

# Market Overview



as of: 18<sup>th</sup> July 2022

- **Copper:** Launching a seawater desalination plant will help Codelco achieve its goal of reducing its freshwater consumption by 60% by 2030 (*page 2*).
- **Precious metals:** In June, gold ETFs left 28t (\$1.7b) of yellow metal. This was the second consecutive month of outflows, following the 53t that left these funds in May (*page 3*).
- **USA:** After consumer inflation in the US reached 9.1% yoy in June, speculation flared up that it is more than less likely that the Fed would raise interest rates by 100 basis points (*page 4*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	7 000.00	-12.2%
▼ Nickel	19 100.00	-11.8%
<b>LBMA (USD/troz)</b>		
▼ Silver	18.46	-6.4%
▼ Gold (PM)	1 706.15	-5.1%
<b>FX</b>		
▼ EURUSD	1.0059	-3.5%
▲ EURPLN	4.8115	2.0%
▲ USDPLN	4.7966	6.3%
▲ USDCAD	1.3038	1.2%
▲ USDCLP	1 042.97	11.9%
<b>Stocks</b>		
▼ KGHM	97.80	-14.4%

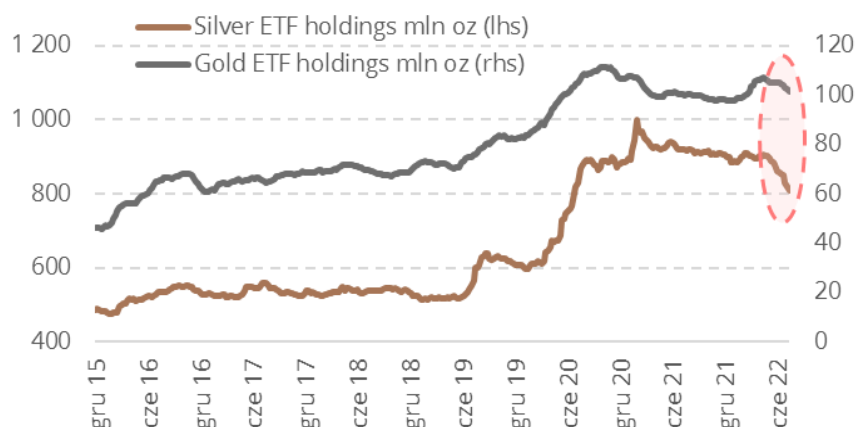
Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 7*)

## Important macroeconomic data

Release	For		
 Industrial prod. (yoy)	Jun	3.9%	▲
 Composite PMI	Jun	52.3	▲
 Non-farm payrolls chng.	Jun	372	▼
 Composite PMI	Jun	52.0	▲
 NBP rate decision	Jul	6.50%	▲

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 5*)

At the end of the second quarter of 2022, the assets of ETFs, both gold and silver-based, decreased significantly



Source: Bloomberg, KGHM Polska Miedź S.A.

## Market Risk Unit

marketrisk@kg hm.com

## Base and precious metals | Other commodities

### Copper

#### Codelco Approves Desalination Plant For Northern Copper Mines

**Launching a seawater desalination plant will help Codelco achieve its goal of reducing its freshwater consumption by 60% by 2030.**

and pumping system to supply water to its mining operations in northern Chile. Construction will begin later this year and the plant will begin supplying water to Codelco's Chuquicamata, Ministro Hales, and Radomiro Tomic in 2025. The plant will be built, owned, and operated by a consortium of Japan's Marubeni Corp. and Chilean transmission firm Transelec. Codelco said that the project would help the company achieve its goal of reducing the consumption of natural freshwater 60% by 2030. The three mines produced 827,400 mt of copper last year. Northern Chile's Atacama Desert is one of the driest places on the Earth, with average annual rainfalls of just a few millimeters a year in some places. What water there is has been drained by a huge expansion of mining activity and the impact of climate change on weather conditions. "We know how urgent it is for our country that large-scale copper mines stop using continental water for its processes, so this long-awaited step of building a desalination plant in the north is a fundamental contribution for Chile," said Codelco chairman Maximo Pacheco in a statement. Codelco originally awarded a contract to build and operate the plant to a Marubeni-led consortium in November 2019, with operations due to start this year. But management canceled the contract a month later to study possible improvements amid a company-wide productivity drive.

