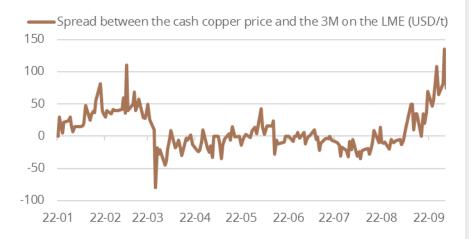


Market Overview

- Copper: The premium for cash copper over three-month futures on the London Metal Exchange rose Thursday (September 8) to a high of \$145 per metric ton, an indication the market is paying more for units right now. The physical market remains strong, fuelled by rising Chinese imports and news from Chile that exports have dropped to their lowest level in 19 months (page 2).
- Precious metals: Total Australian gold production for the fiscal year ended June 30, 2022 was 317 tonnes. Although gold prices have struggled since March, Aussie producers still had a strong incentive to push production higher (page 4).
- ECB: The ECB lifted its deposit rate to 0.75% from zero and raised the main refinancing rate to 1.25%, their highest level since 2011. ECB staff have significantly revised up their inflation projections and inflation is now expected to average 8.1% in 2022, 5.5% in 2023 and 2.3% in 2024 (page 5).

The premium for cash copper over 3M on the LME indicates the market is willing to pay more for metal ready immediately



Source: Bloomberg, KGHM Polska Miedź S.A.

as of: 12th September 2022

Key market prices

		Close price	2w chng.
	LME (USD/t)		
•	Copper	7 985.00	-4.0%
	Nickel	22 200.00	3.2%
	LBMA (USD/troz)		
•	Silver	18.77	-2.3%
•	Gold (PM)	1 713.40	-2.2%
	FX		
	EURUSD	1.0049	0.4%
\blacksquare	EURPLN	4.7098	-0.7%
\blacksquare	USDPLN	4.6599	-1.8%
	USDCAD	1.3035	0.4%
•	USDCLP	881.04	-3.2%
	Stocks		
•	KGHM	92.94	-9.7%
Cource	· Plaambara VCUM D	aleka Miodá C A .	lmoro on nago

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

Important macroeconomic data Release For Official manuf. PMI Aug 49.4 ▲ Manufacturing PMI Aug 51.5 ▲ Manufacturing PMI Aug 49.6 ▼ Manufacturing PMI (sa) Aug 47.3 ▲

Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 6)

Jul 430 028 ▼

Copper production (mt)

Market Risk Unit

marketrisk@kghm.com



Base and precious metals | Other commodities

Copper

The copper market is flashing signs of tight supply

The premium for cash copper over three-month futures on the London Metal Exchange rose Thursday (September 8) to a high of \$145 per metric ton, an indication the market is paying more for units right now. The physical market remains strong, fuelled by rising Chinese imports and news from Chile that exports have dropped to their lowest level in 19 months.

Chinese imports of copper are up 8.1% in the year to August

Copper spreads are spiking in a signal that physical supplies remain tight despite global economic headwinds. The premium for cash copper over three-month futures on the London Metal Exchange rose Thursday (September 8) to a high of \$145 per metric ton, an indication the market is paying more for units right now. That's the biggest backwardation since November last year. The metal has declined 20% this year on fears of a recession. Still, the underlying physical market is robust, with Chinese copper imports ticking higher, while top producer Chile said exports were at a 19-month low. "The physical market is actually very strong," Michael Widmer, head of metals research at Bank of America Corp., said by phone. "Europe is spending as much as possible on grids and renewables to become energy independent from Russia and China's doing the same for decarbonization reasons." Chinese imports of copper are up 8.1% in the year to August, according to customs data. That's coming against the trend for other commodities, with crude oil purchases posting significant drops year on year. Meanwhile, iron ore futures bounced back to \$100 a ton as a major Chinese city ordered work to restart on unfinished property projects, fueling hopes for a wider reboot of construction activity. Aluminum also rose amid continued supply risks while lead tracked lower. Zhengzhou, a provincial capital of some 10 million people, said all stalled housing projects should resume by Oct. 6, according to official media. The city urged developers to raise funds by selling other assets, and said the government will take over projects run by builders with liquidity difficulties.

