

# Market Overview

as of: 11 July 2016






- **Brexit:** Brexit or Bremain vote has been the key event during the last couple of weeks. Although UK referendum result was a surprise for the market, it was not entirely unexpected with surveys poll showing a tie for weeks. As a consequence, in the medium to long-term uncertainty should keep steady demand for safe haven assets like precious metals and/or certain currencies like USD, CHF, JPY (*page 2*).
- **Copper:** Brexit vote put pressure on industrial metals, with copper being liquidated during the day of official referendum results. However, the sell-off was only temporary and red metal continued to be bought until it reached the top of the range at 5000 USD/t and bounced back down again (*page 3*).
- **Precious metals:** Precious metals investors are more bullish given changed Fed's rate projection. In the meantime silver is preparing to fight coming fundamental headwinds and platinum may become scarce again if South African miners go on strike (*page 5*).
- **Interest rates:** Rhetoric demonstrated by Fed officials after last meeting made investors believe that rate hikes are more distant than previously anticipated (*page 7*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▲ Copper	4 710.00	1.0%
▲ Nickel	9 740.00	9.4%
<b>LBMA (USD/troz)</b>		
▲ Silver	19.72	9.3%
▲ Gold (PM)	1 354.25	2.9%
<b>FX</b>		
▲ EUR/USD	1.1070	0.0%
▼ EUR/PLN	4.4295	-0.5%
▲ USD/PLN	4.0001	0.0%
▲ USD/CAD	1.3073	0.9%
▼ USD/CLP	664.06	-0.9%
<b>Stocks</b>		
▲ KGHM	68.01	10.1%

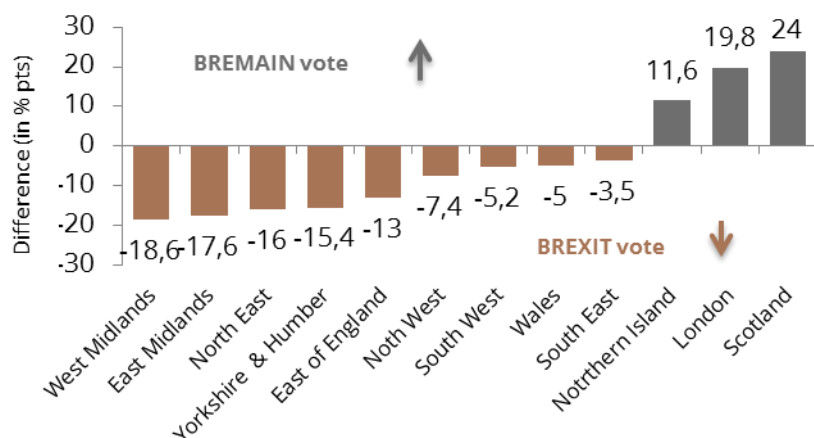
Source: Bloomberg, KGHM; (*more on page 10*)

## Important macroeconomic data

Release	For	
 NBP rate decision	Jul	1.50% -
 Industr. prod. (wda, yoy)	May	-0.4% ▼
 GDP (yoy)	1Q	2.0% -
 Non-farm payrolls chng.	Jun	287 ▲
 Econom. activity (yoy)	May	1.8% ▲

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

## Vote in favour of Brexit is not homogeneous thus it might lead to several referenda all over United Kingdom



Source: Goldman Sachs, KGHM Polska Miedz

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## Base and precious metals | Other commodities

### Brexit

**Brexit or Bremain vote has been the key event during the last couple of weeks. Although UK referendum result was a surprise for the market, it was not entirely unexpected with surveys poll showing a tie for weeks. As a consequence, in the medium to long-term uncertainty should keep steady demand for safe haven assets like precious metals and/or certain currencies like USD, CHF, JPY.**

#### The Brexit spillovers

According to Citi's economists, the economic impacts of Brexit remain relatively contained. Although the recovery looks more fragile than before the referendum, any negative impacts of the vote on commodity markets should be short-lived, unless the base case scenario of gradual improvement is derailed.

