

Market Overview

- **Copper:** While Codelco is struggling with decreasing output, the Chilean government is considering how much to fund world's largest copper producer. The concentrate market tightening is already a thing - Chinese smelters are decreasing TC/RC levels for the second quarter of 2019 (*page 2*).
- **Precious metals:** Goldcorp shareholders approved Newmont Mining Corp's \$10 billion takeover offer, removing one of the last remaining hurdles to create the world's largest gold producer (*page 5*).

as of: 8th April 2019

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	6 419.00	1.4%
▲ Nickel	13 090.00	2.5%
LBMA (USD/troz)		
▼ Silver	15.20	-2.1%
▼ Gold (PM)	1 288.45	-2.4%
FX		
▼ EURUSD	1.1233	-0.8%
▼ EURPLN	4.2921	-0.1%
▲ USDPLN	3.8215	0.7%
▼ USDCAD	1.3386	-0.3%
▼ USDCLP	666.32	-1.5%
Stocks		
▲ KGHM	109.30	5.7%

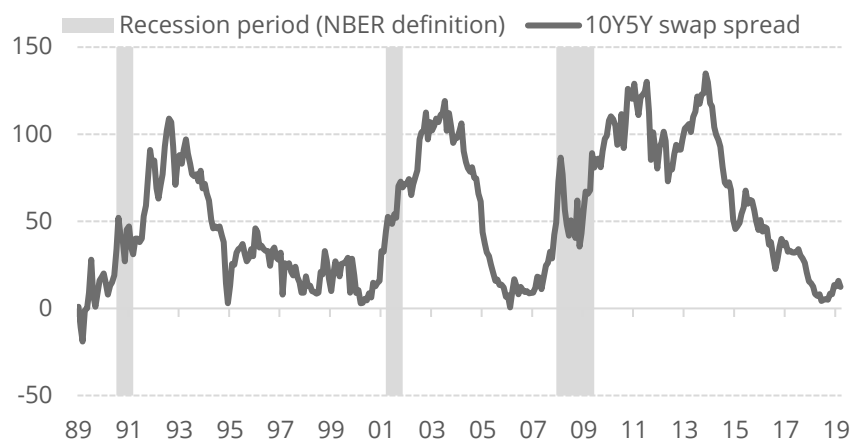
Source: Bloomberg, KGHM Polska Miedź; (*more on page 8*)

Important macroeconomic data

Release	For	
 Manufacturing PMI	Mar	44.1 ▼
 ISM Manufacturing	Mar	55.3 ▲
 Official manuf. PMI	Mar	50.5 ▲
 Non-farm payrolls chng.	Mar	196 ▲
 Manufacturing PMI	Mar	48.7 ▲

Source: Bloomberg, KGHM Polska Miedź; (*more on page 6*)

Low spread between 5 and 10-year swaps usually preceded a period of economic slowdown



Source: Bloomberg, KGHM Polska Miedź

Market Risk Unit

marketrisk@kg hm.com

Base and precious metals | Other commodities

Copper

While Codelco is struggling with decreasing output, the Chilean government is considering how much to fund world's largest copper producer. The concentrate market tightening is already a thing - Chinese smelters are decreasing TC/RC levels for the second quarter of 2019

Copper Giant in Funding Limbo as Chile Wrestles With Tax Law

Chile doesn't want production to fall at the world's largest copper miner, but will decide how much to fund state-owned Codelco only after getting its own finance plans in order. President Sebastian Pinera's government will start discussing a funding package for the mining giant as soon as Congress passes Chile's tax reform bill, expected this year, Mining Minister Baldo Prokurica said. The state can't approve a capitalization plan before knowing how much money is available, he said. Without funding, "it is obvious that Codelco production would go down, and that the state's income would go down," Prokurica said in an interview in Santiago. "We don't want any of that to happen." Codelco has said it needs the Chilean government to resume funding an ongoing program to expand and upgrade its operations, some of which are over a century old, in order to avoid a decline in production. In 2018, output fell 3.2 percent and costs rose to the highest in four years. The struggle to maintain output at Codelco is happening amid slipping global stockpiles and expectations the market will end the year in deficit.

