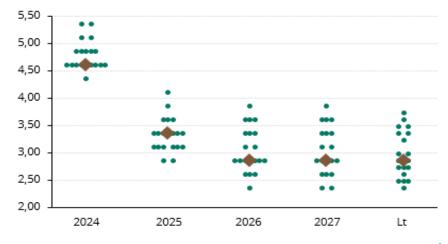


Market Overview

- Copper: ICSG expects a significant global surplus in the refined copper market this year, amounting to 469 thousand tonnes. tons, and then a surplus of 194 thousand. tons in 2025 (page 2).
- Precious metals: Silver prices have bubbled up to their highest in over a decade on the back of bullion's stellar bull run and China's stimulus measures, although some analysts expect the rally to fade as industrial sector demand remains a concern (page 5).
- USA: September's decision to cut interest rates by 50 basis points reflects the Fed's growing confidence that, with appropriate policy recalibration, the strong labor market, moderate economic growth and inflation can sustainably decline to 2% can be achieved (page 6).
- China: Three of China's largest cities have relaxed rules for homebuyers, continuing the central government's latest efforts to support the struggling real estate sector (page 7).

FOMC members median in September 2024



Source: Bloomberg, KGHM Polska Miedź S.A.



Key market prices

		Price	1m chng.		
	LME (USD/t)				
	Copper	9 767.00	6.0%		
	Nickel	17 005.00	1.1%		
	LBMA (USD/troz)				
	Silver	31.08	5.4%		
	Gold (PM)	2 629.95	4.6%		
	FX				
	EURUSD	1.1196	1.0%		
\blacksquare	EURPLN	4.2791	0.0%		
•	USDPLN	3.8193	-1.2%		
	USDCAD	1.3499	0.1%		
•	USDCLP	896.25	-2.3%		
	Stocks				
	KGHM	159.35	14.8%		

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

Important macroeconomic data

	Release	For	
	Fed upper rate	Sep	5.00% ▼
*3	Caixin's manuf. PMI	Aug	50.4
*3	Industrial prod. (yoy)	Aug	4.5% ▼
	Manufacturing PMI	Aug	47.8 🔺
*	BoC rate decision	Sep	4.25% ▼

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

International Copper Study Group (ICSG) has a sobering message for copper bulls

ICSG expects a significant global surplus in the refined copper market this year, amounting to 469 thousand tonnes. tons, and then a surplus of 194 thousand. tons in 2025.

As reported by Reuters copper has rallied hard in the end of September as China's pledged stimulus package has rekindled investor enthusiasm. Renewed optimism that the world's largest copper buyer can recover its lost manufacturing momentum has propelled London Metal Exchange (LME) threemonth metal above the \$10,000-per metric ton level for the first time since July. The turn in macro sentiment has been mirrored by a positive shift in market optics as Shanghai copper stocks have trended sharply lower in recent weeks. However, copper bulls may be getting ahead of themselves. There's no shortage of copper, according to the International Copper Study Group (ICSG), which has just updated its supply and demand forecasts for this year and next. Indeed, the ICSG expects a hefty 469,000-ton global supply surplus this year followed by another 194,000-ton surplus in 2025. The scale of oversupply is more than double that forecast when the Group last met in April. The ICSG forecasts come with statistical caveats, most notably that the Group's calculation of apparent demand in China is based only on reported data such as stock levels and trade flows. The methodology cannot capture shifts in strategic or commercial inventories which can be hugely important in determining the actual market balance. But the Group's increased surplus forecasts for 2024 and 2025 are almost entirely due to changes on the supply side, the far more transparent part of the equation. Expected copper mine production growth of 1.7% in 2024 will fall just short of last year but is a significant upgrade from the 0.5% forecast in April. The ICSG expects the growth rate to accelerate to 3.5% next year as big mines such as Kamoa-Kakula in the Congo and Oyu Tolgoi in Mongolia ramp up capacity and the new Malmyzhskoye mine in Russia enters production. Refined metal production is now expected to grow by 4.2% this year, another upgrade from April, when the ICSG forecast growth of 2.8%. The mismatch between the rate of mine and smelter production growth is squeezing the raw materials segment of the copper market. Spot treatment charges, levied by smelters for converting mined concentrates into refined metal, are close to zero. The squeeze on smelter profitability has fuelled a bull narrative of copper scarcity but that misses the point that low treatment charges also reflect an aggressive expansion of copper smelting capacity, particularly in China. Chinese smelters announced plans to reduce run-rates in March but the effect has been to slow not reverse production growth. National output of refined metal was still up by 6.2% yearon-year in the first eight months of 2024. The country's top producers are again



