

Market Overview



as of: 28th February 2022





- **Copper:** The China's company Zijin Mining has announced plans to spend \$50 million on the modernization of the Kamo-a-Kakula mine located in DRC. A bottleneck removal plan will increase the total capacity of the ore concentrate processing units to 9.2 million tonnes of ore per year from 7.6 million tonnes (*page 2*).
- **Precious metals:** ETFs that invest in gold and other precious metals have recorded a massive inflows, which is seen as a reaction to the growing geopolitical tensions between Russia and Ukraine. Physical gold stocks held by publicly traded funds rose 2.1% to 69.5 million ounces this year (*page 4*).
- **World:** Russia's attack on Ukraine caused instability and new uncertainty in the markets. Gold prices jumped to their highest level in more than a year and the dollar rose by more than 1% against a basket of its peers. The price of oil rose sharply and futures contracts for certain agricultural products reached the highest levels in recent years (*page 5*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	9 920.00	-1.2%
▲ Nickel	24 700.00	4.2%
LBMA (USD/troz)		
▲ Silver	24.21	5.7%
▲ Gold (PM)	1 884.80	2.9%
FX		
▼ EURUSD	1.1216	-1.8%
▲ EURPLN	4.6608	3.2%
▲ USDPLN	4.1683	5.1%
▲ USDCAD	1.2747	0.4%
▲ USDCLP	807.26	0.4%
Stocks		
▲ KGHM	155.70	1.7%

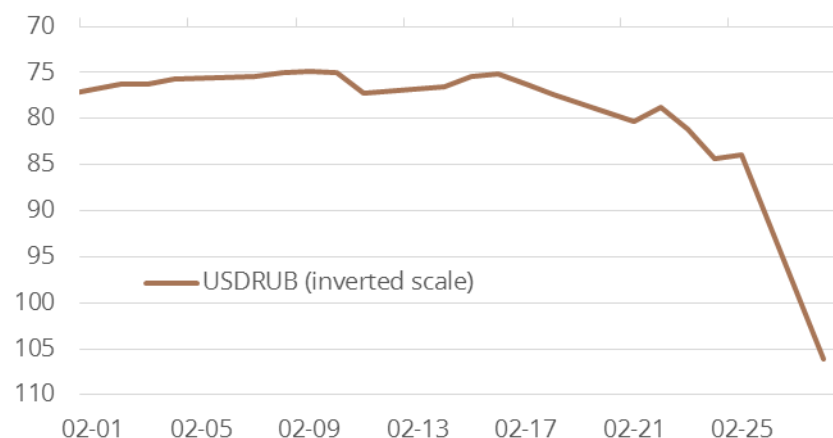
Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 8*)

Important macroeconomic data

Release	For	
 PPI (yoy)	Jan	9.1% ▼
 Industrial prod. (mom)	Jan	1.4% ▲
 Industrial prod. (yoy)	Jan	19.2% ▲
 Industr. prod. (wda, yoy)	Dec	1.6% ▲
 Manufacturing PMI	Feb	57.6 ▲

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

Russia's attack on Ukraine triggered a huge drop in the ruble against the US dollar



Source: Bloomberg, KGHM Polska Miedź S.A.

Market Risk Unit

marketrisk@kgm.com

Base and precious metals | Other commodities

Copper

Zijin Announces Expansion Plan For Congo Copper Joint Venture

The China's company Zijin Mining has announced plans to spend \$50 million on the modernization of the Kamo-Kakula mine located in DRC. A bottleneck removal plan will increase the total capacity of the ore concentrate processing units to 9.2 million tonnes of ore per year from 7.6 million tonnes.

