

# Market Overview

as of: 21<sup>st</sup> August 2017

- Copper:** Prices on the market continued to move higher although it is highly unlikely that fundamentals are entirely responsible for such market dynamics. It seems that several technical resistance points as well as funds' flows and general positioning are the key factors to watch. Commitment of Traders report shows the largest long position in the COMEX copper in the history (2006+). On the top of that, higher copper prices are starting to renew interest in the possible mining projects in Chile, according to the recent Cochilco presentation (*page 2*).
- Precious metals:** Gold prices in recent two weeks have reached the highest level in more than nine months as the dollar retreated on political uncertainty in the United States and a suspected Islamist militant attack in Spain boosted bullion's safe-haven appeal. Moreover, the recent soft patch in U.S. data has put serious doubts over whether there will be another rate hike coming from the Fed this year so investors are less worried about gold price growth and are keener to buy (*page 4*).
- China:** China continues to enjoy strong growth – projected at 6.7% for 2017. And the country has potential to sustain strong growth over the medium term. But to do so safely requires speeding up reforms to make growth less reliant on debt and investment, the IMF said in its latest annual assessment of the economy (*page 6*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▲ Copper	6 453.00	1.9%
▲ Nickel	10 730.00	3.8%
<b>LBMA (USD/troz)</b>		
▲ Silver	17.15	2.7%
▲ Gold (PM)	1 295.80	3.0%
<b>FX</b>		
▼ EURUSD	1.1740	-1.1%
▲ EURPLN	4.2826	0.9%
▲ USDPLN	3.6459	2.1%
▼ USDCAD	1.2586	-0.4%
▼ USDCLP	645.29	-0.8%
<b>Stocks</b>		
▼ KGHM	118.70	-1.0%

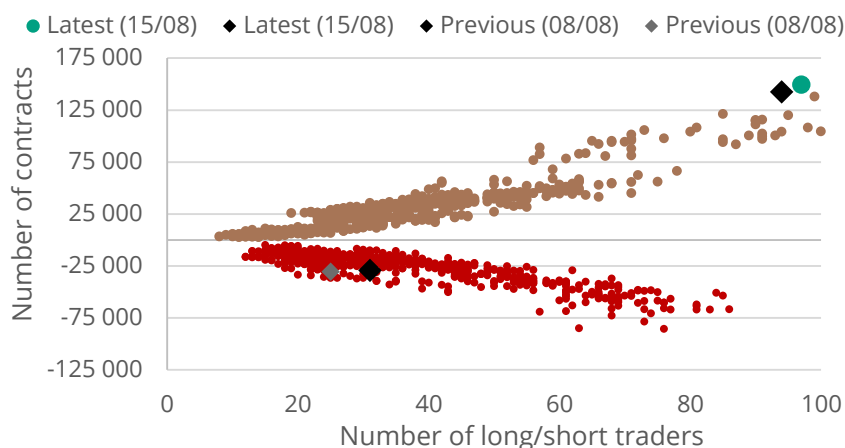
Source: Bloomberg, KGHM Polska Miedź; (*more on page 9*)

## Important macroeconomic data

Release	For		
 GDP (sa, yoy)	2Q	2.2%	▲
 CPI (yoy)	Jul	1.7%	▲
 GDP (yoy)	2Q	3.9%	▼
 Industr. prod. (wda, yoy)	Jun	2.4%	▼
 Copper exports (\$)	Jul	2 451	▼

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

## Copper COMEX long positioning is the largest since the inception of the data published by CFTC



Source: Bloomberg, KGHM Polska Miedź

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## Base and precious metals | Other commodities

### Copper

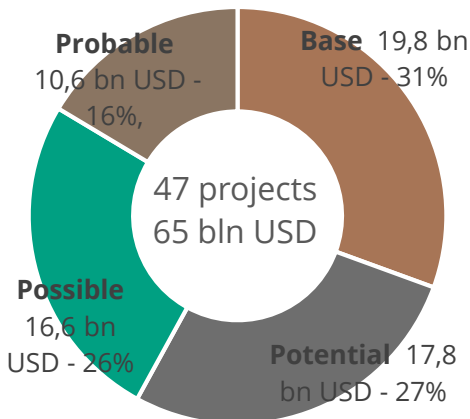
Prices on the market continued to move higher although it is highly unlikely that fundamentals are entirely responsible for such market dynamics. It seems that several technical resistance points as well as funds' flows and general positioning are the key factors to watch. Commitment of Traders report shows the largest long position in the COMEX copper in the history (2006+). On the top of that, higher copper prices are starting to renew interest in the possible mining projects in Chile, according to the recent Cochilco presentation.

