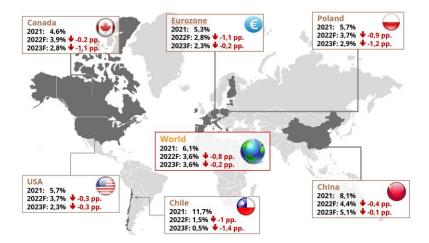


Market Overview

- Copper: The government announced a state of emergency at the Cuajone mine, saying it would send military forces and suspend the right to protest at the mine that has been shuttered for over 50 days. This is a significant turn from President Castillo, who has so far avoided confrontation with protesters despite a series of blockades that hit the country's main export sector (page 2).
- Precious metals: Metals Focus analysts expect global silver demand to increase to 1.1 billion ounces this year, 5% more than in 2021. This sizzling demand will push the silver market into a deficit of 71.5 million ounces this year after a shortfall of 51.8 million ounces in 2021 (page 4).
- IMF: According to IMF global growth is projected to slow from an estimated 6.1 percent in 2021 to 3.6 percent in 2022 and 2023. This is 0.8 and 0.2 percentage points lower for 2022 and 2023 than in the January World Economic Outlook Update. Beyond 2023, global growth is forecast to decline to about 3.3 percent over the medium term (page 5).

IMF World Economic Outlook - April 2022



Source: IMF, KGHM Polska Miedź S.A.



Key market prices

		Close price	2w chng.
	LME (USD/t)	•	_
\blacksquare	Copper	10 230.50	-1.5%
\blacksquare	Nickel	33 850.00	-0.7%
	LBMA (USD/troz)		
•	Silver	24.35	-1.1%
	Gold (PM)	1 941.55	0.0%
	FX		
•	EURUSD	1.0817	-0.4%
•	EURPLN	4.6361	-0.1%
	USDPLN	4.2935	0.5%
	USDCAD	1.2702	0.9%
	USDCLP	817.85	1.2%
	Stocks		
•	KGHM	150.75	-9.7%
ourco.	Plaambara KCHM Da	laka Mindá C A . /	more on nega

Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 10)

Important macroeconomic data

	Release	For	
	Manufacturing PMI	Apr	59.7 🔺
	Manufacturing PMI (sa)	Apr	55.3
	Manufacturing PMI	Apr	55.3 🔻
	CPI (yoy)	Mar	11.0% 🔺
★ 〕	GDP (yoy)	1Q	4.8% 🔺

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

Market Risk Unit

marketrisk@kghm.com



Base and precious metals | Other commodities

Copper

Peru's Castillo hardens stance on mining protests

The government announced a state of emergency at the Cuajone mine, saying it would send military forces and suspend the right to protest at the mine that has been shuttered for over 50 days. This is a significant turn from President Castillo, who has so far avoided confrontation with protesters despite a series of blockades that hit the country's main export sector.

The protests have taken a combined 20% of Peru's copper production offline

As Reuters informs, Peru's leftist President Pedro Castillo has signaled a tougher stance on protests against mining companies. Mining activity has been halted at Southern Copper Corp's Cuajone since late February as protesters from the mostly indigenous surrounding communities demand financial compensation and a share of future profits. The government announced a state of emergency at the Cuajone mine, saying it would send military forces and suspend the right to protest at the mine that has been shuttered for over 50 days. That's a significant pivot by Castillo. He has avoided clashing with protesters despite a series of blockades that have hit the country's main export sector. Meanwhile, residents of the indigenous Fuerabamba community pitched tents just feet away from Chinese-owned MMG Ltd's huge Las Bambas open pit copper deposit. The protests have taken a combined 20% of Peru's copper production offline. "Under this administration there are a greater number of mining protests and they are more serious," said Pablo O'Brien, a mining expert who worked as an adviser to several mining ministers, including under Castillo. "The protests last longer than they ever did and they have spread to regions where you didn't see social conflicts before." Protests have also hit other mines in Peru since Castillo came to office last July, including Antapaccay, Hudbay Minerals Inc's Constancia and Antamina mines. In neighboring Chile, the No. 1 global copper producer, BHP is also facing road blockades that have disrupted operations at its major Escondida mine, forcing it to cut its annual copper production outlook. But the pinch has been felt harder in Peru, where Cuajone and Las Bambas put together add up to 1.5% of the country's gross domestic product. Las Bambas executives have called on the government to also declare a state of emergency at the mine. Protesters, however, say they are digging in for the long-run, indicating that disruptions to the mining sector won't be easy to dismantle and that industry will continue to pressure the government to take firmer action. "We could stay here for years," Edison Vargas, 32, the president of the Fuerabamba community, told Reuters. Vargas and others have set up camp inside Las Bambas and say they are demanding the return of their ancestral lands. The mine had resettled some 400 Fuerabamba families over a decade ago in a compact urban town dubbed Nueva Fuerabamba to make way for the construction of Las Bambas. It paid residents 600 million soles (\$161 million) as compensation for the move, mine



