

Market Overview

as of: 15th May 2017

- Copper:** Another two weeks with huge copper inventories injections (or some trader-trader game again?) into LME warehouses (nearly 70k tonnes), mainly in Asia but some in Europe have influenced investors moods and therefore the price of red metal. Some market participants claim that copper scrap supply has been tightened along with primary metal supply, heavily disrupted in the first quarter. Physical premiums in the Chinese market have slightly recovered and are currently quoted around 60 USD/t (*page 2*).
- Precious metals:** In recent two weeks gold rose as U.S. political turmoil, a missile test by North Korea and a worldwide cyber-attack fueled demand for safe-haven assets, while weaker than expected U.S. data pushed the dollar lower, making gold cheaper for holders of other currencies. Worse than expected U.S. data has reduced expectations of aggressive interest rate increases by the U.S. Federal Reserve this year, though traders still expect a rise in June (*page 2*).
- Aluminium:** Announced supply-side reform in China, aimed to cut production of aluminium from environmental and legal reasons, may lead to significant change of market fundamentals and drive prices higher (*page 4*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	5 520.00	-3.0%
▼ Nickel	9 325.00	-1.7%
LBMA (USD/troz)		
▼ Silver	16.30	-6.4%
▼ Gold (PM)	1 231.25	-2.8%
FX		
▼ EURUSD	1.0876	-0.5%
▲ EURPLN	4.2200	0.1%
▲ USDPLN	3.8837	0.4%
- USDCAD		
▲ USDCLP	671.55	1.1%
Stocks		
▼ KGHM	117.50	-4.5%

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

Important macroeconomic data

Release	For		
 Caixin's manuf. PMI	Apr	50.3	▼
 Non-farm payrolls chng.	Apr	211	▲
 Manufacturing PMI (sa)	Apr	57.3	▲
 Manufacturing PMI	Apr	54.1	▲
 Durable goods orders	Mar	0.9%	▲

Source: Bloomberg, KGHM Polska Miedź; (*more on page 4*)

Fear Index has rarely been friendlier than in the recent weeks



Source: Bloomberg, KGHM Polska Miedź

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Copper

Another two weeks with huge copper inventories injections (or some trader-trader game again?) into LME warehouses (nearly 70k tonnes), mainly in Asia but some in Europe have influenced investors moods and therefore the price of red metal. Some market participants claim that copper scrap supply has been tightened along with primary metal supply, heavily disrupted in the first quarter. Physical premiums in the Chinese market have slightly recovered and are currently quoted around 60 USD/t.

Important information on copper market:

- *[source: Reuters]* Supply of copper scrap has tightened recently after growing in the first quarter, while disruptions at major mines earlier in 2017 are hitting availability of the metal, according to the co-founder of metals hedge fund RK Capital Management (often referred to as Red Kite). Crimped supply of copper, used in everything from wiring to construction, would drag on prices that have eased this year after surging in 2016. "We are hearing that scrap availability has tightened up. Some of the disruptions to mine supply in the first quarter will be felt in metal supply now," David Lilley said at the LMEWeek Asia conference in Hong Kong. A strike at the world's biggest copper mine in Chile and a dispute over mining rights in Indonesia hit copper markets earlier in the year.
- *[source: Reuters]* The London Metal Exchange (LME) will submit a proposal to take over the London silver fix, being the first company to publicly express interest in replacing the current operators of the price benchmark. James Proudlock, managing director and head of market development for the exchange and its clearing business, said the exchange would take part in the process after a request for proposals (RFP) was recently issued to find a replacement for CME Group and Thomson Reuters. Those companies said in March they would step down from providing the silver price benchmark auction less than three years after successfully bidding to provide the process. Proudlock's comments come as the world's oldest and biggest metal market prepares to launch a new precious metals contracts in July 10.

