

Market Overview



as of: 27th September 2021



- **Copper:** Malaysia introduces new strict rules for imported copper scrap at the end of September. Even if watered down, it's hard to see how they're not going to have a negative impact on flows of the very material Malaysia has become specialised in processing. That in turn has consequences for China, which has become reliant on Malaysia as a key supplier of higher-grade recyclable copper (*page 2*).
- **Precious metals:** Carved high into the side of the Tien Shan mountain range, the Kumtor gold mine was built to make both Kyrgyzstan and Toronto-based Centerra Gold, firm behind the project, rich in the process. Instead, the vast mine, one of the world's largest, has become the center of a long-running political row (*page 4*).
- **USA:** Federal Reserve cleared the way to begin reducing its monthly bond purchases as soon as November, and nine of 18 U.S. central bank policymakers projected borrowing costs will need to rise in 2022 (*page 6*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	9 275.00	-2.5%
▼ Nickel	19 180.00	-5.9%
LBMA (USD/troz)		
▼ Silver	22.66	-5.7%
▼ Gold (PM)	1 746.80	-2.7%
FX		
▼ EURUSD	1.1719	-1.0%
▲ EURPLN	4.6085	1.3%
▲ USDPLN	3.9268	2.3%
▲ USDCAD	1.2680	0.4%
▼ USDCLP	787.24	-0.5%
Stocks		
▼ KGHM	160.45	-11.1%

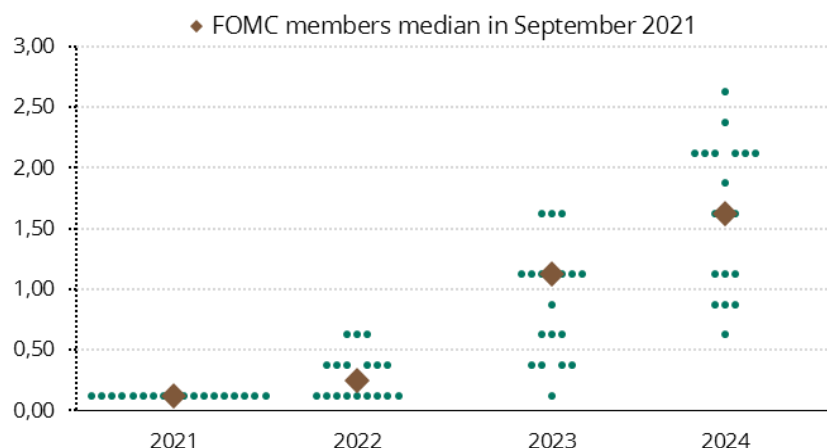
Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 9*)

Important macroeconomic data

Release	For		
 Industrial prod. (yoy)	Aug	5.3%	▼
 Capacity utilization	Aug	76.4%	▲
 CPI (yoy)	Aug	3.0%	-
 CPI (yoy)	Aug	5.5%	▲
 Industrial prod. (yoy)	Aug	13.2%	▲

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

The latest forecast points to a hawkish direction of policy change FOMC



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

marketrisk@kgm.com

Base and precious metals | Other commodities

Copper

Malaysia deals fresh blow to global copper scrap trade

Malaysia introduces new strict rules for imported copper scrap at the end of September. Even if watered down, it's hard to see how they're not going to have a negative impact on flows of the very material Malaysia has become specialised in processing. That in turn has consequences for China, which has become reliant on Malaysia as a key supplier of higher-grade recyclable copper.

Flows of copper scrap have accelerated this year, up 73% yoy at 178,000 tonnes in January-July part