calling for collective restraint. Whether this has any tangible impact on actual production levels remains to be seen. While there is genuine tightness in the raw materials supply chain, there is clearly no shortage of copper. Global exchange stocks touched a four-year high of 599,000 tons at the end of August. Even after a 100,000-ton decline in September, they are still around 280,000 tons higher than at the start of 2024. Global surplus has been masked by regional tightness. Low inventory and an acute squeeze on the CME contract in May reflected the US exchange's limited physical delivery options rather than global scarcity. CME stocks are now rising at a fast clip but only after a convoluted physical arbitrage that saw Chinese smelters ship metal to LME warehouses because none of them have a direct CME delivery option. China exported 332,000 tons of refined copper in the May-August period, which is likely why Shanghai stocks are now sliding. September last week's price rally has been all about China and the renewed optimism surrounding its copper demand outlook. The ICSG hasn't changed its views on that since April, forecasting Chinese copper usage to grow by a relatively modest 2.0% this year and by 1.8% in 2025. The Group expects the rest of the world to fare better after a 3.0% contraction in demand last year. But global demand growth of 2.2% this year will lag refined production growth by a significant margin, hence the expected metal glut. It's noticeable that the jump in the outright LME copper price hasn't been matched by any movement in the forward spreads. The LME cash-to-three-months time-spread continues to trade in wide contango. The cash discount was valued at \$131 at Thursday's [Sep 26] close, a strong price signal the world is not running out of copper just yet.

Other important information on copper market:

- Copper production in Peru will likely fall short of a government goal of 3 million metric tons this year. Output is currently on track to reach about 2.8 million tons this year, said deputy mining minister Henry Luna. However, he noted that some miners may increase their production estimates under a new government norm allowing copper processing plants to increase their capacity by 10%. According to official data, copper production this year through July fell 2.3% compared to the same period a year before. Output in the period was 1.51 million metric tons, due to declines of 5.7% at Cerro Verde, 11.3% at Las Bambas and 17.1% at Toromocho, according to a government report. In July alone, Peru produced 222,389 tons of copper, a 3.2% drop from the year before. After years as the world's second-largest copper miner after Chile, Peru last year lost its position to the Democratic Republic of the Congo.
- Chile state miner Codelco produced 111,400 metric tons of copper in July, down 10.7% from a year earlier, Cochilco announced, while other key miners saw mixed results. The BHP-controlled Escondida mine lifted its production of the red metal in July by 29%, compared to the same month last year, to reach 106,500 tons. Meanwhile, the Collahuasi mine, jointly run by Glencore and Anglo American, saw output shrink 6% to 47,000 tons.
- China Smelters Purchase Team (CSPT) called on Tuesday [Sep 17] for production cuts, while deciding on a slight rise in price guidance for fourth-quarter



processing charges. Although Chinese copper smelters also proposed output cuts at prior meetings this year, monthly refined copper production beat market expectations to stay above a million tons. China's refined copper output grow 6.2% to 8.91 million tons in the first eight months of the year, figures from the National Bureau of Statistics show. Participants at Tuesday's meeting agreed on guidance prices for copper concentrate processing treatment and refining charges (TC/RCs) at \$35 per metric ton and 3.5 cents per pound. The guidance price for the third quarter was set at a nine-year low of \$30 a metric ton and 3 cents a pound.

• The global refined copper market showed a 91,000 metric tons surplus in July, compared with a 113,000 metric tons surplus in June, the International Copper Study Group (ICSG) said. For the first 7 months of the year, the market was in a 527,000 metric tons surplus compared with a 79,000 metric tons surplus in the same period a year earlier, the ICSG said. World refined copper output in July was 2.35 million metric tons, while consumption was 2.26 million metric tons.