As Reuters informs China's Zijin Mining said its joint venture copper mine project in the Democratic Republic of Congo (DRC) will spend \$50 million on an upgrade that will boost both its metal producing capacity and output. The Kamo-Kakula project, in which Ivanhoe Mines of Canada is Zijin's main partner with 39.6% stake each, will increase capacity of its concentrator plants by about a fifth as part of the plan. Its "de-bottlenecking plan" will increase the combined design processing capacity of the concentrator plants, which process ore brought from the mine, to 9.2 million tonnes of ore per year from 7.6 million tonnes, Zijin said. The plan will also increase the plants' annual copper output to over 450,000 tonnes compared to an earlier estimate of 400,000 tonnes, positioning Kamo-Kakula as the world's fourth-largest copper producer, Zijin said. "The de-bottlenecking plan ... is expected to cost approximately \$50 million to modify certain pipes and equipment under continuous production. The plan is expected to take approximately 12 months to complete." Zijin added that a third, significantly larger concentrator is being designed and is expected to be commissioned in the fourth quarter of 2024. Besides Zijin and Ivanhoe, the DRC government owns 20% of Kamo-Kakula and Crystal River Global Limited owns 0.8%. Investment in a \$769 million smelter had been approved in November to reduce the project's reliance on third-party smelters for ore processing. The plant is expected to take three years to construct.

Chile copper giant Codelco profits surge on higher metals prices

In 2021, Codelco produced 1.728 million tonnes of copper. The company's profit for the past year increased to \$7.4 billion in 2021 from \$2.1 billion a year earlier. Conversely, the cash cost increased by 2.6% to \$ 1.33 per pound of metal.

According to Reuters Pre-tax profits for the world's largest copper producer Codelco surged to \$7.4 billion in 2021 from \$2.1 billion a year earlier, boosted by high global prices for the widely used metal. Copper prices jumped last year and some analysts see a new supercycle for the red metal as demand rises for its use in electric vehicles. Codelco, which turns over its profits to government coffers,

reported that it produced 1.618 million tonnes of copper at its own mines in 2021, in line with output a year earlier. Adding production from its stakes in Freeport's El Abra and Anglo American Sur, total copper production rose to 1.728 million tonnes. Cash costs increased 2.6% to \$1.33 per pound of the metal, Codelco Chief Executive Octavio Araneda said during a virtual press conference. "This was mainly due to external effects, higher input prices that towards the end of 2021 began to put pressure on the industry's operating costs," he said. Araneda said fallout from Russia's invasion of Ukraine is not expected to significantly affect Codelco's sales as those countries are not important buyers of the company's copper. Chief Financial Officer Alejandro Rivera forecast global prices for copper should remain near current levels this year barring a major escalation of the conflict. Important maintenance work at Codelco's Chuquicamata smelter is not expected to hit overall production, but it will affect cathode output, Araneda said. He added that 2022 total copper production should be similar to 2020 and 2021 output.

Other important information on copper market:

- As Platts informs Peru's copper, tin, molybdenum shipments all gained on the year in December, while zinc and lead deliveries fell, the government said. Copper deliveries climbed 7.6% to 228,800 mt from 212,500 mt a year earlier. Tin miner Minsur boosted tin shipments from its San Rafael mine by half to 3,000 mt. Molybdenum deliveries rose 18% to 4,300 mt from 3,800 mt. Zinc shipments dropped 35.4% to 85,500 mt from 132,200 mt a year earlier, while lead exports plunged 43% to 36,900 mt.
- According to Platts Canadian miner Hudbay Minerals sees an expansion at its Constancia mine in Peru driving a boost in copper and gold production this year, CEO Peter Kukielski. The high-grade Pampacancha copper-gold deposit, part of the company's \$250 million expansion plan in 2021, is expected to boost copper production at Constancia to 89,000-115,000 mt, Kukielski said on a quarterly earnings conference call. Constancia, which began commercial production in 2015, produced 77,813 mt of copper (up 6% yoy), for the full year 2021, according to the company. "The increase in production is primarily due to the continued ramp-up of Pampacancha," Kukielski said on the call. The company will apply "smart technologies to continuously improve operating performance including sensor-based ore sorting.
- The global world refined copper market showed a 79,000 tonnes deficit in November, compared with a 34,000 tonnes deficit in October, the International Copper Study Group (ICSG) said in its latest monthly bulletin. Between January and November last year, the copper market saw a shortage of 339,000 tonnes compared with a 487,000 tonne shortfall in the same period a year earlier, the ICSG said. World refined copper output in November was 2.073 million tonnes, while consumption was 2.152 million tonnes.

Precious Metals

Gold ETFs see big inflows on rising geopolitical concerns

ETFs that invest in gold and other precious metals have recorded a massive inflows, which is seen as a reaction to the growing geopolitical tensions between Russia and Ukraine. Physical gold stocks held by publicly traded funds rose 2.1% to 69.5 million ounces this year.

