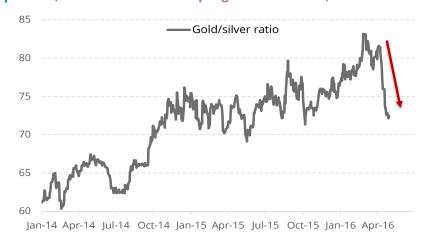


Market Overview

- Copper: With prices having recovered around 7% YTD, it might be tempting to conclude that the worst is over for the copper market. Initially, the recovery was driven by a rebounding oil price and a weak dollar. However, strong data out of China have created a convincing narrative of a stabilized China, supporting the price rebound (page 2).
- China commodities trading: China Securities Regulatory Commission (CSRC) ordered the country's major commodity futures exchanges to control speculative trading activity as a result of huge capital flows and a fear that it might lead to another boom-and-bust cycle, similar to stocks market rollercoaster last summer (page 4).
- Precious metals: During recent two weeks bullish mood in precious metals has been continued as these commodities extended their rally at the end of April, with gold and silver rising to 15-month highs. A lot of new speculative bullish bets on silver and gold markets have recently appeared (page 5).
- Global markets: Red colour dominated global stock exchanges in recent two weeks. Emerging market currencies depreciated against major ones. European Central Bank, according to expectations assured market participants that use whatever tools possible to support economic growth and inflation in Eurozone (page 6).

Silver has gained momentum and caught up with gold in the recent weeks (lower ratio means cheaper gold versus silver)



Source: Bloomberg, KGHM



KAI	/ m	arl	ret.	nri	ces
1/6/	,	uir	100	PII	663

	Close price	2w chng.
LME (USD/t)		
Copper	5 045.00	4.8%
Nickel	9 460.00	6.5%
LBMA (USD/troz)		
Silver	17.86	10.4%
Gold (PM)	1 285.65	4.8%
FX		
EUR/USD	1.1403	1.1%
EUR/PLN	4.4078	2.5%
USD/PLN	3.8738	1.5%
USD/CAD	1.2549	-2.4%
USD/CLP	663.40	-0.7%
Stocks		
KGHM	74.36	4.7%

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

Important macroeconomic data										
	Release	For								
	GDP (annlzd., qoq)	1Q	0.5%							
*1	Official manuf. PMI	Apr	50.1							
	Industrial prod. (yoy)	Mar	0.5%							
	GDP (sa, yoy)	1Q	1.6% -							
$\langle 0 \rangle$	Core CPI (yoy)	Apr	0.7%							
Source: Bloomberg, KGHM; (more on page 7)										

Market Risk Unit

marketrisk@kghm.com

Grzegorz Laskowski Łukasz Bielak Marek Krochta Wojciech Demski Lech Chłopecki



Base and precious metals | Other commodities

Copper

With prices having recovered around 7% YTD, it might be tempting to conclude that the worst is over for the copper market. Initially, the recovery was driven by a rebounding oil price and a weak dollar. However, strong data out of China have created a convincing narrative of a stabilized China, supporting the price rebound.

Positive Chinese data contributed to copper price recovery from Jan lows...

...but the future does not look so bright unless there is a meaningful improvement in copper demand

Copper price recovery might not last long

As a result of a loosening of credit and a surge in fixed asset investment, the immediate outlook for China's economy has brightened, according to Barclays' analysts. The improvement in the Chinese economy has coincided with robust commodity and copper import data which might be treated as further evidence for improvement within China.

