

Market Overview



as of: 10th October 2022

- **Copper:** The new approach to the mining industry in Peru aimed to promote local and foreign investment. According to the government, although the responsibility for equalizing the standard of living of citizens rests with the state, it is necessary to involve and oblige mining companies to make greater social investments (*page 2*).
- **Precious metals:** In India, premiums over the international gold price benchmark have slid to \$1-\$2 an ounce, against around \$4 this time last year. That contrasts with the \$20-45 premiums offered in top consumer China, and \$80 in Turkey (*page 4*).
- **Fed:** With inflation running well above our 2% longer-run goal, restoring price stability likely will require ongoing rate hikes and then keeping policy restrictive for some time until we are confident that inflation is firmly on the path toward our 2% goal (*page 6*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	7 575.50	1.7%
▼ Nickel	22 360.00	-3.3%
LBMA (USD/troz)		
▲ Silver	20.63	8.6%
▲ Gold (PM)	1 696.15	3.2%
FX		
▲ EURUSD	0.9797	0.4%
▲ EURPLN	4.8606	2.1%
▲ USDPLN	4.9588	1.6%
▲ USDCAD	1.3712	1.0%
▲ USDCLP	943.92	0.1%
Stocks		
▲ KGHM	91.00	7.1%

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

Important macroeconomic data

Release	For	
 GDP (annlzd., qoq)	2Q	-31.7% ▲
 Industrial prod. (yoy)	Jul	1.1% ▲
 Retail sales (yoy)	Jul	2.7% ▲
 Composite PMI	Aug	51.7 ▼
 GDP (yoy)	2Q	-14.1% ▼

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

After the peak of almost EUR 100 in mid-August, the cost of EUA certificates returned to the level from the beginning of March



Source: Reuters, KGHM Polska Miedz S.A.

Market Risk Unit

marketrisk@kg hm.com

Base and precious metals | Other commodities

Copper

Peru proposes 'new approach' to mining to combat economic disparities, conflicts

The new approach to the mining industry in Peru aimed to promote local and foreign investment. According to the government, although the responsibility for equalizing the standard of living of citizens rests with the state, it is necessary to involve and oblige mining companies to make greater social investments.

Peru's government proposed "a new approach" for mining companies to end social gaps and avoid conflicts in the sector, a measure taken after several conflicts in the country in recent months. Prime Minister Anibal Torres said during a conference between executives of large mining firms that the new "attitude" aimed to promote local and foreign investment. He added that the government of leftist President Pedro Castillo respects private initiative and wants to promote mining activity. "Although the responsibility for closing gaps falls on the state, it is necessary to involve and commit mining companies to greater social investment," Torres said. Peru is the world's No. 2 copper producer and mining is vital for the country's economy, representing 60% of all exports. However, it has faced several conflicts and protests from local communities in its mining areas that ended up affecting mining operations. Companies affected include Grupo Mexico's Southern Copper Corp and MMG Ltd's Las Bambas. The country's central bank forecasted in September that mining investment would fall 3.7% this year and the deepen in 2023 by 16.2%. Poor indigenous communities have increased their demand for greater benefits for the exploitation of resources, creating blockades on roads and mining areas several times this year. Torres's speech aims to calm down businessmen who have demanded a clearer reaction from the government to stop the protests. Among Torres' proposals is a "social fund" from mining companies for the development of their areas of influence, along with a federal multisectoral commission to improve the use of resources managed by the mining regions. "Only in this way can we recover that social legitimacy and generate better conditions for the development of mining investments," he said, adding that national and foreign investors would have "full assurance" that their investments in Peru would be "safe." Peru has planned investments of \$53 billion in mining projects, many of them frozen or delayed while they await environmental permits or social licenses from the communities of influence.

Desalination plant delays to cost Antofagasta 30,000 tonnes of copper

The construction of a desalination plant and water pipeline is part of Antofagasta's \$2.2 billion expansion of Los Pelambres. The project will add 60,000 tonnes of copper a year over the first 15 years to the company's overall production.