According Reuters exchange-traded funds (ETFs) that invest in gold and other precious metals have seen massive inflows as investors rush to shield themselves against the rising geopolitical tensions between Russia and Ukraine. Data from Refinitiv Lipper showed gold and other precious metal ETFs have seen an inflow of \$4.7 billion this year, after witnessing outflows worth \$7.8 billion last year. The SPDR Gold Shares GLD led with inflows worth \$3.2 billion, while iShares Silver Trust BSLV39.SA and iShares Gold Trust IAU received over \$400 million each. Also, physical gold held by exchange-traded funds has risen 2.1% to 69.5 million ounces this year, according to data from Refinitiv. Safer assets such as gold and the dollar rallied on Thursday, while global stocks slumped after Russian President Vladimir Putin launched an invasion of Ukraine. Oil prices broke above \$100 a barrel for the first time since 2014, heightening further concerns over inflation levels. Higher inflation tends to benefit gold as the yellow metal is seen as a hedge against inflation. Other precious metals such as palladium and platinum also surged on Thursday. Russia is the world's third-largest producer of gold while Nornickel is also a major producer of palladium and platinum, both of which are used in catalytic converters to clean car exhaust fumes. "As palladium is used in autocatalysts, production will probably have to be scaled back in the event of supply restrictions unless automotive manufacturers have built up sufficient stocks in recent months," Commerzbank analysts wrote in a note.

Global economies | Foreign exchange markets




In already bumpy year, Russia's attack on Ukraine sets stage for more market swings

Russia's attack on Ukraine caused instability and new uncertainty in the markets. Gold prices jumped to their highest level in more than a year and the dollar rose by more than 1% against a basket of its peers. The price of oil rose sharply and futures contracts for certain agricultural products reached the highest levels in recent years.