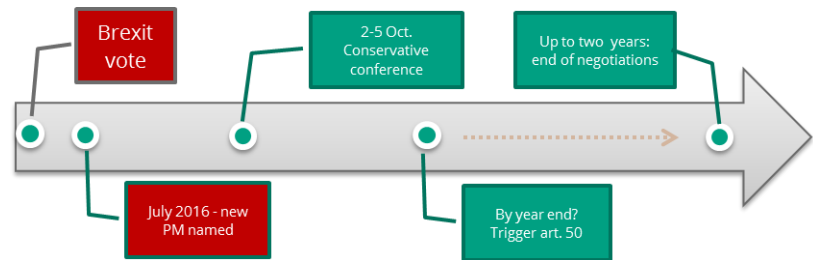
Among the potential consequence, which could be severe, on can enlist:

- medium-long term uncertainty over timing, details and final UK-EU exit terms negotiation outcome,
- uncertainty means greater risk of many business decisions across Europe, potential threat of investment and trade slowdown and lower GDP growth as a consequence,
- further activity of nationalists parties across Europe and referendum requests in other countries/regions,
- already weak European banking sector might be additionally hit with a growing doubts over possibility of London to remain a financial center,
- potential threat of EU total disband,
- more likely scenario of further integration of certain countries, probably part or the whole Eurozone,
- central banks in biggest economies (ECB, Japan, BoE) more determined to support growth, consumption and investment by further unconventional monetary policy,
- any further QE program increase the risk of certain assets price bubbles.

**Impact of Brexit contained, at least for now.**

**So... what happens next?**

The referendum vote will not initially impact UK's trade agreements with the EU and the rest of the world. The main near term economic risk stems from the uncertainty and fear generated by Brexit. Market participants experienced significant sell-offs across risk asset markets, including commodities, once the official vote has been published to the public. As soon as the dust of the sell-offs settles, the broad spectrum of economists started to enlist potential agenda of the future actions and relationship between UK and EU (example below). In the medium term uncertainty could paralyze companies across Europe, affecting capex and investment decisions. UK pound depreciation should cushion the impact on domestic consumption by boosting UK exports and redirecting demand away from imports to domestic production.



Source: Deutsche Bank, KGHM Polska Miedź

## Copper

**Brexit vote put pressure on industrial metals, with copper being liquidated during the day of official referendum results. However, the sell-off was only temporary and red metal continued to be bought until it reached the top of the range at 5000 USD/t and bounced back down again.**

### Long-term challenges ahead for copper recycling industry

During Copper Recycling Conference held in July by Metal Bulletin, numerous companies presented the developments of the scrap market. One of them was Aurubis which commented on the prospects of future copper recycling. According to the German company, growing scrap generation in developing economies and the increasing complexity as well as abundance of e-waste are among the major factors that will shape the future copper recycling industry. According to Aurubis, copper recyclers in developed economies will become more and more reliant on pursuing waste electronic materials as a source of raw materials. Meanwhile, the supply of traditional scrap found in construction and infrastructure will probably fall in developed economies due to a combination of factors, including stable or declining industrial activity, substitution and improving resource efficiency.

However, the declining use of copper pipes in construction, for example, is likely to be offset by increasing use of copper in new technologies such as 'smart' buildings and photovoltaics, according to Christian Coesfeld, director of metal scrap and alloys in the recycling raw materials department at Aurubis. Scrap production will increase overall, but scrap quality will shift from ordinary copper scrap to more complex materials. Quantity will increase, but availability and quality is a different story.

Aurubis forecasts that as its economy matures, China will also slowly move towards self-sufficiency in supply, and in the long-term the country could become a net exporter of scrap, although trade tariffs may be imposed to limit the flow of material out of the country. Scrap in China will increase and imports could increase too until enough scrap is produced locally. The relocation of scrap production could increase or even decrease availability globally, depending on export restrictions.