Despite the fact that this short-turn improvement in fundamentals seems encouraging, Barclay's analyst claim that the prices will remain weak throughout this and next year. This is mainly driven by the weak demand outside China as well as modest wave of additional primary copper supply still looks due for 2016 and 2017. Barclays thinks that the upgrade in Chinese demand outlook has been offset by low year-to-date disruption rate and an industry that looks likely to reduce costs, not cut production in the net, capping the potential upside from a possible outperformance on the demand side of the equation. Moreover, the demand outlook for countries outside of China remains disappointing. Among the main fundamental changes since last Barclays update the following could be enlisted:

- North America: in 1H15 demand surged by 4.6% yoy. However, this
 momentum did not prove sustainable, and a second-half weakening in the
 American and Canadian economies slowed demand growth to 1.7% yoy for
 2015.
- **Europe:** demand for refined copper has strengthened recently. In 1Q15, the continent's consumption of copper fell 4.9% qoq, but by 4Q15, consumption grew by 6.2% qoq, though that was not enough to offset a 1% yoy decline in overall copper consumption.
- Japan: demand in 2015 contracted by 7% yoy, falling to under 1 million tonnes.
- Emerging Markets: troubles in these countries was the main reason for global weakness in the market. Copper consumption in Brazil (321kt) collapsed by 17% yoy, as the flagship economy in Latin America became embroiled in political controversy and a severe economic downturn. Likewise, in Russia (322kt), where a change to the copper taxation regime along with a struggling economic caused refined copper consumption to fall by an extremely large 47% yoy.



Other important information on copper market:

- The global refined copper market showed a production surplus of 56k mt in January, according to preliminary data released by International Copper Study Group. Apparent demand for the red metal in China grew by 16%, mainly due to imports. Shall seasonal adjustments for production and usage be included, the January surplus totaled 50k mt, which is 41k mt higher than in the same period last year. In relative annual terms, the world apparent usage for refined copper rose by about 4.5%. Most of that increase was led by China, which saw its apparent demand jump 16% year on year in January, based on a 15.5% increase in net imports of refined copper. On the contrary, global consumption dropped roughly 5%. On a regional basis, refined copper usage rose by 9% in Asia, but when excluding China, Asian usage, like global consumption, also fell by 5%, and was down 7% in the Americas, and off 3% in Europe.
- According to MMG, the overseas mining arm of Chinese state base metals miner and producer China Minmetals Corp, Las Bambas produced 31,470 mt of copper-in-concentrate since its startup at the beginning of this year. The company continues to ramp up the project's operations towards commercial production in the second quarter of 2016. According to company statement, construction of the entire copper project is complete, and the molybdenum plant is undergoing commissioning. MMG expects Las Bambas to produce 250k-300k mt of copper-in-concentrate in 2016, as commissioning progresses and production ramps up. C1 costs are expected to be within the range of 0.80-0.90 USD/lb once the project attains steady production.
- Copper scrap markets remain squeezed as the market faces tight supply and steady demand. Consumers have raised most brass prices and lowered some copper scrap discounts in order to stay competitive with other buyers and to spur inbound flows of the needed metal units. Market participants say that it is very tough on the procurement side when consumers are competing for the same load in the environment of firm demand and short supply. Despite increases in Comex prices, some of the scrap spreads tightened.
- China imported 1.09 million mt of copper concentrate from Chile over January-March, up 31.5% yoy. Chile is the top source of imported copper concentrate for China for the first three months of the year. The country, however, lost the top spot to Peru over January-February. The other top nine sources for January-March were: Peru, 995,399 mt; Mongolia, 393,408 mt; Mexico, 253,964 mt; Australia, 188,156 mt; Canada, 103,615 mt; Indonesia, 99,666 mt; Iran, 90,211 mt; Spain, 81,191 mt; and Laos, 79,640 mt. Imports from the 10 countries totaled 3.37 million mt, representing 84.2% of China's total copper concentrate imports of 4 million mt for the first quarter.



Chinese commodity futures exchange

Chinese regulator (CSRC) ordered the

exchanges to cut the speculation

huge volumes and volatility, the similarities with a stock market boom-and-bust arise

On some days, the trading volume in iron

ore futures on the Dalian exchange

exceeded China's total imports for 2015

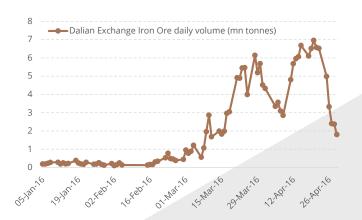
Chinese regulator orders to control speculative trading

According to Reuters, China Securities Regulatory Commission (CSRC) ordered the country's major commodity futures exchanges to control speculative trading activity as a result of huge capital flows and a fear that it might lead to another boom-and-bust cycle. In response, commodity futures exchanges in Dalian, Shanghai and Zhengzhou ordered major institutional investors that lack a commodities background to rein in their trading.