As Reuters informs, Russia's attack on Ukraine sparked volatility and fresh uncertainty in markets on Thursday (Feb 24). After sinking earlier in the session, U.S. stocks surged later in the day while haven assets such as gold and Treasuries unwound some of their earlier gains. Oil prices, which breached \$100 for the first time since 2014, also eased. Markets have already taken investors on a bumpy ride this year, with the S&P 500 down around 10% year-to-date on worries over a more hawkish Federal Reserve and heightened geopolitical strife. The attack on Ukraine will likely add another layer of uncertainty to markets, increasing the potential for more gyrations, investors said. The market's initial knee-jerk reaction was typical of that seen during past geopolitical flare ups. Gold prices jumped to their highest in more than a year and the dollar surged more than 1% against a basket of its peers as investors piled into so-called safe haven assets. Yields on U.S. Treasuries, another popular destination for nervous investors, initially tumbled more than 10 basis points. "Heightened volatility on the escalation of the conflict shows markets had not fully priced in the likelihood of deeper conflict," said Mark Haefele, chief investment officer at UBS Global Wealth Management. For some investors, the sharp equity market falls offered a buying opportunity. With price pressures across major economies already at their highest in decades, others dashed for inflation trades. In addition to the surge in oil prices, wheat futures jumped to their highest since July 2012, soybean futures gained to a nine-year peak, and corn futures hit an eight-month high. "Whether there will be a full-blown war or not, the simple strategy is to bet on a spike in inflation," said Yuan Yuwei, a Chinese hedge fund manager at Water Wisdom Asset Management. "That means buying oil and agricultural products, and shorting consumer shares and U.S. growth stocks." Some investors were also looking at assets linked to Ukraine and Russia, which have been hit hard in recent days. The premium demanded by investors to hold Ukrainian debt relative to U.S. Treasuries soared to 15 percentage points - the widest since the country underwent a debt restructuring in 2015. Russian assets also took a beating - the dollar-denominated RTS stock index crashed 40% to 489 points, its lowest since 2016, while yields on Russian sovereign bonds soared.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
★★★★	16-Feb	Consumer inflation CPI (yoy)	Jan	0.9% ▼	1.5%	1.0% ◡
★★	16-Feb	Producer inflation PPI (yoy)	Jan	9.1% ▼	10.3%	9.5% ◡
Poland 						
★★	14-Feb	Trade balance (EUR mn)‡	Dec	-2 535 ▼	- 242	-1 570 ◡
★★	14-Feb	Exports (EUR mn)‡	Dec	24 109 ▼	27 414	23 941 ◡
★★	14-Feb	Current account balance (EUR mn)‡	Dec	-3 957 ▼	- 628	-2 254 ◡
★★★★★★	15-Feb	GDP (yoy) - preliminary data	4Q	7.3% ▲	5.3%	7.1% ◡
★★★★★★	15-Feb	GDP (qoq) - preliminary data	4Q	1.7% ▼	2.3%	1.8% ◡
★★★★	15-Feb	Consumer inflation CPI (yoy)	Jan	9.2% ▲	8.6%	9.4% ◡
★★★★	18-Feb	Sold industrial production (yoy)	Jan	19.2% ▲	16.7%	14.7% ◡
★★	18-Feb	Average gross salary (yoy)	Jan	9.5% ▼	11.2%	10.1% ◡
★★	18-Feb	Producer inflation PPI (yoy)‡	Jan	14.8% ▲	14.4%	14.4% ◡
★	18-Feb	Employment (yoy)	Jan	2.3% ▲	0.5%	1.7% ◡
★★★	21-Feb	Retail sales (yoy)	Jan	20.0% ▲	16.9%	19.7% ◡
★	22-Feb	M3 money supply (yoy)	Jan	7.7% ▼	8.9%	8.6% ◡
★★	23-Feb	Unemployment rate	Jan	5.5% ▲	5.4%	5.6% ◡
US 						
★★★★	16-Feb	Industrial production (mom)	Jan	1.4% ▲	-0.1%	0.5% ◡
★★	16-Feb	Retail sales (excluding autos, mom)‡	Jan	3.3% ▲	-2.8%	1.0% ◡
★	16-Feb	Capacity utilization‡	Jan	77.6% ▲	76.6%	76.8% ◡
★★	17-Feb	Philadelphia Fed business outlook	Feb	16.0 ▼	23.2	20.0 ◡
★★★	22-Feb	Composite PMI - preliminary data	Feb	56.0 ▲	51.1	52.5 ◡
★★★	22-Feb	Manufacturing PMI - preliminary data	Feb	57.5 ▲	55.5	56.0 ◡
★★★	22-Feb	PMI services - preliminary data	Feb	56.7 ▲	51.2	53.0 ◡
★	22-Feb	Richmond Fed manufacturing index	Feb	1.0 ▼	8.0	10.0 ◡
★★★★★★	24-Feb	GDP (annualized, qoq) -	4Q	7.0% ▲	6.9%	7.0% ○
★★★★	25-Feb	Consumer spending inflation PCE (mom)	Jan	0.5% -	0.5%	0.5% ○
★★★★	25-Feb	Consumer spending inflation PCE (yoy)	Jan	5.2% ▲	4.9%	5.2% ○
★★	25-Feb	Durable goods orders - preliminary data‡	Jan	1.6% ▲	1.2%	1.0% ◡
★★	25-Feb	Personal income (sa, mom)‡	Jan	0.0% ▼	0.4%	-0.3% ◡
★★	25-Feb	Personal spending (sa, mom)‡	Jan	2.1% ▲	-0.8%	1.6% ◡
★★	25-Feb	University of Michigan confidence index - final data	Feb	62.8 ▲	61.7	61.7 ◡