executives say. Las Bambas is notorious for mining conflicts and has faced over 450 days of road blockades since the mine opened in 2016.

Chile's Codelco starts offering exploration assets to third parties

The company offers cooperation on 34 projects at various stages of development. Applicants must be able to contribute the capital, innovation or technology needed to implement the projects.

As Reuters informs, chilean state-owned mining company Codelco said it has commenced seeking prospect partnerships for 34 projects across the country. The offer was first flagged by a company executive at the end of March but met opposition from unions, which saw it as a bid to privatize assets of the stateowned company. Codelco said the 34 projects meet "all the internal and legal requirements to be arranged for partnerships with third parties" since they are not part of deposits currently being mined or destined for expansion. "The selected portfolio is made up of projects that cover approximately 255,000 hectares under concession to Codelco, and that are in an early stage of exploration with different degrees of progress," it said in a statement, adding that basic exploration is mainly for copper and gold. Eight of the projects have drilling information, 22 have geophysical information and 33 have with geochemical information, the statement said. Codelco said that the applicants must be able to attract capital, innovation or the necessary technology for the projects. The company, which already has a partnership with Freeport McMoran in El Abra mine, added that the model will enable it to evaluate the possibility of "upcoming construction and operation of new deposits." Chilean law states that Codelco must carry out basic exploration work before it can form partnerships with third parties on prospects. Partnerships must also have the support of the board of directors and a favorable report by the Chilean Copper Commission.

Other important information on copper market:

- China's copper imports in March fell for third month, slipping 8.8% from the same month a year earlier on easing demand, data from the General Administration of Customs showed on Wednesday. The world's top metals consumer brought in 504,009 tonnes of unwrought copper and products last month, down from 552,317 tonnes in March 2021 and compared with 459,461 tonnes a month earlier, according to the customs data. March imports of copper concentrate, or partially processed copper ore, totalled 2.18 million tonnes, according to the customs data.
- The global world refined copper market showed a 16,000 tonnes surplus in January 2022, compared with a 38,000 tonnes surplus in 2021 and 74,000 tonnes deficit in December 2021, the International Copper Study Group (ICSG) said in its latest monthly bulletin. World refined copper output in January was 2.149 million tonnes, while consumption was 2.133 million tonnes.



Precious Metals

Silver demand to reach its highest on record in 2022, Silver Institute says

Metals Focus analysts expect global silver demand to increase to 1.1 billion ounces this year, 5% more than in 2021. This sizzling demand will push the silver market into a deficit of 71.5 million ounces this year after a shortfall of 51.8 million ounces in 2021.