The Chilean miner hands over all of its profit to the government, which then decides how much it will reinvest in the company. Codelco gave the state \$1.6 billion last year.

The government's bid to pass the tax reform this year is proving challenging as Pinera's conservative coalition lacks a majority in both the Chamber of Deputies and the Senate. A preliminary vote on the idea of debating the bill has been postponed twice as the opposition asks the government to make concessions.

"I expect the bill to be approved during 2019," political analyst Kenneth Bunker said by phone. "The government needs to pass this reform before the 2020 elections and they won't be wasting political capital in other things." The government handed \$400 million to Codelco in February, the last payment of a \$4 billion package approved under the previous government. Lack of new funding could result in Codelco's debt soaring to \$21 billion, from about \$14 billion at the moment, Chief Executive Officer Nelson Pizarro said last month. During Pinera's first term, from 2010 to 2014, the company's debt rose 84 percent, but the government doesn't want that to happen again, Prokurica said. "Codelco's debt is not the same as that of a private company because it has the

state behind it, but we see their current debt levels as sufficient," the minister said. "There is a will to assist Codelco so the debt doesn't escalate excessively."

Chilean company produced slightly less copper in 2018 than the year before, as it continued to contend with declining ore grades and rising costs at its aging mines. Nelson Pizarro said the company produced 1.678 million tonnes of copper at its own mines in 2018, down 3.3 percent from the previous year, and a total of 1.806 million tonnes, including production from its joint ventures at El Abra and Anglo American South. Codelco, reported a 2018 pre-tax profit of \$2.002 billion, down from \$2.885 billion the previous year as production costs rose 2 percent and the price of copper fell from 2017. Pizarro said at a presentation at Codelco's Santiago headquarters that 18 labor negotiations at its mines had also affected the bottom line but that productivity increases kept costs in line with industry averages.

Pizarro predicted a copper price of \$2.95 per pound for 2019. Codelco, which produces nearly 10 percent of the world's copper, is investing billions of dollars to convert its Chuquicamata mine, its second-largest deposit, from an open pit mine into an underground facility. Pizarro said the Chuquicamata project was approaching 76 percent complete. It is a central part of a 10-year, \$39 billion overhaul of the state miner's key operations. Codelco Vice President Alejandro Rivera said the company would begin applying in May for the environmental permits it needs to begin exploring for lithium on its Maricunga salt flat holding.

Codelco plans to lay off almost 4,000 employees through 2023, the local daily newspaper La Tercera reported lately, citing the company's 2019 Business and Development Plan. The firm currently has around 38,000 employees, the paper said. Based on that number, 4,000 job cuts represents about 10 percent of the workforce of Codelco. The company did not immediately respond to a request for comment. As part of a four-year cost-reduction program, Codelco will cut 524 workers this year, La Tercera said.

China Copper Smelters Lower Q2 TC/RC Floor By More Than 20%

China's top copper smelters lowered their floor treatment and refining charges (TC/RC) for the second quarter of 2019 by more than 20 percent, according to two smelter sources with knowledge of the matter. At a meeting in Shanghai, the 10-member China Smelters Purchase Team (CSPT) set the TC floor for the second quarter at \$73 per tonne and the RC floor at 7.3 cents per pound, according to the sources with smelters on the purchase team. The second-quarter floor is down from \$92 per tonne and 9.2 cents per pound in the first quarter, and represents the lowest minimum charges since at least 2015. The CSPT set no floor in the third quarter of 2019. An annual TC/RC benchmark agreed by both sides, which is referenced in miner-smelter contracts worldwide, was set last November at \$80.80 a tonne and 8.08 cents a pound for 2019.

