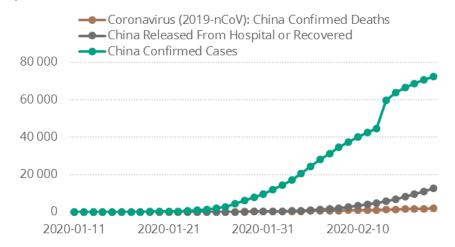


# **Market Overview**

- Copper: A government agency Cochilco, said that Chilean exports of copper to China are continuing normally despite delays to ship other goods to the world's second-largest economy amid the coronavirus outbreak (page 2).
- Precious metals: Gold prices rose 9.8% in US Dollar terms across 2019, and set new record highs for miners in major producer countries, as well as for buyers in major consumer countries (page 4).
- USA-China: Although the deficit shrinks, the gap remains more than 20% wider than before Trump became president. That reflects steady gains in American consumer spending, which drives imports (page 5).

### Development of coronavirus outbreak in China



Source: Bloomberg, KGHM Polska Miedź S.A.



#### Key market prices

		Close price	2w chng.						
	LME (USD/t)	-	_						
	Copper	5 737.00	2.5%						
	Nickel	13 035.00	2.2%						
	LBMA (USD/troz)								
•	Silver	17.71	-0.4%						
	Gold (PM)	1 581.40	0.4%						
	FX								
•	EURUSD	1.0842	-2.0%						
•	EURPLN	4.2402	-1.5%						
	USDPLN	3.9098	0.6%						
•	USDCAD	1.3249	-0.2%						
•	USDCLP	795.12	-0.5%						
	Stocks								
	KGHM	93.90	1.4%						
Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 8)									

#### Important macroeconomic data Release For Industrial profits (yoy) Dec **-6.3%** ▼ CPI (yoy) 4.4% 🔺 Jan Industrial prod. (yoy) Dec -1.8% 🔺 Manufacturing PMI 51.9 Jan Factory orders (wda, yoy) Dec -8.7% **▼** Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 6)

#### **Market Risk Unit**

marketrisk@kghm.com



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

#### Copper

A government agency Cochilco, said that Chilean exports of copper to China are continuing normally despite delays to ship other goods to the world's second-largest economy amid the coronavirus outbreak.

#### Chile's Minister said that the impact of the coronavirus outbreak on copper demand will depend on how long the situation lasts

#### **Chile Denies Delays of Copper Shipments To China**

As Platts informs, a government agency said that Chilean exports of copper to China are continuing normally despite delays to ship other goods to the world's second-largest economy amid the coronavirus outbreak. "With respect to shipment of copper to China, we are not aware of any alterations to trade operations," the Chilean Copper Commission said in a statement. Chile is the world's largest producer of copper, producing around 5.8 million mt/year of the metal. Nearly half of this is exported to China and was worth almost \$15 billion last year. The statement follows a Bloomberg News report that China had asked Chilean mining companies to delay shipments of the metal because of difficulties caused by the outbreak. But in the statement, Cochilco said that market expert Victor Garay had been referring problems faced by other Chilean exports, particularly farm produce. Fruit exporters association ASOEX said that more than 1,000 containers of Chilean fruit still stuck in Chinese ports. Authorities in Beijing decided to shut factories and ban travel across large parts of the country to contain its spread. The measures have sent tremors across the global economy, given China's role as the world's workshop. Concern over a sharp slowdown in the Chinese economy during the first quarter of this year as a result of these measures has triggered a sharp fall in the copper price since mid-January. According to Chile's Foreign Relations Minister, with regards to contracts and logistics the situation is completely normal. Rodrigo Yanez added that "The severity of the impact on the economy and hence copper demand and the copper price will depend on how long the situation lasts". He also said that "The main problem is the logistics and the distribution chains. However, we have noted a slow, but sure reactivation of Chinese markets".