#### Other important information on copper market:

- Chile's total copper production fell 2.55% in May to reach 478,800 tonnes, Cochilco said. Production from state-owned Codelco fell 6.3% on a year-on-year basis to 142,900 tonnes, while Collahuasi's production dipped 15.4% to a total of 49,000 tonnes. Copper output from Escondida, which is controlled by BHP, rose 26% to 106,900 tonnes.
- Peruvian copper output fell 11.2% in May from a year-ago after a stoppage at its Las Bambas mine and lower production in other deposits. Output from the world's second biggest copper producer totaled 174,258 tonnes in May, while output in the first five months of the year reached 898,175 tonnes, representing a drop of 0.3%, the Energy and Mines Ministry said in a report.
- China's July copper cathode output from key producers is expected to rise 3.3% from June to 803,000 mt, as smelters ramp up production, state-owned research agency Antaika said. Copper cathode output from 22 major Chinese smelters totaled 777,000 mt in June, up 6% year on year. The increase in production mostly comes from smelters in Henan, Shandong and Inner Mongolia, which resumed production in June after completing maintenance activities. This production

offsets losses reported by smelters in Xinjiang, Zhejiang and Anhui provinces. Output of the 22 smelters totaled 4.62 million mt in the first half of this year, up 2.11% year on year.

- China's imports of unwrought copper and copper products reached 537,7 mt in June, up 15.5% from a month ago and 25.5% higher from a year earlier, data released by the General Administration of Customs showed. China's copper imports are expected to stay elevated in July, as arbitrage opportunity remains open and demand recovery remains in sights after the country eased pandemic controls. Platts assessed Chinese copper import premiums at \$67/mt plus London Metal Exchange cash, July 13, for LME-registered normal brands of electrolytically-refined cathode, up \$7/mt from a month earlier, data from S&P Global Commodity Insights showed.

## Precious Metals

### Global gold ETFs register record outflows

**In June, gold ETFs left 28t (\$1.7b) of yellow metal. This was the second consecutive month of outflows, following the 53t that left these funds in May.**

**Recent outflows led to a negative net result of 39 tonnes in the second quarter, but YTD the net flow has remained positive, reaching 234 tonnes**

Global gold exchange-traded fund ETFs registered 28t (\$1.7b) of outflows in June. This was the second consecutive month of outflows, following the 53t that left these funds in May. While the recent flows were enough to push Q2 into net outflows of 39t (\$2b), year-to-date net inflows remained positive at 234t (\$14.8b). Total holdings at the end of June stood at 3,792t (\$221.7b), up 6% YTD. North American holdings fell by 26t (\$1.5b). Intense focus on the future pace of interest rate hikes and a stronger US dollar were the primary headwinds for gold investment. European funds saw more modest outflows of 4t (US\$245mn), concentrated in Switzerland, Germany and France. Despite the gloomy economic outlook for Europe, with record inflation and rising sovereign borrowing costs, the European Central Bank indicated it will raise interest rates in July – the first hike in more than 11 years – which weighed on sentiment. In the UK, holdings were up US\$205.4mn even as the Bank of England increased interest rates for a fifth straight month. Holdings in Asia rose fractionally (1t, US\$66.1mn). At a regional level, North American and European funds attracted the lion's share of investment. In H1, US fund holdings rose by 133t (US\$8.1bn) and European funds added 119t (US\$7.5bn). Funds in 'other' regions rose by a marginal 2t. Investors around the world face a challenging environment during H2 2022, needing to navigate a noxious compound of rising interest rates, high inflation and geopolitical risks. In the near term, the gold price will likely remain sensitive to real rates, the speed at which global central banks tighten monetary policy, and their effectiveness in controlling inflation.

## Global economies | Foreign exchange markets

### CPI Scorchers Opens Path for Fed to Consider 100 Basis-Point Hike






**After consumer inflation in the US reached 9.1% yoy in June, speculation flared up that it is more than less likely that the Fed would raise interest rates by 100 basis points.**


