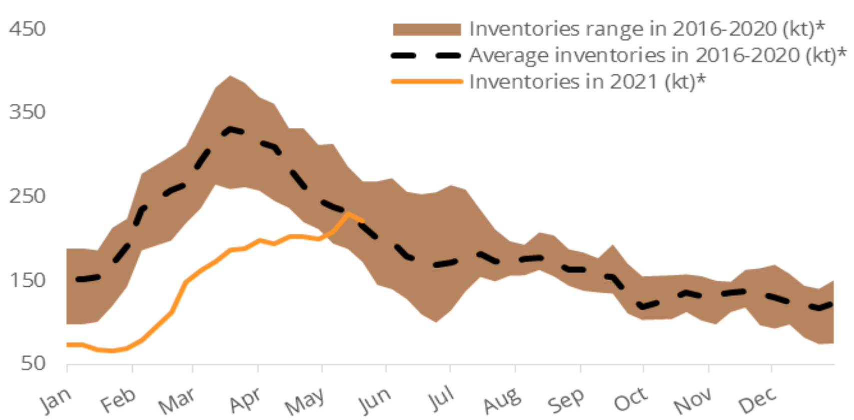
Market Overview

as of: 24th May 2021

- **Copper - DRC:** With record copper and cobalt prices, attention was focused on Mutanda - a mine that has been in the care & maintenance since November 2019. Restarted output from Mutanda could help ease shortages in the copper and cobalt markets that analysts are expecting for next year *(page 2)*.
- **Copper - Mexico:** The six-year investment blueprint includes a $2.3 billion expansion to existing smelting capacity in Sonora, a northern state home to the company's top mines, and $815 million for major new electricity lines for the Baja California peninsula *(page 2)*.
- **Precious metals:** The Australian Digital Platform offers the possibility of investing in gold from mines at an early stage of development, while making funding available to mining companies to develop their assets *(page 6)*.
- **China:** The Bloomberg Commodity Spot Index, which tracks global prices for 23 raw materials, rose this month to its highest point since 2011; it's climbed more than 70% since reaching a four-year low in March of last year. In an indication of just how strong demand is for China's goods right now, the nation's exports climbed 32.3% in dollar terms in April from a year earlier. Which is why economists say the combination of soaring prices and bumper demand augurs a period of higher inflation *(page 7)*.

Copper inventories in 2021 vs inventories in 2016-2020, monitored by the Shanghai Futures Exchange (SHFE)



* BBG SHFCCOPD index

Source: Bloomberg, KGHM Polska Miedź S.A.

Key market prices

		Close price	2w chng.
	LME (USD/t)		
▼	Copper	10 011.00	-3.4%
▼	Nickel	17 047.00	-5.4%
	LBMA (USD/troz)		
▲	Silver	27.80	1.6%
▲	Gold (PM)	1 875.90	2.1%
	FX		
▲	EURUSD	1.2188	1.1%
▼	EURPLN	4.4958	-1.8%
▼	USDPLN	3.6778	-2.9%
▼	USDCAD	1.2061	-0.8%
▲	USDCLP	716.41	2.2%
	Stocks		
▼	KGHM	198.00	-10.1%

Source: Bloomberg, KGHM Polska Miedź S.A.; *(more on page 11)*

Important macroeconomic data

	Release	For		
CN	PPI (yoy)	Apr	6.8%	▲
US	Manufacturing PMI	May	61.5	▲
CN	New yuan loans	Apr	1 470	▼
PL	GDP (yoy)	1Q	-1.2%	▲
DE	Manufacturing PMI	May	64.0	▼

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

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Glencore to restart operations at Mutanda copper, cobalt mine in 2022

With record copper and cobalt prices, attention was focused on Mutanda - a mine that has been in the care & maintenance since November 2019. Restarted output from Mutanda could help ease shortages in the copper and cobalt markets that analysts are expecting for next year.

Mutanda produced 199,000 tonnes of copper and 27,300 tonnes of cobalt hydroxide in 2018

