

Market Overview



as of: 29th August 2022

- **Copper:** Antofagasta Plc's subsidiary Twin Metals has sued the US government in an attempt to resume its Minnesota-based mining project. If built, the mine will be the US's main sources of copper and nickel, two key metals for the green energy transition (*page 2*).
- **Precious metals:** Silver imports to India are expected to triple in 2022 compared to the previous year, reaching 8,200 tonnes. The main reason is the demand from investors who use the current price correction to take a position. Industrial demand is also growing, supported by government incentives (*page 4*).
- **China:** The State Council of China presented an additional stimulus package worth 1 Trillion Yuan (\$146 billion). Including another 300 billion yuan for infrastructure projects and 500 billion yuan in additional special bonds of local governments (*page 5*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	8 315.00	3.1%
▼ Nickel	21 510.00	-7.4%
LBMA (USD/troz)		
▼ Silver	19.22	-5.2%
▼ Gold (PM)	1 751.25	-2.3%
FX		
▼ EURUSD	1.0007	-2.7%
▲ EURPLN	4.7413	1.2%
▲ USDPLN	4.7465	4.4%
▲ USDCAD	1.2989	1.6%
▲ USDCPL	910.03	3.1%
Stocks		
▼ KGHM	102.95	-9.3%

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

Important macroeconomic data

Release	For		
 Industrial prod. (yoy)	Jul	3.8%	▼
 Industrial prod. (mom)	Jul	0.6%	▲
 Composite PMI	Aug	49.2	▼
 Industrial prod. (yoy)	Jul	7.6%	▼
 Composite PMI	Aug	49.8	▼

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

The price of silver has fallen well below its two-year average



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Antofagasta Sues U.S. In Bid To Revive Minnesota Copper Project

Antofagasta Plc's subsidiary Twin Metals has sued the US government in an attempt to resume its Minnesota-based mining project. If built, the mine will be the US's main sources of copper and nickel, two key metals for the green energy transition.

The only existing U.S. nickel mine is set to close by 2025

Antofagasta Plc's Twin Metals subsidiary sued the U.S. government in a bid to revive its proposed Minnesota copper and nickel mine, which Biden administration officials had blocked this year over concerns it could pollute a major river. The suit said the lease cancellations in January by the U.S. Department of the Interior were "arbitrary and capricious" and that Twin Metals should have the right to prove its project can meet environmental standards. The underground mine would, if built, be a major U.S. source of copper and nickel, two metals crucial for the green energy transition. The only existing U.S. nickel mine is set to close by 2025. A measure passed by Congress in August link the electric vehicle tax credit to minerals produced in the United States or in allied nations, a requirement that Twin Metals said shows its mine should be built. Twin Metals asked the U.S. District Court in Washington to restore the leases, which were first granted in 1966 and have been passed between successor companies. No mining has taken place at the site. Opponents say that U.S. environmental standards are too lax and even if Twin Metals were to meet them, the proposed mine could pollute the Boundary Waters Canoe Area Wilderness, a 1 million-acre (405,000-hectare) preserve on the U.S.-Canada border. The White House last fall proposed a 20-year ban on mining in the Boundary Waters, a separate but related step to halt the mine. That proposed ban is in the regulatory review process now. Congress is considering legislation that would permanently ban mining in the region. Ivan Arriagada, chief executive of Chile-based Antofagasta told Reuters earlier this month that he expects the rising demand for EV metals to work in the project's favor.

Other important information on copper market:

- Codelco, the world's largest copper producer, cut its production outlook for 2022, blaming lower recovery levels at some of its mines and ore grades at the Chuquicamata site in Chile, as it also deals with fatal accidents halting some construction works. The Chilean state-owned miner said it now expects output to reach between 1.49 million and 1.51 million tonnes this year, down from a previous forecast of 1.61 million tonnes. In June, the firm's chairman Maximo Pacheco had told Reuters the annual production goal would be maintained at 1.7 million tonnes while he was in charge, including for this year.