Antofagasta said that the collapse of a construction platform at its Los Pelambres desalination plant in Chile in September will cost the company about 30,000 tonnes of expected copper production for 2023. The Chilean miner also said this year's total output will come in at the lower end of its previous forecast 640,000-660,000 tonnes, as sea conditions have prevented the recovery of equipment lost last month. Severe sea swells have also stopped the resumption of marine construction work, therefore affecting the plant, and the company is now working on a revised schedule incorporating this delay, it said. The copper producer said it does not expect a material increase in the total capital cost of the project due to the delayed resumption of the marine works. The construction of a desalination plant and water pipeline is part of Antofagasta's \$2.2 billion expansion of Los Pelambres. The project will add 60,000 tonnes of copper a year over the first 15 years to the company's overall production. The plan includes boosting throughput at the plant from 175,000 tonnes of ore a day to an average of 190,000 tonnes a day. Los Pelambres has been hit by unfortunate events this year. In early June, Antofagasta disclosed a leak in a pipeline at the mine's concentrator plant. It also said that the operation was one of the company's mines hardest hit by the lack of rainfall in the home country earlier in the year. Copper miners across Chile have been forced to find alternative means to feed water to their mines as the country's longest drought in decades and receding aquifers have hampered operations. Many have sharply reduced use of continental freshwater or turned to desalination plants. The country's copper agency Cochilco estimates that mining's use of seawater — either used directly or desalinated — will increase 167% by 2032, while freshwater use will decline 45%. By the end of that period, 68% of water used by the industry will come from the ocean, the agency has said. Antofagasta said it will announce the effects of the delays at the plant in the company's total copper production guidance for 2023, when it publishes its production report for the third quarter on October 19.

Other important information on copper market:

- Copper production in Chile fell to 422,888 mt in August, down 9.4% from the same month last year. Statistics agency INE cited lower ore grades and throughput at major mines in the country as the reason behind the fall. From a month ago, the copper production dropped 1.7% in August. Production during the first eight months of the year totaled 3.51 million mt, down 6.9% from the same period of 2021. Earlier this year, the Chilean Copper Commission predicted that Chilean copper output will fall to 5.43 million mt this year, down 3.4% and its lowest level in a decade.

- The LME has restricted new copper and zinc deliveries from Ural and its subsidiary, Chelyabinsk Zinc, following Britain's sanctioning of its controlling shareholder, Iskander Makhmudov. The LME said metals from UMMC and Chelyabinsk could only be delivered to LME warehouses if the owner could prove to the exchange that it did not constitute a breach of sanctions.
- Global copper smelting edged up in September, but remained below yearly average data from satellite surveillance of metal processing plants showed. Weaker smelting activity in China, was mainly behind the lacklustre readings. Earth-i, which specialises in geospatial data, tracks smelters representing 80-90% of global production. Its global copper dispersion index, a measure of smelter activity, rose to 49.0 in September from 48.6 the month before. The Chinese dispersion index fell for the fourth straight month in September to 44.8, its lowest level since March 2021. Under the dispersion index, 50 points indicate that smelters are operating at the average level of the past 12 months.

Precious Metals

Banks divert gold supply from India to China, Turkey

In India, premiums over the international gold price benchmark have slid to \$1-\$2 an ounce, against around \$4 this time last year. That contrasts with the \$20-45 premiums offered in top consumer China, and \$80 in Turkey.

Gold-supplying banks have cut back shipments to India ahead of major festivals in favour of focusing on China, Turkey, and other markets where better premiums are offered. That could create scarcity in the world's second-biggest market for gold, and force Indian buyers to start paying hefty premiums for supplies in the approaching peak-demand season. Leading gold suppliers to India - which include ICBC Standard Bank, JPMorgan and Standard Chartered - usually import more gold ahead of festivals and store it in vaults. But vaults now hold less than 10% of the gold they did a year ago. "Ideally a few tonnes of gold should be there in vaults during this time of the year. But now we only have a few kilos," said one Mumbai-based vault official. In India, premiums over the international gold price benchmark have slid to \$1-\$2 an ounce, against around \$4 this time last year. That contrasts with the \$20-45 premiums offered in top consumer China, and \$80 in Turkey, where gold imports have risen sharply against a backdrop of rampant inflation. India's gold imports in September fell 30% from a year ago to 68 tonnes, while Turkish gold imports soared 543%. China's net gold imports via Hong Kong jumped nearly 40% to a more than four-year high in August. Indians will celebrate Dussehra, Diwali and Dhanteras in October, when buying gold is considered traditional. After these festivals, the wedding season starts, which is one of the biggest drivers of gold purchases in India. Thin vault stocks could force Indian buyers to pay hefty premiums to secure supplies.

