

Market Overview

 as of: 7th August 2017






- Copper:** In the past two weeks, the price of red metal has increased significantly (c. 5.5%) on the back of positive macroeconomic and demand momentum in China as well as rumors about various scrap imports limitation (copper among them) to be initiated by the Chinese government and come into effect from end-2018 (page 2).
- Precious metals:** In recent two weeks gold was consolidating between 1245 – 1270 USD/troz. Investors were following recent move on the U.S. dollar buoyed by hopes of another interest rate hike this year after robust U.S. employment data. This environment is hard for gold to resume its growing pace (page 4).
- IMF World Economic Outlook:** The pickup in global growth anticipated in the April World Economic Outlook remains on track, with global output projected to grow by 3.5% in 2017 and 3.6% in 2018 (page 5).
- Chinese renminbi:** It has been two year since the People's bank of China turned the markets upside down when it "updated" its exchange rate strategy, effectively devaluing the renminbi by c. -3% in two days and by further -3% over the following five months (page 6).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	6 330.00	5.5%
▲ Nickel	10 335.00	8.1%
LBMA (USD/troz)		
▲ Silver	16.70	1.6%
▲ Gold (PM)	1 257.70	0.7%
FX		
▲ EURUSD	1.1868	1.9%
▲ EURPLN	4.2423	0.3%
▼ USDPLN	3.5702	-1.7%
▲ USDCAD	1.2638	0.7%
▼ USDCLP	650.17	-0.2%
Stocks		
▲ KGHM	119.95	1.2%

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

Important macroeconomic data

Release	For		
 GDP (annlzd., qoq)	2Q	2.6%	▲
 Manufacturing PMI	Jul	56.6	▼
 Non-farm payrolls chng.	Jul	209	▼
 Caixin's manuf. PMI	Jul	51.1	▲
 Industrial profits (yoy)	Jun	19.1%	▲

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

Copper has broken 6k handle again this year on the back of stronger macroeconomic data as well as production disruptions



Source: Thomson Reuters, KGHM Polska Miedź

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Base and precious metals | Other commodities

Copper

In the past two weeks, the price of metal has increased significantly (c. 5.5%) on the back of positive macroeconomic and demand momentum in China as well as rumors about various scrap imports limitation (copper among them) to be initiated by the Chinese government and come into effect from end-2018.

What is the impact of possible scrap imports ban in China?

Having in mind environment protection, Chinese government is more actively regulating the import of waste materials. Recently, World Trade Organization has been notified about Chinese intention to ban imports of 24 types of solid waste by end 2017. Moreover, according to the recycling branch of China's non-ferrous metals association, China may also ban some scrap metal imports. Although the Ministry of Environmental Protection's recent ban on 24 types of waste does not affect copper, the rumored ban on types of scrap metal might, but no official statement has been made yet.

Scrap copper falls under categories 6 and 7 of the government-defined classification of waste materials. Category 7 includes low-grade copper scrap that requires disassembling before reaching consumers or smelters, such as electric motors, wires and cables and metallic hardware. Imports of this category already require government permission. Scrap copper that does not require disassembling – and typically of high copper content, such as bright copper – is in category 6. The rumored ban won't affect this category.

The ban, set to come into effect from end-2018, involves material that contributed ~330ktpa of contained copper supply in 2016, or ~3% of Chinese consumption. It is believed by market participants that most of the preparation of this scrap type is likely to simply shift offshore (improve the grades overseas) from south China to other developing Asia, and we note the Philippines, Thailand and Malaysia have recently seen increases to both volumes of scrap flow to China and implied copper content (by value), from which we infer the relocation has already begun. So medium to long term no real change for the copper balance, but short term we could see some disruption to secondary availability, which coming on top of the National Sword scrap yard inspection disruptions might mean most likely tighter (and more bullish) conditions for primary copper sources concentrates, blister/anode and cathode in 2H.

Other important information on copper market:

- *[source: Reuters]* Copper miner Antofagasta has signed a wage deal with workers at its Zaldivar deposit in Chile, averting threatened labor action. The union of about 700 members said in a statement that the contract could come

Middle Kingdom's crusade to protect the environment is growing large

One out of two categories to be potentially affected by the rumored ban

into effect soon and the company said it would last for three years. According to Zaldivar's statement the new collective contract recognizes the benefits that the workers had and also makes a decided move to focus on productivity. Further details of the new contract have not been disclosed to the public. Zaldivar's union had voted this month to strike but delayed walking off to engage in government-mediated negotiations as mandated by Chilean law.