#### Chilean Miners Lift Investment Plans On Higher Copper Prices

Top copper-producing country Chile is expecting mining companies to sharply increase their investments over the next 10 years, driven by growth in metal prices, with 90% of funds going toward copper projects. An updated investment report released on August 7 by Cochilco shows forecast investments of \$65 billion in the coming decade, up from the previous estimate of \$49.2 billion for 2016 to 2025 (increase of 32%). The figure will be spread cross 37 projects and marks the first annual increase in forecast investment after four years of successive declines. According to Cochilco, the report mentions 11 new investment projects that were not part of the portfolio in 2016. They include the \$3.5 billion Nueva Union joint venture between Goldcorp and Teck, an overhaul of the state-owned Paipote copper smelter, and a \$370 million project to leach copper from concentrates. Two projects were removed from the list after they entered production last year: Codelco's Molyb processing plant (\$425 million) and modifications at Antofagasta's El Tesoro mine. Meanwhile, the Caspiche copper-gold project was removed from the list following its acquisition by Goldcorp earlier this year, probably to combine with the Cerro Casale deposit under a joint venture with Barrick Gold. A recent surge in copper prices has benefited investments in the sector, although some fear that costs will go up as in previous cycles.

Source: Reuters

#### Mining projects forecast in Chile in years 2017 - 2026



Source: Cochilco, KGHM Polska Miedź

Source: Bloomberg

#### Who is missing the copper price surge?

As copper producers from Freeport-McMoRan Inc. to BHP Billiton Ltd. ponder what to do with the windfall from surging prices, First Quantum Minerals Ltd. has no such dilemma. Unlike most of its peers, First Quantum's copper sales are fully hedged – at an expected average price of \$2.37 a pound for the second half of the year, completely cutting the price potential. That means it's largely watching from the sidelines as the metal surges above \$2.90 for the first time in more than two years. The Vancouver-based company began hedging in 2015 to lock in the value of its output so as to avoid breaching debt covenants while developing a project in Panama. But as copper has risen more than 30 percent in the past year, the trade has proven to be a liability: the company posted a net loss of \$35 million

in the second quarter as its hedge book lost \$97 million. It plans to continue hedging next year, although to a lesser extent. As President Clive Newall told analysts on earnings call, FQM is not a strategic long-term hedger of the copper price as we believe really in the positive fundamentals of copper. However, this program is said to protect cash flows and covenants as FQM develops the Cobre Panama project. According to Chief Financial Officer Hannes Otto Meyer, for copper sales in the first half of 2018, First Quantum is only 30 percent hedged and plans to use mechanisms to secure a greater benefit if prices remain strong. Currently the 2018 hedge book is structured so that the company will never get less than \$2.59 a pound for its copper or more than \$2.80 (participation cap). When copper trades between those two levels, it receives the market price.

### Other important information on copper market:

- *[source: Reuters]* The global world refined copper market showed a 45,000 tonnes deficit in May, compared with a 84,000 tonnes deficit in April, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 5 months of the year, the market was in a 14,000 tonnes surplus compared with a 282,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in May was 1.96 million tonnes, while consumption was 2.00 million tonnes. Bonded stocks of copper in China showed a 83,000 tonnes deficit in May compared with a 89,000 tonnes deficit in April.
- *[source: Metal Bulletin]* The London Metal Exchange's average daily volumes (ADV) increased in July for the first time since February, helped by copper and zinc volumes climbing. Copper's ADV is 6.1% higher than last year at 145,744 lots. This follows significant declines in volume over the last few months, down 26.5% year on year in June. Zinc continued to see an improvement, with the metal's ADV in July up 7.2% on last year to 118,755 lots, following an annual rise of 9.4% in the previous month. Aluminium was still the largest traded metal, but its ADV dropped by 7.7% year on year to 185,141 lots in June. Declines were also recorded in the rest of the base metals complex: lead dropped 10.1% year on year to 37,489 lots, nickel edged just 0.5% lower at 85,820 lots and tin's ADV fell 3.9% to 5,555 lots. Cobalt's ADV declined 24.4% in the year to 14 lots, while molybdenum remained untraded.
- *[source: Metal Bulletin]* Chile's copper mine production fell 9% year on year in the first half of 2017, heavily affected by the 44-day strike at Escondida. Output totalled 2.518 million tonnes in the year to June, compared with 2.77 million tonnes in the corresponding period of 2016, according to preliminary figures from Chile's copper commission, Cochilco. This is the lowest first-half volume since 2005, when Chile's copper production totalled 2.517 million tonnes. The country's production was primarily affected by the lower volumes generated at BHP's Escondida copper mine, which faced the longest strike in Chilean mining history in the first quarter of the year. The company produced

323,900 tonnes of the red metal in the first six months of 2017, 40% less than a year earlier. According to Cochilco, total production from state-owned Codelco declined 6% in the first half of 2017 from a year earlier, to 851,000 tonnes. The figure includes production from all of Codelco's divisions, as well as its 49% stake in El Abra and its 20% share in Anglo American Sur. Antofagasta's Los Pelambres mine saw its production drop 4.4% in the first six months of 2017 from the year before, to 170,200 tonnes. In contrast, production at Collahuasi mine increased 1.3% in the first half of 2017 from a year earlier, to 246,900 tonnes, Cochilco said.

