

Market Overview

 as of: 8th November 2021






- Copper:** LME copper stocks have maintained a downward trend since late September, while the proportion of cancelled warrants has gradually increased, up from 26.84% on September 22 to 61.60% on October 11. The proportion of cancelled warrants on October 15 has reached 92.2%, pushing the available inventory to the lowest level since 1974. The backwardation of LME cash to the three-month contract soared to above \$1,100/mt, the highest since the 1970s (*page 2*).
- Precious metals:** Mali's government plans to require permits for small-scale miners and set up 200 cooperatives with the help of the World Bank as part of a move to formalize trade by middlemen. Mining Minister Lamine Traore that, those changes could see Mali's total output rise 15%, he said (*page 4*).
- USA:** Gross domestic product expanded at a 2% annualized rate following a 6.7% pace in the second quarter, the Commerce Department's preliminary estimate showed. The deceleration reflected a sharp slowdown in personal consumption, which grew at just a 1.6% pace after a rapid 12% jump in the prior period. Shortages, transportation bottlenecks, rising prices and the delta variant of the coronavirus weighed on both goods and services spending (*page 5*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	9 740.00	-2.5%
▼ Nickel	19 270.00	-5.3%
LBMA (USD/troz)		
▼ Silver	23.82	-2.0%
▼ Gold (PM)	1 801.85	-0.4%
FX		
▼ EURUSD	1.1519	-1.0%
▼ EURPLN	4.6065	0.0%
▲ USDPLN	3.9911	0.8%
▲ USDCAD	1.2452	0.8%
▼ USDCLP	815.58	-0.2%
Stocks		
▼ KGHM	150.00	-7.5%

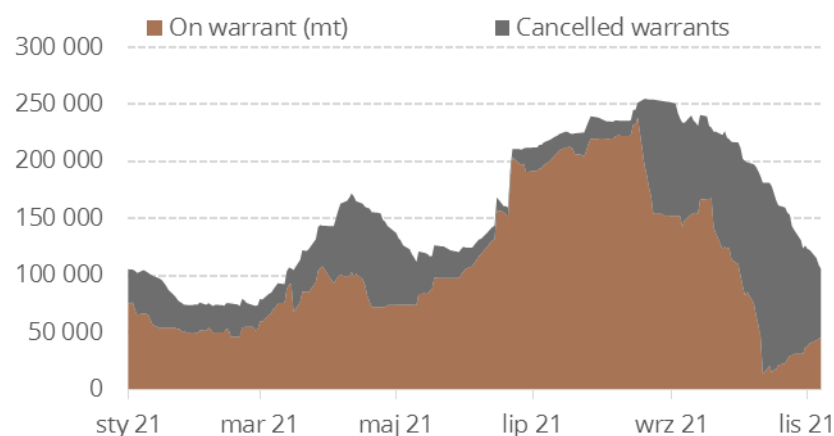
 Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 9*)

Important macroeconomic data

Release	For		
 Trade balance (\$)	Oct	84.5	▲
 Non-farm payrolls chng.	Oct	531	▲
 Manufacturing PMI	Oct	53.8	▲
 Factory orders (wda, yoy)	Sep	9.7%	▼
 Copper production (mt)	Sep	451 128	▼

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

After the drastic decline, the stocks of available (on warrant) copper in the warehouses monitored by the LME are slowly increasing



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Chinese Smelters to Increase Exports as Short Squeeze Pushed LME Copper Prices Higher

LME copper stocks have maintained a downward trend since late September, while the proportion of cancelled warrants has gradually increased, up from 26.84% on September 22 to 61.60% on October 11. The proportion of cancelled warrants on October 15 has reached 92.2%, pushing the available inventory to the lowest level since 1974. The backwardation of LME cash to the three-month contract soared to above \$1,100/mt, the highest since the 1970s.