Pentwater weighs legal action over Rio Tinto-Turquoise Hill deal

Pentwater Capital Management LP, the second-largest shareholder of Turquoise Hill Resources Ltd, said it opposes Rio Tinto's acquisition of the Canadian miner. Pentwater joins another shareholder, SailingStone Capital Partners, in publicly opposing Rio Tinto's offer as too low.

Pentwater Capital Management LP, the second-largest shareholder of Turquoise Hill Resources Ltd, said it opposes Rio Tinto's acquisition of the Canadian miner, and was weighing legal options to thwart the deal. The activist investor added that it now owns 11.67% of Turquoise Hill's shares, after buying a further 1.73% stake on the open market. Rio Tinto agreed on Sept. 1 to take over the 49% stake



it doesn't already own in Turquoise Hill after sweetening an initial offer by around 20% to "a best and final" \$3.3 billion, hoping to boost the Anglo-Australian mining company's chances of gaining direct ownership of the massive Oyu Tolgoi copper-gold mining project in Mongolia. "The proposed price implies an equity value of \$8.65 billion CAD, which is a fraction of the free cash flow that Pentwater expects Turquoise Hill to generate over the next decade," it said in a release. "Pentwater expects Turquoise Hill to generate over \$10.5 billion CAD of free cash flow through 2030." Shares of Turquoise Hill, which fell 3% after Pentwater's announcement, have gained more than 50% since Rio's initial offer in March. Turquoise Hill's minority shareholders are expected to vote on the proposed deal around the end of October. Pentwater joins another minority shareholder, SailingStone Capital Partners, in publicly opposing Rio Tinto's offer as too low.

Other important information on copper market:

- Chile's Codelco, the world's largest copper producer, expects its output of the red metal to fall further next year amid project delays, local newspaper El Mercurio reported, citing the chairman of the state-owned miner's board. Codelco lowered its copper production outlook for 2022 to about 1.5 million tonnes, blaming lower recovery levels at some of its mines and ore grades at the Chuquicamata site. The company previously had expected to produce 1.61 million tonnes of copper this year. "The production outlook for 2023 is 1.45 million tonnes. For the five-year period between 2023 and 2027, the best forecast we have is 1.5 million tonnes on average," Codelco Chairman Maximo Pacheco said.
- Peru, the world's second-largest copper producer, posted a 6.6% year-over-year slip in its July output after two of the country's largest mines underperformed, the government said on Monday. Copper production in July totaled 195,234 tonnes to hit 1,291,888 tonnes year-to-date, just 0.1% under the year-ago period, the Ministry of Energy and Mines said in a report. The Antamina mine, controlled by Glencore, BHP, Teck and Mitsubishi, reported a 9.1% drop in production in July, while Southern Copper owned by Grupo Mexico dropped 14.5%. Copper production had recovered in June after the Las Bambas mine resumed following a truce with indigenous communities. The Las Bambas truce ended without reaching a final agreement, and renewed protests could risk production. Mining exports in Peru total around 60% of the country's overall shipments.



Precious Metals

Aussie gold miners produced 83 tonnes of gold in Q2

Total Australian gold production for the fiscal year ended June 30, 2022 was 317 tonnes. Although gold prices have struggled since March, Aussie producers still had a strong incentive to push production higher.

Australian gold production was firing on all cylinders between April and June, rising by 9% compared to the first three months of the year, according to Melbourne-based gold mining consultants Surbiton Associates. According to the firm's quarterly report, Australian gold companies produced 83 tonnes of gold in the final quarter of the 2021-2022 financial year. "This brings Australian total gold mine production to 317 tonnes for the financial year ended 30 June 2022, worth around A\$26 billion," the report said. Dr. Sandra Close, a Surbiton director, said that producers were able to end the financial year on a high note by pushing their treatment plants and treating higher-grade ore. She added that although gold prices have struggled since March, Aussie producers still had a strong incentive to push production higher. "In the second quarter of 2022, the US dollar price of gold fell by US\$125 per ounce, but the Australian dollar gold price actually rose by almost A\$42 an ounce due to a US 6 cent movement in the exchange rate," Close said. Although the June quarter saw strong production, Close noted that the industry faces some challenges, including rising input costs due to inflation and a shortage of skilled workers. The report noted that two new mines was a factor in pushing production higher during the quarter. The two mines are located in Western Australia, Red 5's King of the Hills and Calidus Resources' Warrawoona project. "When in full production, these could add more than 10 tonnes of gold output a year," the report said.