- *[source: CNBC]* Chilean state copper commission Cochilco forecast average global copper prices of \$2.64 per pound (~5820 USD/t) in 2017, a slight upward revision from its previous estimate of \$2.60 (~5732 USD/t), due to greater demand in China, a key market. The commission also predicted 2017 copper production in Chile of about 5.6 million tonnes, a 0.8% rise from the previous year and roughly in line with its previous forecast in April. In 2018, Cochilco added, Chilean copper production should rise to 5.9 million tonnes. According to the statement, Chilean Mining Minister Aurora Williams explained that the copper price rise for 2017 is due, in part, to the better performance of economic activity indicators in China, which surpassed market expectations. As China is by far the most important market for Chilean copper, an improvement in its economy, particularly in copper-intensive areas such as real estate, bode well for the South American nation. In its previous report in April, Cochilco significantly revised down its 2017 forecast for Chilean copper production and revised up its copper price forecasts, due in large part to a 43-day strike at BHP Billiton's Escondida mine in Chile, the largest copper mine in the world.
- *[source: Bloomberg]* China's appetite for copper, which helped to propel the metal to a two-year high recently, is expected to expand in the second half, leaving the rally with further to run, according to state-run research firm Beijing Antaike Information Development Co. Antaike sees China's energy and property sectors driving consumption, which beat expectations in the first half and boosted the material used in wires to one of the top performing metals this year. The researcher is forecasting even better in the six months to December, with usage gaining 4.7% on- year to 5.56 million metric tons after 4% growth through June. Power grid investment is recovering and air conditioner sales are heated, according to Antaike. while property sales are slowing in China's biggest conurbations, the market in third and fourth-tier cities remains buoyant, with the impact on copper yet to be felt, as the red metals is used in the final stage.

Precious Metals

In recent two weeks gold was consolidating between 1245 – 1270 USD/troz. Investors were following recent move on the U.S. dollar buoyed by hopes of another interest rate hike this year after robust U.S. employment data. This environment is hard for gold to resume its growing pace.

World Gold Council's Gold Demand Trends Report for H1 2017

According to World Gold Council's Gold Demand Trends Q2 gold demand of 953,4t was 10% lower than 2016, while H1 demand slowed 14% to 2003,8t. Y-o-y comparisons are affected by record ETF inflows in 2016: demand from this sector slowed dramatically after last year's H1 surge. Central bank net purchases of 176,7t were also slightly lower in the first half (-3%). Technology demand also made modest gains. ETF inflows slowed dramatically from last year's record pace. But holdings continued to grow: after adding 56t in Q2, H1 inflows reached 167,9t. European ETFs saw the strongest H1 inflows: holdings in these funds reached a record 977,7t. A strong jump in Turkey was fueled by economic recovery, double-digit inflation and relative currency stability. Jewelry demand strengthened from a weak 2016, but fell short of the long-term average. India was the main contributor to the 8% gain in Q2, as it recovered from extremely low 2016 demand.

Demystifying London's Gold and Silver Vault Holdings

The LBMA vault holding data outlined below represent the volume of Loco London gold and silver held in the London vaults offering custodian services. As at 31 March, 2017 there were 7,449 tons of gold, valued at \$298 billion and 32,078 tons of silver valued at \$19 billion. This equates to approximately 596,000 gold bars and 1,069,255 silver bars. There are currently seven custodians offering vaulting services (all of which are LBMA members): four security carriers: Brinks, G4S Cash Solutions (UK), Malca-Amit and Loomis International (UK) Ltd); and three clearing banks: HSBC, ICBC Standard Bank and JP Morgan. In addition the Bank of England (not an LBMA member) also offers gold (but not silver) custodial services to central banks and certain commercial firms that facilitate central bank access to the liquidity of the London gold market. Those clearing banks without their own vault operations – Scotiabank and UBS – utilize their accounts with one of the LBMA custodians or the Bank of England (BoE) and therefore do not contribute to these statistics to avoid double accounting. The physical holdings of precious metals held in the London vaults underpin the gross daily trading and net clearing in London. The net clearing is undertaken by the members of the London Precious Metals Clearing Limited (LPMCL). London is the largest gold trading center in the world as demonstrated by the \$18.1bn worth of gold which was cleared on average each day in March 2017 (Source: LBMA net daily clearing statistics).

Global economies | Foreign exchange markets

IMF: A firming global recovery?

The pickup in global growth anticipated in the April World Economic Outlook remains on track, with global output projected to grow by 3.5% in 2017 and 3.6% in 2018.