Commodity trader and miner Glencore plans to restart operations at Mutanda - the world's biggest cobalt mine that also produces large amounts of copper - in the Democratic Republic of Congo next year, a source with direct knowledge of the matter told Reuters. Glencore, one of the world's largest copper producers and leading cobalt producer, said in February that the process to resume production at Mutanda was underway, but did not give a specific date. Copper is a vital material for the power and construction industries and it also features heavily in the raw materials mix for energy transition. Cobalt hydroxide is a key material for the fast-growing electric vehicle sector. With copper at record highs above $10,000 a tonne and cobalt metal up almost 40% to around $45,000 a tonne since the start of 2021, market focus has turned to Mutanda -- a facility that has been on care and maintenance since November 2019. Restarted output from Mutanda could help ease shortages in the copper and cobalt markets that analysts are expecting for next year, potentially capping further price gains. Mutanda produced 103,200 tonnes of copper and 25,100 tonnes of cobalt hydroxide in 2019 compared with 199,000 tonnes and 27,300 tonnes respectively in 2018. It has five copper production lines and three cobalt hydroxide lines. It is not known how many lines could be restarted over the next 12 months. Glencore's contribution to global copper supplies last year was nearly 1.3 million tonnes in a market estimated at around 24 million tonnes, while for cobalt the number was 27,400 tonnes or nearly 20% of the global total. Glencore Chief Executive Ivan Glasenberg decided in August 2019 to suspend Mutanda. He said falling cobalt prices, increased costs, and higher taxes had dented the mine's economic viability. However, since then significantly higher cobalt prices have made costs and taxes less of an issue.

Grupo Mexico Plans $3.1B Refining Spend

The six-year investment blueprint includes a $2.3 billion expansion to existing smelting capacity in Sonora, a northern state home to the company's top mines, and $815 million for major new electricity lines for the Baja California peninsula.

The investment is to include a 500 km long power line, which will enable the use of the potential of Lower California

Grupo Mexico is planning $3.1 billion in new investments for metals refining in Sonora state and power infrastructure for a major mine that will bring cheaper electricity to the isolated Baja peninsula, the company's No. 2 executive told

Reuters. The six-year investment blueprint includes a $2.3 billion expansion to existing smelting capacity in Sonora, a northern state home to the company's top mines, and $815 million for major new electricity lines for the Baja California peninsula. Grupo Mexico Vice Chairman Xavier Garcia de Quevedo detailed nearly $9 billion in investments through 2027, including a previously-announced $2.8 billion for its proposed El Arco copper mine, which would anchor the Baja power investment. The rest will be spread over additional infrastructure, two other mines and new zinc refining capacity. Garcia de Quevedo, who has spent five decades at the company controlled by Mexico's second-richest man, minimized suggestions that political risk could derail the company's investment plans. While the two-year-old administration of leftist President Andres Manuel Lopez Obrador has shown mixed support for mining, Garcia de Quevedo said the mining, rail and energy company's plans have been discussed with senior government officials. The energy plans in Baja would benefit El Arco as well as domestic and commercial power users in a region that includes the Los Cabos tourist hub, he said. "Baja California's huge potential can't be developed without electricity," said Garcia de Quevedo. The proposed power infrastructure includes a 500-km (310-mile) transmission line running north-south. Lopez Obrador deemed mining an essential sector last year amid a wave of pandemic-related business restrictions, but has been widely criticized by the industry for the slow pace of permits and approvals, attributed to spending cuts at his environment ministry, as well as a policy of no new concessions. Grupo Mexico, the country's third-largest company by market capitalization, has mining operations across the Americas via its majority-owned Southern Copper Corp. It also has a major rail freight business in Mexico and a big presence in the country's oil sector, transporting refined products for state-run energy company Pemex by both rail and pipeline. The world's fifth-biggest copper producer, Grupo Mexico's overall copper output is expected to dip this year by up to 1.5%, on lower output from Peru, Garcia de Quevedo said. However, he said, new copper production was set to come online by the second quarter of 2023, including an additional 36,000 tonnes a year from its El Pilar mine in Sonora and 30,000 tonnes annually from Buenavista. El Arco, further out, is due to produce 190,000 tonnes annually from 2027. "We've always followed the philosophy of planning our investments on (the expectation) of low copper prices," Garcia de Quevedo said, noting Grupo Mexico typically plans for copper at about $5,500 per tonne, far below a recent all-time high over $10,700.

Other important information on copper market:

- Germany copper company Aurubis saw concentrate throughput in the first half of its fiscal 2020-21 increase 9.6% year on year to 1.225 million mt, the company said May 10. Aurubis, which is the largest copper recycler in the world and leading copper group, said the significantly higher concentrate throughput came up against lower treatment and refining charges for copper concentrates due to global market factors, while refining charges for copper scrap and recycling materials remained at an elevated level. The throughput of other recycling materials also increased, with the new sites in Beerse (Belgium) and Berango

(Spain) making positive contributions to the result in particular, the company said. The company said copper cathode production increased 17% year on year to 554,000 mt in the six months to March 31. Aurubis said copper scrap supply and other recycling materials improved, as a result of being supported by higher metal prices, especially in its core markets in Europe and the US. The company said it was able to fully supply its production facilities with input materials at positive refining charges in both the previous quarter and beyond the reporting period.

