

Market Overview



as of: 3th February 2020






- Copper:** More than a dozen Chinese provinces, including Hebei and Yunnan, announced an extension of the current Lunar New Year holiday by more than a week, meaning at least two-thirds of China's economy will stay shut for extra time. The regions account for about 90% of copper smelting, 60% of steel production, 65% of oil refining and 40% of coal output (*page 2*).
- Precious metals:** Tanzania's government lifted an export ban following the resolution of a three-year tax dispute. As part of the deal, Tanzania will own 16% of Twiga Minerals, a new joint venture set up to manage the Bulyanhulu, North Mara and Buzwagi mines (*page 4*).
- Macro:** The International Monetary Fund provides actualised outlook for stabilization of global economic growth while lowering its forecasts for 2020 and 2021 by 0.1% and 0.2% respectively. (*page 5*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	5 570.00	-10.8%
▼ Nickel	12 675.00	-8.5%
LBMA (USD/troz)		
▼ Silver	17.89	-0.9%
▲ Gold (PM)	1 584.20	1.5%
FX		
▼ EURUSD	1.1052	-0.3%
▲ EURPLN	4.3010	1.3%
▲ USDPLN	3.8999	1.9%
▲ USDCAD	1.3233	1.4%
▲ USDCLP	797.96	3.4%
Stocks		
▼ KGHM	91.20	-9.2%

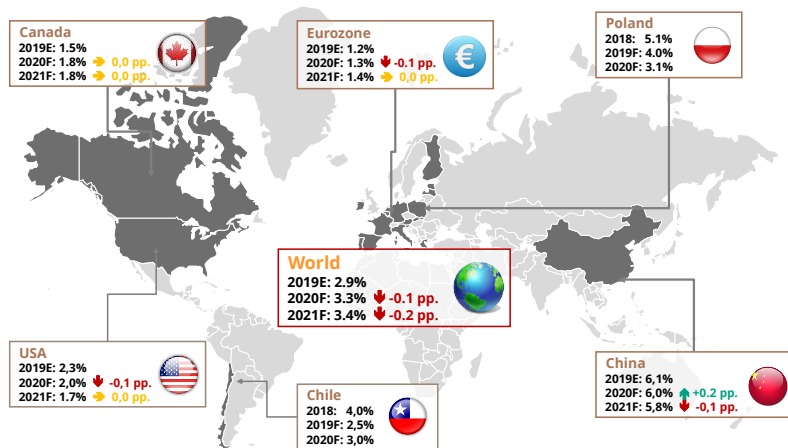
Source: Bloomberg, KGHM Polska Miedź; (*more on page 9*)

Important macroeconomic data

Release	For		
 GDP (sa, yoy)	4Q	1.0%	▼
 Manufacturing (yoy)	Dec	4.2%	▲
 BoE rate decision	Jan	0.75%	-
 Retail sales (yoy)	Dec	7.5%	▲
 Composite PMI	Jan	51.1	▲

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

IMF World Economic Outlook update – January 2020



Source: IMF, KGHM Polska Miedź

Market Risk Unit

marketrisk@kgm.com

Base and precious metals | Other commodities

Copper

More than a dozen Chinese provinces, including Hebei and Yunnan, announced an extension of the current Lunar New Year holiday by more than a week, meaning at least two-thirds of China's economy will stay shut for extra time. The regions account for about 90% of copper smelting, 60% of steel production, 65% of oil refining and 40% of coal output.

Copper's worst month since 2015 shows why China is everything

The shock to copper demand from the coronavirus is estimated at about 500,000 tonnes, compared to about 125,000 tonnes during SARS

