

Market Overview

 as of: 3rd October 2016

- Copper:** Between September 19th and October 2nd copper prices traded range-bound between 4,700 USD/t - 4,850 USD/t, with overall (LME, SHFE and COMEX) stocks falling as much as 6 225 tonnes. According to ICSG, the global world refined copper market showed a 83k tonnes deficit in June, compared with a 69k tonnes deficit in May (*page 2*).
- Precious metals:** After September FOMC meeting investors stay interested in the outcome of US elections. The issue of rate hikes seems to be put on hold until December. Recently the precious metals segment lost some appeal due to other opportunities in the commodities market e.g. crude oil - after the OPEC agreed on supply cuts (*page 2*).
- Crude oil:** OPEC agreed to a preliminary deal that will cut production for the first time in eight years. As a consequence oil prices gained more than 6% as Saudi Arabia and Iran wrong-footed traders who expected a continuation of the pump-at-will policy the group adopted in 2014 (*page 5*).
- Foreign exchange markets:** The Fed decided to await for more evidence of progress toward its goals while projecting that an increase is still likely by year-end. The committee said in a statement that near-term risks to the economic outlook appear roughly balanced (*page 6*).

Drawdown of copper stocks in SHFE might have been the culprit of physical premiums recent bounce








Source: SMM, KGHM Polska Miedź

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	4 832.00	2.1%
▲ Nickel	10 460.00	8.4%
LBMA (USD/troz)		
▲ Silver	19.35	2.3%
▲ Gold (PM)	1 322.50	1.1%
FX		
▼ EUR/USD	1.1161	-0.6%
▼ EUR/PLN	4.3120	-0.3%
▲ USD/PLN	3.8558	0.2%
▼ USD/CAD	1.3117	-0.7%
▼ USD/CLP	659.08	-1.8%
Stocks		
▲ KGHM	74.50	6.1%

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

Important macroeconomic data

Release	For		
 Industrial prod. (yoy)	Aug	7.5%	▲
 Core CPI (yoy)	Sep	0.8%	-
 Caixin's manuf. PMI	Sep	50.1	▲
 Copper production (mt)	Aug	455 434	▲
 PCE inflation (mom)	Aug	0.2%	▲

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

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Base and precious metals | Other commodities

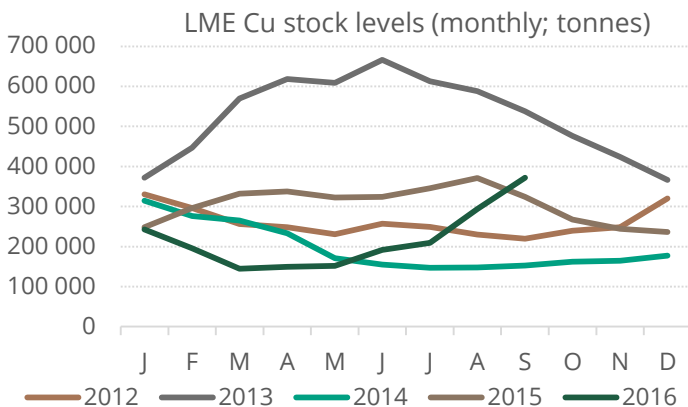
Copper

Between September 19th and October 2nd copper prices traded range-bound between 4,700 USD/t - 4,850 USD/t, with overall (LME, SHFE and COMEX) stocks falling as much as 6 225 tonnes. According to ICSG, the global world refined copper market showed a 83k tonnes deficit in June, compared with a 69k tonnes deficit in May.