As Reuters informs more disruption is looming in the global copper scrap market. This time it is Malaysia that is threatening to stop imports of lower-grade recyclable material. The country has emerged as a major recycling hub for both copper and aluminium, processing and upgrading scrap into a form that can be imported into China. China has since 2019 banned imports of complex material such as insulated copper wire and shredded motor scrap. It was going to ban all scrap imports this year but was persuaded by its domestic copper sector that eliminating such a key source of raw material was unwise. New trade codes and a reclassification of higher-grade copper and brass scrap as "recyclable raw materials" have seen China's copper scrap imports bounce back strongly this year. However, the biggest supplier is Malaysia, which is now going down the same path as that trodden by China by proposing strict new rules on the sort of scrap it will allow to be imported. Malaysia's new import purity thresholds are due to come in at the end of this September. The Malaysia Non-ferrous Metals Association (MNMA) has warned that the current proposals risk killing off the country's growing scrap dismantling and processing sector. The proposed guidelines, issued by state standards agency SIRIM, would represent some of the strictest purity rules in the world. They not only stipulate a minimum metal content of 94.75% but also zero impurities, including the copper dust that naturally forms through oxidization. Even China didn't try for zero tolerance. Its 1% impurity threshold was controversial enough. Indonesia dropped a proposed 0.5% impurity threshold and settled for 2% after concerted push-back from international recycling organizations such as ISRI and BIR. Taken together, SIRIM's proposed standards risk halting imports of all but the highest-purity copper scrap. Even if watered down, it's hard to see how they're not going to have a negative impact on flows of the very material Malaysia has become specialised in processing. That in turn has consequences for China, which has become reliant on Malaysia as a key supplier of higher-grade recyclable copper. Malaysia was China's ninth largest supplier of copper scrap back in 2017, when Beijing first revealed its intention to phase out imports of what it classified as "solid waste". Malaysian imports that year amounted to 154,000 tonnes with a low implied copper content of around 30-35%. China's ban on lower-grade scrap at the start of 2019 saw Malaysian imports mushroom to 267,000 tonnes with an implied

content of 85-90% that year. Malaysia has been China's top copper scrap supplier ever since. Shipments of 172,000 tonnes last year accounted for almost a fifth of China's total imports. Flows have accelerated again this year, up 73% at 178,000 tonnes in January-July part of a broader 92% resurgence in total copper scrap imports. It's no coincidence that this scrap surge is happening just as China's appetite for refined copper wanes. While a shortage of imported scrap exacerbated domestic supply chain tightness last year, much improved flows of scrap this year are reducing the call on refined copper. Recycling, everyone agrees, will be a cornerstone of the green economy. It is both inherently green in itself - remelting copper is much less carbon intensive than digging it out of the ground - and critical to boosting supply of the metals needed for decarbonisation. But it's clear that China has set in motion a domino effect of individual countries deciding unilaterally to devise their own standards on the sort of scrap resource they're prepared to import and process. No-one wants to be the dumping ground for the rest of the world's trash, but as Malaysia has shown over the last three years, one man's junk can be another man's fortune, particularly if it's got copper in it. It's possible that other countries could step into any gap left by Malaysia but tightening restrictions on trade in recyclables is a fast-spreading phenomenon. Vietnam, for example, added another 13 items to its list of banned scrap-waste imports at the beginning of this year, including several exotic metals such as tungsten and molybdenum. As ever more countries restrict trade in end-of-life scrap, particularly lower-grade and more complex materials, the goal of achieving higher global recycling rates becomes ever more challenging. The world has got more efficient in processing end-of-life products but to do so has relied on globalised trade. The United States and Europe in particular have got used to sending large quantities of low-grade material to first China, then other Asian countries such as Malaysia, for recycling. Neither currently has the capacity to treat such material. The last secondary refinery in the United States closed at the turn of the century and although investment is flowing into new secondary copper capacity, it is doing so at the direct-melt products stage. That requires higher-grade scrap, not the stuff that has historically been shipped to China for the messier business of dismantling, removing contaminants, processing plastic packaging and refining it into new metal. It's noticeable that U.S. exports of copper scrap fell sharply over the 2018-2020 period as China - the previous top destination - steadily tightened its purity thresholds. Indeed last year's tally of 771,000 tonnes was the lowest since 2005. Relative to 2017, the last year of normal trade with China, exports of copper scrap have fallen by a cumulative 450,000 tonnes over the last three years. That material may be sitting in storage but it may also have gone to landfill for want of a better alternative, proof that transnational shipment is still a core requirement for an efficient recycling chain.