Precious Metals

In recent two weeks gold rose as U.S. political turmoil, a missile test by North Korea and a worldwide cyber-attack fueled demand for safe-haven assets, while weaker than expected U.S. data pushed the dollar lower, making gold cheaper for holders of other currencies. Worse than expected U.S. data has reduced expectations of aggressive interest rate increases

by the U.S. Federal Reserve this year, though traders still expect a rise in June

Platinum market: turning to surplus, palladium: deepening deficit

First platinum surplus from six years

The platinum market is set to record its first surplus in six years in 2017, Johnson Matthey said on Monday, as a drop in demand from the vehicle industry, jewellers and investors outstrips a smaller fall in supply. But the deficit in palladium is expected to widen to 792,000 ounces in 2017 from 163,000 ounces this year, the company said. The rising deficit in palladium helped cut its discount to platinum to less than \$100 an ounce this month, its lowest in 15 years. The average for the past 20 years has been \$555. Both metals are heavily used in catalytic converters but platinum, which is used more heavily in diesel catalysts, is seen as vulnerable to a drop in diesel market share. Commenting on platinum, JM said: "Chinese jewellery fabrication is expected to contract again, while automotive demand will be hit by changes in catalyst technology in Europe, in response to the introduction of Real Driving Emissions testing." JM, a leading manufacturer of vehicle catalysts, added in its release: "Investment demand is forecast to remain positive, but at lower levels than in the last two years, as purchasing by Japanese investors slows." Platinum prices have underperformed other precious metals this year, rising about 2 percent against a near 20 percent jump in palladium. The market is expected to be in a 300,000 ounce surplus this year. Strong automotive and industrial demand for platinum and firm investment had kept it in a deficit of 202,000 ounces last year, JM's data showed.

A merger of companies on gold market

Gold producer Eldorado Gold Corp has agreed to buy the remaining shares of Integra Gold Corp, to expand its mining opportunities in the Eastern Abitibi region of Canada (Quebec). Integra shareholders have the option of receiving cash or shares in Eldorado or a mix of both. The maximum number of shares issuable by Eldorado under the arrangement will be about 77 million and the total deal value is about C\$590 million, inclusive of Integra shares held by Eldorado. The Integra acquisition comes after Eldorado in January indefinitely shelved expansion plans for its flagship Kisladag mine in Turkey and put off a development decision on a project in Brazil, citing lower gold prices. After 11 years of operations in China, Eldorado Gold left the country last year after selling stakes in two mines and a development project to Yintai Resources Co Ltd for \$600 million. Vancouver-based Eldorado currently owns about 62.2 mln common shares in the capital of Integra, constituting 13 percent of the outstanding common shares of Integra on an undiluted basis.

Aluminium

Announced supply-side reform in China, aimed to cut production of aluminium from environmental and legal reasons, may lead to significant change of market fundamentals and drive prices higher.

Aluminium price has outperformed most other commodities after news of possible production cuts in China

Aluminium supply cuts in China

Aluminium's global surplus will fall sharply this year due to an environmental crackdown in top producer China and move to a deficit in 2018, although the market has largely priced in the impact, according to the recent Reuters poll. Aluminium, mainly used in transport and packaging, has been the best performer on the London Metal Exchange, rising 13 percent this year and touching 28-month highs. Aluminium has outperformed most other commodities over the year-to-date (including steel, copper and zinc).

The driver of the rally was a demand from Chinese authorities that aluminium producers to slash output during the winter to combat smog. An official document jointly released by China's Ministry of Environment and Protection, the NDRC (National Development and Reform Committee) and several relevant local governments, has ordered capacity cuts in steel, aluminium, alumina and carbon anode in 28 northern cities during the winter heating season, in an effort to reduce air pollution. The news reached major media outlets (Bloomberg, Reuters) on March 1, while the document is dated February 20. According to the plan, 30% of aluminium capacity, 30% alumina capacity and 50%+ of carbon anode capacity in the targeted cities will be shut down. These regions account for roughly c.20% of world aluminium and alumina capacity.