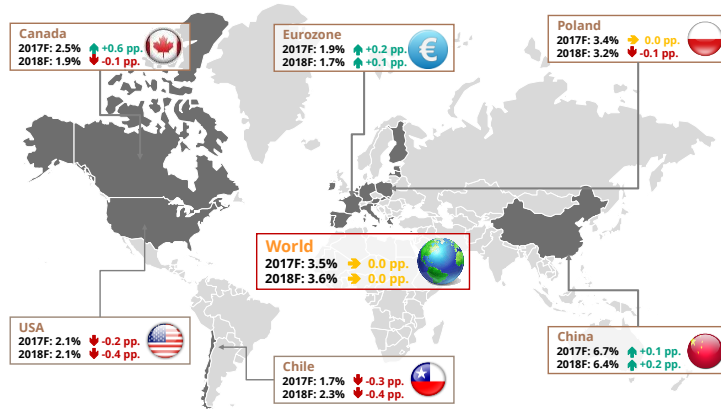
Source: International Monetary Fund (IMF) – World Economic Outlook Jun'17

The unchanged global growth projections mask somewhat different contributions at the country level. U.S. growth projections are lower than in April, primarily reflecting the assumption that fiscal policy will be less expansionary going forward than previously anticipated. Growth has been revised up for Japan and especially the euro area, where positive surprises to activity in late 2016 and early 2017 point to solid momentum. China's growth projections have also been revised up, reflecting a strong first quarter of 2017 and expectations of continued fiscal support. Inflation in advanced economies remains subdued and generally below targets; it has also been declining in several emerging economies, such as Brazil, India, and Russia.

While risks around the global growth forecast appear broadly balanced in the near term, they remain skewed to the downside over the medium term. On the upside, the cyclical rebound could be stronger and more sustained in Europe, where political risk has diminished. On the downside, rich market valuations and very low volatility in an environment of high policy uncertainty raise the likelihood of a market correction, which could dampen growth and confidence. The more supportive policy tilt in China, especially strong credit growth, comes with rising downside risks to medium-term growth. Monetary policy normalization in some advanced economies, notably the United States, could trigger a faster-than-anticipated tightening in global financial conditions. And other risks discussed in the April 2017 WEO, including a turn toward inward-looking policies and geopolitical risks, remain salient.

Projected global growth rates for 2017–18, though higher than the 3.2 percent estimated for 2016, are below pre-crisis averages, especially for most advanced economies and for commodity-exporting emerging and developing economies. Among the former, many face excess capacity as well as headwinds to potential growth from aging populations, weak investment, and slowly advancing productivity. In view of weak core inflation and muted wage pressures, policy settings should remain consistent with lifting inflation expectations in line with targets, closing output gaps, and—where appropriate—external rebalancing. Reforms to boost potential output are of the essence, and slow aggregate output growth makes it even more important that gains are shared widely across the income distribution. Financial stability risks need close monitoring in many emerging economies. Commodity exporters should continue adjusting to lower revenues, while diversifying their sources of growth over time.

IMF has left the world's growth forecasts unchanged since April; fiscal stimulus not the base case in USA; Eurozone and China lifted upwards



Source: IMF, KGHM Polska Miedź

China: New RMB strategy

It has been two year since the People's bank of China turned the markets upside down when it "updated" its exchange rate strategy, effectively devaluating the renminbi by c. -3% in two days and by further -3% over the following five months.

Source: Gavekal Dragonomics

Since then, China's currency policy has been through several evolutions. According to Gavekal Dragonomics. through much of 2016 and the first half of 2017, the PBOC pursued an opportunistic strategy, taking advantage of periods of US dollar weakness to steer a trade-weighted depreciation of the renminbi's exchange rate. Over the last couple of months, however, Beijing's policy has changed again, a move which implies the authorities are satisfied with the renminbi's current trade-weighted exchange rate. If so, the renminbi will now rise on broad US dollar falls, and vice versa.

