

Market Overview

- **Copper:** The London Metal Exchange announced that it did not intend to go beyond the scope of sanctions, for example by placing restrictions on the circulation of metal produced in Russia within the LME system. It was found that the impact of taking such steps would not be limited solely to the LME's business, but would extend to all those participating in the global market; it would in effect be an action taken on behalf of the LME's global user base (*page 2*).
- **Precious metals:** Increasing household demand for physical gold prompted Bank of Russia to halt its purchases from banks to ensure there's enough supply for local buyers (*page 4*).
- **Energy:** The EU-U.S. deal will provide a political platform for commercial contracts for LNG deliveries. The additional imports from the U.S. will take time to start, with Europe constrained by the current regassification capacity, number of terminals and interconnectors. (*page 5*).
- **Fed:** Policy makers led by Chair Jerome Powell voted 8-1 to lift their key rate to a target range of 0.25% to 0.5%. They signaled increases at all other six meetings this year (*page 6*).








as of: 28th March 2022

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	10 280.00	1.3%
▼ Nickel	35 550.00	-17.3%
LBMA (USD/troz)		
▼ Silver	25.62	-0.1%
▼ Gold (PM)	1 953.80	-1.3%
FX		
▲ EURUSD	1.1002	0.1%
▼ EURPLN	4.7459	-1.0%
▼ USDPLN	4.3125	-1.3%
▼ USDCAD	1.2502	-1.7%
▼ USDCPL	789.87	-2.0%
Stocks		
▲ KGHM	177.35	1.7%

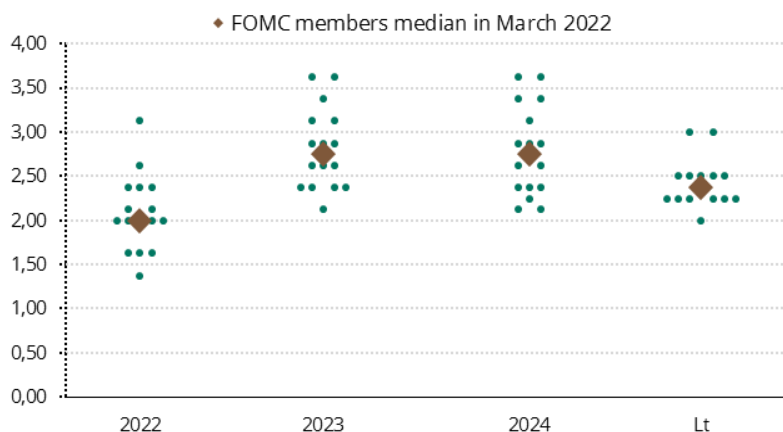
Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 10*)

Important macroeconomic data

Release	For		
 Fed upper rate	Mar	0.50%	▲
 GDP (yoy)	4Q	12.0%	▼
 IFO business climate	Mar	90.8	▼
 CPI (yoy)	Feb	8.5%	▼
 Average salary (yoy)	Feb	11.7%	▲

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 8*)

The latest forecast shows an increase in expectations of higher inflation among FOMC members



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

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Base and precious metals | Other commodities

Copper

LME Has No Plans To Ban Russian Copper

The London Metal Exchange announced that it did not intend to go beyond the scope of sanctions, for example by placing restrictions on the circulation of metal produced in Russia within the LME system. It was found that the impact of taking such steps would not be limited solely to the LME's business, but would extend to all those participating in the global market; it would in effect be an action taken on behalf of the LME's global user base.

Russia produced 920,000 mt of refined copper in 2021, which is about 3.5% of the world's total