Precious Metals

China stimulus, mighty gold puts silver on a streak, but for how long

Silver prices have bubbled up to their highest in over a decade on the back of bullion's stellar bull run and China's stimulus measures, although some analysts expect the rally to fade as industrial sector demand remains a concern.

As Reuters informs, silver prices have bubbled up to their highest in over a decade on the back of bullion's stellar bull run and China's stimulus measures, although some analysts expect the rally to fade as industrial sector demand remains a concern. Spot silver - both an investment asset due to its relationship with gold and an industrial metal - rose to \$32.71 per ounce on Thursday [Sep 26], its highest since December 2012, and has gained more than 35% so far in 2024, leading the precious metals complex. China's central bank unveiled its biggest stimulus in the end of September since the COVID 19 pandemic and is expected cut its seven-day reverse repo rate. The U.S. Federal Reserve lowered interest rates with a half-percentage-point reduction. "China stimulus is giving industrial metals a boost, something silver traders had been waiting for," Ole Hansen, head of commodity strategy at Saxo Bank, said. "Continued gold strength combined with stable to higher industrial metal prices should see silver continue to outperform gold, with the gold/silver ratio falling back towards the 70 to 75 area, potentially driving a 10% outperformance in silver," Hansen added. The gold-silver ratio, denoting how many ounces of silver one ounce of gold can buy, is used by the market to gauge future trends as it indicates silver's current performance against its historical correlation with gold. "Interest rate cuts should provide a bullish impulse for global activity and support silver consumption. We see prices rising to \$35 over the next 3 months and \$38 over the next 6-12 months," Citi analyst Max Layton said. Macquarie, which expects that silver market deficits will persist throughout its 5-year forecast window, said investor flows are likely to remain key for near-term price action, with ETF holdings arguably offering the greatest scope for support. However, consolidation in China's solar industry and slower growth in the world's second biggest economy could pose headwinds for silver in the near-term. "China's newest support measures on their own will probably be insufficient to drive a turnaround in growth and traders do appear to be overestimating the likelihood of another 50 bps cut by the Fed in November," said Hamad Hussain, assistant climate & commodities economist at Capital Economics. "Accordingly, the rally in silver prices is unlikely to be sustained over the next few months as some of the tailwinds boosting silver demand fade." In top consumer China, industrial output growth slowed to a five-month low in August, underlining weakening domestic demand.



Global economies | Foreign exchange markets

Powell Points to Two More Rate Cuts This Year

September's decision to cut interest rates by 50 basis points reflects the Fed's growing confidence that, with appropriate policy recalibration, the strong labor market, moderate economic growth and inflation can sustainably decline to 2% can be achieved.

Jerome H. Powell, chair of the Federal Reserve, said that central bankers will lower rates as much as needed, but have forecast two more quarter-point rate cuts this year. Jerome H. Powell, the chair of the Federal Reserve, underscored that officials are likely to lower interest rates in the coming months — but that policymakers do not expect to make those rate cuts in large increments if the economy shapes up as expected. Fed officials lowered interest rates by half a percentage point, or 50 basis points, at their meeting on Sept. 18, the first reduction in more than four years. Policymakers usually cut borrowing costs in quarter-point increments, so that was an unusually large decrease. The move came as the Fed made notable progress in its fight against rapid inflation. Price increases have slowed substantially since their 2022 peak, which meant that the high interest rates the Fed had maintained since mid-2023 were no longer seen as necessary. Now, the question is how quickly central bankers will ease off in the months ahead. Speaking to business economists at a conference in Nashville, Mr. Powell pointed to economic projections that Fed officials released following their recent meeting. Those showed that policymakers thought they would lower rates by another half percentage point by the end of 2024. "That would mean two more cuts, it wouldn't mean more 50s," Mr. Powell said, referring to 50-basispoint cuts. "Of course, that will depend on the data. But ultimately, that's what the baseline is." The Fed is facing two big risks as it approaches its upcoming policy decisions in November and December. High interest rates slow the economy by making it more expensive to borrow to buy a home, finance a car purchase, or expand a business. By lowering interest rates, Fed officials are essentially taking their foot off the economic brakes. But figuring out how quickly to do that is an inexact science. On one hand, officials do not want to lower interest rates so quickly that they cause the economy to sharply accelerate, fueling a burst in demand that could keep inflation too hot for comfort. On the other, they do not want to reduce rates too slowly, causing the job market to slow so much that unemployment jumps sharply and there is a risk of an outright recession. The goal is to carve a middle path, often called a "soft landing," in which Fed policy slows the economy enough to wrestle inflation fully under control without causing a painful downturn. But a gentle cooling is still not guaranteed. Inflation has been coming down nicely, and is now just slightly above the Fed's official target of 2 percent on an overall basis. But the unemployment rate has climbed notably over the past year. "Inflation has moved down, and unemployment has moved up, in both cases significantly," Mr. Powell said. That combination is why the Fed started their rate cuts with a relatively large reduction. The September decision "reflects our growing confidence that, with an