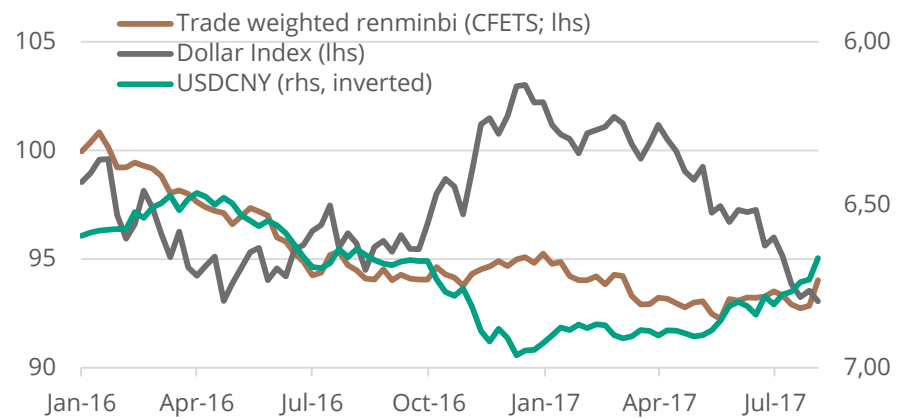
Since early May, the renminbi has strengthened by 2.7% against the US dollar, which itself has declined by 6.3% against the major currencies of the DXY index basket. For the renminbi, this is its biggest three-month climb against the US dollar since 2010. Just as importantly, over the same period, the renminbi's trade-weighted CFETS index has been almost flat, easing by -0.15%.

Such moves indicate a change in the policy. As Gavekal Dragonomics discusses in its article, for the last year and a half or so, whenever the US dollar weakened against major currencies, the PBOC kept the USD-CNY exchange rate stable, so steering a depreciation of the renminbi's trade-weighted CFETS index. Conversely, when the US dollar strengthened, it allowed the renminbi to fall against the US currency in order to keep it stable on a trade-weighted basis. The net result of this opportunistic strategy was to steer a gradual trade-weighted depreciation of the Chinese currency. However, in May the PBOC released a cryptic statement that it would include a "counter-cyclical factor" in the formula it uses to set the renminbi's daily fixing rate. Since then, the renminbi's strength

against the US dollar and its relative stability against the CFETS basket suggest the subtle change in the central bank's daily fixing calculation signals a broader change in the PBOC's currency management framework.

Gavekal Dragonomics article concludes that the PBOC has now abandoned the opportunistic strategy that it followed through 2016 and the first half of 2017. Instead the central bank is targeting broad stability of the renminbi's trade-weighted exchange rate, as represented by the CFETS index. As a result, from now on, the renminbi is likely to trade in the same direction against the US dollar as other major currencies.


China's opportunistic RMB strategy appears to have run its course






Source: Bloomberg, KGHM Polska Miedź

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
☆☆	27-Jul	Industrial profits (yoy)	Jun	19.1% ▲	16.7%	--
☆☆☆	31-Jul	Official manufacturing PMI	Jul	51.4 ▼	51.7	51.5 ◡
☆☆☆	01-Aug	Caixin's manufacturing PMI	Jul	51.1 ▲	50.4	50.4 ◢
Poland 						
☆☆	25-Jul	Unemployment rate	Jun	7.1% ▼	7.4%	7.1% ○
☆☆☆☆	31-Jul	Consumer inflation CPI (yoy) - preliminary data	Jul	1.7% ▲	1.5%	1.6% ◢
☆☆☆	01-Aug	Manufacturing PMI	Jul	52.3 ▼	53.1	53.4 ◡
US 						
☆☆☆	24-Jul	Composite PMI - preliminary data‡	Jul	--	53.9	--
☆☆☆	24-Jul	Manufacturing PMI - preliminary data	Jul	--	52.0	52.3
☆☆☆	24-Jul	PMI services - preliminary data	Jul	--	54.2	54.2
☆	25-Jul	Richmond Fed manufacturing index‡	Jul	14.0 ▲	11.0	7.0 ◢
☆	25-Jul	S&P/CaseShiller home price index‡	May	199 ▲	197	--
☆☆☆☆☆	26-Jul	FOMC base rate decision - upper bound (Fed)	Jul	1.25% -	1.25%	1.25% ○
☆☆☆☆☆	26-Jul	FOMC base rate decision - lower bound (Fed)	Jul	1.00% -	1.00%	1.00% ○
☆☆	27-Jul	Durable goods orders - preliminary data‡	Jun	6.5% ▲	-0.1%	3.9% ◢
☆☆☆☆☆	28-Jul	GDP (annualized, qoq) - estimation‡	2Q	2.6% ▲	1.2%	2.7% ◡
☆☆	28-Jul	University of Michigan confidence index - final data	Jul	93.4 ▲	93.1	93.2 ◢
☆	31-Jul	Dallas Fed manufacturing activity	Jul	16.8 ▲	15.0	13.0 ◢
☆☆☆☆	01-Aug	Consumer spending inflation PCE (mom)	Jun	0.1% -	0.1%	0.1% ○
☆☆☆☆	01-Aug	Consumer spending inflation PCE (yoy)‡	Jun	1.5% -	1.5%	1.4% ◢
☆☆☆	01-Aug	Manufacturing PMI - final data	Jul	53.3 ▲	53.2	53.2 ◢
☆☆	01-Aug	ISM Manufacturing	Jul	56.3 ▼	57.8	56.5 ◡
☆☆	01-Aug	Personal income (sa, mom)‡	Jun	0.0% ▼	0.3%	0.4% ◡
☆☆	01-Aug	Personal spending (sa, mom)‡	Jun	0.1% ▼	0.2%	0.1% ○
☆☆☆	03-Aug	Composite PMI - final data	Jul	54.6 ▲	54.2	--
☆☆☆	03-Aug	PMI services - final data	Jul	54.7 ▲	54.2	54.2 ◢
☆☆	03-Aug	Durable goods orders - final data	Jun	6.4% ▼	6.5%	0.0% ◢
☆☆	04-Aug	Change in non-farm payrolls (ths)‡	Jul	209 ▼	231	180 ◢
☆☆	04-Aug	Underemployment rate (U6)	Jul	8.6% -	8.6%	--
☆☆	04-Aug	Unemployment rate	Jul	4.3% ▼	4.4%	4.3% ○
☆	04-Aug	Average hourly earnings (yoy)	Jul	2.5% -	2.5%	2.4% ◢