In addition to above mentioned "anti-pollution regulations", China has recently issued a directive ordering local governments to curb illegal and unqualified capacities in the next 6 months. By definition, 'unqualified' capacities are those projects which have failed to comply with NDRC directive no.1494 in 2015, and most of them were constructed without official approvals. 'Illegal' capacities are projects that violate relevant laws (environment protection, tax, land, etc), such as failing to provide land certificates or certificates of National Environment Assessment or failing to pay relevant fees (captive smelters are required to pay a government fund), etc. This law will mainly impact capacities in Xinjiang (unqualified expansion projects of 2 million tonnes) and Shandong (1-2 mln tonnes). The actual scale of total unqualified and illegal capacities nationwide, as well as the detailed timing of cuts and potential substitution of cuts (illegal vs. winter) is yet unknown. However it's believed that the probability of enforcement is high given that supply-side reform has strong political support.

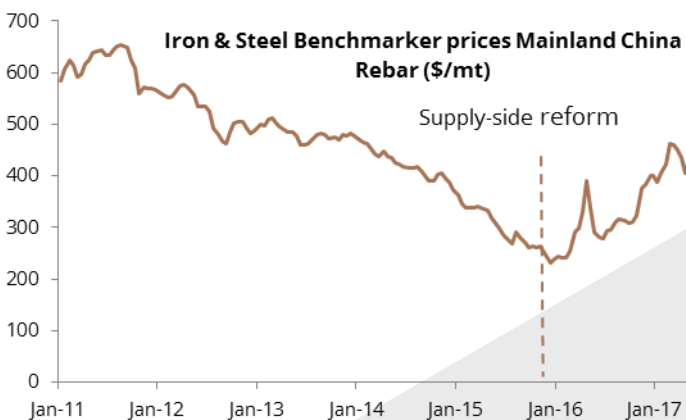
Aluminium market outlook moves toward the deficit which may drive prices higher

In the wake of the news, analysts polled by Reuters slashed their estimates of a global surplus this year by 74 percent to 82,000 tonnes from 317,000 tonnes in the previous poll in January. They have pegged in a deficit of 200,000 tonnes for 2018. They also boosted their price outlooks. The median forecast of 30 analysts for the average price of LME cash aluminium this year CMA10 was \$1,835 a tonne, up 9 percent from the previous poll.

Further, global political developments may also be supportive of capacity and production cuts, given the two leaders of the US and China launched a 100-day (trade) plan on April 7. These developments shows that aluminium is the next target for supply-side reform in China. As background, steel and coal prices - other commodities like aluminium, in which China is 'long' - rose by 70% and 80%, respectively, over the past 16 months owing in large part to the implementation of Chinese supply-side reforms in these markets.

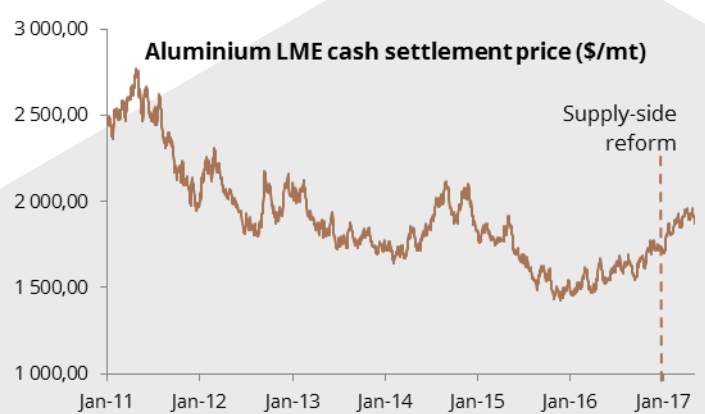
Date	Major past and upcoming events in China's aluminium industry
Jan-17	First report that China might shut down 30% of aluminium smelting capacities in Henan, Shandong and Shanxi provinces owing to environmental issues
Feb-17	China's Ministry of Environment and Protection, the National Development and Reform Committee (NDRC) and several relevant local governments officially ordered capacity cuts in steel, aluminium, alumina and carbon anode in 28 northern cities during the winter heating season
Apr-17	Government of Xinjiang announced three expansion projects totaling 2mt unqualified and ordered them to be halted
Apr-17	NDRC, together with other 3 departments issued a directive ordering local governments to curb illegal and unqualified capacities with a clear timetable
May-17	Chinese aluminium smelters need to finish self-check on illegal and unqualified capacities and submit results to local governments
Jun-17	Verification of illegal and unqualified capacities
Sep-17	Relevant departments carry out spot-check and enforce rectification
Oct-17	Implementation of winter cuts in targeted cities

Steel Rebar price has gone up almost 70% after the supply-side reform was announced in the end of 2015.