appropriate recalibration of our policy stance, strength in the labor market can be maintained in a context of moderate economic growth and inflation moving sustainably down to 2 percent," Mr. Powell explained. Preventing the job market from cooling further will require the Fed to strike a delicate balance. Even after the recent cut, rates remain at roughly 4.8 percent, which is much higher than the level most economists think is necessary to keep the economy growing steadily over time. Fed officials expect rates to hover around 3 percent in the longer run. That level is sometimes referred to as a "neutral rate" or a "neutral policy stance." "Looking forward, if the economy evolves broadly as expected, policy will move over time toward a more neutral stance," Mr. Powell said. "But we are not on any preset course." Fed officials will receive key economic data between now and their next rate decision on Nov. 6-7, including a jobs report that should offer insight into how well the labor market is holding up. Mr. Powell made it clear that they are not taking a soft landing for granted.

Major Chinese Cities Ease Homebuying Rules

Three of China's largest cities have relaxed rules for homebuyers, continuing the central government's latest efforts to support the struggling real estate sector.

As Bloomberg informs three of China's largest cities eased rules for homebuyers, following through on the central government's latest efforts to prop up the embattled property sector. Trading hub Guangzhou became the first tier-1 city to remove all restrictions. Both Shanghai and Shenzhen said they will allow more people to purchase residences in suburban areas, as well as allow others to buy more homes. Shanghai, China's financial hub, and Shenzhen, the southern city known for its tech industry, also announced they were lowering minimum downpayment ratios for first and second homes to 15% and 20%, respectively, in a bid to boost demand. China in late September unveiled its biggest package yet to shore up its beleaguered property market, lowering borrowing costs on as much as \$5.3 trillion in mortgages and easing down- payment requirements for second-home purchases to a historical low. Top leaders also pledged action to make the real estate market "stop declining," their strongest vow yet to stabilize the sector after new-home prices fell in August at the fastest pace since 2014. The central government directive, including encouraging cities to modify homebuying restrictions, paved the way for China's biggest cities to roll out easing. The central bank on Sunday also announced that it will allow refinancing of mortgages. The move, confirming earlier reports by Bloomberg News, underscores China's urgency to stem a housing-led slowdown in Asia's largest economy as it faces the prospect of increasing protectionism and a shaky global outlook. Homeowners will be able to renegotiate terms with their current lenders effective Nov. 1, the People's Bank of China said Sunday. Those who chose fixed mortgage rates can also renegotiate new loans based on the latest loan prime rate, a reference rate for mortgage loans, according to the statement. China will allow mortgage refinancing for both first and second homes, according to a separate statement by the nation's interest rate self-disciplinary body overseen by the central bank. The inclusion of second-home buyers for mortgage



refinancing marks an expansion from a similar drive a year earlier, which applied to first-home purchasers only. Major banks should announce detailed rules no later than Oct. 12 and complete the mortgage refinancing before Oct. 31. Stateowned lenders including Industrial & Commercial Bank of China Ltd., Bank of China Ltd., Bank of Communications Co. and Agricultural Bank of China Ltd. all announced their rules immediately after the PBOC's statement.