Shifting inventory trends

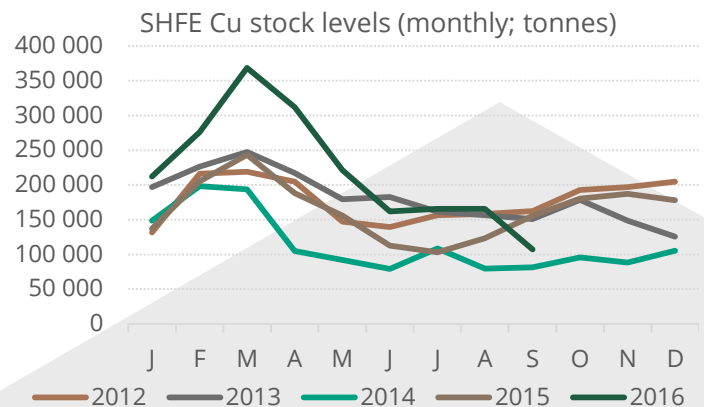
Despite the recent inventory trends (LME rising, SHFE falling), the copper price has been relatively stable. Markets appear to have already priced in LME inventory growth to be an inventory shift. Copper prices look like little deterred by builds in LME warehouses, largely as these builds have been partially offset by SHFE and China bonded copper inventory draws, which has been the prevailing trend for much of the previous quarter. In the 3Q LME copper stocks have risen by 180,7k tonnes, while SHFE stocks has fallen by 61,3k tonnes. What could have made a difference on the price stability side, were China's Bonded copper inventories which have fallen by 95k tonnes since the end of June according to Metal Bulletin's assessment.

Recent dynamic official inventory builds in the LME warehouses...



Source: Bloomberg, KGHM Polska Miedź

...were partially offset by SHFE drawdown



Source: Bloomberg, KGHM Polska Miedź

What is interesting, is that LME copper market widely believes that a further 100-150 kt of metal will be delivered into LME sheds over the next few months, and yet such an expectation still fails to undermine prices. According to Citi analysts, most physical market participants expect warrants associated with deliveries to be relatively quickly cancelled, and thus have no lasting negative price impact. This might be based on the performance of copper consumption in China. Chinese YTD real copper consumption has defied bearish

expectations, largely due to a resurgent housing market, and related to this; recovering a/c and household white goods output, plus strong spending on the power grid. China metals analysts BGRIMM now forecast 2016 Chinese copper demand growth at 4.1% versus previous expectations of 3.1%. The change in forecasts is mainly driven and supported by Chinese macro data which has looked increasingly supportive post-summer. China's August industrial production data, released in mid-September, came in at 6.3% yoy, above market expectations and representing the strongest mom improvement in five months.

Other important information on copper market:

- According to the latest monthly bulletin International Copper Study Group (ICSG), the global world refined copper market showed a 83k tonnes deficit in June, compared with a 69k tonnes deficit in May. For the first 6 months of the year, the market was in a 306k tonnes deficit compared with a 54k tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in June was 1.91 million tonnes, while consumption was 2.00 million tonnes. Bonded stocks of copper in China showed a 65k tonnes deficit in June compared with a 71k tonnes deficit in May.
- As the final part of its reform programme, the LME will introduce an initial schedule of maximum rates for warehouse rents and free-on-truck (FOT) charges by calculating the average of the highest published charges for the years 2015/2016 and 2016/2017, on a per-metal and per-country basis. This schedule of charge caps will be frozen for five years, during which time "real-world" prices are expected to converge closer with the frozen published rates. After that, the maximum prices will be updated annually, based on the per-country consumer price index (CPI). In initial submissions from warehouses for 2016/2017, the stockweighted average increases for rents and FOTs were significantly higher than in the previous two cycles at 10% for rents, up from a 3% annual rise in the previous two years, and 12% for FOTs compared with 2% previously. The LME provided a one-off window for warehouse operators to alter their proposed increases before April 1. Reuben Brothers-owned Metro lowered its daily rent in Detroit to 60 cents from 72 cents and Istim - the Whelan family business - also cut rates there to 56 cents from the previous 60 cents. But the exchange was still "disappointed" even after these reductions and subsequently drew up the discussion paper. Warehouse operators must now submit charges for the 2017/2018 period by December 29; these will come into effect on April 1, 2018. Warehouse operators are all widely expected to submit charges at the top end of the allowance.

Precious metals

After September FOMC meeting investors stay interested in the outcome of US elections. The issue of rate hikes seems to be put on hold until December. Recently the precious metals segment lost some appeal due to other opportunities in the commodities market e.g. crude oil - after the OPEC agreed on supply cuts.