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Eurozone 						
⊕⊕⊕	24-Jul	Composite PMI - preliminary data	Jul	--	56.3	56.2
⊕⊕⊕	24-Jul	Manufacturing PMI - preliminary data	Jul	--	57.4	57.2
⊕⊕⊕	24-Jul	Services PMI - preliminary data	Jul	--	55.4	55.4
⊕	27-Jul	M3 money supply (yoy)	Jun	5.0% -	5.0%	5.0% ⊕
⊕	28-Jul	Economic confidence	Jul	111 ▲	111	111 ▲
⊕	28-Jul	Industrial confidence	Jul	4.5 -	4.5	4.4 ▲
⊕	28-Jul	Consumer confidence - final data	Jul	-1.7 -	-1.7	-1.7 ⊕
⊕	28-Jul	Business climate indicator‡	Jul	1.1 ▼	1.2	1.1 ▼
⊕⊕⊕⊕	31-Jul	Core CPI (yoy) - estimation	Jul	1.2% ▲	1.1%	1.1% ▲
⊕⊕⊕⊕	31-Jul	CPI estimate (yoy)	Jul	1.3% -	1.3%	1.3% ⊕
⊕⊕	31-Jul	Unemployment rate‡	Jun	9.1% ▼	9.2%	9.2% ▼
⊕⊕⊕⊕⊕	01-Aug	GDP (sa, yoy) - estimation	2Q	2.1% ▲	1.9%	2.1% ⊕
⊕⊕⊕⊕⊕	01-Aug	GDP (sa, qoq) - estimation‡	2Q	0.6% ▲	0.5%	0.6% ⊕
⊕⊕⊕	01-Aug	Manufacturing PMI - final data	Jul	56.6 ▼	56.8	56.8 ▼
⊕⊕	02-Aug	Producer inflation PPI (yoy)‡	Jun	2.5% ▼	3.4%	2.5% ⊕
⊕⊕⊕	03-Aug	Composite PMI - final data	Jul	55.7 ▼	55.8	55.8 ▼
⊕⊕⊕	03-Aug	Services PMI - final data	Jul	55.4 -	55.4	55.4 ⊕
⊕⊕	03-Aug	Retail sales (yoy)‡	Jun	3.1% ▲	2.4%	2.5% ▲
Germany 						
⊕⊕⊕	24-Jul	Composite PMI - preliminary data	Jul	--	56.4	56.3
⊕⊕⊕	24-Jul	Manufacturing PMI - preliminary data	Jul	--	59.6	59.2
⊕⊕	25-Jul	IFO business climate‡	Jul	116 ▲	115	115 ▲
⊕⊕	27-Jul	GfK consumer confidence	Aug	10.8 ▲	10.6	10.6 ▲
⊕⊕⊕⊕	28-Jul	Harmonized consumer inflation HICP (yoy) - preliminary data	Jul	1.5% -	1.5%	1.4% ▲
⊕⊕⊕⊕	28-Jul	Consumer inflation CPI (yoy) - preliminary data	Jul	1.7% ▲	1.6%	1.5% ▲
⊕⊕⊕	31-Jul	Retail sales (yoy)‡	Jun	1.5% ▼	4.9%	2.7% ▼
⊕⊕⊕	01-Aug	Manufacturing PMI - final data	Jul	58.1 ▼	58.3	58.3 ▼
⊕⊕	01-Aug	Unemployment rate	Jul	5.7% -	5.7%	5.7% ⊕
⊕⊕⊕	03-Aug	Composite PMI - final data	Jul	54.7 ▼	55.1	55.1 ▼
⊕⊕⊕	04-Aug	Factory orders (wda, yoy)‡	Jun	5.1% ▲	3.8%	4.4% ▲
France 						
⊕⊕⊕	24-Jul	Composite PMI - preliminary data	Jul	--	56.6	56.4
⊕⊕⊕	24-Jul	Manufacturing PMI - preliminary data	Jul	--	54.8	54.6
⊕⊕⊕⊕⊕	28-Jul	GDP (yoy) - estimation	2Q	1.8% ▲	1.1%	1.6% ▲
⊕⊕⊕⊕⊕	28-Jul	GDP (qoq) - estimation	2Q	0.5% -	0.5%	0.5% ⊕