Other important information on copper market:

- Zambia's mines minister Paul Kabuswe, criticised the previous administration's push to liquidate Vedanta's Konkola Copper Mines (KCM) unit. Vedanta and the government have been in a legal dispute over the mine and smelter since May 2019 when Zambia, which owns 20% of KCM, handed control of the business to a liquidator. Kabuswe made the comments during a tour of Zambia's copperbelt, in a further indication that President Hichilema's new administration will seek to roll back state involvement in the mining sector, the engine of Zambia's economy. State-appointed provisional liquidator Milingo Lungu split KCM into two units, KCM SmelterCo Limited and Konkola Mineral Resources Limited, which he was looking to sell. But any potential buyers were wary of legal complications, with Vedanta calling the split illegal, and arbitration between Vedanta and Zambia ongoing in London.
- The global world refined copper market showed a 90,000 tonnes deficit in June, compared with a 4,000 tonnes surplus in May, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 6 months of the year, the market was in a 2,000 tonnes deficit compared with a 67,000 tonnes surplus in the same period a year earlier, the ICSG said. World refined copper output in June was 2.03 million tonnes, while consumption was 2.12 million tonnes.
- A Chilean court agreed to suspend a ban on BHP's Cerro Colorado copper mine pumping water from an aquifer for 90 days as it prepares a fresh operational continuity plan. After complaints by locals over the mine's impact on natural resources, the same First Environmental Court in July ruled that the operation must start again from scratch on seeking permits to operate. The court ruled that the company could extract 54 liters per second of water for production purposes, "for a final term of 90 calendar days." "Once that period has expired if the mine does not have approval for its environmental plan, the mining company will not continue to extract water," the court said in a statement.

Precious Metals

Kyrgyzstan's Showdown With Western Investors

Carved high into the side of the Tien Shan mountain range, the Kumtor gold mine was built to make both Kyrgyzstan and Toronto-based Centerra Gold, firm behind the project, rich in the process. Instead, the vast mine, one of the world's largest, has become the center of a long-running political row.

Kumtor churns out up to 16 tons of gold each year and is believed to have enough still underground to maintain current levels of extraction for more than half a century

On the surface, Kyrgyzstan is one of the world's poorest nations, but just beneath the ground it holds almost unimaginable wealth. Carved high into the side of the Tien Shan mountain range, the Kumtor gold mine was built to extract that wealth, making the Central Asian nation, and the Canadian firm behind the project, rich in the process. Instead, the vast mine, one of the world's largest, has become the center of a long-running political row. In May, just weeks after being inaugurated as the country's president, Sadyr Japyrov ordered officials to roll in and take

charge of the site, claiming that the operator, Toronto-based Centerra Gold, was failing to maintain safe working conditions and risking an ecological catastrophe. Since then, authorities in the capital, Bishkek, have effectively torn up a series of agreements stretching over three decades that saw foreign investors plow millions into the country. Japarov's supporters say the deal was rigged in favor of the Canadian firm, and that since the start of the arrangement, the company has taken home some \$11.5 billion in profits, while Kyrgyzstan has seen just \$1.5 billion in returns. At the same time, the new government blames Centerra for the alarming speed at which a nearby glacier is melting, and says the water running off it threatens to overflow a storage pool holding cyanide and other byproducts from mining. If it does, they say it could contaminate rivers that millions of Kyrgyzstan's citizens, and those in downstream countries. The firm, however, chalks the issue up to global warming and insists it took steps to minimize the risk. The project was once Kyrgyzstan's flagship foreign investment, and directly or indirectly provided jobs for thousands of local people. The new government, however, is eyeing a better deal if it is able to pocket the entirety of proceeds from the mine, which churns out up to 16 tons of gold each year and is believed to have enough still underground to maintain current levels of extraction for more than half a century. The legal battles don't just end at home. Centerra has launched a bid in U.S. courts against what it deems state efforts to appropriate the mine and drive its subsidiaries into bankruptcy. The company disputes the financial figures put forward by the Kyrgyz government, insisting that the \$11.5 billion relates only to revenue and doesn't take into account all of its outlays, and that its profits haven't exceeded \$1.4 billion since 1994 — less than the amount that has stayed in the country. In response, Kyrgyzstan has placed the company's top executives, Yana Atkinson and Michael Fischer, on its wanted list, issuing orders to detain them on charges of conspiring to defraud the country. Blowback from the row is already affecting Kyrgyzstan's relations with the West. The Canadian and British embassies in Bishkek issued a joint statement warning that the move has "far-reaching implications for foreign direct investment in Kyrgyzstan." In addition, Kyrgyzstan's state-owned gold producer (Kyrgyzaltyn JSC) was suspended last week from the Independent Precious Metals Authority's "Good Delivery List," which regulates exports of the coveted commodity. As a result, it will be blocked from trading on London's markets, dealing a blow to its lucrative bullion sales. While environmental concerns were cited as part of the decision to take over Kumtor, it is not clear what steps, if any, have been taken to address what has been described as a pressing crisis. Earlier this month, Centerra warned that it had seen photographs indicating that the central pit of the mine has been flooded, with large quantities of water running down from the melting glacier. "As any experienced miner would know, water in an open pit mine decreases stability and increases the risk of a wall failure," the company said. "This is dangerous and we are worried about the safety of workers at the mine."