Centerra Gold extends Mount Milligan mine to 2033

The Mount Milligan deposit is estimated to contain proven and probable reserves totalling 246.2 million tonnes at 0.37 g/t gold and 0.18% copper, containing approximately 2.9 million oz. of gold and 1 billion lb. of copper. These reserves were classified as approximately 30% proven and 70% probable on a tonnage basis.

Centerra Gold has provided an updated life of mine plan for its Mount Milligan mine in central British Columbia that would extend the open pit mining to 2033. The updated LOM plan incorporates an increased mineral reserve base from the 2021 year-end calculations. As of December 31, 2021, the Mount Milligan deposit is estimated to contain proven and probable reserves totalling 246.2 million tonnes at 0.37 g/t gold and 0.18% copper, containing approximately 2.9 million oz. of gold and 1 billion lb. of copper. These reserves were classified as approximately 30% proven and 70% probable on a tonnage basis. Compared with the 2020 Mount Milligan technical report, total payable gold production would increase by 800,000 oz. (from 1.1 million oz. to 1.9 million oz.) and total payable copper production by 191 million lb. (from 560 million lb. to 751 million lb.) from 2022 onwards. The LOM payable gold production is expected to reach 1.9 million oz. at a production cost of \$502/oz. According to Centerra, recent inflationary cost pressure will be taken into consideration when the company updates and discloses the Mount Milligan mine's 2023-2025 production and cost guidance in early 2023. Its 2022 guidance remains on track for year-end. Net cash flow over the LOM is estimated at \$640 million using a gold price of \$1,500/oz. and copper price of \$3.25/lb., and over \$1 billion at prices of \$1,700/oz. of gold and \$3.50/lb. of copper.

Global economies | Foreign exchange markets





Fed Officials Keep Hammering Hawkish Message on Rates Heading Up








With inflation running well above our 2% longer-run goal, restoring price stability likely will require ongoing rate hikes and then keeping policy restrictive for some time until we are confident that inflation is firmly on the path toward our 2% goal.