- Canada’s Teck Resources sees little risk of higher taxes in copper powerhouse Chile due to a stability agreement that shields the company’s massive Quebrada Blanca Phase 2 copper project from higher levies for 15 years, Chief Executive Don Lindsay said recently. Chile’s lower house this month approved a bill that would sharply hike taxes on copper mining to pay for social programs. “We trust the Chilean institutions,” Lindsay said at the Bank of America Securities Global Metals, Mining & Steel conference recently. “The stability agreements were offered on a transparent and uniform basis under Chilean law and therefore they’re theoretically not negotiable,” he added. Teck spokesman Chris Stannell said that Lindsay was referring only to tax agreements related to Teck’s operations in Chile, rather than the wider sector. Separately, Vancouver-based Teck has yet to decide whether to restart a sales process for its 80% stake in the Zafranal copper mine in Peru and could look for a partner to build it, Lindsay said. A similar approach could work at its San Nicolas project in Mexico. Teck and other miners have benefited from a surge in copper prices on the back of rising demand in China, which has made such assets more valuable, Lindsay said. “These projects are now more valuable today than they were before COVID,” he said.

- Chile's state-run Codelco, the world's largest copper producer, said recently its product was now 100% traceable, a key step as the sprawling miner pushes to reduce its carbon footprint and boost sustainability within its operations. CEO Octavio Araneda said in a web seminar that tracing copper through its mines would help the company more precisely measure progress on its social and environmental goals while providing proof to increasingly demanding customers of those efforts. "We can now say that 100% of our products are traced...which will allow us to have a very strong transparency regarding our resource use footprint," Araneda said. The announcement comes amid a broader push by the company to reduce water consumption, recycle industrial waste and scale back carbon dioxide emissions by 2030. Codelco said in the webinar the tool it has developed to assure traceability will help assure those sustainability targets are met. Soaring demand for electric vehicles, a key component in the global fight against climate change, has increased attention on the carbon footprint and sustainability of inputs such as copper, cobalt and lithium.

- China's main copper smelters increased production in April by 0.85% from the previous month according to state backed research house Antaike, while zinc output also rose and lead production fell from March. Copper cathode output from the 22 companies surveyed totaled 799,500 tonnes in a month that saw virtually no smelter maintenance; the total was up 12.85% from a coronavirus-affected April 2020. The 22 smelters produced a combined 3.07 million mt of copper cathode in the first four months of 2021, up 13.4% from the same period a year earlier. The rise in production levels stems from a lower output base seen last year, caused by the pandemic. Overhauls at Tongling Nonferrous, Yunnan Copper and Jinchuan Group as well as a smelter plan to cut concentrate purchases in 2021 will see May output fall to about 760,000 tonnes (5.2%). Meanwhile, China's 15 major copper smelters have reached a consensus to reduce copper concentrates procurement by a total of 1.26 million mt in 2021, down 8.8% from a year earlier. This might also impact production from domestic smelters. Zinc and zinc alloy output from 51 Chinese smelters in April was at 438,000 tonnes, up 3.7% year-on-year and 6.4% month-on-month on a daily basis; it envisages a slight increase in May to 440,000 tonnes. Lead production from major smelters in April was up 1.3% year-on-year, but down 22,000 tonnes from March, at 391,000 tonnes, which sees tight lead concentrate supply limiting May output to around 400,000 tonnes.

- Chile's Codelco, the world's largest copper producer, announced it would soon break ground on a $1.4 billion project to extend the life of its aging Salvador division thru 2068. The Rajo Inca project aims to convert Salvador from an underground mine to an open-pit. "We will begin work in the next few weeks, in order to reach production of 90,000 tons in the first half of 2023," the firm said in a statement. Codelco is in the midst of a 10-year, $40 billion initiative to upgrade its sprawling but aging mines, which have suffered in recent years from sharply falling ore grades. Salvador has been in operation since 1959 and has the lowest productivity of any of the copper miner's deposits, producing just 50,600 tonnes, just under 3% of Codelco's total output, last year. The company's board of directors in January approved the plan and its financing.

Precious Metals

New digital exchange offers investors gold exposure and funding for miners

The Australian Digital Platform offers the possibility of investing in gold from mines at an early stage of development, while making funding available to mining companies to develop their assets.