Global economies | Foreign exchange markets

Investors look ahead to rate hikes with Fed tapering plan all but certain






Federal Reserve cleared the way to begin reducing its monthly bond purchases as soon as November, and nine of 18 U.S. central bank policymakers projected borrowing costs will need to rise in 2022.







The gap between five-year notes and 30-year bonds fell below 100 basis points after the Fed policy statement to the lowest level since July 2020

Investors are grappling with how an unwind of the Federal Reserve's easy money policies could affect asset prices, after the central bank signaled that a taper of its bond-buying program was closer than ever and suggested it may raise rates at a faster-than-expected pace. In what some described as a hawkish tilt, the Federal Reserve on Wednesday (22 Sept) cleared the way to begin reducing its monthly bond purchases as soon as November, and nine of 18 U.S. central bank policymakers projected borrowing costs will need to rise in 2022. Though many had expected the central bank to begin its unwind before the year was up, some investors said the projection for rate increases may spur worries over whether the Fed risks tightening monetary policy at a time when the economy could be significantly weaker than it is today, potentially undercutting the case for stocks and other comparatively risky assets. Stocks held onto their gains after the Fed's statement, with the S&P 500 closing up nearly 1%. In Treasury markets, the gap between five-year notes and 30-year bonds fell below 100 basis points after the Fed policy statement to the lowest level since July 2020. A narrower gap could indicate factors like economic uncertainty, easing inflation concerns and anticipation of tighter monetary policy. "The rates market interpreted Fed communications as hawkish," analysts at BoFA Global Research said in a note. "The more hawkish Fed is a key ingredient for our higher rates view." The market fully priced in a rate hike by January 2023 after the statement, moving projected rate increases forward by a month. Analysts at TD Securities expect the central bank to reduce its asset purchases by \$15 billion a month starting in November, helping push up yields and strengthen the dollar, they said in a report. The U.S. currency's trajectory is important for investors as it impacts everything from commodity prices to corporate earnings. Higher yields make dollar-denominated assets more attractive to income-seeking investors. The greenback was up 0.23% against a basket of its peers late Wednesday (22 Sept). "Once the dust settles it seems that there are enough hawkish signals to keep the dollar biased higher, as the market pencils in a sooner-than-expected rate hike," said Joe Manimbo, senior market analyst at Western Union Business Solutions. Markets are likely to remain more focused on the inference that additional rate hikes in 2022 and 2023 would suggest a strengthening economy than on the Fed's tapering plan, said Mark Freeman, chief investment officer at Socorro Asset Management. "Powell clarified repeatedly ... that the criteria for tapering is very different than criteria for raising rates, which is much higher" and will have more of a market impact, he said. Rick Rieder, chief investment officer of global fixed income at BlackRock, said that robust demand for Treasuries would likely minimize the impact of the Fed's unwind.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