Wave of strikes in South Africa boosting Platinum price

Members of a union representing more than half the worker's at Impala Platinum's refinery in South Africa started a strike recently after talks over pay and benefits broke down. About 500 people who are members of the National Union of Mineworkers (NUM) didn't report for duty. In some wage categories at the refinery, the NUM is seeking a 9.5 percent increase, with the company offering 7.5 percent. South Africa's inflation rate was 5.9 percent in August. Impala also is not close to meeting demands for higher housing, shift and standby allowances, and wants employees to use its in-house medical-insurance plan, which the union says undermines freedom of choice. The refinery raised production from mine-to-market operations by 11 percent to 628 600 ounces in the year ended June 30 from 12 months earlier.

9.5% wage increase demanded versus 7.5% offered and 5.9% inflation

PwC sees deeper deficit on platinum market

Auditing firm PricewaterhouseCoopers (PwC) has warned that the platinum industry was unlikely to meet the demand for the precious metal in the medium term. Report issued recently claimed that the supply would be subdued as a result of a lack of investment in the industry. The report was in line with previous studies on the platinum industry that noted that a deficit in platinum supply would deepen. The report notes how, despite substantial investment in platinum mines in the last 15 years, supply had been on a downward trend since 2006. It said the levels of investment started decreasing as far back as 2008 in contrast to capital expenditure by the overall global mining industry, which only started decreasing in 2013. Earlier this month the World Platinum Investment Council adjusted the supply deficit forecast for 2016 upwards by 16 percent or 65 000 ounces, to 520 000 ounces from the 455 000 ounces forecast at the end of the first quarter. The council report showed that while total demand for the full year of 2016 would marginally increase, total mining supply would fall by 3 percent. South Africa provides more than 70 percent of primary mined platinum supply and more than 55 percent of total supply, including recycling.

Lower supply is forecasted due to lack of investment in the industry

Crude oil

OPEC agreed to a preliminary deal that will cut production for the first time in eight years. As a consequence oil prices gained more than 6% as Saudi Arabia and Iran wrong-footed traders who expected a continuation of the pump-at-will policy the group adopted in 2014.

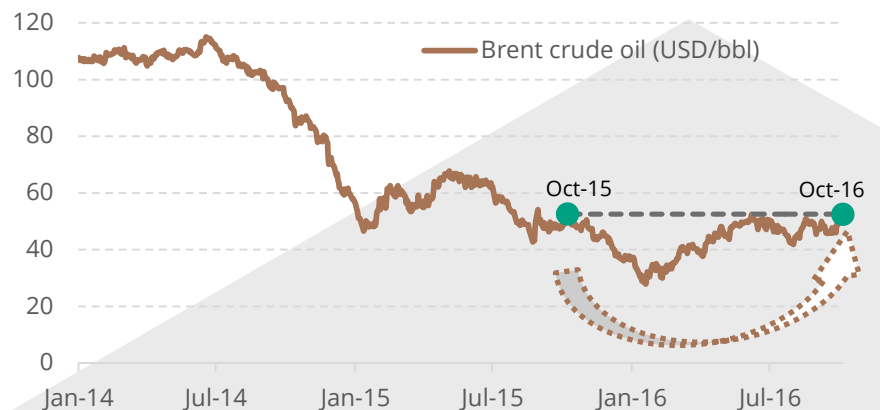
“The cut is clearly bullish; Saudis appear to be returning to a period of market management”

OPEC said to agree on first oil output cut in eight years

In two days of round-the-clock talks in Algiers, the group agreed to drop production to as low as 32.5 million barrels a day. OPEC needs to fine tune the deal in November, with a target-range of 32.5 to 33 million barrels per day. The lower end of the production target equates to a nearly 750,000 barrels-a-day drop from what OPEC said it pumped in August. The group will set up a committee to decide over the next two months the individual supply cuts for its members. The deal will reverberate beyond the Organization of Petroleum Exporting Countries. It will brighten the prospects for the energy industry, from giants like Exxon Mobil Corp. to small U.S. shale firms, and boost the economies of oil-rich countries such as Russia and Saudi Arabia. For consumers, however, it will mean higher prices at the pump.

The agreement also signals a new phase in relations between Saudi Arabia and Iran, which have clashed on oil policy since 2014 and are backing opposite sides in civil wars in Syria and Yemen. The deal indicates that Riyadh and Tehran, with the mediation of Russia, Algeria and Qatar, were able to overcome the differences that sunk another proposal to cap production earlier this year.