#### Other important information on copper market:

• Aurubis AG, Europe's, maintains its forecast of a stable financial year, although a scheduled maintenance shutdown at its main smelter in Hamburg hit its first-quarter numbers. According to Metal Bulletin, Aurubis copper cathode output dropped 15% in the October-December, cathode output was 234,000 tonnes, down from 274,000 tonnes in October-December 2018. Additionally the copper producer said its Luenen smelter will undergo scheduled maintenance shutdowns in April and September, which will have an impact of an estimated 11 million euros on its operating EBT. Aurubis said it expects a good supply of copper concentrate (ore) in the new year, but with



low treatment and refining charges (TC/RCs) as asian copper smelters have agreed a 23% cut in benchmark TC/RCs for 2020. "For the next few months, Aurubis can expect "robust copper wire rod demand from cable producers." For copper shapes, the copper producer anticipates stable demand at the low level of the previous year. The company is currently seeing initial indications of a slight upturn in demand from the trend towards electrically powered vehicles.

- According to Bloomberg Chinese base metals inventories extended their surge as the outbreak of coronavirus hurt domestic demand and affected transportation. Stockpiles of both copper and zinc rose more than 20% to the highest since March, according to data from the Shanghai Futures Exchange. Aluminum holdings rose for a 6th week, the longest expansion in almost two years. The extended shutdown due to the outbreak is hitting commodities demand, while Chinese manufactures able to restart have seen operations hampered by transport curbs put in place to contain the virus. Economists are turning more pessimistic over the chances for a speedy recovery, with a long-lasting disruption to factory activity pointing to a further build in inventories.
- According to Reuters, spot charges for processing copper concentrate in China have risen to their highest in eight months as the coronavirus outbreak and associated constraints on production and logistics leave smelters unable to take shipments. Treatment and refining charges (TC/RCs), climbed to \$62.50 a tonne and 6.25 cents a pound. Smelters in China, the world's biggest copper consumer, need less concentrate after the coronavirus outbreak because factory shutdowns and transport curbs mean they have not been able to offload high inventories of byproduct sulphuric acid, which are limiting their capacity to produce more copper. Charges increase when there is more abundant supply of copper concentrate and go down when the market tightens. The annual miner-smelter TC/RC benchmark for 2020 was agreed at \$62 a tonne and 6.2 cents a pound, the lowest in nine years amid rising smelter capacity and limited mine supply growth.
- Chile state miner Codelco and BHP's sprawling Escondida mine saw copper output rise in December, Chilean state copper agency Cochilco said. Cochilco said output at Codelco, the world's top copper miner, rose 1.2% in the month versus the same period a year earlier, hitting 187,600 tonnes. That came after a steep drop in November impacted by riots in the country. Production at BHP's massive Escondida rose a steep 16% to 105,600 tonnes against a weak December a year earlier. The Collahuasi copper mine in northern Chile, a joint-venture between Anglo American and Glencore, produced 56,500 tonnes in December, down 0.2%, the agency said.



#### **Precious Metals**

Gold prices rose 9.8% in US Dollar terms across 2019, and set new record highs for miners in major producer countries, as well as for buyers in major consumer countries.

#### **Gold Mining Slips But 2019 Supply Sets Record**

Gold mining output fell in 2019 for the first year in over a decade, reviving talk of 'peak gold' among executives and analysts. But total supply still rose to a new alltime high, thanks to 'scrap' flows rising by more than 10% as gold's sharpest price gain since 2011 spurred the heaviest reselling of jewelry in 7 years by consumers worldwide. Figures from specialist consultancy Metals Focus say 2019 was the first year since 2008 that global gold mine production didn't grow - down by 1.3% to 3 464 tonnes. Fewer discoveries plus a lack of investment mean global output could fall by 30% over the next decade, said Mark Bristow, CEO of stock-market listed miner Barrick. "If we are going to see a decline in gold production," said John Reade of mining-industry group the World Gold Council, "that's certainly going to be positive for investor sentiment." Gold prices rose 9.8% in US Dollar terms across 2019, and set new record highs for miners in major producer countries Australia and Canada, as well as for buyers in major consumer countries India, Germany and Turkey. That spurred a surge in gold sales from existing household stocks. Added to mine output that took total global supply to a new record. Competitor analysts Refinitive GFMS meantime estimate that 2019's global gold mining output in fact grew from 2018, expanding by 2.6%. Metals Focus itself has in the past made significant upwards revisions to its historic figures, adding more than 4% to its previous estimate for 2016-2018, revised to account for a surge in less-easily tracked output from so-called artisanal, small-scale projects (ASM). Operating outside the formal gold-mining industry, ASM sites usually operate on an informal basis, outside the law.