Source: Bloomberg, Metal Bulletin, KGHM Polska Miedź





So far the aluminium prices have rallied by 15% since announcement of supply cuts in China.



Source: Bloomberg, KGHM Polska Miedź

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
☆☆☆	02-May	Caixin's manufacturing PMI	Apr	50.3 ▼	51.2	51.3 ◐
☆	07-May	Foreign reserves (USD bn)	Apr	3 030 ▲	3 009	3 020 ◑
☆☆	08-May	Trade balance (USD bn)‡	Apr	38.1 ▲	23.9	35.2 ◑
☆☆	08-May	Exports (yoy)	Apr	8.0% ▼	16.4%	11.3% ◐
☆☆☆☆	10-May	Consumer inflation CPI (yoy)	Apr	1.2% ▲	0.9%	1.1% ◑
☆☆	10-May	Producer inflation PPI (yoy)	Apr	6.4% ▼	7.6%	6.7% ◐
☆	12-May	New yuan loans (CNY bn)	Apr	1 100 ▲	1 020	815 ◑
Poland 						
☆☆☆	02-May	Manufacturing PMI	Apr	54.1 ▲	53.5	53.9 ◑
☆☆☆☆	12-May	Consumer inflation CPI (yoy) - final data	Apr	2.0% -	2.0%	--
☆	12-May	M3 money supply (yoy)‡	Apr	6.6% ▼	7.8%	7.1% ◐
US 						
☆☆☆☆	01-May	Consumer spending inflation PCE (mom)	Mar	-0.1% ▼	0.2%	-0.1% ◐
☆☆☆☆	01-May	Consumer spending inflation PCE (yoy)	Mar	1.6% ▼	1.8%	1.6% ◐
☆☆☆	01-May	Manufacturing PMI - final data	Apr	52.8 -	52.8	52.8 ◐
☆☆	01-May	ISM Manufacturing	Apr	54.8 ▼	57.2	56.5 ◐
☆☆	01-May	Personal income (sa, mom)‡	Mar	0.2% ▼	0.3%	0.3% ◐
☆☆	01-May	Personal spending (sa, mom)‡	Mar	0.0% -	0.0%	0.2% ◐
☆☆☆☆☆	03-May	FOMC base rate decision - upper bound (Fed)	May	1.00% -	1.00%	1.00% ◐
☆☆☆☆☆	03-May	FOMC base rate decision - lower bound (Fed)	May	0.75% -	0.75%	0.75% ◐
☆☆☆	03-May	Composite PMI - final data	Apr	53.2 ▲	52.7	--
☆☆☆	03-May	PMI services - final data	Apr	53.1 ▲	52.5	52.5 ◑
☆☆	04-May	Durable goods orders - final data	Mar	0.9% ▲	0.7%	0.7% ◑
☆☆	05-May	Change in non-farm payrolls (ths)‡	Apr	211 ▲	79.0	190 ◑
☆☆	05-May	Underemployment rate (U6)	Apr	8.6% ▼	8.9%	--
☆☆	05-May	Unemployment rate	Apr	4.4% ▼	4.5%	4.6% ◐
☆	05-May	Average hourly earnings (yoy)‡	Apr	2.5% ▼	2.6%	2.7% ◐
☆☆☆☆	12-May	Consumer inflation CPI (mom)	Apr	0.2% ▲	-0.3%	0.2% ◐
☆☆☆☆	12-May	Consumer inflation CPI (yoy)	Apr	2.2% ▼	2.4%	2.3% ◐
☆☆	12-May	Retail sales (excluding autos, mom)‡	Apr	0.3% -	0.3%	0.5% ◐
☆☆	12-May	University of Michigan confidence index - preliminary data	May	97.7 ▲	97.0	97.0 ◑
Eurozone 						
☆☆☆	02-May	Manufacturing PMI - final data	Apr	56.7 ▼	56.8	56.8 ◐
☆☆	02-May	Unemployment rate	Mar	9.5% -	9.5%	9.4% ◑
☆☆☆☆☆	03-May	GDP (sa, yoy) - estimation‡	1Q	1.7% ▼	1.8%	1.7% ◐
☆☆☆☆☆	03-May	GDP (sa, qoq) - estimation‡	1Q	0.5% -	0.5%	0.5% ◐
☆☆	03-May	Producer inflation PPI (yoy)	Mar	3.9% ▼	4.5%	4.2% ◐
☆☆☆	04-May	Composite PMI - final data	Apr	56.8 ▲	56.7	56.7 ◑
☆☆☆	04-May	Services PMI - final data	Apr	56.4 ▲	56.2	56.2 ◑
☆☆	04-May	Retail sales (yoy)‡	Mar	2.3% ▲	1.7%	2.1% ◑
☆☆☆☆	12-May	Industrial production (sa, mom)‡	Mar	-0.1% -	-0.1%	0.3% ◐
☆☆☆☆	12-May	Industrial production (wda, yoy)‡	Mar	1.9% ▲	1.4%	2.3% ◐