The London Metals Exchange has no immediate plans to ban Russian copper, despite media reports that its copper committee had recommended this course of action. "The LME does not currently plan to take independent action outside of the scope of sanctions - for example, by placing restrictions on the circulation of metal produced in Russia within the LME system," the LME said in an emailed statement. This was because "the impact of taking such steps would not be limited solely to the LME's business, but would extend to all those participating in the global market; it would in effect be an action taken on behalf of the LME's global user base," it said. Russia's major copper producers and exporters are the Russian Copper Company, UGMK and Nornickel. While there are no sanctions on any of these three companies, the UK government announced March 10 sanctions against seven Russian oligarchs including Roman Abramovich, who, with partners, owns Crispian, a firm that holds a less than 5% stake in Nornickel. On March 3, the London Stock Exchange suspended trading of global depository receipts of a number of Russian companies, including Nornickel, while Russian banks have also been disconnected from SWIFT, which may slow counterparty transactions between commodity traders. The US is advancing a proposal to revoke Russia's most-favored nation trade status, a move which would be followed by other G7 nations and could significantly increase duties on imports from Russia, including many metals products. The UK also introduced March 15 additional 35% tariffs on imports of a few Russian metals, including copper, although this was not expected to have much impact. Russia produced 920,000 mt of refined copper in 2021, which is about 3.5% of the world's total, according to US Geological Survey. In 2021, Russia shipped 463,000 mt of refined copper and copper alloys outside of the Eurasian Economic Union, with European countries being their major buyers, according to statistical data by Russia's customs service and the Eurasian Economic Commission, the regulatory authority overseeing the customs union between Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan. Of the total, roughly 45% was distributed in the EU (205,000 mt) and the UK (630 mt), although this data somewhat contradicts China's published statistics, which claim it imported 390,440 mt of refined copper from Russia in 2021. As with all other LME base metals contracts, copper trading

on the exchange is subject to a daily limit of 15%, which were instituted March 15 due to high levels of volatility across most base metals markets. UBS Global Research analyst Daniel Major said in a March 18 note that, in the near-term, copper supply was likely to be the least impacted of the major commodities and demand was likely to be negatively impacted by slower economic growth in developed markets, as well as weaker demand for China. However, he added "We are fundamentally constructive copper, and believe the impact of Russia/Ukraine strengthens the outlook for copper demand medium-term due to accelerated copper intensive energy transition spend as Europe looks to reduce use of Russian gas".

Other important information on copper market:

- Miner MMG's board of directors has approved a \$550 million-\$600 million expansion of the company's Kinsevere copper and cobalt operation in the Democratic Republic of Congo. The expansion project will extend the life of the operation for at least 13 years from 2022 and increase production to 80,000 mt/year of copper cathode and 4,000-6,000 mt/year of cobalt hydroxide once fully ramped up. Construction is due to start in this year, with first cobalt production expected in 2023 and first copper cathode production from the sulfide orebody expected in 2024. The mine will continue to produce copper cathode from the remaining oxide orebody during the construction phase. MMG expects to fund the project's capital expenditure through a combination of available cash reserves and debt facilities, it said.
- Copper production in Zambia dropped to 801 kt last year from 838 kt the year before, data obtained from the nation's statistics agency showed. Zambia's cobalt production also dropped to 247 tonnes last year from 316 tonnes a year earlier, according to the Zambia Statistics Agency (ZAMSTATS). The Zambia Chamber of Mines said the reduced output was mainly due to operational challenges arising from a lack of recapitalisation due to an unattractive mining tax regime. "It is only now that we are seeing mining companies recapitalising after mineral royalty was made a deductible expense," chamber chief executive Sokwani Chilemba told Reuters. Mining companies operating in Zambia had long complained about what they called "double taxation", with mineral royalty payments not treated as a deductible expense when calculating corporate income tax since 2019.
- The global world refined copper market showed a 92,000 tonnes deficit in December, compared with a 123,000 tonnes deficit in November, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the 12 months of the year, the market saw a shortage of 475,000 tonnes compared with a 484,000 tonne shortfall a year earlier, the ICSG said. World refined copper output in December was 2.110 million tonnes, while consumption was 2.202 million tonnes.
- Peru's shipments of copper and molybdenum rose on the year in January, while deliveries of zinc, lead, tin and precious metals all fell, the government said March 21. Copper deliveries stood at 179,600 mt in January, up 9.5% from 164,100 mt

a year earlier. Molybdenum deliveries rose 0.8% on the year to 2,300 mt in January. Zinc shipments fell 26% on the year to 67,200 mt in January, while lead exports halved to 32,000 mt over the same period. Canadian miner Trevali Mining and Peru's Buenaventura both closed zinc-lead-silver mines last year. Minsur's tin shipments fell 35% on the year to 1,600 mt in January.