According to Bloomberg copper posted its ugliest monthly decline since 2015, marking a spectacular sell-off as investors priced in fears about the economic fallout from China's coronavirus. The metal fell 9.8% in end of January and stretched for a record 13-day losing streak. Commodities across the board are in the red. Oil futures have slumped 16% while crop markets have also tumbled. Investors are fleeing raw materials as China's key industrial provinces extend Lunar New Year holidays, raising concerns of a sharp drop in demand. Units of State Grid Corp. of China, the world's single-largest copper consumer by far, have deferred some tenders to buy supplies as the nation combats the pandemic, according to notices on the company's website. China's importance to the copper market has grown considerably, with its share of global consumption expanding by about 30% since 2003, when the SARS epidemic broke out, according to Capital Economics analyst Kieran Clancy. The shock to copper demand from the coronavirus "is likely to be quite a bit larger than it was during SARS, if the coronavirus persists for roughly the same amount of time," said Capital Economics' Clancy. "Our estimates put that shock at about 500,000 tons, compared to about 125,000 tons during SARS." China's trade council said it would provide force majeure certificates to companies that are unable to meet international commitments. More than a dozen Chinese provinces, including Hebei and Yunnan, announced an extension of the current Lunar New Year holiday by more than a week, meaning at least two-thirds of China's economy will stay shut for extra time. The regions account for about 90% of copper smelting, 60% of steel production, 65% of oil refining and 40% of coal output. Hubei province, where the virus-hit Wuhan city is located and part of China's industrial heartland, has said the holiday will last until at least Feb. 14. The coronavirus crisis in China has hammered many markets this month. None may have felt a bigger impact than freight. Rates for giant Capesize ships, typically used to carry raw materials plunged 90% from a September peak to less than \$4,000 a day. The plunge in shipping rates underscores just how much pull China has in global commodities markets., with the virus upending everything from oil futures to copper prices. Miners have downplayed concerns. Australia's Fortescue Metals Group Ltd. said concern over the virus is impacting sentiment rather than the physical trade in iron ore. Separately, Brazil's Vale SA said

operations at Asian ports are normal. That signals prices could recover at least partially once concerns over the virus outbreak ease or if port operations aren't significantly disrupted. They may also get a lift after the holidays draw to a close.

Other important information on copper market:

- According to Platts, the Chilean government has cut its forecast copper price for 2020. In its latest quarterly report, the Chilean Copper Commission said that it expects prices to average \$2.85/lb this year, up from an average of \$2.72/lb in 2019 but down from a previous forecast of \$2.90/lb given six months earlier. Copper prices have slumped nearly 11% in the second half of Jan, reaching \$2.55/lb, as optimism over the US-China phase one trade deal was replaced by nervousness, first over an escalation of geopolitical tensions between the US and Iran and then the rapid spread of coronavirus from China. In 2021 prices would average \$2.95/lb, the commission said.
- The global world refined copper market showed a 33,000 tonnes deficit in October, compared with a 89,000 tonnes deficit in September, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 10 months of the year, the market was in a 439,000 tonnes deficit compared with a 345,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in October was 2.07 million tonnes, while consumption was 2.11 million tonnes. Bonded stocks of copper in China showed a 76,000 tonnes deficit in October compared with a 144,000 tonnes deficit in September.
- As Platts informs, BHP's copper production in October-December rose by 9% on the year and 6% quarter on quarter to 455,000 mt, the Australian miner said, helped by higher throughput at its Escondida mine in Chile. Analysts at J.P. Morgan and RBC Capital Markets said this beat their copper production forecasts of 437,000 mt and 432,000 mt, respectively. BHP maintained its fiscal 2019-2020 -- which ends June 2020 -- copper production guidance at 1.71 million-1.82 million mt. The company's July-December production rose 7% year on year to 885,000 mt. The company saw an average realized copper price of \$2.6/lb in the July-December half, versus \$2.54/lb a year earlier and \$2.7/lb in the January-June half.
- As Platts informs, Codelco has launched 15 months early a new operation to bolster production at its El Teniente division. Combined with \$50 million of savings during the construction process, the early commissioning of the project will earn Codelco more than \$300 million on top of the planned revenue, the company said. Launched more than a century ago, El Teniente is Codelco's largest mine by production, producing more than 465,000 mt of copper in 2018. The new sectors currently in development, including a whole new mine level, are expected to extend the life of the operation by another 50 years.

Precious Metals

Tanzania's government lifted an export ban following the resolution of a three-year tax dispute. As part of the deal, Tanzania will own 16% of Twiga Minerals, a new joint venture set up to manage the Bulyanhulu, North Mara and Buzwagi mines.

