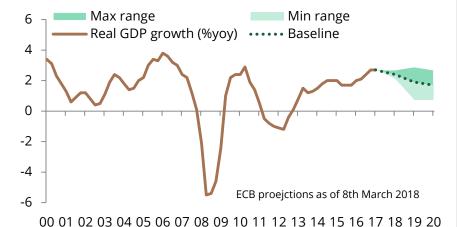


Market Overview

- Copper: Peru is ratcheting up its forecasts for mining investment and production, even in the face of the country's political turbulence. Overcapacity in Chinese smelters could throw the domestic market into surplus, as around 1.5 million metric tons of new capacity is forecasted to comes on line in the next two years. A group of workers at BHP's Escondida, the world's largest copper mine, didn't gather enough signatures to form a breakaway union (page 2).
- Precious metals: Precious metals have largely traded range-bound in the recent fortnight. On the news side it's worth mentioning that Russia has overtaken China in terms of accumulated gold reserves. In South Africa the new mining charter, which lays out requirements for black ownership levels and other targets, is said to be ready in next three months (page 4).
- US interest rates: New Fed's chief Jerome Powell opened the door to the Federal Reserve raising U.S. interest rates four times this year as he acknowledged stronger economic growth may prompt policy makers to rethink their plan for three hikes. (page 6).

ECB projections show positive view on Eurozone gross domestic product, with the peak in 2019



Source: European Central Bank, Bloomberg, KGHM Polska Miedź



Var	100 D M	100	100 141	
nev	mar	ĸel	ווט	ces

		Close price	2w chng.
	LME (USD/t)		
•	Copper	6 808.00	-4.3%
•	Nickel	13 345.00	-4.1%
	LBMA (USD/troz)		
•	Silver	16.49	-1.1%
•	Gold (PM)	1 320.60	-1.0%
	FX		
	EURUSD	1.2291	2.2%
	EURPLN	4.1989	0.8%
•	USDPLN	3.4132	-1.4%
	USDCAD	1.2840	2.4%
•	USDCLP	605.22	-0.7%
	Stocks		
Source	KGHM :: Bloomberg, KGHM Po	104.00 olska Miedź; <i>(mor</i>	-4.9% e on page 10)

Important macroeconomic data									
	Release	For							
	GDP (yoy)	4Q	5.1% =						
\bigcirc	Manufacturing PMI	Feb	58.6						
	Non-farm payrolls chng.	Feb	313 🔺						
*	Econom. activity (yoy)	Jan	3.9% 🔺						
* }	Official manuf. PMI	Feb	50.3 ▼						
Source: Bloomberg, KGHM Polska Miedź; (more on page 8)									

Market Risk Unit

marketrisk@kghm.com

Grzegorz Laskowski Michał Kamiński Bartosz Jachnik Wojciech Demski



Base and precious metals | Other commodities

Copper

Peru is ratcheting up its forecasts for mining investment and production, even in the face of the country's political turbulence. Overcapacity in Chinese smelters could throw the domestic market into surplus, as around 1.5 million metric tons of new capacity is forecasted to comes on line in the next two years. A group of workers at BHP's Escondida, the world's largest copper mine, didn't gather enough signatures to form a breakaway union.

31st International Copper Conference – balanced copper market in short term, going into deficit after 2020

In recent two weeks Metal Bulletin held its annual edition of International Copper Conference. Participants on various panels, presentations and meetings expressed their rather positive sentiment for copper market in short term and bullish in mid- and longer term horizon. Investors pointed out, that there are few arguments in favour for further copper price increases in a short term, and that if strike risks in Chile won't materialize this year, it should oscilate around comfortable price zone of 7 000s USD/mt. There are 34 contract renegotiations in Chile this year, from which 9 were rated as having high risk of strike. In total, this kind of risk was estimated as being slightly higher than in the last year (2.5 mln tonnes of production at risk vs 2.2 mln tonnes last year).