Federal Reserve officials kept up the drumbeat of support for extending their run of interest-rate hikes, stressing the need to quash inflation that's proved unexpectedly stubborn. Governor Lisa Cook, in her first speech since joining the central bank in May, dashed any hopes that she would be a dovish voice at the Fed. She echoed her colleagues' resolve in continuing tightening policy and then holding rates at restrictive levels until inflation comes down. "With inflation running well above our 2% longer-run goal, restoring price stability likely will require ongoing rate hikes and then keeping policy restrictive for some time until we are confident that inflation is firmly on the path toward our 2% goal," Cook said. "In the current situation, with risks to inflation forecasts skewed to the upside, I believe policy judgments must be based on whether and when we see inflation actually falling in the data, rather than just in forecasts," Cook said. Her message was echoed in separate comments from Chicago Fed President Charles Evans and Minneapolis's Neel Kashkari, pushing back against bets by investors that policymakers will cut rates next year. Fed officials are delivering the most aggressive tightening campaign since the 1980s to tackle inflation near four-decade highs. Starting near zero in March, they've increased their benchmark rate to a target range of 3% to 3.25%, including with back-to-back 75-basis-point hikes at their last three meetings. The median of the 19 policymakers' latest projections sees another 1.25 percentage points of increases over their two remaining meetings of the year, with investors pricing a 75 basis-point move when they gather Nov. 1-2. Fed forecasts show an additional 25-basis-point increase next year, with policy staying at restrictive levels until at least 2024. "We look to me, according to our reports, headed for 4.5% to 4.75% by sometime next year -- which, given how fast we've been raising interest rates, is likely to be the springtime," Evans told a meeting of the Illinois Chamber of Commerce. All three policymakers expressed concern over core inflation. Prices minus food and energy, typically the most volatile categories, rose in August even in the face of historic Fed tightening this year. "Commodity prices move up and down, but underlying inflation tend to be stickier," Kashkari said. "We're not seeing any evidence yet that those things are moving in the right direction." Core consumer prices rose 6.3% in the 12 months through August, marking an acceleration from 5.9% in the 12 months through July.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
⊙⊙⊙	30-Sep	Official manufacturing PMI	Sep	50.1 ▲	49.4	49.7	▲
⊙⊙⊙	30-Sep	Caixin's manufacturing PMI	Sep	48.1 ▼	49.5	49.5	●
⊙	07-Oct	Foreign reserves (USD bn)	Sep	3 029 ▼	3 055	2 998	▲
Poland							
⊙⊙⊙⊙	30-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	17.2% ▲	16.1%	16.4%	▲
⊙⊙⊙	03-Oct	Manufacturing PMI	Sep	43.0 ▲	40.9	40.2	▲
⊙⊙⊙⊙⊙	05-Oct	NBP base rate decision	Oct	6.75% -	6.75%	7.00%	●
US							
⊙	26-Sep	Dallas Fed manufacturing activity	Sep	-17.2 ▼	-12.9	-9.0	●
⊙⊙	27-Sep	Durable goods orders - preliminary data	Aug	-0.2% ▼	-0.1%	-0.3%	▲
⊙	27-Sep	Richmond Fed manufacturing index	Sep	0.0 ▲	-8.0	-10.0	▲
⊙⊙⊙⊙⊙	29-Sep	GDP (annualized, qoq) -	2Q	-0.6% -	-0.6%	-0.6%	⊙
⊙⊙⊙⊙	30-Sep	Consumer spending inflation PCE (mom)‡	Aug	0.6% ▲	0.0%	0.5%	▲
⊙⊙⊙⊙	30-Sep	Consumer spending inflation PCE (yoy)‡	Aug	4.9% ▲	4.7%	4.7%	▲
⊙⊙	30-Sep	Personal income (sa, mom)‡	Aug	0.3% -	0.3%	0.3%	⊙
⊙⊙	30-Sep	Personal spending (sa, mom)‡	Aug	0.4% ▲	-0.2%	0.2%	▲
⊙⊙	30-Sep	University of Michigan confidence index - final data	Sep	58.6 ▼	59.5	59.5	●
⊙⊙⊙	03-Oct	Manufacturing PMI - final data	Sep	52.0 ▲	51.8	51.8	▲
⊙⊙	03-Oct	ISM Manufacturing	Sep	50.9 ▼	52.8	52.0	●
⊙⊙	04-Oct	Durable goods orders - final data	Aug	-0.2% -	-0.2%	-0.2%	⊙
⊙⊙⊙	05-Oct	Composite PMI - final data	Sep	49.5 ▲	49.3	49.3	▲
⊙⊙⊙	05-Oct	PMI services - final data	Sep	49.3 ▲	49.2	49.2	▲
⊙⊙	07-Oct	Change in non-farm payrolls (ths)	Sep	263 ▼	315	255	▲
⊙⊙	07-Oct	Underemployment rate (U6)	Sep	6.7% ▼	7.0%	--	●
⊙⊙	07-Oct	Unemployment rate	Sep	3.5% ▼	3.7%	3.7%	●
⊙	07-Oct	Average hourly earnings (yoy)	Sep	5.0% ▼	5.2%	5.0%	⊙
Eurozone							
⊙	27-Sep	M3 money supply (yoy)‡	Aug	6.1% ▲	5.7%	5.4%	▲
⊙	29-Sep	Economic confidence‡	Sep	93.7 ▼	97.3	95.0	●
⊙	29-Sep	Industrial confidence‡	Sep	-0.4 ▼	1.0	-0.7	▲
⊙	29-Sep	Consumer confidence - final data	Sep	-28.8 -	-28.8	--	●
⊙⊙⊙⊙	30-Sep	Core CPI (yoy) - preliminary data	Sep	4.8% ▲	4.3%	4.7%	▲
⊙⊙⊙⊙	30-Sep	CPI estimate (yoy)	Sep	10.0% ▲	9.1%	9.7%	▲
⊙⊙	30-Sep	Unemployment rate	Aug	6.6% -	6.6%	6.6%	⊙
⊙⊙⊙	03-Oct	Manufacturing PMI - final data	Sep	48.4 ▼	48.5	48.5	●
⊙⊙	04-Oct	Producer inflation PPI (yoy)‡	Aug	43.3% ▲	38.0%	43.2%	▲
⊙⊙⊙	05-Oct	Composite PMI - final data	Sep	48.1 ▼	48.2	48.2	●
⊙⊙⊙	05-Oct	Services PMI - final data	Sep	48.8 ▼	48.9	48.9	●
⊙⊙	06-Oct	Retail sales (yoy)‡	Aug	-2.0% ▼	-1.2%	-1.7%	●