\$100 million from the proceeds of the sale of concentrates will go towards paying down settlement agreed with the government

Barrick to sell gold worth up to \$280 mln as export ban lifted

Barrick Gold will start to ship gold worth up to \$280 million from Tanzania, chief executive Mark Bristow said, after the government lifted an export ban following the resolution of a three-year tax dispute. The world's second-largest gold miner signed a deal with Tanzania's government, ending a row that dated back to when Acacia Mining ran the Tanzanian operations. Barrick fully acquired Acacia last year. "The shipments will start immediately" Mark Bristow told Reuters in a telephone interview. "It's (worth) around \$260-\$280 million depending on the price of metal prices at the time of sale." Spot gold, which rose 18% last year, is hovering at about \$1,600 per ounce. Bristow said \$100 million from the proceeds of the sale of concentrates will go towards paying down a \$300 million settlement agreed with the government. As part of the deal, Tanzania will own 16% of Twiga Minerals, a new joint venture set up to manage the Bulyanhulu, North Mara and Buzwagi mines. In the long-standing dispute, Acacia was accused of tax evasion, leading the government to impose a ban on exporting mineral concentrates and to change mining laws. Barrick's Tanzanian operations account for about 6% of its gold output. Bristow said shutting Acacia Mining's office in London and reducing staff numbers in Johannesburg and Dar es Salaam, had already reduced costs, but he saw further potential for efficiency. Barrick also plans in the fourth quarter of this year to re-start the Bulyanhulu mine in Tanzania, which ceased operations because of the export ban.

Global economies | Foreign exchange markets

The IMF revised its forecast of global GDP growth

The International Monetary Fund provides actualised outlook for stabilization of global economic growth while lowering its forecasts for 2020 and 2021 by 0.1% and 0.2% respectively.

The IMF forecasts stabilization of global economic growth. It predicts that global GDP growth has reached its lowest levels and is ready to recover

The IMF forecasts that global economic growth will increase from 2.9% in 2019 to 3.3% in 2020 and 3.4% in 2021 - a downward adjustment of 0.1 percentage point in 2019 and 2020 and 0.2 in 2021 compared to October forecasts. This is due to the negative surprises of several emerging economies, in particular India.

In the second half of 2019 risk factors became active and affected global production and trade. IMF mainly talks about uncertainty related to trade policy, geopolitical tensions, social protests, natural disasters and problems in emerging economies. Despite these difficulties, at the end of the year, there were some signs that global growth could have reached the bottom and a gradual rebound could be expected. In addition, the easing of monetary policy in the second half in some economies should restore economic activity at the beginning of 2020. Without this, the forecast for 2020 would be lower by 0.5%.

In the third quarter of 2019, growth in all emerging economies (including India, Mexico and South Africa) was weaker than expected in the October IMF release, mainly due to country-specific shocks affecting domestic demand. Developed economies have slowed down as predicted despite the constant creation of new jobs. In some cases, the unemployment rate remains at a record low while core inflation remained at low levels. Poor demand lowered metals and energy prices, which kept control over headline inflation. Business sentiment and purchasing managers' perspectives in the manufacturing sector have ceased to deteriorate, but have remained pessimistic. The component of new orders increased especially in emerging economies.





The IMF predicts that in all developed economies, growth will stabilize at 1.6% in 2020-21, i.e. 0.1 % lower than in the October 2020 forecast. In the United States, growth will slow down from 2.3% in 2019 to 2% in 2020 and will fall further to 1.7% in 2021. The forecast reflects a return to neutral policy budgetary and expected slowdown in monetary easing. Growth in the euro area will increase from 1.2% in 2019 to 1.3% in 2020 and 1.4% in 2021. The projected improvement in external demand is conducive to stunting. In Germany, production activity at the end of 2019 remains at a level signaling a slowdown. In the United Kingdom, growth will stabilize at 1.4% in 2020 and stay up to 1.5% in 2021 - unchanged from the October report. The growth forecast assumes an orderly exit from the European Union at the end of January, followed by a gradual transition to negotiations of new economic relations. The growth rate in Japan will fall from an estimated 1% in 2019 to 0.7% in 2020. The 2020 update reflects the expected increase in stimulus measures from December 2019. It is expected that growth will fall to 0,5% in 2021, because the impact of the fiscal stimulus will disappear.








For emerging markets, an increase of 4.4% is expected in 2020 and 4.6% in 2021 (0.2% lower in both years than in the IMF October report) from about 3.7% in 2019. The decline in growth largely reflects the revision of the Indian forecast, in which domestic demand slowed down more than expected due to problems in the non-banking financial sector and a decline in lending growth. It is estimated that growth in India will be 4.8% in 2019 and will improve to 5.8% in 2020 and 6.5% in 2021 (1.2 and 0.9 percentage points less than in October report). The growth forecast in China will decrease from around 6.1% in 2019 to 6.0% in 2020 and 5.8% in 2021. Anticipated partial withdrawal of earlier tariffs and a break in additional tariff increases under phase one trade agreements with the United States are likely to alleviate short-term cyclical weakness. This will result in a 0.2 pp increase for 2020 compared to the October report. However, unresolved disputes over the broader economic relations between the US and China, as well as the necessary strengthening of national financial supervision, are expected to continue to weigh on the Chinese economy. Growth prospects have been slightly revised down for Indonesia and Thailand, where persistent weakness of exports also affects domestic demand.