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
☆☆☆	02-May	Manufacturing PMI - final data	Apr	58.2 -	58.2	58.2	○
☆☆	03-May	Unemployment rate	Apr	5.8% -	5.8%	5.8%	○
☆☆☆	04-May	Composite PMI - final data	Apr	56.7 ▲	56.3	56.3	●
☆☆☆	08-May	Factory orders (wda, yoy)‡	Mar	2.4% ▼	4.7%	2.1%	●
☆☆☆☆	09-May	Industrial production (wda, yoy)‡	Mar	1.9% ▼	2.0%	2.5%	●
☆☆☆☆☆	12-May	GDP (yoy) - preliminary data‡	1Q	2.9% ▲	1.3%	2.8%	●
☆☆☆☆☆	12-May	GDP (sa, qoq) - preliminary data	1Q	0.6% ▲	0.4%	0.6%	○
☆☆☆☆	12-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	2.0% -	2.0%	2.0%	○
☆☆☆☆	12-May	Consumer inflation CPI (yoy) - final data	Apr	2.0% -	2.0%	2.0%	○
France							
☆☆☆	02-May	Manufacturing PMI - final data	Apr	55.1 -	55.1	55.1	○
☆☆☆	04-May	Composite PMI - final data	Apr	56.6 ▼	57.4	57.4	●
☆☆☆☆	10-May	Industrial production (yoy)	Mar	2.0% ▲	-0.7%	0.6%	●
Italy							
☆☆☆	02-May	Manufacturing PMI	Apr	56.2 ▲	55.7	56.0	●
☆☆	02-May	Unemployment rate - preliminary data	Mar	11.7% ▲	11.5%	11.5%	●
☆☆☆	04-May	Composite PMI	Apr	56.8 ▲	54.2	54.6	●
☆☆☆☆	10-May	Industrial production (wda, yoy)‡	Mar	2.8% ▲	2.0%	2.5%	●
UK							
☆☆☆	02-May	Manufacturing PMI (sa)	Apr	57.3 ▲	54.2	54.0	●
☆☆☆	04-May	Composite PMI‡	Apr	56.2 ▲	54.8	54.5	●
☆☆☆☆☆	11-May	BoE base rate decision	May	0.25% -	0.25%	0.25%	○
☆☆☆☆	11-May	Industrial production (yoy)‡	Mar	1.4% ▼	2.5%	2.0%	●
☆☆☆☆	11-May	BoE asset purchase target (GBP bn)	May	435 -	435	435	○
Japan							
☆☆☆	01-May	Manufacturing PMI - final data	Apr	52.7 ▼	52.8	--	
☆☆☆	02-May	Composite PMI	Apr	52.6 ▼	52.9	--	
Chile							
☆☆☆☆	05-May	Economic activity (yoy)	Mar	0.2% ▲	-1.3%	-0.4%	●
☆☆	05-May	Nominal wages (yoy)	Mar	4.3% ▲	4.2%	4.0%	●
☆☆☆☆	08-May	Consumer inflation CPI (yoy)	Apr	2.7% -	2.7%	2.7%	○
☆☆☆	08-May	Copper exports (USD mn)	Apr	2 189 ▼	2 309	--	
Canada							
☆☆☆	05-May	Net change in employment (ths)	Apr	3.2 ▼	19.4	10.0	●