The impact of recent scrap import ban in China is difficult to estimate, but in many investors' opinion it's already priced in the current price level, and its further impact on prices will be very limited, as Chinese domestic scrap production is rapidly growing. Much attention has been devoted to electric vehicles and renewable sources of energy which influence on copper demand as well as other metals used in battery production (mainly nickel and cobalt) should be substantial starting from 2022-2023. Analysts present different views regarding the future of the dollar – there is risk of further depreciation, but hawkish Fed could lead to currency strengthening. Investors agreed on the growing role of new technologies in industry as the new environmental restrictions will force higher efficiency in order to maintain current levels of production.

Peru lifts mine spending estimates even as politics stay stormy

Peru is ratcheting up its forecasts for mining investment and production, saying companies are proving resilient in the face of the country's political turbulence. New Energy and Mines Minister Angela Grossheim's team raised its estimate for project spending in the next 10 years by 14 percent to \$58 billion, of which 30 percent would be spent in the next four years. In January, Peruvian President

International Copper Conference Keynotes



Pedro Pablo Kuczynski promoted Grossheim to minister as part of a cabinet reshuffle after back-to-back crises in his government triggered resignations and protests. Speaking from a mining conference in Toronto on Monday, she said the level of interest from would-be investors has been high despite the president facing the threat of a second impeachment attempt in less than three months. Kuczynski warned on Monday a new attempt to force him from office would create "tremendous chaos" as opposition lawmakers consider presenting a motion as early as this week to impeach him for allegedly lying to Congress. While production of other large copper-producing countries slipped last year after spending cutbacks amid low prices, Peru's output continued to grow.

Grossheim is targeting a 30 percent increase in copper production to 3 million metric tons by 2021. The government expects several projects together worth more than \$10 billion to start construction this year, including Anglo American Plc's \$5 billion Quellaveco copper venture, Jinzhao Mining Peru SA's Pampa de Pongo iron project and Minsur SA's Mina Justa. It also includes the expansion of Minera Chinalco Peru SA's Toromocho, "for which we hope to have good news soon," she said. The list of projects to begin construction this year doesn't include Southern Copper Corp.'s Tia Maria, with the minister preferring not to give an estimate on when it would get permission to begin building the mine. The \$7 billion increase in the 10-year pipeline is a mix of new projects and budget increases. The government expects mining investment growth in Peru to accelerate to 20 percent this year from about 15 percent. The ministry is looking to streamline exploration permitting and help mining companies navigate red tape generally. It's also preparing to unveil a fund that will help communities improve basic infrastructure before mining investment arrives, and has called for bids to evaluate an estimated \$2.5 billion rail line linking Las Bambas and other mines in the area with the coast.

Other important information on copper market:

- A group of workers at BHP's Escondida, the world's largest copper mine, didn't gather enough signatures to form a breakaway union, says Pedro Marin, one of the leaders of the initiative said. 225 workers signed up for the new union, falling short of the 250 required under Chilean labor rules. Escondida Union No.1 remains the sole union representing about 2,500 operators and maintenance workers. Escondida workers will negotiate a new collective contract with the company in June, after wage talks resulted in a 44-day strike and no agreement last year.
- Chile's environmental commission approved a project that will allow the Collahuasi mine to increase daily processing to its approved capacity of 170,000 metric tons, from 136,000 tons now, the company said.
- The London Metal Exchange will introduce a financial over-the-counter (OTC) booking fee, which will be payable from June 1, the exchange said on Thursday March 1. Following a consultation period with the market, the exchange announced on Thursday that it will set a OTC booking fee of \$1 per



equivalent LME lot which will be paid by financial institutions for each OTC trade executed in place of an LME client. The consultation feedback provided a range of viewpoints regarding the OTC booking fee.

Precious Metals

Precious metals have largely traded range-bound in the recent fortnight. On the news side it's worth mentioning that Russia has overtaken China in terms of accumulated gold reserves. In South Africa the new mining charter, which lays out requirements for black ownership levels and other targets, is said to be ready in next three months.