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

#### **U.S. Annual Trade Gap Shrinks for First Time in Six Years**

Although the deficit shrinks, the gap remains more than 20% wider than before Trump became president. That reflects steady gains in American consumer spending, which drives imports.

The annual merchandise-trade deficit with China narrowed 17.6% to \$345.6 billion after hitting a record in 2018

As Bloomberg informs. the U.S. trade deficit narrowed in 2019 from the widest in a decade, reflecting plunges in shipments from China and oil imports while giving President Donald Trump some evidence he's delivered on pledges to reduce the gap. The annual deficit in goods and services decreased for the first time in six years, narrowing 1.7% to \$616.8 billion. The December gap rose from the prior month to \$48.9 billion, wider than the median estimate of economists, as oil imports from Canada jumped. While Trump frequently cites the deficit as evidence of the failure of his predecessors' trade policies -- even though most economists don't dwell on the indicator -- the gap remains more than 20% wider than before he became president. That reflects steady gains in American consumer spending, which drives imports. The annual merchandise-trade deficit with China -- the principal target of Trump's trade war -- narrowed 17.6% to \$345.6 billion after hitting a record in 2018. Imports from the country slumped 16.2%, exceeding the drop in 2009 during the global financial crisis, while shipments to China declined 11.3%, the biggest drop since at least 2003. That pushed China down to third place among America's top trading partners for goods in 2019, as Mexico vaulted to the top spot, slightly ahead of Canada. The merchandise deficits with Mexico and the European Union hit records, while the U.S. surplus in services declined by 4% to \$249.2 billion as imports gained.

#### China To Halve Tariffs On Some U.S. Imports

China's finance ministry informed about tariff reductions for 1,717 products imported from the United States which will take effect on Feb. 14.

According to Reuters, China will halve additional tariffs levied against 1,717 products imported from the United States last year, following the signing of a Phase 1 trade deal that brought a truce to a bruising trade war. China's finance ministry said in a statement that tariff reductions for the relevant goods, which were implemented on Sept. 1, will take effect on Feb. 14. The reductions come about three weeks after the two countries signed the Phase 1 trade deal in Washington. That agreement included China's promise to boost purchases of U.S. goods and services by \$200 billion over two years in exchange for the United States rolling back some tariffs imposed against Chinese goods. The news was positive for financial markets and comes as Beijing seeks to shore up investor and business confidence in China as a virus outbreak casts deep uncertainty over the economic outlook. The ministry did not state the value of the goods that are affected by the decision. China hopes it and the United States can abide by the trade deal and implement it to boost market confidence, push bilateral trade development and aid global economic growth, the ministry added.