After announcement of possible production cut in OPEC countries, prices of crude oil reached the highest levels since last year



Source: Bloomberg, KGHM Polska Miedź

Global economies | Foreign exchange markets

Federal Reserve left its policy interest rate unchanged





The Fed decided to await for more evidence of progress toward its goals while projecting that an increase is still likely by year-end. The committee said in a statement that near-term risks to the economic outlook appear roughly balanced.








The sixth straight hold extends U.S. central bankers' run of getting cold feet amid risks from abroad and inconsistent signs of economic strength. Now the focus will shift to December as the Fed's likely last chance to raise interest rates in 2016 -- a move that depends on how the economy, inflation and markets fare in the months surrounding a contentious presidential election. Three officials, the most since December 2014, dissented in favor of a quarter-point hike. Esther George, president of the Kansas City Fed, voted against the decision for a second straight meeting. She was joined by Cleveland Fed President Loretta Mester -- in her first dissent -- and Eric Rosengren, head of the Boston Fed, whose previous dissents called for easier policy. "Our decision does not reflect a lack of confidence in the economy," Fed Chair Janet Yellen said at the start of her press conference. "Since monetary policy is only modestly accommodative, there appears little risk of falling behind the curve in the near future." The central bank's so-called "dot plot", which it uses to signal its outlook for the path of interest rates, showed that officials expected one quarter-point rate increase this year. Three policy makers projected that keeping rates unchanged this year would be most appropriate. Officials scaled back expectations for hikes in 2017 and over the longer run. Policy makers see two rate hikes next year, down from their June median projection of three. The Fed said that the labor market will "strengthen somewhat further," adding the qualifier "somewhat further" to similar language from the July statement. "Although the unemployment rate is little changed in recent months, job gains have been solid, on average," the Fed said in its statement. "Household spending has been growing strongly but business fixed investment has remained soft."

"Dot plot", shows that officials expected one quarter-point rate increase this year

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
☉☉	27-Sep	Industrial profits (yoy)	Aug	19.5% ▲	11.0%	--
☉☉☉	30-Sep	Caixin's manufacturing PMI	Sep	50.1 ▲	50.0	50.1 ○
☉☉☉	01-Oct	Official manufacturing PMI	Sep	50.4 -	50.4	50.5 ◓
Poland 						
☉☉☉☉	19-Sep	Sold industrial production (yoy)	Aug	7.5% ▲	-3.4%	5.4% ◓
☉☉☉	19-Sep	Retail sales (yoy)	Aug	5.6% ▲	2.0%	4.5% ◓
☉☉	19-Sep	Producer inflation PPI (yoy)‡	Aug	-0.1% ▲	-0.5%	0.0% ◓
☉	19-Sep	Budget balance (ytd)	Aug	27.3% ▲	26.3%	--
☉☉	23-Sep	Unemployment rate	Aug	8.5% ▼	8.6%	8.5% ○
☉☉☉☉	30-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	-0.5% ▲	-0.8%	-0.4% ◓
US 						
☉☉☉☉☉	21-Sep	FOMC base rate decision - upper bound (Fed)	Sep	0.50% -	0.50%	0.50% ○
☉☉☉☉☉	21-Sep	FOMC base rate decision - lower bound (Fed)	Sep	0.25% -	0.25%	0.25% ○
☉☉☉	23-Sep	Manufacturing PMI - preliminary data	Sep	--	52.0	52.0
☉	26-Sep	Dallas Fed manufacturing activity	Sep	-3.7 ▲	-6.2	-2.5 ◓
☉☉☉	27-Sep	Composite PMI - preliminary data	Sep	--	51.5	--
☉☉☉	27-Sep	PMI services - preliminary data	Sep	--	51.0	51.2
☉	27-Sep	Richmond Fed manufacturing index	Sep	-8.0 ▲	-11.0	-2.0 ◓
☉	27-Sep	S&P/CaseShiller home price index‡	Jul	191 ▲	190	--
☉☉	28-Sep	Durable goods orders - preliminary data‡	Aug	0.0% ▼	3.6%	-1.5% ◓
☉☉☉☉☉	29-Sep	GDP (annualized, qoq) -	2Q	1.4% ▲	1.1%	1.3% ◓
☉☉☉☉	30-Sep	Consumer spending inflation PCE (mom)	Aug	0.2% ▲	0.1%	0.2% ○
☉☉☉☉	30-Sep	Consumer spending inflation PCE (yoy)	Aug	1.7% ▲	1.6%	1.7% ○
☉☉	30-Sep	Personal income (sa, mom)	Aug	0.2% ▼	0.4%	0.2% ○
☉☉	30-Sep	Personal spending (sa, mom)‡	Aug	0.0% ▼	0.4%	0.1% ◓
☉☉	30-Sep	University of Michigan confidence index - final data	Sep	91.2 ▲	89.8	90.0 ◓
Eurozone 						
☉	22-Sep	Consumer confidence - estimation	Sep	-8.2 ▲	-8.5	-8.2 ○
☉☉☉	23-Sep	Composite PMI - preliminary data	Sep	--	52.9	52.8
☉☉☉	23-Sep	Manufacturing PMI - preliminary data	Sep	--	51.7	51.5
☉☉☉	23-Sep	Services PMI - preliminary data	Sep	--	52.8	52.8
☉	27-Sep	M3 money supply (yoy)‡	Aug	5.1% ▲	4.9%	4.9% ◓
☉	29-Sep	Economic confidence	Sep	105 ▲	104	104 ◓
☉	29-Sep	Industrial confidence‡	Sep	-1.7 ▲	-4.3	-4.2 ◓
☉	29-Sep	Consumer confidence - final data	Sep	-8.2 -	-8.2	-8.2 ○
☉	29-Sep	Business climate indicator‡	Sep	0.5 ▲	0.0	0.1 ◓
☉☉☉☉	30-Sep	Core CPI (yoy) - estimation	Sep	0.8% -	0.8%	0.9% ◓
☉☉☉☉	30-Sep	CPI estimate (yoy)	Sep	0.4% ▲	0.2%	0.4% ○
☉☉	30-Sep	Unemployment rate	Aug	10.1% -	10.1%	10.0% ◓