Lower minimum charges for processing indicate a tighter copper concentrate market. Spot TC/RCs have fallen sharply in 2019 as smelting capacity grows in

China, the world's biggest copper consumer, and competition for copper concentrate supply increases. China's imports of copper concentrate tied the record monthly high in February. Chinese smelters are set to add another 950,000 tonnes of copper smelting capacity this year, according to a 2018 forecast by research house Antaika. Meanwhile, mine disruption in South America, including at Chinese miner MMG's Las Bambas project in Peru, and a steep plunge in exports from Indonesia's Grasberg mine has also affected supply. The CSPT, whose members include Jiangxi Copper Co and Tongling Nonferrous Metal Group, meets every three months to set the floor TC/RCs.

Other important information on copper market:

- The global copper market will remain in deficit to 2025 even at low demand growth rates, according to Teck Resources. "Despite recent announced mine-supply increases, the medium-to-long-term market is still in structural deficit," Teck says in slides for its Investor and Analyst Day. Demand for concentrates and cathode is rising as environmental restrictions on global scrap flows limit Supply. "Production cuts at Asian smelters combined with lower scrap availability has contributed to a drawdown in cathode" company says. Exchange stocks have fallen 425,000 tons since March 2018, equal to just over 1 week's global Consumption. Inventories, including those in bonded warehouses are at the lowest since 2009. While stocks are building in China, in 2Q several large planned smelter maintenance shutdowns will occur, Teck says.
- Base metals miner MMG said it will declare force majeure on copper and molybdenum concentrate from its Las Bambas mine in Peru later this week due to logistical disruption. It said protest activities by the Fuerabamba community, near the entrance to the mine, were disrupting personnel transport as well as inbound and outbound logistics. "Production at site continues, however, following the suspension of personnel and inbound supply logistics, production is expected to be progressively impacted from later this week," it said, noting that as a result it will declare force majeure under its sales contracts. On February 25, MMG said outbound concentrate transport had been disrupted by a community blockade, occurring on a stretch of public national road in the district of Colquamarca, Cusco region. Las Bambas produced 385,299 mt of copper in concentrates in 2018 and planned to produce 385,000-405,000 mt in 2019, MMG said. China was one of its major delivery destinations. China's imports of copper conc from Peru accounted for 28% of the country's total imports, according to General Administration of Customs.

Precious Metals

Goldcorp shareholders approved Newmont Mining Corp's \$10 billion takeover offer, removing one of the last remaining hurdles to create the world's largest gold producer.

Goldcorp shareholders approve Newmont's \$10 billion takeover offer

The new company, to be called Newmont Goldcorp, will overtake current market leader Barrick Gold Corp in annual production





Goldcorp shareholders approved Newmont Mining Corp's \$10 billion takeover offer, removing one of the last remaining hurdles to create the world's largest gold producer. While some Goldcorp shareholders had voiced concerns in recent weeks, in the end there was little push back against blessing the biggest-ever corporate takeover in the gold sector's history, according to Refinitiv data. The deal, which would create a company with assets in the Americas, Africa and Australia, will be voted on by Newmont shareholders soon. If approved, the deal is expected to close by June. About 97 percent of Goldcorp's outstanding shares that were voted at a special meeting were cast in favor of the deal, the company said in a statement. Newmont had offered 0.328 of its shares and 2 cents for each Goldcorp share.








The new company, to be called Newmont Goldcorp, will overtake current market leader Barrick Gold Corp in annual production, churning out 6 million to 7 million ounces of gold annually over the next 10 years, compared with Barrick's forecast of 5.1 million to 5.6 million ounces for 2019. The \$1 billion to \$1.5 billion of assets the combined company is expected to shed, combined with mines Barrick plans to sell in the wake of its acquisition of Randgold Resources earlier this year, is expected by analysts to fuel further sector deals.