Russia overtakes China in gold reserves race

The Central Bank of Russia (CBR) boosted its holdings of gold by almost 20 metric tons last month, with reserves reaching 1,857 tons. It has increased its holdings every month since March 2015. Russia is now among the top five gold holders after surpassing China, which reportedly holds 1,843 tons. Over the last 15 years, Moscow and Beijing have been aggressively accumulating gold reserves to cut their dependence on the US dollar. The US claims to be the largest holder of gold with 8,134 tons. Germany is in second place with 3,374 tons, but a large portion of its gold reserves are still held in the US. As of last year, Bundesbank has only been able to repatriate 674 tons of gold kept in Paris and New York since the Cold War. Over 50 percent of Germany's gold reserves are now in Frankfurt. The remainder is stored in London and New York. The International Monetary Fund (IMF) owns 2,814 tons of gold. France is the fourth-biggest bullion holder. The CBR has more than doubled the pace of its gold purchases, according to Gold.org data. It has been increasing the country's gold reserves to meet the goal set by President Vladimir Putin to make Russia less vulnerable to geopolitical risks. The Russian gold hoard has increased by more than 500% since 2000. Russia is also the third-largest producer of the precious metal. The government has purchased two-thirds of all the gold mined in country, buying it from local banks, as the Kremlin sees the precious metal as a safe haven at a time of geopolitical turbulence.

Russia overtakes China in total gold reserves stock

Platinum price crashes through \$1,000 after German diesel ban

Platinum group metals were the hardest hit on generally weak precious metals markets Tuesday after a German court ruled that cities in Europe's largest economy and world's fourth largest automaker have the right to ban diesel cars.

The price of platinum were back in triple digit territory on New York futures markets on Wednesday falling 2% to a low of \$983 an ounce. Palladium was also weaker at \$1,033 an ounce as it continues to retreat from record highs of \$1,138 an ounce hit in January. "We're witnessing the creeping death of diesel," Stefan

Creeping death of diesel?



Bratzel, director of the Center of Automotive Management at the University of Applied Sciences in Bergisch Gladbach, Germany told Bloomberg News.

Diesel technology has been under relentless pressure since the September 2015 revelations that Volkswagen, the world's number two vehicle manufacturer, had cheated on emissions testing. Today's ruling affects more than 10 million vehicle owners in Germany and could have ripple effects across Europe. Encouraged by government tax subsidies and loose regulations, the European auto industry invested heavily in diesel as a profitable stop-gap technology to meet tighter rules on carbon dioxide emissions. Standards will again tighten in 2021, which means carmakers risk fines as consumers desert diesel.

Will the new regulations refrain companies from investing in South Africa?

South Africa's mining charter to be finalized in three months

South Africa's new mining minister Gwede Mantashe said on Wednesday he will finalize the latest version of an industry charter which lays out requirements for black ownership levels and other targets in the next three months.

Uncertainty around the charter has deterred investment into a sector that accounts for 8 percent of gross domestic product in the world's top platinum producer. The government of new President Cyril Ramaphosa has said it will negotiate the latest charter with mining companies, prompting the Chamber of Mines to temporarily suspend a legal challenge to the version drawn up by Mantashe's predecessor Mosebenzi Zwane. The industry had broken off talks with Zwane and said his new charter would drive many companies out of business. Bones of contention included raising the target for black ownership to 30 percent from 26 percent.



Global economies | Foreign exchange markets

Dowish tone of Fed chairman

New Fed's chief Jerome Powell opened the door to the Federal Reserve raising U.S. interest rates four times this year as he acknowledged stronger economic growth may prompt policy makers to rethink their plan for three hikes.