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

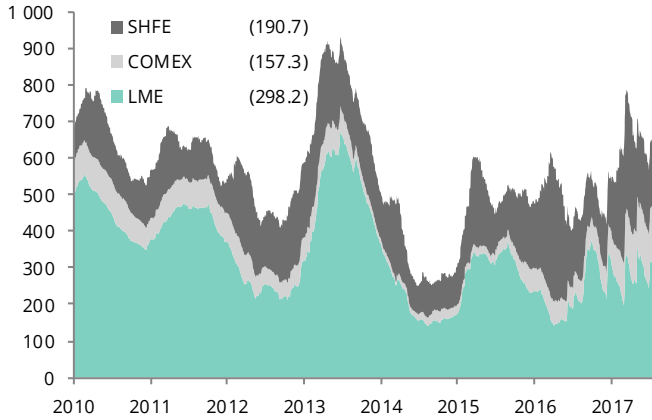
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 04-Aug-17)</i>		Price change °					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 330.00	▲ 5.5%	▲ 7.2%	▲ 15.1%	▲ 32.2%	5 795.67	5 466.00	6 347.00	
Molybdenum	16 000.00	- 0.0%	- 0.0%	▲ 4.9%	- 0.0%	15 838.33	15 250.00	17 500.00	
Nickel	10 335.00	▲ 8.1%	▲ 11.4%	▲ 3.2%	▼ -1.0%	9 734.50	8 715.00	11 045.00	
Aluminum	1 890.00	▼ -0.6%	▼ -1.0%	▲ 10.3%	▲ 17.0%	1 883.24	1 701.00	1 962.00	
Tin	20 865.00	▲ 2.7%	▲ 3.3%	▼ -1.1%	▲ 16.3%	20 056.57	18 760.00	21 300.00	
Zinc	2 798.00	▲ 1.5%	▲ 1.6%	▲ 9.2%	▲ 23.9%	2 706.04	2 434.50	2 971.00	
Lead	2 349.00	▲ 6.2%	▲ 3.3%	▲ 18.3%	▲ 31.4%	2 229.98	2 007.00	2 442.00	
LBMA (USD/troz)									
Silver	16.70	▲ 1.6%	▲ 1.4%	▲ 2.8%	▼ -17.2%	17.14	15.22	18.56	
Gold ¹	1 257.70	▲ 0.7%	▲ 1.2%	▲ 8.5%	▼ -7.7%	1 238.18	1 151.00	1 293.50	
LPPM (USD/troz)									
Platinum ¹	966.00	▲ 3.1%	▲ 4.8%	▲ 6.5%	▼ -16.5%	953.69	891.00	1 033.00	
Palladium ¹	884.00	▲ 3.8%	▲ 5.1%	▲ 30.8%	▲ 24.3%	804.61	706.00	900.00	
FX ³									
EURUSD	1.1868	▲ 1.9%	▲ 4.0%	▲ 12.6%	▲ 6.6%	1.0954	1.0385	1.1868	
EURPLN	4.2423	▲ 0.3%	▲ 0.4%	▼ -4.1%	▼ -1.3%	4.2643	4.1737	4.4002	
USDPLN	3.5702	▼ -1.7%	▼ -3.7%	▼ -14.6%	▼ -7.5%	3.8985	3.5702	4.2271	
USDCAD	1.2638	▲ 0.7%	▼ -2.6%	-	-	1.3235	1.2447	1.3743	
USDCNY	6.7289	▼ -0.6%	▼ -0.8%	▼ -3.1%	▲ 1.3%	6.8547	6.7172	6.9640	
USDCLP	650.17	▼ -0.2%	▼ -2.0%	▼ -2.6%	▼ -1.1%	659.52	638.35	679.05	
Money market									
3m LIBOR USD	1.312	▼ 0.00	▲ 0.01	▲ 0.31	▲ 0.52	1.165	0.999	1.317	
3m EURIBOR	-0.329	▲ 0.00	▲ 0.00	▼ -0.01	▼ -0.03	-0.329	-0.332	-0.319	
3m WIBOR	1.730	- 0.00	- 0.00	- 0.00	▲ 0.02	1.730	1.730	1.730	
5y USD interest rate swap	1.901	▲ 0.02	▼ -0.06	▼ -0.07	▲ 0.82	1.956	1.797	2.239	
5y EUR interest rate swap	0.241	▼ -0.01	▼ -0.05	▲ 0.17	▲ 0.38	0.190	0.078	0.326	
5y PLN interest rate swap	2.390	▲ 0.05	▲ 0.03	▼ -0.01	▲ 0.55	2.412	2.165	2.625	
Fuel									
WTI Cushing	49.58	▲ 8.7%	▲ 7.7%	▼ -7.7%	▲ 18.2%	49.44	42.31	54.10	
Brent	51.90	▲ 9.5%	▲ 7.6%	▼ -6.3%	▲ 20.6%	51.59	44.21	56.46	
Diesel NY (ULSD)	164.24	▲ 8.7%	▲ 11.1%	▼ -3.3%	▲ 25.0%	154.37	135.85	167.82	
Others									
VIX	10.03	▲ 0.67	▼ -1.15	▼ -4.01	▼ -2.39	11.35	9.36	15.96	
BBG Commodity Index	83.28	▲ 0.3%	▲ 0.8%	▼ -4.8%	▼ -0.8%	84.75	79.36	89.36	
S&P500	2 476.83	▲ 0.2%	▲ 2.2%	▲ 10.6%	▲ 14.4%	2 377.62	2 257.83	2 477.83	
DAX	12 297.72	▲ 0.5%	▼ -0.2%	▲ 7.1%	▲ 20.2%	12 206.21	11 509.84	12 888.95	
Shanghai Composite	3 262.08	▲ 0.7%	▲ 2.2%	▲ 5.1%	▲ 9.4%	3 184.11	3 052.79	3 292.64	
WIG 20	2 380.16	▲ 1.6%	▲ 3.5%	▲ 22.2%	▲ 30.8%	2 246.46	1 989.64	2 413.53	
KGHM	119.95	▲ 1.2%	▲ 8.4%	▲ 29.7%	▲ 52.1%	117.81	94.00	135.50	