Investors looking for exposure to early stage gold mines can buy millions of dollars of the precious metal at a discount on a digital exchange in a new development which will also provide funding for miners to develop their assets. Physically-backed products such as exchange traded funds (ETFs) are one way for investors to access gold investments, but they don’t offer discounts or the capital miners need to develop their operations. Mines in Australia and Ecuador have made available for sale around $93.50 million worth of gold at current prices, discounted to $80 million, on the Digital Metal Exchange (DMX), an online trading platform based in Australia and launching in June. Future mine production is turned into tokens or digital assets which can be freely traded on the exchange and redeemed at maturity for either physical metal or cash, DMX Chief Executive Jeremy Samuel told Reuters. “DMX is offering around 50,000 ounces of gold in the form of digital assets, discounted from spot price at various rates, depending on the location of the mine, time to delivery and other factors,” Samuel said. “The discount is calculated by our algorithm, and adjusts in real time as the mine progresses towards delivery.” Investors will include individuals, family offices that manage money for ultra-high net worth individuals and jewellery makers. “Modern customers demand sourcing transparency and clear provenance in the products they buy and use, and jewellery is no different,” Samuel said. “We are able to demonstrate precisely where the gold comes from.”

Global economies | Foreign exchange markets

China's Soaring Factory Costs Send Inflation Signal to the World

The Bloomberg Commodity Spot Index, which tracks global prices for 23 raw materials, rose this month to its highest point since 2011; it's climbed more than 70% since reaching a four-year low in March of last year. In an indication of just how strong demand is for China's goods right now, the nation's exports climbed 32.3% in dollar terms in April from a year earlier. Which is why economists say the combination of soaring prices and bumper demand augurs a period of higher inflation.

Research shows the correlation between China's PPI and U.S. CPI has been as high as 0.61 in recent years