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
☆☆☆	23-Sep	Composite PMI - preliminary data	Sep	--	53.3	53.6	
☆☆☆	23-Sep	Manufacturing PMI - preliminary data	Sep	--	53.6	53.1	
☆☆	26-Sep	IFO business climate‡	Sep	110 ▲	106	106	▲
☆☆	28-Sep	GfK consumer confidence	Oct	10.0 ▼	10.2	10.2	▼
☆☆☆☆	29-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	0.5% ▲	0.3%	0.5%	○
☆☆☆☆	29-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	0.7% ▲	0.4%	0.6%	▲
☆☆	29-Sep	Unemployment rate	Sep	6.1% -	6.1%	6.1%	○
☆☆☆	30-Sep	Retail sales (yoy)	Aug	3.7% ▲	-1.5%	1.8%	▲
France							
☆☆☆☆☆	23-Sep	GDP (yoy) - final data	2Q	1.3% ▼	1.4%	1.4%	▼
☆☆☆☆☆	23-Sep	GDP (qoq) - final data	2Q	-0.1% ▼	0.0%	0.0%	▼
☆☆☆	23-Sep	Composite PMI - preliminary data	Sep	--	51.9	51.8	
☆☆☆	23-Sep	Manufacturing PMI - preliminary data	Sep	--	48.3	48.5	
☆☆☆☆	30-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	0.5% ▲	0.4%	0.5%	○
☆☆☆☆	30-Sep	Consumer inflation CPI (yoy) - preliminary data	Sep	0.4% ▲	0.2%	0.4%	○
Italy							
☆☆☆☆	30-Sep	Harmonized consumer inflation HICP (yoy) - preliminary data	Sep	0.1% ▲	-0.1%	0.1%	○
☆☆	30-Sep	Unemployment rate - preliminary data	Aug	11.4% -	11.4%	11.4%	○
UK							
☆☆☆☆☆	30-Sep	GDP (yoy) - final data	2Q	2.1% ▼	2.2%	2.2%	▼
☆☆☆☆☆	30-Sep	GDP (qoq) - final data	2Q	0.7% ▲	0.6%	0.6%	▲
Japan							
☆☆☆	23-Sep	Manufacturing PMI - preliminary data	Sep	--	49.5	--	
☆☆☆☆	30-Sep	Consumer inflation CPI (yoy)	Aug	-0.5% ▼	-0.4%	-0.5%	○
☆☆☆☆	30-Sep	Industrial production (yoy) - preliminary data	Aug	4.6% ▲	-4.2%	3.4%	▲
Chile							
☆☆☆	30-Sep	Total copper production (metric tons)	Aug	455 434 ▲	447 558	--	
☆☆☆	30-Sep	Manufacturing (yoy)	Aug	2.4% ▲	-4.4%	0.5%	▲
Canada							
☆☆☆☆	23-Sep	Consumer inflation CPI (yoy)	Aug	1.1% ▼	1.3%	1.4%	▼
☆☆☆☆☆	30-Sep	GDP (yoy)‡	Jul	1.3% ▲	1.2%	1.0%	▲

