

Market Overview

as of: 26th June 2017

- **Copper:** Despite strong data coming from Chinese economy in the past few months, tightening monetary policy creates important downside risk for the shape of copper market in H2'2017. Long-term fundamentals for copper stays very strong, with EV cars being part of the positive story on the demand side ("page 2").
- **Precious metals:** In recent two weeks gold continued falling after it marked its monthly heights of around 1300 USD/troz in the beginning of the month. Investors remained cautious ahead coming Janet Yellen speech during Europe visit. Traders were expecting Yellen to maintain a positive outlook on the U.S. economy despite a recent batch of weak U.S. economic data, thereby supporting the Fed's forecast of raising interest rates once more this year and three times next year ("page 4").
- **US monetary policy:** Fed plans of introducing gradual rate hikes have not been changed by the recent soft inflation readings. Federal Open Market Committee presented plans of balance sheet normalization ("page 5").

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	5 774.00	0.6%
▲ Nickel	9 170.00	4.1%
LBMA (USD/troz)		
▼ Silver	16.71	-3.7%
▼ Gold (PM)	1 255.70	-0.9%
FX		
▼ EURUSD	1.1173	0.0%
▲ EURPLN	4.2255	0.9%
▲ USDPLN	3.7824	1.0%
▼ USDCAD	1.3268	-1.4%
▼ USDCLP	664.00	-0.3%
Stocks		
▼ KGHM	108.80	-5.0%

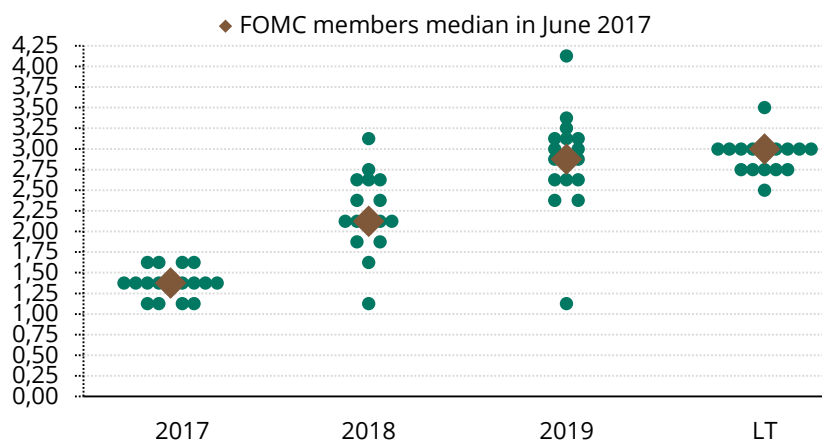
Source: Bloomberg, KGHM Polska Miedź; (more on page 9)

Important macroeconomic data

Release	For		
 Fed upper rate	Jun	1.25%	▲
 Manufacturing PMI	Jun	57.3	▲
 Industrial prod. (yoy)	May	9.1%	▲
 Industrial prod. (yoy)	May	6.5%	-
 Retail sales (yoy)	May	10.7%	-

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

After another hike in June, FOMC assumes one more policy rate rise this year and predict long term interest rate at the level of 3.00%



Source: Federal Reserve, Bloomberg, KGHM Polska Miedź

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Base and precious metals | Other commodities

Copper

Despite strong data coming from Chinese economy in the past few months, tightening monetary policy creates important downside risk for the shape of copper market in H2'2017.

China's economy holds up in May, but slowing investment points to cooling

Solid data coming from Chinese economy, but tighter credit availability raise question marks for H2'2017