Precious metals

Russians Buy Up Gold to Salvage Savings After Ruble Collapse **Increasing household demand for physical gold prompted Bank of Russia to halt its purchases from banks to ensure there's enough supply for local buyers.**

Russians are buying more gold to protect their savings after Vladimir Putin's invasion of Ukraine sparked a collapse in the ruble and new restrictions made it more difficult to purchase foreign currency or take money out of the country. Increasing household demand for physical gold prompted Bank of Russia to halt its purchases from banks to ensure there's enough supply for local buyers. The scrapping of a 20% value-added tax on purchases of metals also spurred transactions, the central bank said. The nation's biggest lender, Sberbank, said last week that demand for gold and palladium had quadrupled, and it planned to increase the number of offices selling the precious metal to "help people protect their savings." "There have been bank runs in Russia since the start of the war in Ukraine and Western sanctions, with the population withdrawing their deposits," Ksenia Mishankina, a research analyst with Loomis, Sayles & Co., said in an email. "They see gold as a safe asset where they can park their savings." Gold has a long history as a haven against hard economic times, particularly when there are worries about the safety of local cash. The metal's near-universal acceptance as an asset makes it equivalent to foreign exchange at times when governments limit access to other currencies. The central bank lost access to almost half of its foreign-currency reserves after an asset freeze was imposed as part of the economic penalties meant to punish Moscow for the invasion. It still can access reserves in gold and yuan, but sanctions make it difficult for the central bank to trade in gold. Russia imposed a raft of measures to curb the ruble's slide, including raising interest rates to 20%, temporarily banning banks from selling cash currency to citizens who don't already have FX accounts and limiting transfers abroad. Still, the currency has fallen by a third so far this year, fueling one of Russia's biggest inflation spikes this century. Earlier this month, the London Bullion Market Association and the CME Group suspended all Russian refineries from their accredited lists, amounting to a ban on newly minted bars from the country entering the world's top two markets. That means Russians may face restrictions on where they can resell their metal if it has to be remelted by one of the country's purifiers.

Energy

U.S. Strikes Deal to Help Europe Replace Russian Gas Imports

The EU-U.S. deal will provide a political platform for commercial contracts for LNG deliveries. The additional imports from the U.S. will take time to start, with Europe constrained by the current regassification capacity, number of terminals and interconnectors.

The EU wants to replace almost two-thirds of total gas imports from Russia this year, which amounted to 155 billion cubic meters last year

A political deal between President Joe Biden and the European Union will pave the way for additional imports of liquefied natural gas from the U.S. to help the bloc replace Russian imports of the fuel. Biden joined EU leaders at a summit in a bid to showcase a common resolve against the Russian invasion of Ukraine. LNG imports from Russia, the EU's biggest energy supplier, stood at around 14 billion to 18 billion cubic meters annually in the past years. "We are taking further, concrete steps in our energy cooperation to ensure the security of supply and to reduce dependence on Russian fossil fuels," Biden and von der Leyen said in a joint statement late on Thursday in Brussels. The transatlantic agreement comes ahead of a planned meeting in Berlin next week between American gas exporters and German buyers of the power-plant fuel. The U.S. Embassy in Germany is coordinating the meeting with the liquefied natural gas suppliers, expected to take place after the March 29-30 Berlin Energy Transition Dialogue conference. The EU-U.S. deal will provide a political platform for commercial agreements that will need to follow for shipments to begin. The 27-nation bloc is aiming to replace this year nearly two-thirds of its total gas imports from Russia, which amounted to 155 billion cubic meters last year. The war waged by President Vladimir Putin forced an unprecedented re-think of the bloc's energy strategy. "We are working with the EU to support Europe's energy security and to accelerate the global transition to clean energy," Saloni Sharma, a spokeswoman for the U.S. National Security Council, said Thursday. The additional imports from the U.S. will take time to start, with Europe constrained by the current regassification capacity, number of terminals and interconnectors. In the medium term, the U.S. would explore options to increase production and the EU will pursue ways to reduce energy consumption. The new European energy strategy, outlined by the commission earlier this month, aims to replace 101.5 billion cubic meters of Russian gas in 2022 by tapping alternative supply sources, building up renewables and boosting energy security. It seeks to ensure 50 billion cubic meters in LNG from new suppliers. Imports of the fuel from the U.S. have risen exponentially amid the European energy crisis, which started a couple of months before the war amid limited flows from Russia. In 2021, transatlantic deliveries of LNG were at around 22 billion cubic meters. In January 2022, they stood at 4.4 billion cubic meters.

Global economies | Foreign exchange markets

Fed Lifts Rates a Quarter Point and Signals More Hikes to Come

Policy makers led by Chair Jerome Powell voted 8-1 to lift their key rate to a target range of 0.25% to 0.5%. They signaled increases at all other six meetings this year.

