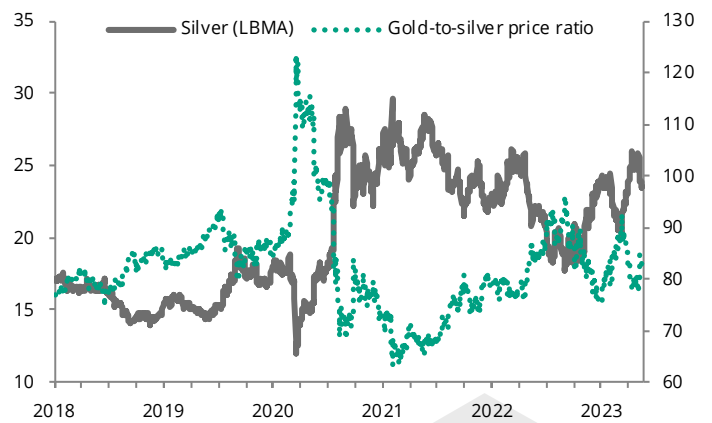
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



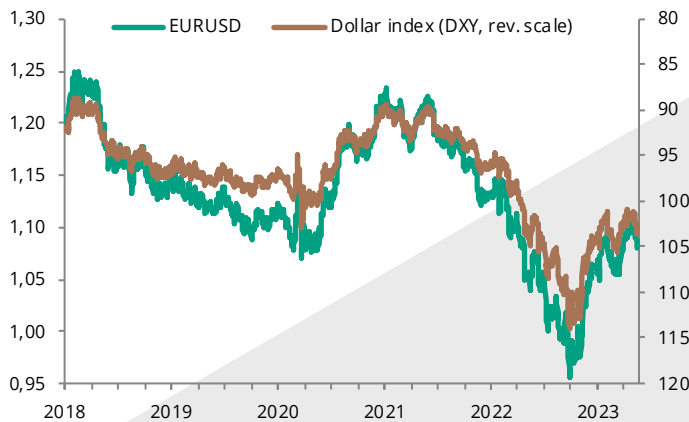
Source: Bloomberg, KGHM Polska Miedz

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



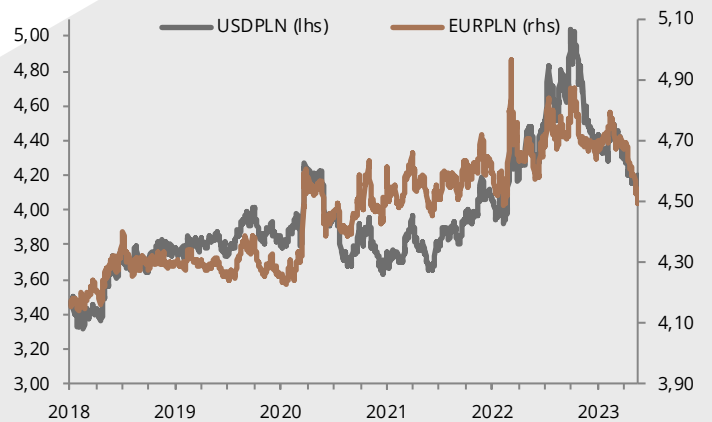
Source: Bloomberg, KGHM Polska Miedz

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



Source: Bloomberg, KGHM Polska Miedz

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



Source: Bloomberg, KGHM Polska Miedz

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
8 – 21 May 2023.

- 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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