**The biggest challenge in the scrap market would be the complexity and amount of e-waste to be processed further**

### Other important information on copper market:

- The Chilean government is creating a fund to support country's small mines through periods of low metals prices. Finance Minister, Rodrigo Valdes, told the Senate Mining Committee that the fund would allow state mining development agency ENAMI to continue a mechanism by which it buys ore and concentrates from small mines at above-market copper prices when the market prices are below a certain level. Small miners, with an output of less than 10,000 mt/year of ore, currently receive a subsidy of up to 40 cents/lb when the copper price remains below last year's long-term price of \$2.98/lb. The mines must pay the additional income when copper prices recover above this level, set annually by a committee of independent experts and used to guide Chile's annual budget. The government would provide the initial capital for the fund, which would be managed by ENAMI. Chilean experts are due to announce a new long-term price in July that will apply to the small miners from August. Chile's small mines produce a fraction of the 5.78 million mt the country produced last year, but the sector is a central part of the economy in large parts of northern Chile.
- Due to regulatory crackdown and amid fears over the depreciation of the yuan, China's investors are increasingly looking to trade on offshore commodities markets. According to Bloomberg, trade revenues from China have doubled this year, offsetting a slump of about 30% in traditional business from industrial and corporate clients. The surge of trading from China comes after a clampdown last year on equity market speculation and the suppression of an unprecedented frenzy on commodities exchanges this year by hiking fees, raising margins and cutting trading hours. Chinese funds are also interested in dollar-denominated investments as fears of weaker yuan are becoming more and more probable.
- China's MMG has begun commercial production at its Las Bambas copper operation in Peru. The start of commercial production marks the time from which the site switches from being a project to being treated as an operation for accounting purposes. MMG's Chief Executive Officer Andrew Michelmore said this confirmed the ramp up of the plant has been achieved on schedule and commercial production reached in line with guidance to the market. Copper production commenced with the first concentrate achieved on November 26 last year. The first shipment of product left the Port of Matarani for China on January 15, 2016. The mine produced 31,470 mt of copper in copper concentrate in the first quarter 2016.
- According to the International Copper Study Group (ICSG) the global world refined copper market showed a 40,000 tonnes deficit in March, compared with a 29,000 tonnes surplus in February. For the first 3 months of the year, the market was in a 42,000 tonnes surplus compared with a 143,000 tonnes surplus in the same period a year earlier. World refined copper output in March was 2.00 million tonnes, while consumption was 2.04 million tonnes. Bonded stocks of copper in China showed a 18,000 tonnes surplus in March compared with a 94,000 tonnes surplus in February.

## Precious metals

**Precious metals investors are more bullish given changed Fed's rate projection. In the meantime silver is preparing to fight coming fundamental headwinds and platinum may become scarce again if South African miners go on strike.**

### Silver imports by India set to plunge from last year's record

Indian jewelers struggle with slowing demand and excessive inventories after domestic prices climbed to the highest levels since 2013. Overseas purchases probably slumped by about 40 percent from a year earlier to 2,000 metric tons in the first half, and total imports for the year will fall short of the 7,500 tons bought in 2015, said Chirag Sheth, a Mumbai-based analyst at Metals Focus Ltd., an independent precious metals research firm. India, the top consumer of gold after China, is also one of the world's largest buyers of silver, which is popular in rural areas where farmers with no access to banks prefer it as a store of value. According to analysts there are ample inventories in the system and these stocks would need to be sold first before anyone will try to import more.