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Eurozone						
☆☆☆☆☆	15-Feb	GDP (sa, yoy) - preliminary data	4Q	4.6% -	4.6%	4.6% ○
☆☆☆☆☆	15-Feb	GDP (sa, qoq) - preliminary data	4Q	0.3% -	0.3%	0.3% ○
☆☆	15-Feb	Trade balance (EUR mn)	Dec	- 4.6 ▼	- 1.5	--
☆☆	15-Feb	ZEW survey expectations	Feb	48.6 ▼	49.4	--
☆☆☆☆	16-Feb	Industrial production (sa, mom)‡	Dec	1.2% ▼	2.4%	0.3% ▲
☆☆☆☆	16-Feb	Industrial production (wda, yoy)‡	Dec	1.6% ▲	-1.4%	-0.5% ▲
☆☆	18-Feb	Consumer confidence - estimation	Feb	- 8.8 ▼	- 8.5	- 8.0 ◡
☆☆☆☆	21-Feb	Composite PMI - preliminary data	Feb	55.8 ▲	52.3	52.9 ▲
☆☆☆☆	21-Feb	Manufacturing PMI - preliminary data	Feb	58.4 ▼	58.7	58.7 ◡
☆☆☆☆	21-Feb	Services PMI - preliminary data	Feb	55.8 ▲	51.1	52.1 ▲
☆☆☆☆	23-Feb	Consumer inflation CPI (yoy) - final data‡	Jan	5.1% ▲	5.0%	5.1% ○
☆☆☆☆	23-Feb	Core CPI (yoy) - final data	Jan	2.3% -	2.3%	2.3% ○
☆☆	25-Feb	M3 money supply (yoy)	Jan	6.4% ▼	6.9%	6.7% ◡
☆☆	25-Feb	Economic confidence	Feb	114 ▲	113	113 ▲
☆☆	25-Feb	Industrial confidence	Feb	14.0 ▲	13.9	14.1 ◡
☆☆	25-Feb	Consumer confidence - final data	Feb	- 8.8 -	- 8.8	--
Germany						
☆☆☆☆	21-Feb	Composite PMI - preliminary data	Feb	56.2 ▲	53.8	54.5 ▲
☆☆☆☆	21-Feb	Manufacturing PMI - preliminary data	Feb	58.5 ▼	59.8	59.8 ◡
☆☆	22-Feb	IFO business climate‡	Feb	98.9 ▲	96.0	96.5 ▲
☆☆	23-Feb	GfK consumer confidence	Mar	- 8.1 ▼	- 6.7	- 6.3 ◡
☆☆☆☆☆	25-Feb	GDP (yoy) - final data	4Q	1.8% ▲	1.4%	1.4% ▲
☆☆☆☆☆	25-Feb	GDP (sa, qoq) - final data	4Q	-0.3% ▲	-0.7%	-0.7% ▲
France						
☆☆☆☆	18-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	3.3% -	3.3%	3.3% ○
☆☆☆☆	18-Feb	Consumer inflation CPI (yoy) - final data	Jan	2.9% -	2.9%	2.9% ○
☆☆☆☆	21-Feb	Composite PMI - preliminary data	Feb	57.4 ▲	52.7	53.0 ▲
☆☆☆☆	21-Feb	Manufacturing PMI - preliminary data	Feb	57.6 ▲	55.5	55.5 ▲
☆☆☆☆☆	25-Feb	GDP (yoy) - final data	4Q	5.4% -	5.4%	5.4% ○
☆☆☆☆☆	25-Feb	GDP (qoq) - final data	4Q	0.7% -	0.7%	0.7% ○
Italy						
☆☆☆☆	22-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	5.1% ▼	5.3%	5.3% ○
UK						
☆☆	15-Feb	Unemployment rate (ILO, 3-months)	Dec	4.1% -	4.1%	4.1% ○
☆☆☆☆	16-Feb	Consumer inflation CPI (yoy)	Jan	5.5% ▲	5.4%	5.4% ▲
☆☆☆☆	21-Feb	Manufacturing PMI (sa) - preliminary data	Feb	57.3 -	57.3	57.0 ▲
☆☆☆☆	21-Feb	Composite PMI - preliminary data	Feb	60.2 ▲	54.2	55.3 ▲
Japan						
☆☆☆☆☆	15-Feb	GDP (annualized, qoq) - preliminary data‡	4Q	5.4% ▲	-2.7%	6.0% ◡
☆☆☆☆☆	15-Feb	GDP (qoq, sa) - preliminary data‡	4Q	1.3% ▲	-0.7%	1.5% ◡
☆☆☆☆	15-Feb	Industrial production (yoy) - final data	Dec	2.7% -	2.7%	--
☆☆☆☆	18-Feb	Consumer inflation CPI (yoy)	Jan	0.5% ▼	0.8%	0.6% ◡
☆☆☆☆	21-Feb	Composite PMI - preliminary data	Feb	44.6 ▼	49.9	--
☆☆☆☆	21-Feb	Manufacturing PMI - preliminary data	Feb	52.9 ▼	55.4	--
Chile						
<i>No major data in the period</i>						
Canada						
☆☆☆☆	16-Feb	Consumer inflation CPI (yoy)	Jan	5.1% ▲	4.8%	4.8% ▲