China's economy generally remained on solid footing in May, but tighter monetary policy, a cooling housing market and slowing investment reinforced views that it will gradually lose momentum in coming months. Still, with half a year left to go, Beijing is expected to handily meet its annual 6.5 percent economic growth target without too many bumps, good news for President Xi Jinping ahead of a major political leadership reshuffle later this year. China's fast start to the year led the International Monetary Fund to raise its 2017 growth outlook for the country to 6.7 percent from its 6.6 percent forecast in April, though it recommended China accelerate reforms and rein in credit. Credit and money supply data showed China may be making progress in the battle against risky lending and rising leverage as May bank loans topped expectations, but money supply grew at the slowest annual rate in over 20 years, which the central bank attributed to deleveraging. Off-balance sheet lending, or shadow banking activity, also fell sharply in May after rising earlier in the year. But the People's Bank of China (PBOC) said it will balance deleveraging with the need to keep liquidity basically stable, adding that slower money supply expansion could be a "new normal". Slower fixed asset investment growth in May and a sharp deceleration in housing starts point to some of the cooling economists have been expecting, though stable growth in factory output and retail sales, along with a pickup in exports, are cushioning the impact so far. Industrial output grew at a steady 6.5 percent pace in May from a year earlier, defying expectations for a slight softening, as a government infrastructure spree continues to boost demand for building materials from cement to steel. But rising inventories are a risk. In April, growth in industrial inventories picked up to over 10 percent. Weaker growth in fixed asset investment -- at 8.6 percent for January through May -- was led by a slowdown in the property sector. While housing sales rose by an unexpectedly solid 10 percent, growth in new construction starts almost halved to 5.2 percent in May, according to Reuters calculations.

Predicted shape of Chinese economy in the second half of this year determines slower growth of demand for base metals.

Basing on recent data, the copper fundamentals proves to be strong. High pace of Chinese growth and rapid decline of visible copper stocks, particularly in Asia, show good shape of current demand for red metal. However, going deeper into the year, the Chinese copper consumption growth is expected to decline sequentially. With the moderate growth of infrastructure investment, the recent financial tightening efforts and expected fall of the growth in auto sales

- a headwind for metals demand is probable, although not sure. There are some upside risks to the scenario for copper, including high level of uncertainty on the supply side (both in mining production from main copper mines and availability of secondary materials later this year).

Long-term fundamentals for copper stays very strong, with EV cars being part of the positive story on the demand side.

Copper demand for electric cars expected to hit 1,74 mln mt in 2027 from current 0,2 mln mt

Copper demand for electric cars to rise nine-fold by 2027

The growing number of electric vehicles hitting roads is set to fuel a nine-fold increase in copper demand from the sector over the coming decade, according to an industry report. Electric or hybrid cars and buses are expected to reach 27 million by 2027, up from 3 million this year, according to a report by consultancy IDTechEx, commissioned by the International Copper Association (ICA). "Demand for electric vehicles is forecast to increase significantly over the next ten years as technology improves, the price gap with petrol cars is closed and more electric chargers are deployed," IDTechEx Senior Technology Analyst Franco Gonzalez said in the report. "Our research predicts this increase will raise copper demand for electric cars and buses from 185,000 mt in 2017 to 1.74 million mt in 2027," Gonzalez said.

Copper use in electric vehicles

Type of vehicle	kg of copper per unit
Internal combustion engine:	23
Hybrid electric vehicle (HEV):	40
Plug-in hybrid electric vehicle (PHEV):	60
Battery electric vehicle (BEV):	83
Hybrid electric bus (Ebus HEV):	89
Battery-powered electric bus (Ebus BEV):	224-369

Source: ICA report

Electric vehicles use a substantial amount of copper in their batteries and in the windings and copper rotors used in electric motors. A single car can have up to six kilometers of copper wiring, according to the ICA. The global market for copper is around 23.9 million mt, according to the International Copper Study Group. That suggests electric vehicles could account for about 6 percent of global copper demand in ten years, according to analyst estimates, rising from less than 1 percent this year. The electric car market is still concentrated in a limited number of countries, according to a report by the International Energy Agency (IEA). Globally, 95 percent of electric car sales take place in just ten countries - China, the United States, Japan, Canada, Norway, Britain, France, Germany, the Netherlands and Sweden - the IEA said. Still, the IEA expects there is a "good chance" that electric vehicles in use globally could reach carmaker estimates of between 9 million and 20 million by 2020 and between 40 million and 70 million by 2025. While cars using internal combustion engines require up to 23 kg of copper each, the ICA report found that a hybrid electric vehicle uses nearly double that amount at 40 kg of copper, and a plug-in hybrid electric vehicle uses 60 kg. Depending on the size of battery, an electric bus can use between 224 kg and 369 kg of copper. Charging infrastructure for electric cars was another source of demand, the ICA report said. Further out, the expected growth in vehicles that use roof-mounted solar panels would also require copper.

