

# Market Overview

14th November 2016






- Copper:** During the week of October 31 and November 5 London held its annual conference called "LME Week" during which market participants have the possibility to exchange information, ideas, to establish new contacts and negotiate trading contracts for next year (page 2).
- Precious metals:** Donald Trump's victory was expected to be precious metals' bullish trigger but the market behaved as usual - unexpectedly. Analysts were trying to capture how much gold and other precious prices could rise once Donald Trump wins the campaign. Indeed, gold's value increased by over 50 USD/troz after the official results but by the end of the day it came back to the level's seen before the election date and slowly started to decrease onwards (page 4).
- USA:** Donald Trump has defied all expectations from the very start of his presidential campaign more than a year ago. According to BBC, very few people thought he would actually run, climb in the polls, win any primaries, win the Republican nomination, compete with H. Clinton and finally win the elections. Now he's President-elect Trump (page 6).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▲ Copper	5 900.00	23.3%
▲ Nickel	11 735.00	13.5%
<b>LBMA (USD/troz)</b>		
▲ Silver	18.59	5.6%
▼ Gold (PM)	1 236.45	-2.9%
<b>FX</b>		
▼ EUR/USD	1.0904	-0.2%
▲ EUR/PLN	4.3424	0.3%
▲ USD/PLN	3.9856	0.4%
▲ USD/CAD	1.3475	0.7%
▲ USD/CLP	656.36	0.7%
<b>Stocks</b>		
▲ KGHM	87.52	21.9%

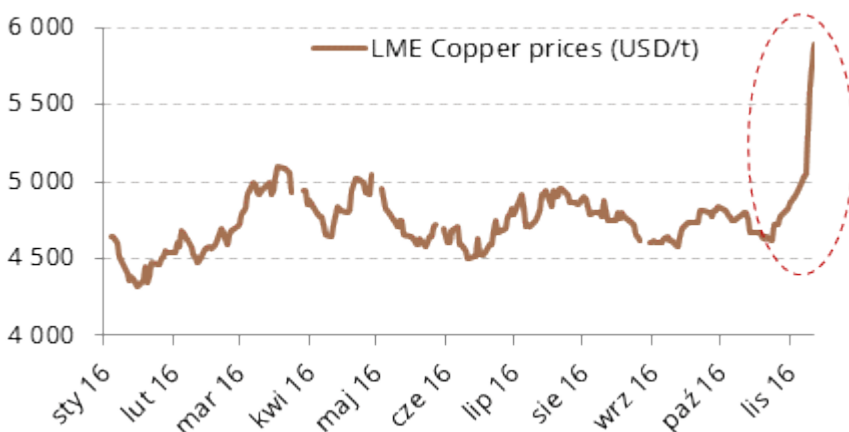
Source: Bloomberg, KGHM Polska Miedź; (more on page 9)

## Important macroeconomic data

Release	For		
 CPI (yoy)	Oct	2.1%	▲
 GDP (sa, yoy)	3Q	1.6%	-
 Official manuf. PMI	Oct	51.2	▲
 Non-farm payrolls chng.	Oct	161	▼
 Copper exports (\$)	Oct	2 163	▼

Source: Bloomberg, KGHM Polska Miedź; (more on page 7)

## Copper prices have increased dramatically after LME week in London



Source: Thomson Reuters, KGHM Polska Miedź

## Market Risk Unit

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## Base and precious metals | Other commodities

### Copper

**During the week of October 31 and November 5 London held its annual conference called "LME Week" during which market participants have the possibility to exchange information, ideas, to establish new contacts and negotiate trading contracts for next year.**

#### LME Week key takeaways

- Copper in the past several months did much worse than most other base metals and raw materials. This was partly due to a worse situation on the supply side, which indicated a significant over-production in relation to demand (at least for the next few quarters).
- Despite the persistence of low copper prices, copper miners currently are reluctant to consider reducing production or closing of unprofitable projects. The consensus in the market suggests that there is the possibility of significant production deficit in the next few years, after commencement of projects that are now in the final phase of implementation. The main reason is the lack of new projects started in recent years. This discourages mining companies from closing of mining projects that is often costly process.
- Chinese economy is slowing, but the government has taken more actions (stimulus packages) aimed at sustaining economic growth at communicated earlier level of 6-6.5%.
- Copper prices stabilized recently at a higher level than cautious market forecasts and we can observe the beginning of the process of realignment of short and medium-term price analysts assumptions to current market conditions.
- Conditions of molybdenum market improved compared to the first months of this year, but they remain slightly negative or at best neutral.
- Current demand for molybdenum is in slightly better shape due to the improvement in the construction sector in China and the Oil & Gas sector worldwide.