**In June, the Fed raised rates by 75 basis points, the largest single increase since 1994**

Federal Reserve officials may debate a historic one percentage-point rate hike later this month after another searing inflation report piled pressure on the central bank to act. "Everything is in play," Atlanta Fed President Raphael Bostic told reporters in St. Petersburg, Florida, on Wednesday after US consumer prices rose a faster-than-forecast 9.1% in the year through June. The comments added fuel to bets that the Fed is more likely than not to raise interest rates by 100 basis points when it meets July 26-27, which would be the largest increase since the Fed started directly using overnight interest rates to conduct monetary policy in the early 1990s. Americans are furious over high prices and critics blame the Fed for its initial slow response. Given the acceleration in monthly inflation, economists at Nomura Securities International now expect a full percentage-point increase in the Fed's benchmark rate at the upcoming policy meeting. Fed Chair Jerome Powell told reporters last month after the central bank raised rates by 75 basis points, to a range of 1.5% to 1.75%, that either a 50 or 75 basis-point increase was likely in July. A majority of his colleagues since then have either echoed his line or endorsed the bigger move. Central banks globally are confronting unprecedented inflation, prompting historic rate hikes from Hungary to Pakistan. The Bank of Canada increased rates by a surprise full percentage point. Fed raised rates by 75 basis points last month -- the largest increase since 1994 -- despite previously signaling that they were on track for a smaller half-point move. Fed officials have said they want to push policy into restrictive territory, to a range of 3.25 to 3.5% by the end of this year, according to the median projection from the quarterly economic projections released in June. Futures markets Wednesday showed investors pricing in an even higher 3.5% to 3.75% range by year end. Economists warn that such a fast pace of large increases could push the US into recession. A handful of banks are calling for a contraction starting this year, while others see it starting next year. The Fed's abrupt change to a 75 basis-point increase last month came on the back of a preliminary survey showing consumer expectations for future inflation were rising. Inflation expectations are particularly concerning to Powell and his colleagues, who are trying to avoid a 1970s-style price spiral. "After what happened in June, I do not rule anything out," said Stephen Stanley, chief economist at Amherst Pierpont Securities. "I had been thinking that the Fed would decelerate to a 50-basis-point-per-meeting pace beginning in September, but if the next two monthly inflation numbers look like May's and June's, all bets are off."