Other important information on copper market:

- *[source: Reuters]* Disruptions at the two biggest copper mines early this year may have only a muted impact on prices after a surge of scrap metal partially filled the supply gap and a recovery in mine output is due to help in the second half. The market remained relatively well-supplied when the two

biggest mines were shut after high copper prices late last year drew a wave of scrap metal into the market. According to one of market analysts: "It looks as though the scrap inflow into the market really diluted the impact of the primary shortage, because we saw scrap moving in, not so much into smelter furnaces, but in place of cathode being consumed by the fabricators. The flow of scrap is now dissipating, which may support copper prices temporarily."

- *[source: Bloomberg]* China's copper refiners will add 600,000 tons of capacity this year, 6% of their total at end-2016, on rising downstream demand. The effect on output will start to show next year when this new capacity gradually comes online. Steadily rising refining capacity has increased China's demand for imported concentrate, which can rise its price and dent margins of the major domestic producers.

Precious Metals

In recent two weeks gold continued falling after it marked its monthly heights of around 1300 USD/troz in the beginning of the month. Investors remained cautious ahead coming Janet Yellen speech during Europe visit. Traders were expecting Yellen to maintain a positive outlook on the U.S. economy despite a recent batch of weak U.S. economic data, thereby supporting the Fed's forecast of raising interest rates once more this year and three times next year.

Race to silver benchmark – nearing to an end

Two contenders have emerged to run London's silver benchmark - gold benchmark operator Intercontinental Exchange (ICE), which offers a model with clearing, and a flexible auction process proposed by the London Metal Exchange (LME). The London Bullion Market Association (LBMA), which owns the copyright for the LBMA Silver Price, is set to discuss the offers. It is due to announce a replacement for current operators CME Group and Thomson Reuters this summer. Sources close to the matter say the race is too close to call between ICE, which operates the LBMA Gold Price benchmark, and the LME, which runs the process for platinum and palladium. The LBMA said in March that CME and Thomson Reuters were stepping down from the role less than three years into a five-year contract, citing a review prompted by upcoming European benchmarking regulation. The existing silver price benchmark has suffered big swings away from the underlying spot price since its inception, in part due to the seven participating banks' unwillingness to adjust buy or sell orders once the auction has begun for fear of accusations of manipulation. ICE's solution is for a cleared model similar to the existing gold benchmark. As this negates counterparty risk that would theoretically allow a higher number of participants and greater liquidity.

Russia adds to its reserves again

Russia's central bank, which is seeking to add to its international reserves, posted an increase in gold reserves in May, the fifth consecutive month of gains. The central bank, one of the world's largest holders of bullion, has been regularly buying gold as it wrestles with weaker oil prices and Western sanctions imposed over Moscow's role in the Ukraine crisis. Russia's gold reserves rose to 54.9 million troy ounces by early June from 54.2 million ounces as of May 1, the central bank said on recently. The value of its holdings rose to \$69.30 billion from \$68.65 billion as of May 1. Russia's central bank, which usually buys locally produced gold from Russian banks, has been one of the leading national buyers of gold in recent years, along with China.

Global economies | Foreign exchange markets

Tightening US monetary policy

Fed plans of introducing gradual rate hikes have not been changed by the recent soft inflation readings, but the timing of next hike may depend on inflation dynamics in coming months. Federal Open Market Committee (FOMC) presented plans of balance sheet normalization this year.