Rising copper prices have increased costs for companies, which is contrary to the Chinese government's policy of stabilising commodity prices

The market concerns of inflation caused by the global energy crisis has risen sharply. As Europe's largest refined zinc producer Nyrstar decided to cut output in the fourth quarter due to the soaring electricity prices in Europe and the significant increase in carbon emissions-related costs. And the sharp growth in the cost of industrial products will gradually be passed onto the prices. Meanwhile, low global inventories have become the largest transaction logic in the market. LME copper stocks have maintained a downward trend since late September, while the proportion of cancelled warrants has gradually increased, up from 26.84% on September 22 to 61.60% on October 11. The proportion of cancelled warrants on October 15 has reached 92.2%, pushing the available inventory to the lowest level since 1974. The backwardation of LME cash to the three-month contract soared to above \$1,100/mt, the highest since the 1970s. At the same time, the LME three-month copper rose rapidly, up from around \$9,300/mt to a maximum of \$10,452.5/mt, an increase of 12.4%. However, SMM believes that the global low inventories will be a short-term issue. Maritime logistics and containers have been affected to varying degrees amid the global pandemic. A large number of industrial products and processed products are stranded at ports, which has led to an increase in global invisible inventory. However, with the gradual popularisation of vaccines, global shipping issues are expected to ease in Q1 next year, which will alleviate the current high invisible inventory in the market. In the short term, the impact of domestic power rationing will be more concentrated in downstream processing companies. Operations at the several smelters that have been significantly affected by power rationing have also improved. Dongying Fangyuan will resume production. Besides, the operating rates at downstream processing plants have been low amid higher copper prices, thin profits and poor orders. The price spread between copper cathode and copper scrap has expanded after copper prices surged, incentivised large amounts of copper scrap offered into the market. Some copper cathode rod plants cut output as copper scrap rod became desirable for downstream wire and cable plants. In the short term, the copper cathode will be significantly substituted with copper scrap. This, coupled with the

timely offering of reserves by the SRB, will ease copper cathode shortages substantially. The rapid rise in copper prices has also caused difficulties for domestic enterprises. Moreover, rising copper prices have placed greater cost pressure on mid- and downstream companies, which is contrary to the direction of the Chinese government's policy of stabilising commodity prices. In this scenario, some domestic smelters have begun to increase exports of copper to LME warehouses. The short squeeze on LME has improved. On October 26, the backwardation of LME cash to the three-month contract dropped from a high of \$1,103.5/mt to \$203.25/mt, and the LME copper prices fell to the \$9,800/mt level.

Other important information on copper market:

- Malaysia delayed until 2022 the implementation of a new rule on imports of metal scrap that would only allow high grade scrap to enter the country, giving industry more time to comply. The rules were set to be implemented from Nov. 1. Malaysia, which has in recent years emerged as a recycling hub for scrap metal, has proposed stricter guidelines on imports following the example of China, which restricted scrap imports for environmental reasons. The industry has been given until Dec. 31 to take the necessary steps to comply with the new rules. The proposed guidelines require metal content of at least 94.75% in ferrous and non-ferrous scrap.
- Copper production in Chile, the world's largest producer of the metal, fell 6.9% year on year in September amid some shutdowns in the sector, government figures released showed. The National Institute of Statistics (INE) reported that the country produced 451 kt of copper in September.
- Chile's Codelco, the world's largest copper miner, has offered to supply copper to a South Korean customer at a premium of \$100 a tonne in 2022, two sources with direct knowledge of the matter said, a 20% rise from this year. The higher rates, paid on top of the London Metal Exchange benchmark copper price, underscore anticipated strong demand for the metal. The state-owned miner's annual copper premiums, which vary by region, are typically used as industry benchmarks. Earlier this month, Codelco offered copper to European buyers for 2022 at a premium of \$128 a tonne, up more than 20% year-on-year.
- Peruvian Prime Minister Mirtha Vasquez said that MMG Ltd's Las Bambas mine will begin transferring funds to the Apurimac region where its operations take place in 2022, a key demand from residents who have been protesting the company.

Precious Metals

Africa's crackdown on informal gold miners spreads to Mali

Mali's government plans to require permits for small-scale miners and set up 200 cooperatives with the help of the World Bank as part of a move to formalize trade by middlemen. Mining Minister Lamine Traore that, those changes could see Mali's total output rise 15%, he said.