Global economies | Foreign exchange markets

ECB raises rates by unprecedented 75 basis points

The ECB lifted its deposit rate to 0.75% from zero and raised the main refinancing rate to 1.25%, their highest level since 2011. ECB staff have significantly revised up their inflation projections and inflation is now expected to average 8.1% in 2022, 5.5% in 2023 and 2.3% in 2024.

The European Central Bank raised interest rates by an unprecedented 75 basis points to tame runaway inflation, as the bloc has lost access to vital Russian natural gas. The ECB lifted its deposit rate to 0.75% from zero and raised the main refinancing rate to 1.25%, their highest level since 2011, as inflation is becoming increasingly broad and was at risk of getting entrenched. "Over the next several meetings the Governing Council expects to raise interest rates further to dampen demand and guard against the risk of a persistent upward shift in inflation expectations," the ECB said in a statement. The move comes after weeks of canvassing by policymakers, with a seeming majority making the case for a 75 basis-point hike and a few policy doves trying to downgrade expectations. Markets, however, sided with the conservatives and priced in an 80% likelihood of a 75 basis-point move, even as economists polled by Reuters were more evenly split, showing only a slight majority expecting the larger move. The large hike comes as the ECB increased its own inflation forecasts and continues to see price growth well above its 2% target throughout its entire projection horizon. "ECB staff have significantly revised up their inflation projections and inflation is now expected to average 8.1% in 2022, 5.5% in 2023 and 2.3% in 2024," the ECB added. Conservatives feared that anything but an oversized move would signal that the ECB was not serious about its inflationfighting mandate. That risked pushing up already high long-term inflation expectations, which would signal a loss of confidence in the ECB. Timid action would have also weakened the euro, boosting inflation through more expensive energy imports. Frontloading the rate hikes also allows the ECB to get most of the work done before the recession sets in. Attention now turns to ECB President Christine Lagarde's 1245 GMT news conference.



Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹		Previous	Consensus	
		China					*	
000	31-Aug	Official manufacturing PMI	Aug	49.4	<u> </u>	49.0	49.2	
000	01-Sep	Caixin's manufacturing PMI	Aug	49.5	▼	50.4	50.0	_
00	07-Sep	Trade balance (USD bn)	Aug	79.4	▼	101	92.7	
00	07-Sep	Exports (yoy)	Aug	7.1%	▼	18.0%	13.0%	
•	07-Sep	Foreign reserves (USD bn)	Aug	3 055	▼	3 104	3 065	
0000	09-Sep	Consumer inflation CPI (yoy)	Aug	2.5%	▼	2.7%	2.8%	
00	09-Sep	Producer inflation PPI (yoy)	Aug	2.3%	▼	4.2%	3.2%	
0	09-Sep	New yuan loans (CNY bn)	Aug	1 250		679	1 500	
		Poland						
00000	31-Aug	GDP (yoy) - final data	2Q	5.5%		5.3%		
00000	31-Aug	GDP (qoq) - final data	2Q	-2.1%		-2.3%		
0000	31-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	16.1%		15.6%	15.4%	
000	01-Sep	Manufacturing PMI	Aug	40.9	•	42.1	41.6	
00000	07-Sep	NBP base rate decision	Sep	6.75%	A	6.50%	6.75%	0
		US						
9	29-Aug	Dallas Fed manufacturing activity	Aug	- 12.9		- 22.6	- 12.7	
000	01-Sep	Manufacturing PMI - final data	Aug	51.5		51.3	51.3	
00	01-Sep	ISM Manufacturing	Aug	52.8		52.8	51.9	
00	02-Sep	Change in non-farm payrolls (ths)‡	Aug	315	▼	526	298	
90	02-Sep	Durable goods orders - final data	Jul	-0.1%	•	0.0%	0.0%	
00	02-Sep	Underemployment rate (U6)	Aug	7.0%		6.7%		
00	02-Sep	Unemployment rate	Aug	3.7%		3.5%	3.5%	
Ð	02-Sep	Average hourly earnings (yoy)	Aug	5.2%	-	5.2%	5.3%	
000	06-Sep	Composite PMI - final data	Aug	44.6	•	45.0	45.0	_
000	06-Sep	PMI services - final data	Aug	43.7	•	44.1	44.2	_
		Eurozone	J.					0
0	30-Aug	Economic confidence‡	Aug	97.6	V	98.9	98.0	
Đ	30-Aug	Industrial confidence‡	Aug	1.2	V	3.4	2.4	
>	30-Aug	Consumer confidence - final data	Aug	- 24.9		- 24.9		
0000	31-Aug	Core CPI (yoy) - preliminary data	Aug	4.3%		4.0%	4.1%	
0000	31-Aug	CPI estimate (yoy)	Aug	9.1%		8.9%	9.0%	
000	01-Sep	Manufacturing PMI - final data	Aug		•	49.7	49.7	_
00	01-Sep	Unemployment rate‡	Jul	6.6%	•	6.7%	6.6%	0
90	02-Sep	Producer inflation PPI (yoy)‡	Jul			36.0%	37.3%	
000	05-Sep	Composite PMI - final data	Aug		•	49.2	49.2	
000	05-Sep	Services PMI - final data	Aug		•	50.2	50.2	
90	05-Sep	Retail sales (yoy)‡	Jul			-3.2%	-0.8%	_
00000	07-Sep	GDP (sa, yoy) - final data	2Q		_	3.9%	3.9%	
00000	07-Sep	GDP (sa, qoq) - final data	2Q		_	0.6%	0.6%	
000	07-Sep	Gross fixed capital (qoq)‡	2Q		_	-0.8%		
000	07-Sep	Households consumption (gog)‡	2Q		_	0.0%		
00000	08-Sep	ECB main refinancing rate	Sep		_	0.50%	12.5	0
	JU JUP		JCP	12.5	_	3.3070	12.3	-