The risk balance for the global forecast remains negative, but less focused on negative results than in the October report. The early signs of stabilization discussed above may persist. Additional support could come from monetary easing and improved sentiment after signing the phase one trade agreement between the US and China. The combination of these factors and the reduction of tariffs may lead to a stronger recovery than currently forecast. After all, the main risks will still relate to geopolitical tensions between the US and Iran, the introduction of new tariffs between the US and China as well as the US and EU, as well as the appearance of weather elements caused by climate change and global warming.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
***	31-Jan	Official manufacturing PMI	Jan	50.0 ▼	50.2	50.0 ○
Poland 						
**	21-Jan	Average gross salary (yoy)	Dec	6.2% ▲	5.3%	6.1% ▲
*	21-Jan	Employment (yoy)	Dec	2.6% -	2.6%	2.6% ○
****	22-Jan	Sold industrial production (yoy)	Dec	3.8% ▲	1.4%	6.4% ▼
**	22-Jan	Producer inflation PPI (yoy)	Dec	1.0% ▲	-0.1%	0.9% ▲
***	23-Jan	Retail sales (yoy)	Dec	7.5% ▲	5.9%	7.3% ▲
*	24-Jan	M3 money supply (yoy)	Dec	8.3% ▼	9.4%	9.1% ▼
**	27-Jan	Unemployment rate	Dec	5.2% ▲	5.1%	5.2% ○
US 						
***	24-Jan	Composite PMI - preliminary data	Jan	53.1 ▲	52.7	--
***	24-Jan	Manufacturing PMI - preliminary data	Jan	51.7 ▼	52.4	52.5 ▼
***	24-Jan	PMI services - preliminary data	Jan	53.2 ▲	52.8	53.0 ▲
*	27-Jan	Dallas Fed manufacturing activity	Jan	-0.2 ▲	-3.2	-2.0 ▲
**	28-Jan	Durable goods orders - preliminary data‡	Dec	2.4% ▲	-3.1%	0.3% ▲
*	28-Jan	Richmond Fed manufacturing index	Jan	20.0 ▲	-5.0	-3.0 ▲
*	28-Jan	S&P/CaseShiller home price index‡	Nov	219 ▲	218	--
*****	29-Jan	FOMC base rate decision - upper bound (Fed)	Jan	1.75% -	1.75%	1.75% ○
*****	29-Jan	FOMC base rate decision - lower bound (Fed)	Jan	1.50% -	1.50%	1.50% ○
*****	30-Jan	GDP (annualized, qoq) - estimation	4Q	2.1% -	2.1%	2.0% ▲
****	31-Jan	Consumer spending inflation PCE (mom)	Dec	0.2% ▲	0.1%	0.1% ▲
****	31-Jan	Consumer spending inflation PCE (yoy)‡	Dec	1.6% ▲	1.5%	1.6% ○
**	31-Jan	Personal income (sa, mom)‡	Dec	0.2% ▼	0.4%	0.3% ▼
**	31-Jan	Personal spending (sa, mom)	Dec	0.3% ▼	0.4%	0.3% ○
**	31-Jan	University of Michigan confidence index - final data	Jan	99.8 ▲	99.1	99.1 ▲
Eurozone 						
*	21-Jan	ZEW survey expectations	Jan	25.6 ▲	11.2	--
*****	23-Jan	ECB main refinancing rate	Jan	0.00% -	0.00%	0.00% ○
*****	23-Jan	ECB deposit facility rate	Jan	-0.5% -	-0.5%	-0.5% ○
*	23-Jan	Consumer confidence - estimation	Jan	-8.1 -	-8.1	-7.8 ▼
**	24-Jan	Composite PMI - preliminary data	Jan	50.9 -	50.9	51.2 ▼
**	24-Jan	Manufacturing PMI - preliminary data	Jan	--	46.3	46.8
**	24-Jan	Services PMI - preliminary data	Jan	52.2 ▼	52.8	52.8 ▼
*	29-Jan	M3 money supply (yoy)	Dec	5.0% ▼	5.6%	5.5% ▼
**	30-Jan	Unemployment rate	Dec	7.4% ▼	7.5%	7.5% ▼
*	30-Jan	Economic confidence‡	Jan	103 ▲	101	102 ▲
*	30-Jan	Industrial confidence	Jan	-7.3 ▲	-9.3	-8.8 ▲
*	30-Jan	Consumer confidence - final data	Jan	-8.1 -	-8.1	--
*	30-Jan	Business climate indicator‡	Jan	-0.2 ▲	-0.3	-0.2 ▼
*****	31-Jan	GDP (sa, yoy) - estimation	4Q	1.0% ▼	1.2%	1.1% ▼
*****	31-Jan	GDP (sa, qoq) - estimation‡	4Q	0.1% ▼	0.3%	0.2% ▼
****	31-Jan	Core CPI (yoy) - preliminary data	Jan	1.1% ▼	1.3%	1.2% ▼
****	31-Jan	CPI estimate (yoy)	Jan	1.4% ▲	1.3%	1.4% ○