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
⊛	07-Jul	Foreign reserves (USD bn)	Jun	3 071 ▼	3 128	3 111 ◡
⊛⊛⊛⊛	09-Jul	Consumer inflation CPI (yoy)	Jun	2.5% ▲	2.1%	2.4% ◢
⊛⊛	09-Jul	Producer inflation PPI (yoy)	Jun	6.1% ▼	6.4%	6.0% ◢
⊛	11-Jul	New yuan loans (CNY bn)‡	Jun	2 810 ▲	1 888	2 400 ◢
⊛⊛	13-Jul	Trade balance (USD bn)	Jun	97.9 ▲	78.8	76.8 ◢
⊛⊛	13-Jul	Exports (yoy)	Jun	17.9% ▲	16.9%	12.5% ◢
⊛⊛⊛⊛⊛	15-Jul	GDP (yoy)	2Q	0.4% ▼	4.8%	1.2% ◡
⊛⊛⊛⊛⊛	15-Jul	GDP (sa, qoq)‡	2Q	-2.6% ▼	1.4%	-2.0% ◡
⊛⊛⊛⊛	15-Jul	Industrial production (yoy)	Jun	3.9% ▲	0.7%	4.0% ◡
⊛⊛	15-Jul	Fixed assets investments (ytd, yoy)	Jun	6.1% ▼	6.2%	6.0% ◢
⊛	15-Jul	Retail sales (yoy)	Jun	3.1% ▲	-6.7%	0.3% ◢
<b>Poland</b> 						
⊛⊛⊛⊛⊛	07-Jul	NBP base rate decision	Jul	6.50% ▲	6.00%	6.75% ◡
⊛⊛	14-Jul	Trade balance (EUR mn)‡	May	-1 222 ▲	-2 620	-2 673 ◢
⊛⊛	14-Jul	Exports (EUR mn)‡	May	28 104 ▲	26 848	26 667 ◢
⊛⊛	14-Jul	Current account balance (EUR mn)‡	May	-1 909 ▲	-3 476	-3 513 ◢
⊛⊛⊛⊛	15-Jul	Consumer inflation CPI (yoy) - final data	Jun	15.5% ▼	15.6%	--
<b>US</b> 						
⊛⊛	05-Jul	Durable goods orders - final data	May	0.8% ▲	0.7%	0.7% ◢
⊛⊛⊛	06-Jul	Composite PMI - final data	Jun	52.3 ▲	51.2	51.2 ◢
⊛⊛⊛	06-Jul	PMI services - final data	Jun	52.7 ▲	51.6	51.6 ◢
⊛⊛	08-Jul	Change in non-farm payrolls (ths)‡	Jun	372 ▼	384	265 ◢
⊛⊛	08-Jul	Underemployment rate (U6)	Jun	6.7% ▼	7.1%	--
⊛⊛	08-Jul	Unemployment rate	Jun	3.6% -	3.6%	3.6% ◉
⊛	08-Jul	Average hourly earnings (yoy)‡	Jun	5.1% ▼	5.3%	5.0% ◢
⊛⊛⊛⊛	13-Jul	Consumer inflation CPI (mom)	Jun	1.3% ▲	1.0%	1.1% ◢
⊛⊛⊛⊛	13-Jul	Consumer inflation CPI (yoy)	Jun	9.1% ▲	8.6%	8.8% ◢
⊛⊛⊛⊛	15-Jul	Industrial production (mom)‡	Jun	-0.2% ▼	0.0%	0.1% ◡
⊛⊛	15-Jul	Retail sales (excluding autos, mom)‡	Jun	1.0% ▲	0.6%	0.7% ◢
⊛⊛	15-Jul	University of Michigan confidence index - preliminary data	Jul	51.1 ▲	50.0	50.0 ◢
⊛	15-Jul	Capacity utilization‡	Jun	80.0% ▼	80.3%	80.8% ◡
<b>Eurozone</b> 						