That is a change from the last several years, when miners focused on cutting costs instead and investors lost confidence in the industry after years of dilutive share issuances and pricey acquisitions. Thursday's vote comes after a tense start to the year for the gold industry, sparked by Barrick's hostile bid for Newmont two months ago, a proposal that would have required the Goldcorp deal be scrapped. While that was resolved through the creation of a joint venture of Barrick and Newmont's Nevada assets, Newmont investors raised concerns about Goldcorp receiving too much of the benefits from the joint venture, which the company responded to with an 88-cent special dividend.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
***	31-Mar	Official manufacturing PMI	Mar	50.5 ▲	49.2	49.6	▲
***	01-Apr	Caixin's manufacturing PMI	Mar	50.8 ▲	49.9	50.0	▲
*	07-Apr	Foreign reserves (USD bn)	Mar	3 099 ▲	3 090	3 090	▲
Poland							
**	25-Mar	Unemployment rate	Feb	6.1% -	6.1%	6.1%	○
****	29-Mar	Consumer inflation CPI (yoy) - preliminary data	Mar	1.7% ▲	1.2%	1.6%	▲
***	01-Apr	Manufacturing PMI	Mar	48.7 ▲	47.6	47.4	▲
*****	03-Apr	NBP base rate decision	Apr	1.50% -	1.50%	1.50%	○
US							
*	25-Mar	Dallas Fed manufacturing activity	Mar	8.3 ▼	13.1	8.9	▼
*	26-Mar	Richmond Fed manufacturing index	Mar	10.0 ▼	16.0	10.0	○
*	26-Mar	S&P/CaseShiller home price index‡	Jan	212 ▼	213	213	▼
*****	28-Mar	GDP (annualized, qoq) -	4Q	2.2% ▼	2.6%	2.3%	▼
****	29-Mar	Consumer spending inflation PCE (mom)	Jan	0.1% ▼	0.2%	0.2%	▼
****	29-Mar	Consumer spending inflation PCE (yoy)‡	Jan	1.8% ▼	2.0%	1.9%	▼
**	29-Mar	Personal income (sa, mom)	Feb	0.2% ▲	-0.1%	0.3%	▼
**	29-Mar	Personal spending (sa, mom)‡	Jan	0.1% ▲	-0.6%	0.3%	▼
**	29-Mar	University of Michigan confidence index - final data	Mar	98.4 ▲	97.8	97.8	▲
***	01-Apr	Manufacturing PMI - final data	Mar	52.4 ▼	52.5	52.5	▼
**	01-Apr	ISM Manufacturing	Mar	55.3 ▲	54.2	54.5	▲
**	01-Apr	Retail sales (excluding autos, mom)‡	Feb	-0.4% ▼	1.4%	0.3%	▼
**	02-Apr	Durable goods orders - preliminary data‡	Feb	-1.6% ▼	0.1%	-1.8%	▲
***	03-Apr	Composite PMI - final data	Mar	54.6 ▲	54.3	--	
***	03-Apr	PMI services - final data	Mar	55.3 ▲	54.8	54.8	▲
**	05-Apr	Change in non-farm payrolls (ths)‡	Mar	196 ▲	33.0	177	▲
**	05-Apr	Underemployment rate (U6)	Mar	7.3% -	7.3%	--	
**	05-Apr	Unemployment rate	Mar	3.8% -	3.8%	3.8%	○
*	05-Apr	Average hourly earnings (yoy)	Mar	3.2% ▼	3.4%	3.4%	▼
Eurozone							
*	28-Mar	M3 money supply (yoy)	Feb	4.3% ▲	3.8%	3.9%	▲
*	28-Mar	Economic confidence‡	Mar	106 ▼	106	106	▼
*	28-Mar	Industrial confidence	Mar	-1.7 ▼	-0.4	-0.6	▼
*	28-Mar	Consumer confidence - final data	Mar	-7.2 -	-7.2	-7.2	○
*	28-Mar	Business climate indicator	Mar	0.5 ▼	0.7	0.7	▼
****	01-Apr	Core CPI (yoy) - estimation	Mar	0.8% ▼	1.0%	0.9%	▼
****	01-Apr	CPI estimate (yoy)	Mar	1.4% ▼	1.5%	1.5%	▼
***	01-Apr	Manufacturing PMI - final data	Mar	47.5 ▼	47.6	47.6	▼
**	01-Apr	Unemployment rate	Feb	7.8% -	7.8%	7.8%	○
**	02-Apr	Producer inflation PPI (yoy)‡	Feb	3.0% ▲	2.9%	3.1%	▼
***	03-Apr	Composite PMI - final data	Mar	51.6 ▲	51.3	51.3	▲
***	03-Apr	Services PMI - final data	Mar	53.3 ▲	52.7	52.7	▲
**	03-Apr	Retail sales (yoy)	Feb	2.8% ▲	2.2%	2.3%	▲