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

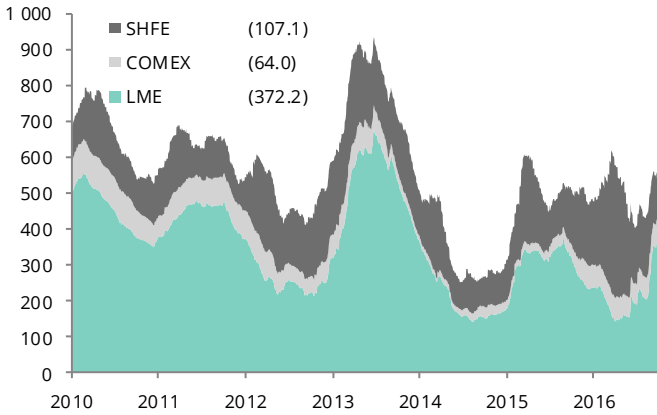
(as of: 08-Jul-16)

	Price	Price change °					From year beginning ²		
		2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	4 710.00	▲ 1.0%	▼ -2.4%	▲ 0.2%	▼ -15.5%	4 704.26	4 310.50	5 103.00	
Molybdenum	15 250.00	▼ -10.3%	▼ -10.3%	▲ 27.1%	▲ 15.1%	13 448.85	11 750.00	17 000.00	
Nickel	9 740.00	▲ 9.4%	▲ 3.5%	▲ 12.4%	▼ -13.7%	8 716.95	7 710.00	10 300.00	
Aluminum	1 640.50	▲ 2.5%	▲ 0.3%	▲ 8.8%	▼ -0.5%	1 548.15	1 453.00	1 673.00	
Tin	17 725.00	▲ 3.9%	▲ 3.9%	▲ 21.4%	▲ 23.5%	16 295.95	13 235.00	18 145.00	
Zinc	2 123.00	▲ 6.3%	▲ 1.0%	▲ 32.7%	▲ 5.7%	1 813.34	1 453.50	2 143.00	
Lead	1 815.50	▲ 7.2%	▲ 2.0%	▲ 0.7%	▲ 0.6%	1 735.45	1 597.00	1 896.50	
LBMA (USD/troz)									
Silver	19.72	▲ 9.3%	▲ 7.4%	▲ 42.7%	▲ 28.2%	16.01	13.58	20.43	
Gold ¹	1 354.25	▲ 2.9%	▲ 2.5%	▲ 27.5%	▲ 16.3%	1 227.43	1 077.00	1 366.25	
LPPM (USD/troz)									
Platinum ¹	1 082.00	▲ 9.6%	▲ 8.3%	▲ 24.1%	▲ 4.8%	964.53	814.00	1 086.00	
Palladium ¹	606.00	▲ 10.6%	▲ 2.9%	▲ 10.8%	▼ -7.3%	548.92	470.00	628.00	
FX ³									
EUR/USD	1.1070	▲ 0.0%	▼ -0.3%	▲ 1.7%	▲ 0.1%	1.1157	1.0742	1.1569	
EUR/PLN	4.4295	▼ -0.5%	▲ 0.1%	▲ 3.9%	▲ 4.8%	4.3709	4.2355	4.4987	
USD/PLN	4.0001	▲ 0.0%	▲ 0.5%	▲ 2.5%	▲ 4.5%	3.9179	3.7193	4.1475	
USD/CAD	1.3073	▲ 0.9%	▲ 0.5%	▼ -5.5%	▲ 2.7%	1.3289	1.2544	1.4589	
USD/CNY	6.6908	▲ 1.0%	▲ 0.6%	▲ 3.0%	▲ 7.8%	6.5437	6.4536	6.6908	
USD/CLP	664.06	▼ -0.9%	▲ 0.4%	▼ -6.5%	▲ 1.8%	688.47	657.90	730.31	
Money market									