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

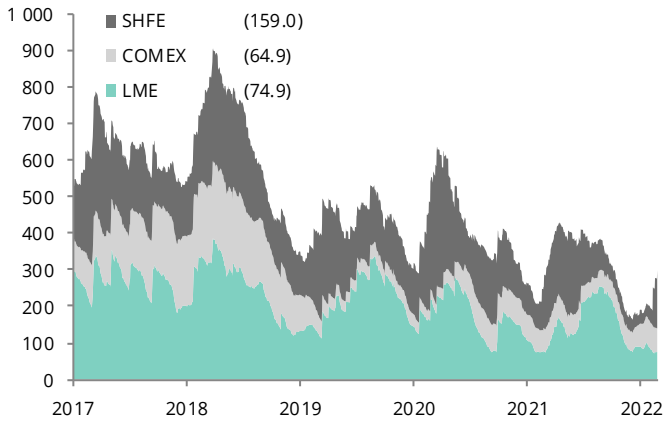
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 25-Feb-22)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t; Mo in USD/lbs)									
Copper	9 920.00	▼ -1.2%	▲ 2.4%	▲ 2.4%	▲ 3.2%	9 855.68	9 565.00	10 220.50	
Molybdenum	18.91	▼ -0.7%	▲ 1.2%	▲ 1.2%	▲	19.01	18.69	19.19	
Nickel	24 700.00	▲ 4.2%	▲ 18.0%	▲ 18.0%	▲ 26.2%	23 201.03	20 480.00	26 105.00	
Aluminum	3 355.50	▲ 4.9%	▲ 19.6%	▲ 19.6%	▲ 50.9%	3 123.79	2 815.50	3 519.00	
Tin	45 200.00	▲ 2.3%	▲ 14.0%	▲ 14.0%	▲ 52.9%	42 896.03	39 400.00	45 795.00	
Zinc	3 640.00	▼ -0.9%	▲ 0.3%	▲ 0.3%	▲ 25.8%	3 625.09	3 535.00	3 738.00	
Lead	2 359.00	▲ 3.1%	▲ 1.3%	▲ 1.3%	▲ 9.3%	2 319.23	2 199.00	2 393.50	
LBMA (USD/troz)									
Silver	24.21	▲ 5.7%	▲ 4.9%	▲ 4.9%	▼ -13.3%	23.27	22.24	25.32	
Gold ²	1 884.80	▲ 2.9%	▲ 3.6%	▲ 3.6%	▲ 5.9%	1 834.65	1 788.15	1 936.30	
LPPM (USD/troz)									
Platinum ²	1 055.00	▲ 3.1%	▲ 9.7%	▲ 9.7%	▼ -15.5%	1 021.41	931.00	1 101.00	
Palladium ²	2 320.00	▲ 4.3%	▲ 20.3%	▲ 20.3%	▼ -5.9%	2 183.79	1 854.00	2 680.00	
FX ³									
EURUSD	1.1216	▼ -1.8%	▼ -1.0%	▼ -1.0%	▼ -8.3%	1.1330	1.1138	1.1464	
EURPLN	4.6608	▲ 3.2%	▲ 1.3%	▲ 1.3%	▲ 3.2%	4.5467	4.4879	4.6608	
USDPLN	4.1683	▲ 5.1%	▲ 2.7%	▲ 2.7%	▲ 12.8%	4.0116	3.9218	4.1683	
USDCAD	1.2747	▲ 0.4%	▲ 0.5%	▲ 0.5%	▲ 1.7%	1.2664	1.2474	1.2832	
USDCNY	6.3175	▼ -0.6%	▼ -0.6%	▼ -0.6%	▼ -2.1%	6.3492	6.3145	6.3830	
USDCLP	807.26	▲ 0.4%	▼ -4.4%	▼ -4.4%	▲ 14.7%	814.22	787.05	852.03	
Money market									
3m LIBOR USD	0.523	▲ 0.02	▲ 0.31	▲ 0.31	▲ 0.33	0.340	0.216	0.523	
3m EURIBOR	-0.528	▼ -0.01	▲ 0.04	▲ 0.04	▲ 0.01	-0.546	-0.576	-0.516	
3m WIBOR	3.590	▲ 0.29	▲ 1.05	▲ 1.05	▲ 3.38	3.060	2.590	3.590	
5y USD interest rate swap	1.961	▲ 0.01	▲ 0.59	▲ 0.59	▲ 1.07	1.767	1.445	2.032	
5y EUR interest rate swap	0.619	▼ -0.03	▲ 0.60	▲ 0.60	▲ 0.88	0.319	0.031	0.669	
5y PLN interest rate swap	4.145	▼ -0.02	▲ 0.40	▲ 0.40	▲ 3.04	4.037	3.780	4.275	
Fuel									
WTI Cushing	92.59	▼ -0.5%	▲ 20.3%	▲ 20.3%	▲ 45.7%	87.40	76.99	95.46	
Brent	97.68	▲ 0.1%	▲ 26.1%	▲ 26.1%	▲ 47.9%	90.57	79.83	99.09	
Diesel NY (ULSD)	285.70	▼ -3.9%	▲ 19.2%	▲ 19.2%	▲ 49.8%	274.87	241.70	301.93	
Others									
VIX	27.59	▲ 0.23	▲ 10.37	▲ 10.37	▼ -1.30	24.49	16.91	31.96	
BBG Commodity Index	112.40	▲ 2.3%	▲ 13.3%	▲ 13.3%	▲ 29.0%	107.40	100.58	115.27	
S&P500	4 384.65	▼ -0.8%	▼ -8.0%	▼ -8.0%	▲ 14.5%	4 502.42	4 225.50	4 793.54	
DAX	14 567.23	▼ -5.6%	▼ -8.3%	▼ -8.3%	▲ 5.0%	15 446.93	14 052.10	16 271.75	
Shanghai Composite	3 451.41	▼ -0.3%	▼ -5.2%	▼ -5.2%	▼ -3.7%	3 502.14	3 361.44	3 632.33	
WIG 20	1 970.78	▼ -10.5%	▼ -13.1%	▼ -13.1%	▲ 1.8%	2 221.09	1 817.45	2 411.11	
KGHM	155.70	▲ 1.7%	▲ 11.7%	▲ 11.7%	▼ -22.2%	147.15	135.05	157.55	