⊛⊛	04-Jul	Producer inflation PPI (yoy)	May	36.3% ▼	37.2%	36.6% ◡
⊛⊛⊛	05-Jul	Composite PMI - final data	Jun	52.0 ▲	51.9	51.9 ◢
⊛⊛⊛	05-Jul	Services PMI - final data	Jun	53.0 ▲	52.8	52.8 ◢
⊛⊛	06-Jul	Retail sales (yoy)‡	May	0.2% ▼	4.0%	-0.3% ◢
⊛	12-Jul	ZEW survey expectations	Jul	-51.1 ▼	-28.0	--
⊛⊛⊛⊛	13-Jul	Industrial production (sa, mom)‡	May	0.8% ▲	0.5%	0.3% ◢
⊛⊛⊛⊛	13-Jul	Industrial production (wda, yoy)‡	May	1.6% ▲	-2.5%	0.3% ◢
⊛	15-Jul	Trade balance (EUR mn)	May	-26.3 ▲	-32.4	--
<b>Germany</b> 						
⊛⊛⊛	05-Jul	Composite PMI - final data	Jun	51.3 -	51.3	51.3 ◉
⊛⊛⊛	06-Jul	Factory orders (wda, yoy)‡	May	-3.1% ▲	-5.3%	-5.0% ◢
⊛⊛⊛⊛	07-Jul	Industrial production (wda, yoy)‡	May	-1.5% ▲	-2.5%	-1.8% ◢

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>France</b> 						
🔴🔴🔴🔴	05-Jul	Industrial production (yoy)‡	May	-0.4% ▲	-0.6%	0.3% 🟡
🔴🔴🔴	05-Jul	Composite PMI - final data	Jun	52.5 ▼	52.8	52.8 🟡
🔴🔴🔴🔴	13-Jul	Harmonized consumer inflation HICP (yoy) - final data	Jun	6.5% -	6.5%	6.5% ⚪
🔴🔴🔴🔴	13-Jul	Consumer inflation CPI (yoy) - final data	Jun	5.8% -	5.8%	5.8% ⚪
<b>Italy</b> 						
🔴🔴🔴	05-Jul	Composite PMI	Jun	51.3 ▼	52.4	50.7 🟡
🔴🔴🔴🔴	08-Jul	Industrial production (wda, yoy)‡	May	3.4% ▼	3.9%	3.9% 🟡
🔴🔴🔴🔴	15-Jul	Harmonized consumer inflation HICP (yoy) - final data	Jun	8.5% -	8.5%	8.5% ⚪
<b>UK</b> 						
🔴🔴🔴	05-Jul	Composite PMI - final data	Jun	53.7 ▲	53.1	53.1 🟡
🔴🔴🔴🔴	13-Jul	Industrial production (yoy)‡	May	1.4% ▼	1.6%	-0.3% 🟡
<b>Japan</b> 						
🔴🔴🔴	05-Jul	Composite PMI - final data	Jun	53.0 ▼	53.2	--
🔴🔴🔴🔴	14-Jul	Industrial production (yoy) - final data	May	-3.1% ▼	-2.8%	--
<b>Chile</b> 						
🔴🔴🔴	07-Jul	Copper exports (USD mn)	Jun	3 975 ▲	3 757	--
🔴🔴	07-Jul	Nominal wages (yoy)	May	9.6% ▲	8.0%	--
🔴🔴🔴🔴	14-Jul	BCCh overnight rate target	Jul	9.75% ▲	9.00%	9.50% 🟡
<b>Canada</b> 						
🔴🔴🔴	08-Jul	Net change in employment (thrs)	Jun	-43.2 ▼	39.8	22.5 🟡
🔴🔴🔴🔴	13-Jul	BoC base rate decision	Jul	2.50% ▲	1.50%	2.25% 🟡