- China's refined copper imports rose 11.3% on the year to 300,444 mt in July, data from the General Administration of Customs showed Aug. 25. Imports fell 52.5% on the year in July 2021 as the country released copper stocks from the state reserves at the time. Import arbitrage opportunity for Chinese buyers remained open in August, which is expected to continue to support supplies into China, industry sources said. Tight supply is likely to continue in the Chinese copper cathode market, which has kept domestic premiums well supported. Power cuts in China had impacted market sentiment, leading to a boost in premiums in early and mid-August. Platts assessed Chinese copper import premiums at \$91/mt plus London Metal Exchange cash, CIF China, Aug. 24, up \$9/mt on the month.
- The global refined copper market showed a 66,000 tonne deficit in June, compared with a 30,000 tonne deficit in May, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 6 months of the year, the market was in a 72,000 tonne deficit compared with a 130,000 tonne deficit in the same period a year earlier, the ICSG said. World refined copper output in June was 2.17 million tonne, while consumption was 2.23 million tonne. Bonded stocks of copper in China showed a 66,000 tonne deficit in June compared with a 34,000 tonne deficit in May.
- Peru's copper, tin and lead export shipments in June all increased on the year, while zinc and molybdenum exports fell, the government said Aug. 22. Copper deliveries jumped 40% to 236,400 mt from 168,900 mt a year earlier, offsetting a 14% drop in prices to boost export revenue by 21% to \$2 billion, the central bank said. Protests ended at mines operated by China Minmetals and Brazil's Nexa Resources in June. Capacity in the region also increased with the ramp-up of Minsur's Mina Justa copper-silver mine. Minsur increased tin shipments from its San Rafael mine by 33% to 2,000 mt in June. Lead exports were up 22.4% to 65,900 mt. Zinc shipments fell by a quarter to 77,700 mt, as miners Volcan, Buenaventura and Pan American Silver closed units. Molybdenum exports were down 11% to 2,500 mt.

Precious Metals

Investment demand to lift India's silver imports to record high level

Silver imports to India are expected to triple in 2022 compared to the previous year, reaching 8,200 tonnes. The main reason is the demand from investors who use the current price correction to take a position. Industrial demand is also growing, supported by government incentives.

In the first seven months of 2022, silver imports reached 5,100 tonnes comparing to just 110 tonnes during the same period a year ago

India's silver imports are set to triple in 2022 from a year ago to record highs after a dip in prices to 2-year lows spurred investors to bet that the metal was primed for a rebound and could outperform gold in the coming years. Higher demand in India, the world's biggest silver consumer, could support global prices. India's silver imports in 2022 could jump to a record 8,200 tonnes. In the first seven months of 2022, silver imports surged to 5,100 tonnes from just 110 tonnes during the same period a year ago, according to provisional data from Ministry of Commerce and Industry. In 2020 and 2021 Indian investors and industry sold off silver stocks after strong imports in 2018 and 2019. Destocking depleted available stocks in the country. At current prices, traders are investing. Since silver is not available in the country, imports are rising. India silver imports in 2020 and 2021 were 2,218 tonnes and 2,773 tonnes respectively, down from 5,969 tonnes in 2019. Local silver futures were trading around 57,900 rupees per kilogram after hitting a record high of 77,949 rupees in 2020. Investors think prices have corrected too much, and will rebound soon. Investors are hoping it will rise sharply like 2009 to 2011 period. Along with investment demand, imports have also climbed on growing industrial use. Electronics, solar panel manufacturing have been increasing because of the government incentives. These industries are consuming more and more silver along with the auto industry. India has been offering production-linked incentives to local and foreign companies for manufacturing electronics and solar panels in the country. The country fulfils most of its silver requirements through imports, mainly from Hong Kong, the United Kingdom, China and Russia. The rise in demand has been allowing banks and bullion dealers to charge premiums of up to 30 cents per ounce over global prices, while gold is trading at a discount, said a Mumbai-based bullion dealer with a private bank. "Last year gold was trading in premium and silver in discount. Now exactly the opposite is happening," the dealer said.

Global economies | Foreign exchange markets

China Adds 1 Trillion Yuan More of Stimulus to Rescue Growth





The State Council of China presented an additional stimulus package worth 1 Trillion Yuan (\$146 billion). Including another 300 billion yuan for infrastructure projects and 500 billion yuan in additional special bonds of local governments.