The Fed said it would begin allowing its \$8.9 trillion balance sheet to shrink at a “coming meeting” without elaborating

The Federal Reserve raised interest rates by a quarter percentage point and signaled hikes at all six remaining meetings this year, launching a campaign to tackle the fastest inflation in four decades. Policy makers led by Chair Jerome Powell voted 8-1 to lift their key rate to a target range of 0.25% to 0.5%, the first increase since 2018, after two years of holding borrowing costs near zero to insulate the economy from the pandemic. St. Louis Fed President James Bullard dissented in favor of a half-point hike.

The hike is likely the first of several to come this year, as the Fed said it “anticipates that ongoing increases in the target range will be appropriate,” and Powell repeated his pledge to be “nimble.” In the Fed’s so-called dot plot, officials’ median projection was for the benchmark rate to end 2022 at about 1.9% -- in line with traders’ bets but higher than previously anticipated -- and then rise to about 2.8% in 2023. They estimated a 2.8% rate in 2024, the final year of the forecasts, which are subject to even more uncertainty than usual given Russia’s invasion of Ukraine and new Covid-19 lockdowns in China are buffeting the global economy.






The implications for the U.S. economy are highly uncertain, but in the near term the invasion of Ukraine by Russia and related events are likely to create additional upward pressure on inflation and weigh on economic activity. The Fed said it would begin allowing its \$8.9 trillion balance sheet to shrink at a “coming meeting” without elaborating. Powell said officials had made good progress in nailing down their plans and could be in a position to begin the process at their May meeting, though the FOMC had not taken a decision to do so.







The Fed faces the arduous task of securing a soft landing for the world’s largest economy, a very rare outcome. Tighten too slowly and it risks allowing inflation to run out of control, requiring even tougher action. Shift too quickly and the central bank could roil markets and tip the economy into recession. Complicating the job: The war has sent the cost of fuel, food and metals racing even higher, raising fears of 1970s-style stagflation. In new economic projections, Fed officials said they see inflation significantly higher than previously anticipated, at 4.3% this year, but still coming down to 2.3% in 2024. The forecast for economic growth in 2022 was lowered to 2.8% from 4%, while unemployment projections were little changed. The pivot to tighter monetary policy is sharper than policy makers expected just three months ago, when their median projection was for just three quarter-point rate increases this year. Forcing the pace is a surge in inflation which has proved stronger and more sustained than anticipated. The consumer price index soared 7.9% in February, the most since 1982; the Fed’s