Silver demand will climb to a record level this year thanks to increasing use of solar panels as governments boost renewable energy to meet climate goals. Global silver demand is expected to rise to 1.1 billion ounces this year, up 5% from 2021, consultants Metals Focus said in an annual report compiled for the Silver Institute. That is the highest since Metals Focus's records began in 2010. This sizzling demand will push the silver market into a deficit of 71.5 million ounces this year after a shortfall of 51.8 million ounces in 2021, Metals Focus said. "We believe that this is the start of a structural change in the market where we see deficits that will carry on for some time," said Metals Focus director Philip Newman. Uncertainty around the Ukraine war and the possibility of a global recession presents a risk to industrial demand, which accounts for around half of silver consumption, he said. The increase in silver usage builds on a rebound from a slump during the early period of the covid-19 pandemic. Last year, every key element of demand rose for the first time since 1997, the report said. Buying of silver coins and bars jumped 36% last year to 278.7 million ounces, its highest since 2015, after a buying frenzy triggered by posts on a Reddit forum. The silver price rally caused by that buying was short-lived but the retail market remains tight, with buyers stocking up on the precious metal as a safe-haven store of value and a hedge against inflation and geopolitical uncertainty. In 2021, demand for silver for jewellery rose 21% to 181.4 million ounces but remained below prepandemic levels as higher prices deterred some physical buying in India, one of the biggest markets, the report said. The silver price is expected to average \$23.90 an ounce in 2022, the report said.



Global economies | Foreign exchange markets

IMF: War Sets Back The Global Recovery

According to IMF global growth is projected to slow from an estimated 6.1 percent in 2021 to 3.6 percent in 2022 and 2023. This is 0.8 and 0.2 percentage points lower for 2022 and 2023 than in the January World Economic Outlook Update. Beyond 2023, global growth is forecast to decline to about 3.3 percent over the medium term.

The war in Ukraine has triggered a costly humanitarian crisis. Economic damage from the conflict will contribute to a significant slowdown in global growth in 2022. A severe double-digit drop in GDP for Ukraine and a large contraction in Russia are more than likely, along with worldwide spillovers through commodity markets, trade, and financial channels. Even as the war reduces growth, it will add to inflation. Fuel and food prices have increased rapidly, with vulnerable populations—particularly in low-income countries— most affected. Elevated inflation will complicate the trade-offs central banks face between containing price pressures and safeguarding growth. Interest rates are expected to rise as central banks tighten policy, exerting pressure on emerging market and developing economies. The invasion has contributed to economic fragmentation as a significant number of countries sever commercial ties with Russia and risks derailing the post-pandemic recovery. In addition, the conflict adds to the economic strains wrought by the pandemic. Although many parts of the world appear to be moving past the acute phase of the COVID-19 crisis, deaths remain high. Moreover, recent lockdowns in key manufacturing and trade hubs in China will likely compound supply disruptions elsewhere.

Global growth is projected to slow from an estimated 6.1 percent in 2021 to 3.6 percent in 2022 and 2023. This is 0.8 and 0.2 percentage points lower for 2022 and 2023 than in the January World Economic Outlook Update. Beyond 2023, global growth is forecast to decline to about 3.3 percent over the medium term. Crucially, this forecast assumes that the conflict remains confined to Ukraine, further sanctions on Russia exempt the energy sector (although the impact of European countries' decisions to wean themselves off Russian energy and embargoes announced through March 31, 2022, are factored into the baseline), and the pandemic's health and economic impacts abate over the course of 2022. With a few exceptions, employment and output will typically remain below prepandemic trends through 2026. Scarring effects are expected to be much larger in emerging market than in advanced economies—reflecting more limited policy support and generally slower vaccination. Unusually high uncertainty surrounds this forecast, and downside risks to the global outlook dominate—including from a possible worsening of the war, escalation of sanctions on Russia, a sharperthan-anticipated deceleration in China, and a renewed flare-up of the pandemic should a new, more virulent virus strain emerge. Moreover, the war in Ukraine has increased the probability of wider social tensions because of higher food and energy prices.



Inflation is expected to remain elevated for longer than in the previous forecast, driven by war-induced commodity price increases and broadening price pressures. For 2022, inflation is projected at 5.7 percent in advanced economies and 8.7 percent in emerging market and developing economies—1.8 and 2.8 percentage points higher than projected in January. Although a gradual resolution of supply-demand imbalances and a modest pickup in labor supply are expected in the baseline, easing price inflation eventually, uncertainty again surrounds the forecast. If signs emerge that inflation will be high over the medium term, central banks will be forced to react faster than currently anticipated—raising interest rates and exposing debt vulnerabilities.