China's producer price index (PPI) climbed by the most since 2017 in April, with everything from big-ticket items like oil and metal to components such as screws and cardboard all shooting up. On the other side of the Pacific, a U.S. gauge of prices for imported goods from China rose 1.8% in March from a year ago, the biggest gain in almost nine years. The big unknowns are how durable these higher costs will prove to be and how much of China's price pressures will eventually flow to the world's consumers. If supply chain disruptions caused by the Covid-19 pandemic do smooth out—and once we get past the data distortion caused by last year's pandemic-depressed prices—the inflation might dissipate. A sharp divergence in input and output prices for China's producers indicates costs aren't being passed all the way through just yet. Raw material prices rose 15.2% in April from a year ago, which was more than the 5.4% increase for manufactured goods. The official manufacturing purchasing managers index for April also showed input prices running far hotter than output prices. Manufacturers are looking for workarounds and cost savings to avoid raising prices. Higher prices would reverberate all the way to U.S. store shelves. Research by Standard Chartered Plc shows the correlation between China's PPI and U.S. consumer prices has been as high as 0.61 in recent years. That relationship appears to be holding true again, though exchange-rate movements and other variables may influence the pass-through. Other manufacturing giants, including the U.S., Germany, and South Korea, also are experiencing higher costs. The Bloomberg Commodity Spot Index, which tracks global prices for 23 raw materials, rose this month to its highest point since 2011; it's climbed more than 70% since reaching a four-year low in March of last year. In an indication of just how strong demand is for China's goods right now, the nation's exports climbed 32.3% in dollar terms in April from a year earlier. Which is why economists say the combination of soaring prices and bumper demand augurs a period of higher inflation. Wilson Lam, whose factories in Shenzhen make packaging for global cosmetic and perfume brands and metal caps and other accessories for whiskey and cognac bottles, thinks it's inevitable that some of the cost increases will need to be shared with his clients in Europe. In reaction to current situation China will strengthen its management of commodity supply and demand to curb "unreasonable" increases in prices and prevent them being passed on to consumers. Prices for commodities such as coal, steel, iron ore and copper - of which China is the world's biggest user - have surged this year, fuelled by post-lockdown recoveries in demand and easing liquidity globally. China will step up adjustments on the trade and stockpiling of commodities and reinforce inspections on both the spot and futures markets. It will crack down on malicious trading and investigate behaviour that bids up prices, according to the report. China will maintain stable monetary policy and keep yuan exchange rates basically steady, according to the cabinet, which added that it will help small and micro firms to cope with production and operation difficulties amid rising costs.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading [1]		Previous	Consensus [2]
		China					
✪✪✪✪	11-May	Consumer inflation CPI (yoy)	Apr	0.9%	▲	0.4%	1.0%
✪✪	11-May	Producer inflation PPI (yoy)	Apr	6.8%	▲	4.4%	6.5%
✪	12-May	New yuan loans (CNY bn)	Apr	1 470	▼	2 730	1 600
✪✪✪✪	17-May	Industrial production (yoy)	Apr	9.8%	▼	14.1%	10.0%
✪✪	17-May	Fixed assets investments (ytd, yoy)	Apr	19.9%	▼	25.6%	20.0%
✪	17-May	Retail sales (yoy)	Apr	17.7%	▼	34.2%	25.0%
		Poland					
✪✪✪✪✪	14-May	GDP (yoy) - preliminary data‡	1Q	-1.2%	▲	-2.7%	-1.4%
✪✪✪✪✪	14-May	GDP (qoq) - preliminary data‡	1Q	0.9%	▲	-0.5%	1.1%
✪✪✪✪	14-May	Consumer inflation CPI (yoy) - final data	Apr	4.3%	-	4.3%	--
✪✪	14-May	Trade balance (EUR mn)‡	Mar	589	▼	771	1 000
✪✪	14-May	Exports (EUR mn)‡	Mar	24 427	▲	21 258	24 357
✪✪	14-May	Current account balance (EUR mn)‡	Mar	938	▼	1 585	1 589
✪✪✪✪	17-May	Core CPI (excluding food and energy, yoy)	Apr	3.9%	-	3.9%	3.7%
✪✪	20-May	Average gross salary (yoy)	Apr	9.9%	▲	8.0%	10.1%
✪	20-May	Employment (yoy)	Apr	0.9%	▲	-1.3%	1.1%
✪✪	21-May	Producer inflation PPI (yoy)‡	Apr	5.3%	▲	4.2%	4.9%
		US					
✪✪✪✪	12-May	Consumer inflation CPI (mom)	Apr	0.8%	▲	0.6%	0.2%
✪✪✪✪	12-May	Consumer inflation CPI (yoy)	Apr	4.2%	▲	2.6%	3.6%
✪✪✪✪	14-May	Industrial production (mom)‡	Apr	0.7%	▼	2.4%	0.9%
✪✪	14-May	Retail sales (excluding autos, mom)‡	Apr	-0.8%	▼	9.0%	0.6%
✪✪	14-May	University of Michigan confidence index - preliminary data	May	82.8	▼	88.3	90.0
✪	14-May	Capacity utilization	Apr	74.9%	▲	74.4%	75.0%
✪✪	20-May	Philadelphia Fed business outlook	May	31.5	▼	50.2	41.5
✪✪✪	21-May	Composite PMI - preliminary data	May	68.1	▲	63.5	--
✪✪✪	21-May	Manufacturing PMI - preliminary data	May	61.5	▲	60.5	60.2
✪✪✪	21-May	PMI services - preliminary data	May	70.1	▲	64.7	64.3
		Eurozone					
✪	11-May	ZEW survey expectations	May	84.0	▲	66.3	--
✪✪✪✪	12-May	Industrial production (sa, mom)‡	Mar	0.1%	▲	-1.2%	0.8%
✪✪✪✪	12-May	Industrial production (wda, yoy)‡	Mar	10.9%	▲	-1.8%	11.8%
✪✪✪✪✪	18-May	GDP (sa, yoy) - preliminary data	1Q	-1.8%	-	-1.8%	-1.8%
✪✪✪✪✪	18-May	GDP (sa, qoq) - preliminary data	1Q	-0.6%	-	-0.6%	-0.6%
✪	18-May	Trade balance (EUR mn)	Mar	15.8	▼	17.7	--
✪✪✪✪	19-May	Consumer inflation CPI (yoy) - final data	Apr	1.6%	▲	1.3%	1.6%
✪✪✪✪	19-May	Core CPI (yoy) - final data	Apr	0.7%	▼	0.8%	0.8%
✪✪✪	21-May	Composite PMI - preliminary data	May	56.9	▲	53.8	55.1
✪✪✪	21-May	Manufacturing PMI - preliminary data	May	62.8	▼	62.9	62.5
✪✪✪	21-May	Services PMI - preliminary data	May	55.1	▲	50.5	52.5
✪	21-May	Consumer confidence - estimation	May	- 5.1	▲	- 8.1	- 6.5
		Germany					
✪✪✪✪	12-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	2.1%	-	2.1%	2.1%
✪✪✪✪	12-May	Consumer inflation CPI (yoy) - final data	Apr	2.0%	-	2.0%	2.0%