2% inflation target is based on a separate gauge, the personal consumption expenditures price index, which rose 6.1% in the 12 months through January. The Fed previously held off from raising rates as officials bet the inflation shock would fade once the economy returned to normal following the pandemic recession and lockdowns. Instead, price gains accelerated amid a mixture of massive government stimulus, tightening labor markets, surging commodity costs and frayed supply chains. Powell has also been operating under a Fed policy framework, adopted in mid-2020, to allow some above-target inflation in the hope of broadening employment. Critics say the Fed was too slow in changing course and is now behind the curve in taking on price gains that could become more entrenched if companies pass on elevated costs to consumers who react by demanding higher wages. At the same time, the worsening inflation picture has handed Powell political cover to hike rates as he awaits Senate confirmation for a second term. American households and businesses have reacted with alarm to rising costs with retail gasoline surpassing \$4 a gallon. President Joe Biden has called taming inflation his top economic priority, while fellow Democrats worry failure to restrain prices could cost them their thin congressional majorities. Powell also bucked some calls for a larger half-point increase, which would have been the first since 2000. Some on Wall Street reckon it could deliver such a salvo in coming months if inflation doesn't retreat. On the positive side, American households are in a strong position with the unemployment rate at 3.8% and savings having risen throughout the pandemic.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
☆☆	15-Mar	Fixed assets investments (ytd, yoy)	Feb	12.2% ▲	4.9%	5.0% ●
Poland 						
☆☆☆☆	15-Mar	Consumer inflation CPI (yoy)‡	Feb	8.5% ▼	9.4%	8.3% ●
☆☆☆☆	16-Mar	Core CPI (excluding food and energy, yoy)	Feb	6.7% ▲	6.1%	6.3% ●
☆☆	16-Mar	Trade balance (EUR mn)	Jan	-1 186 ▲	-2 535	-1 461 ●
☆☆	16-Mar	Exports (EUR mn)	Jan	24 669 ▲	24 109	24 958 ●
☆☆	16-Mar	Current account balance (EUR mn)	Jan	- 64.0 ▲	-3 957	- 871 ●
☆☆☆☆	18-Mar	Sold industrial production (yoy)	Feb	17.6% ▼	19.2%	16.8% ●
☆☆	18-Mar	Average gross salary (yoy)	Feb	11.7% ▲	9.5%	9.9% ●
☆☆	18-Mar	Producer inflation PPI (yoy)‡	Feb	15.9% ▼	16.1%	15.2% ●
☆	18-Mar	Employment (yoy)	Feb	2.2% ▼	2.3%	2.2% ○
☆☆☆	21-Mar	Retail sales (yoy)	Feb	16.5% ▼	20.0%	16.6% ●
☆	22-Mar	M3 money supply (yoy)	Feb	8.0% ▲	7.7%	7.8% ●
☆☆	23-Mar	Unemployment rate	Feb	5.5% -	5.5%	5.5% ○
US 						
☆☆☆☆☆	16-Mar	FOMC base rate decision - upper bound (Fed)	Mar	0.50% ▲	0.25%	0.50% ○
☆☆☆☆☆	16-Mar	FOMC base rate decision - lower bound (Fed)	Mar	0.25% ▲	0.00%	0.25% ○
☆☆	16-Mar	Retail sales (excluding autos, mom)‡	Feb	0.2% ▼	4.4%	0.9% ●
☆☆☆☆	17-Mar	Industrial production (mom)	Feb	0.5% ▼	1.4%	0.5% ○
☆☆	17-Mar	Philadelphia Fed business outlook	Mar	27.4 ▲	16.0	14.5 ●
☆	17-Mar	Capacity utilization‡	Feb	77.6% ▲	77.3%	77.9% ●
☆	22-Mar	Richmond Fed manufacturing index	Mar	13.0 ▲	1.0	2.0 ●
☆☆☆	24-Mar	Composite PMI - preliminary data	Mar	58.5 ▲	55.9	54.7 ●
☆☆☆	24-Mar	Manufacturing PMI - preliminary data	Mar	58.5 ▲	57.3	56.6 ●
☆☆☆	24-Mar	PMI services - preliminary data	Mar	58.9 ▲	56.5	56.0 ●
☆☆	24-Mar	Durable goods orders - preliminary data	Feb	-2.2% ▼	1.6%	-0.6% ●
☆☆	25-Mar	University of Michigan confidence index - final data	Mar	59.4 ▼	59.7	59.7 ●
Eurozone 						
☆☆☆☆	15-Mar	Industrial production (sa, mom)‡	Jan	0.0% ▼	1.3%	0.0% ○
☆☆☆☆	15-Mar	Industrial production (wda, yoy)‡	Jan	-1.3% ▼	2.0%	-0.5% ●
☆	15-Mar	ZEW survey expectations	Mar	- 38.7 ▼	48.6	--
☆☆☆☆	17-Mar	Consumer inflation CPI (yoy) - final data	Feb	5.9% ▲	5.8%	5.8% ●
☆☆☆☆	17-Mar	Core CPI (yoy) - final data	Feb	2.7% -	2.7%	2.7% ○
☆☆	18-Mar	Labour costs (yoy)‡	4Q	1.9% ▼	2.3%	--
☆	18-Mar	Trade balance (EUR mn)	Jan	- 27.2 ▼	- 4.6	--
☆	23-Mar	Consumer confidence - estimation	Mar	- 18.7 ▼	- 8.8	- 12.9 ●
☆☆☆	24-Mar	Composite PMI - preliminary data	Mar	54.5 ▼	55.5	53.8 ●
☆☆☆	24-Mar	Manufacturing PMI - preliminary data	Mar	57.0 ▼	58.2	56.0 ●
☆☆☆	24-Mar	Services PMI - preliminary data	Mar	54.8 ▼	55.5	54.3 ●
☆	25-Mar	M3 money supply (yoy)	Feb	6.3% ▼	6.4%	6.3% ○
Germany 						
☆☆☆	24-Mar	Composite PMI - preliminary data	Mar	54.6 ▼	55.6	53.8 ●
☆☆☆	24-Mar	Manufacturing PMI - preliminary data	Mar	57.6 ▼	58.4	56.0 ●
☆☆	25-Mar	IFO business climate‡	Mar	90.8 ▼	98.5	94.2 ●