Weight	Date	Event	For	Reading	1	Previous	Consensu	JS ²
		Germany						
0000	30-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	8.8%	A	8.5%	8.8%	0
0000	30-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	7.9%		7.5%	7.8%	
00	31-Aug	Unemployment rate	Aug	5.5%		5.4%	5.5%	0
000	01-Sep	Manufacturing PMI - final data	Aug	49.1	\blacksquare	49.8	49.8	
000	01-Sep	Retail sales (yoy)‡	Jul	-5.5%		-9.1%	-6.5%	
000	05-Sep	Composite PMI - final data	Aug	46.9	\blacksquare	47.6	47.6	
000	06-Sep	Factory orders (wda, yoy)	Jul	-13.6%	\blacksquare	-9.0%	-13.4%	
0000	07-Sep	Industrial production (wda, yoy)‡	Jul	-1.1%	\blacksquare	-0.1%	-2.1%	
		France						
00000	31-Aug	GDP (yoy) - final data	2Q	4.2%		4.2%	4.2%	0
00000	31-Aug	GDP (qoq) - final data	2Q	0.5%		0.5%	0.5%	0
0000	31-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	6.5%	\blacksquare	6.8%	6.7%	
0000	31-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	5.8%	\blacksquare	6.1%	6.1%	
000	01-Sep	Manufacturing PMI - final data	Aug	50.6		49.0	49.0	
000	05-Sep	Composite PMI - final data	Aug	50.4	_	49.8	49.8	
0000	09-Sep	Industrial production (yoy)‡	Jul		_	1.0%	0.4%	_
		Italy						Ĭ
0000	31-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	9.0%		8.4%	8.2%	
00000	01-Sep	GDP (wda, yoy) - final data‡	2Q	4.7%	-	4.7%	4.6%	
00000	01-Sep	GDP (wda, qoq) - final data‡	2Q	1.1%		1.1%	1.0%	
000	01-Sep	Manufacturing PMI	Aug	48.0	•	48.5	48.1	_
00	01-Sep	Unemployment rate‡	Jul	7.9%	•	8.0%	8.1%	_
000	05-Sep	Composite PMI	Aug	49.6	<u>.</u>	47.7	48.0	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	UK					<u> </u>	
000	01-Sep	Manufacturing PMI (sa) - final data	Aug	47.3		46.0	46.0	
000	05-Sep	Composite PMI - final data	Aug	49.6	—	50.9	50.9	_
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Japan			·			•
0000	31-Aug	Industrial production (yoy) - preliminary data	Jul	-1.8%		-2.8%	-2.4%	
000	01-Sep	Manufacturing PMI - final data	Aug	51.5	_	51.0		
000	05-Sep	Composite PMI - final data	Aug	49.4	_	48.9		
00000	08-Sep	GDP (annualized, qoq) - final data	2Q	3.5%	_	2.2%	2.9%	
00000	08-Sep	GDP (qoq, sa) - final data	2Q	0.9%	_	0.5%	0.7%	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Chile					*	
000	31-Aug	Total copper production (metric tons)	Jul	430 028	_	462 172		
000	31-Aug	Manufacturing (yoy)	Jul	-5.1%	•	-2.5%	-1.8%	
0000	01-Sep	Economic activity (yoy)‡	Jul	1.0%		3.3%	1.0%	0
00000	07-Sep	BCCh overnight rate target	Sep			9.75%		
000	07-3ep	Copper exports (USD mn)	Aug		—	3.75%	10.5070	
000	07-3ep 07-Sep	Nominal wages (yoy)	Jul		*	10.0%	-	
	о, эср	Canada	jui	5.070	*	10.070		ان
00000	31-Aug	GDP (yoy)	Jun	4.7%	•	5.6%	4.9%	7
00000	31-Aug	GDP (goy) GDP (annualized, qoq)	2Q	3.3%	V	3.1%	4.9%	_
00000	07-Sep	BoC base rate decision			_			
			Sep	3.25%		2.50%	3.25%	0
000	09-Sep	Capacity utilization‡	2Q	83.8%		81.9%	15.0	
000	09-Sep	Net change in employment (ths)	Aug	- 39.7		- 30.6	15.0	