Investors, including hedge funds and retail investors, have placed big bets on Chinese commodities futures this year, driving up contracts including iron ore, rebar, cotton and even eggs. The rally has prompted many analysts to warn of similarities with a boom in the country's stock markets, which reversed into a sharp crash last summer. According to Reuters, CSRC is about to provide measures which are aimed at cracking down on high-frequency trading. Moreover, exchanges made several public announcements of measures that increase the cost of trading, such as a rise in transaction fees and minimum margin requirements, action that has taken some of the heat out of the rally and traded volumes. Market trading limits have also been widened, all in order to improve mechanisms for controlling risks.

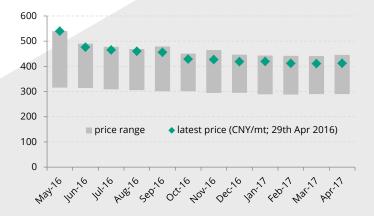
At their peak this year, Dalian iron ore rose 73 percent, and Shanghai rebar 62 percent. On some days, the trading volume in iron ore futures on the Dalian exchange exceeded China's total imports for 2015. Analysts said speculators have been betting that government plans for more infrastructure spending and signs of a pick-up in the economy would fuel more demand for commodities. Others suggested commodities futures markets were the only place left for speculators to make quick profits given weakness in stocks, bonds and housing.

Iron ore volume has been volatile this year



Source: Bloomberg, KGHM

The iron ore forward curve prices have been volatile and drew Chinese market regulator's attention



Source: Bloomberg, KGHM



Precious metals

During recent two weeks bullish mood in precious metals has been continued as these commodities extended their rally at the end of April, with gold and silver rising to 15-month highs. A lot of new speculative bullish bets on silver and gold markets have recently appeared.

On commodities markets all eyes are focused on precious metals.

Gold and silver on 15-month highs

Precious metals rally is one of the hottest topics on commodity markets at the time being. Dynamic price upswing from the beginning of the year was stimulated by uncertainty of Chinese economy outlook, Brexit discussions and FED's monetary policy. Fundamental factors have been empowered by speculative activity of many hedge funds, which have been looking for opportunities to improve results after poor financial results on commodities markets in recent quarters.

What is really interesting, silver outperformed gold in fortnight. Some ETF investors have been switching from gold to silver and silver large-scale futures speculators or "managed money" investors such as hedge funds are also bullish on the outlook for the metal. Hedge funds dramatically raised bullish bets on silver last week pushing the overall market into another record net long position.

According to the CFTC's weekly Commitment of Traders data up to April 19th, speculators once again added to longs, building a bullish position of 378.6 million troz or 11 773 tonnes, the highest level since at least 2006, when government first started to collect the data. At the same time speculators cut their short positions which saw net longs positions grow to 10 311 tonnes, compared to a record net short of 1 610 tonnes recorded during the third quarter last year.

At the end of the April silver price closed at 17,96 USD/troz whereas gold finished at 1 293,36 USD/troz.

Gold hedging is in sharpest uptrend since the bear market of two decades ago

Gold miner's hedging strongest since 1990s on price jump

Gold miners hedging to lock-in current prices is seeing the sharpest uptrend since the bear market of two decades ago, according to Thomson Reuters GFMS. At least six mining companies used the rise to sell future production. GFMS calculates that the global producer hedge book stood at a delta-adjusted total of 6,88 mn troz (214 t) at the end of 2015 and estimates that the book grew to 7,39 mn troz (230 t) at 1Q16 end, which represents a 7% increase. It should be noted that this estimate incorporates the run-down of the existing suite of producer hedge books and makes a small allowance for more hedges that have yet to be announced.