Macroeconomic calendar

Important macroeconomic data releases

Neight	Date	Event	For	Reading ¹	Previous	Consensus ²	
		China				*3	
000	02-Sep	Caixin's manufacturing PMI	Aug	50.4	49.8	50.0	
0000	14-Sep	Industrial production (yoy)	Aug	4.5%	5.1%	4.7%	
00	14-Sep	Fixed assets investments (ytd, yoy)	Aug	3.4%	3.6%	3.5%	
00000	24-Sep	Reserve requirement ratio	Sep	9.5%	10.0%		
00	27-Sep	Industrial profits (yoy)	Aug	-17.8%	4.1%		
000	30-Sep	Official manufacturing PMI	Sep	49.8	49.1	49.4	
000	30-Sep	Caixin's manufacturing PMI	Sep	49.3	50.4	50.5	
		Poland					
000	02-Sep	Manufacturing PMI	Aug	47.8	47.3	47.4	
0000	19-Sep	Sold industrial production (yoy)‡	Aug	-1.5%	5.2%	-0.3%	
00	19-Sep	Average gross salary (yoy)	Aug	11.1%	10.6%	10.4%	
>	19-Sep	Employment (yoy)	Aug	-0.5%	-0.4%	-0.3%	
00	24-Sep	Unemployment rate	Aug	5.0%	5.0%	5.0%	
		US					
000	03-Sep	Manufacturing PMI - final data‡	Aug	47.9	47.9	48.0	
000	05-Sep	Composite PMI - final data‡	Aug	54.6	54.6	54.0	
000	05-Sep	PMI services - final data‡	Aug	55.7	55.7	55.1	
00	06-Sep	Change in non-farm payrolls (ths)‡	Aug	142	89.0	165	
00	06-Sep	Underemployment rate (U6)	Aug	7.9%	7.8%		
00	06-Sep	Unemployment rate	Aug	4.2%	4.3%	4.2%	
3	17-Sep	Capacity utilization‡	Aug	78.0%	77.4%	77.9%	
00000	18-Sep	FOMC base rate decision - upper bound (Fed)	Sep	5.00%	5.50%	5.25%	
00000	18-Sep	FOMC base rate decision - lower bound (Fed)	Sep	4.75%	5.25%	5.00%	
000	23-Sep	Composite PMI - preliminary data	Sep	54.4	54.6	54.3	
000	23-Sep	Manufacturing PMI - preliminary data	Sep		47.9	48.6	
000	23-Sep	PMI services - preliminary data	Sep	55.4	55.7	55.2	
		Eurozone				4	
00000	06-Sep	GDP (sa, yoy) - final data	2Q	0.6%	0.6%	0.6%	
00000	12-Sep	ECB main refinancing rate	Sep	3.65%	4.25%	3.65%	
00000	12-Sep	ECB deposit facility rate	Sep	3.5%	3.8%	3.5%	
0000	13-Sep	Industrial production (wda, yoy)‡	Jul	-2.2%	-4.1%	-2.3%	
		Germany					
000	02-Sep	Manufacturing PMI - final data‡	Aug	42.4	42.4	42.1	
000	04-Sep	Composite PMI - final data‡	Aug	48.4	48.4	48.5	
000	05-Sep	Factory orders (wda, yoy)‡	Jul	3.7%	-11.2%	-1.9%	
0000	06-Sep	Industrial production (wda, yoy)‡	Jul	-5.3%	-3.7%	-3.5%	
000	23-Sep	Composite PMI - preliminary data	Sep	47.2	V 48.4	48.2	
000	23-Sep	Manufacturing PMI - preliminary data	Sep		42.4	42.3	
		France					
000	02-Sep	Manufacturing PMI - final data	Aug	43.9	7 44.0	42.1	
000	04-Sep	Composite PMI - final data‡	Aug	53.1	53.1	52.7	
0000	06-Sep	Industrial production (yoy)‡	Jul	-2.2%	-1.7%	-0.9%	
000	23-Sep	Composite PMI - preliminary data	Sep		53.1	51.5	