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; == equal to previous.



Key market data

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

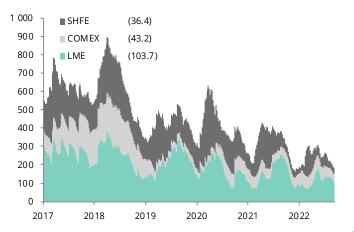
(as of: 09-Sep-22)					Price	cha	nge¹			From year beginning ²				
(),,	Price		2W		QTD		YTD		1Y	Average	Min	Max		
LME (USD/t; Mo in USD/lbs)					٧					7110110				
Copper	7 985.00	_	-4.0%	_	-3.2%	_	-17.6%	_	-14.7%	9 179.81	7 000.00	10 730.00		
Molybdenum	16.12		5.5%	_	-6.6%		-13.7%	_		17.87	14.10	19.33		
Nickel	22 200.00		3.2%	_	-3.9%		6.1%		9.7%	25 925.57	19 100.00	45 795.00		
Aluminum	2 280.00	_	-8.6%	_	-4.9%	_	-18.7%	_	-19.1%	2 884.33	2 230.50	3 984.50		
Tin	21 305.00	_	-12.9%	_		_	-46.2%	_	-37.0%	35 630.32	20 525.00	50 050.00		
Zinc	3 222.50		-12.4%	_	-0.9%		-11.2%		4.9%	3 685.13	2 921.00	4 530.00		
Lead	1 918.00	_	-4.0%		0.6%	_	-17.6%	_	-17.5%	2 193.95	1 882.00	2 513.00		
LBMA (USD/troz)														
Silver	18.77	_	-2.3%	_	-8.1%	_	-18.7%	_	-22.3%	22.15	17.77	26.18		
Gold ²	1 713.40	_	-2.2%	_	-5.7%	_	-5.9%	_	-4.2%	1 836.71	1 694.30	2 039.05		
LPPM (USD/troz)														
Platinum ²	881.00		0.5%	_	-2.9%	_	-8.4%	_	-10.5%	963.14	831.00	1 151.00		
Palladium ²	2 161.00		0.4%		14.5%		12.1%	_	-3.5%	2 168.15	1 810.00	3 015.00		
FX ³														
EURUSD	1.0049		0.4%	•	-3.3%	•	-11.3%	_	-15.1%	1.0699	0.9885	1.1464		
EURPLN	4.7098	_	-0.7%		0.6%		2.4%		3.9%	4.6674	4.4879	4.9647		
USDPLN	4.6599	_	-1.8%		4.0%		14.8%		21.7%	4.3697	3.9218	4.8284		
USDCAD	1.3035		0.4%		1.2%		2.8%		3.0%	1.2782	1.2451	1.3166		
USDCNY	6.9265		0.8%		3.4%		9.0%		7.3%	6.5778	6.3093	6.9658		
USDCLP	881.04	_	-3.2%	•	-4.2%		4.3%		11.9%	852.82	777.10	1 042.97		
Money market	_													
3m LIBOR USD	3.245		0.18		0.96		3.04		3.13	1.544	0.216	3.245		
3m EURIBOR	0.934		0.39		1.13		1.51		1.48	-0.226	-0.576	0.934		
3m WIBOR	7.150		0.08		0.10		4.61		6.91	5.511	2.590	7.160		
