

# **Market Overview**

- Copper: The benchmark for this year's TC/RC fell to \$59.50 per tonne and 5.95 cents per pound from what was already a lowball \$62.00 and 6.2 cents in 2019. This is due to the insufficient supply of copper concentrate, which this year is under additional threat due to COVID-19. Global mine output in the first 10 months of 2020 was still 0.5% lower than 2019 levels, according to the International Copper Study Group (page 2).
- Precious metals: After a call by Reddit Inc posters to create a short squeeze, silver for March delivery rose US\$0.99 to US\$26.91. Significant increases were also visible in the shares of mining companies producing this metal and funds based on silver (page 5).
- **Euro zone:** Stringent blockades to contain the coronavirus pandemic have hit hard the service industry dominating the euro zone. As a result, the block's IHS Markit PMI fell to 47.5 in January from 49.1 in December (page 7).

After a strong breakout in March 2020, the gold-silver price ratio returned to the long-term average



Source: Bloomberg, KGHM Polska Miedź S.A.

as of: 1<sup>st</sup> February 2021

#### Key market prices

		Close price	2w chng.
	LME (USD/t)		
$\blacksquare$	Copper	7 877.00	-1.3%
$\blacksquare$	Nickel	17 727.00	-1.4%
	LBMA (USD/troz)		
	Silver	27.42	8.6%
	Gold (PM)	1 863.80	1.3%
	FX		
	EURUSD	1.2136	0.1%
$\blacksquare$	EURPLN	4.5385	-0.2%
$\blacksquare$	USDPLN	3.7460	0.0%
	USDCAD	1.2780	0.4%
	USDCLP	741.40	0.8%
	Stocks		
_	KGHM	188.40	-4.9%

Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 11)

#### Important macroeconomic data

Release	For	
GDP (yoy)	4Q	6.5% 🔺
Industrial prod. (yoy)	Dec	11.2% 🔺
PMI services	Jan	57.5 🔺
GDP (sa, yoy)	4Q	-2.9% 🔺
Composite PMI	Jan	<b>40.6</b> ▼
	GDP (yoy) Industrial prod. (yoy) PMI services	GDP (yoy) 4Q Industrial prod. (yoy) Dec PMI services Jan GDP (sa, yoy) 4Q

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

#### **Market Risk Unit**

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### **Base and precious metals | Other commodities**

### Copper

#### World's copper mines struggle to recover from COVID-19

The benchmark for this year's TC/RC fell to \$59.50 per tonne and 5.95 cents per pound from what was already a lowball \$62.00 and 6.2 cents in 2019. This is due to the insufficient supply of copper concentrate, which this year is under additional threat due to COVID-19. Global mine output in the first 10 months of 2020 was still 0.5% lower than 2019 levels, according to the International Copper Study Group.

The ICSG's forecast was for world mined copper production to fall by 1.5% in 2020 but to come roaring back with 4.6% growth in 2021

The deadly coronavirus has taken a heavy toll on the world's copper mines. Output in key producer countries such as Peru cratered over the second quarter of 2020 as lockdowns and guarantine measures caused many mines drastically to reduce operations. Recovery has been patchy. Peruvian mines had just about returned to normal run-rates by October, but output in Chile, the world's largest copper producer, started sliding in the third quarter after a robust first half of the year. Global mine output in the first 10 months of 2020 was still 0.5% lower than 2019 levels, according to the International Copper Study Group (ICSG). What was supposed to be a year of mined supply growth turned out to be the second consecutive year of zero growth. The resulting supply chain stress is manifest in this year's benchmark smelter terms which are the lowest in a decade. There is as yet no sign of a turnaround in the raw materials segment of the copper supply chain, suggesting full COVID-19 recovery could be a protracted affair. Treatment and refining charges, which are what a smelter levies for processing copper concentrates into refined metal, are the best indicator of what is going on in the opaque raw materials market. And the message is clear. There's not enough concentrate to go around. The benchmark terms for this year's shipments fell to \$59.50 per tonne and 5.95 cents per pound from what was already a lowball \$62.00 and 6.2 cents in 2019. They haven't been this low since 2011, another year of mine supply stress, when they were settled at \$56.00 and 5.6 cents. Last year's supply woes coincided with increased appetite in China as new smelters entered the competition for raw materials. That should have translated into more concentrates imports. But after increases of 14% and 12% in 2018 and 2019 respectively, imports were down by 1% over the first 11 months of 2020. Unless there was a big rebound in December itself, 2020 could be the first year of lower concentrates arrivals since 2011. An unofficial ban on Australian material hasn't helped. Strained bilateral relations between Australia and China have impacted Chinese purchases of copper concentrates, which fell to zero in December. However, Australia was only the fifth largest supplier to China in 2019 and although constricted trade has exacerbated the tightness, the root cause has been COVID-19 disruption, particularly in Peru. What is normally China's second top supplier after Chile saw mined copper production contract by 38% over April and May and by 14.5% over the January-October period, according to the ICSG.