# **Macroeconomic calendar**

#### Important macroeconomic data releases

Weight	Date	Event	For Reading		Previous	Consensus <sup>2</sup>	
		China				*1	
000	03-Feb	Caixin's manufacturing PMI	Jan	51.1	51.5	51.0	
00	03-Feb	Industrial profits (yoy)	Dec	-6.3%	5.4%		
٥	07-Feb	Foreign reserves (USD bn)	Jan	3116	3 108	3 106	
0000	10-Feb	Consumer inflation CPI (yoy)	Jan	5.4%	4.5%	4.9%	
00	10-Feb	Producer inflation PPI (yoy)	Jan	0.1%	-0.5%	0.0%	
		Poland					
000	03-Feb	Manufacturing PMI	Jan	47.4 <b>▼</b>	48.0	48.3	
00000	05-Feb	NBP base rate decision	Feb	1.50% =	1.50%	1.50%	
00	13-Feb	Trade balance (EUR mn)‡	Dec	224 🔻	893	- 730 🦱	
00	13-Feb	Exports (EUR mn)‡	Dec	17 220	20 398	16 712	
00	13-Feb	Current account balance (EUR mn)‡	Dec	990 🔻	1 564	- 416	
00000	14-Feb	GDP (yoy) - preliminary data	4Q	3.1%	3.9%	3.0%	
00000	14-Feb	GDP (qoq) - preliminary data‡	4Q	0.2%	1.2%	-0.1%	
0000	14-Feb	Consumer inflation CPI (yoy)	Jan	4.4%	3.4%	4.2%	
		US					
000	03-Feb	Manufacturing PMI - final data	Jan	51.9	51.7	51.7	
00	03-Feb	ISM Manufacturing‡	Jan	50.9	47.8	48.5	
00	04-Feb	Durable goods orders - final data	Dec	2.4% =	2.4%	2.4%	
000	05-Feb	Composite PMI - final data	Jan	53.3	53.1		
000	05-Feb	PMI services - final data	Jan	53.4	53.2	53.2	
00	07-Feb	Change in non-farm payrolls (ths)‡	Jan	225	147	165	
00	07-Feb	Underemployment rate (U6)	Jan	6.9%	6.7%		
00	07-Feb	Unemployment rate	Jan	3.6%	3.5%	3.5%	
٥	07-Feb	Average hourly earnings (yoy)‡	Jan	3.1%	3.0%	3.0%	
0000	13-Feb	Consumer inflation CPI (mom)	Jan	0.1%	0.2%	0.2%	
0000	13-Feb	Consumer inflation CPI (yoy)	Jan	2.5%	2.3%	2.4%	
0000	14-Feb	Industrial production (mom)‡	Jan	-0.3%	-0.4%	-0.2%	
00	14-Feb	Retail sales (excluding autos, mom)‡	Jan	0.3%	0.6%	0.3%	
00	14-Feb	University of Michigan confidence index - preliminary data	Feb	101	99.8	99.5	
٥	14-Feb	Capacity utilization‡	Jan	76.8%	77.1%	76.8%	
		Eurozone				0	
000	03-Feb	Manufacturing PMI - final data	Jan	47.9	47.8	47.8	
00	04-Feb	Producer inflation PPI (yoy)	Dec	-0.7%	-1.4%	-0.7%	
000	05-Feb	Composite PMI - final data	Jan	51.3	50.9	50.9	
000	05-Feb	Services PMI - final data	Jan	52.5	52.2	52.2	
00	05-Feb	Retail sales (yoy)‡	Dec	1.3%	2.3%	2.3%	
0000	12-Feb	Industrial production (sa, mom)‡	Dec	-2.1%	0.0%	-2.0%	
0000	12-Feb	Industrial production (wda, yoy)‡	Dec	-4.1% <b>V</b>	-1.7%	-2.5%	
00000	14-Feb	GDP (sa, yoy) - preliminary data‡	4Q	0.9% =	0.9%	1.0%	
00000	14-Feb	GDP (sa, qoq) - preliminary data	4Q	0.1% =	0.1%	0.1%	
<b>©</b>	14-Feb	Trade balance (EUR mn)	Dec	23.1	20.7		
				_			