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

Key market data

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

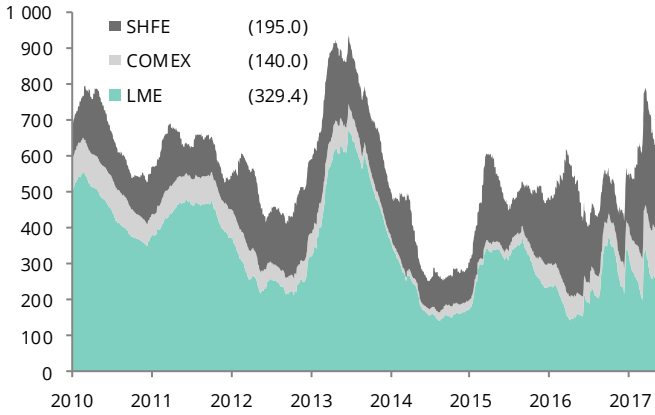
(as of: 12-May-17)

	Price	Price change °					From year beginning ²		
		2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	5 520.00	▼ -3.0%	▼ -5.6%	▲ 0.3%	▲ 16.4%	5 778.03	5 466.00	6 145.00	
Molybdenum	17 500.00	▲ 14.8%	▲ 14.8%	▲ 14.8%	▲ 14.4%	15 321.43	15 250.00	17 500.00	
Nickel	9 325.00	▼ -1.7%	▼ -5.6%	▼ -6.8%	▲ 6.3%	10 046.76	8 935.00	11 045.00	
Aluminum	1 880.00	▼ -2.6%	▼ -3.4%	▲ 9.7%	▲ 21.7%	1 871.07	1 701.00	1 962.00	
Tin	19 910.00	▲ 0.3%	▼ -0.9%	▼ -5.6%	▲ 14.8%	20 011.26	18 760.00	21 300.00	
Zinc	2 582.00	▼ -2.2%	▼ -7.2%	▲ 0.7%	▲ 35.2%	2 732.99	2 530.00	2 971.00	
Lead	2 165.50	▼ -5.0%	▼ -6.3%	▲ 9.1%	▲ 23.7%	2 260.07	2 007.00	2 442.00	
LBMA (USD/troz)									
Silver	16.30	▼ -6.4%	▼ -9.7%	▲ 0.4%	▼ -5.4%	17.45	15.95	18.56	
Gold ¹	1 231.25	▼ -2.8%	▼ -1.1%	▲ 6.2%	▼ -3.8%	1 229.87	1 151.00	1 284.15	
LPPM (USD/troz)									
Platinum ¹	922.00	▼ -2.5%	▼ -1.9%	▲ 1.7%	▼ -12.8%	968.78	897.00	1 033.00	
Palladium ¹	808.00	▼ -1.9%	▲ 1.3%	▲ 19.5%	▲ 33.1%	777.31	706.00	824.00	
FX ³									
EURUSD	1.0876	▼ -0.5%	▲ 1.7%	▲ 3.2%	▼ -4.5%	1.0690	1.0385	1.0961	
EURPLN	4.2200	▲ 0.1%	▲ 0.0%	▼ -4.6%	▼ -4.7%	4.2945	4.2059	4.4002	
USDPLN	3.8837	▲ 0.4%	▼ -1.6%	▼ -7.1%	▲ 0.1%	4.0180	3.8391	4.2271	
USDCAD	-	-	-	-	-	1.3286	1.3004	1.3667	