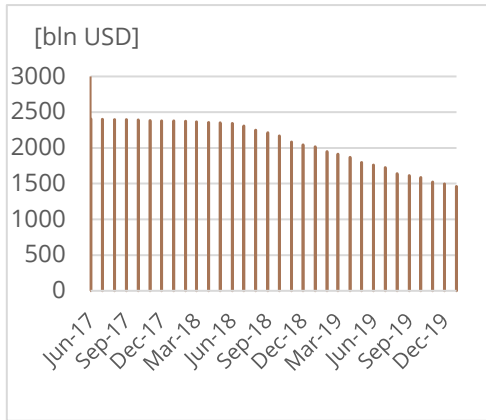
Fed reaction to inflation rate

The recent soft inflation readings coming from US economy raised some question marks regarding Fed's plans to raise funds rates later this year. However the FOMC statement continued to describe inflation as "somewhat" below the Fed's target, and Chair Yellen said it was "prudent" risk management to gradually hike rates given the tight labor market. Yellen added that "it's important not to overreact to a few readings and inflation data can be noisy." The forecast of unchanged plans regarding development of US monetary policy was echoed by Federal Reserve Bank of New York President – Dudley, who backed Yellen with his statement, that with a tight labor market the FOMC expects inflation to get back to 2% and the appropriate risk management is to "tighten monetary policy very judiciously." He added that different approach would risk overheating the labor market, which would force Fed to rapidly raise rates and could lead to recession. On the other hand there are some comments (Chicago and Dallas Fed Presidents) suggesting that timing of next rate hikes may depend on further development of inflation readings.

Specific plans of balance sheet normalization announced by FOMC

Additionally the June 2017 FOMC meeting resulted in specific plans to start balance sheet normalization this year, still before the next rates hike. The Committee intends to gradually reduce the Federal Reserve's securities holdings by decreasing its reinvestment of the principal payments it receives from securities held in the System Open Market Account. Specifically, such payments will be reinvested only to the extent that they exceed gradually rising caps. The caps have been set separately for payments Fed receives from maturing Treasury securities (6-30 bln \$ per month) and from its holdings of agency debt and mortgage-backed securities (4-20 bln \$ per month). The caps will remain in

Projected US Reserve Balances
















































Source: Federal Reserve, KGHM Polska Miedź S.A.