Mali loses as much as 15 tons a year -- equal to about \$860 million at today's price -- from artisanal gold production

Mali is getting closer to bringing in new rules to better control artisanal gold mining and overtake South Africa as the continent's second-biggest producer. The country has struggled to keep tabs on informal output that's sold on the black market or smuggled out, and gold is also being illegally funneled through the nation from its neighbors. While a mining code that came into force in late 2020 set out plans to overhaul the sector, no measures were implemented. That's now changing. The government plans to require permits for small-scale miners and set up 200 cooperatives with the help of the World Bank as part of a move to formalize trade by middlemen. Mining Minister Lamine Traore that, those changes could see Mali's total output rise 15%, he said. It's the latest move by an African nation to maximize earnings from their gold resources as the metal trades within 15% of a record high. In recent years, Ethiopia has channeled sales through the central bank to curb smuggling, while Nigeria announced plans to shift informal production into a supervised supply chain. Also, Tanzania introduced trading centers to reduce illegal exports. Authorities estimate that Mali loses as much as 15 tons a year -- equal to about \$860 million at today's price -- from artisanal gold production. Its favorable export taxes also encourage supplies to illegally enter the country before being shipped on. "Mali could significantly increase output if it had better control over production and exports from the artisanal mining sector," Abdoulaye Pona, the head of the Mining Chamber, said in a separate interview. Artisanal gold mines in West Africa's Sahel region including in Mali have become a source of revenue and recruits for Islamist militants. Mali's industrial mining areas have largely been spared from the violence, though there have been sporadic attacks, most recently near the border with Mauritania that targeted a convoy taking equipment to a mine in the southwest. "Mining, mostly for gold, is a pillar of the country's economy, accounting for almost 10% of gross domestic product," Traore said. "Clearly the security issue is something we can't ignore." As well as Barrick, companies with operations or assets there include B2Gold Corp. and Endeavor Mining Corp. Mali also has untapped resources or deposits of commodities such as lithium, a key metal used in electric batteries, and iron ore.

Global economies | Foreign exchange markets

U.S. Posts Weakest Growth of Pandemic Recovery on Supply Woes

Gross domestic product expanded at a 2% annualized rate following a 6.7% pace in the second quarter, the Commerce Department's preliminary estimate showed. The deceleration reflected a sharp slowdown in personal consumption, which grew at just a 1.6% pace after a rapid 12% jump in the prior period. Shortages, transportation bottlenecks, rising prices and the delta variant of the coronavirus weighed on both goods and services spending.

"The risks are clearly now to longer and more persistent bottlenecks and thus to higher inflation," Fed Chair Jerome Powell said.

U.S. economic growth slowed more than expected in the third quarter of the pandemic recovery period as snarled supply chains and a surge in Covid-19 cases throttled spending and investment. Gross domestic product expanded at a 2% annualized rate following a 6.7% pace in the second quarter, the Commerce Department's preliminary estimate showed. The deceleration reflected a sharp slowdown in personal consumption, which grew at just a 1.6% pace after a rapid 12% jump in the prior period. Shortages, transportation bottlenecks, rising prices and the delta variant of the coronavirus weighed on both goods and services spending. The latest data underscore how unprecedented supply constraints are holding back the U.S. economy. Understaffed and short of necessary materials, producers are struggling to keep up with demand. Service providers, who face similar pressures, fared better than manufacturers during the quarter despite the pickup in infections. While supply chain challenges are expected to linger well into 2022, subsiding Covid-19 infections and elevated savings should support stronger household spending in the final three months of the year. Persistent supply constraints paired with other reopening effects have also driven up prices for a variety of products, spurring concerns about the breadth and duration of the recent spike in inflation. The personal consumption expenditures price index excluding food and energy costs, an inflation measure followed closely by Federal Reserve officials, remained elevated, growing an annualized 4.5% last quarter after a 6.1% jump in the prior three months. "The risks are clearly now to longer and more persistent bottlenecks and thus to higher inflation," Fed Chair Jerome Powell said. "We now see higher inflation and the bottlenecks lasting well into next year." Inflation-adjusted business investment cooled from the rapid pace of growth seen over the past year as manufacturers struggled to fulfill orders. Non-residential fixed investment rose an annualized 1.8%. Both outlays for structures and equipment declined on an inflation-adjusted basis, while the value of intellectual property surged. The slowdown in consumer spending reflected weaker motor vehicle expenditures which subtracted 2.39 percentage points from GDP during the quarter. Automakers have been struggling to boost production and inventory amid computer chip shortages. A wider trade deficit -- reflecting record imports of foreign goods -- further eroded growth. Net exports subtracted 1.14 percentage points. Residential investment also declined. Inventories added more than 2 percentage points to GDP after consecutive