★★★★	15-Sep	Industrial production (yoy)	Aug	5.3% ▼	6.4%	5.8%	☹
★★	15-Sep	Fixed assets investments (ytd, yoy)	Aug	8.9% ▼	10.3%	9.0%	☹
★	15-Sep	Retail sales (yoy)	Aug	2.5% ▼	8.5%	7.0%	☹
Poland							
★★	13-Sep	Trade balance (EUR mn)	Jul	- 714 ▼	761	341	☹
★★	13-Sep	Exports (EUR mn)	Jul	22 346 ▼	23 680	22 793	☹
★★	13-Sep	Current account balance (EUR mn)	Jul	-1 827 ▼	281	- 180	☹
★★★★	15-Sep	Consumer inflation CPI (yoy) - final data	Aug	5.5% ▲	5.4%	--	
★★★★	16-Sep	Core CPI (excluding food and energy, yoy)	Aug	3.9% ▲	3.7%	3.9%	○
★★	17-Sep	Average gross salary (yoy)	Aug	9.5% ▲	8.7%	8.8%	☺
★	17-Sep	Employment (yoy)	Aug	0.9% ▼	1.8%	1.1%	☹
★★★★	20-Sep	Sold industrial production (yoy)	Aug	13.2% ▲	9.8%	14.6%	☹
★★	20-Sep	Producer inflation PPI (yoy)‡	Aug	9.5% ▲	8.4%	9.3%	☺
★★	21-Sep	Retail sales (yoy)	Aug	10.7% ▲	8.9%	10.5%	☺
★	22-Sep	M3 money supply (yoy)	Aug	9.1% ▲	8.8%	9.2%	☹
★★	23-Sep	Unemployment rate	Aug	5.8% -	5.8%	5.8%	○
US							
★★★★	14-Sep	Consumer inflation CPI (mom)	Aug	0.3% ▼	0.5%	0.4%	☹
★★★★	14-Sep	Consumer inflation CPI (yoy)	Aug	5.3% ▼	5.4%	5.3%	○
★★★★	15-Sep	Industrial production (mom)‡	Aug	0.4% ▼	0.8%	0.5%	☹
★	15-Sep	Capacity utilization‡	Aug	76.4% ▲	76.2%	76.4%	○
★★	16-Sep	Philadelphia Fed business outlook	Sep	30.7 ▲	19.4	19.0	☺
★★	16-Sep	Retail sales (excluding autos, mom)‡	Aug	1.8% ▲	-1.0%	0.0%	☺
★★	17-Sep	University of Michigan confidence index - preliminary data	Sep	71.0 ▲	70.3	72.0	☹
★★★★	22-Sep	FOMC base rate decision - upper bound (Fed)	Sep	0.25% -	0.25%	0.25%	○
★★★★	22-Sep	FOMC base rate decision - lower bound (Fed)	Sep	0.00% -	0.00%	0.00%	○
★★	23-Sep	Composite PMI - preliminary data	Sep	54.5 ▼	55.4	--	
★★	23-Sep	Manufacturing PMI - preliminary data	Sep	60.5 ▼	61.1	61.0	☹
★★	23-Sep	PMI services - preliminary data	Sep	54.4 ▼	55.1	54.9	☹
Eurozone							
★★★★	15-Sep	Industrial production (sa, mom)‡	Jul	1.5% ▲	-0.1%	0.6%	☺
★★★★	15-Sep	Industrial production (wda, yoy)‡	Jul	7.7% ▼	10.1%	6.0%	☺
★★	15-Sep	Labour costs (yoy)‡	2Q	-0.1% ▼	1.3%	--	
★	16-Sep	Trade balance (EUR mn)‡	Jul	20.7 ▲	17.7	--	
★★★★	17-Sep	Consumer inflation CPI (yoy) - final data	Aug	3.0% -	3.0%	3.0%	○
★★★★	17-Sep	Core CPI (yoy) - final data	Aug	1.6% -	1.6%	1.6%	○
★	22-Sep	Consumer confidence - estimation	Sep	- 4.0 ▲	- 5.3	- 5.9	☺
★★	23-Sep	Composite PMI - preliminary data	Sep	56.1 ▼	59.0	58.5	☹
★★	23-Sep	Manufacturing PMI - preliminary data	Sep	58.7 ▼	61.4	60.3	☹
★★	23-Sep	Services PMI - preliminary data	Sep	56.3 ▼	59.0	58.5	☹
Germany							
★★	23-Sep	Composite PMI - preliminary data	Sep	55.3 ▼	60.0	59.2	☹
★★	23-Sep	Manufacturing PMI - preliminary data	Sep	58.5 ▼	62.6	61.4	☹
★★	24-Sep	IFO business climate‡	Sep	98.8 ▼	99.6	99.0	☹