place once they reach their respective maximums so that the Federal Reserve's securities holdings will continue to decline in a gradual and predictable manner until the Committee judges that the Federal Reserve is holding no more securities than necessary to implement monetary policy efficiently and effectively. It's expected that FOMC announced plan would reduce the Fed's holdings of Treasuries by about 500 bln USD by the end of 2019. The Committee currently anticipates reducing the quantity of reserve balances, over time, to a level appreciably below that seen in recent years but larger than before the financial crisis. Additionally the Committee in their statement affirms that changing the target range for the federal funds rate is its primary means of adjusting the stance of monetary policy. However, the Committee would be prepared to resume reinvestment of principal payments received on securities held by the Federal Reserve if a material deterioration in the economic outlook were to warrant a sizable reduction in the Committee's target for the federal funds rate.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
⊕⊕⊕⊕	14-Jun	Industrial production (yoy)	May	6.5% -	6.5%	6.4% 
⊕⊕	14-Jun	Fixed assets investments (ytd, yoy)	May	8.6% ▼	8.9%	8.8% 
⊕	14-Jun	New yuan loans (CNY bn)	May	1 110 ▲	1 100	1 000 
⊕	14-Jun	Retail sales (yoy)	May	10.7% -	10.7%	10.7% 
Poland 						
⊕⊕⊕⊕	12-Jun	Consumer inflation CPI (yoy) - final data	May	1.9% -	1.9%	--
⊕⊕⊕⊕	13-Jun	Core CPI (excluding food and energy, yoy)	May	0.8% ▼	0.9%	1.0% 
⊕⊕	13-Jun	Trade balance (EUR mn)	Apr	86.0 ▲	- 218	- 374 
⊕⊕	13-Jun	Exports (EUR mn)	Apr	15 176 ▼	17 798	15 650 
⊕⊕	13-Jun	Current account balance (EUR mn)	Apr	- 275 ▲	- 738	- 276 
⊕	14-Jun	M3 money supply (yoy)‡	May	6.2% ▼	6.7%	6.5% 
⊕⊕	19-Jun	Average gross salary (yoy)	May	5.4% ▲	4.1%	4.9% 
⊕	19-Jun	Employment (yoy)	May	4.5% ▼	4.6%	4.6% 
⊕⊕⊕⊕	20-Jun	Sold industrial production (yoy)	May	9.1% ▲	-0.6%	8.5% 
⊕⊕⊕	20-Jun	Retail sales (yoy)	May	8.4% ▲	8.1%	9.2% 
⊕⊕	20-Jun	Producer inflation PPI (yoy)‡	May	2.5% ▼	4.2%	2.9% 
⊕	22-Jun	Budget balance (ytd)‡	May	0.3% ▼	1.7%	--
US 						
⊕⊕⊕⊕⊕	14-Jun	FOMC base rate decision - upper bound (Fed)	Jun	1.25% ▲	1.00%	1.25% 
⊕⊕⊕⊕⊕	14-Jun	FOMC base rate decision - lower bound (Fed)	Jun	1.00% ▲	0.75%	1.00% 
⊕⊕⊕⊕	14-Jun	Consumer inflation CPI (mom)	May	-0.1% ▼	0.2%	0.0% 
⊕⊕⊕⊕	14-Jun	Consumer inflation CPI (yoy)	May	1.9% ▼	2.2%	2.0% 
⊕⊕	14-Jun	Retail sales (excluding autos, mom)‡	May	-0.3% ▼	0.4%	0.1% 
⊕⊕⊕⊕	15-Jun	Industrial production (mom)‡	May	0.0% ▼	1.1%	0.2% 
⊕⊕	15-Jun	Philadelphia Fed business outlook	Jun	27.6 ▼	38.8	24.9 
⊕	15-Jun	Capacity utilization	May	76.6% ▼	76.7%	76.8% 
⊕⊕	16-Jun	University of Michigan confidence index - preliminary data	Jun	94.5 ▼	97.1	97.0 
⊕⊕⊕	23-Jun	Composite PMI - preliminary data	Jun	53.0 ▼	53.6	--
⊕⊕⊕	23-Jun	Manufacturing PMI - preliminary data	Jun	52.1 ▼	52.7	53.0 
⊕⊕⊕	23-Jun	PMI services - preliminary data	Jun	53.0 ▼	53.6	53.5 
Eurozone 						
⊕	13-Jun	ZEW survey expectations	Jun	37.7 ▲	35.1	--
⊕⊕⊕⊕	14-Jun	Industrial production (sa, mom)‡	Apr	0.5% ▲	0.2%	0.5% 
⊕⊕⊕⊕	14-Jun	Industrial production (wda, yoy)‡	Apr	1.4% ▼	2.2%	1.4% 
⊕	15-Jun	Trade balance (EUR mn)	Apr	17.9 ▼	30.9	28.5 
⊕⊕⊕⊕	16-Jun	Consumer inflation CPI (yoy) - final data‡	May	1.4% ▼	1.9%	1.4% 
⊕⊕⊕⊕	16-Jun	Core CPI (yoy) - final data	May	0.9% -	0.9%	0.9% 
⊕⊕	16-Jun	Labour costs (yoy)‡	1Q	1.5% -	1.5%	--
⊕	22-Jun	Consumer confidence - estimation	Jun	- 1.3 ▲	- 3.3	- 3.0 
⊕⊕⊕	23-Jun	Composite PMI - preliminary data	Jun	55.7 ▼	56.8	56.6 
⊕⊕⊕	23-Jun	Manufacturing PMI - preliminary data	Jun	57.3 ▲	57.0	56.8 
⊕⊕⊕	23-Jun	Services PMI - preliminary data	Jun	54.7 ▼	56.3	56.1 