Weight	Date	Event	For	Reading [1]		Previous	Consensus [2]	
		France						
✪✪✪✪	12-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	1.6%	▼	1.7%	1.7%	◒
✪✪✪✪	12-May	Consumer inflation CPI (yoy) - final data	Apr	1.2%	▼	1.3%	1.3%	◒
✪✪✪	21-May	Composite PMI - preliminary data	May	57.0	▲	51.6	53.7	◓
✪✪✪	21-May	Manufacturing PMI - preliminary data	May	59.2	▲	58.9	58.5	◓
		Italy						
✪✪✪✪	11-May	Industrial production (wda, yoy)‡	Mar	37.7%	▲	-0.8%	37.1%	◓
✪✪✪✪	17-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	1.0%	▪	1.0%	1.0%	○
		UK						
✪✪✪✪✪	12-May	GDP (yoy) - preliminary data	1Q	-6.1%	▲	-7.3%	-6.1%	○
✪✪✪✪✪	12-May	GDP (qoq) - preliminary data	1Q	-1.5%	▼	1.3%	-1.6%	◓
✪✪✪✪	12-May	Industrial production (yoy)	Mar	3.6%	▲	-3.5%	2.9%	◓
✪✪	18-May	Unemployment rate (ILO, 3-months)	Mar	4.8%	▼	4.9%	4.9%	◒
✪✪✪✪	19-May	Consumer inflation CPI (yoy)	Apr	1.5%	▲	0.7%	1.5%	○
✪✪✪	21-May	Manufacturing PMI (sa) - preliminary data	May	66.1	▲	60.9	60.8	◓
✪✪✪	21-May	Composite PMI - preliminary data	May	62.0	▲	60.7	61.9	◓
		Japan						
✪✪✪✪✪	18-May	GDP (annualized, qoq) - preliminary data‡	1Q	-5.1%	▼	11.6%	-4.5%	◒
✪✪✪✪✪	18-May	GDP (qoq, sa) - preliminary data	1Q	-1.3%	▼	2.8%	-1.1%	◒
✪✪✪✪	19-May	Industrial production (yoy) - final data	Mar	3.4%	▼	4.0%	--	
✪✪✪✪	21-May	Consumer inflation CPI (yoy)	Apr	-0.4%	▼	-0.2%	-0.5%	◓
✪✪✪	21-May	Composite PMI - preliminary data	May	48.1	▼	51.0	--	
✪✪✪	21-May	Manufacturing PMI - preliminary data	May	52.5	▼	53.6	--	
		Chile						
✪✪✪✪✪	14-May	BCCh overnight rate target	May	0.50%	▪	0.50%	0.50%	○
✪✪✪✪✪	18-May	GDP (yoy)	1Q	0.3%	▲	0.0%	0.5%	◒
		Canada						
✪✪✪✪	19-May	Consumer inflation CPI (yoy)	Apr	3.4%	▲	2.2%	3.2%	◓