Global economies | Foreign exchange markets

Red colour dominated global stock exchanges in recent two weeks and emerging market currencies depreciated against major ones. At the same time European Central Bank, according to expectations, assured market participants that will use whatever tools possible to support economic growth and inflation in Eurozone.

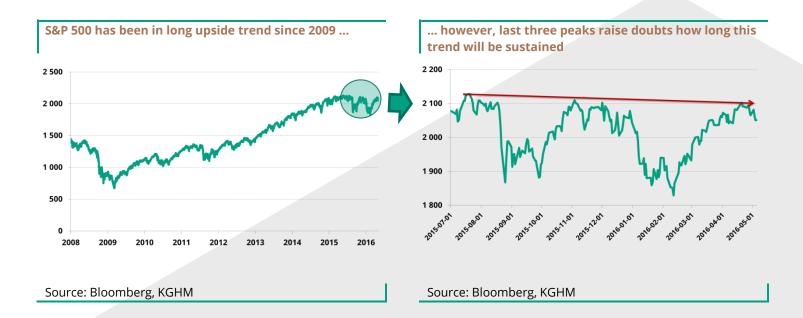
Apple's earnings disappointment in 1Q16

Global sentiment deteriorated in recent two weeks

The earnings publication season in United States continues. Generally, financial results presented by majority of sectors contributing to S&P 500 index disappointed investors, starting from banks and ending at IT & social media companies. It was the major trigger, which caused sell off on stock exchanges.

The most spectacular example of disappointment was Apple, whose shares felt down significantly as analysts expressed their disappointment with the tech giant's latest quarterly report. The company's stock fall took out USD 46 bn from its market cap, but it still remains the largest company in that regard. Apple also recorded its first-ever iPhone year-over-year sales decline, which is treated as a negative signal by some analysts that company' era of greatness has slowly come to an end. As a response for doubts on the market, Apple's CEO Tim Cook said that company will be poaching top talent from Tesla to build its own electric car. Whether or not this car would be self-driving seems to be up for debate, but what's important is that Apple has big ideas to experiment with new product categories.

S&P 500 index has reached third peak in recent few quarters and it seems that the 2 200 level may be tough barrier to overcome.





Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		China				*1
00	27-Apr	Industrial profits (yoy)	Mar	11.1%	-4.7%	
000	01-May	Official manufacturing PMI	Apr	50.1	50.2	50.3
		Poland				
00	18-Apr	Average gross salary (yoy)	Mar	3.3%	3.9%	3.4%
©	18-Apr	Employment (yoy)	Mar	2.7%	2.5%	2.5%
0000	19-Apr	Sold industrial production (yoy)‡	Mar	0.5%	6.8%	3.9%
000	19-Apr	Retail sales (yoy)	Mar	0.8%	3.9%	3.4%
00	19-Apr	Producer inflation PPI (yoy)‡	Mar	-1.7%	-1.5%	-1.4%
00	25-Apr	Unemployment rate	Mar	10.0%	10.3%	10.0%
©	26-Apr	Budget balance (ytd)	Mar	17.5%	5.7%	
0000	29-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	-1.1%	-0.9%	-1.0%
0	29-Apr	NBP inflation expectations	Apr	0.2%	0.2%	0.2%
		US				
00	21-Apr	Philadelphia Fed business outlook	Apr	- 1.6	12.4	9.0
000	22-Apr	Manufacturing PMI - preliminary data	Apr		51.5	52.0
0	25-Apr	Dallas Fed manufacturing activity	Apr	- 13.9	- 13.6	- 10.0 👅
00	26-Apr	Durable goods orders - preliminary data‡	Mar	0.8%	-3.1%	1.9%
©	26-Apr	S&P/CaseShiller home price index‡	Feb	183	182	183 🕳
000	26-Apr	Composite PMI - preliminary data	Apr	51.7	51.3	
000	26-Apr	PMI services - preliminary data	Apr	52.1	51.3	52.0
•	26-Apr	Richmond Fed manufacturing index	Apr	14.0	22.0	12.0
00000	27-Apr	FOMC base rate decision - upper bound (Fed)	Apr	0.50% =	0.50%	0.50%
00000	27-Apr	FOMC base rate decision - lower bound (Fed)	Apr	0.25% =	0.25%	0.25%
00000	28-Apr	GDP (annualized, qoq) - estimation	1Q	0.5%	1.4%	0.7%
0000	29-Apr	Consumer spending inflation PCE (mom)‡	Mar	0.1%	0.2%	0.1%
0000	29-Apr	Consumer spending inflation PCE (yoy)	Mar	1.6%	1.7%	1.6%
00	29-Apr	Personal income (sa, mom)‡	Mar	0.4%	0.1%	0.3%
00	29-Apr	Personal spending (sa, mom)‡	Mar	0.1%	0.2%	0.2%
00	29-Apr	University of Michigan confidence index - final data	Apr	89.0	89.7	90.0