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
⊕⊕⊕⊕	14-Jun	Harmonized consumer inflation HICP (yoy) - final data	May	1.4% -	1.4%	1.4% ○
⊕⊕⊕⊕	14-Jun	Consumer inflation CPI (yoy) - final data	May	1.5% -	1.5%	1.5% ○
⊕⊕⊕	23-Jun	Composite PMI - preliminary data	Jun	56.1 ▼	57.4	57.2 ◡
⊕⊕⊕	23-Jun	Manufacturing PMI - preliminary data	Jun	59.3 ▼	59.5	59.0 ◡
France 						
⊕⊕⊕⊕	15-Jun	Harmonized consumer inflation HICP (yoy) - final data	May	0.9% -	0.9%	0.9% ○
⊕⊕⊕⊕	15-Jun	Consumer inflation CPI (yoy) - final data	May	0.8% -	0.8%	0.8% ○
⊕⊕⊕⊕⊕	23-Jun	GDP (yoy) - final data	1Q	1.1% ▲	1.0%	1.0% ◡
⊕⊕⊕⊕⊕	23-Jun	GDP (qoq) - final data	1Q	0.5% ▲	0.4%	0.4% ◡
⊕⊕⊕	23-Jun	Composite PMI - preliminary data	Jun	55.3 ▼	56.9	56.7 ◡
⊕⊕⊕	23-Jun	Manufacturing PMI - preliminary data	Jun	55.0 ▲	53.8	54.0 ◡
Italy 						
⊕⊕⊕⊕	12-Jun	Industrial production (wda, yoy)‡	Apr	1.0% ▼	2.9%	2.5% ◡
⊕⊕⊕⊕	15-Jun	Harmonized consumer inflation HICP (yoy) - final data	May	1.6% ▲	1.5%	1.5% ◡
UK 						
⊕⊕⊕⊕	13-Jun	Consumer inflation CPI (yoy)	May	2.9% ▲	2.7%	2.7% ◡
⊕⊕	14-Jun	Unemployment rate (ILO, 3-months)	Apr	4.6% -	4.6%	4.6% ○
⊕⊕⊕⊕⊕	15-Jun	BoE base rate decision	Jun	0.25% -	0.25%	0.25% ○
⊕⊕⊕⊕	15-Jun	BoE asset purchase target (GBP bn)	Jun	435 -	435	435 ○
Japan 						
⊕⊕⊕⊕	14-Jun	Industrial production (yoy) - final data	Apr	5.7% -	5.7%	--
⊕⊕⊕	23-Jun	Manufacturing PMI - preliminary data	Jun	52.0 ▼	53.1	--
Chile 						
⊕⊕⊕⊕⊕	16-Jun	BCCh overnight rate target	Jun	2.50% -	2.50%	2.50% ○
Canada 						
⊕⊕⊕⊕	23-Jun	Consumer inflation CPI (yoy)	May	1.3% ▼	1.6%	1.5% ◡