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

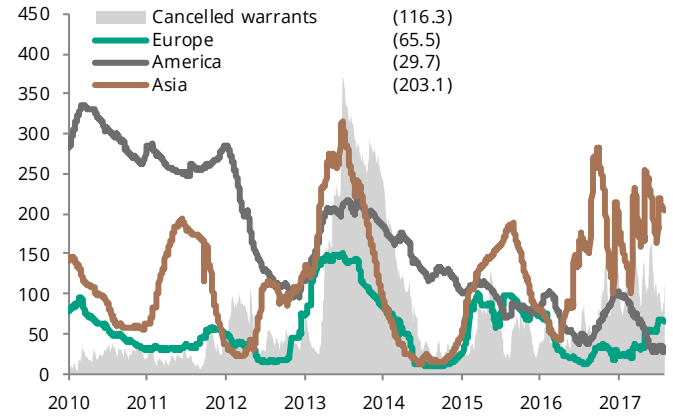
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



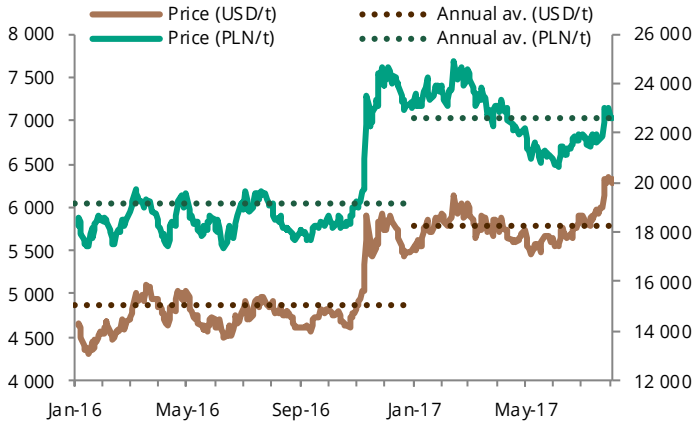
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