USDCNY	6.8995	▲ 0.1%	▲ 0.2%	▼ -0.7%	▲ 5.9%	6.8901	6.8450	6.9640	
USDCLP	671.55	▲ 1.1%	▲ 1.3%	▲ 0.6%	▼ -1.0%	657.24	638.35	679.05	
Money market									
3m LIBOR USD	1.180	▲ 0.01	▲ 0.03	▲ 0.18	▲ 0.55	1.099	0.999	1.185	
3m EURIBOR	-0.329	-	0.00	-	0.00	▼ -0.01	▼ -0.07	-0.329	
3m WIBOR	1.730	-	0.00	-	0.00	▲ 0.06	1.730	1.730	
5y USD interest rate swap	1.916	▼ -0.02	▼ -0.14	▼ -0.06	▲ 0.72	2.001	1.813	2.239	
5y EUR interest rate swap	0.209	▲ 0.01	▲ 0.03	▲ 0.13	▲ 0.20	0.173	0.078	0.321	
5y PLN interest rate swap	2.350	▼ -0.06	▼ 0.00	▼ -0.05	▲ 0.47	2.473	2.300	2.625	
Fuel									
WTI Cushing	47.84	▼ -3.0%	▼ -5.5%	▼ -10.9%	▲ 2.4%	51.06	45.52	54.10	
Brent	50.32	▼ -1.1%	▼ -4.5%	▼ -9.2%	▲ 6.0%	53.32	47.76	56.46	
Diesel NY (ULSD)	149.08	▼ -0.8%	▼ -5.2%	▼ -12.2%	▲ 7.4%	157.24	141.23	167.82	
Others									
VIX	10.40	▼ -0.42	▼ -1.97	▼ -3.64	▼ -4.01	11.84	9.77	15.96	
BBG Commodity Index	83.48	▼ -0.6%	▼ -2.2%	▼ -4.6%	▼ -1.5%	86.13	82.03	89.36	
S&P500	2 390.90	▲ 0.3%	▲ 1.2%	▲ 6.8%	▲ 15.8%	2 340.35	2 257.83	2 399.63	
DAX	12 770.41	▲ 2.7%	▲ 3.7%	▲ 11.2%	▲ 29.5%	11 981.51	11 509.84	12 770.41	
Shanghai Composite	3 083.51	▼ -2.3%	▼ -4.3%	▼ -0.6%	▲ 8.7%	3 191.87	3 052.79	3 288.97	
WIG 20	2 368.50	▼ -0.4%	▲ 8.8%	▲ 21.6%	▲ 30.4%	2 192.54	1 989.64	2 413.53	
KGHM	117.50	▼ -4.5%	▲ 1.5%	▲ 27.1%	▲ 83.9%	120.77	94.00	135.50	

° 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

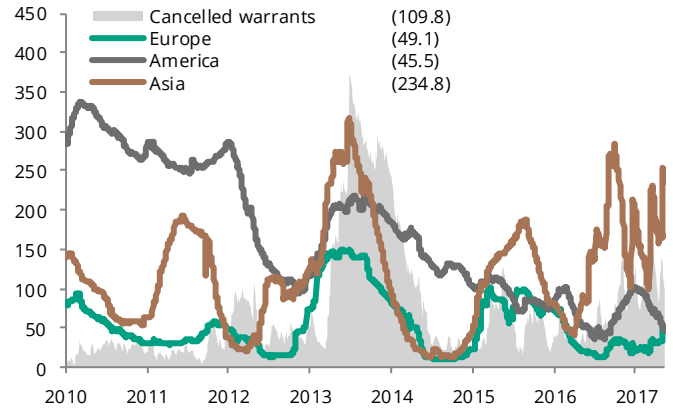
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