Although the drivers of inflation are in many cases beyond the control of central banks, price pressures are increasingly broad-based. The transmission of the war shock will vary across countries, depending on trade and financial linkages, exposure to commodity price increases, and the strength of the preexisting inflation surge. The appropriate monetary policy response will therefore differ across economies. In some places, including the United States, inflationary pressure had strengthened considerably and become more broad-based even before the Russian invasion of Ukraine—buoyed by strong policy support. In other countries, the prominence of fuel- and war-affected commodities in local consumption baskets could lead to broader and more persistent price pressures. In countries where the harmful effects from the war are larger, the trade-off between safeguarding growth and containing inflation will be more challenging. Central banks should remain vigilant to the impact of price pressures on inflation expectations and continue to communicate clearly on the outlook for inflation and monetary policy.

Fiscal policies should depend on exposure to the war, the state of the pandemic, and the strength of the recovery. Following a huge and necessary fiscal expansion in many countries during the pandemic, debt levels are at all-time highs and governments are more exposed than ever to higher interest rates. Where fiscal space is more limited, governments will need to tread a difficult path between fiscal consolidation and prioritizing essential expenditures. Moreover, authorities should be vigilant regarding private sector vulnerabilities to rising interest rates.

Beyond the immediate challenges of the war and the pandemic, policymakers should not lose sight of longer-term goals. Pandemic disruptions have highlighted the productivity of novel ways of working. Governments should look to harness positive structural change wherever possible, embracing the digital transformation and retooling and reskilling workers to meet its challenges. Carbon pricing and fossil fuel subsidy reform can also help with the transition to a cleaner mode of production, less exposed to fossil fuel prices. The green energy transition will also entail labor market reallocation across occupations and sectors. Multilateral efforts to respond to the humanitarian crisis, prevent further economic fragmentation, maintain global liquidity, manage debt distress, tackle climate change, and end the pandemic remain essential.

The adverse consequences from the current geopolitical conflict are a reminder of the importance of global cooperation. This extends from addressing the immediate needs of war refugees to the eventual great effort to rebuild Ukraine.



As countries contend with higher volatility, spending pressures from humanitarian response needs, and tighter financial market conditions, the likelihood that some countries will become financially constrained increases. Where liquidity support alone is insufficient, progress toward orderly debt restructuring is essential. On climate, advanced economies must make real progress toward their COP26 climate summit pledges. And as the pandemic is not yet over, governments must use all tools at their disposal to combat the virus.



Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus
		China				*):
0000	11-Apr	Consumer inflation CPI (yoy)	Mar	1.5%	0.9%	1.4%
00	11-Apr	Producer inflation PPI (yoy)	Mar	8.3%	8.8%	8.1%
٥	11-Apr	New yuan loans (CNY bn)‡	Mar	3 130	1 234	2 750
00	13-Apr	Trade balance (USD bn)‡	Mar	47.4	94.3	21.7
00	13-Apr	Exports (yoy)	Mar	14.7%	6.2%	12.8%
00000	15-Apr	Reserve requirement ratio	Apr	11.3%	11.5%	
00000	18-Apr	GDP(yoy)	1Q	4.8%	4.0%	4.2%
00000	18-Apr	GDP (sa, qoq)	1Q	1.3%	1.6%	0.7%
0000	18-Apr	Industrial production (yoy)	Mar	5.0%		4.0%
00	18-Apr	Fixed assets investments (ytd, yoy)	Mar	9.3%	12.2%	8.4%
0	18-Apr	Retail sales (yoy)	Mar	-3.5%		-3.0%
		Poland				
00	13-Apr	Trade balance (EUR mn)‡	Feb	-1 741 🔻	-1 669	-1 503
00	13-Apr	Exports (EUR mn)‡	Feb	25 270	25 166	25 900
00	13-Apr	Current account balance (EUR mn)‡	Feb	-2 871	- 638	-2 095
0000	15-Apr	Consumer inflation CPI (yoy) - final data	Mar	11.0%	10.9%	
0000	19-Apr	Core CPI (excluding food and energy, yoy)	Mar	6.9%	6.7%	7.0%
0000	21-Apr	Sold industrial production (yoy)	Mar	17.3%	17.6%	11.6%
00	21-Apr	Average gross salary (yoy)	Mar	12.4%	11.7%	10.6%
00	21-Apr	Producer inflation PPI (yoy)‡	Mar	20.0%	16.1%	18.1%
0	21-Apr	Employment (yoy)	Mar	2.4%	2.2%	2.4%
000	22-Apr	Retail sales (yoy)	Mar	22.0%	16.5%	18.6%
		US				
0000	12-Apr	Consumer inflation CPI (mom)	Mar	1.2%	0.8%	1.2%
0000	12-Apr	Consumer inflation CPI (yoy)	Mar	8.5%	7.9%	8.4%
00	14-Apr	Retail sales (excluding autos, mom)‡	Mar	1.1%	1.8%	1.0%
00	14-Apr	University of Michigan confidence index - preliminary data	Apr	65.7	59.4	59.0
0000	15-Apr	Industrial production (mom)‡	Mar	0.9% =	0.9%	0.4%
0	15-Apr	Capacity utilization‡	Mar	78.3% 🛕	77.7%	77.8%
00	21-Apr	Philadelphia Fed business outlook	Apr	17.6	27.4	21.4
000	22-Apr	Composite PMI - preliminary data	Apr	55.1	57.7	57.9
000	22-Apr	Manufacturing PMI - preliminary data	Apr	59.7	58.8	58.0
000	22-Apr	PMI services - preliminary data	Apr	54.7 ▼	58.0	58.0
		Eurozone				
0	12-Apr	ZEW survey expectations	Apr	- 43.0 V	- 38.7	
00000	14-Apr	ECB main refinancing rate	Apr	0.00% =	0.00%	0.00%
00000	14-Apr	ECB deposit facility rate	Apr	-0.5% =	-0.5%	-0.5%
0000	20-Apr	Industrial production (sa, mom)‡	Feb	0.7%	-0.7%	0.7%
0000	20-Apr	Industrial production (wda, yoy)‡	Feb	2.0%	-1.5%	1.5%
9	20-Apr	Trade balance (EUR mn)	Feb	- 7.6 🛕	- 27.2	
0000	21-Apr	Consumer inflation CPI (yoy) - final data	Mar	7.4%	7.5%	7.5%
0000	21-Apr	Core CPI (yoy) - final data	Mar	2.9%	3.0%	3.0%
0	21-Apr	Consumer confidence - estimation	Apr	- 16.9 🛕	- 18.7	- 20.0



Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		Germany				
0000	12-Apr	Harmonized consumer inflation HICP (yoy) - final data	Mar	7.6% =	7.6%	7.6%
0000	12-Apr	Consumer inflation CPI (yoy) - final data	Mar	7.3% =	7.3%	7.3%
000	22-Apr	Composite PMI - preliminary data	Apr	54.5	55.1	54.1
000	22-Apr	Manufacturing PMI - preliminary data	Apr	54.1	56.9	54.5
		France				
0000	15-Apr	Harmonized consumer inflation HICP (yoy) - final data	Mar	5.1% =	5.1%	5.1%
0000	15-Apr	Consumer inflation CPI (yoy) - final data	Mar	4.5% =	4.5%	4.5%
000	22-Apr	Composite PMI - preliminary data	Apr	57.5	56.3	55.0
000	22-Apr	Manufacturing PMI - preliminary data	Apr	55.4	54.7	53.7
		Italy				
0000	13-Apr	Industrial production (wda, yoy)‡	Feb	3.3% 🛕	-2.7%	0.9%
0000	15-Apr	Harmonized consumer inflation HICP (yoy) - final data	Mar	6.8%	7.0%	7.0%
		UK				
0000	11-Apr	Industrial production (yoy)‡	Feb	1.6%	3.0%	2.1%
00	12-Apr	Unemployment rate (ILO, 3-months)	Feb	3.8%	3.9%	3.8%
0000	13-Apr	Consumer inflation CPI (yoy)	Mar	7.0%	6.2%	6.7%
000	22-Apr	Manufacturing PMI (sa) - preliminary data	Apr	55.3	55.2	54.0
000	22-Apr	Composite PMI - preliminary data	Apr	57.6	60.9	58.7
		Japan				
0000	19-Apr	Industrial production (yoy) - final data	Feb	0.5%	0.2%	
0000	22-Apr	Consumer inflation CPI (yoy)	Mar	1.2%	0.9%	1.2%
000	22-Apr	Composite PMI - preliminary data	Apr	50.9	50.3	
000	22-Apr	Manufacturing PMI - preliminary data	Apr	53.4	54.1	<u></u>
		Chile				*
		No major data in the perio	d			
		Canada				*
00000	13-Apr	BoC base rate decision	Apr	1.00%	0.50%	1.00%