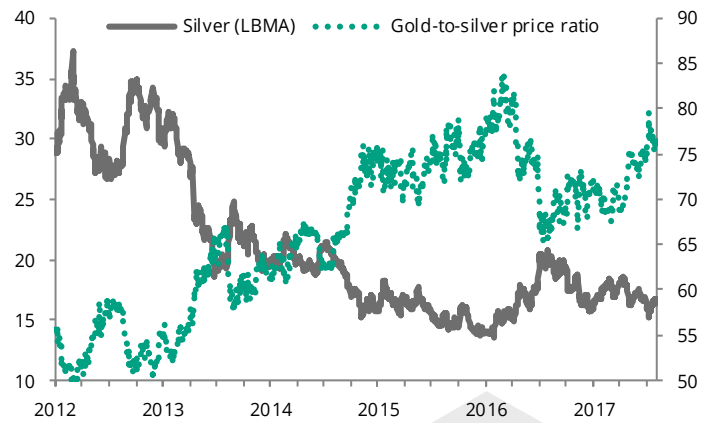
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



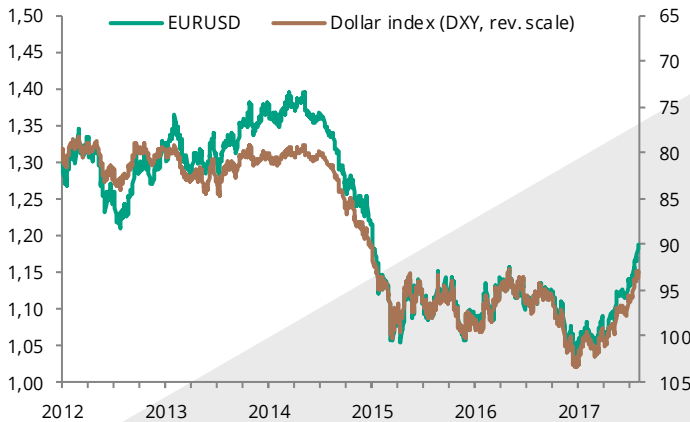
Source: Bloomberg, KGHM Polska Miedź

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



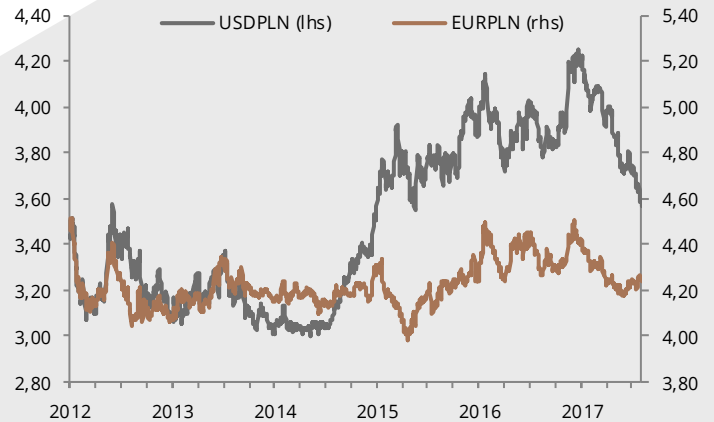
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
24th July – 6th August 2017.

- Barclays Capital, ▪ BofA Merrill Lynch, ▪ Citi Research, ▪ CRU Group, ▪ Deutsche Bank Markets Research,
- GavekalDragonomics, ▪ Goldman Sachs, ▪ JPMorgan, ▪ Macquarie Capital Research, ▪ Mitsui Bussan Commodities,
- Morgan Stanley Research, ▪ SMM Information & Technology.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ thebulliondesk.com, ▪ lbma.org.uk, ▪ lme.co.uk, ▪ metalbulletin.com, ▪ nbp.pl, , also: Bloomberg and Thomson Reuters.

Official metals prices are available on following websites:

- base metals: www.lme.com/dataprices_products.asp (charge-free logging)
- silver and gold: www.lbma.org.uk/pricing-and-statistics
- platinum and palladium: www.lppm.com/statistics.aspx

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