Weight Dat		Event	For	Reading	'	Previous	Consensus ²		
		Eurozone							
0	19-Apr	ZEW survey expectations	Apr	21.5		10.6			
00000	21-Apr	ECB main refinancing rate	Apr	0.00%	-	0.00%	0.00%	0	
00000	21-Apr	ECB deposit facility rate	Apr	-0.4%	-	-0.4%	-0.4%	0	
0	21-Apr	Consumer confidence - estimation	Apr	- 9.3		- 9.7	- 9.3	0	
000	22-Apr	Composite PMI - preliminary data	Apr			53.1	53.3		
000	22-Apr	Manufacturing PMI - preliminary data	Apr			51.6	51.9		
000	22-Apr	Services PMI - preliminary data	Apr			53.1	53.3		
0	27-Apr	M3 money supply (yoy)‡	Mar	5.0%		4.9%	5.0%	0	
0	28-Apr	Economic confidence	Apr	104		103	103		
0	28-Apr	Industrial confidence	Apr	- 3.7		- 4.2	- 4.0		
0	28-Apr	Consumer confidence - final data	Apr	- 9.3	-	- 9.3	- 9.3	0	
٥	28-Apr	Business climate indicator‡	Apr	0.1		0.1	0.1		
00000	29-Apr	GDP (sa, yoy) - estimation	1Q	1.6%	-	1.6%	1.4%		
00000	29-Apr	GDP (sa, qoq) - estimation	1Q	0.6%		0.3%	0.4%		
0000	29-Apr	Core CPI (yoy) - estimation	Apr	0.7%	\blacksquare	1.0%	0.9%	_	
0000	29-Apr	CPI estimate (yoy)	Apr	-0.2%	\blacksquare	0.0%	-0.1%		
00	29-Apr	Unemployment rate‡	Mar	10.2%	\blacksquare	10.4%	10.3%		
		Germany							
000	22-Apr	Composite PMI - preliminary data	Apr			54.0	54.2		
000	22-Apr	Manufacturing PMI - preliminary data	Apr			50.7	51.0		
00	25-Apr	IFO business climate	Apr	107	\blacksquare	107	107		
00	27-Apr	GfK consumer confidence	May	9.7		9.4	9.4		
00	28-Apr	Unemployment rate	Apr	6.2%	-	6.2%	6.2%	0	
0000	28-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	-0.3%	\blacksquare	0.1%	0.0%		
0000	28-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	-0.1%	\blacksquare	0.3%	0.1%		
000	29-Apr	Retail sales (yoy)‡	Mar	0.7%	\blacksquare	5.5%	2.7%		
		France							
000	22-Apr	Composite PMI - preliminary data	Apr			50.0	50.2		
000	22-Apr	Manufacturing PMI - preliminary data	Apr			49.6	49.9		
00000	29-Apr	GDP (yoy) - estimation	1Q	1.3%	\blacksquare	1.4%	1.0%		
00000	29-Apr	GDP (qoq) - estimation	1Q	0.5%		0.3%	0.4%		
0000	29-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	-0.1%	-	-0.1%	-0.1%	0	
0000	29-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	-0.2%	\blacksquare	-0.1%	-0.1%	_	
		Italy							
00	29-Apr	Unemployment rate - preliminary data‡	Mar	11.4%	•	11.6%	11.6%	_	
0000	29-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	-0.3%	\blacksquare	-0.2%	-0.1%		
		UK							
00	20-Apr	Unemployment rate (ILO, 3-months)	Feb	5.1%	-	5.1%	5.1%		
00000	27-Apr	GDP (yoy) - estimation	1Q	2.1%	-	2.1%	2.0%		
00000	29-Apr Unemployment rate Mar 10.2%	0.4%	0						
		Japan							
000	22-Apr	Manufacturing PMI - preliminary data	Apr			49.1	49.5		
0000	28-Apr	Consumer inflation CPI (yoy)	Mar	-0.1%	\blacksquare	0.3%	0.0%	_	
0000	28-Apr	Industrial production (yoy) - preliminary data	Mar	0.1%		-1.2%	-1.6%		
		Chile					*		
				488 759					