quarters of declines. A separate report showed initial jobless claims fell to 281,000 in the end of October, a fresh pandemic low. Continuing claims, a measure of ongoing benefits, dropped by 237,000 in the week ended Oct. 16, the biggest decline since July. Excluding the trade and inventories components of GDP, final sales to private domestic purchasers, a gauge of underlying demand, rose at a 1.1% pace, the slowest of the pandemic recovery.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
☆☆	27-Oct	Industrial profits (yoy)	Sep	16.3% ▲	10.1%	--
☆☆☆	31-Oct	Official manufacturing PMI	Oct	49.2 ▼	49.6	49.7 ◡
☆☆☆	01-Nov	Caixin's manufacturing PMI	Oct	50.6 ▲	50.0	50.0 ◢
☆☆	07-Nov	Trade balance (USD bn)	Oct	84.5 ▲	66.8	64.0 ◢
☆☆	07-Nov	Exports (yoy)	Oct	27.1% ▼	28.1%	22.8% ◢
☆	07-Nov	Foreign reserves (USD bn)	Oct	3 218 ▲	3 201	3 200 ◢
Poland 						
☆☆	25-Oct	Unemployment rate	Sep	5.6% ▼	5.8%	5.7% ◡
☆☆☆☆	29-Oct	Consumer inflation CPI (yoy) - preliminary data	Oct	6.8% ▲	5.9%	6.4% ◢
☆☆☆	02-Nov	Manufacturing PMI	Oct	53.8 ▲	53.4	53.0 ◢
☆☆☆☆☆	03-Nov	NBP base rate decision	Nov	1.25% ▲	0.50%	0.75% ◢
US 						
☆	25-Oct	Dallas Fed manufacturing activity	Oct	14.6 ▲	4.6	6.0 ◢
☆	26-Oct	Richmond Fed manufacturing index	Oct	12.0 ▲	- 3.0	5.0 ◢
☆☆	27-Oct	Durable goods orders - preliminary data†	Sep	-0.4% ▼	1.3%	-1.1% ◢
☆☆☆☆☆	28-Oct	GDP (annualized, qoq) - estimation	3Q	2.0% ▼	6.7%	2.6% ◡
☆☆☆☆	29-Oct	Consumer spending inflation PCE (mom)	Sep	0.2% ▼	0.3%	0.2% ◡
☆☆☆☆	29-Oct	Consumer spending inflation PCE (yoy)	Sep	3.6% -	3.6%	3.7% ◡
☆☆	29-Oct	Personal income (sa, mom)	Sep	-1.0% ▼	0.2%	-0.3% ◡
☆☆	29-Oct	Personal spending (sa, mom)†	Sep	0.6% ▼	1.0%	0.6% ◡
☆☆	29-Oct	University of Michigan confidence index - final data	Oct	71.7 ▲	71.4	71.4 ◢
☆☆☆	01-Nov	Manufacturing PMI - final data	Oct	58.4 ▼	59.2	59.2 ◡
☆☆	01-Nov	ISM Manufacturing	Oct	60.8 ▼	61.1	60.5 ◢
☆☆☆☆☆	03-Nov	FOMC base rate decision - upper bound (Fed)	Nov	0.25% -	0.25%	0.25% ◡
☆☆☆☆☆	03-Nov	FOMC base rate decision - lower bound (Fed)	Nov	0.00% -	0.00%	0.00% ◡
☆☆☆	03-Nov	Composite PMI - final data	Oct	57.6 ▲	57.3	--
☆☆☆	03-Nov	PMI services - final data	Oct	58.7 ▲	58.2	58.2 ◢
☆☆	05-Nov	Change in non-farm payrolls (ths)†	Oct	531 ▲	312	450 ◢
☆☆	05-Nov	Underemployment rate (U6)	Oct	8.3% ▼	8.5%	--
☆☆	05-Nov	Unemployment rate	Oct	4.6% ▼	4.8%	4.7% ◡
☆	05-Nov	Average hourly earnings (yoy)	Oct	4.9% ▲	4.6%	4.9% ◡