[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

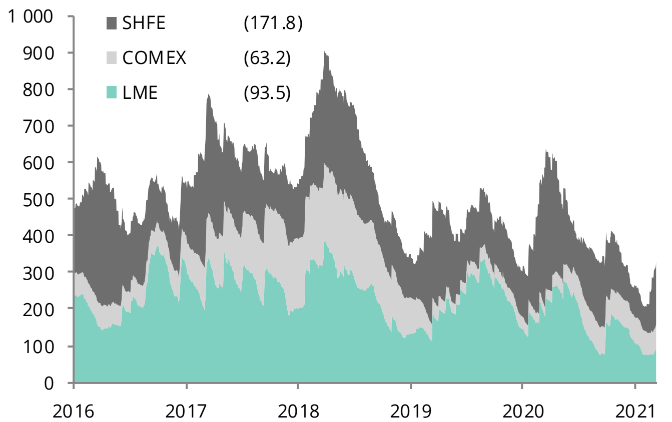
Key market data

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

(as of: 21-May-21)		Price change[1]				From year beginning[2]		
	Price	2W	QTD	YTD	1Y	Average	Min	Max
LME (USD/t; Mo in USD/lbs)								
Copper	10 011.00	▼ -3.4%	▲ 13.1%	▲ 29.3%	▲ 85.8%	8 927.51	7 755.50	10 724.50
Molybdenum	13.27	▲ 13.0%	▲ 20.1%	▲ 32.3%	▲	11.46	9.95	13.27
Nickel	17 047.00	▼ -5.4%	▲ 5.9%	▲ 3.1%	▲ 33.6%	17 368.92	15 907.00	19 689.00
Aluminum	2 403.00	▼ -4.6%	▲ 8.6%	▲ 21.5%	▲ 61.6%	2 195.82	1 951.50	2 565.00
Tin	32 362.00	▼ -3.6%	▲ 19.1%	▲ 57.6%	▲ 105.3%	27 131.79	20 965.00	34 462.00
Zinc	2 981.00	▲ 0.3%	▲ 6.7%	▲ 9.5%	▲ 49.3%	2 797.06	2 539.00	3 063.50
Lead	2 223.50	▲ 0.2%	▲ 13.6%	▲ 12.8%	▲ 34.4%	2 040.42	1 896.00	2 228.50
LBMA (USD/troz)								
Silver	27.80	▲ 1.6%	▲ 15.8%	▲ 5.0%	▲ 61.6%	26.29	24.00	29.59
Gold[2]	1 875.90	▲ 2.1%	▲ 10.9%	▼ -0.8%	▲ 8.8%	1 793.91	1 683.95	1 943.20
LPPM (USD/troz)								
Platinum[2]	1 198.00	▼ -3.7%	▲ 1.4%	▲ 11.4%	▲ 40.8%	1 179.87	1 016.00	1 294.00
Palladium[2]	2 832.00	▼ -0.9%	▲ 7.9%	▲ 19.5%	▲ 36.3%	2 555.18	2 258.00	3 000.00
FX [3]								
EURUSD	1.2188	▲ 1.1%	▲ 3.9%	▼ -0.7%	▲ 10.8%	1.2045	1.1725	1.2338
EURPLN	4.4958	▼ -1.8%	▼ -3.5%	▼ -2.6%	▼ -0.9%	4.5507	4.4773	4.6603
USDPLN	3.6778	▼ -2.9%	▼ -7.3%	▼ -2.1%	▼ -11.0%	3.7802	3.6656	3.9676
USDCAD	1.2061	▼ -0.8%	▼ -4.1%	▼ -5.3%	▼ -13.4%	1.2546	1.2051	1.2828
USDCNY	6.4340	▲ 0.0%	▼ -1.8%	▼ -1.4%	▼ -9.6%	6.4858	6.4166	6.5718
USDCLP	716.41	▲ 2.2%	▼ -2.1%	▲ 0.7%	▼ -12.5%	718.08	693.74	741.40
Money market								
3m LIBOR USD	0.147	▼ -0.01	▼ -0.05	▼ -0.09	▼ -0.21	0.191	0.147	0.241
3m EURIBOR	-0.543	▼ -0.01	▼ -0.01	▲ 0.00	▼ -0.26	-0.541	-0.556	-0.529
3m WIBOR	0.210	- 0.00	- 0.00	- 0.00	▼ -0.47	0.210	0.210	0.210
5y USD interest rate swap	0.911	▲ 0.04	▼ -0.15	▲ 0.48	▲ 0.54	0.791	0.416	1.093
5y EUR interest rate swap	-0.232	▲ 0.03	▲ 0.08	▲ 0.23	▲ 0.05	-0.345	-0.485	-0.209
5y PLN interest rate swap	1.623	▲ 0.26	▲ 0.35	▲ 1.01	▲ 0.91	1.086	0.583	1.623
Fuel								
WTI Cushing	63.70	▼ -1.8%	▲ 7.7%	▲ 31.3%	▲ 86.4%	59.93	47.62	66.27
Brent	66.38	▼ -2.8%	▲ 6.4%	▲ 29.7%	▲ 89.3%	62.77	50.02	69.57
Diesel NY (ULSD)	199.07	▼ -1.2%	▲ 12.4%	▲ 34.7%	▲ 106.5%	181.41	146.07	207.82
Others								
VIX	20.15	▲ 3.46	▲ 0.75	▼ -2.60	▼ -9.38	21.53	16.25	37.21
BBG Commodity Index	90.89	▼ -3.0%	▲ 8.9%	▲ 16.5%	▲ 44.2%	85.32	78.64	93.88
S&P500	4 155.86	▼ -1.8%	▲ 4.6%	▲ 10.6%	▲ 40.9%	3 970.55	3 700.65	4 232.60
DAX	15 437.51	▲ 0.2%	▲ 2.9%	▲ 12.5%	▲ 39.5%	14 517.91	13 432.87	15 459.75
Shanghai Composite	3 486.56	▲ 2.0%	▲ 1.3%	▲ 0.4%	▲ 21.6%	3 498.44	3 357.74	3 696.17
WIG 20	2 139.06	▲ 2.0%	▲ 10.3%	▲ 7.8%	▲ 30.6%	1 992.51	1 876.85	2 139.06
KGHM	198.00	▼ -10.1%	▲ 4.1%	▲ 8.2%	▲ 144.1%	195.85	166.70	223.80

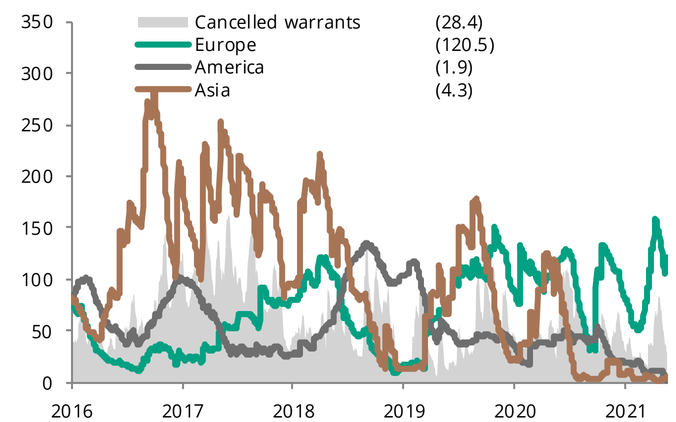
° change over: 2W = two weeks; QTD = quarter-to-day; YTD = year-to-date; 1Y = one year. [1] based on daily closing prices. [2] latest quoted price. [3] central banks' fixing rates (Bank of China HK for USD/CNY). [4].
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