There is no sign of any short-term alleviation of the squeeze on smelter margins. Indeed, it may be getting worse. China's Smelter Purchase Team, a grouping of some of the country's biggest players, has lowered its floor purchase terms to \$53.00 and 5.3 cents for the first quarter. The Team has considerable negotiating muscle and its quarterly minimum terms are a strong signal as to the state of play in the concentrates market. This quarter's floor terms are down from \$58.00 and 5.8 cents in the fourth quarter and from \$67.00 and 6.7 cents in the first quarter of 2020. Even this low first-quarter floor may be on the optimistic side, since Fastmarkets is assessing the spot market for copper concentrates at below \$50.00 and 5 cents. Supply should improve as mine activity normalises along in the wake of COVID-19 vaccination programmes. The ICSG's October forecast was for world mined copper production to fall by 1.5% in 2020 but to come roaring back with 4.6% growth in 2021. Things, however, may not be that simple. Consider the case of the Las Bambas mine in Peru. Production last year was 311,000 tonnes of copper in concentrate, according to mine operator MMG Ltd. The mine took a 70,000-tonne hit from a combination of COVID-19 restrictions on personnel, unplanned maintenance and, to a lesser degree, community road blockages. Production recovered to pre-pandemic rates in the fourth quarter with onsite workforce levels now in excess of 90% of normal. But last year's disruption will have a long tail. It was supposed to be "a year of transition for Las Bambas, with an intended focus on continuing to increase mining volumes to open up additional operating faces and the development of the (new) Chalcobamba pit." Most of that activity will now fall into this year "with a return to higher production volumes in following years," according to MMG. Production in 2021 is expected to come in close to 2020 levels at 310,000-330,000 tonnes of contained copper before rising to 400,000 tonnes in subsequent years. Although Los Bambas like other mines has learned to live with COVID-19, it has done so at the cost of deferring expansion work. When copper smelter terms were last this low - 2010 and 2011 - the copper price was at record highs. That was no coincidence. The world's miners were collectively blindsided by the strength of China's demand for industrial metals. Their inability to respond saw tightness in the concentrates segment of the supply chain transmitted into the refined metal section. With Chinese demand again booming and analysts looking for a strong pick-up in demand from the rest of the world on the back of "green" technology roll-out, copper mine supply needs to react. However, if Las Bambas is indicative of operational stresses in the rest of the sector, production is not going to miraculously snap back to pre-pandemic levels this year. Just as the world starts to consider the effects of "long COVID-19" on human health, the copper market needs to start doing the same for mine supply.

#### Other important information on copper market:

Chile produced 506,891 mt of copper in December 2020, down 8.7% from the same month of 2019. Statistics agency INE attributed the sharp drop to lower throughput and lower ore grades at major mines. But the monthly figure also marks a rise of 2.7% from the previous month of November when output was hit by a month-long shutdown of Lundin Mining's Candelaria copper mine following



strike by unionized workers. It brings annual production to 5.795 million mt, down 0.7% from the previous year. The Chilean Copper Commission forecast that national production would reach record levels this year, before rising to 6.1 million mt in 2022. This comes despite warnings that reduced investment in mine development during 2020, as companies slashed onsite personnel to reduce infections, could have repercussions on production in the coming quarters. Miner BHP said that reduced earthmoving during last year would continue to impact production at Escondida, the world's largest copper mine, into next year.