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
☉☉	25-Mar	IFO business climate‡	Mar	99.6 ▲	98.7	98.5 ▲
☉☉	26-Mar	GfK consumer confidence‡	Apr	10.4 ▼	10.7	10.8 ◡
☉☉☉☉	28-Mar	Harmonized consumer inflation HICP (yoy) - preliminary data	Mar	1.4% ▼	1.7%	1.6% ◡
☉☉☉☉	28-Mar	Consumer inflation CPI (yoy) - preliminary data	Mar	1.3% ▼	1.5%	1.5% ◡
☉☉☉	29-Mar	Retail sales (yoy)‡	Feb	4.7% ▲	3.1%	2.1% ▲
☉☉	29-Mar	Unemployment rate	Mar	4.9% ▼	5.0%	4.9% ○
☉☉☉	01-Apr	Manufacturing PMI - final data	Mar	44.1 ▼	44.7	44.7 ◡
☉☉☉	03-Apr	Composite PMI - final data	Mar	51.4 ▼	51.5	51.5 ◡
☉☉☉	04-Apr	Factory orders (wda, yoy)‡	Feb	-8.4% ▼	-3.6%	-3.1% ◡
☉☉☉☉	05-Apr	Industrial production (wda, yoy)‡	Feb	-0.4% ▲	-2.7%	-1.4% ▲
France 						
☉☉☉☉☉☉	26-Mar	GDP (yoy) - final data	4Q	1.0% ▲	0.9%	0.9% ▲
☉☉☉☉☉☉	26-Mar	GDP (qoq) - final data	4Q	0.3% -	0.3%	0.3% ○
☉☉☉☉	29-Mar	Harmonized consumer inflation HICP (yoy) - preliminary data	Mar	1.3% ▼	1.6%	1.4% ◡
☉☉☉☉	29-Mar	Consumer inflation CPI (yoy) - preliminary data	Mar	1.1% ▼	1.3%	1.2% ◡
☉☉☉	01-Apr	Manufacturing PMI - final data	Mar	49.7 ▼	49.8	49.8 ◡
☉☉☉	03-Apr	Composite PMI - final data	Mar	48.9 ▲	48.7	48.7 ▲
Italy 						
☉☉☉☉	29-Mar	Harmonized consumer inflation HICP (yoy) - preliminary data	Mar	1.1% -	1.1%	1.0% ▲
☉☉☉	01-Apr	Manufacturing PMI	Mar	47.4 ▼	47.7	47.5 ◡
☉☉	01-Apr	Unemployment rate - preliminary data	Feb	10.7% ▲	10.5%	10.5% ▲
☉☉☉	03-Apr	Composite PMI	Mar	51.5 ▲	49.6	49.8 ▲
UK 						
☉☉☉☉☉☉	29-Mar	GDP (yoy) - final data	4Q	1.4% ▲	1.3%	1.3% ▲
☉☉☉☉☉☉	29-Mar	GDP (qoq) - final data	4Q	0.2% -	0.2%	0.2% ○
☉☉☉	01-Apr	Manufacturing PMI (sa)‡	Mar	55.1 ▲	52.1	51.2 ▲
☉☉☉	03-Apr	Composite PMI	Mar	50.0 ▼	51.5	51.1 ◡
Japan 						
☉☉☉☉	29-Mar	Industrial production (yoy) - preliminary data	Feb	-1.0% ▼	0.3%	-1.1% ▲
☉☉☉	01-Apr	Manufacturing PMI - final data	Mar	49.2 ▲	48.9	--
☉☉☉	03-Apr	Composite PMI	Mar	50.4 ▼	50.7	--
Chile 						
☉☉☉☉☉☉	29-Mar	BCCh overnight rate target	Mar	3.00% -	3.00%	3.00% ○
☉☉☉	29-Mar	Total copper production (metric tons)‡	Feb	417 097 ▼	460 146	--
☉☉☉	29-Mar	Manufacturing (yoy)‡	Feb	0.8% ▼	2.6%	1.1% ◡
☉☉☉☉	05-Apr	Economic activity (yoy)	Feb	1.4% ▼	2.4%	2.0% ◡
☉☉	05-Apr	Nominal wages (yoy)	Feb	4.3% ▲	3.8%	--
Canada 						
☉☉☉☉☉☉	29-Mar	GDP (yoy)	Jan	1.6% ▲	1.1%	1.3% ▲
☉☉☉	05-Apr	Net change in employment (ths)	Mar	- 7.2 ▼	55.9	6.0 ◡