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
France 						
🔔🔔🔔	15-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	4.2% ▲	4.1%	4.1% ▲
🔔🔔🔔	15-Mar	Consumer inflation CPI (yoy) - final data	Feb	3.6% -	3.6%	3.6% ○
🔔🔔🔔	24-Mar	Composite PMI - preliminary data	Mar	56.2 ▲	55.5	54.5 ▲
🔔🔔🔔	24-Mar	Manufacturing PMI - preliminary data	Mar	54.8 ▼	57.2	55.1 ▼
Italy 						
🔔🔔🔔	16-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	6.2% -	6.2%	6.2% ○
UK 						
🔔🔔	15-Mar	Unemployment rate (ILO, 3-months)	Jan	3.9% ▼	4.1%	4.0% ▼
🔔🔔🔔🔔	17-Mar	BoE base rate decision	Mar	0.75% ▲	0.50%	0.75% ○
🔔🔔🔔	23-Mar	Consumer inflation CPI (yoy)	Feb	6.2% ▲	5.5%	6.0% ▲
🔔🔔🔔	24-Mar	Manufacturing PMI (sa) - preliminary data	Mar	55.5 ▼	58.0	57.0 ▼
🔔🔔🔔	24-Mar	Composite PMI - preliminary data	Mar	59.7 ▼	59.9	57.5 ▼
Japan 						
🔔🔔🔔	16-Mar	Industrial production (yoy) - final data	Jan	-0.5% ▲	-0.9%	--
🔔🔔🔔	18-Mar	Consumer inflation CPI (yoy)	Feb	0.9% ▲	0.5%	0.9% ○
🔔🔔🔔	24-Mar	Composite PMI - preliminary data	Mar	49.3 ▲	45.8	--
🔔🔔🔔	24-Mar	Manufacturing PMI - preliminary data	Mar	53.2 ▲	52.7	--
Chile 						
🔔🔔🔔🔔	18-Mar	GDP (yoy)	4Q	12.0% ▼	17.2%	13.0% ▼
Canada 						
🔔🔔🔔	16-Mar	Consumer inflation CPI (yoy)	Feb	5.7% ▲	5.1%	5.5% ▲