China stepped up its economic stimulus with a further 1 trillion yuan (\$146 billion) of funding largely focused on infrastructure spending, support that likely won't go far enough to counter the damage from repeated Covid lockdowns and a property market slump. The State Council, outlined a 19-point policy package, including another 300 billion yuan that state policy banks can invest in infrastructure projects, on top of 300 billion yuan already announced at the end of June. Local governments will be allocated 500 billion yuan of special bonds from previously unused quotas. Goldman Sachs Group Inc. economists said the measures announced Wednesday won't be enough to lift the overall growth rate from the 3% they're projecting. "We're getting easing, but it's not quickly enough to keep up with the pace of deterioration in the broader economy," said Andrew Tilton, chief economist for Asia Pacific at Goldman Sachs, in an interview on Bloomberg TV. "More domestic policy easing and improved growth and domestic demand is going to be key as we get into 2023." The State Council also said the economy won't be flooded with excessive stimulus. The meeting sent a signal: "Don't expect massive additional stimulus," according to Bruce Pang, head of research and chief economist for Greater China at Jones Lang LaSalle Inc. He added that the language used in the announcement suggested "the possibility of adopting extraordinary tools such as special sovereign bonds or increasing official budget deficit has decreased." The property slump and China's stop-start reopening from Covid lockdowns have put the government's official gross domestic product growth goal of "around 5.5%" well out of reach. Officials have downplayed the target in recent months as they stick to the Covid Zero policy of eliminating infections, with economists polled by Bloomberg projecting growth of less than 4% this year. The 500 billion yuan in additional local government special bonds this year is smaller than what some analysts had expected, given the estimated amount of unused quota could be as high as 1.5 trillion yuan. Local authorities have accelerated their issuance of the bonds -- a major source for infrastructure investment -- this year compared with previous years, and have used up most of the 3.65 trillion yuan in official quota set early this year. The latest measures come on top of several recent stimulus steps: policy banks have been allocated a total of 1.1 trillion yuan of financing for infrastructure projects since June; the central bank delivered a surprise 10 basis-point interest rate cut in August; and in May, Beijing announced about 1.9 trillion yuan of support measures in a 33-point policy package, including targeting small businesses. The State Council also pledged to approve a batch of infrastructure projects. Local authorities are encouraged to use city-specific credit policies to support reasonable housing demand, it said. Amid an energy crunch triggered by