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Eurozone						
⊕	27-Oct	M3 money supply (yoy)	Sep	7.4% ▼	7.9%	7.4% ⊕
⊕⊕⊕⊕⊕	28-Oct	ECB main refinancing rate	Oct	0.00% -	0.00%	0.00% ⊕
⊕⊕⊕⊕⊕	28-Oct	ECB deposit facility rate	Oct	-0.5% -	-0.5%	-0.5% ⊕
⊕	28-Oct	Economic confidence	Oct	119 ▲	118	117 ▲
⊕	28-Oct	Industrial confidence	Oct	14.2 ▲	14.1	12.9 ▲
⊕	28-Oct	Consumer confidence - final data	Oct	-4.8 -	-4.8	--
⊕⊕⊕⊕⊕	29-Oct	GDP (sa, yoy) - estimation‡	3Q	3.7% ▼	14.2%	3.5% ▲
⊕⊕⊕⊕⊕	29-Oct	GDP (sa, qoq) - estimation‡	3Q	2.2% ▲	2.1%	2.1% ▲
⊕⊕⊕⊕	29-Oct	Core CPI (yoy) - preliminary data	Oct	2.1% ▲	1.9%	1.9% ▲
⊕⊕⊕⊕	29-Oct	CPI estimate (yoy)	Oct	4.1% ▲	3.4%	3.7% ▲
⊕⊕⊕	02-Nov	Manufacturing PMI - final data	Oct	58.3 ▼	58.5	58.5 ◡
⊕⊕	03-Nov	Unemployment rate	Sep	7.4% ▼	7.5%	7.4% ⊕
⊕⊕⊕	04-Nov	Composite PMI - final data	Oct	54.2 ▼	54.3	54.3 ◡
⊕⊕⊕	04-Nov	Services PMI - final data	Oct	54.6 ▼	54.7	54.7 ◡
⊕⊕	04-Nov	Producer inflation PPI (yoy)	Sep	16.0% ▲	13.4%	15.4% ▲
⊕⊕	05-Nov	Retail sales (yoy)‡	Sep	2.5% ▲	1.5%	1.5% ▲
Germany						
⊕⊕	25-Oct	IFO business climate‡	Oct	97.7 ▼	98.9	98.0 ◡
⊕⊕	27-Oct	GfK consumer confidence‡	Nov	0.9 ▲	0.4	-0.5 ▲
⊕⊕⊕⊕	28-Oct	Harmonized consumer inflation HICP (yoy) - preliminary data	Oct	4.6% ▲	4.1%	4.5% ▲
⊕⊕⊕⊕	28-Oct	Consumer inflation CPI (yoy) - preliminary data	Oct	4.5% ▲	4.1%	4.4% ▲
⊕⊕	28-Oct	Unemployment rate	Oct	5.4% ▼	5.5%	5.4% ⊕
⊕⊕⊕⊕⊕	29-Oct	GDP (yoy) - preliminary data‡	3Q	2.5% ▼	10.3%	2.6% ◡
⊕⊕⊕⊕⊕	29-Oct	GDP (sa, qoq) - preliminary data‡	3Q	1.8% ▼	1.9%	2.2% ◡
⊕⊕⊕	01-Nov	Retail sales (yoy)‡	Sep	-0.7% ▼	0.9%	1.8% ◡
⊕⊕⊕	02-Nov	Manufacturing PMI - final data	Oct	57.8 ▼	58.2	58.2 ◡
⊕⊕⊕	04-Nov	Composite PMI - final data	Oct	52.0 -	52.0	52.0 ⊕
⊕⊕⊕	04-Nov	Factory orders (wda, yoy)‡	Sep	9.7% ▼	10.4%	11.3% ◡
⊕⊕⊕⊕	05-Nov	Industrial production (wda, yoy)‡	Sep	-1.0% ▼	2.2%	1.3% ◡
France						
⊕⊕⊕⊕⊕	29-Oct	GDP (yoy) - preliminary data‡	3Q	3.3% ▼	18.8%	2.4% ▲
⊕⊕⊕⊕⊕	29-Oct	GDP (qoq) - preliminary data‡	3Q	3.0% ▲	1.3%	2.2% ▲
⊕⊕⊕⊕	29-Oct	Harmonized consumer inflation HICP (yoy) - preliminary data	Oct	3.2% ▲	2.7%	3.1% ▲
⊕⊕⊕⊕	29-Oct	Consumer inflation CPI (yoy) - preliminary data	Oct	2.6% ▲	2.2%	2.5% ▲
⊕⊕⊕	02-Nov	Manufacturing PMI - final data	Oct	53.6 ▲	53.5	53.5 ▲
⊕⊕⊕	04-Nov	Composite PMI - final data	Oct	54.7 -	54.7	54.7 ⊕
⊕⊕⊕⊕	05-Nov	Industrial production (yoy)	Sep	0.8% ▼	3.9%	2.5% ◡
Italy						
⊕⊕⊕⊕⊕	29-Oct	GDP (wda, yoy) - preliminary data‡	3Q	3.8% ▼	17.0%	3.0% ▲
⊕⊕⊕⊕⊕	29-Oct	GDP (wda, qoq) - preliminary data	3Q	2.6% ▼	2.7%	2.0% ▲
⊕⊕⊕⊕	29-Oct	Harmonized consumer inflation HICP (yoy) - preliminary data	Oct	3.1% ▲	2.9%	3.2% ◡
⊕⊕⊕	02-Nov	Manufacturing PMI	Oct	61.1 ▲	59.7	59.6 ▲
⊕⊕	03-Nov	Unemployment rate	Sep	9.2% ▼	9.3%	9.3% ◡
⊕⊕⊕	04-Nov	Composite PMI	Oct	54.2 ▼	56.6	55.6 ◡
UK						
⊕⊕⊕	01-Nov	Manufacturing PMI (sa) - final data	Oct	57.8 ▲	57.7	57.7 ▲
⊕⊕⊕	03-Nov	Composite PMI - final data	Oct	57.8 ▲	56.8	56.8 ▲
⊕⊕⊕⊕⊕	04-Nov	BoE base rate decision	Nov	0.10% -	0.10%	0.10% ⊕
⊕⊕⊕⊕	04-Nov	BoE asset purchase target (GBP bn)	Nov	875 -	875	875 ⊕