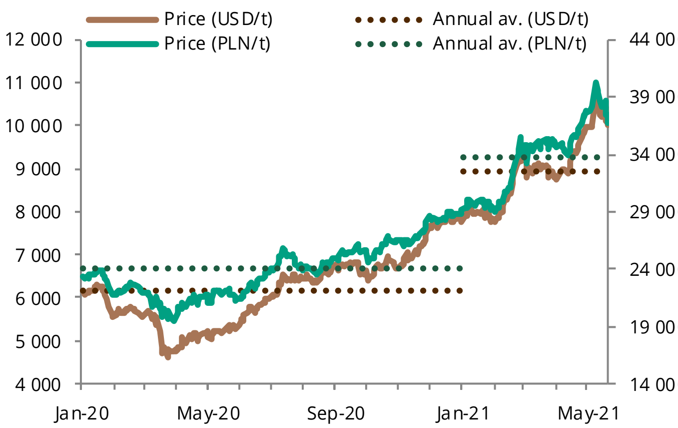
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



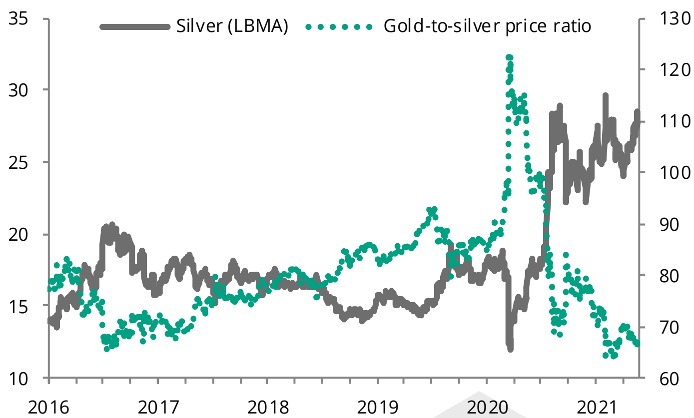
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



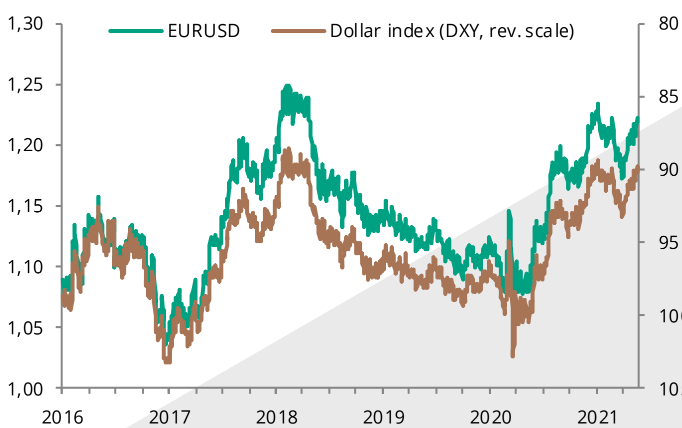
Source: Bloomberg, KGHM Polska Miedź

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



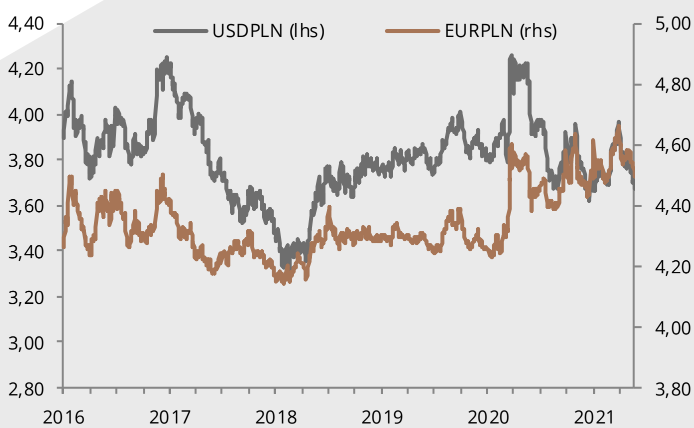
Source: Bloomberg, KGHM Polska Miedź

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: **10 - May 2021.**

▪ 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

In case of questions or comments please contact us:

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