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
France 						
👤👤👤👤	15-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	2.4% -	2.4%	2.4% ○
👤👤👤👤	15-Sep	Consumer inflation CPI (yoy) - final data	Aug	1.9% -	1.9%	1.9% ○
👤👤👤	23-Sep	Composite PMI - preliminary data	Sep	55.1 ▼	55.9	55.7 ◡
👤👤👤	23-Sep	Manufacturing PMI - preliminary data	Sep	55.2 ▼	57.5	57.0 ◡
Italy 						
👤👤👤👤	15-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	2.5% ▼	2.6%	2.6% ◡
UK 						
👤👤	14-Sep	Unemployment rate (ILO, 3-months)	Jul	4.6% ▼	4.7%	4.6% ○
👤👤👤👤	15-Sep	Consumer inflation CPI (yoy)	Aug	3.2% ▲	2.0%	2.9% ◢
👤👤👤👤👤	23-Sep	BoE base rate decision	Sep	0.10% -	0.10%	0.10% ○
👤👤👤👤	23-Sep	BoE asset purchase target (GBP bn)	Sep	875 -	875	875 ○
👤👤👤	23-Sep	Manufacturing PMI (sa) - preliminary data	Sep	56.3 ▼	60.3	59.0 ◡
👤👤👤	23-Sep	Composite PMI - preliminary data	Sep	54.1 ▼	54.8	54.6 ◡
Japan 						
👤👤👤👤	14-Sep	Industrial production (yoy) - final data	Jul	11.6% -	11.6%	--
👤👤👤👤	24-Sep	Consumer inflation CPI (yoy)	Aug	-0.4% ▼	-0.3%	-0.3% ◡
👤👤👤	24-Sep	Composite PMI - preliminary data	Sep	47.7 ▲	45.5	--
👤👤👤	24-Sep	Manufacturing PMI - preliminary data	Sep	51.2 ▼	52.7	--
Chile 						
<i>No major data in the period</i>						
Canada 						
👤👤👤👤	15-Sep	Consumer inflation CPI (yoy)	Aug	4.1% ▲	3.7%	3.9% ◢

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

² Reading difference to consensus: ◢ = higher than consensus; ◡ = lower than consensus; ○ = equal to consensus.

mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.