Powell revised his personal outlook on US economy growth to more positive

"My personal outlook for the economy has strengthened since December," the Fed chairman said in response to a question about what would cause the central bank to step up the pace of policy tightening. He then listed four events that are causing him to revise up his outlook. "We've seen continuing strength in the labor market," Powell told the House Financial Services Committee in his first hearing as Fed chief. "We've seen some data that will in my case add some confidence to my view that inflation is moving up to target. We've also seen continued strength around the globe, and we've seen fiscal policy become more stimulative." Powell is taking over the Fed at a time when the world's largest economy may be shifting gear to faster growth and declining unemployment, though inflation remains below the central bank's 2 percent goal. Adding to the momentum are tax cuts and spending increases agreed to by Republican lawmakers and signed by President Donald Trump.

More dynamic policy tightening possible, but market may have overreacted.

Economists said the signal was clear. The economic outlook is improving, and the chairman used the testimony to invite policy makers to reassess their December forecast for three hikes this year. Powell's remarks caused yields on U.S. 10-year notes to jump to their highest levels of the day. Fed officials will submit fresh estimates for the economy and the number of rate increases warranted this year at their upcoming meeting on March 20-21. When pressed on how such an improving assessment would affect the path of interest rates, Powell said he wouldn't "want to prejudge" the results of that exercise. Even though his written testimony echoed the "roughly balanced" language of the Fed's January statement, Powell's answers to questions signaled he's gone a step beyond that. "For a long time, there was slack in the labor market, and that argued for continuing to support lower unemployment. We've reached the point where the risks are really two-sided now," Powell said. If the economy overheats, "we'll have to raise rates faster, and that raises the chances of a recession, and recessions tend to hit vulnerable populations the most," he added. "We're trying to balance the risk of getting inflation up to 2 percent with the risk of the economy overheating." Investors marked up the probability of a Fed rate hike in the fourth quarter to about 50 percent following Powell's remarks. Odds of increases in the second and third quarters ticked up to about 80 percent and 70 percent, respectively, while the chances of a boost when the Fed next meets in March remained near 100 percent. "There has been a huge reaction in the rates market," said Priya Misra (TD Securities). "He has more confidence in the outlook for growth and inflation than he did in December, but I think the market over-



reacted." For the Fed to go faster than three hikes in 2018, she added, there has to be evidence that inflation is moving up by at least mid-year. The Fed's preferred inflation benchmark rose 1.7 percent in 2017 and has been under its 2 percent goal for most of the last 5 years.



Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For Reading ¹		Previous	Consensus ²
		China				*3
000	28-Feb	Official manufacturing PMI	Feb	50.3	51.3	51.1
000	01-Mar	Caixin's manufacturing PMI	Feb	51.6	51.5	51.3
0	07-Mar	Foreign reserves (USD bn)	Feb	3 134	3 161	3 160 👅
00	08-Mar	Trade balance (USD bn)‡	Feb	33.7	20.4	- 5.7
00	08-Mar	Exports (yoy)‡	Feb	44.5%	11.2%	11.0%
0000	09-Mar	Consumer inflation CPI (yoy)	Feb	2.9%	1.5%	2.5%
00	09-Mar	Producer inflation PPI (yoy)	Feb	3.7%	4.3%	3.8%
0	09-Mar	New yuan loans (CNY bn)	Feb	839 🔻	2 900	900
		Poland				
00000	28-Feb	GDP (yoy) - final data	4Q	5.1% =	5.1%	5.1%
00000	28-Feb	GDP (qoq) - final data	4Q	1.0% =	1.0%	
000	01-Mar	Manufacturing PMI	Feb	53.7	54.6	54.3
00000	07-Mar	NBP base rate decision	Mar	1.50% =	1.50%	1.50%
		US				
0	26-Feb	Dallas Fed manufacturing activity	Feb	37.2	33.4	30.0
00	27-Feb	Durable goods orders - preliminary data‡	Jan	-3.7%	2.6%	-2.0%
0	27-Feb	Richmond Fed manufacturing index	Feb	28.0	14.0	15.0
0	27-Feb	S&P/CaseShiller home price index‡	Dec	204 🔺	204	
00000	28-Feb	GDP (annualized, qoq) -	4Q	2.5%	2.6%	2.5%
0000	01-Mar	Consumer spending inflation PCE (mom)	Jan	0.3%	0.2%	0.3%
0000	01-Mar	Consumer spending inflation PCE (yoy)	Jan	1.5% =	1.5%	1.5%
000	01-Mar	Manufacturing PMI - final data	Feb	55.3	55.9	55.9
00	01-Mar	ISM Manufacturing	Feb	60.8	59.1	58.7
00	01-Mar	Personal income (sa, mom)	Jan	0.4% =	0.4%	0.3%
00	01-Mar	Personal spending (sa, mom)	Jan	0.2%	0.4%	0.2%
00	02-Mar	University of Michigan confidence index - final data	Feb	99.7	99.9	99.5
000	05-Mar	Composite PMI - final data	Feb	55.8	55.9	
000	05-Mar	PMI services - final data	Feb	55.9 -	55.9	55.9
00	06-Mar	Durable goods orders - final data	Jan	-3.6%	-3.7%	-3.6%
00	09-Mar	Change in non-farm payrolls (ths)‡	Feb	313 🔺	239	205
00	09-Mar	Underemployment rate (U6)	Feb	8.2% =	8.2%	
00	09-Mar	Unemployment rate	Feb	4.1% =	4.1%	4.0%
0	09-Mar	Average hourly earnings (yoy)‡	Feb	2.6%	2.8%	2.8%



Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		Eurozone				(0)
©	27-Feb	M3 money supply (yoy)	Jan	4.6% =	4.6%	4.6%
©	27-Feb	Economic confidence‡	Feb	114	115	114 🦱
•	27-Feb	Industrial confidence‡	Feb	8.0	9.0	8.0
©	27-Feb	Consumer confidence - final data	Feb	0.1 -	0.1	0.1
٥	27-Feb	Business climate indicator‡	Feb	1.5	1.6	1.5
0000	28-Feb	Core CPI (yoy) - estimation	Feb	1.0% =	1.0%	1.0%
0000	28-Feb	CPI estimate (yoy)	Feb	1.2%	1.3%	1.2%
000	01-Mar	Manufacturing PMI - final data	Feb	58.6	58.5	58.5
00	01-Mar	Unemployment rate‡	Jan	8.6% =	8.6%	8.6%
00	02-Mar	Producer inflation PPI (yoy)	Jan	1.5%	2.2%	1.6%
000	05-Mar	Composite PMI - final data	Feb	57.1	57.5	57.5
000	05-Mar	Services PMI - final data	Feb	56.2	56.7	56.7
00	05-Mar	Retail sales (yoy)‡	Jan	2.3%	2.1%	2.0%
00000	07-Mar	GDP (sa, yoy) - final data	4Q	2.7% =	2.7%	2.7%
00000	07-Mar	GDP (sa, qoq) - final data	4Q	0.6% =	0.6%	0.6%
000	07-Mar	Gross fixed capital (qoq)‡	4Q	0.9% 🔺	-0.2%	1.1%
000	07-Mar	Households consumption (qoq)	4Q	0.2%	0.3%	0.3%
00000	08-Mar	ECB main refinancing rate	Mar	0.00% =	0.00%	0.00%
00000	08-Mar	ECB deposit facility rate	Mar	-0.4% =	-0.4%	-0.4%
		Germany				
0000	27-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Feb	1.2%	1.4%	1.3%
0000	27-Feb	Consumer inflation CPI (yoy) - preliminary data	Feb	1.4%	1.6%	1.5%
00	28-Feb	GfK consumer confidence	Mar	10.8	11.0	10.9
00	28-Feb	Unemployment rate	Feb	5.4% =	5.4%	5.4%
000	01-Mar	Manufacturing PMI - final data	Feb	60.6	60.3	60.3
000	02-Mar	Retail sales (yoy)‡	Jan	2.3%	-0.2%	3.0%
000	05-Mar	Composite PMI - final data	Feb	57.6	57.4	57.4
000	08-Mar	Factory orders (wda, yoy)‡	Jan	8.2%	7.9%	11.5%
0000	09-Mar	Industrial production (wda, yoy)‡	Jan	5.5%	6.2%	6.0%
		France				
00000	28-Feb	GDP (yoy) - preliminary data	4Q	2.5%	2.4%	2.4%
00000	28-Feb	GDP (qoq) - preliminary data	4Q	0.6% =	0.6%	0.6%
0000	28-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Feb	1.3%	1.5%	1.5%
0000	28-Feb	Consumer inflation CPI (yoy) - preliminary data	Feb	1.2%	1.3%	1.4%
000	01-Mar	Manufacturing PMI - final data	Feb	55.9	56.1	56.1