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
☆☆☆	24-Jan	Composite PMI - preliminary data	Jan	51.1 ▲	50.2	50.5	▲
☆☆☆	24-Jan	Manufacturing PMI - preliminary data	Jan	--	43.7	44.5	
☆☆	27-Jan	IFO business climate	Jan	95.9 ▼	96.3	97.0	▼
☆☆	29-Jan	GfK consumer confidence‡	Feb	9.9 ▲	9.7	9.6	▲
☆☆☆☆	30-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.6% ▲	1.5%	1.7%	▼
☆☆☆☆	30-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.7% ▲	1.5%	1.7%	○
☆☆	30-Jan	Unemployment rate	Jan	5.0% =	5.0%	5.0%	○
☆☆☆	31-Jan	Retail sales (yoy)‡	Dec	0.8% ▼	2.7%	4.5%	▼
France							
☆☆☆	24-Jan	Composite PMI - preliminary data	Jan	51.5 ▼	52.0	52.0	▼
☆☆☆	24-Jan	Manufacturing PMI - preliminary data	Jan	--	50.4	50.6	
☆☆☆☆☆	31-Jan	GDP (yoy) - preliminary data	4Q	0.8% ▼	1.4%	1.2%	▼
☆☆☆☆☆	31-Jan	GDP (qoq) - preliminary data	4Q	-0.1% ▼	0.3%	0.2%	▼
☆☆☆☆	31-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.6% =	1.6%	1.7%	○
☆☆☆☆	31-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.5% =	1.5%	1.5%	○
Italy							
☆☆	30-Jan	Unemployment rate - preliminary data‡	Dec	9.8% =	9.8%	9.7%	▲
☆☆☆☆☆	31-Jan	GDP (wda, yoy) - preliminary data‡	4Q	0.0% ▼	0.5%	0.3%	▼
☆☆☆☆☆	31-Jan	GDP (wda, qoq) - preliminary data	4Q	-0.3% ▼	0.1%	0.1%	▼
UK							
☆☆	21-Jan	Unemployment rate (ILO, 3-months)	Nov	3.8% =	3.8%	3.8%	○
☆☆☆	24-Jan	Manufacturing PMI (sa) - preliminary data	Jan	--	47.5	48.8	
☆☆☆	24-Jan	Composite PMI - preliminary data	Jan	52.4 ▲	49.3	50.7	▲
☆☆☆☆☆	30-Jan	BoE base rate decision	Jan	0.75% =	0.75%	0.75%	○
☆☆☆☆	30-Jan	BoE asset purchase target (GBP bn)	Jan	435 =	435	435	○
Japan							
☆☆☆☆	20-Jan	Industrial production (yoy) - final data‡	Nov	-8.2% =	-8.2%	--	
☆☆☆☆	24-Jan	Consumer inflation CPI (yoy)	Dec	0.8% ▲	0.5%	0.7%	▲
☆☆☆	24-Jan	Composite PMI - preliminary data	Jan	51.1 ▲	48.6	--	
☆☆☆	24-Jan	Manufacturing PMI - preliminary data	Jan	--	48.4	--	
☆☆☆☆	31-Jan	Industrial production (yoy) - preliminary data	Dec	-3.0% ▲	-8.2%	-3.6%	▲
Chile							
☆☆☆☆☆	29-Jan	BCCh overnight rate target	Jan	1.75% =	1.75%	1.75%	○
☆☆☆	31-Jan	Total copper production (metric tons)‡	Dec	554 953 ▲	504 349	--	
☆☆☆	31-Jan	Manufacturing (yoy)	Dec	4.2% ▲	3.2%	1.0%	▲
Canada							
☆☆☆☆☆	22-Jan	BoC base rate decision	Jan	1.75% =	1.75%	1.75%	○
☆☆☆☆	22-Jan	Consumer inflation CPI (yoy)	Dec	2.2% =	2.2%	2.3%	▼
☆☆☆☆	31-Jan	GDP (yoy)	Nov	1.5% ▲	1.2%	1.4%	▲