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

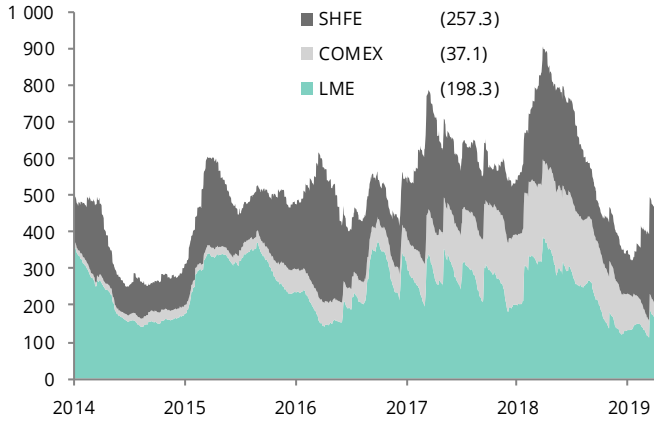
Key base & precious metal prices, exchange rates and other important market factors

(as of: 05-Apr-19)		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 419.00	▲ 1.4%	▼ -1.0%	▲ 7.6%	▼ -5.1%	6 232.57	5 811.00	6 572.00	
Molybdenum	-	-	-	-	-	-	-	-	
Nickel	13 090.00	▲ 2.5%	▲ 0.6%	▲ 23.5%	▼ -1.5%	12 423.24	10 440.00	13 610.00	
Aluminum	1 864.00	▲ 0.4%	▼ -1.9%	▼ -0.3%	▼ -5.3%	1 859.77	1 775.50	1 923.00	
Tin	21 280.00	▼ -0.8%	▼ -1.4%	▲ 9.1%	▲ 1.0%	21 077.28	19 500.00	21 925.00	
Zinc	2 969.00	▲ 4.6%	▼ -1.0%	▲ 18.3%	▼ -8.2%	2 722.52	2 462.00	3 018.00	
Lead	1 973.00	▼ -1.7%	▼ -2.4%	▼ -1.8%	▼ -17.2%	2 032.37	1 934.50	2 154.00	
LBMA (USD/troz)									
Silver	15.20	▼ -2.1%	▲ 0.6%	▼ -1.7%	▼ -6.8%	15.54	15.03	16.08	
Gold ²	1 288.45	▼ -2.4%	▼ -0.5%	▲ 0.5%	▼ -3.0%	1 302.71	1 279.55	1 343.75	
LPPM (USD/troz)									
Platinum ²	903.00	▲ 6.0%	▲ 6.2%	▲ 13.7%	▼ -0.9%	825.90	782.00	903.00	
Palladium ²	1 352.00	▼ -13.6%	▼ -2.7%	▲ 7.0%	▲ 48.2%	1 430.24	1 267.00	1 604.00	
FX³									
EURUSD	1.1233	▼ -0.8%	▼ 0.0%	▼ -1.9%	▼ -8.4%	1.1348	1.1200	1.1535	
EURPLN	4.2921	▼ -0.1%	▼ -0.2%	▼ -0.2%	▲ 2.0%	4.3028	4.2706	4.3402	
USDPLN	3.8215	▲ 0.7%	▼ -0.4%	▲ 1.6%	▲ 11.4%	3.7910	3.7243	3.8516	
USDCAD	1.3386	▼ -0.3%	▲ 0.2%	▼ -1.9%	▲ 4.8%	1.3299	1.3095	1.3600	
USDCNY	6.7079	▼ 0.0%	▼ -0.1%	▼ -2.5%	▲ 6.4%	6.7455	6.6872	6.8721	