#### Other important information on copper market:

- According to Freeport- McMoRan Inc China is building new copper smelters faster than the world is adding new mines, giving mining companies an advantage when negotiating supply deals. As has been said by senior vice president of marketing and sales, the good news for miners is that there's much more smelting capacity coming on stream than new mined production. Smelters and miners are starting to negotiate treatment and refining charges, known as TC/RCS, and the increased capacity may force smelters to lower their fees to win business. Benchmark treatment charges

for this year were set at about \$97 a metric ton for treating. More smelting capacity in China is reducing the need for the world's biggest user to import as much metal, according to CRU Group. The London-based researcher expects another 20 Chinese smelters to start operating by 2020. At the same time, its imports of concentrates are booming.

- Money managers are betting that copper's days as a metals-market laggard may be coming to an end. Hedge funds and other large speculators boosted their long positions by 20% to a record 67,806 U.S. copper futures and options contracts in the week ended Nov. 1, according to Commodity Futures Trading Commission data. They held a net-long position of 23,340 contracts, after being net short a week earlier. While copper futures are up about 6% this year, the metal has been left behind in a metals rally this year amid concerns that abundant supply will prolong a glut. There are signs sentiment may be turning. The prospect of supply disruptions in Chile means production will be lower than expected. According to market analysts, even as copper is in an oversupply in the short term, there is a consensus that over the medium term it is one of the most scarce commodities. Copper futures have climbed for 10 straight sessions, the longest winning streak in more than two years.
- Indonesia may allow the export of copper concentrates beyond 2017 with certain restrictions, according to an official at the Ministry of Industry. Indonesia banned metal ore exports in early 2014 to encourage miners to build smelters to create jobs and shift exports from raw materials to higher-value finished metals. But the government has been comprehensively reevaluating the domestic mineral processing requirements, amid concerns that the January 2017 deadline for full processing of all minerals will come too soon for certain metals. The government is now considering extending the deadline extension for copper producers, but with quotas and export taxes to give them an incentive to build smelters in the country. Gusti Putu Suryawirawan, the director-general of the metal industry at the Industry Ministry, said there would be no extension of the deadline for other metals, repeating that the government is unlikely to allow exports of nickel ore and bauxite.
- According to China Nonferrous Metals Industry Association, or CNIA, The Chinese electric car sector's refined copper demand is forecast to hit 280k mt by 2025, surging from an estimated 38.4k mt in 2016. China's new energy vehicle, or NEV (partially or fully powered by electricity), output in the first nine months of this year hit 461k units, up 84% year on year, figures from Chinese brokerage BOC International Futures, based in Shanghai, showed. Based on the current NEV output growth, China's NEV output is expected to be 640k units in 2016, with copper usage totaling around 38.4k mt, according to the report. The growth in the domestic NEV sales volume is attributed to the Chinese government's subsidies to the sector. Based on the Ministry of Industry and Information Technology's China Manufacturing 2025 plans, China's NEV sales is forecast to hit 3 million units by 2025. However in the CNIA's report it is said that China's electric car output is

expected to be higher at 4.76 million units by 2025, based on an estimated annual domestic output growth of 25%, and copper consumption is estimated to rise to around 280k mt with that number of units. According to the CNIA report, pure electric and plug-in hybrid cars are most common in the Chinese market, consuming 80 kg of copper per car and 40 kg copper/car, respectively. Traditional cars use just 10-21 kg copper/car, depending on the type and size of car.

## Precious metals

**Donald Trump's victory was expected to be precious metals' bullish trigger but the market behaved unexpectedly as usual. Analysts were trying to capture how much gold and other precious prices could rise once Donald Trump wins the campaign. Indeed, gold's value increased by over 50 USD/troz after the official results but by the end of the day it came back to the level's seen before the election date and slowly started to decrease onwards.**

### LME Week key takeaways

- The market was dominated by positive sentiment and expectations of rising prices of precious metals, in the short term. The most important factors supporting the price of gold and silver were political events (Brexit and presidential elections in the US).
- The common opinion was that in case of Donald Trump winning in the presidential elections precious metals should clearly gain in value, due to the increased uncertainty associated with unsafe and radical statements of this candidate.