	-		_	D 1: 4		
Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		Italy				
00000	02-Sep	GDP (wda, yoy) - final data	2Q	0.9% =	0.9%	0.9%
000	02-Sep	Manufacturing PMI	Aug	49.4	47.4	48.5
000	04-Sep	Composite PMI	Aug	50.8	50.3	51.4
0000	10-Sep	Industrial production (wda, yoy)	Jul	-3.3%	-2.6%	-1.8%
		UK				
000	02-Sep	Manufacturing PMI (sa) - final data‡	Aug	52.5 =	52.5	52.5 🔾
000	04-Sep	Composite PMI - final data‡	Aug	53.8 =	53.8	53.4
0000	11-Sep	Industrial production (yoy)	Jul	-1.2% 🔺	-1.4%	-0.1%
00000	19-Sep	BoE base rate decision	Sep	50.0 -	50.0	50.0
000	23-Sep	Manufacturing PMI (sa) - preliminary data	Sep		52.5	52.2
000	23-Sep	Composite PMI - preliminary data	Sep	52.9	53.8	53.5
00000	30-Sep	GDP (yoy) - final data	2Q	0.7%	0.9%	0.9%
		Japan				
000	02-Sep	Manufacturing PMI - final data	Aug	49.8	49.1	
000	04-Sep	Composite PMI - final data	Aug	52.9	52.5	
0000	13-Sep	Industrial production (yoy) - final data	Jul	2.9%	2.7%	
000	24-Sep	Composite PMI - preliminary data	Sep		52.9	
000	24-Sep	Manufacturing PMI - preliminary data	Sep		49.8	
0000	30-Sep	Industrial production (yoy) - preliminary data	Aug	-4.9%	2.9%	-1.5%
		Chile				*
0000	02-Sep	Economic activity (yoy)‡	Jul	4.2%	0.2%	2.7%
		Canada				- 4
00000	04-Sep	BoC base rate decision	Sep	4.25%	4.50%	4.25%
00000	27-Sep	GDP (yoy)‡	Jul	1.5% 🔺	1.3%	1.4%