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
🔊🔊	26-Sep	IFO business climate‡	Sep	84.3 ▼	88.6	87.0 🟡
🔊🔊	28-Sep	GfK consumer confidence‡	Oct	-42.5 ▼	-36.8	-39.0 🟡
🔊🔊🔊🔊	29-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	10.9% ▲	8.8%	10.2% 🟡
🔊🔊🔊🔊	29-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	10.0% ▲	7.9%	9.5% 🟡
🔊🔊	30-Sep	Unemployment rate	Sep	5.5% =	5.5%	5.5% 🟡
🔊🔊🔊	03-Oct	Manufacturing PMI - final data	Sep	47.8 ▼	48.3	48.3 🟡
🔊🔊🔊	05-Oct	Composite PMI - final data	Sep	45.7 ▼	45.9	45.9 🟡
🔊🔊🔊	06-Oct	Factory orders (wda, yoy)‡	Aug	-4.1% ▲	-11.0%	-5.5% 🟡
🔊🔊🔊🔊	07-Oct	Industrial production (wda, yoy)‡	Aug	2.1% ▲	-0.8%	2.3% 🟡
🔊🔊🔊	07-Oct	Retail sales (yoy)‡	Aug	-1.7% ▲	-5.1%	-4.1% 🟡
France 						
🔊🔊🔊🔊	30-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	6.2% ▼	6.6%	6.6% 🟡
🔊🔊🔊🔊	30-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	5.6% ▼	5.9%	6.0% 🟡
🔊🔊🔊	03-Oct	Manufacturing PMI - final data	Sep	47.7 ▼	47.8	47.8 🟡
🔊🔊🔊🔊	05-Oct	Industrial production (yoy)	Aug	1.2% ▲	-1.2%	-1.5% 🟡
🔊🔊🔊	05-Oct	Composite PMI - final data	Sep	51.2 =	51.2	51.2 🟡
Italy 						
🔊🔊🔊🔊	30-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	9.5% ▲	9.1%	9.5% 🟡
🔊🔊	30-Sep	Unemployment rate	Aug	7.8% ▼	7.9%	7.9% 🟡
🔊🔊🔊	03-Oct	Manufacturing PMI	Sep	48.3 ▲	48.0	47.5 🟡
🔊🔊🔊	05-Oct	Composite PMI	Sep	47.6 ▼	49.6	48.4 🟡
UK 						
🔊🔊🔊🔊🔊	30-Sep	GDP (yoy) - final data	2Q	4.4% ▲	2.9%	2.9% 🟡
🔊🔊🔊🔊🔊	30-Sep	GDP (qoq) - final data	2Q	0.2% ▲	-0.1%	-0.1% 🟡
🔊🔊🔊	03-Oct	Manufacturing PMI (sa) - final data	Sep	48.4 ▼	48.5	48.5 🟡
🔊🔊🔊	05-Oct	Composite PMI - final data	Sep	49.1 ▲	48.4	48.4 🟡
Japan 						
🔊🔊🔊	26-Sep	Composite PMI - preliminary data	Sep	--	49.4	--
🔊🔊🔊	26-Sep	Manufacturing PMI - preliminary data	Sep	--	51.5	--
🔊🔊🔊🔊	30-Sep	Industrial production (yoy) - preliminary data	Aug	5.1% ▲	-2.0%	1.8% 🟡
🔊🔊🔊	03-Oct	Manufacturing PMI - final data	Sep	50.8 ▼	51.0	--
🔊🔊🔊	05-Oct	Composite PMI - final data	Sep	51.0 ▲	50.9	--
Chile 						
🔊🔊🔊	30-Sep	Total copper production (metric tons)	Aug	422 888 ▼	430 028	--
🔊🔊🔊	30-Sep	Manufacturing (yoy)	Aug	-4.0% ▲	-5.1%	-3.4% 🟡
🔊🔊🔊🔊	03-Oct	Economic activity (yoy)	Aug	0.0% ▼	1.0%	-1.5% 🟡
🔊🔊	06-Oct	Nominal wages (yoy)	Aug	11.1% ▲	9.8%	--
🔊🔊🔊	07-Oct	Copper exports (USD mn)	Sep	3 336 ▲	3 271	--
Canada 						
🔊🔊🔊🔊🔊	29-Sep	GDP (yoy)‡	Jul	4.3% ▼	4.6%	4.2% 🟡
🔊🔊🔊	07-Oct	Net change in employment (ths)	Sep	21.1 ▲	-39.7	20.0 🟡