### And yet Trump's victory weakened gold...

Donald Trump's U.S. presidential victory on November 8 has spurred safe-haven buying of physical gold in Europe, but traditional bullion holders in the United States were not moved. After all, many of them are optimistic after voting for Trump. The contrast in reactions to Trump's surprise victory shows a wide difference in how investors in the two markets evaluate risk. For many outside the United States, Trump's pledge to rewrite the play book on trade and international relations prompted defensive gold buying. U.S. investors however, were more likely to be dumping gold in favor of stocks and bonds.

### Gold prices rollercoaster after the elections results

Spot gold prices soared nearly 5 percent above \$1,337 an ounce after the election, but have dropped since then below \$1,250 by 11<sup>th</sup> of November. Dealers who sell gold coins and bars in Europe, however, have been busy. "Users have now added well over half a tonne since end-October (652 kg). That already makes November the strongest month for net inflows since December 2012 (702 kg)" said Adrian Ash, head of research for Bullion Vault in London, referring to the online gold trading platform's clients. New U.S. interest has quieted since the election. In the United States, investors took a risk-on

approach, lifting Wall Street's three main stock indexes to record highs and the U.S. dollar to a 13 year peak on expectations that markets would benefit from Trump's policies. According to analysts' view a lot of the people who invest in gold and silver are Trump supporters. They tend to be more conservative, traditional-type people who use gold and silver more as a store of wealth rather than safe heaven.

### **Deutsche Bank manipulated gold prices and has agreed to pay \$60 million to settle litigation**

### **Deutsche Bank will settle litigation for gold prices manipulation**

Deutsche Bank AG has agreed to pay \$60 million to settle private U.S. antitrust litigation by traders and other investors who accused the German bank of conspiring to manipulate gold prices at their expense. The preliminary settlement was filed with the U.S. District Court in Manhattan, and requires a judge's approval. Deutsche Bank denied wrongdoing. The bank in October agreed to pay \$38 million to settle similar litigation over alleged silver price manipulation.

### **Investors accused banks of conspiring to rig rates and prices in financial and commodities markets**

The case is one of many in the Manhattan court in which investors accused banks of conspiring to rig rates and prices in financial and commodities markets. Investors sued Deutsche Bank, Barclays Plc, Bank of Nova Scotia, HSBC Holdings Plc and Societe Generale in 2014, claiming that they conspired to fix gold prices from 2004 to 2013. While the investors did not estimate the size of the banks' gold portfolios, they said the gold derivatives market alone reached \$650 billion during the class period. Deutsche Bank had agreed to settle its part of the case in April, but the terms were not disclosed until now. Deutsche Bank has separately been in talks with U.S. authorities on a potential multibillion-dollar penalty related to mortgage securities.

## Global economies | Foreign exchange markets

### The economic consequences of Donald Trump's victory

**Donald Trump has defied all expectations from the very start of his presidential campaign more than a year ago. According to BBC, very few people thought he would actually run, climb in the polls, win any primaries, win the Republican nomination, compete with H. Clinton and finally win the elections. Now he's President-elect Trump.**

**With a help from the Republican Party, D. Trump will likely deliver public spending boost**





Among the key positive news for the U.S. economy one may find public spending boost and debt limits relaxation, since the Republicans are in power, it would be much easier for the new president to launch Keynesian-style fiscal stimulus that Obama often proposed but was unable to deliver. In principle, the resulting deficits may be described as "supply-side economics", rather than Keynesian stimulus, but the effect will be the same: it is very likely that growth and inflation will both increase. Tax reforms (amnesty for multinational companies that repatriate foreign profits) as well as deregulation (energy and environmental laws) are also expected to happen in the coming years.

**Nobody can currently assess what shift away from trade, globalization and open markets might mean for the global economy**

Negative influence could show up in the trade area, as for the first time since the 1930s, the US has a president who views trade as a zero-sum game. Trump's protectionist campaign rhetoric may not have been meant literally, but if he fails to deliver any of the trade curbs that he promised, Republicans will suffer a backlash from what is now their core voter constituency, voters in declining industries and regions. US global leadership is therefore bound to shift away from free trade, globalisation, and open markets. Therefore, nobody can predict the full effects of the biggest potential regime change in global economic management since the 1980s. However, they will surely be negative for emerging economies and multinational companies, whose development models and business strategies have assumed free trade and open capital flows. Another economic threat could stem from enacting large tax cuts and boosting public spending in an economy already nearing full employment, which implies accelerating inflation, higher interest rates, or probably some combination of the two. Given the likelihood of additional trade protectionism and measures to remove immigrant workers, the increase in inflation and long-term interest rates could be quite dramatic. One of the most important issues might be connected with the combination of a dollar squeeze and protectionism which spells big trouble for developing countries, with the possible exception of some relatively closed economies such as Brazil, Russia, and India, whose development strategies are less reliant on free trade and foreign financing.