#### Ample inventories in the system

### Tanaka Holdings to buy Metalor Technologies

Japan's Tanaka Holdings announced that it is planning to buy Metalor Technologies International SA a privately held Swiss precious metals refiner, to boost its business as local growth stagnates due to a falling population. The purchase of Metalor will allow Tanaka to expand into precious metals recovery and refining in Europe, North America and Asia, the Tokyo-based company said in a statement on Tuesday. No terms for the deal were given in the statement. Tanaka was founded in 1885 and had sales of just over 1 trillion yen (\$9.7 billion) in the year through March 2016, it said. The company also sells jewelry and gold bars, as well as producing electronic circuitry and other electrical parts. Metalor, based in Neuchatel, Switzerland, was controlled by private equity company Astorg Partners before the transaction and has capital of 37.8 million Swiss francs (\$38.5 million), Tanaka said.

#### Japan expands into precious metals

### South Africa set for another platinum strike

In what seems like an annual event, platinum mining companies in South Africa are under threat for what could be another year of labour unrest. The firms that mine the precious metal and the labour unions that represent their workers are in talks, trying to hammer out a deal that could avert a strike of similar magnitude to 2014. That year, a strike led by the Association of Mineworkers and Construction Union (AMCU) forced major producers Implats, Implats and Lonmin to shed over 70,000 jobs. The strike lasted 21 weeks, cost the industry R24 billion, and resulted in 1.3 million ounces of lost production – about a third of global output. South Africa and Russia combined account for close to 80% of global supply of palladium and 70% of platinum output which are mainly used to clean emissions in automobiles. AMCU is demanding a pay

**Unions demanding 56% pay rise**

rise of 56%, in line with a "living wage", while the National Union of Mineworkers is asking for a 20% wage hike – well over the 6.1% rate of inflation. The unions however will no doubt argue that the market is turning. Platinum prices are up by 22% this year and the World Platinum Council said earlier this year that the market will be in a deficit supply situation for the fifth year in a row.

## Global economies | Foreign exchange markets

### “The forces holding down interest rates may be long-lasting”

**Rhetoric demonstrated by Fed officials after last meeting made investors believe that rate hikes are more distant than previously anticipated.**

**FED now less bullish on rates as it used to be**





FED's attitude to interest rates demonstrated recently was reflected in a marked downgrade in rate projections released by policy makers after their meeting on Wednesday. Six of 17 now only see one rise this year, after the central bank lifted rates effectively from zero in December. Officials also slowed the pace of expected moves in both 2017 and 2018. They now only foresee three increases in each of those years, down from the four they expected in March, according to their latest median forecast. Yellen in the past has ascribed the low level of rates mainly to lingering headwinds from the financial crisis e.g. tight mortgage credit and suggested that they would dissipate over time. Recently though, she also pointed to more permanent forces that could depress rates for longer, namely, slow productivity growth and aging societies, in the U.S. and throughout much of the world. In a press conference after the Fed held policy steady, Yellen spoke of a sense that rates may be depressed by “factors that are not going to be rapidly disappearing, but will be part of the new normal”.

**Larry Summers had it all figured out long time ago**

Lawrence Summers, who was in the running to get the Fed Chairman job before losing out to Yellen in 2013, has been contending for several years that the U.S. and other industrial countries are in “secular stagnation” of scant economic growth. A key component of his argument: an excess supply of savings and a scarcity of demand is depressing equilibrium interest rates in the advanced world, making it difficult for central banks to ease credit enough to lift growth and inflation. The equilibrium, or neutral rate, is the one that balances the supply of and demand for savings in an economy. If a central bank wants to spur growth it has to cut rates below that level.