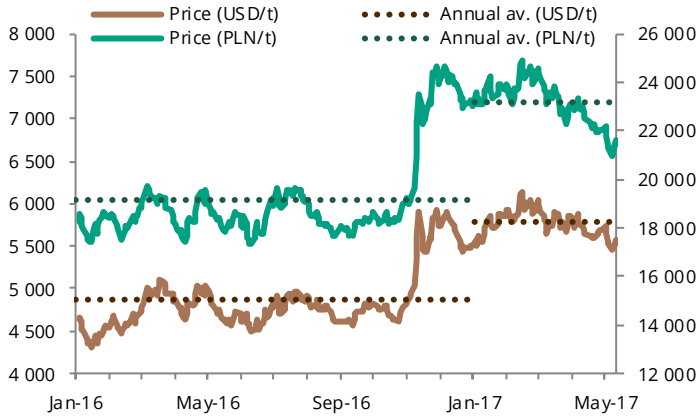
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



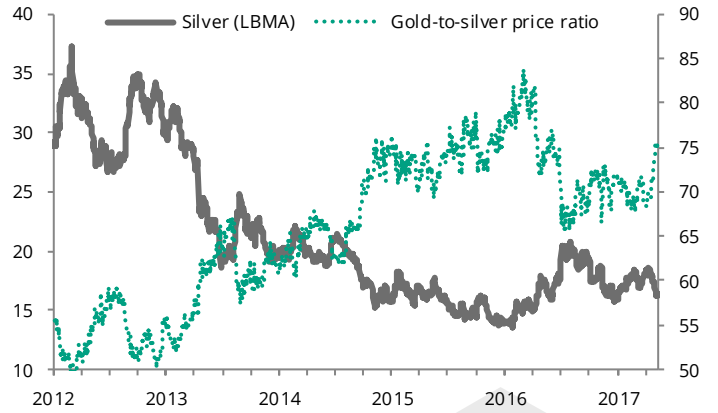
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



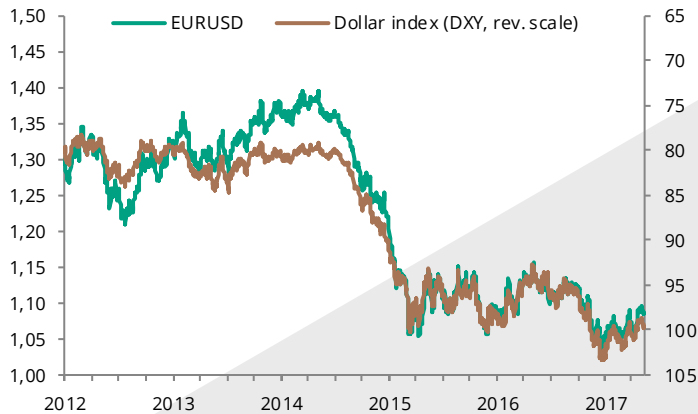
Source: Bloomberg, KGHM Polska Miedz

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



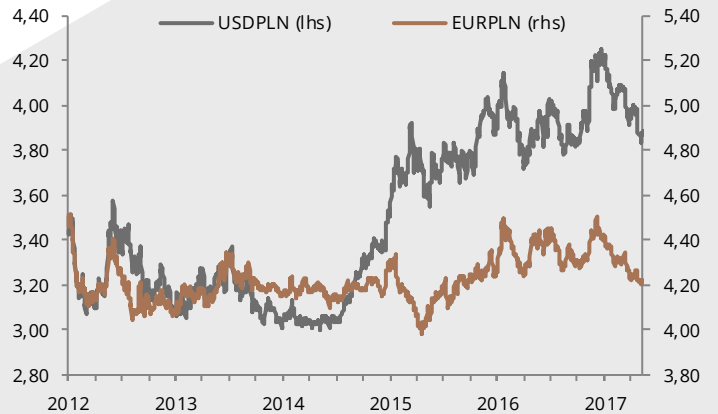
Source: Bloomberg, KGHM Polska Miedz

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



Source: Bloomberg, KGHM Polska Miedz

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



Source: Bloomberg, KGHM Polska Miedz

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
1st – 15th May 2017.

- 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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