Source: Bloomberg, KGHM Polska Miedź

Key market data

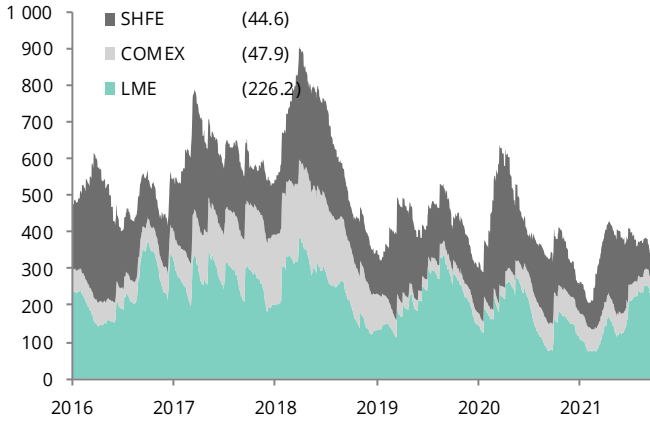
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 24-Sep-21)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t; Mo in USD/lbs)									
Copper	9 275.00	▼ -2.5%	▼ -1.2%	▲ 19.8%	▲ 41.9%	9 187.61	7 755.50	10 724.50	
Molybdenum	19.65	▼ -1.3%	▲ 1.9%	▲ 95.9%	▲	14.86	9.95	20.05	
Nickel	19 180.00	▼ -5.9%	▲ 4.0%	▲ 16.0%	▲ 35.3%	18 024.64	15 907.00	20 375.00	
Aluminum	2 905.50	▲ 0.3%	▲ 15.2%	▲ 46.9%	▲ 71.2%	2 373.09	1 951.50	2 950.00	
Tin	37 525.00	▲ 8.0%	▲ 12.1%	▲ 82.7%	▲ 116.0%	30 412.97	20 965.00	37 525.00	
Zinc	3 110.00	▲ 0.7%	▲ 5.6%	▲ 14.2%	▲ 30.7%	2 882.81	2 539.00	3 110.00	
Lead	2 158.50	▼ -8.8%	▼ -6.9%	▲ 9.5%	▲ 16.3%	2 163.84	1 896.00	2 504.00	
LBMA (USD/troz)									
Silver	22.66	▼ -5.7%	▼ -12.1%	▼ -14.4%	▲ 2.0%	25.82	22.40	29.59	
Gold ²	1 746.80	▼ -2.7%	▼ -0.9%	▼ -7.6%	▼ -6.2%	1 800.96	1 683.95	1 943.20	
LPPM (USD/troz)									
Platinum ²	969.00	▼ -0.8%	▼ -8.5%	▼ -9.9%	▲ 16.6%	1 122.87	931.00	1 294.00	
Palladium ²	1 943.00	▼ -11.6%	▼ -28.2%	▼ -18.0%	▼ -12.2%	2 561.87	1 901.00	3 000.00	
FX ³									
EURUSD	1.1719	▼ -1.0%	▼ -1.4%	▼ -4.5%	▲ 0.6%	1.1969	1.1671	1.2338	
EURPLN	4.6085	▲ 1.3%	▲ 1.9%	▼ -0.1%	▲ 1.8%	4.5477	4.4541	4.6603	
USDPLN	3.9268	▲ 2.3%	▲ 3.2%	▲ 4.5%	▲ 1.1%	3.8016	3.6545	3.9676	
USDCAD	1.2680	▲ 0.4%	▲ 2.3%	▼ -0.4%	▼ -5.2%	1.2510	1.2040	1.2856	
USDCNY	6.4662	▲ 0.3%	▲ 0.1%	▼ -0.9%	▼ -5.3%	6.4708	6.3685	6.5718	
USDCLP	787.24	▼ -0.5%	▲ 7.1%	▲ 10.7%	▲ 0.7%	736.51	693.74	791.28	
Money market									
3m LIBOR USD	0.132	▲ 0.02	▼ -0.01	▼ -0.11	▼ -0.10	0.161	0.114	0.241	
3m EURIBOR	-0.543	▲ 0.00	▼ 0.00	▲ 0.00	▼ -0.05	-0.543	-0.556	-0.529	
3m WIBOR	0.240	-	▲ 0.03	▲ 0.03	▲ 0.02	0.213	0.210	0.240	
5y USD interest rate swap	1.048	▲ 0.13	▲ 0.08	▲ 0.62	▲ 0.70	0.833	0.416	1.093	
5y EUR interest rate swap	-0.197	▲ 0.09	▲ 0.06	▲ 0.26	▲ 0.23	-0.326	-0.485	-0.197	
5y PLN interest rate swap	1.730	▲ 0.11	▲ 0.30	▲ 1.12	▲ 1.20	1.266	0.583	1.750	
Fuel									
WTI Cushing	74.13	▲ 6.3%	▲ 0.9%	▲ 52.8%	▲ 84.6%	64.84	47.62	75.25	
Brent	77.66	▲ 6.7%	▲ 3.4%	▲ 51.8%	▲ 89.0%	67.36	50.02	77.79	
Diesel NY (ULSD)	226.84	▲ 5.6%	▲ 5.9%	▲ 53.5%	▲ 102.5%	195.70	146.07	226.84	
Others									
VIX	17.75	▼ -3.20	▲ 1.92	▼ -5.00	▼ -10.76	19.74	15.07	37.21	
BBG Commodity Index	98.98	▲ 1.9%	▲ 4.7%	▲ 26.8%	▲ 39.7%	89.72	78.64	99.58	
S&P500	4 455.48	▼ -0.1%	▲ 3.7%	▲ 18.6%	▲ 37.2%	4 157.07	3 700.65	4 536.95	
DAX	15 531.75	▼ -0.5%	▲ 0.0%	▲ 13.2%	▲ 23.2%	15 056.78	13 432.87	15 977.44	
Shanghai Composite	3 613.07	▼ -2.4%	▲ 0.6%	▲ 4.0%	▲ 12.1%	3 524.67	3 357.74	3 715.37	
WIG 20	2 299.18	▼ -2.6%	▲ 3.6%	▲ 15.9%	▲ 38.0%	2 127.84	1 876.85	2 416.38	
KGHM	160.45	▼ -11.1%	▼ -14.5%	▼ -12.3%	▲ 37.4%	191.21	155.75	223.80	

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

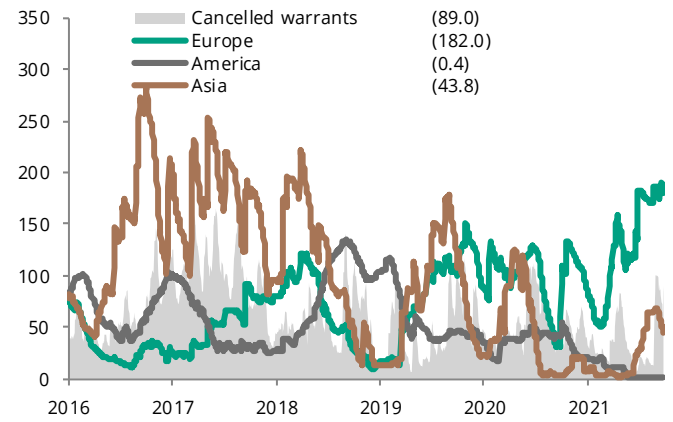
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