## Macroeconomic calendar

### Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>China</b>							
☆☆☆	01-Nov	Official manufacturing PMI	Oct	51.2 ▲	50.4	50.3	▲
☆☆☆	01-Nov	Caixin's manufacturing PMI	Oct	51.2 ▲	50.1	50.1	▲
☆☆	07-Nov	Foreign reserves (USD bn)	Oct	3 121 ▼	3 166	3 133	▼
☆☆	08-Nov	Trade balance (USD bn)‡	Oct	49.1 ▲	40.9	51.7	▼
☆☆	08-Nov	Exports (yoy)‡	Oct	-7.3% ▲	-10.5%	-6.0%	▼
☆☆☆☆	09-Nov	Consumer inflation CPI (yoy)	Oct	2.1% ▲	1.9%	2.1%	○
☆☆	09-Nov	Producer inflation PPI (yoy)	Oct	1.2% ▲	0.1%	0.9%	▲
☆☆	11-Nov	New yuan loans (CNY bn)	Oct	651 ▼	1 220	672	▼
<b>Poland</b>							
☆☆☆☆	31-Oct	Consumer inflation CPI (yoy) - preliminary data	Oct	-0.2% ▲	-0.5%	-0.3%	▲
☆☆☆	02-Nov	Manufacturing PMI	Oct	50.2 ▼	52.2	52.5	▼
☆☆☆☆☆	09-Nov	NBP base rate decision	Nov	1.50% -	1.50%	1.50%	○
<b>US</b>							
☆☆☆☆	31-Oct	Consumer spending inflation PCE (mom)	Sep	0.1% ▼	0.2%	0.1%	○
☆☆☆☆	31-Oct	Consumer spending inflation PCE (yoy)	Sep	1.7% -	1.7%	1.7%	○
☆☆	31-Oct	Personal income (sa, mom)‡	Sep	0.3% ▲	0.2%	0.4%	▼
☆☆	31-Oct	Personal spending (sa, mom)‡	Sep	0.5% ▲	0.1%	0.4%	▲
☆☆	31-Oct	Dallas Fed manufacturing activity	Oct	- 1.5 ▲	- 3.7	2.0	▼
☆☆☆	01-Nov	Manufacturing PMI - final data‡	Oct	53.4 -	53.4	53.2	▲
☆☆	01-Nov	ISM Manufacturing	Oct	51.9 ▲	51.5	51.7	▲
☆☆☆☆☆	02-Nov	FOMC base rate decision - upper bound (Fed)	Nov	0.50% -	0.50%	0.50%	○
☆☆☆☆☆	02-Nov	FOMC base rate decision - lower bound (Fed)	Nov	0.25% -	0.25%	0.25%	○
☆☆☆	03-Nov	Composite PMI - final data‡	Oct	54.9 -	54.9	--	
☆☆☆	03-Nov	PMI services - final data‡	Oct	54.8 -	54.8	54.8	○
☆☆	03-Nov	Durable goods orders - final data‡	Sep	-0.3% ▼	0.3%	-0.1%	▼
☆☆	04-Nov	Change in non-farm payrolls (ths)‡	Oct	161 ▼	208	173	▼
☆☆	04-Nov	Underemployment rate (U6)	Oct	9.5% ▼	9.7%	--	
☆☆	04-Nov	Unemployment rate	Oct	4.9% ▼	5.0%	4.9%	○
☆☆	04-Nov	Average hourly earnings (yoy)‡	Oct	2.8% ▲	2.7%	2.6%	▲
☆☆	11-Nov	University of Michigan confidence index - preliminary data	Nov	91.6 ▲	87.2	87.9	▲
<b>Eurozone</b>							
☆☆☆☆☆	31-Oct	GDP (sa, yoy) - estimation	3Q	1.6% -	1.6%	1.6%	○
☆☆☆☆☆	31-Oct	GDP (sa, qoq) - estimation	3Q	0.3% -	0.3%	0.3%	○
☆☆☆☆	31-Oct	Core CPI (yoy) - estimation	Oct	0.8% -	0.8%	0.8%	○
☆☆☆☆	31-Oct	CPI estimate (yoy)	Oct	0.5% ▲	0.4%	0.5%	○
☆☆☆	02-Nov	Manufacturing PMI - final data‡	Oct	53.5 -	53.5	53.3	▲
☆☆	03-Nov	Unemployment rate‡	Sep	10.0% -	10.0%	10.0%	○
☆☆☆	04-Nov	Composite PMI - final data‡	Oct	53.3 -	53.3	53.7	▼
☆☆☆	04-Nov	Services PMI - final data‡	Oct	52.8 -	52.8	53.5	▼
☆☆	04-Nov	Producer inflation PPI (yoy)‡	Sep	-1.5% ▲	-1.9%	-1.7%	▲
☆☆	07-Nov	Retail sales (yoy)‡	Sep	1.1% ▼	1.3%	1.2%	▼