USDCLP	666.32	▼ -1.5%	▼ -2.2%	▼ -4.1%	▲ 10.2%	667.61	649.22	697.64	
Money market									
3m LIBOR USD	2.592	▼ -0.02	▼ -0.01	▼ -0.22	▲ 0.26	2.680	2.589	2.804	
3m EURIBOR	-0.310	-	▲ 0.00	▼ 0.00	▲ 0.02	-0.309	-0.311	-0.306	
3m WIBOR	1.720	-	-	-	▲ 0.02	1.720	1.720	1.720	
5y USD interest rate swap	2.347	▲ 0.15	▲ 0.06	▼ -0.22	▼ -0.43	2.526	2.198	2.715	
5y EUR interest rate swap	0.041	▼ 0.00	▲ 0.03	▼ -0.16	▼ -0.34	0.125	-0.010	0.222	
5y PLN interest rate swap	2.035	▲ 0.10	▲ 0.09	▼ -0.08	▼ -0.33	2.029	1.908	2.140	
Fuel									
WTI Cushing	63.08	▲ 7.3%	▲ 4.9%	▲ 38.9%	▼ -0.7%	55.44	46.54	63.08	
Brent	69.96	▲ 5.0%	▲ 3.6%	▲ 31.6%	▲ 2.3%	63.74	53.83	69.96	
Diesel NY (ULSD)	204.24	▲ 3.1%	▲ 3.4%	▲ 21.4%	▲ 3.5%	193.95	170.01	204.24	
Others									
VIX	12.82	▼ -3.51	▼ -0.89	▼ -12.60	▼ -6.12	16.24	12.82	25.45	
BBG Commodity Index	82.37	▲ 0.6%	▲ 1.6%	▲ 7.4%	▼ -5.5%	80.77	76.99	82.38	
S&P500	2 892.74	▲ 3.4%	▲ 2.1%	▲ 15.4%	▲ 8.6%	2 732.75	2 447.89	2 892.74	
DAX	12 009.75	▲ 5.8%	▲ 4.2%	▲ 13.7%	▼ -2.4%	11 304.64	10 416.66	12 009.75	
Shanghai Composite	3 246.57	▲ 6.7%	▲ 5.0%	▲ 30.2%	▲ 3.7%	2 819.37	2 464.36	3 246.57	
WIG 20	2 351.08	▲ 1.7%	▲ 1.7%	▲ 3.3%	▲ 4.8%	2 346.19	2 247.22	2 414.41	
KGHM	109.30	▲ 5.7%	▲ 2.1%	▲ 23.0%	▲ 21.1%	97.99	86.12	111.75	

^o 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

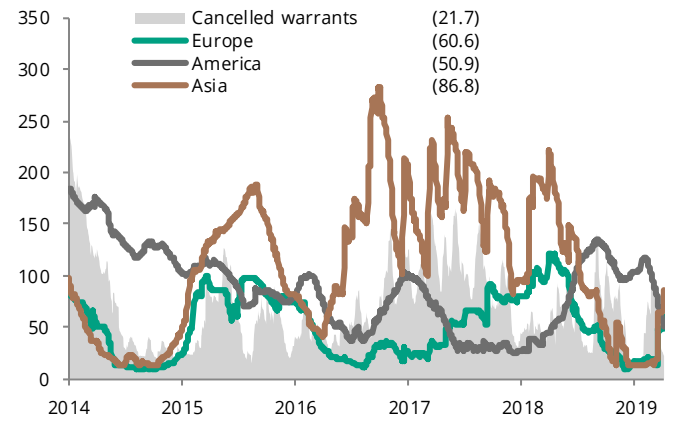
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