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

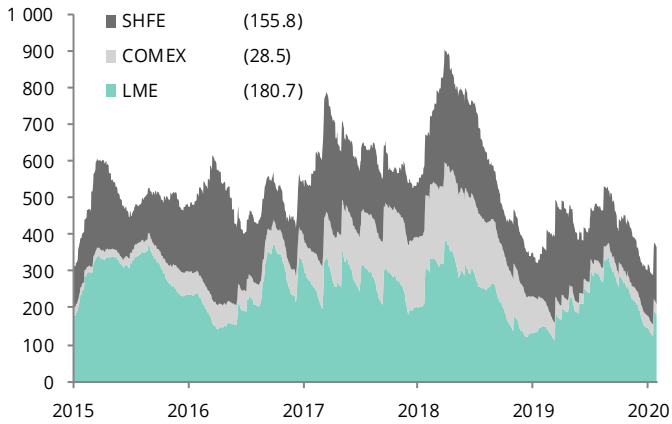
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 31-Jan-20)</i>		Price change ¹				From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max
LME (USD/t; Mo in USD/lbs)								
Copper	5 570.00	▼ -10.8%	▼ -9.5%	▼ -9.5%	▼ -9.4%	6 049.20	5 570.00	6 300.50
Molybdenum	10.30	▲ 4.3%	▲ 12.0%	▲ 12.0%	-	9.88	9.20	10.45
Nickel	12 675.00	▼ -8.5%	▼ -9.5%	▼ -9.5%	▲ 2.4%	13 552.95	12 535.00	14 290.00
Aluminum	1 709.50	▼ -5.4%	▼ -5.0%	▼ -5.0%	▼ -9.1%	1 771.73	1 709.50	1 810.50
Tin	16 275.00	▼ -8.4%	▼ -3.4%	▼ -3.4%	▼ -22.3%	17 071.14	16 275.00	17 775.00
Zinc	2 219.00	▼ -9.8%	▼ -3.2%	▼ -3.2%	▼ -18.4%	2 357.27	2 219.00	2 466.50
Lead	1 874.50	▼ -5.4%	▼ -2.5%	▼ -2.5%	▼ -10.3%	1 925.16	1 836.00	2 027.00
LBMA (USD/troz)								
Silver	17.89	▼ -0.9%	▼ -0.9%	▼ -0.9%	▲ 11.3%	17.97	17.47	18.44
Gold ²	1 584.20	▲ 1.5%	▲ 4.0%	▲ 4.0%	▲ 19.7%	1 560.67	1 527.10	1 584.20
LPPM (USD/troz)								
Platinum ²	959.00	▼ -5.6%	▼ -1.2%	▼ -1.2%	▲ 16.8%	987.36	958.00	1 017.00
Palladium ²	2 295.00	▼ -9.4%	▲ 19.5%	▲ 19.5%	▲ 66.3%	2 240.59	1 946.00	2 533.00
FX ³								
EURUSD	1.1052	▼ -0.3%	▼ -1.6%	▼ -1.6%	▼ -3.8%	1.1100	1.1001	1.1194
EURPLN	4.3010	▲ 1.3%	▲ 1.0%	▲ 1.0%	▲ 0.5%	4.2514	4.2279	4.3010
USDPLN	3.8999	▲ 1.9%	▲ 2.7%	▲ 2.7%	▲ 4.6%	3.8319	3.7861	3.8999
USDCAD	1.3233	▲ 1.4%	▲ 1.9%	▲ 1.9%	▲ 0.7%	1.3087	1.2970	1.3233
USDCNY	6.9109	▲ 0.6%	▼ -0.8%	▼ -0.8%	▲ 3.2%	6.9166	6.8598	6.9747
USDCLP	797.96	▲ 3.4%	▲ 7.2%	▲ 7.2%	▲ 19.7%	772.65	748.74	797.96
Money market								
3m LIBOR USD	1.751	▼ -0.05	▼ -0.16	▼ -0.16	▼ -0.99	1.820	1.751	1.900
3m EURIBOR	-0.393	▼ 0.00	▼ -0.01	▼ -0.01	▼ -0.09	-0.391	-0.401	-0.379
3m WIBOR	1.710	- 0.00	- 0.00	- 0.00	▼ -0.01	1.710	1.710	1.710
5y USD interest rate swap	1.317	▼ -0.32	▼ -0.41	▼ -0.41	▼ -1.21	1.570	1.317	1.693
5y EUR interest rate swap	-0.298	▼ -0.14	▼ -0.19	▼ -0.19	▼ -0.42	-0.190	-0.298	-0.129
5y PLN interest rate swap	1.795	▼ -0.26	▲ 0.01	▲ 0.01	▼ -0.21	1.906	1.748	2.050
Fuel								
WTI Cushing	51.56	▼ -11.9%	▼ -15.6%	▼ -15.6%	▼ -4.1%	57.52	51.56	63.27
Brent	56.33	▼ -12.9%	▼ -15.2%	▼ -15.2%	▼ -7.5%	63.48	56.33	69.02
Diesel NY (ULSD)	162.20	▼ -12.5%	▼ -20.0%	▼ -20.0%	▼ -13.5%	184.81	162.20	206.01
Others								
VIX	18.84	▲ 6.74	▲ 5.06	▲ 5.06	▲ 2.27	13.94	12.10	18.84
BBG Commodity Index	74.84	▼ -6.2%	▼ -7.5%	▼ -7.5%	▼ -7.3%	79.01	74.84	81.64
S&P500	3 225.52	▼ -3.1%	▼ -0.2%	▼ -0.2%	▲ 19.3%	3 278.20	3 225.52	3 329.62
DAX	12 981.97	▼ -4.2%	▼ -2.0%	▼ -2.0%	▲ 16.2%	13 370.52	12 981.97	13 576.68
Shanghai Composite	2 976.53	▼ -3.9%	▼ -2.4%	▼ -2.4%	▲ 15.2%	3 078.65	2 976.53	3 115.57
WIG 20	2 065.90	▼ -5.1%	▼ -3.9%	▼ -3.9%	▼ -13.2%	2 145.90	2 065.90	2 200.10
KGHM	91.20	▼ -9.2%	▼ -4.6%	▼ -4.6%	▼ -3.1%	96.83	91.20	101.00