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Germany</b>							
☆☆☆	31-Oct	Retail sales (yoy)‡	Sep	0.4% ▼	4.1%	1.5%	☹
☆☆☆	02-Nov	Manufacturing PMI - final data‡	Oct	55.0 -	55.0	55.1	☹
☆☆	02-Nov	Unemployment rate	Oct	6.0% ▼	6.1%	6.1%	☹
☆☆☆	04-Nov	Composite PMI - final data‡	Oct	55.1 -	55.1	55.1	○
☆☆☆	07-Nov	Factory orders (wda, yoy)‡	Sep	2.6% ▲	2.0%	3.5%	☹
☆☆☆☆	08-Nov	Industrial production (wda, yoy)‡	Sep	1.2% ▼	2.4%	2.0%	☹
☆☆☆☆	11-Nov	Harmonized consumer inflation HICP (yoy) - final data	Oct	0.7% -	0.7%	0.7%	○
☆☆☆☆	11-Nov	Consumer inflation CPI (yoy) - final data	Oct	0.8% -	0.8%	0.8%	○
<b>France</b>							
☆☆☆	02-Nov	Manufacturing PMI - final data‡	Oct	51.8 -	51.8	51.3	▲
☆☆☆	04-Nov	Composite PMI - final data‡	Oct	51.6 -	51.6	52.2	☹
☆☆☆☆	10-Nov	Industrial production (yoy)‡	Sep	-1.1% ▼	0.6%	0.4%	☹
<b>Italy</b>							
☆☆☆☆	31-Oct	Harmonized consumer inflation HICP (yoy) - preliminary data	Oct	-0.1% ▼	0.1%	0.1%	☹
☆☆☆	02-Nov	Manufacturing PMI	Oct	50.9 ▼	51.0	51.4	☹
☆☆	03-Nov	Unemployment rate - preliminary data‡	Sep	11.7% ▲	11.5%	11.4%	▲
☆☆☆	04-Nov	Composite PMI	Oct	51.1 -	51.1	51.5	☹
☆☆☆☆	10-Nov	Industrial production (wda, yoy)‡	Sep	1.8% ▼	4.4%	2.2%	☹
<b>UK</b>							
☆☆☆	01-Nov	Manufacturing PMI (sa)‡	Oct	54.3 ▼	55.4	54.5	☹
☆☆☆☆☆	03-Nov	BoE base rate decision	Nov	0.25% -	0.25%	0.25%	○
☆☆☆☆	03-Nov	BoE asset purchase target (GBP bn)	Nov	435 -	435	435	○
☆☆☆	03-Nov	Composite PMI	Oct	54.8 ▲	53.9	53.5	▲
☆☆☆☆	08-Nov	Industrial production (yoy)‡	Sep	0.3% ▼	0.8%	0.8%	☹
<b>Japan</b>							
☆☆☆☆	31-Oct	Industrial production (yoy) - preliminary data	Sep	0.9% ▼	4.5%	1.9%	☹
☆☆☆	01-Nov	Manufacturing PMI - final data‡	Oct	51.4 -	51.4	--	
☆☆☆	04-Nov	Composite PMI	Oct	51.3 ▲	48.9	--	
<b>Chile</b>							
☆☆☆☆	07-Nov	Economic activity (yoy)‡	Sep	1.4% ▼	2.6%	2.2%	☹
☆☆☆	07-Nov	Copper exports (USD mn)‡	Oct	2 163 ▼	2 328	--	
☆☆	07-Nov	Nominal wages (yoy)	Sep	5.0% ▼	5.5%	5.3%	☹
☆☆☆☆	08-Nov	Consumer inflation CPI (yoy)	Oct	2.8% ▼	3.1%	3.0%	☹
<b>Canada</b>							
☆☆☆☆☆	01-Nov	GDP (yoy)‡	Aug	1.3% ▲	1.2%	1.3%	○
☆☆☆	04-Nov	Net change in employment (ths)	Oct	43.9 ▼	67.2	- 15.0	▲