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

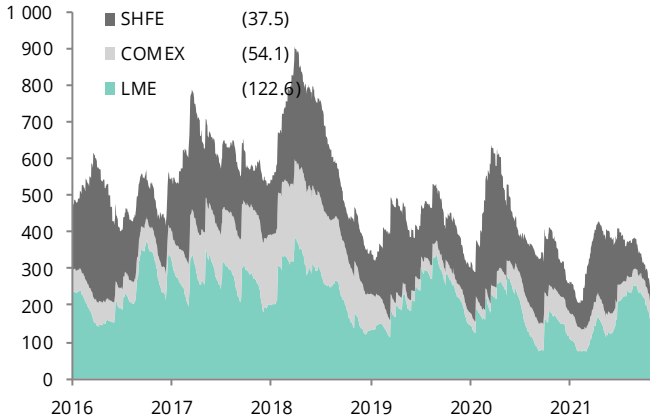
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 05-Nov-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	9 740.00	▼ -2.5%	▲ 7.7%	▲ 25.8%	▲ 43.3%	9 260.32	7 755.50	10 724.50	
Molybdenum	19.12	▼ -1.4%	▲ 2.0%	▲ 90.6%	▲	15.45	9.95	20.05	
Nickel	19 270.00	▼ -5.3%	▲ 6.0%	▲ 16.5%	▲ 24.7%	18 208.53	15 907.00	20 530.00	
Aluminum	2 490.50	▼ -15.5%	▼ -12.6%	▲ 25.9%	▲ 32.1%	2 445.87	1 951.50	3 180.00	
Tin	38 400.00	▼ -1.2%	▲ 4.9%	▲ 87.0%	▲ 109.0%	31 457.47	20 965.00	39 650.00	
Zinc	3 229.50	▼ -7.6%	▲ 7.1%	▲ 18.6%	▲ 24.5%	2 944.59	2 539.00	3 815.00	
Lead	2 395.00	▼ -1.8%	▲ 13.3%	▲ 21.5%	▲ 30.4%	2 187.03	1 896.00	2 504.00	
LBMA (USD/troz)									
Silver	23.82	▼ -2.0%	▲ 10.7%	▼ -10.1%	▼ -3.1%	25.46	21.53	29.59	
Gold ²	1 801.85	▼ -0.4%	▲ 3.4%	▼ -4.7%	▼ -7.0%	1 797.24	1 683.95	1 943.20	
LPPM (USD/troz)									
Platinum ²	1 028.00	▼ -3.2%	▲ 6.7%	▼ -4.4%	▲ 14.6%	1 107.88	931.00	1 294.00	
Palladium ²	2 028.00	▲ 0.6%	▲ 6.8%	▼ -14.4%	▼ -15.6%	2 483.44	1 871.00	3 000.00	
FX ³									
EURUSD	1.1519	▼ -1.0%	▼ -0.5%	▼ -6.1%	▼ -2.8%	1.1918	1.1519	1.2338	
EURPLN	4.6065	▼ 0.0%	▼ -0.6%	▼ -0.2%	▲ 1.8%	4.5545	4.4541	4.6603	
USDPLN	3.9911	▲ 0.8%	▼ 0.0%	▲ 6.2%	▲ 4.1%	3.8233	3.6545	3.9992	
USDCAD	1.2452	▲ 0.8%	▼ -2.3%	▼ -2.2%	▼ -4.6%	1.2503	1.2040	1.2856	
USDCNY	6.3988	▲ 0.2%	▼ -0.7%	▼ -2.0%	▼ -3.1%	6.4642	6.3685	6.5718	