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

<sup>2</sup> 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

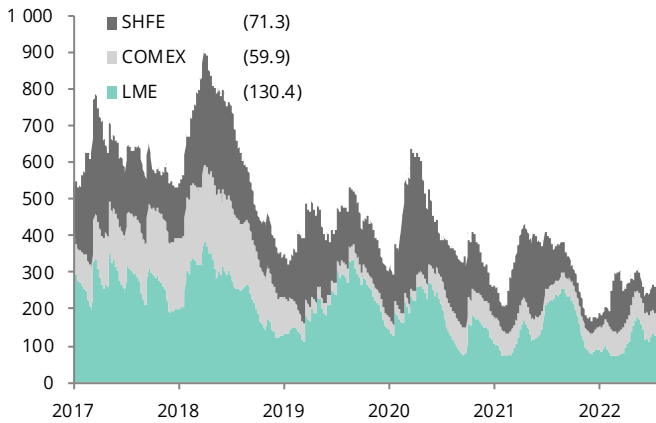
<i>(as of: 15-Jul-22)</i>		Price change <sup>1</sup>				From year beginning <sup>2</sup>		
	Price	2W	QTD	YTD	1Y	Average	Min	Max
<b>LME (USD/t; Mo in USD/lbs)</b>								
Copper	7 000.00	▼ -12.2%	▼ -15.1%	▼ -27.8%	▼ -25.1%	9 582.21	7 000.00	10 730.00
Molybdenum	16.20	▼ -5.2%	▼ -6.1%	▼ -13.3%	▼	18.60	16.20	19.33
Nickel	19 100.00	▼ -11.8%	▼ -17.3%	▼ -8.7%	▲ 2.2%	27 204.61	19 100.00	45 795.00
Aluminum	2 320.50	▼ -2.7%	▼ -3.2%	▼ -17.3%	▼ -7.0%	3 024.38	2 320.50	3 984.50
Tin	23 600.00	▼ -12.6%	▼ -12.8%	▼ -40.5%	▼ -30.4%	39 015.86	23 600.00	50 050.00
Zinc	2 921.00	▼ -6.5%	▼ -10.2%	▼ -19.5%	▼ -0.4%	3 770.83	2 921.00	4 530.00
Lead	1 925.00	▲ 0.3%	▲ 0.9%	▼ -17.3%	▼ -16.7%	2 242.38	1 891.00	2 513.00
<b>LBMA (USD/troz)</b>								
Silver	18.46	▼ -6.4%	▼ -9.6%	▼ -20.0%	▼ -29.6%	22.98	18.46	26.18
Gold <sup>2</sup>	1 706.15	▼ -5.1%	▼ -6.1%	▼ -6.3%	▼ -6.4%	1 863.56	1 700.70	2 039.05
<b>LPPM (USD/troz)</b>								
Platinum <sup>2</sup>	851.00	▼ -2.4%	▼ -6.2%	▼ -11.5%	▼ -24.7%	983.77	831.00	1 151.00
Palladium <sup>2</sup>	1 864.00	▼ -2.6%	▼ -1.3%	▼ -3.3%	▼ -32.7%	2 195.28	1 810.00	3 015.00
<b>FX <sup>3</sup></b>								
EURUSD	1.0059	▼ -3.5%	▼ -3.2%	▼ -11.2%	▼ -14.8%	1.0870	1.0005	1.1464
EURPLN	4.8115	▲ 2.0%	▲ 2.8%	▲ 4.6%	▲ 5.1%	4.6488	4.4879	4.9647
USDPLN	4.7966	▲ 6.3%	▲ 7.0%	▲ 18.1%	▲ 24.2%	4.2810	3.9218	4.8284
USDCAD	1.3038	▲ 1.2%	▲ 1.2%	▲ 2.8%	▲ 3.7%	1.2737	1.2451	1.3138
USDCNY	6.7572	▲ 0.8%	▲ 0.9%	▲ 6.3%	▲ 4.6%	6.5044	6.3093	6.7893
USDCLP	1 042.97	▲ 11.9%	▲ 13.4%	▲ 23.5%	▲ 39.4%	836.61	777.10	1 042.97
<b>Money market</b>								
3m LIBOR USD	2.738	▲ 0.44	▲ 0.45	▲ 2.53	▲ 2.60	1.136	0.216	2.740
3m EURIBOR	0.072	▲ 0.25	▲ 0.27	▲ 0.64	▲ 0.62	-0.412	-0.576	0.072
3m WIBOR	7.000	▼ -0.05	▼ -0.05	▲ 4.46	▲ 6.79	5.066	2.590	7.140
5y USD interest rate swap	3.038	▲ 0.13	▼ -0.04	▲ 1.67	▲ 2.18	2.514	1.445	3.637
5y EUR interest rate swap	1.617	▼ -0.04	▼ -0.17	▲ 1.60	▲ 1.93	1.070	0.031	2.377
5y PLN interest rate swap	6.505	▲ 0.01	▼ -0.40	▲ 2.77	▲ 5.11	5.539	3.780	7.870
<b>Fuel</b>								
WTI Cushing	97.59	▼ -10.0%	▼ -7.7%	▲ 26.8%	▲ 36.2%	102.04	76.99	123.70
Brent	109.09	▼ -7.9%	▼ -5.2%	▲ 40.8%	▲ 47.0%	106.80	79.83	133.89
Diesel NY (ULSD)	373.90	▼ -7.2%	▼ -4.1%	▲ 56.1%	▲ 77.0%	373.97	241.70	534.54
<b>Others</b>								
VIX	24.23	▼ -2.47	▼ -4.48	▲ 7.01	▲ 7.22	26.47	16.91	36.45
BBG Commodity Index	113.47	▼ -3.1%	▼ -3.1%	▲ 14.4%	▲ 20.5%	121.23	100.58	136.61
S&P500	3 863.16	▲ 1.0%	▲ 2.1%	▼ -18.9%	▼ -11.4%	4 247.72	3 666.77	4 793.54
DAX	12 864.72	▲ 0.4%	▲ 0.6%	▼ -19.0%	▼ -17.7%	14 275.32	12 401.20	16 271.75
Shanghai Composite	3 228.06	▼ -4.7%	▼ -5.0%	▼ -11.3%	▼ -9.4%	3 298.59	2 886.43	3 632.33
WIG 20	1 620.13	▼ -4.1%	▼ -4.5%	▼ -28.5%	▼ -28.3%	1 975.41	1 613.98	2 411.11
KGHM	97.80	▼ -14.4%	▼ -17.7%	▼ -29.8%	▼ -48.4%	146.22	97.80	182.20