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

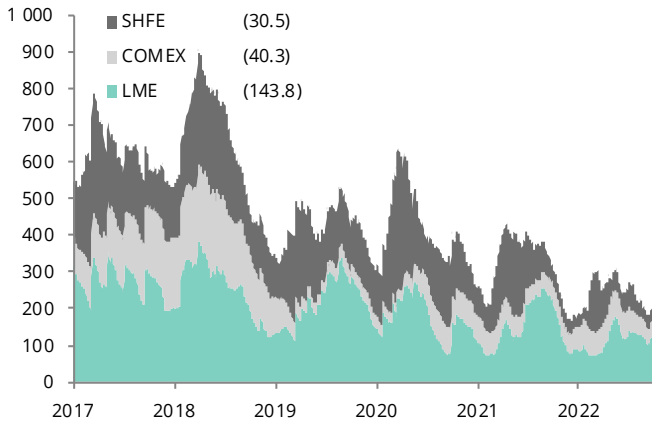
Key base & precious metal prices, exchange rates and other important market factors

(as of: 07-Oct-22)		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t; Mo in USD/lbs)									
Copper	7 575.50	▲ 1.7%	▼ -0.9%	▼ -21.8%	▼ -17.5%	9 026.44	7 000.00	10 730.00	
Molybdenum	17.97	▼ -0.1%	▼ -2.2%	▼ -3.8%	▼	17.84	14.10	19.33	
Nickel	22 360.00	▼ -3.3%	▲ 0.3%	▲ 6.9%	▲ 22.6%	25 616.63	19 100.00	45 795.00	
Aluminum	2 342.00	▲ 8.8%	▲ 7.4%	▼ -16.5%	▼ -19.7%	2 816.20	2 080.00	3 984.50	
Tin	20 000.00	▼ -6.6%	▼ -3.6%	▼ -49.5%	▼ -44.8%	34 106.84	20 000.00	50 050.00	
Zinc	3 061.50	▲ 0.9%	▲ 2.5%	▼ -15.7%	▲ 1.2%	3 622.52	2 830.00	4 530.00	
Lead	2 078.00	▲ 15.3%	▲ 10.0%	▼ -10.8%	▼ -4.7%	2 162.40	1 754.00	2 513.00	
LBMA (USD/troz)									
Silver	20.63	▲ 8.6%	▲ 8.4%	▼ -10.7%	▼ -9.1%	21.88	17.77	26.18	
Gold ²	1 696.15	▲ 3.2%	▲ 1.5%	▼ -6.8%	▼ -3.7%	1 821.05	1 634.30	2 039.05	
LPPM (USD/troz)									
Platinum ²	930.00	▲ 6.4%	▲ 7.6%	▼ -3.3%	▼ -5.0%	956.57	831.00	1 151.00	
Palladium ²	2 256.00	▲ 7.5%	▲ 1.9%	▲ 17.0%	▲ 19.7%	2 169.28	1 810.00	3 015.00	
FX³									
EURUSD	0.9797	▲ 0.4%	▲ 0.5%	▼ -13.5%	▼ -15.3%	1.0615	0.9565	1.1464	
EURPLN	4.8606	▲ 2.1%	▼ -0.2%	▲ 5.7%	▲ 6.9%	4.6785	4.4879	4.9647	
USDPLN	4.9588	▲ 1.6%	▲ 0.1%	▲ 22.1%	▲ 26.1%	4.4179	3.9218	5.0381	
USDCAD	1.3712	▲ 1.0%	▲ 0.0%	▲ 8.2%	▲ 9.2%	1.2850	1.2451	1.3726	
USDCNY	7.1159	▼ -0.2%	-	0.0%	▲ 12.0%	6.6153	6.3093	7.2005	