3m LIBOR USD	0.667	▲ 0.04	▲ 0.01	▲ 0.05	▲ 0.38	0.635	0.612	0.686	
3m EURIBOR	-0.293	▼ -0.01	▼ -0.01	▼ -0.16	▼ -0.28	-0.226	-0.293	-0.132	
3m WIBOR	1.710	- 0.00	- 0.00	▼ -0.01	▼ -0.01	1.685	1.670	1.720	
5y USD interest rate swap	0.928	▼ -0.11	▼ -0.05	▼ -0.81	▼ -0.79	1.239	0.928	1.709	
5y EUR interest rate swap	-0.183	▼ -0.14	▼ -0.12	▼ -0.51	▼ -0.67	0.036	-0.183	0.309	
5y PLN interest rate swap	1.770	▼ -0.28	▼ -0.02	▼ -0.22	▼ -0.45	1.878	1.735	2.118	
Fuel									
WTI Cushing	45.41	▼ -3.3%	▼ -6.0%	▲ 22.6%	▼ -14.0%	39.89	26.21	51.23	
Brent	44.64	▼ -4.9%	▼ -7.8%	▲ 24.9%	▼ -22.6%	40.58	26.39	51.33	
Diesel NY (ULSD)	138.73	▼ -4.1%	▼ -5.9%	▲ 29.0%	▼ -19.6%	124.08	86.44	156.18	
Others									
VIX	13.20	▼ -12.56	▼ -2.43	▼ -5.01	▼ -6.77	17.89	13.10	28.14	
BBG Commodity Index	86.40	▼ -0.6%	▼ -2.7%	▲ 10.0%	▼ -12.8%	81.05	72.88	89.94	
S&P500	2 129.90	▲ 4.5%	▲ 1.5%	▲ 4.2%	▲ 3.8%	2 018.09	1 829.08	2 129.90	
DAX	9 629.66	▲ 0.8%	▼ -0.5%	▼ -10.4%	▼ -12.4%	9 801.27	8 752.87	10 435.73	
Shanghai Composite	2 988.09	▲ 4.7%	▲ 2.0%	▼ -15.6%	▼ -19.4%	2 916.73	2 655.66	3 361.84	
WIG 20	1 705.43	▼ -3.6%	▼ -2.6%	▼ -8.3%	▼ -23.5%	1 829.30	1 674.57	1 999.93	
KGHM	68.01	▲ 10.1%	▲ 3.0%	▲ 7.1%	▼ -33.7%	65.30	52.29	77.00	

° change over: 2W = two weeks; QTD = quarter-to-day; YTD = year-to-date; 1Y = one year. ¹ based on daily closing prices. ² latest quoted price. ³ central banks' fixing rates (Bank of China HK for USD/CNY). ⁴

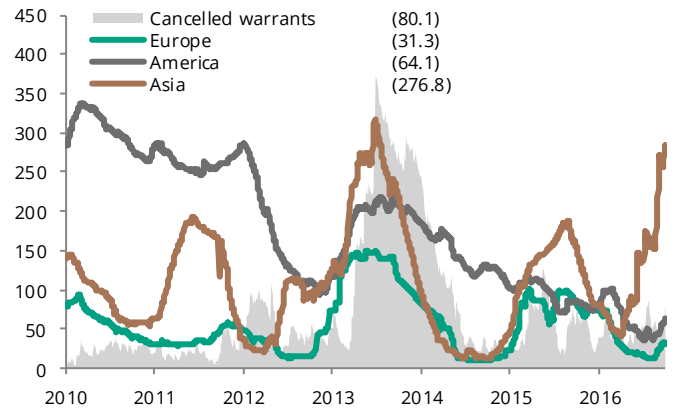
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