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

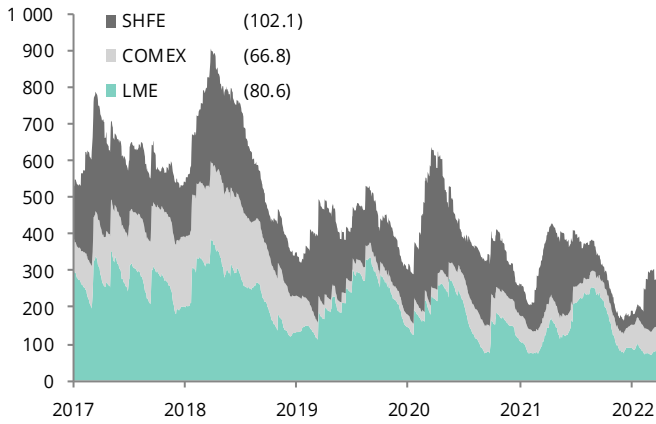
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 25-Mar-22)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t; Mo in USD/lbs)									
Copper	10 280.00	▲ 1.3%	▲ 6.1%	▲ 6.1%	▲ 17.1%	9 974.67	9 565.00	10 730.00	
Molybdenum	19.26	- 0.0%	▲ 3.1%	▲ 3.1%	▲	19.05	18.69	19.26	
Nickel	35 550.00	▼ -17.3%	▲ 69.9%	▲ 69.9%	▲ 122.4%	25 974.91	20 480.00	45 795.00	
Aluminum	3 583.00	▲ 3.2%	▲ 27.7%	▲ 27.7%	▲ 62.3%	3 261.84	2 815.50	3 984.50	
Tin	42 650.00	▼ -3.1%	▲ 7.6%	▲ 7.6%	▲ 56.5%	43 431.27	39 400.00	50 050.00	
Zinc	4 073.00	▲ 6.2%	▲ 12.2%	▲ 12.2%	▲ 47.6%	3 727.68	3 535.00	4 248.00	
Lead	2 346.00	▼ -0.6%	▲ 0.8%	▲ 0.8%	▲ 23.0%	2 330.87	2 199.00	2 513.00	
LBMA (USD/troz)									
Silver	25.62	▼ -0.1%	▲ 11.0%	▲ 11.0%	▲ 3.9%	23.95	22.24	26.18	
Gold ²	1 953.80	▼ -1.3%	▲ 7.3%	▲ 7.3%	▲ 12.5%	1 873.53	1 788.15	2 039.05	
LPPM (USD/troz)									
Platinum ²	1 011.00	▼ -4.4%	▲ 5.1%	▲ 5.1%	▼ -13.9%	1 033.24	931.00	1 151.00	
Palladium ²	2 498.00	▼ -9.7%	▲ 29.6%	▲ 29.6%	▼ -5.7%	2 342.42	1 854.00	3 015.00	
FX ³									
EURUSD	1.1002	▲ 0.1%	▼ -2.9%	▼ -2.9%	▼ -6.8%	1.1224	1.0892	1.1464	
EURPLN	4.7459	▼ -1.0%	▲ 3.2%	▲ 3.2%	▲ 2.4%	4.6228	4.4879	4.9647	
USDPLN	4.3125	▼ -1.3%	▲ 6.2%	▲ 6.2%	▲ 9.9%	4.1202	3.9218	4.5722	
USDCAD	1.2502	▼ -1.7%	▼ -1.4%	▼ -1.4%	▼ -0.8%	1.2673	1.2474	1.2867	
USDCNY	6.3662	▲ 0.4%	▲ 0.2%	▲ 0.2%	▼ -2.8%	6.3463	6.3093	6.3830	
USDCLP	789.87	▼ -2.0%	▼ -6.5%	▼ -6.5%	▲ 9.2%	810.38	787.05	852.03	
Money market									
3m LIBOR USD	0.983	▲ 0.16	▲ 0.77	▲ 0.77	▲ 0.79	0.494	0.216	0.983	
3m EURIBOR	-0.477	▲ 0.03	▲ 0.10	▲ 0.10	▲ 0.06	-0.531	-0.576	-0.477	
3m WIBOR	4.600	▲ 0.38	▲ 2.06	▲ 2.06	▲ 4.39	3.434	2.590	4.600	
5y USD interest rate swap	2.620	▲ 0.59	▲ 1.25	▲ 1.25	▲ 1.68	1.880	1.445	2.620	
5y EUR interest rate swap	0.969	▲ 0.29	▲ 0.95	▲ 0.95	▲ 1.34	0.429	0.031	0.969	
5y PLN interest rate swap	5.453	▲ 0.50	▲ 1.71	▲ 1.71	▲ 4.40	4.274	3.780	5.453	
Fuel									
WTI Cushing	115.40	▲ 5.6%	▲ 49.9%	▲ 49.9%	▲ 97.3%	94.85	76.99	123.70	
Brent	119.75	▲ 2.7%	▲ 54.6%	▲ 54.6%	▲ 96.3%	99.17	79.83	133.89	
Diesel NY (ULSD)	419.96	▲ 17.6%	▲ 75.3%	▲ 75.3%	▲ 140.4%	309.07	241.70	458.23	
Others									
VIX	20.81	▼ -9.94	▲ 3.59	▲ 3.59	▲ 1.00	25.93	16.91	36.45	
BBG Commodity Index	129.85	▲ 2.7%	▲ 30.9%	▲ 30.9%	▲ 56.5%	113.57	100.58	132.63	
S&P500	4 543.06	▲ 8.1%	▼ -4.7%	▼ -4.7%	▲ 16.2%	4 449.52	4 170.70	4 793.54	
DAX	14 305.76	▲ 5.0%	▼ -9.9%	▼ -9.9%	▼ -2.2%	14 930.93	12 831.51	16 271.75	
Shanghai Composite	3 212.24	▼ -2.9%	▼ -11.7%	▼ -11.7%	▼ -4.5%	3 428.46	3 063.97	3 632.33	
WIG 20	2 115.58	▲ 4.0%	▼ -6.7%	▼ -6.7%	▲ 12.7%	2 155.29	1 817.45	2 411.11	
KGHM	177.35	▲ 1.7%	▲ 27.2%	▲ 27.2%	▲ 6.4%	156.36	135.05	182.20	

° 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

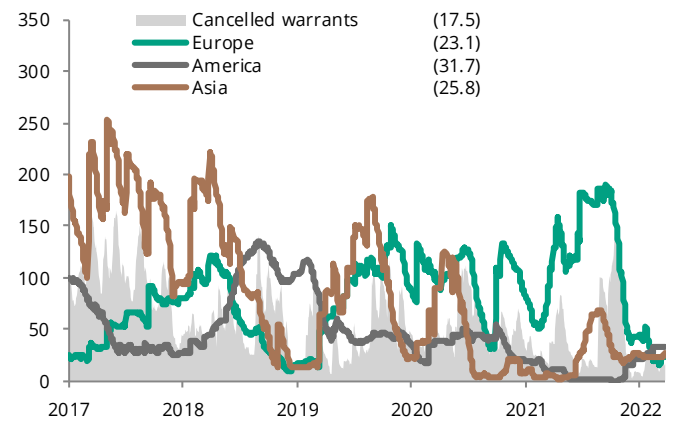
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