¹ Reading difference to previous release: \blacktriangle = higher than previous; \blacktriangledown = lower than previous; \multimap = equal to previous. ² Reading difference to consensus: \multimap = higher than consensus; \multimap = lower than consensus; \multimap = 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

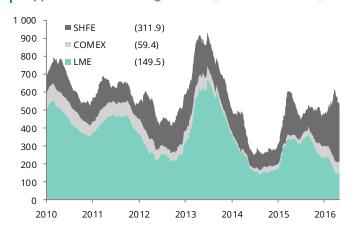
Key base & precious metal prices, exchange rates and other important market factors

(as of: 29-Apr-16)		Price change °						From year beginning ²				
	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t)												
Copper	5 045.00		4.8%		3.9%		7.3%	•	-19.2%	4 717.25	4 310.50	5 103.00
Molybdenum	13 600.00		10.6%		11.5%		13.3%	•	-21.2%	12 181.33	11 750.00	13 600.00
Nickel	9 460.00		6.5%		14.3%		9.2%	•	-31.7%	8 588.55	7 710.00	9 460.00
Aluminum	1 673.00		9.0%		12.2%		11.0%	\blacksquare	-12.4%	1 528.06	1 453.00	1 673.00
Tin	17 420.00		1.0%		3.1%		19.3%		8.7%	15 899.04	13 235.00	17 625.00
Zinc	1 943.00		4.8%		8.9%		21.4%	•	-17.5%	1 722.30	1 453.50	1 943.00
Lead	1 795.50		5.1%		5.3%	•	-0.4%	•	-15.5%	1 739.91	1 597.00	1 896.50
LBMA (USD/troz)												
Silver	17.86		10.4%		16.1%		29.2%		8.1%	15.20	13.58	17.86
Gold ¹	1 285.65		4.8%		3.9%		21.0%		8.9%	1 197.67	1 077.00	1 285.65
LPPM (USD/troz)												
Platinum ¹	1 065.00		8.0%		9.1%		22.1%	_	-6.3%	935.20	814.00	1 065.00
Palladium ¹	628.00		10.6%		10.4%		14.8%	_	-19.4%	537.14	470.00	628.00
FX ³												
EUR/USD	1.1403		1.1%		0.2%		4.7%		1.7%	1.1101	1.0742	1.1432
EUR/PLN	4.4078		2.5%		3.3%		3.4%		9.3%	4.3505	4.2355	4.4987
USD/PLN	3.8738		1.5%		3.1%	•	-0.7%		7.6%	3.9179	3.7193	4.1475
USD/CAD	1.2549	_	-2.4%	•	-3.3%	_	-9.3%		3.5%	1.3501	1.2544	1.4589
USD/CNY	6.4780		0.0%		0.4%	_	-0.2%		4.4%	6.5229	6.4536	6.5948
USD/CLP	663.40	_	-0.7%	•	-1.7%	_	-6.6%		9.3%	693.90	657.90	730.31
Money market												
3m LIBOR USD	0.637		0.00		0.01		0.02		0.36	0.627	0.612	0.642
3m EURIBOR	-0.251	•	0.00	\blacksquare	-0.01	\blacksquare	-0.12	•	-0.25	-0.203	-0.252	-0.132
3m WIBOR	1.670	-	0.00		0.00	\blacksquare	-0.05		0.02	1.683	1.670	1.720
5y USD interest rate swap	1.267		0.10		0.09	\blacksquare	-0.47	•	-0.31	1.280	1.045	1.709
5y EUR interest rate swap	0.073		0.07		0.05	\blacksquare	-0.26	•	-0.22	0.074	-0.035	0.309
5y PLN interest rate swap	1.925		0.04		0.15	•	-0.06	•	-0.21	1.851	1.735	2.040
Fuel												
WTI Cushing	45.92		13.8%		19.8%		24.0%	•	-23.0%	35.34	26.21	46.03
Brent	46.36		10.5%		19.7%		29.7%	•	-28.5%	36.40	26.39	46.64
Diesel NY (ULSD)	138.73		12.8%		18.6%		29.0%	•	-29.9%	111.64	86.44	140.59
Others												
VIX	15.70		2.08		1.75	•	-2.51		1.15	18.90	13.10	28.14
BBG Commodity Index	85.52		6.4%		8.5%		8.9%	_	-17.6%	77.88	72.88	85.52
S&P500	2 065.30	•	-0.7%		0.3%		1.0%	•		1 983.06	1 829.08	2 102.40
DAX	10 038.97	•	-0.1%		0.7%	•	-6.6%	_	-12.4%	9 749.47	8 752.87	10 435.73
Shanghai Composite	2 938.32	_	-4.5%	_	-2.2%	_	-17.0%		-33.8%	2 930.61	2 655.66	3 361.84
WIG 20	1 896.64	_	-2.2%	_	-5.1%		2.0%		-24.6%	1 848.50	1 674.57	1 999.93
WIG ZU	1 000.07										1 0, 1.5,	