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

<sup>2</sup> 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

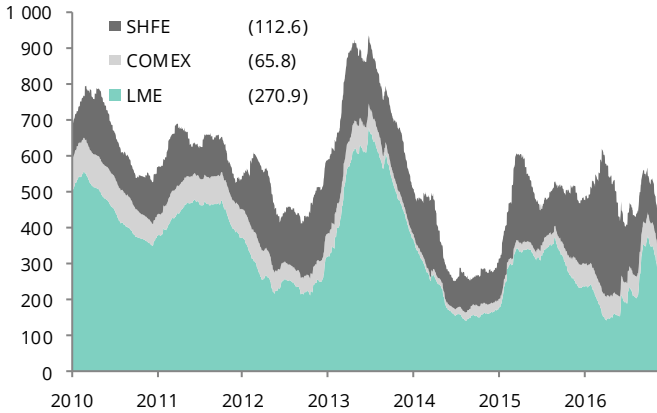
(as of: 11-Nov-16)

	Price	Price change °					From year beginning ²		
		2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t)</b>									
Copper	5 900.00	▲ 23.3%	▲ 22.1%	▲ 25.5%	▲ 21.1%	4 744.01	4 310.50	5 900.00	
Molybdenum	15 250.00	- 0.0%	- 0.0%	▲ 27.1%	▲ 38.6%	14 332.95	11 750.00	17 000.00	
Nickel	11 735.00	▲ 13.5%	▲ 12.2%	▲ 35.4%	▲ 25.2%	9 382.64	7 710.00	11 735.00	
Aluminum	1 777.00	▲ 4.4%	▲ 7.1%	▲ 17.9%	▲ 19.7%	1 585.64	1 453.00	1 777.00	
Tin	21 750.00	▲ 4.2%	▲ 7.2%	▲ 49.0%	▲ 48.4%	17 527.66	13 235.00	21 945.00	
Zinc	2 528.50	▲ 6.5%	▲ 6.3%	▲ 58.0%	▲ 61.0%	2 009.91	1 453.50	2 531.50	
Lead	2 151.50	▲ 5.1%	▲ 2.2%	▲ 19.4%	▲ 35.1%	1 817.22	1 597.00	2 155.00	
<b>LBMA (USD/troz)</b>									
Silver	18.59	▲ 5.6%	▼ -3.9%	▲ 34.5%	▲ 29.2%	17.23	13.58	20.71	
Gold ¹	1 236.45	▼ -2.9%	▼ -6.5%	▲ 16.4%	▲ 13.7%	1 261.73	1 077.00	1 366.25	
<b>LPPM (USD/troz)</b>									
Platinum ¹	974.00	▲ 0.2%	▼ -5.8%	▲ 11.7%	▲ 10.8%	998.12	814.00	1 182.00	
Palladium ¹	685.00	▲ 11.2%	▼ -5.1%	▲ 25.2%	▲ 20.8%	598.85	470.00	730.00	
<b>FX ³</b>									
EUR/USD	1.0904	▼ -0.2%	▼ -2.3%	▲ 0.2%	▲ 1.7%	1.1143	1.0742	1.1569	
EUR/PLN	4.3424	▲ 0.3%	▲ 0.7%	▲ 1.9%	▲ 2.8%	4.3529	4.2355	4.4987	
USD/PLN	3.9856	▲ 0.4%	▲ 3.4%	▲ 2.2%	▲ 1.1%	3.9064	3.7193	4.1475	
USD/CAD	1.3475	▲ 0.7%	▲ 2.7%	▼ -2.6%	▲ 1.3%	1.3229	1.2544	1.4589	
USD/CNY	6.8120	▲ 0.5%	▲ 2.1%	▲ 4.9%	▲ 7.0%	6.6034	6.4536	6.8120	