USDCLP	943.92	▲ 0.1%	▼ -2.3%	▲ 11.7%	▲ 15.6%	861.37	777.10	1 042.97	
Money market									
3m LIBOR USD	3.909	▲ 0.28	▲ 0.15	▲ 3.70	▲ 3.79	1.751	0.216	3.909	
3m EURIBOR	1.288	▲ 0.14	▲ 0.12	▲ 1.86	▲ 1.84	-0.088	-0.576	1.288	
3m WIBOR	7.190	▲ 0.04	▼ -0.02	▲ 4.65	▲ 6.56	5.684	2.590	7.330	
5y USD interest rate swap	4.171	▲ 0.12	▲ 0.03	▲ 2.80	▲ 3.07	2.775	1.445	4.239	
5y EUR interest rate swap	3.103	▲ 0.18	▲ 0.14	▲ 3.09	▲ 3.28	1.388	0.031	3.151	
5y PLN interest rate swap	7.005	▲ 0.44	▼ -0.04	▲ 3.27	▲ 4.67	5.743	3.780	7.870	
Fuel									
WTI Cushing	92.64	▲ 16.9%	▲ 16.5%	▲ 20.3%	▲ 18.3%	98.29	76.71	123.70	
Brent	98.54	▲ 15.0%	▲ 14.4%	▲ 27.2%	▲ 19.1%	103.69	79.83	133.89	
Diesel NY (ULSD)	432.37	▲ 32.8%	▲ 28.6%	▲ 80.5%	▲ 75.4%	368.74	241.70	534.54	
Others									
VIX	31.36	▲ 1.44	▼ -0.26	▲ 14.14	▲ 11.82	26.00	16.91	36.45	
BBG Commodity Index	117.14	▲ 4.2%	▲ 5.1%	▲ 18.1%	▲ 14.5%	120.41	100.58	136.61	
S&P500	3 639.66	▼ -1.5%	▲ 1.5%	▼ -23.6%	▼ -17.3%	4 166.11	3 585.62	4 793.54	
DAX	12 273.00	▼ -0.1%	▲ 1.3%	▼ -22.7%	▼ -19.5%	13 902.16	11 975.55	16 271.75	
Shanghai Composite	3 024.39	▼ -2.1%	-	0.0%	▼ -16.9%	3 273.41	2 886.43	3 632.33	
WIG 20	1 405.21	▼ -3.6%	▲ 2.0%	▼ -38.0%	▼ -40.4%	1 853.93	1 377.91	2 411.11	
KGHM	91.00	▲ 7.1%	▲ 3.8%	▼ -34.7%	▼ -41.5%	131.61	84.22	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

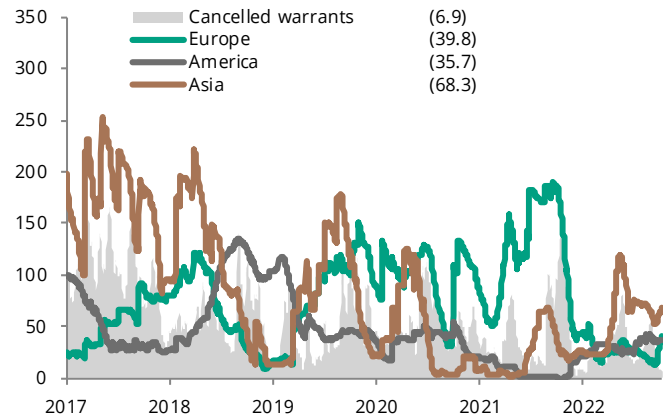
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