° 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

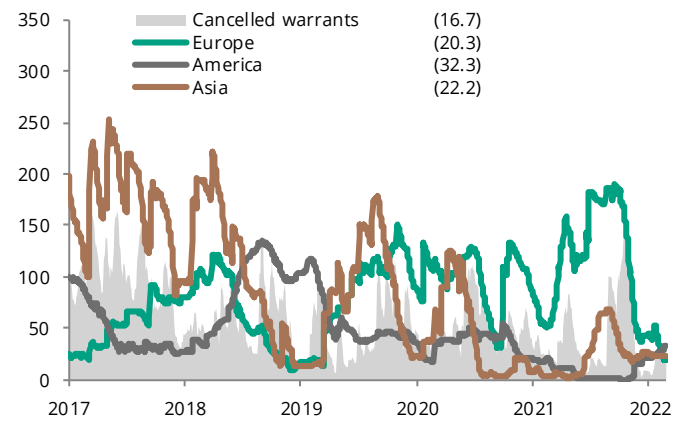
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



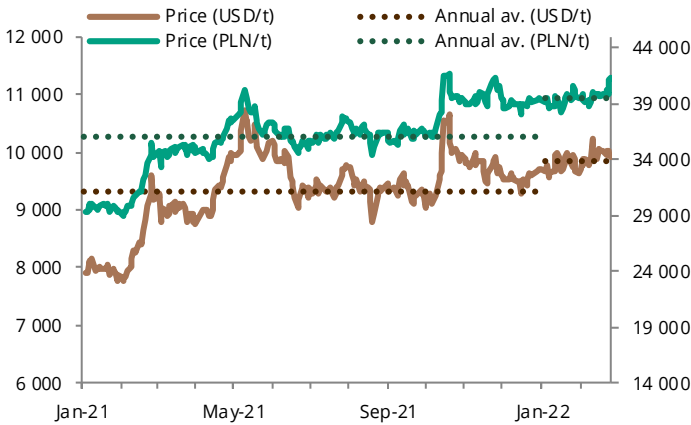
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