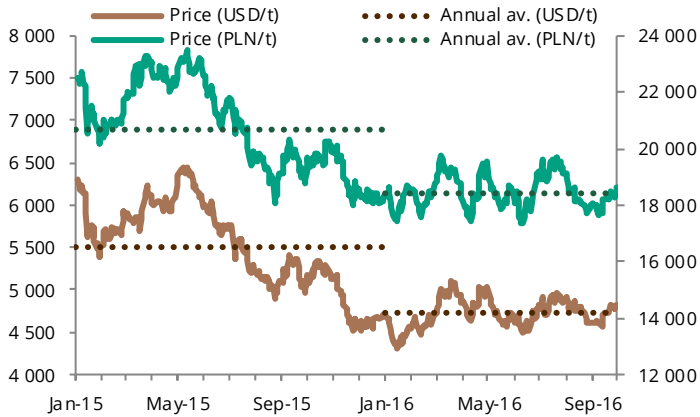
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



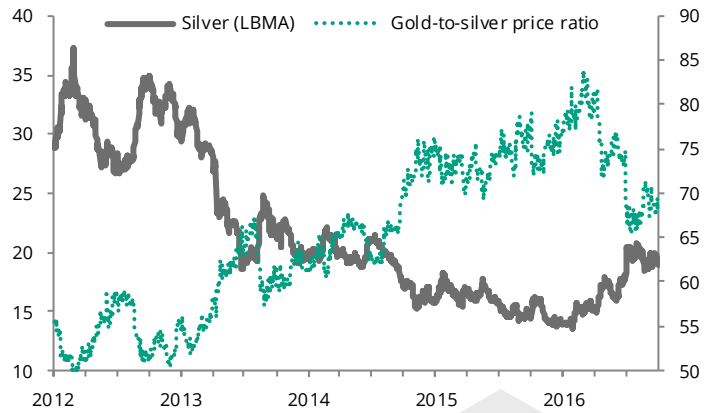
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



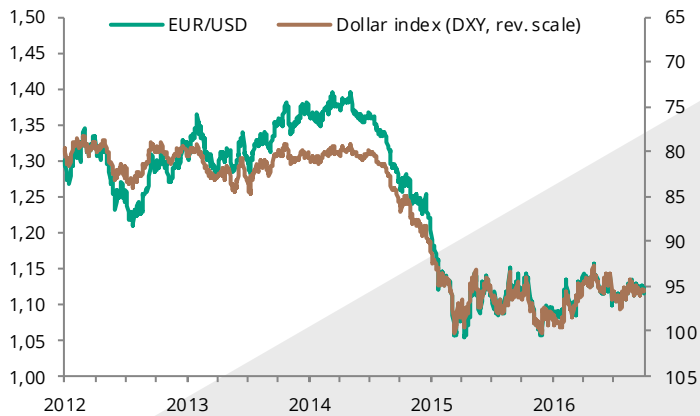
Source: Bloomberg, KGHM

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



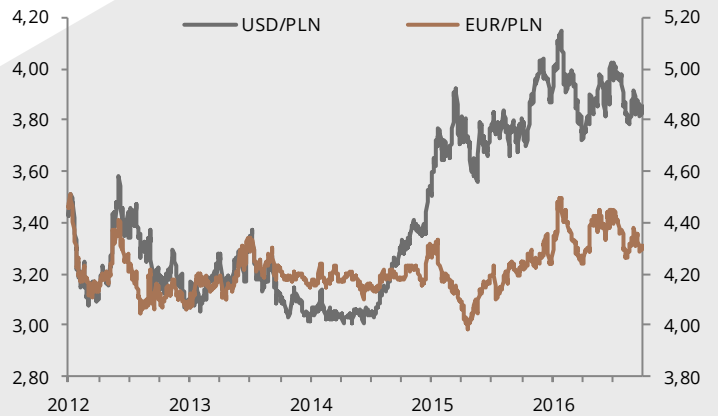
Source: Bloomberg, KGHM

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:
19th September – 2nd October 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, ▪ 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

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