- Peru, heading into a new lockdown to stem a rising wave of COVID-19 infections, will allow key industries such as mining to continue. Large swathes of Peru, including capital Lima, will return to strict restrictions on movement and activity from Sunday for a two-week lockdown period. However, the government said on Thursday that mining, as well as fishing and construction, would be allowed to continue during the period from Jan. 31 to Feb. 14, as well as essential services including food and pharmacy. Mining is considered the engine of the local economy since its exports represent 60% of shipments from Peru. The lockdown includes the mining regions of Ancash where copper miner Antamina operates; Apurimac the region of MMG's Las Bambas mine; Pasco where Volcan operates; and Ica where China's Shougang Hierro Perú operates. Peru has more than 1.1 million confirmed cases of COVID-19 and over 40,000 deaths, according to official data.
- China's refined copper production in December surged 10.9% year-on-year to a monthly record high, while annual output also set an all-time peak in 2020. December refined copper output reached 986,000 tonnes smashing the previous monthly record of 945,000 tonnes in November. Annual refined copper production in China rose 7.4% in 2020 to 10.03 million tonnes, beating the previous peak in 2019 and exceeding 10 million tonnes for the first time.
- The London Metal Exchange has proposed closing Europe's last open outcry trading floor to move permanently to an electronic system, cementing a change sparked by the coronavirus pandemic. The LME floor closed last March for the first time since World War Two to comply with social distancing needed to deal with COVID-19.



#### **Precious Metals**

#### Reddit investors drive up silver

After a call by Reddit Inc. posters to create a short squeeze silver for March delivery rose US\$0.99 to US\$26.91. Significant increases were also visible in the shares of mining companies producing this metal and funds based on silver.

Silver jumped for a second day on Friday (Jan 29) as the market remains on high alert after a call by Reddit Inc. posters to create a short squeeze. Silver for March delivery rose US\$0.99 to US\$26.91. On Thursday, silver miners' shares spiked and the largest silver exchange-traded fund, iShares Silver Trust, saw a frenzy of options buying after the market emerged as a target on the Reddit forum r/wallstreetbets. The moves "have been extreme in some cases and have had little fundamental justification," Eugen Weinberg, an analyst at Commerzbank AG, said in a note. "Retail investors who have been swapping tips on such information platforms have caused massive shifts in the prices of some shares," Weinberg said. "We are confident that the influence of retail investors on silver will not last all that long, and that ultimately industrial and institutional demand will be the key factor in the longer term." Still, "in the very short term, I would think people would be cautious about holding a short in precious metals, irrespective of the fundamental view" said Marcus Garvey, head of metals and bulks commodity strategy at Macquarie Group Ltd. Comments about the metal on Wednesday began appearing on the investor board that is now famous for driving up GameStop Corp shares. They centered on conspiracy theories long held by the fringes of the precious metals world, alleging the metal's price is suppressed by banks and the government to mask inflation. If there's another short squeeze, "I think it will be fairly muted," said Jason Teed, director of research at Flexible Plan Investments Ltd. "A short squeeze on a mid-cap stock is one thing, but the commodity markets are extremely vast."

## China's 2020 gold imports via Hong Kong sink as virus hits demand

Chinese gold import via Hong Kong in the last month of 2020 was 86% lower than in December 2019 when it amounted to 41.4 tonnes. Net import in the whole of 2020 amounted to 40.9 tonnes, well below 267.6 tonnes in the previous year.