drought, support was also directed toward state-owned power generation companies, which will be allowed to sell 200 billion yuan of bonds. Another 10 billion yuan of subsidies will be offered to the agricultural sector. The State Council also pledged to continue lowering financing costs and introduce measures to support the development of private businesses.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
⊕⊕⊕⊕	15-Aug	Industrial production (yoy)	Jul	3.8% ▼	3.9%	4.3% 📉
⊕⊕	15-Aug	Fixed assets investments (ytd, yoy)	Jul	5.7% ▼	6.1%	6.2% 📉
⊕	15-Aug	Retail sales (yoy)	Jul	2.7% ▼	3.1%	4.9% 📉
Poland 						
⊕⊕⊕⊕	16-Aug	Core CPI (excluding food and energy, yoy)	Jul	9.3% ▲	9.1%	9.2% 📈
⊕⊕⊕⊕⊕	17-Aug	GDP (yoy) - preliminary data	2Q	5.3% ▼	8.5%	6.3% 📉
⊕⊕⊕⊕⊕	17-Aug	GDP (qoq) - preliminary data	2Q	-2.3% ▼	2.5%	-0.7% 📉
⊕⊕⊕⊕	19-Aug	Sold industrial production (yoy)	Jul	7.6% ▼	10.4%	7.8% 📉
⊕⊕	19-Aug	Average gross salary (yoy)	Jul	15.8% ▲	13.0%	13.2% 📈
⊕⊕	19-Aug	Producer inflation PPI (yoy)	Jul	24.9% ▼	25.6%	25.3% 📉
⊕	19-Aug	Employment (yoy)	Jul	2.3% ▲	2.2%	2.1% 📈
⊕⊕⊕	22-Aug	Retail sales (yoy)	Jul	18.4% ▼	19.9%	17.7% 📈
⊕	23-Aug	M3 money supply (yoy)	Jul	6.2% ▼	6.5%	5.9% 📈
⊕⊕	24-Aug	Unemployment rate	Jul	4.9% -	4.9%	4.8% 📈
US 						
⊕⊕⊕⊕	16-Aug	Industrial production (mom)‡	Jul	0.6% ▲	0.0%	0.3% 📈
⊕	16-Aug	Capacity utilization‡	Jul	80.3% ▲	79.9%	80.2% 📈
⊕⊕	17-Aug	Retail sales (excluding autos, mom)‡	Jul	0.4% ▼	0.9%	-0.1% 📈
⊕⊕	18-Aug	Philadelphia Fed business outlook	Aug	6.2 ▲	-12.3	-5.0 📈
⊕⊕⊕	23-Aug	Composite PMI - preliminary data	Aug	--	47.7	--
⊕⊕⊕	23-Aug	Manufacturing PMI - preliminary data	Aug	--	52.2	51.8
⊕⊕⊕	23-Aug	PMI services - preliminary data	Aug	--	47.3	49.8
⊕	23-Aug	Richmond Fed manufacturing index	Aug	-8.0 ▼	0.0	-2.0 📉
⊕⊕	24-Aug	Durable goods orders - preliminary data‡	Jul	0.0% ▼	2.2%	0.8% 📉
⊕⊕⊕⊕⊕	25-Aug	GDP (annualized, qoq) -	2Q	-0.6% ▲	-0.9%	-0.7% 📈
⊕⊕⊕⊕	26-Aug	Consumer spending inflation PCE (mom)	Jul	0.1% ▼	0.6%	0.2% 📉
⊕⊕⊕⊕	26-Aug	Consumer spending inflation PCE (yoy)	Jul	4.6% ▼	4.8%	4.7% 📉
⊕⊕	26-Aug	Personal income (sa, mom)‡	Jul	0.2% ▼	0.7%	0.6% 📉
⊕⊕	26-Aug	Personal spending (sa, mom)‡	Jul	0.1% ▼	1.0%	0.5% 📉
⊕⊕	26-Aug	University of Michigan confidence index - final data	Aug	58.2 ▲	55.1	55.5 📈
Eurozone 						
⊕	16-Aug	Trade balance (EUR mn)	Jun	-24.6 ▲	-26.3	--
⊕	16-Aug	ZEW survey expectations	Aug	-54.9 ▼	-51.1	--
⊕⊕⊕⊕⊕	17-Aug	GDP (sa, yoy) - preliminary data‡	2Q	3.9% -	3.9%	4.0% 📉
⊕⊕⊕⊕⊕	17-Aug	GDP (sa, qoq) - preliminary data‡	2Q	0.6% -	0.6%	0.7% 📉
⊕⊕⊕⊕	18-Aug	Consumer inflation CPI (yoy) - final data‡	Jul	8.9% ▲	8.6%	8.9% 📈
⊕⊕⊕⊕	18-Aug	Core CPI (yoy) - final data	Jul	4.0% -	4.0%	4.0% 📈
⊕⊕⊕	23-Aug	Composite PMI - preliminary data	Aug	49.2 ▼	49.9	49.0 📈
⊕⊕⊕	23-Aug	Manufacturing PMI - preliminary data	Aug	--	49.8	49.0
⊕⊕⊕	23-Aug	Services PMI - preliminary data	Aug	--	51.2	50.5
⊕	23-Aug	Consumer confidence - preliminary data	Aug	-24.9 ▲	-27.0	-28.0 📈
⊕	26-Aug	M3 money supply (yoy)	Jul	5.5% ▼	5.7%	5.5% 📈