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
		Germany					
000	03-Feb	Manufacturing PMI - final data	Jan	45.3	45.2	45.2	
000	05-Feb	Composite PMI - final data	Jan	51.2	51.1	51.1	
000	06-Feb	Factory orders (wda, yoy)‡	Dec	-8.7%	-6.0%	-6.6%	
0000	07-Feb	Industrial production (wda, yoy)‡	Dec	-6.8%	-2.5%	-3.7%	
0000	13-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	1.6% =	1.6%	1.6%	
0000	13-Feb	Consumer inflation CPI (yoy) - final data	Jan	1.7% =	1.7%	1.7%	
00000	14-Feb	GDP (yoy) - preliminary data‡	4Q	0.3%	1.1%	0.2%	
00000	14-Feb	GDP (sa, qoq) - preliminary data‡	4Q	0.0%	0.2%	0.1%	
		France					
000	03-Feb	Manufacturing PMI - final data	Jan	51.1 🛕	51.0	51.0	
000	05-Feb	Composite PMI - final data	Jan	51.1	51.5	51.5	
0000	07-Feb	Industrial production (yoy)‡	Dec	-3.0%	0.9%	1.0%	
		Italy					
000	03-Feb	Manufacturing PMI	Jan	48.9	46.2	47.3	
0000	04-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	0.5% =	0.5%	0.5%	
000	05-Feb	Composite PMI	Jan	50.4	49.3	49.4	
0000	10-Feb	Industrial production (wda, yoy)‡	Dec	-4.3%	-0.8%	-0.4%	
		UK					
000	03-Feb	Manufacturing PMI (sa) - final data	Jan	50.0	49.8	49.8	
000	05-Feb	Composite PMI - final data	Jan	53.3	52.4	52.4	
00000	11-Feb	GDP (yoy) - preliminary data	4Q	1.1% =	1.1%	0.8%	
00000	11-Feb	GDP (qoq) - preliminary data	4Q	0.0%	0.4%	0.0%	
0000	11-Feb	Industrial production (yoy)‡	Dec	-1.8% 🛕	-2.5%	-0.8%	
		Japan					
000	03-Feb	Manufacturing PMI - final data	Jan	48.8	49.3		
000	05-Feb	Composite PMI - final data	Jan	50.1	51.1		
		Chile				*	
0000	03-Feb	Economic activity (yoy)	Dec	1.1%	-3.3%	-0.4%	
00	06-Feb	Nominal wages (yoy)	Dec	4.5%	4.1%		
000	07-Feb	Copper exports (USD mn)	Jan	2716	3 450	<u></u> _	
		Canada				*	
000	07-Feb	Net change in employment (ths)‡	Jan	34.5	27.3	17.5	

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

<sup>&</sup>lt;sup>2</sup> Reading difference to consensus: ■ = higher than consensus; ■ = lower than consensus; O= 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**

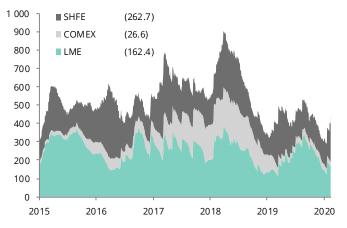
Key base & precious metal prices, exchange rates and other important market factors