China's net gold imports via Hong Kong in December rose for a second straight month, although imports for the year plunged by 85% as the coronavirus took its toll on the country's economy and dealt a blow to consumption of the metal. Net gold imports via Hong Kong to China, the world's top gold consumer, stood at 5.6 tonnes in December compared with 3.3 tonnes in November, data from the Hong Kong Census and Statistics Department shows. Total gold imports via Hong Kong to China rose to 11.2 tonnes from 8.8 tonnes in November. "The pick-up in Hong



Kong imports was likely the result of expectations for a physical demand bonanza during the Chinese Lunar New Year which meant lots of tonnage was on order," said Stephen Innes, chief global market strategist at financial services firm Axi. Physical gold discounts in China eased in December and were substantially below the steep discounts offered earlier in the year. The country's imports via Hong Kong last month were still about 86% lower than December 2019's 41.4 tonnes. Net imports stood at 40.9 tonnes in 2020 as a whole, sharply lower than 267.6 tonnes in the prior year. "The 5.6 tonnes imported from Hong Kong in December is still very low and China not importing more in the last few months is surprising as the Chinese economy has recovered quickly and China's foreign exchange reserves have also risen," said Commerzbank analyst Daniel Briesemann. The Hong Kong data may not provide a complete picture of Chinese purchases, as gold is also imported via Shanghai and Beijing.



### **Global economies | Foreign exchange markets**

#### **Euro Zone business activity shrinks in January**

Stringent blockades to contain the coronavirus pandemic have hit hard the service industry dominating the euro zone. As a result, the block's IHS Markit PMI fell to 47.5 in January from 49.1 in December.

The PMI covering the services industry in the euro zone fell to 45.0

Economic activity in the euro zone shrank markedly in January as stringent lockdowns to contain the coronavirus pandemic hit the bloc's dominant service industry hard. With hospitality and entertainment venues forced to remain closed across much of the continent, surveys on Friday highlighted sharp contractions in the services industry but also showed manufacturing remained strong as factories largely kept working. IHS Markit's flash composite purchasing managers' index (PMI) for the euro zone, seen as a good guide to economic health, fell further below the 50 mark separating growth from contraction to 47.5 in January from December's 49.1. A Reuters poll had predicted a fall to 47.6. "High infection rates are again forcing governments to extend and tighten containment measures," said Tomas Dvorak at Oxford Economics. "The flash PMIs point to a looming contraction in euro zone GDP in Q1. We don't expect any meaningful economic recovery before the pandemic is brought under control." Still, a Reuters poll showed the bloc's economy was expected to grow 0.6% this quarter and would return to its pre-COVID-19 level within two years on hopes the rollout of vaccines will allow a return to some form of normality. Activity in Germany's services sector shrank for a fourth month in a row as a hard lockdown shuttered most non-essential businesses in Europe's biggest economy. Despite slowing to a four-month low, manufacturing remained in expansion territory as exports kept German factories humming. With hotels and restaurants closed, France's service sector bore the brunt of national coronavirus restrictions and overall activity there shrank more than expected. In Britain, outside the European Union, a third national lockdown sparked the sharpest drop in business activity since May. A post Brexit shift to a more bureaucratic trading arrangement with the EU also contributed to the decline. Global shares slipped off record highs as the gloomy data reminded investors of the struggles facing the economic recovery, taking the shine off a rally fuelled by hopes of U.S. stimulus by newly inaugurated President Joe Biden. A PMI covering the euro zone's dominant service industry dropped to 45.0 from 46.4, exceeding expectations in a Reuters poll that had predicted a steeper fall to 44.5. With activity still in decline and restrictions likely to be in place for some time yet, services firms were forced to chop their charges, with the output price index falling to its lowest reading since June. That will be disappointing for policymakers at the European Central Bank as uncomfortably low inflation has been a thorn in the ECB's side for years. Factory activity remained strong and the manufacturing PMI held well above the breakeven level But despite strong demand factories again cut headcount, as they have every month since May 2019. As immunization programs are being ramped up after a slow start in Europe survey respondents remained optimistic about the coming year.



#### World's richest shake off crisis in record setback for equality

A K-shaped economic rebound is taking place, which shows that the world is not giving social equality a priority. More and more institutions predict that the crisis caused by the Covid-19 pandemic will have tragic consequences for the poorest.