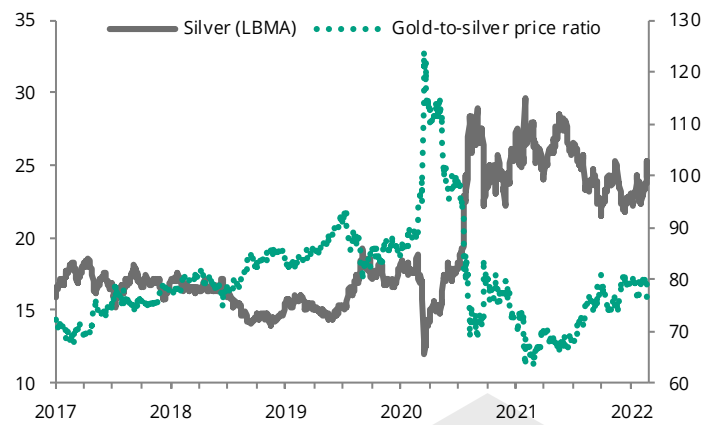
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



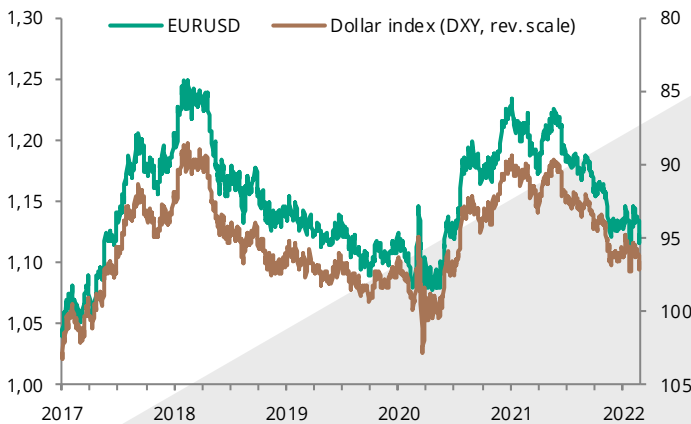
Source: Bloomberg, KGHM Polska Miedź

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



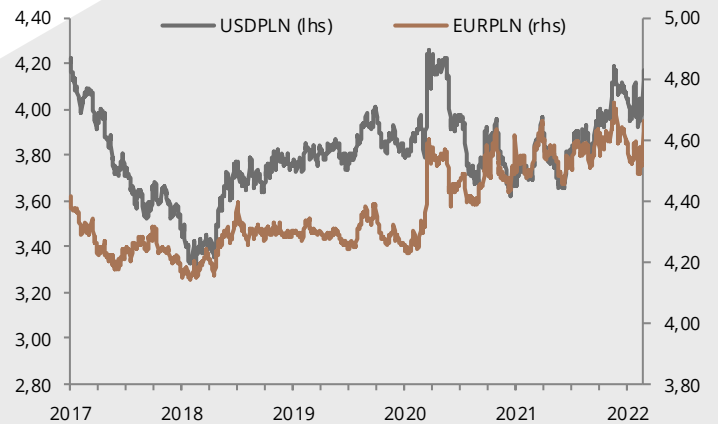
Source: Bloomberg, KGHM Polska Miedź

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:
14 - 27 February 2022.

- Barclays Capital, ▪ BofA Merrill Lynch, ▪ Citi Research, ▪ CRU Group, ▪ Deutsche Bank Markets Research,
- GavekalDragonomics, ▪ Goldman Sachs, ▪ JPMorgan, ▪ Macquarie Capital Research, ▪ Mitsui Bussan Commodities,
- Morgan Stanley Research, ▪ SMM Information & Technology, ▪ Sharps Pixley.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ thebulliondesk.com, ▪ lbma.org.uk, ▪ lme.co.uk, ▪ metalbulletin.com, ▪ nbp.pl, , also: Bloomberg and Thomson Reuters.

Official metals prices are available on following websites:

- base metals: www.lme.com/dataprices_products.asp (charge-free logging)
- silver and gold: www.lbma.org.uk/pricing-and-statistics
- platinum and palladium: www.lppm.com/statistics.aspx

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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