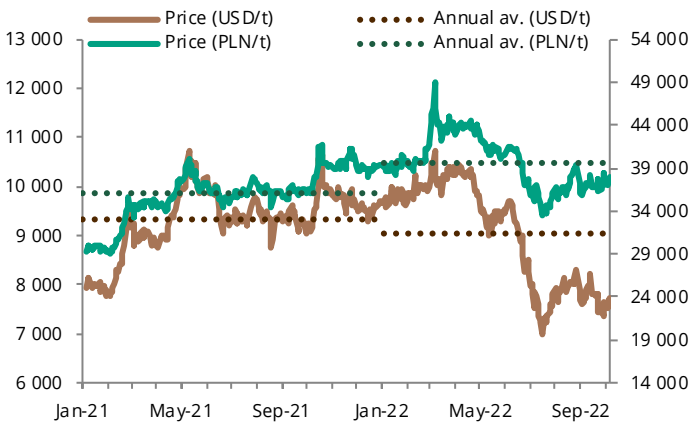
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



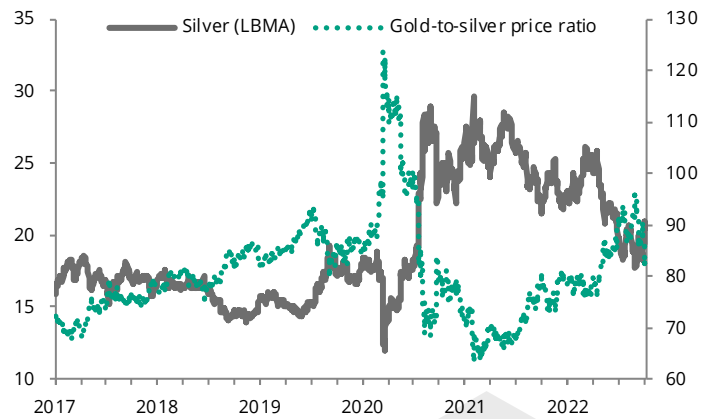
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



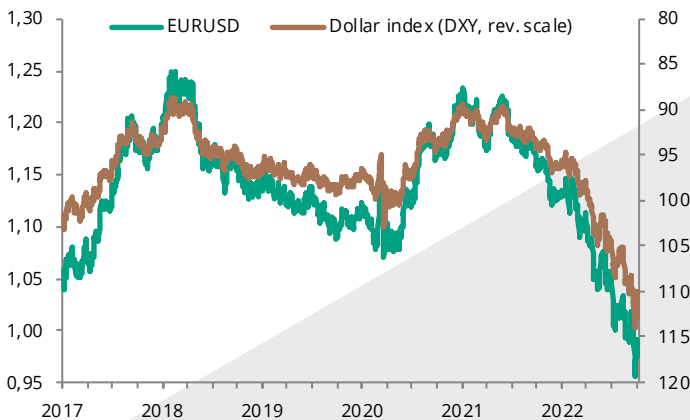
Source: Bloomberg, KGHM Polska Miedź

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



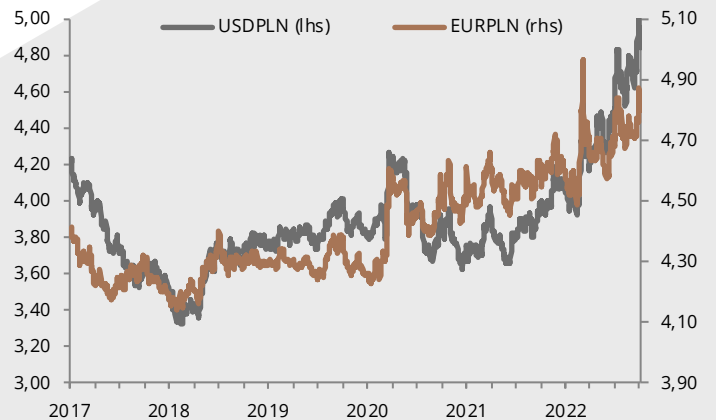
Source: Bloomberg, KGHM Polska Miedź

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:
26 September – 9 October 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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In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.
Departament Ryzyka Finansowego i Rynkowego (Financial and Market Risk Department)
Wydział Ryzyka Rynkowego (Market Risk Unit)
ul. M. Skłodowskiej-Curie 48
59-301 Lubin, Poland