The world is witnessing the greatest rise in inequality on record, with the poorest likely to feel the effects of the Covid-19 pandemic for years to come while the "mega rich" have already bounced back, according to Oxfam. That's the conclusion from a report by the charity, which charts the wealth effects of the deepest slump since the Global Financial Crisis as widespread shutdowns of businesses lead to rising unemployment. "The pandemic has hurt people living in poverty far harder than the rich, and has had particularly severe impacts on women, Black people, Afro-descendants, indigenous peoples, and historically marginalized and oppressed communities around the world," Oxfam said. "It is likely that almost every country will see an increase in inequality, the first time since records began." The report follows in the footsteps of similar analysis by the World Bank, which has warned that the economic crisis is sending a new generation into poverty and debt turmoil. The International Monetary Fund has warned that developing nations may be set back by a decade. Oxfam is urging governments to do more to address inequality, including making tax policies more equitable and canceling developing countries' debts. The study -- entitled 'The Inequality Virus' -- is being published in tandem with the World Economic Forum's virtual conference, at which politicians and business executives are set to discuss the state of the global economy. Usually held in the Swiss ski resort of Davos, the event has been criticized for being a place for the rich and famous to rub shoulders while paying only lip service to the need for equality and social change. For its part, the WEF has urged governments to make society more resilient, inclusive and sustainable. "The 1,000 richest people on the planet recouped their Covid-19 losses within just nine months," Oxfam said. "But it could take more than a decade for the world's poorest to recover."



## **Macroeconomic calendar**

#### Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
		China				*)	
00000	18-Jan	GDP (yoy)	4Q	6.5%	4.9%	6.2%	
00000	18-Jan	GDP (sa, qoq)‡	4Q	2.6%	3.0%	2.7%	
0000	18-Jan	Industrial production (yoy)	Dec	7.3%	7.0%	6.9%	
00	18-Jan	Fixed assets investments (ytd, yoy)	Dec	2.9%	2.6%	3.2%	
0	18-Jan	Retail sales (yoy)	Dec	4.6%	5.0%	5.5%	
00	27-Jan	Industrial profits (yoy)	Dec	20.1%	15.5%		
000	31-Jan	Official manufacturing PMI	Jan	51.3	51.9	51.6	
		Poland					
0000	18-Jan	Core CPI (excluding food and energy, yoy)	Dec	3.7%	4.3%	3.7%	
00	21-Jan	Average gross salary (yoy)	Dec	6.6%	4.9%	4.7%	
9	21-Jan	Employment (yoy)	Dec	-1.0%	-1.2%	-1.2%	
000	22-Jan	Retail sales (yoy)	Dec	-0.8%	-5.3%	-1.4%	
90	22-Jan	Producer inflation PPI (yoy)	Dec	0.0%	-0.2%	-0.1%	
0000	25-Jan	Sold industrial production (yoy)	Dec	11.2%	5.4%	8.9%	
<b>0</b>	26-Jan	M3 money supply (yoy)	Dec	16.4%	16.1%	16.3%	
00	27-Jan	Unemployment rate	Dec	6.2%	6.1%	6.2%	
		US					
00	21-Jan	Philadelphia Fed business outlook‡	Jan	26.5	9.1	11.8 🥌	
000	22-Jan	Composite PMI - preliminary data	Jan	58.0	55.3		
000	22-Jan	Manufacturing PMI - preliminary data	Jan		57.1	56.5	
000	22-Jan	PMI services - preliminary data	Jan	57.5	54.8	53.4	
<b>O</b>	25-Jan	Dallas Fed manufacturing activity	Jan	7.0	9.7	12.0	
)	26-Jan	Richmond Fed manufacturing index	Jan	14.0	19.0	19.0	
00000	27-Jan	FOMC base rate decision - upper bound (Fed)	Jan	0.25% =	0.25%	0.25%	
00000	27-Jan	FOMC base rate decision - lower bound (Fed)	Jan	0.00% =	0.00%	0.00%	
00	27-Jan	Durable goods orders - preliminary data‡	Dec	0.2%	1.2%	1.0%	
00000	28-Jan	GDP (annualized, qoq) - estimation	4Q	4.0%	33.4%	4.2%	
0000	29-Jan	Consumer spending inflation PCE (mom)	Dec	0.3%	0.0%	0.1%	
0000	29-Jan	Consumer spending inflation PCE (yoy)	Dec	1.5%	1.4%	1.3%	
90	29-Jan	Personal income (sa, mom)‡	Dec	0.6%	-1.3%	0.1%	
90	29-Jan	Personal spending (sa, mom)‡	Dec	-0.2%	-0.7%	-0.4%	
90	29-Jan	University of Michigan confidence index - final data	Jan	79.0	79.2	79.4	
		Eurozone				(0)	
>	19-Jan	ZEW survey expectations	Jan	58.3	54.4		
0000	20-Jan	Consumer inflation CPI (yoy) - final data	Dec	-0.3% =	-0.3%	-0.3%	
0000	20-Jan	Core CPI (yoy) - final data	Dec	0.2% =	0.2%	0.2%	
00000	21-Jan	ECB main refinancing rate	Jan	0.00% =	0.00%	0.00%	
00000	21-Jan	ECB deposit facility rate	Jan	-0.5% =	-0.5%	-0.5%	
•	21-Jan	Consumer confidence - estimation‡	Jan	- 15.5	- 13.8	- 15.0 👅	
000	22-Jan	Composite PMI - preliminary data	Jan		49.1	47.6	
000	22-Jan	Manufacturing PMI - preliminary data	Jan		55.2	54.4	
000	22-Jan	Services PMI - preliminary data	Jan		46.4	44.5	
٥	28-Jan	Economic confidence‡	Jan	91.5	92.4	89.6	
0	28-Jan	Industrial confidence‡	Jan	- 5.9	- 6.8	- 7.0	