5y USD interest rate swap	3.498		0.22		0.42		2.13		2.62	2.646	1.445	3.637		
5y EUR interest rate swap	2.366		0.26		0.58		2.35		2.68	1.232	0.031	2.380		
5y PLN interest rate swap	6.160	•	-0.41	\blacksquare	-0.74		2.42		4.55	5.647	3.780	7.870		
Fuel	_													
WTI Cushing	86.79	•	-6.7%	\blacksquare	-17.9%		12.7%		27.4%	99.91	76.99	123.70		
Brent	92.34	•	-8.2%	\blacksquare	-19.7%		19.2%		29.6%	105.16	79.83	133.89		
Diesel NY (ULSD)	360.62	•	-10.1%	\blacksquare	-7.5%		50.5%		70.6%	370.87	241.70	534.54		
Others	_													
VIX	22.79	•	-2.77	•	-5.92		5.57		3.99	25.68	16.91	36.45		
BBG Commodity Index	118.52	•	-4.9%		1.3%		19.5%		22.7%	120.96	100.58	136.61		
S&P500	4 067.36		0.2%		7.4%	•	-14.7%	•	-9.5%	4 210.74	3 666.77	4 793.54		
DAX	13 088.21		0.9%		2.4%	•	-17.6%	•	-16.2%	14 054.07	12 401.20	16 271.75		
Shanghai Composite	3 262.05		0.8%	•	-4.0%	•	-10.4%	•	-11.7%	3 286.46	2 886.43	3 632.33		
WIG 20	1 534.68	•	-4.3%	•	-9.5%	•	-32.3%	•	-34.9%	1 898.75	1 452.86	2 411.11		
KGHM	92.94	•	-9.7%	•	-21.8%	•	-33.3%	•	-47.2%	136.47	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

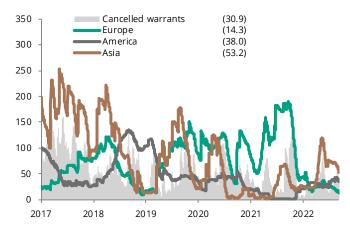


Copper: official exchange stocks (thousand tonnes)



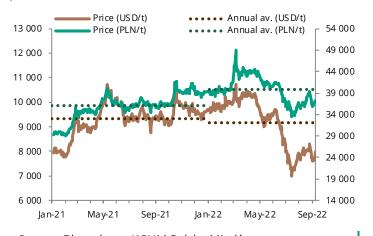
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



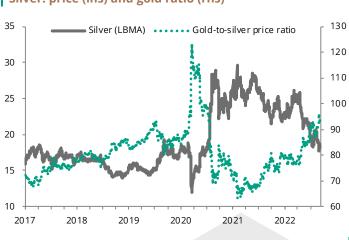
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



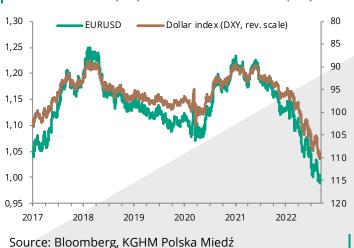
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs) 4,80 5,10 USDPLN (lhs) EURPLN (rhs) 4,60 4.90 4,40 4,20 4,00 4,50 3,80 3,60 4,30 3,40 4,10 3,20 3,00 3,90 2017 2018 2019 2020 2021 2022

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: **29 August - 11 September 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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