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
🔊🔊🔊	23-Aug	Composite PMI - preliminary data	Aug	--	48.1	47.3
🔊🔊🔊	23-Aug	Manufacturing PMI - preliminary data	Aug	--	49.3	48.0
🔊🔊🔊🔊	25-Aug	GDP (yoy) - final data	2Q	1.8% ▲	1.5%	1.5% 🟢
🔊🔊🔊🔊	25-Aug	GDP (sa, qoq) - final data	2Q	0.1% ▲	0.0%	0.0% 🟢
🔊🔊	25-Aug	IFO business climate‡	Aug	88.5 ▼	88.7	86.8 🟢
🔊🔊	26-Aug	GfK consumer confidence‡	Sep	-36.5 ▼	-30.9	-32.0 🟡
France 						
🔊🔊🔊	23-Aug	Composite PMI - preliminary data	Aug	49.8 ▼	51.7	51.0 🟡
🔊🔊🔊	23-Aug	Manufacturing PMI - preliminary data	Aug	--	49.5	49.0 🟡
Italy 						
<i>No major data in the period</i>						
UK 						
🔊🔊	16-Aug	Unemployment rate (ILO, 3-months)	Jun	3.8% =	3.8%	3.8% ⚪
🔊🔊🔊🔊	17-Aug	Consumer inflation CPI (yoy)	Jul	10.1% ▲	9.4%	9.8% 🟢
🔊🔊🔊	23-Aug	Manufacturing PMI (sa) - preliminary data	Aug	--	52.1	51.0 🟡
🔊🔊🔊	23-Aug	Composite PMI - preliminary data	Aug	--	52.1	51.0 🟡
Japan 						
🔊🔊🔊🔊🔊	15-Aug	GDP (annualized, qoq) - preliminary data‡	2Q	2.2% ▲	0.1%	2.6% 🟡
🔊🔊🔊🔊🔊	15-Aug	GDP (qoq, sa) - preliminary data‡	2Q	0.5% ▲	0.0%	0.7% 🟡
🔊🔊🔊🔊	15-Aug	Industrial production (yoy) - final data	Jun	-2.8% ▲	-3.1%	-- 🟡
🔊🔊🔊🔊	19-Aug	Consumer inflation CPI (yoy)	Jul	2.6% ▲	2.4%	2.6% ⚪
🔊🔊🔊	23-Aug	Composite PMI - preliminary data	Aug	48.9 ▼	50.2	-- 🟡
🔊🔊🔊	23-Aug	Manufacturing PMI - preliminary data	Aug	--	52.1	-- 🟡
Chile 						
🔊🔊🔊🔊	18-Aug	GDP (yoy)‡	2Q	5.4% ▼	7.4%	5.7% 🟡
Canada 						
🔊🔊🔊	16-Aug	Consumer inflation CPI (yoy)	Jul	7.6% ▼	8.1%	7.6% ⚪