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



Key market data

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

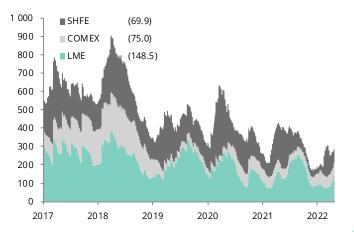
Price change	Max 0 10 730.00 9 19.33 0 45 795.00 0 3 984.50 0 50 050.00 0 4 530.00 0 2 513.00 4 26.18 5 2 039.05
Copper 10 230.50 ▼ -1.5% ▼ -1.0% 5.6% 8.0% 10 050.85 9 565.0 Molybdenum 19.25 △ 0.2% ▼ -0.3% △ 3.1% △ 19.10 18.0 Nickel 33 850.00 ▼ -0.7% △ 1.3% △ 61.8% △ 111.4% 27 861.41 20 480.0 Aluminum 3 244.00 ▼ -4.4% ▼ -7.4% △ 15.6% △ 36.7% 3 287.36 2 815.5 Tin 42 200.00 ▼ -4.7% ▼ -4.5% △ 6.5% △ 48.6% 43 527.47 39 400.0 Zinc 4 515.00 △ 5.5% △ 6.0% △ 24.4% △ 61.0% 3 872.54 3 535.0 Lead 2 400.00 ▼ -1.0% ▼ -1.4% △ 3.1% △ 19.0% 2 351.32 2 199.0	9 19.33 0 45 795.00 0 3 984.50 0 50 050.00 0 4 530.00 0 2 513.00 4 26.18 5 2 039.05
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LBMA (USD/troz)	5 2 039.05
Silver 24.35 ▼ -1.1% ▼ -1.9% ▲ 5.5% ▼ -7.4% 24.17 22.3	
Gold ² 1 941.55 ▲ 0.0% ▼ 0.0% ▲ 6.7% ▲ 8.6% 1 889.87 1 788.	0 1 151.00
LPPM (USD/troz)	0 1 151.00
Platinum ² 940.00 ▼ -3.3% ▼ -4.4% ▼ -2.3% ▼ -22.6% 1 020.36 931.0	
Palladium ² 2 405.00 ▼ -1.5% ▲ 6.5% ▲ 24.7% ▼ -16.5% 2 339.57 1 854.0	0 3 015.00
FX ³	
EURUSD 1.0817 ▼ -0.4% ▼ -2.6% ▼ -4.5% ▼ -10.2% 1.1157 1.080	3 1.1464
EURPLN 4.6361 ▼ -0.1% ▼ -0.4% ▲ 0.8% ▲ 1.8% 4.6297 4.48°	9 4.9647
USDPLN 4.2935 ▲ 0.5% ▲ 2.7% ▲ 5.8% ▲ 13.3% 4.1535 3.92	8 4.5722
USDCAD 1.2702 ▲ 0.9% ▲ 1.6% ▲ 0.2% ▲ 1.6% 1.2644 1.245	1 1.2867
USDCNY 6.5014 ▲ 2.1% ▲ 2.5% ▲ 2.3% ▲ 0.2% 6.3550 6.309	3 6.5014
USDCLP 817.85 ▲ 1.2% ▲ 3.9% ▼ -3.2% ▲ 17.4% 807.78 777.	0 852.03
Money market	
3m LIBOR USD 1.214 ▲ 0.20 ▲ 0.25 ▲ 1.00 ▲ 1.04 0.620 0.25	6 1.214
3m EURIBOR -0.427 ▲ 0.02 ▲ 0.03 ▲ 0.15 ▲ 0.11 -0.514 -0.55	6 -0.427
3m WIBOR 5.740 ▲ 0.42 ▲ 0.97 ▲ 3.20 ▲ 5.53 3.872 2.59	0 5.740
5y USD interest rate swap 2.993 ▲ 0.17 ▲ 0.47 ▲ 1.62 ▲ 2.10 2.104 1.44	5 3.034
5y EUR interest rate swap 1.434 ▲ 0.23 ▲ 0.45 ▲ 1.42 ▲ 1.73 0.611 0.00	1 1.434
5y PLN interest rate swap 6.260 ▲ 0.37 ▲ 1.10 ▲ 2.52 ▲ 4.94 4.624 3.78	0 6.260
Fuel	
WTI Cushing 103.07 ▲ 4.9% ▲ 2.8% ▲ 33.9% ▲ 67.7% 96.67 76.9	9 123.70
Brent 105.32 ▲ 3.3% ▼ -1.2% ▲ 36.0% ▲ 61.8% 101.13 79.8	3 133.89
Diesel NY (ULSD) 406.86 ▲ 15.7% ▲ 10.2% ▲ 69.8% ▲ 118.6% 327.14 241.	0 458.23
Others	
VIX 28.21 ▲ 7.05 ▲ 7.65 ▲ 10.99 ▲ 9.50 24.85 16.9	1 36.45
BBG Commodity Index 129.03 ▲ 2.1% ▲ 3.7% ▲ 30.1% ▲ 46.7% 117.13 100.5	8 134.99
S&P500 4 271.78 ▼ -4.8% ▼ -5.7% ▼ -10.4% ▲ 3.3% 4 456.76 4 170.3	0 4 793.54
DAX 14 142.09 ▼ -1.0% ▼ -1.9% ▼ -11.0% ▼ -7.7% 14 789.66 12 831.5	1 16 271.75
Shanghai Composite 3 086.92 ▼ -5.1% ▼ -5.1% ▼ -15.2% ▼ -10.9% 3 372.78 3 063.9	7 3 632.33
WIG 20 1 973.31 ▼ -5.4% ▼ -7.5% ▼ -13.0% ▼ -0.8% 2 142.91 1 817.4	5 2 411.11
KGHM 150.75 ▼ -9.7% ▼ -12.8% ▲ 8.1% ▼ -23.7% 159.71 135.0	5 182.20