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



Key market data

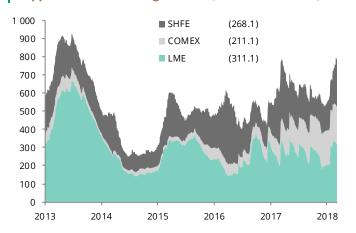
Key base & precious metal prices, exchange rates and other important market factors

(as of: 09-Mar-18)		Price change ¹				From year beginning ²						
	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t)												
Copper	6 808.00	_	-4.3%	\blacksquare	-4.9%	\blacksquare	-4.9%		20.4%	7 017.69	6 755.00	7 202.50
Molybdenum	19 500.00		21.9%		21.9%		21.9%		27.9%	16 224.49	16 000.00	19 500.00
Nickel	13 345.00		-4.1%		8.8%		8.8%		32.1%	13 239.59	12 415.00	14 150.00
Aluminum	2 078.50	_	-5.0%	\blacksquare	-7.3%	\blacksquare	-7.3%		12.5%	2 188.76	2 078.50	2 266.00
Tin	21 375.00	_	-1.5%		7.5%		7.5%		11.2%	21 238.16	19 960.00	22 105.00
Zinc	3 216.00	_	-10.4%	\blacksquare	-2.8%	\blacksquare	-2.8%		21.1%	3 465.65	3 216.00	3 618.00
Lead	2 352.00	_	-9.5%	•	-5.7%	\blacksquare	-5.7%		5.6%	2 561.54	2 352.00	2 683.00
LBMA (USD/troz)												
Silver	16.49		-1.1%	\blacksquare	-2.3%	\blacksquare	-2.3%	\blacksquare	-3.8%	16.87	16.32	17.52
Gold ²	1 320.60		-1.0%		1.9%		1.9%		9.5%	1 330.20	1 307.75	1 354.95
LPPM (USD/troz)	_											
Platinum ²	949.00		-4.8%		2.4%		2.4%		0.5%	985.34	936.00	1 020.00
Palladium ²	984.00		-7.3%	\blacksquare	-6.8%	\blacksquare	-6.8%		30.5%	1 050.18	969.00	1 129.00
FX ³												
EURUSD	1.2291		-0.2%		2.5%		2.5%		16.5%	1.2279	1.1932	1.2493
EURPLN	4.1989		0.7%		0.7%		0.7%	\blacksquare	-2.7%	4.1693	4.1423	4.2024
USDPLN	3.4132		1.0%	\blacksquare	-2.0%	\blacksquare	-2.0%	\blacksquare	-16.5%	3.3956	3.3173	3.4999
USDCAD	1.2840		1.2%		2.4%		2.4%	\blacksquare	-5.0%	1.2560	1.2288	1.2977
USDCNY	6.3344		0.3%	\blacksquare	-2.6%	\blacksquare	-2.6%	\blacksquare	-8.3%	6.3749	6.2778	6.5297
USDCLP	605.22		2.3%	\blacksquare	-1.6%	\blacksquare	-1.6%	•	-8.5%	601.00	588.28	614.75
Money market	_											
3m LIBOR USD	2.089		0.10		0.39		0.39		0.97	1.837	1.696	2.089
3m EURIBOR	-0.327		0.00		0.00		0.00		0.00	-0.328	-0.329	-0.327
3m WIBOR	1.710	•	-0.01	\blacksquare	-0.01	\blacksquare	-0.01	\blacksquare	-0.02	1.720	1.710	1.720
5y USD interest rate swap	2.788		0.07		0.54		0.54		0.56	2.588	2.283	2.816
5y EUR interest rate swap	0.462	•	-0.01		0.15		0.15		0.19	0.430	0.292	0.509
5y PLN interest rate swap	2.475	•	-0.11	\blacksquare	-0.02	\blacksquare	-0.02	\blacksquare	-0.04	2.563	2.400	2.740
Fuel	_											
WTI Cushing	62.04	•	-2.9%		2.7%		2.7%		25.9%	62.75	59.19	66.14
Brent	65.28	•	-3.0%	\blacksquare	-2.3%	\blacksquare	-2.3%		25.9%	66.96	62.33	70.42
Diesel NY (ULSD)	187.41	•	-5.5%	\blacksquare	-9.2%	\blacksquare	-9.2%		23.4%	198.88	183.32	212.60
Others	_											
VIX	14.64	•	-1.16		3.60		3.60		2.34	16.75	9.15	37.32
BBG Commodity Index	87.95	•	-1.2%	•	-0.2%	•	-0.2%		4.0%	88.50	85.64	90.80
S&P500	2 786.57		0.3%		4.2%		4.2%		17.8%	2 745.83	2 581.00	2 872.87
DAX	12 346.68	•	-1.4%	•	-4.4%	•	-4.4%		3.1%	12 783.65	11 913.71	13 559.60
Shanghai Composite	3 307.17	•	-0.7%	•	0.0%	•	0.0%		2.8%	3 373.68	3 129.85	3 559.47
WIG 20	2 354.54	•	-2.2%	•	-4.3%	•	-4.3%		7.5%	2 475.03	2 314.23	2 630.37
KGHM	104.00	•	-4.2%	•	-6.5%	•	-6.5%	•	-11.4%	109.32	102.25	115.00