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

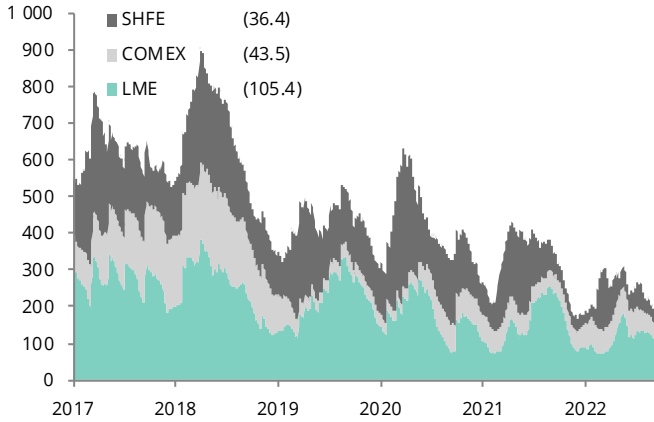
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 26-Aug-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	8 315.00	▲ 3.1%	▲ 0.8%	▼ -14.2%	▼ -10.8%	9 257.36	7 000.00	10 730.00	
Molybdenum	15.28	▲ 1.9%	▼ -11.4%	▼ -18.2%	▼	17.97	14.10	19.33	
Nickel	21 510.00	▼ -7.4%	▼ -6.9%	▲ 2.8%	▲ 14.0%	26 194.94	19 100.00	45 795.00	
Aluminum	2 495.00	▲ 1.1%	▲ 4.1%	▼ -11.1%	▼ -5.3%	2 916.36	2 320.50	3 984.50	
Tin	24 450.00	▼ -2.2%	▼ -9.6%	▼ -38.3%	▼ -28.3%	36 380.58	23 100.00	50 050.00	
Zinc	3 678.00	▲ 0.2%	▲ 13.1%	▲ 1.3%	▲ 23.0%	3 706.60	2 921.00	4 530.00	
Lead	1 997.50	▼ -8.2%	▲ 4.7%	▼ -14.2%	▼ -17.9%	2 209.39	1 891.00	2 513.00	
LBMA (USD/troz)									
Silver	19.22	▼ -5.2%	▼ -5.9%	▼ -16.8%	▼ -18.8%	22.36	18.27	26.18	
Gold ²	1 751.25	▼ -2.3%	▼ -3.6%	▼ -3.8%	▼ -2.0%	1 843.65	1 700.70	2 039.05	
LPPM (USD/troz)									
Platinum ²	877.00	▼ -8.4%	▼ -3.3%	▼ -8.8%	▼ -11.5%	969.10	831.00	1 151.00	
Palladium ²	2 153.00	▼ -4.7%	▲ 14.0%	▲ 11.7%	▼ -10.0%	2 174.03	1 810.00	3 015.00	
FX ³									
EURUSD	1.0007	▼ -2.7%	▼ -3.7%	▼ -11.6%	▼ -15.0%	1.0742	0.9927	1.1464	
EURPLN	4.7413	▲ 1.2%	▲ 1.3%	▲ 3.1%	▲ 3.6%	4.6640	4.4879	4.9647	
USDPLN	4.7465	▲ 4.4%	▲ 5.9%	▲ 16.9%	▲ 22.0%	4.3477	3.9218	4.8284	
USDCAD	1.2989	▲ 1.6%	▲ 0.8%	▲ 2.5%	▲ 2.7%	1.2764	1.2451	1.3138	
USDCNY	6.8718	▲ 1.9%	▲ 2.6%	▲ 8.1%	▲ 6.0%	6.5558	6.3093	6.8718	
USDCLP	910.03	▲ 3.1%	▼ -1.1%	▲ 7.7%	▲ 16.2%	850.71	777.10	1 042.97	
Money market									
3m LIBOR USD	3.070	▲ 0.15	▲ 0.78	▲ 2.86	▲ 2.95	1.455	0.216	3.070	
3m EURIBOR	0.542	▲ 0.21	▲ 0.74	▲ 1.11	▲ 1.09	-0.284	-0.576	0.542	
3m WIBOR	7.070	▲ 0.04	▲ 0.02	▲ 4.53	▲ 6.86	5.412	2.590	7.140	
5y USD interest rate swap	3.283	▲ 0.28	▲ 0.21	▲ 1.91	▲ 2.35	2.600	1.445	3.637	
5y EUR interest rate swap	2.107	▲ 0.53	▲ 0.32	▲ 2.09	▲ 2.45	1.169	0.031	2.377	
5y PLN interest rate swap	6.565	▲ 1.14	▼ -0.34	▲ 2.83	▲ 5.10	5.599	3.780	7.870	
Fuel									
WTI Cushing	93.06	▲ 1.1%	▼ -12.0%	▲ 20.9%	▲ 38.0%	100.57	76.99	123.70	
Brent	100.54	▲ 1.5%	▼ -12.6%	▲ 29.8%	▲ 43.5%	105.81	79.83	133.89	
Diesel NY (ULSD)	401.01	▲ 14.0%	▲ 2.8%	▲ 67.4%	▲ 92.4%	371.07	241.70	534.54	
Others									
VIX	25.56	▲ 6.03	▼ -3.15	▲ 8.34	▲ 6.72	25.70	16.91	36.45	
BBG Commodity Index	124.60	▲ 1.1%	▲ 6.4%	▲ 25.6%	▲ 31.2%	121.04	100.58	136.61	
S&P500	4 057.66	▼ -5.2%	▲ 7.2%	▼ -14.9%	▼ -9.2%	4 223.46	3 666.77	4 793.54	
DAX	12 971.47	▼ -6.0%	▲ 1.5%	▼ -18.3%	▼ -17.9%	14 123.71	12 401.20	16 271.75	
Shanghai Composite	3 236.22	▼ -1.2%	▼ -4.8%	▼ -11.1%	▼ -7.6%	3 290.48	2 886.43	3 632.33	
WIG 20	1 602.81	▼ -7.6%	▼ -5.5%	▼ -29.3%	▼ -30.6%	1 923.04	1 602.81	2 411.11	
KGHM	102.95	▼ -9.3%	▼ -13.4%	▼ -26.1%	▼ -41.9%	139.39	97.80	182.20	

^o 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

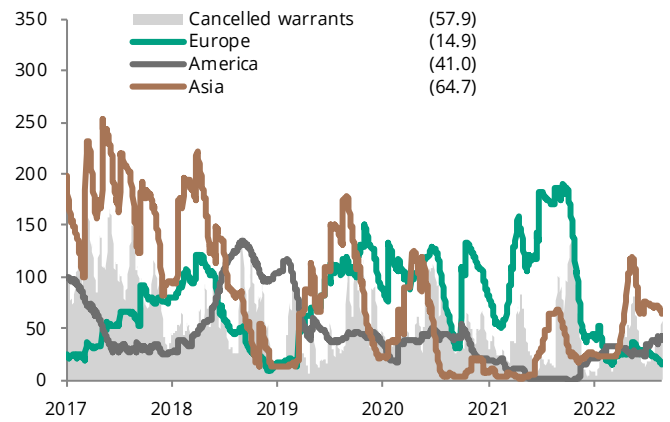
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