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

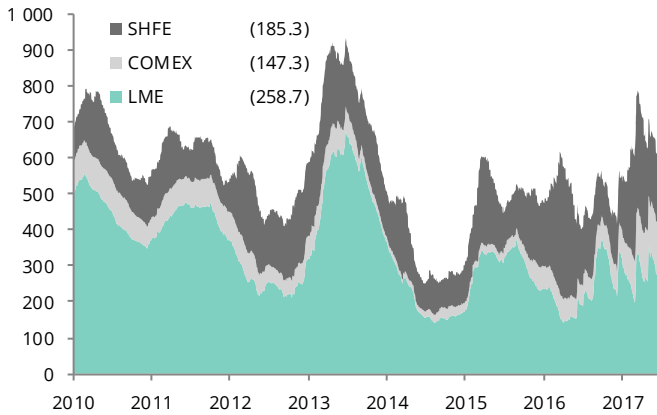
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 23-Jun-17)</i>		Price change °					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	5 774.00	▲ 0.6%	▼ -1.3%	▲ 5.0%	▲ 21.6%	5 744.88	5 466.00	6 145.00	
Molybdenum	16 000.00	▼ -8.6%	▲ 4.9%	▲ 4.9%	▼ -5.9%	15 797.92	15 250.00	17 500.00	
Nickel	9 170.00	▲ 4.1%	▼ -7.1%	▼ -8.4%	▼ -0.1%	9 786.08	8 715.00	11 045.00	
Aluminum	1 868.00	▼ -1.8%	▼ -4.0%	▲ 9.0%	▲ 14.7%	1 879.41	1 701.00	1 962.00	
Tin	19 495.00	▲ 1.8%	▼ -3.0%	▼ -7.6%	▲ 13.5%	20 011.13	18 760.00	21 300.00	
Zinc	2 725.00	▲ 9.9%	▼ -2.1%	▲ 6.3%	▲ 34.0%	2 688.39	2 434.50	2 971.00	
Lead	2 186.50	▲ 4.3%	▼ -5.3%	▲ 10.2%	▲ 27.1%	2 219.02	2 007.00	2 442.00	
LBMA (USD/troz)									
Silver	16.71	▼ -3.7%	▼ -7.5%	▲ 2.9%	▼ -3.4%	17.35	15.95	18.56	
Gold ¹	1 255.70	▼ -0.9%	▲ 0.9%	▲ 8.3%	▼ -0.5%	1 237.26	1 151.00	1 293.50	
LPPM (USD/troz)									
Platinum ¹	927.00	▼ -1.3%	▼ -1.4%	▲ 2.2%	▼ -3.7%	961.41	897.00	1 033.00	
Palladium ¹	886.00	▼ -1.1%	▲ 11.0%	▲ 31.1%	▲ 58.2%	790.55	706.00	898.00	
FX ³									
EURUSD	1.1173	▼ 0.0%	▲ 4.5%	▲ 6.0%	▼ -1.9%	1.0812	1.0385	1.1258	
EURPLN	4.2255	▲ 0.9%	▲ 0.1%	▼ -4.5%	▼ -3.5%	4.2713	4.1737	4.4002	
USDPLN	3.7824	▲ 1.0%	▼ -4.1%	▼ -9.5%	▼ -2.0%	3.9542	3.7066	4.2271	
USDCAD	1.3268	▼ -1.4%	▼ -0.3%	-	-	1.3353	1.3016	1.3743	
USDCNY	6.8366	▲ 0.6%	▼ -0.7%	▼ -1.6%	▲ 3.9%	6.8768	6.7917	6.9640	
USDCLP	664.00	▼ -0.3%	▲ 0.2%	▼ -0.5%	▼ -1.3%	659.89	638.35	679.05	
Money market									
3m LIBOR USD	1.293	▲ 0.06	▲ 0.14	▲ 0.30	▲ 0.65	1.130	0.999	1.296	
3m EURIBOR	-0.331	-	▼ 0.00	▼ -0.01	▼ -0.06	-0.329	-0.332	-0.319	
3m WIBOR	1.730	-	-	-	▲ 0.02	1.730	1.730	1.730	
5y USD interest rate swap	1.819	▼ -0.03	▼ -0.23	▼ -0.16	▲ 0.60	1.963	1.797	2.239	
5y EUR interest rate swap	0.140	▲ 0.01	▼ -0.04	▲ 0.07	▲ 0.15	0.171	0.078	0.321	
5y PLN interest rate swap	2.230	▲ 0.00	▼ -0.13	▼ -0.17	▲ 0.28	2.425	2.165	2.625	
Fuel									
WTI Cushing	42.81	▼ -6.6%	▼ -15.4%	▼ -20.3%	▼ -13.0%	50.11	42.31	54.10	
Brent	45.18	▼ -5.0%	▼ -14.3%	▼ -18.5%	▼ -8.8%	52.29	44.21	56.46	
Diesel NY (ULSD)	136.04	▼ -4.3%	▼ -13.5%	▼ -19.9%	▼ -10.1%	154.82	135.85	167.82	
Others									
VIX	10.02	▼ -0.68	▼ -2.35	▼ -4.02	▼ -7.23	11.59	9.75	15.96	
BBG Commodity Index	79.64	▼ -3.4%	▼ -6.7%	▼ -9.0%	▼ -9.9%	85.23	79.36	89.36	
S&P500	2 438.30	▲ 0.3%	▲ 3.2%	▲ 8.9%	▲ 15.4%	2 359.48	2 257.83	2 453.46	
DAX	12 733.41	▼ -0.6%	▲ 3.4%	▲ 10.9%	▲ 24.1%	12 157.24	11 509.84	12 888.95	
Shanghai Composite	3 157.87	▼ 0.0%	▼ -2.0%	▲ 1.7%	▲ 9.2%	3 173.71	3 052.79	3 288.97	
WIG 20	2 304.48	▼ -1.1%	▲ 5.9%	▲ 18.3%	▲ 24.3%	2 222.41	1 989.64	2 413.53	
KGHM	108.80	▼ -5.0%	▼ -6.0%	▲ 17.6%	▲ 68.4%	118.27	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

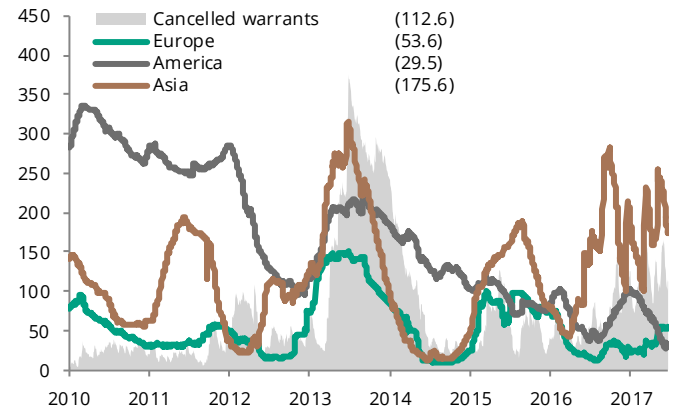
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