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	us Consensus <sup>:</sup>	
		Germany					
0000	19-Jan	Harmonized consumer inflation HICP (yoy) - final data	Dec	-0.7% =	-0.7%	-0.7%	
0000	19-Jan	Consumer inflation CPI (yoy) - final data	Dec	-0.3% =	-0.3%	-0.3%	
000	22-Jan	Composite PMI - preliminary data	Jan		52.0	50.0	
000	22-Jan	Manufacturing PMI - preliminary data	Jan		58.3	57.2	
00	25-Jan	IFO business climate‡	Jan	90.1	92.2	91.4 🕳	
00	27-Jan	GfK consumer confidence‡	Feb	- 15.6	- 7.5	- 7.9 👅	
00000	29-Jan	GDP (yoy) - preliminary data	4Q	-2.9% 🔺	-3.9%	-3.2%	
00000	29-Jan	GDP (sa, qoq) - preliminary data	4Q	0.1%	8.5%	0.0%	
00	29-Jan	Unemployment rate‡	Jan	6.0% =	6.0%	6.1%	
		France					
000	22-Jan	Composite PMI - preliminary data	Jan		49.5	49.0	
000	22-Jan	Manufacturing PMI - preliminary data	Jan		51.1	50.5	
00000	29-Jan	GDP (yoy) - preliminary data	4Q	-5.0%	-3.9%	-7.6%	
00000	29-Jan	GDP (qoq) - preliminary data‡	4Q	-1.3%	18.5%	-4.0%	
		Italy					
0000	18-Jan	Harmonized consumer inflation HICP (yoy) - final data	Dec	-0.3% =	-0.3%	-0.3%	
		UK					
0000	20-Jan	Consumer inflation CPI (yoy)	Dec	0.6%	0.3%	0.5%	
000	22-Jan	Manufacturing PMI (sa) - preliminary data	Jan		57.5	53.6	
000	22-Jan	Composite PMI - preliminary data	Jan	40.6	50.4	45.5	
90	26-Jan	Unemployment rate (ILO, 3-months)	Nov	5.0%	4.9%	5.1%	
		Japan					
0000	18-Jan	Industrial production (yoy) - final data‡	Nov	-3.9% =	-3.9%		
0000	22-Jan	Consumer inflation CPI (yoy)	Dec	-1.2%	-0.9%	-1.3%	
000	22-Jan	Composite PMI - preliminary data	Jan		48.5		
000	22-Jan	Manufacturing PMI - preliminary data	Jan		50.0		
		Chile				*	
00000	27-Jan	BCCh overnight rate target	Jan	0.50% =	0.50%	0.50%	
000	29-Jan	Total copper production (metric tons)	Dec	506 891 🔺	493 538		
000	29-Jan	Manufacturing (yoy)	Dec	0.4%	-1.7%	-1.7%	
		Canada				*	
00000	20-Jan	BoC base rate decision	Jan	0.25% =	0.25%	0.25%	
0000	20-Jan	Consumer inflation CPI (yoy)	Dec	0.7%	1.0%	1.0%	
00000	29-Jan	GDP(yoy)	Nov	-2.8%	-3.5%	-3.2%	