## Macroeconomic calendar

### Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
☼☼	27-Jun	Industrial profits (yoy)	May	3.7% ▼	4.2%	--
☼☼☼	01-Jul	Official manufacturing PMI	Jun	50.0 ▼	50.1	50.0 ○
☼☼☼	01-Jul	Caixin's manufacturing PMI	Jun	48.6 ▼	49.2	49.2 ◡
☼	07-Jul	Foreign reserves (USD bn)	Jun	3 205 ▲	3 192	3 167 ◡
☼☼☼☼	10-Jul	Consumer inflation CPI (yoy)	Jun	1.9% ▼	2.0%	1.8% ◡
☼☼	10-Jul	Producer inflation PPI (yoy)	Jun	-2.6% ▲	-2.8%	-2.5% ◡
<b>Poland</b> 						
☼☼☼☼	30-Jun	Consumer inflation CPI (yoy) - preliminary data	Jun	-0.8% ▲	-0.9%	-0.8% ○
☼	30-Jun	NBP inflation expectations	Jun	0.2% -	0.2%	0.2% ○
☼☼☼	01-Jul	Manufacturing PMI	Jun	51.8 ▼	52.1	52.5 ◡
☼☼☼☼☼	06-Jul	NBP base rate decision	Jul	1.50% -	1.50%	1.50% ○
<b>US</b> 						
☼☼☼	27-Jun	Composite PMI - preliminary data	Jun	--	50.9	--
☼☼☼	27-Jun	PMI services - preliminary data	Jun	--	51.3	52.0
☼	27-Jun	Dallas Fed manufacturing activity	Jun	- 18.3 ▲	- 20.8	- 15.0 ◡
☼☼☼☼☼	28-Jun	GDP (annualized, qoq) -	1Q	1.1% ▲	0.8%	1.0% ◡
☼	28-Jun	S&P/CaseShiller home price index‡	Apr	187 ▲	185	187 ◡
☼	28-Jun	Richmond Fed manufacturing index	Jun	- 7.0 ▼	- 1.0	3.0 ◡
☼☼☼☼	29-Jun	Consumer spending inflation PCE (mom)	May	0.2% -	0.2%	0.2% ○
☼☼☼☼	29-Jun	Consumer spending inflation PCE (yoy)	May	1.6% -	1.6%	1.6% ○
☼☼	29-Jun	Personal income (sa, mom)‡	May	0.2% ▼	0.5%	0.3% ◡
☼☼	29-Jun	Personal spending (sa, mom)‡	May	0.4% ▼	1.1%	0.4% ○
☼☼☼	01-Jul	Manufacturing PMI - final data	Jun	51.3 ▼	51.4	51.2 ◡
☼☼	01-Jul	ISM Manufacturing	Jun	53.2 ▲	51.3	51.3 ◡
☼☼	05-Jul	Durable goods orders - final data	May	-2.3% ▼	-2.2%	-2.2% ◡
☼☼☼	06-Jul	Composite PMI - final data	Jun	51.2 -	51.2	--
☼☼☼	06-Jul	PMI services - final data	Jun	51.4 ▲	51.3	51.3 ◡
☼☼	08-Jul	Change in non-farm payrolls (ths)‡	Jun	287 ▲	11.0	180 ◡
☼☼	08-Jul	Underemployment rate (U6)	Jun	9.6% ▼	9.7%	--
☼☼	08-Jul	Unemployment rate	Jun	4.9% ▲	4.7%	4.8% ◡
☼	08-Jul	Average hourly earnings (yoy)	Jun	2.6% ▲	2.5%	2.7% ◡
<b>Eurozone</b> 						
☼	27-Jun	M3 money supply (yoy)	May	4.9% ▲	4.6%	4.8% ◡
☼	29-Jun	Economic confidence‡	Jun	104 ▼	105	105 ◡
☼	29-Jun	Industrial confidence‡	Jun	- 2.8 ▲	- 3.7	- 3.4 ◡
☼	29-Jun	Consumer confidence - final data	Jun	- 7.3 -	- 7.3	- 7.3 ○
☼	29-Jun	Business climate indicator	Jun	0.2 ▼	0.3	0.3 ◡
☼☼☼☼	30-Jun	Core CPI (yoy) - estimation	Jun	0.9% ▲	0.8%	0.8% ◡
☼☼☼☼	30-Jun	CPI estimate (yoy)	Jun	0.1% ▲	-0.1%	0.0% ◡
☼☼☼	01-Jul	Manufacturing PMI - final data	Jun	52.8 ▲	52.6	52.6 ◡
☼☼	01-Jul	Unemployment rate	May	10.1% ▼	10.2%	10.1% ○
☼☼	04-Jul	Producer inflation PPI (yoy)	May	-3.9% ▲	-4.4%	-4.1% ◡
☼☼☼	05-Jul	Composite PMI - final data	Jun	53.1 ▲	52.8	52.8 ◡
☼☼☼	05-Jul	Services PMI - final data	Jun	52.8 ▲	52.4	52.4 ◡
☼☼	05-Jul	Retail sales (yoy)	May	1.6% ▲	1.4%	1.7% ◡