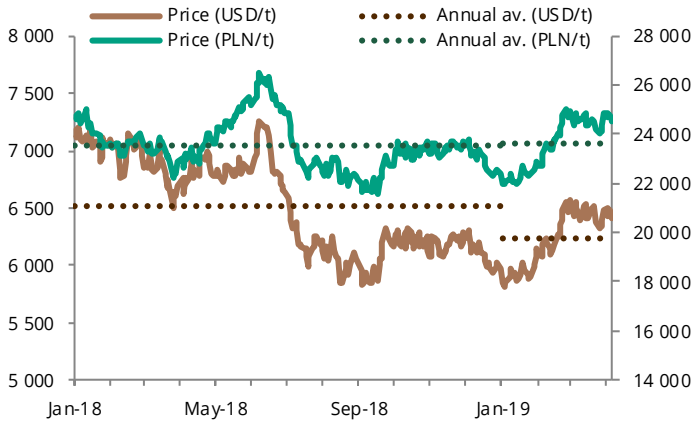
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



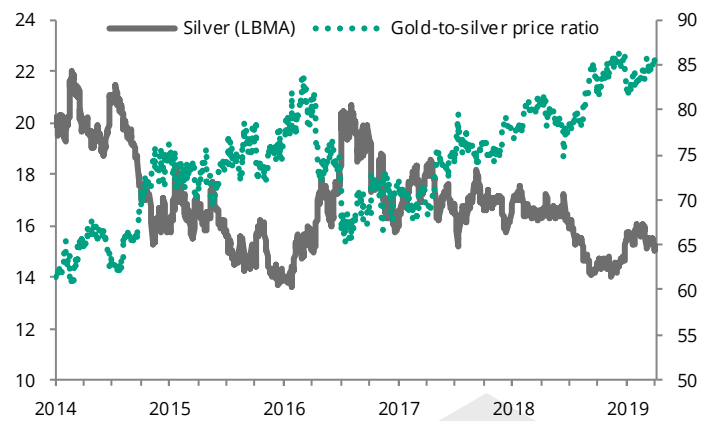
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



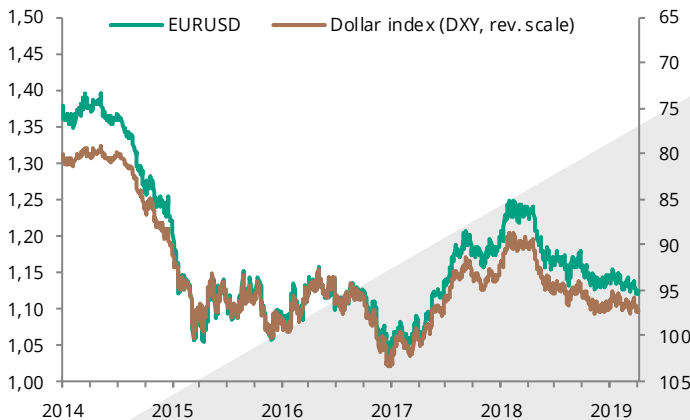
Source: Bloomberg, KGHM Polska Miedź

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



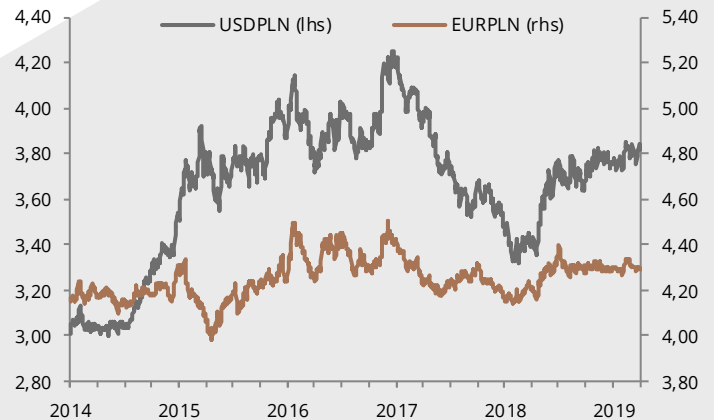
Source: Bloomberg, KGHM Polska Miedź

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:
25th March – 7th April 2019.

- 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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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