° 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

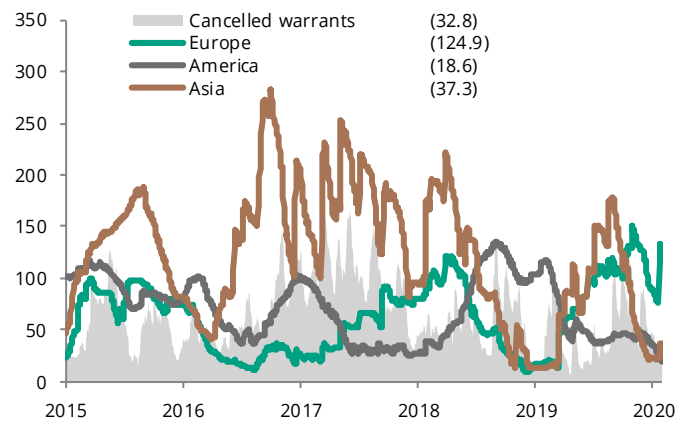
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



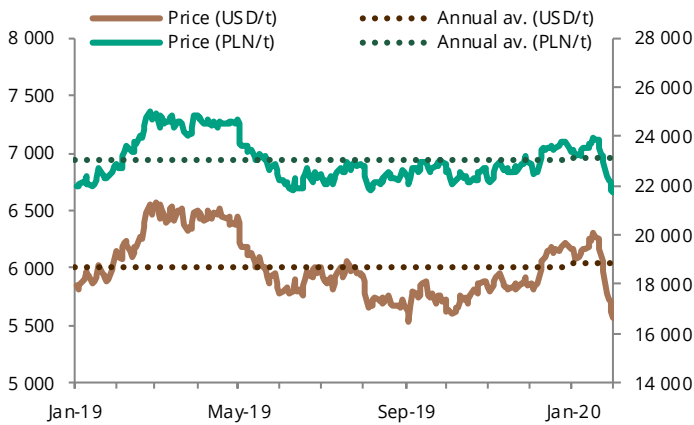
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