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>Germany</b> 						
☆☆	29-Jun	GfK consumer confidence	Jul	10.1 ▲	9.8	9.8 ●
☆☆☆☆	29-Jun	Harmonized consumer inflation HICP (yoy) - preliminary data	Jun	0.2% ▲	0.0%	0.2% ●
☆☆☆☆	29-Jun	Consumer inflation CPI (yoy) - preliminary data	Jun	0.3% ▲	0.1%	0.3% ●
☆☆☆	30-Jun	Retail sales (yoy)‡	May	2.6% ▼	2.7%	2.5% ●
☆☆	30-Jun	Unemployment rate	Jun	6.1% =	6.1%	6.1% ●
☆☆☆	01-Jul	Manufacturing PMI - final data	Jun	54.5 ▲	54.4	54.4 ●
☆☆☆	05-Jul	Composite PMI - final data	Jun	54.4 ▲	54.1	54.1 ●
☆☆☆	06-Jul	Factory orders (wda, yoy)‡	May	-0.2% ▲	-0.4%	0.9% ●
☆☆☆☆	07-Jul	Industrial production (wda, yoy)‡	May	-0.4% ▼	0.8%	1.5% ●
<b>France</b> 						
☆☆☆☆	30-Jun	Harmonized consumer inflation HICP (yoy) - preliminary data	Jun	0.3% ▲	0.1%	0.3% ●
☆☆☆☆	30-Jun	Consumer inflation CPI (yoy) - preliminary data	Jun	0.2% ▲	0.0%	0.2% ●
☆☆☆	01-Jul	Manufacturing PMI - final data	Jun	48.3 ▲	47.9	47.9 ●
☆☆☆	05-Jul	Composite PMI - final data	Jun	49.6 ▲	49.4	49.4 ●
☆☆☆☆	08-Jul	Industrial production (yoy)‡	May	0.5% ▼	1.8%	0.9% ●
<b>Italy</b> 						
☆☆☆☆	30-Jun	Harmonized consumer inflation HICP (yoy) - preliminary data	Jun	-0.3% =	-0.3%	-0.2% ●
☆☆☆	01-Jul	Manufacturing PMI	Jun	53.5 ▲	52.4	52.4 ●
☆☆	01-Jul	Unemployment rate - preliminary data‡	May	11.5% ▼	11.6%	11.7% ●
☆☆☆	05-Jul	Composite PMI	Jun	52.6 ▲	50.8	--
<b>UK</b> 						
☆☆☆☆☆	30-Jun	GDP (yoy) - final data	1Q	2.0% =	2.0%	2.0% ●
☆☆☆☆☆	30-Jun	GDP (qoq) - final data	1Q	0.4% =	0.4%	0.4% ●
☆☆☆	01-Jul	Manufacturing PMI (sa)‡	Jun	52.1 ▲	50.4	50.1 ●
☆☆☆	05-Jul	Composite PMI	Jun	52.4 ▼	53.0	52.0 ●
☆☆☆☆	07-Jul	Industrial production (yoy)‡	May	1.4% ▼	2.2%	0.5% ●
<b>Japan</b> 						
☆☆☆☆	30-Jun	Industrial production (yoy) - preliminary data	May	-0.1% ▲	-3.3%	1.9% ●
☆☆☆☆	01-Jul	Consumer inflation CPI (yoy)	May	-0.4% ▼	-0.3%	-0.5% ●
☆☆☆	01-Jul	Manufacturing PMI - final data	Jun	48.1 ▲	47.8	--
☆☆☆	05-Jul	Composite PMI	Jun	49.0 ▼	49.2	--
<b>Chile</b> 						
☆☆☆	30-Jun	Total copper production (metric tons)	May	473 825 ▲	432 277	--
☆☆☆	30-Jun	Manufacturing (yoy)	May	2.1% ▲	-1.2%	2.5% ●
☆☆☆☆	05-Jul	Economic activity (yoy)	May	1.8% ▲	0.7%	1.5% ●
☆☆☆	07-Jul	Copper exports (USD mn)	Jun	2 009 ▼	2 274	--
☆☆	07-Jul	Nominal wages (yoy)	May	5.3% =	5.3%	5.1% ●
☆☆☆☆	08-Jul	Consumer inflation CPI (yoy)	Jun	4.2% =	4.2%	4.1% ●
<b>Canada</b> 						
☆☆☆☆☆	30-Jun	GDP (yoy)‡	Apr	1.5% ▲	1.2%	1.4% ●
☆☆☆	08-Jul	Net change in employment (ths)	Jun	-0.7 ▼	13.8	5.0 ●