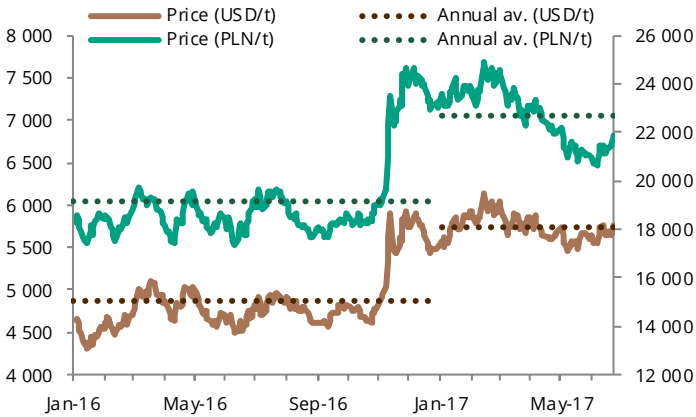
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



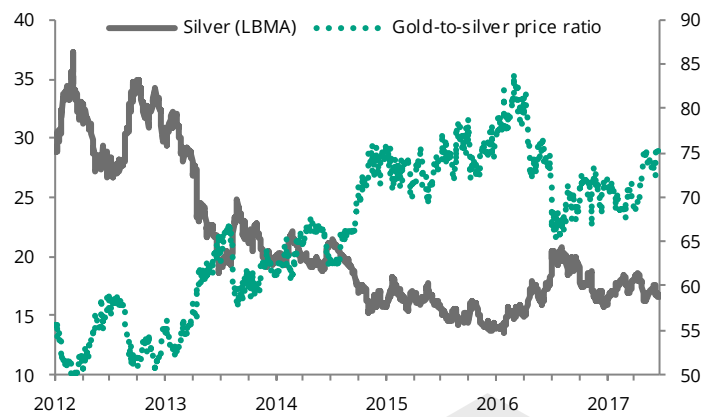
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



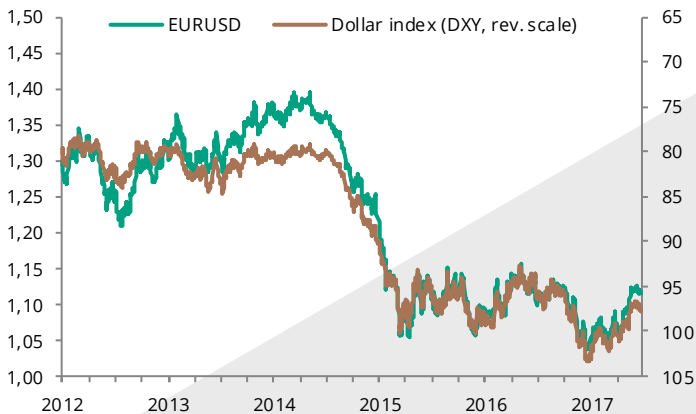
Source: Bloomberg, KGHM Polska Miedź

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



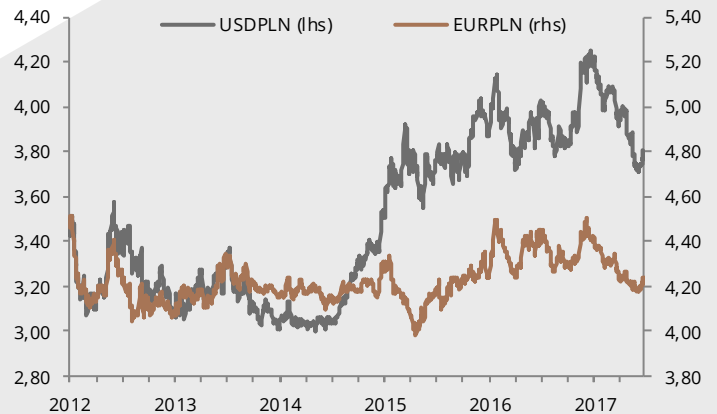
Source: Bloomberg, KGHM Polska Miedź

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: **12th – 25th June 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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