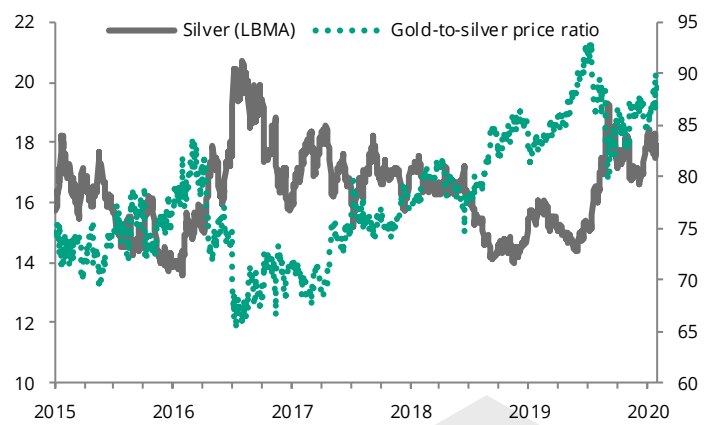
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



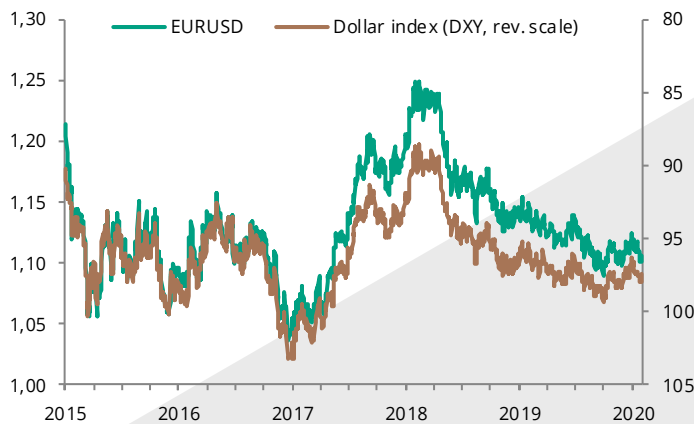
Source: Bloomberg, KGHM Polska Miedź

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



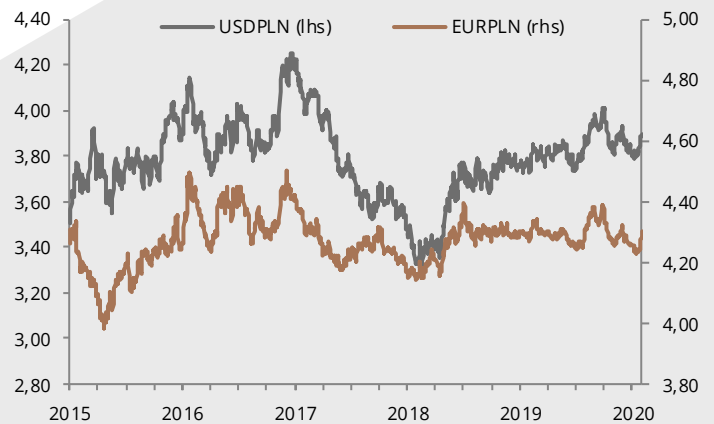
Source: Bloomberg, KGHM Polska Miedź

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:
20th January – 2nd February 2020.

- 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

DISCLAIMER

This document reflects the market view of the staff of KGHM Polska Miedz (Polish Copper)'s Market Risk Unit employees on the economy, commodity as well as financial markets. Although, according to the our best of our knowledge, all the facts presented in this publication come from or are based on reliable sources, we do not guarantee their correctness. Moreover, they may be incomplete or shortened. All the opinions and forecasts are backed by diligently-performed analyses valid as of the publishing date and may be subject to change. KGHM Polska Miedz (Polish Copper) S.A. is not obligated to announce any subsequent change of these opinions or forecasts. This document's purpose is solely informative and must not be interpreted as an offer or advice with regards to the purchase/sale of any mentioned financial instrument, nor it is part of such offer or advice.

Re-printing or using this publication or its in whole or part requires prior written consent from KGHM. To acquire that such consent please contact the Communications and CSR Department of Communication (Departament Komunikacji i CSR) of and CSR KGHM Polska Miedz SA.

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