USD/CLP	656.36	▲ 0.7%	▼ -0.4%	▼ -7.6%	▼ -6.1%	677.88	645.22	730.31	
<b>Money market</b>									
3m LIBOR USD	0.906	▲ 0.02	▲ 0.05	▲ 0.29	▲ 0.54	0.713	0.612	0.906	
3m EURIBOR	-0.312	▲ 0.00	▼ -0.01	▼ -0.18	▼ -0.23	-0.257	-0.313	-0.132	
3m WIBOR	1.730	▲ 0.01	▲ 0.02	▲ 0.01	- 0.00	1.696	1.670	1.730	
5y USD interest rate swap	1.578	▲ 0.23	▲ 0.40	▼ -0.16	▼ -0.09	1.229	0.928	1.709	
5y EUR interest rate swap	0.150	▲ 0.14	▲ 0.30	▼ -0.18	▼ -0.10	-0.017	-0.183	0.309	
5y PLN interest rate swap	2.290	▲ 0.16	▲ 0.35	▲ 0.30	▲ 0.47	1.899	1.735	2.290	
<b>Fuel</b>									
WTI Cushing	43.41	▼ -10.9%	▼ -10.0%	▲ 17.2%	▲ 4.0%	42.36	26.21	51.60	
Brent	43.77	▼ -8.8%	▼ -8.3%	▲ 22.4%	▲ 1.0%	43.01	26.39	51.56	
Diesel NY (ULSD)	137.99	▼ -10.3%	▼ -9.6%	▲ 28.3%	▼ -0.9%	132.03	86.44	160.02	
<b>Others</b>									
VIX	14.17	▼ -2.02	▲ 0.88	▼ -4.04	▼ -4.20	16.30	11.34	28.14	
BBG Commodity Index	82.38	▼ -4.1%	▼ -3.5%	▲ 4.9%	▼ -0.6%	82.57	72.88	89.94	
S&P500	2 164.45	▲ 1.8%	▼ -0.2%	▲ 5.9%	▲ 5.8%	2 074.69	1 829.08	2 190.15	
DAX	10 667.95	▼ -0.3%	▲ 1.5%	▼ -0.7%	▼ -1.1%	10 070.78	8 752.87	10 761.17	
Shanghai Composite	3 196.04	▲ 3.0%	▲ 6.4%	▼ -9.7%	▼ -12.0%	2 973.33	2 655.66	3 361.84	
WIG 20	1 796.75	▼ -1.2%	▲ 5.1%	▼ -3.4%	▼ -10.8%	1 807.85	1 674.57	1 999.93	
KGHM	87.52	▲ 21.9%	▲ 17.5%	▲ 37.8%	▲ 7.8%	69.01	52.29	87.52	

° 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

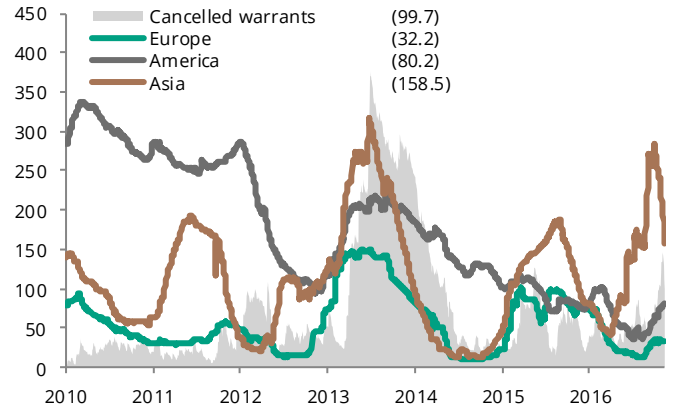
Source: Bloomberg, KGHM

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



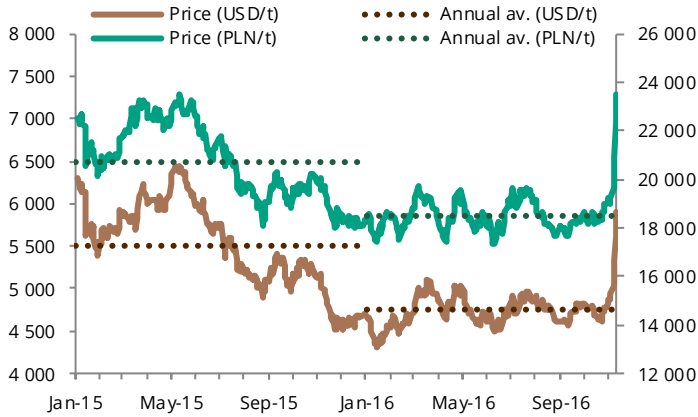
Note: Latest values in brackets. Source: Bloomberg, KGHM