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



## **Key market data**

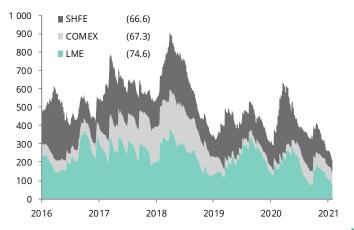
Key base & precious metal prices, exchange rates and other important market factors

(as of: 29-Jan-21)					Price	cha	nge <sup>1</sup>			From year beginning <sup>2</sup>				
, , , , ,	Price		2W		QTD		YTD		1Y	Average	Min	Max		
LME (USD/t; Mo in USD/lbs)					•									
Copper	7 877.00	_	-1.3%		1.8%		1.8%		40.1%	7 970.50	7 778.50	8 146.00		
Molybdenum	10.70		5.1%		6.7%		6.7%			10.22	9.95	10.70		
Nickel	17 727.00	_	-1.4%		7.2%		7.2%		41.4%	17 847.60	17 164.00	18 370.00		
Aluminum	1 987.00	_	-0.7%		0.5%		0.5%		15.4%	2 003.80	1 951.50	2 062.50		
Tin	23 657.00		10.1%		15.2%		15.2%		45.4%	21 955.45	20 965.00	23 657.00		
Zinc	2 565.00	_	-4.9%	$\blacksquare$	-5.8%	$\blacksquare$	-5.8%		14.7%	2 707.70	2 546.00	2 838.00		
Lead	2 013.00		1.6%		2.1%		2.1%		9.6%	2 014.93	1 963.50	2 068.50		
LBMA (USD/troz)	_													
Silver	27.42		8.6%		3.5%		3.5%		54.7%	25.90	24.87	27.53		
Gold <sup>2</sup>	1 863.80		1.3%	$\blacksquare$	-1.4%	$\blacksquare$	-1.4%		18.1%	1 866.99	1 833.05	1 943.20		
LPPM (USD/troz)	_													
Platinum <sup>2</sup>	1 110.00		2.3%		3.3%		3.3%		14.0%	1 090.95	1 016.00	1 129.00		
Palladium <sup>2</sup>	2 327.00	_	-4.0%	$\blacksquare$	-1.8%		-1.8%		2.1%	2 378.10	2 312.00	2 454.00		
FX <sup>3</sup>	_													
EURUSD	1.2136		0.1%	$\blacksquare$	-1.1%		-1.1%		10.0%	1.2171	1.2064	1.2338		
EURPLN	4.5385	_	-0.2%	$\blacksquare$	-1.7%	$\blacksquare$	-1.7%		6.0%	4.5357	4.4973	4.5497		
USDPLN	3.7460	_	0.0%	$\blacksquare$	-0.3%		-0.3%	•	-3.6%	3.7286	3.6656	3.7699		
USDCAD	1.2780		0.4%		0.4%		0.4%	•	-3.3%	1.2724	1.2627	1.2810		
USDCNY	6.4283	_	-0.8%	$\blacksquare$	-1.5%		-1.5%	•	-7.0%	6.4695	6.4283	6.4928		
USDCLP	741.40		0.8%		4.2%		4.2%	•	-5.9%	723.56	696.18	741.40		
Money market	_													
3m LIBOR USD	0.202	•	-0.02	$\blacksquare$	-0.04	$\blacksquare$	-0.04	•	-1.56	0.223	0.202	0.241		
3m EURIBOR	-0.548		0.00	$\blacksquare$	0.00	•	0.00	•	-0.15	-0.547	-0.556	-0.539		