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

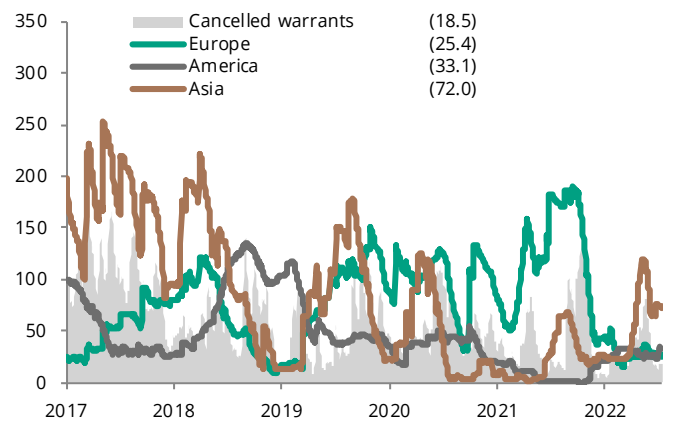
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)

Copper: official LME stocks (thousand tonnes)

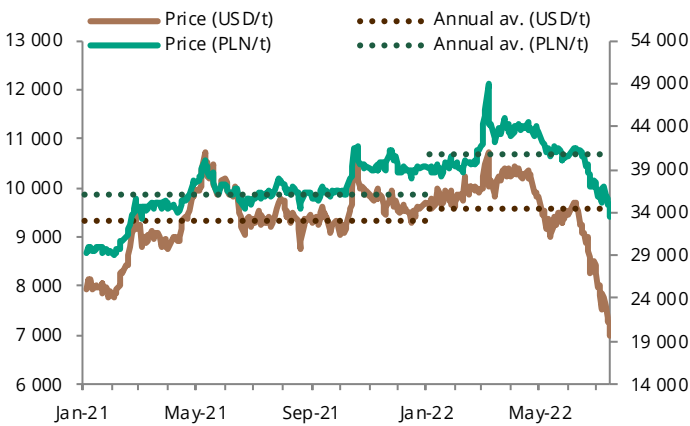


Note: Latest values in brackets. Source: Bloomberg, KGHM



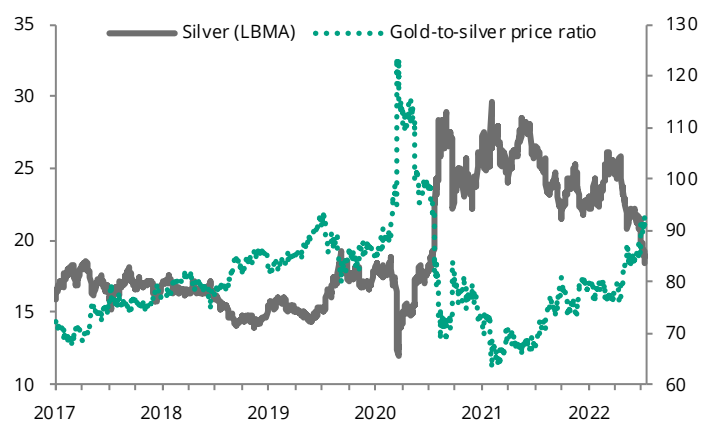
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



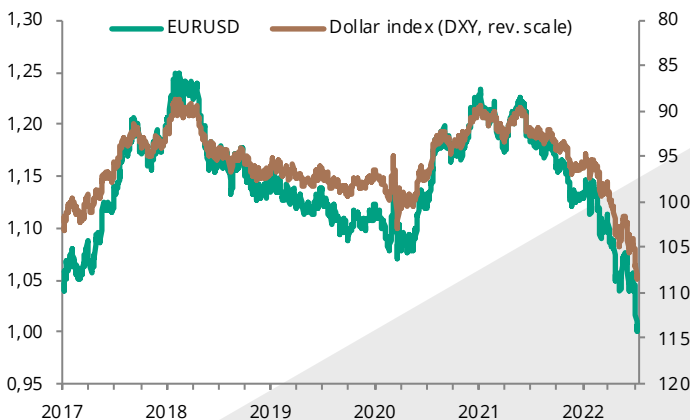
Source: Bloomberg, KGHM Polska Miedź

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



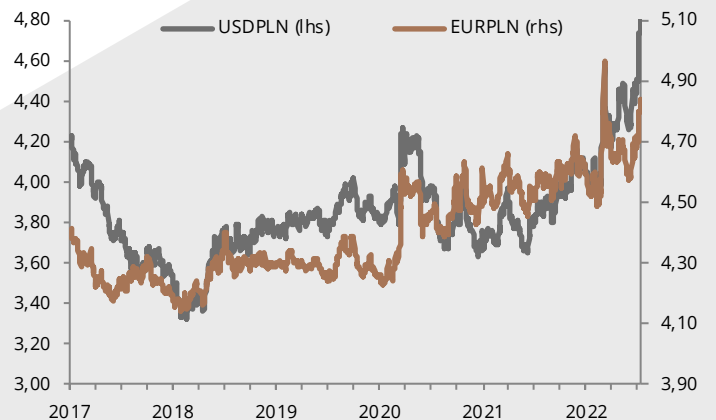
Source: Bloomberg, KGHM Polska Miedź

**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:  
**4 – 17 July 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](http://www.lme.com/dataprices_products.asp) (charge-free logging)
- silver and gold: [www.lbma.org.uk/pricing-and-statistics](http://www.lbma.org.uk/pricing-and-statistics)
- platinum and palladium: [www.lppm.com/statistics.aspx](http://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