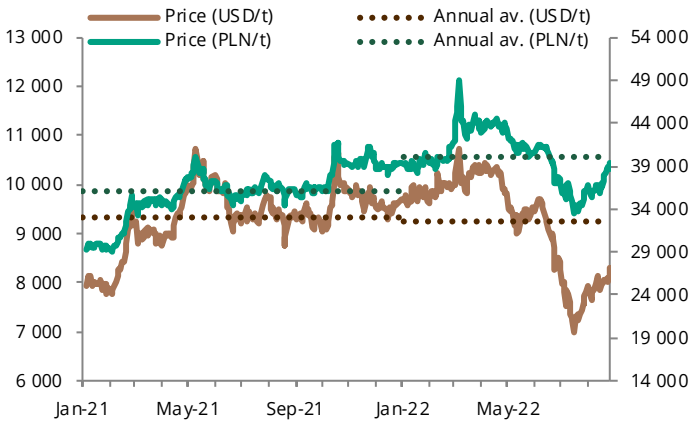
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



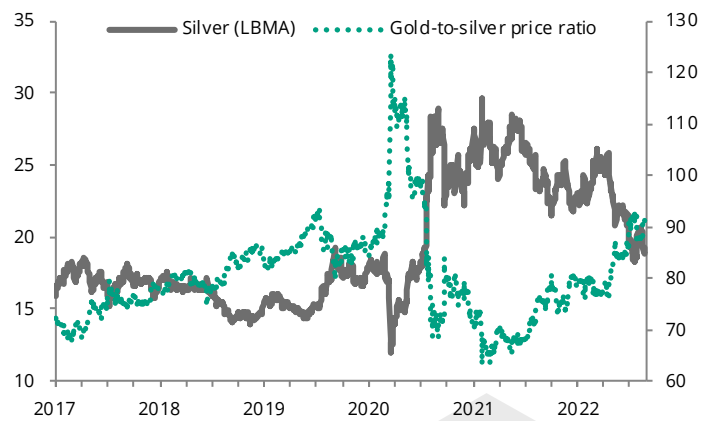
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



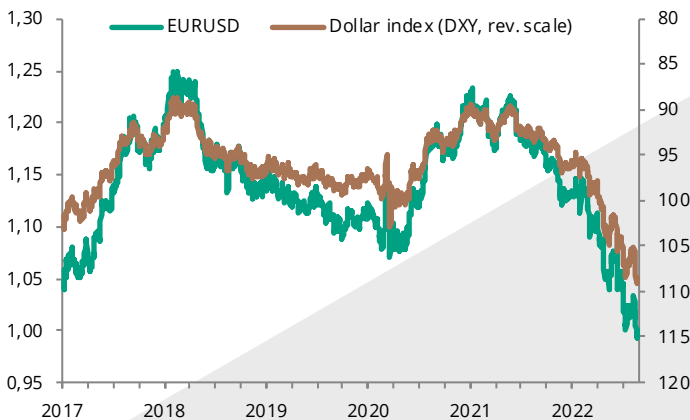
Source: Bloomberg, KGHM Polska Miedź

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



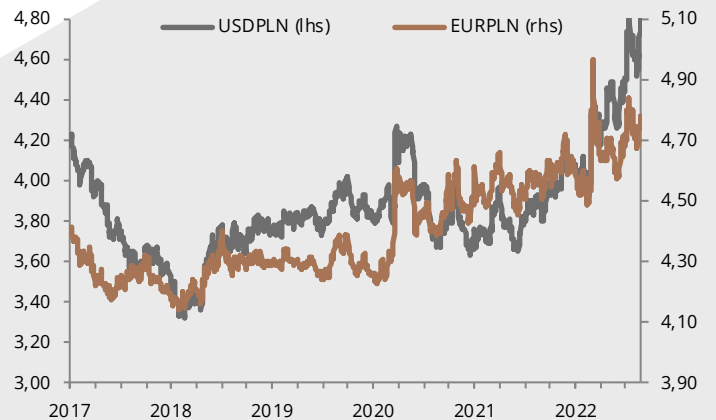
Source: Bloomberg, KGHM Polska Miedź

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:
15 -28 August 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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