3m WIBOR	0.210	-	0.00	-	0.00	-	0.00	$\blacksquare$	-1.50	0.210	0.210	0.210		
5y USD interest rate swap	0.520	•	0.00		0.09		0.09	$\blacksquare$	-0.89	0.519	0.416	0.578		
5y EUR interest rate swap	-0.443		0.01		0.02		0.02	•	-0.17	-0.449	-0.485	-0.418		
5y PLN interest rate swap	0.695		0.04		0.08		0.08	$\blacksquare$	-1.13	0.638	0.583	0.695		
Fuel	_													
WTI Cushing	52.20	•	-0.3%		7.6%		7.6%		0.1%	52.10	47.62	53.57		
Brent	54.85		0.6%		7.2%		7.2%	•	-5.4%	54.72	50.02	56.28		
Diesel NY (ULSD)	159.97		0.6%		8.3%		8.3%	$\blacksquare$	-2.2%	157.66	146.07	161.57		
Others	_													
VIX	33.09		8.75		10.34		10.34		17.60	24.91	21.32	37.21		
BBG Commodity Index	80.10	•	-0.4%		2.6%		2.6%		6.6%	80.12	78.64	81.22		
S&P500	3 714.24	•	-1.4%	$\blacksquare$	-1.1%	$\blacksquare$	-1.1%		13.1%	3 793.75	3 700.65	3 855.36		
DAX	13 432.87	•	-2.6%	$\blacksquare$	-2.1%	$\blacksquare$	-2.1%		2.1%	13 823.26	13 432.87	14 049.53		
Shanghai Composite	3 483.07	▼	-2.3%		0.3%		0.3%		17.0%	3 566.43	3 483.07	3 624.24		
WIG 20	1 948.01	▼	-1.9%	$\blacksquare$	-1.8%	•	-1.8%	•	-6.3%	2 000.27	1 929.21	2 074.11		
KGHM	188.40	•	-4.9%		3.0%		3.0%		103.7%	197.01	175.05	215.90		

<sup>°</sup> 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

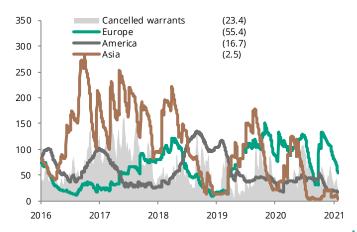


#### **Copper: official exchange stocks (thousand tonnes)**



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

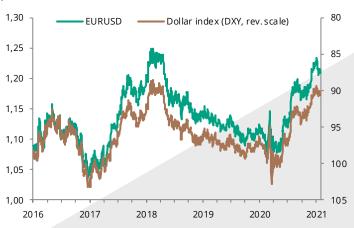
#### Silver: price (lhs) and gold ratio (rhs)



Source: Bloomberg, KGHM Polska Miedź

USDPLN (lhs)

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



3,80 3,60 3,60 3,40 3,20 3,00

4,40

4,20

4,00

2016

3,40 3,20 3,00 2,80

2019

2018

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

Source: Bloomberg, KGHM Polska Miedź

2017

2021

5,00

4,80

4,60

4.40

EURPLN (rhs)

2020



### **Legal note**

This document has been prepared based on the below listed reports, among others, published in the following period: 18 - 31 January 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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