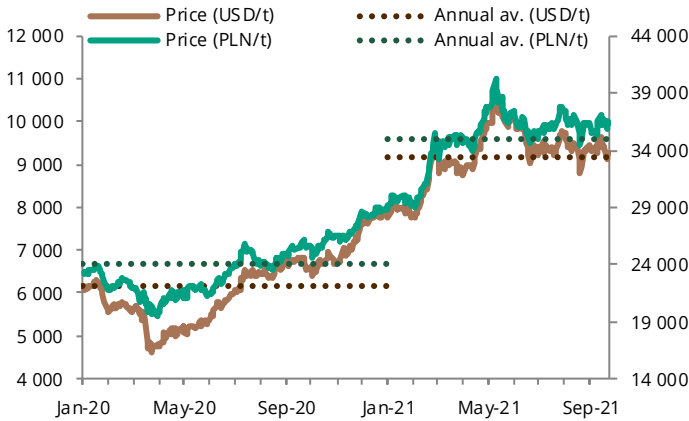
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



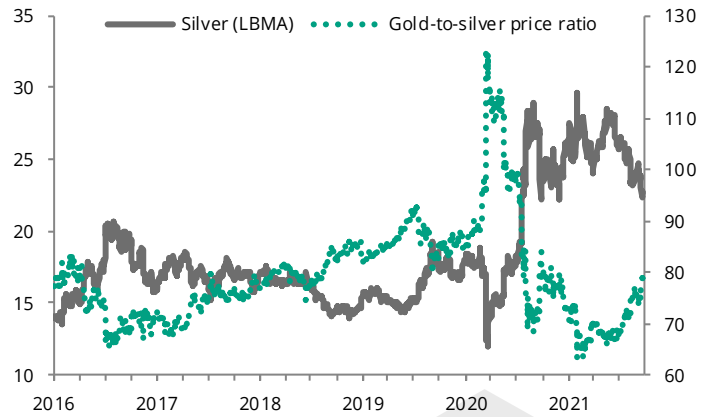
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



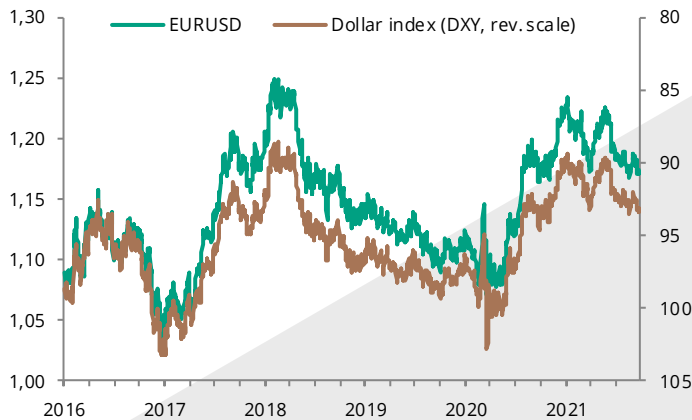
Source: Bloomberg, KGHM Polska Miedź

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



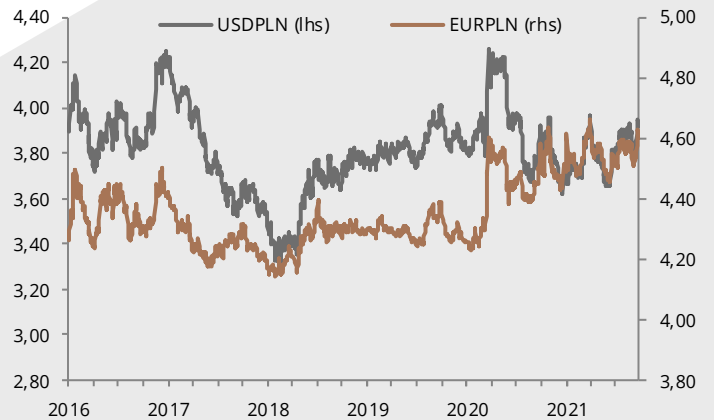
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs)



Source: Bloomberg, KGHM Polska Miedź

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
13 - 26 September 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

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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