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

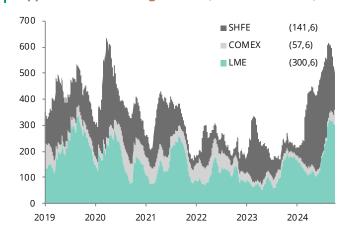
(as of: 30-Sep-24)			Price change ¹								m year beginning ²	
	Price		1M		QTD		YTD		1Y	Average	Min	Max
LME (USD/t; Mo in USD/lbs)												
Copper	9 767.00		6.0%		3.1%		15.2%		18.7%	9 131.16	8 085.50	10 857.00
Molybdenum	21.59		2.5%	\blacksquare	-7.1%		16.5%	\blacksquare		21.14	19.18	23.73
Nickel	17 005.00		1.1%		0.3%		4.3%	•	-8.1%	17 072.08	15 470.00	21 275.00
Aluminum	2 611.00		6.0%		5.0%		11.8%		13.2%	2 366.41	2 110.00	2 695.00
Tin	33 325.00		2.8%		1.0%		32.4%		37.7%	30 130.32	24 025.00	35 685.0
Zinc	3 075.50		7.5%		5.3%		16.5%		16.5%	2 687.70	2 285.50	3 093.0
Lead	2 070.50		2.2%	\blacksquare	-4.1%		1.9%	\blacksquare	-6.3%	2 094.70	1 905.00	2 291.0
LBMA (USD/troz)	_											
Silver	31.08		5.4%		5.8%		30.6%		34.7%	27.22	22.09	32.48
$Gold^2$	2 629.95		4.6%		12.8%		27.5%		40.6%	2 295.75	1 985.10	2 663.75
LPPM (USD/troz)												
Platinum ²	985.00		4.8%	\blacksquare	-2.7%	•	-2.1%		6.7%	951.60	872.00	1 065.00
Palladium ²	998.00		1.8%		2.7%	•	-10.8%	•	-22.6%	973.29	852.00	1 101.00
FX ³												
EURUSD	1.1196		1.0%		4.6%		1.3%		5.7%	1.0871	1.0632	1.119
EURPLN	4.2791	_	0.0%	\blacksquare	-0.8%	_	-1.6%	_	-7.7%	4.3063	4.2499	4.401
USDPLN	3.8193	_	-1.2%	•	-5.3%	_	-2.9%	_	-12.6%	3.9619	3.8117	4.076
USDCAD	1.3499		0.1%	V	-1.4%		2.1%	_	-0.2%	1.3604	1.3316	1.3858
USDCNY	7.0187	_	-1.0%	V	-3.4%	_	-1.1%	_	-3.8%	7.1983	7.0109	7.276
USDCLP	896.25	_		V	-5.8%		1.3%	_		937.56	877.12	986.85
Money market												
3m SOFR	4.592	_	-0.42	•	-0.73	•	-0.74	_	-0.80	5.239	4.592	5.347
3m EURIBOR	3.279	_	-0.21	_	-0.43	_	-0.63	_	-0.67	3.761	3.279	3.970
3m WIBOR	5.850	_	0.00	-	0.00	_	-0.03		0.08	5.857	5.850	5.890
5y USD interest rate swap	3.246	_	-0.15	•	-0.86	_	-0.28	_	-1.13	3.863	3.104	4.484
5y EUR interest rate swap	3.246	_	-0.15	_	-0.86	_	-0.28	_	-1.13	2.694	2.214	3.030
5y PLN interest rate swap	4.329	_	-0.21	_	-0.66	_	-0.07	_	-0.17	4.811	4.268	5.450
Fuel												
WTI Cushing	40.10	_	-0.9%		62.1%	•	-35.0%	•	-29.0%	36.91	-37.63	63.27
Brent	44.82		1.1%	_	80.1%	_	-35.6%		-28.7%	41.40	11.41	70.54
Diesel NY (ULSD)	1.45		0.4%	_	32.4%	_	-33.4%		-31.9%	1.47	0.89	2.20
Others						·		·				
VIX	16.73		1.73	•	4.29		4.28	_	-0.79	14.94	11.86	38.57
BBG Commodity Index	100.34		4.4%	_	-0.6%		1.7%	_	-4.3%	99.27	93.33	107.2
S&P500	5 762.48		2.0%		5.5%	_	20.8%		34.4%	5 265.24	4 688.68	5 762.48
DAX	19 324.93		2.2%	_	6.0%		15.4%		25.6%	18 013.51	16 431.69	19 473.6
Shanghai Composite	3 336.50		17.4%	<u> </u>	12.4%		12.2%		7.3%	2 962.39	2 702.19	3 336.5
WIG 20	2 324.13		-3.6%	-	-9.3%	T	-0.8%		21.3%	2 405.26	2 167.71	2 593.10
KGHM inge over: 2W = two weeks		•										

° 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

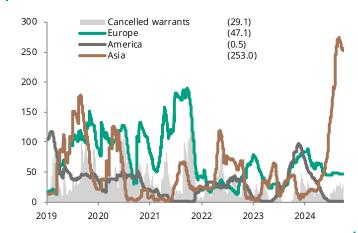


Copper: official exchange stocks (thousand tonnes)



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

Copper: official LME stocks (thousand tonnes)



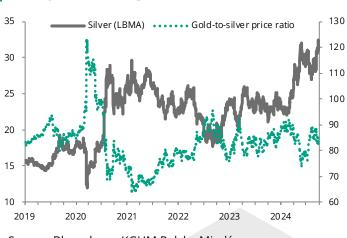
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



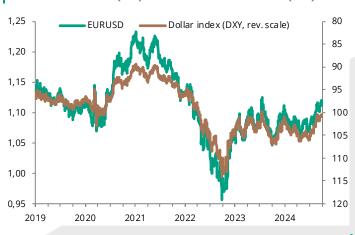
Source: Bloomberg, KGHM Polska Miedź

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



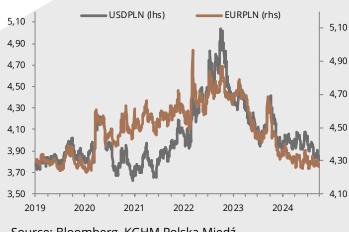
Source: Bloomberg, KGHM Polska Miedź

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: **1 - 30 September 2024.**

- 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/

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