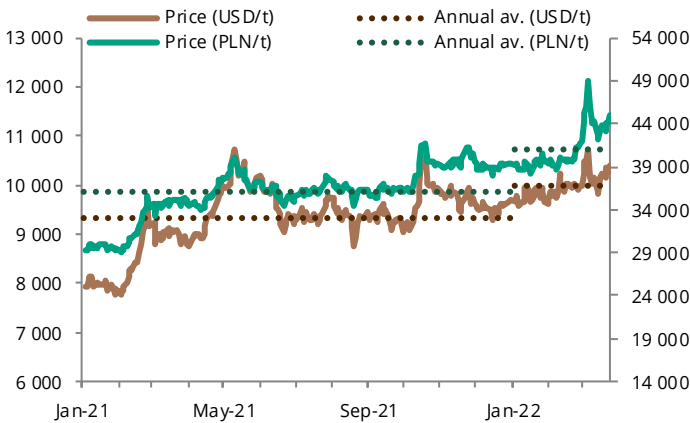
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



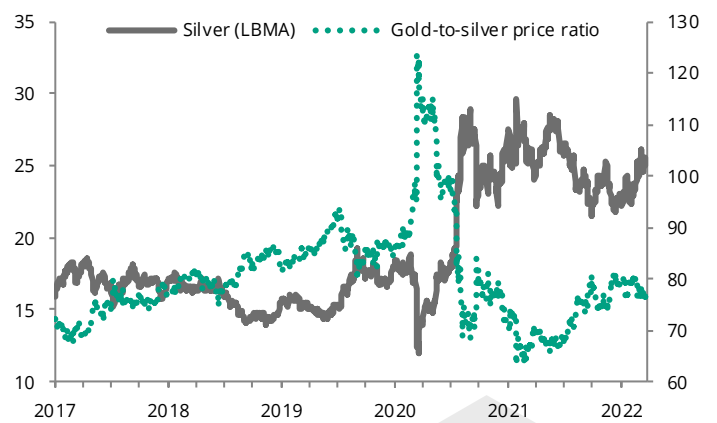
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



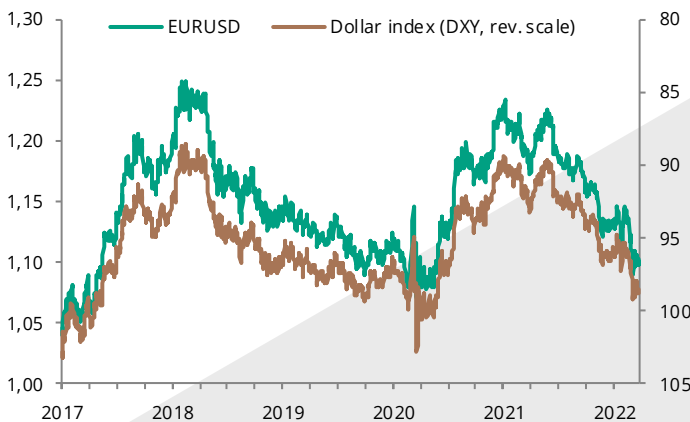
Source: Bloomberg, KGHM Polska Miedź

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



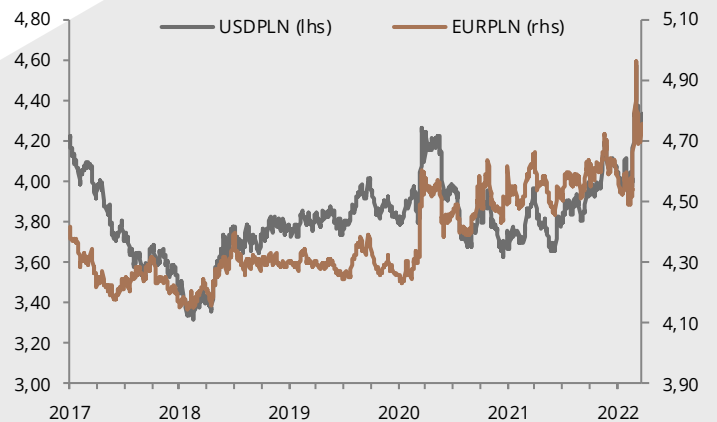
Source: Bloomberg, KGHM Polska Miedź

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:
14 - 27 March 2022.

- 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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