(as of: 14-Feb-20)	Price change <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	5 737.00		2.5%	$\blacksquare$	-6.8%	•	-6.8%	$\blacksquare$	-7.1%	5 936.81	5 570.00	6 300.50
Molybdenum	10.68		3.4%		16.1%		16.1%	-		10.12	9.20	10.83
Nickel	13 035.00		2.2%	•	-6.9%	•	-6.9%		5.6%	13 363.44	12 535.00	14 290.00
Aluminum	1 704.50		0.6%	•	-5.3%	•	-5.3%	$\blacksquare$	-6.8%	1 747.42	1 676.00	1 810.50
Tin	16 525.00		1.1%	•	-1.9%	•	-1.9%	$\blacksquare$	-21.7%	16 861.41	16 155.00	17 775.00
Zinc	2 138.00	•	-2.8%	•	-6.8%	•	-6.8%	$\blacksquare$	-18.9%	2 298.95	2 128.00	2 466.50
Lead	1 875.00	•	-0.2%	•	-2.5%	•	-2.5%	$\blacksquare$	-7.8%	1 901.64	1 810.00	2 027.00
LBMA (USD/troz)	_											
Silver	17.71	•	-0.4%	$\blacksquare$	-1.9%	•	-1.9%		13.6%	17.88	17.47	18.44
Gold <sup>2</sup>	1 581.40		0.4%		3.8%		3.8%		20.6%	1 563.16	1 527.10	1 584.20
LPPM (USD/troz)	_											
Platinum <sup>2</sup>	972.00		0.6%		0.1%		0.1%		24.3%	981.38	958.00	1 017.00
Palladium <sup>2</sup>	2 458.00		6.9%		28.0%		28.0%		75.2%	2 283.09	1 946.00	2 533.00
FX <sup>3</sup>	_											
EURUSD	1.0842	•	-2.0%	$\blacksquare$	-3.5%	•	-3.5%	$\blacksquare$	-3.8%	1.1056	1.0842	1.1194
EURPLN	4.2402	•	-1.5%	•	-0.4%	•	-0.4%	$\blacksquare$	-2.3%	4.2560	4.2279	4.3034
USDPLN	3.9098		0.6%		3.0%		3.0%		1.5%	3.8511	3.7861	3.9104
USDCAD	1.3249	•	-0.2%		2.0%		2.0%	$\blacksquare$	-0.4%	1.3147	1.2970	1.3319
USDCNY	6.9869	•	-0.5%		0.3%		0.3%		3.2%	6.9420	6.8598	7.0215
USDCLP	795.12	_	-0.5%		6.8%		6.8%		20.2%	777.71	748.74	799.11
Money market	_											
3m LIBOR USD	1.692	•	-0.05	$\blacksquare$	-0.22	$\blacksquare$	-0.22	$\blacksquare$	-1.00	1.788	1.692	1.900
3m EURIBOR	-0.413	•	-0.02	$\blacksquare$	-0.03	$\blacksquare$	-0.03	$\blacksquare$	-0.11	-0.395	-0.413	-0.379
3m WIBOR	1.710	-	0.00	-	0.00	-	0.00	$\blacksquare$	-0.01	1.710	1.710	1.710
5y USD interest rate swap	1.412		0.06	$\blacksquare$	-0.32	$\blacksquare$	-0.32	$\blacksquare$	-1.15	1.525	1.317	1.693
5y EUR interest rate swap	-0.298		0.00	•	-0.19	$\blacksquare$	-0.19	$\blacksquare$	-0.43	-0.216	-0.301	-0.129
5y PLN interest rate swap	1.860		0.04		0.08		0.08	$\blacksquare$	-0.15	1.882	1.748	2.050
Fuel	_											
WTI Cushing	52.05		3.9%	$\blacksquare$	-14.8%	$\blacksquare$	-14.8%	$\blacksquare$	-4.3%	55.28	49.57	63.27
Brent	57.22		7.5%	$\blacksquare$	-13.9%	$\blacksquare$	-13.9%	$\blacksquare$	-11.0%	60.72	52.97	69.02
Diesel NY (ULSD)	169.70		7.9%	$\blacksquare$	-16.3%	$\blacksquare$	-16.3%	$\blacksquare$	-13.8%	178.09	157.29	206.01
Others	_											
VIX	13.68	•	-4.29	$\blacksquare$	-0.10	•	-0.10	•	-2.54	14.33	12.10	18.84
BBG Commodity Index	75.38		1.8%	$\blacksquare$	-6.8%	•	-6.8%	$\blacksquare$	-5.7%	77.62	74.08	81.64
S&P500	3 380.16		4.0%		4.6%		4.6%		23.1%	3 298.08	3 225.52	3 380.16
DAX	13 744.21		5.4%		3.7%		3.7%		23.9%	13 418.96	12 981.97	13 749.78
Shanghai Composite	2 917.01		6.2%	$\blacksquare$	-4.4%	•	-4.4%		7.3%	2 995.81	2 746.61	3 115.57
WIG 20	2 115.29		2.0%	•	-1.6%	•	-1.6%	•	-8.8%	2 133.88	2 065.90	2 200.10
KGHM	93.90		1.4%	$\blacksquare$	-1.8%	•	-1.8%		0.4%	96.28	91.20	101.00

<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

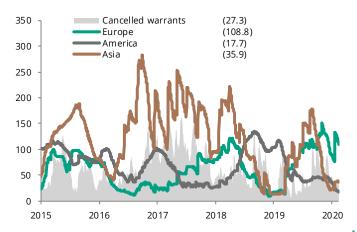


#### Copper: official exchange stocks (thousand tonnes)



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

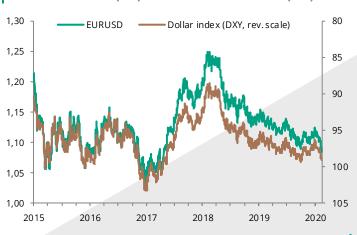
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs) 4,40 5,00 EURPLN (rhs) 4,20 4,80 4,00 4,60 3,80 3,60 4,40 3,40 4,20 3,20 4,00 3,00 2,80 3,80 2015 2016 2017 2018 2019 2020

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: 3<sup>th</sup> -16<sup>th</sup> 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

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