USDCLP	815.58	▼ -0.2%	▲ 1.5%	▲ 14.7%	▲ 7.7%	746.62	693.74	827.56	
Money market									
3m LIBOR USD	0.143	▲ 0.02	▲ 0.01	▼ -0.10	▼ -0.07	0.157	0.114	0.241	
3m EURIBOR	-0.567	▼ -0.02	▼ -0.02	▼ -0.02	▼ -0.05	-0.544	-0.573	-0.529	
3m WIBOR	1.560	▲ 0.86	▲ 1.33	▲ 1.35	▲ 1.34	0.269	0.210	1.560	
5y USD interest rate swap	1.149	▼ -0.13	▲ 0.10	▲ 0.72	▲ 0.75	0.879	0.416	1.314	
5y EUR interest rate swap	-0.157	▼ -0.13	▲ 0.04	▲ 0.30	▲ 0.33	-0.296	-0.485	0.043	
5y PLN interest rate swap	2.880	▲ 0.32	▲ 1.00	▲ 2.27	▲ 2.40	1.422	0.583	2.970	
Fuel									
WTI Cushing	81.27	▼ -3.9%	▲ 8.3%	▲ 67.5%	▲ 109.5%	67.04	47.62	84.65	
Brent	82.50	▼ -2.9%	▲ 4.7%	▲ 61.2%	▲ 106.8%	69.47	50.02	85.54	
Diesel NY (ULSD)	246.19	▼ -3.2%	▲ 5.1%	▲ 66.6%	▲ 110.7%	203.11	146.07	259.61	
Others									
VIX	16.48	▲ 1.05	▼ -6.66	▼ -6.27	▼ -11.10	19.51	15.01	37.21	
BBG Commodity Index	102.74	▼ -1.0%	▲ 2.0%	▲ 31.6%	▲ 40.4%	91.60	78.64	105.84	
S&P500	4 697.53	▲ 3.4%	▲ 9.1%	▲ 25.1%	▲ 33.8%	4 202.43	3 700.65	4 697.53	
DAX	16 054.36	▲ 3.3%	▲ 5.2%	▲ 17.0%	▲ 27.7%	15 116.63	13 432.87	16 054.36	
Shanghai Composite	3 491.57	▼ -2.5%	▼ -2.1%	▲ 0.5%	▲ 5.2%	3 529.22	3 357.74	3 715.37	
WIG 20	2 439.16	▲ 0.9%	▲ 5.6%	▲ 22.9%	▲ 46.0%	2 164.40	1 876.85	2 472.33	
KGHM	150.00	▼ -7.5%	▼ -4.9%	▼ -18.0%	▲ 13.4%	186.79	149.40	223.80	

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

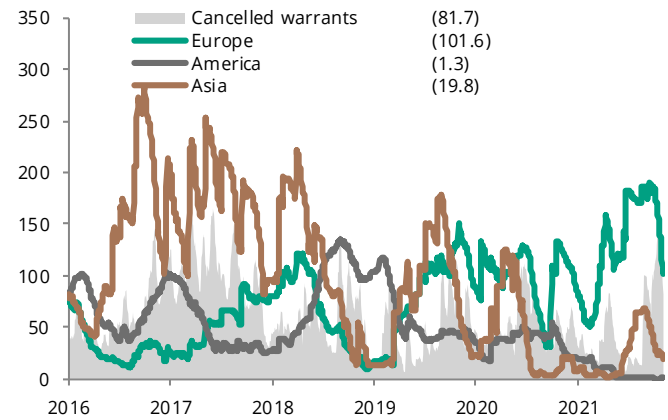
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