**Copper: official LME stocks (thousand tonnes)**



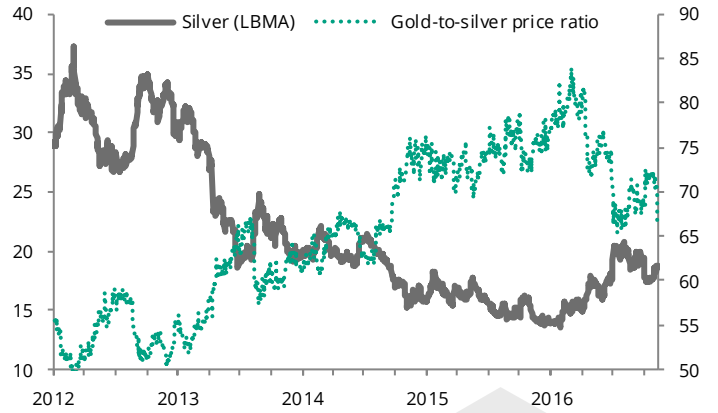
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



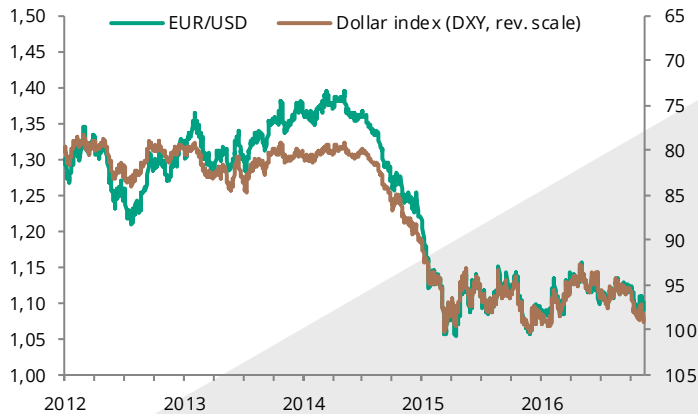
Source: Bloomberg, KGHM

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



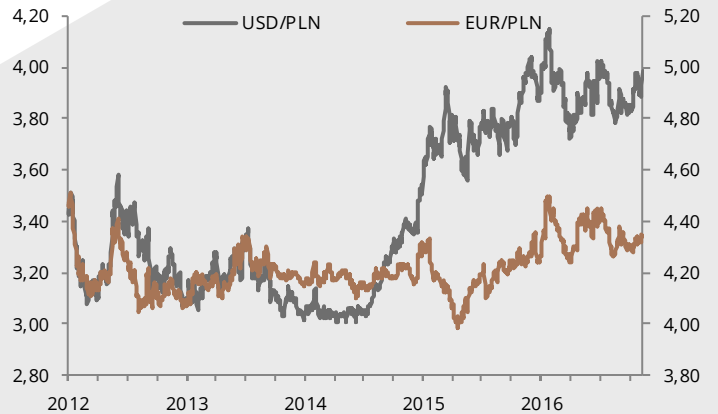
Source: Bloomberg, KGHM

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



Source: Bloomberg, KGHM

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



Source: Bloomberg, KGHM

## Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:  
**31<sup>st</sup> October – 13<sup>th</sup> November 2016.**

- 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, ▪ SNL Metals & Mining.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ [thebulliondesk.com](http://thebulliondesk.com), ▪ [lbma.org.uk](http://lbma.org.uk), ▪ [lme.co.uk](http://lme.co.uk), ▪ [metalbulletin.com](http://metalbulletin.com), ▪ [nbp.pl](http://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](http://www.lme.com/dataprices_products.asp) (charge-free logging)
- silver and gold: [www.lbma.org.uk/pricing-and-statistics](http://www.lbma.org.uk/pricing-and-statistics)
- platinum and palladium: [www.lppm.com/statistics.aspx](http://www.lppm.com/statistics.aspx)

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