[°] 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

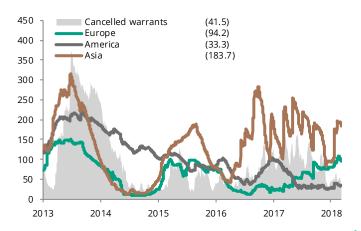


Copper: official exchange stocks (thousand tonnes)



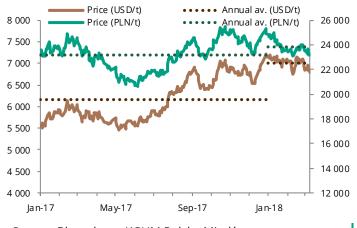
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



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

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



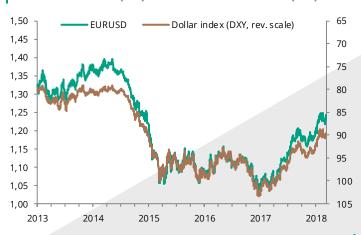
Source: Bloomberg, KGHM Polska Miedź

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



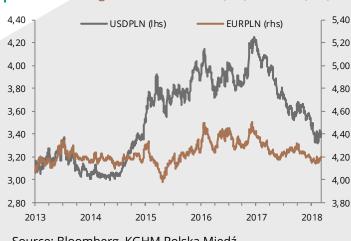
Source: Bloomberg, KGHM Polska Miedź

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: **26**th **February – 11**th **March 2018.**

- 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.

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

Official metals prices are available on following websites:

base metals: www.lme.com/dataprices_products.asp (charge-free logging)

• silver and gold: www.lbma.org.uk/pricing-and-statistics

platinum and palladium: www.lppm.com/statistics.aspx

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In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.

Departament Zarządzania Ryzykiem Rynkowym i Kredytowym (Market and Credit Risk Management Department)

Wydzial Ryzyka Rynkowego (Market Risk Unit)

ul. M. Sklodowskiej-Curie 48

59-301 Lubin, Poland