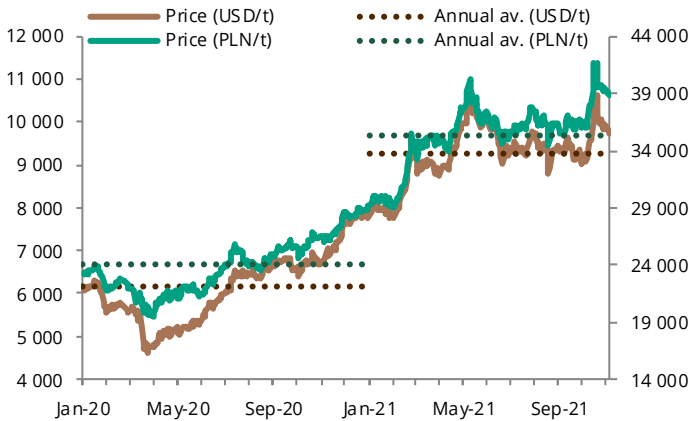
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



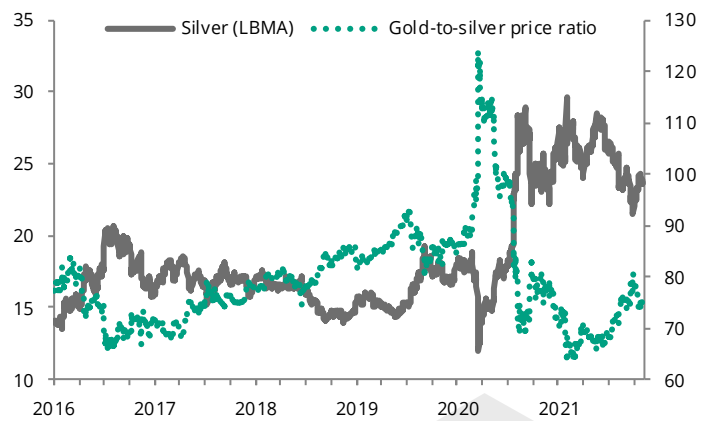
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



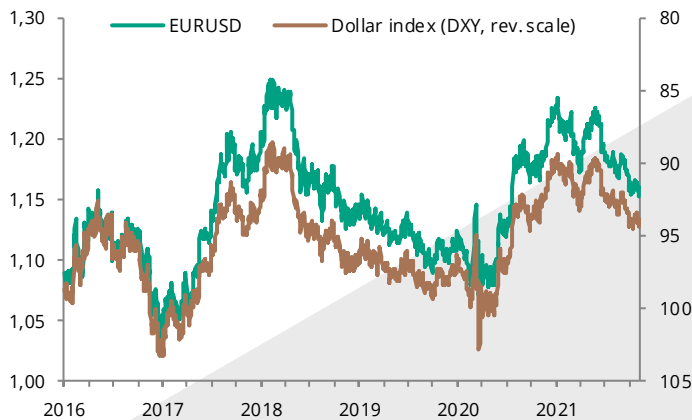
Source: Bloomberg, KGHM Polska Miedź

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



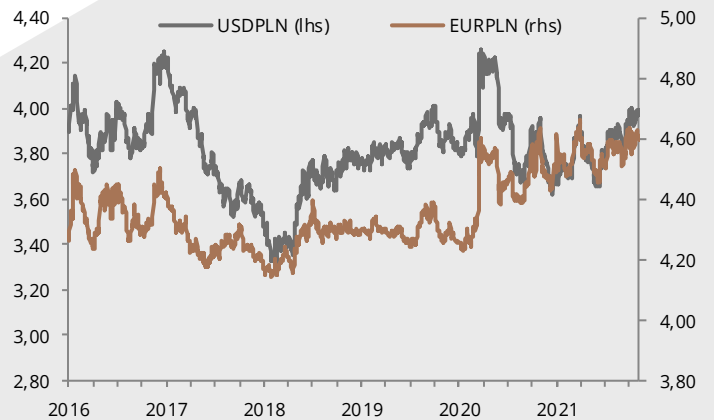
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
25 October – 7 November 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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