[°] 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

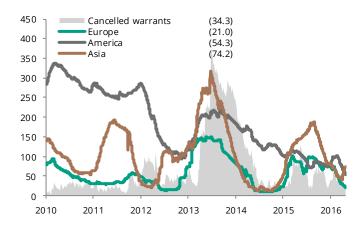


Copper: official exchange stocks (thousand tonnes)



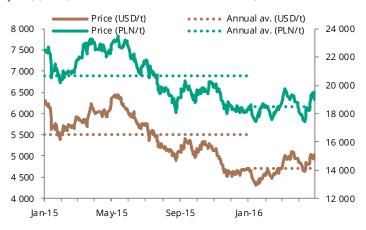
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



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

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



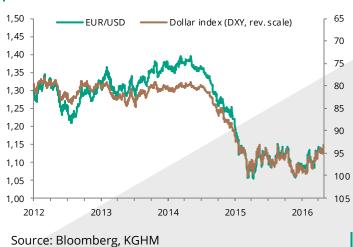
Source: Bloomberg, KGHM

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



Source: Bloomberg, KGHM

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



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





Legal note

This document has been prepared based on the below listed reports, among others, published in the following period: **18 April 2016 – 1 May 2016.**

- Barclays Capital, BofA Merrill Lynch, Citi Research, CRU Group, Deustche Bank Markets Research,
- GavekalDragonomics,
 Goldman Sachs,
 JPMorgan,
 Macquarie Capital Research,
 Mitsui Bussan Commodities,
- Morgan Stanley Research,
 SMM Information & Technology,
 SNL Metals & Mining,
 Wood Mackenzie.

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, a także systemów: Bloomberg oraz Thomson Reuters.

Official metals prices are available on following websites:

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

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

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

DISCLAIMER

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

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

In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.

Departament 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