[°]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

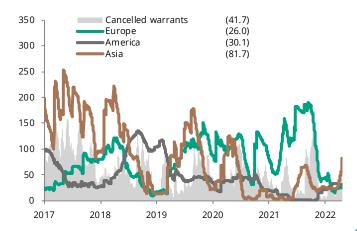


Copper: official exchange stocks (thousand tonnes)



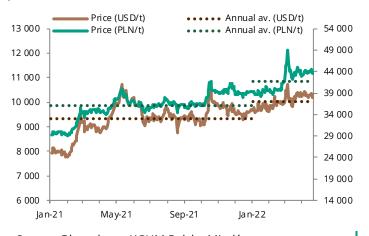
Note: Latest values in brackets. Source: Bloomberg, KGHM

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

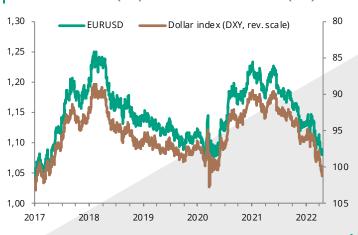
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs) 4,80 5,10 USDPLN (lhs) EURPLN (rhs) 4,60 4,90 4,40 4,20 4,70 4,00 4,50 3,80 3,60 4,30 3,40 4,10 3,20 3,00 3,90 2019 2017 2018 2020 2021 2022

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: 11 - 24 April 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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