<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

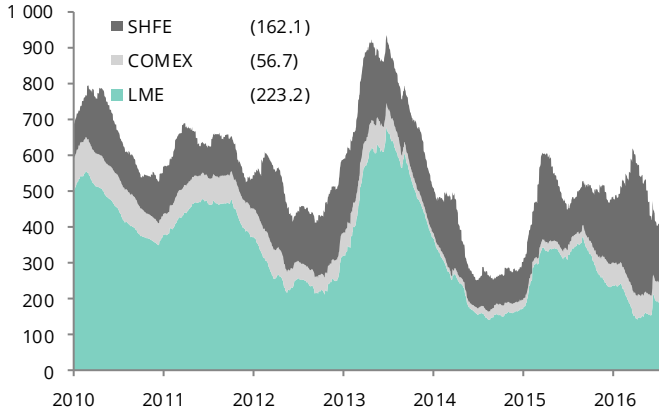
(as of: 08-Jul-16)

	Price	Price change °					From year beginning ²		
		2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t)</b>									
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	
<b>LBMA (USD/troz)</b>									
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	
<b>LPPM (USD/troz)</b>									
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	
<b>FX ³</b>									
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	
<b>Money market</b>									
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	
<b>Fuel</b>									
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	
<b>Others</b>									
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

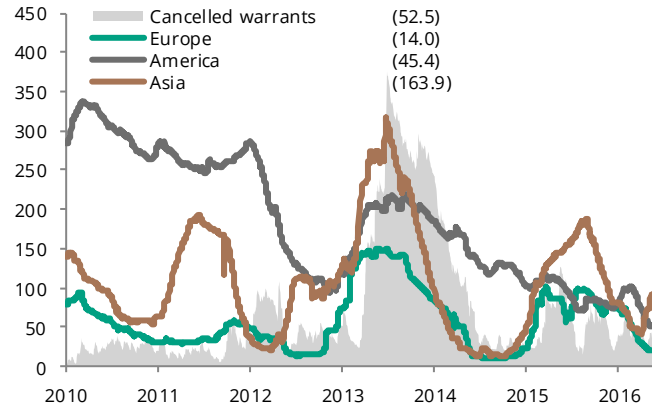
Source: Bloomberg, KGHM

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



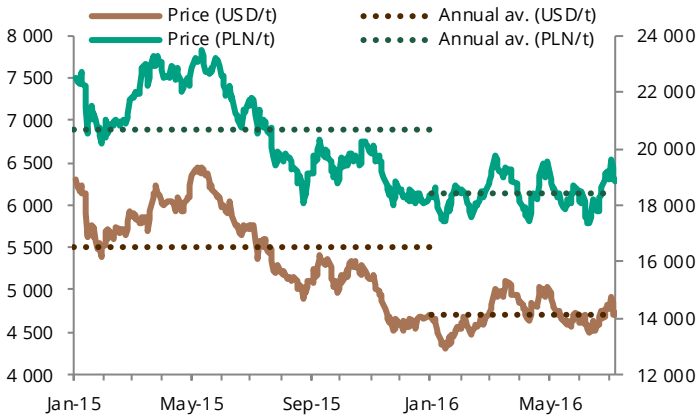
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



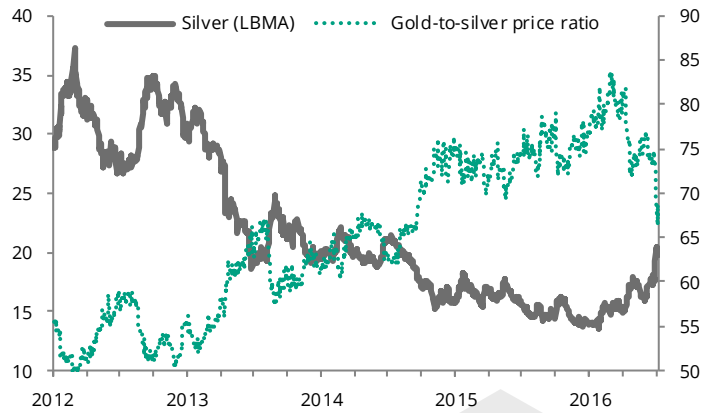
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



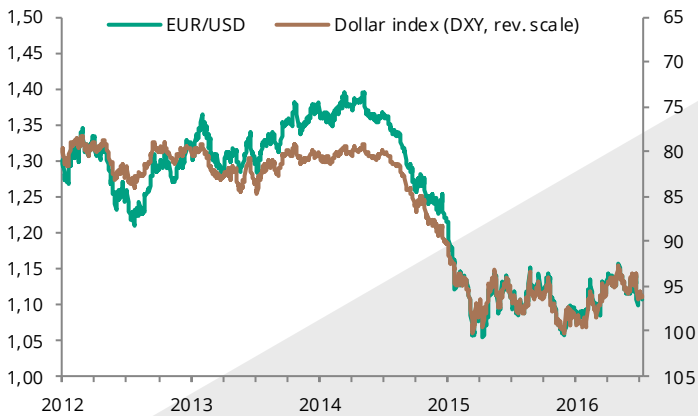
Source: Bloomberg, KGHM

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



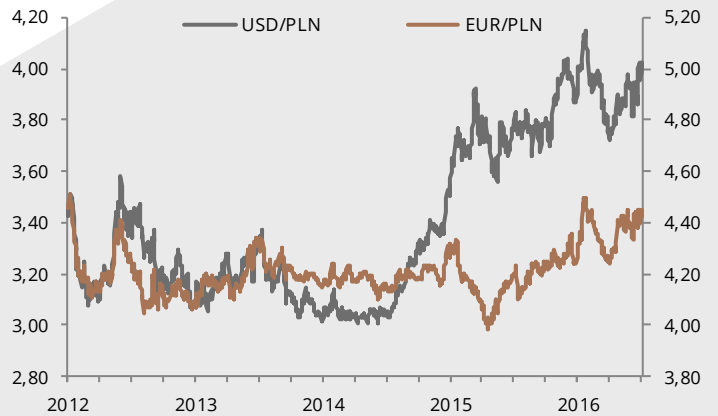
Source: Bloomberg, KGHM

**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:  
**13 June – 10 July 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](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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