## Precious Metals

**Gold prices in recent two weeks have reached the highest level in more than nine months as the dollar retreated on political uncertainty in the United States and a suspected Islamist militant attack in Spain boosted bullion's safe-haven appeal. Moreover, the recent soft patch in U.S. data has put serious doubts over whether there will be another rate hike coming from the Fed this year so investors are less worried about gold price growth and are keener to buy.**

### Germany repatriates its gold reserves

Germany's central bank has brought much of its gold reserve back to Frankfurt, the Bundesbank said recently, restoring a bulwark of economic stability the country had stashed away at the height of the Cold War. Safe havens like New York, London and Paris, the 3,378-tonne, 140 billion-euro gold stockpile had been a symbol of Germany's ascent, insulating the economy even when others struggled. But as the rest of the euro zone stumbled from crisis to crisis over the past decade, the German public grew uneasy about keeping the gold abroad. Some even questioned whether the gold is still there. In secretive operation spanning five years, the Bundesbank moved 674 tonnes of gold back from the Banque de France in Paris and the Federal Reserve Bank of New York. Just over half of all Bundesbank gold is now stored in its own vaults in Frankfurt. Most of the rest - 1,236 tonnes - will remain in New York indefinitely. A smaller portion, 432 tonnes, will be held at the Bank of England in London. Hoping to soothe the public and ease speculation about the existence of the gold, the Bundesbank released a 2,300-page list of gold bars in 2015, promising increased transparency to calm wary Germans. During the Cold War, 98 percent of the gold was stored abroad. The biggest chunk moved so far, some 931 tonnes, was brought back from the Bank of England in 2000.

### AngloGold Ashanti is considering separating its South African

Africa's top bullion producer has hired Deutsche Bank to evaluate options of separating its South African assets from the rest of its portfolio. The miner is looking at listing its international assets, which include gold mines in Western Australia and Brazil, in London, while the South African assets, some of which will

be sold as part of the plan, will remain in the existing Johannesburg listing. Investors speculate that the bullion producer Harmony Gold is likely to buy some of the assets AngloGold plans to offload in South Africa. In 2016, AngloGold's South African operations produced 967,000 ounces of gold, or 26 percent of its total output. The company said in June it could cut up to 8,500 jobs in South Africa as part of a restructuring after heavy losses. AngloGold, which operates in nine countries including Ghana, Mali, Tanzania, Brazil and Australia, is rated just above junk by credit agency Moody's, while S&P has the miner in junk status with a stable outlook. Should the spinoff happen, AngloGold would be the latest miner to reduce exposure to South Africa, where political instability, controversial new mining rules and a stronger rand have made it less attractive to operate.

## Global economies | Foreign exchange markets

### China: IMF sees dynamic GDP growth in the medium term

**China continues to enjoy strong growth – projected at 6.7% for 2017. And the country has potential to sustain strong growth over the medium term. But to do so safely requires speeding up reforms to make growth less reliant on debt and investment, the IMF said in its latest annual assessment of the economy.**

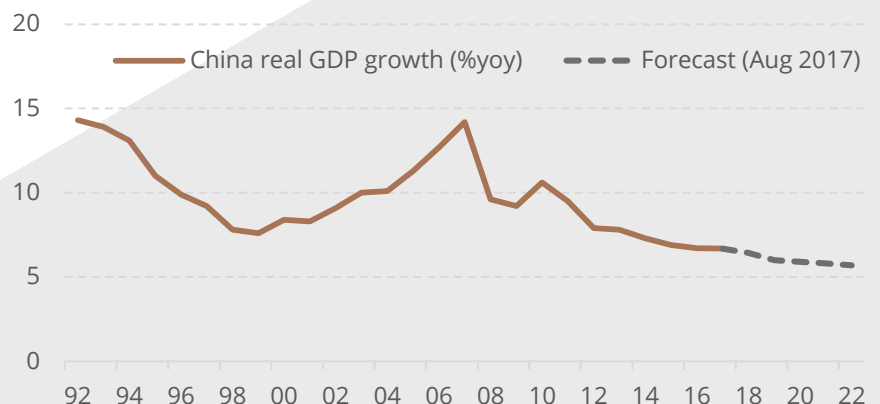
Source: International Monetary Fund

China continues to transition to a more sustainable growth path and reforms have advanced across a wide domain. Growth slowed to 6.7% in 2016 and is projected to remain robust at 6.7% this year owing to the momentum from last year's policy support, strengthening external demand, and progress in domestic reforms. Inflation rose to 2% in 2016 and is expected to remain stable at 2% in 2017. Important supervisory and regulatory action is being taken against financial sector risks, and corporate debt is growing more slowly, reflecting restructuring initiatives and overcapacity reduction.

Fiscal policy remained expansionary and credit growth remained strong in 2016. Growth momentum will likely decline over the course of the year reflecting recent regulatory measures which have tightened financial conditions and contributed to a declining credit impulse.

The current account surplus fell to 1.7% of GDP in 2016, driven by a sharp recovery in goods imports and continued strength in tourism outflows. It is projected to further narrow to 1.4% of GDP this year, due primarily to robust domestic demand and a deterioration in terms of trade. Capital outflows have moderated amid tighter enforcement of capital flow management measures and more stable exchange rate expectations. After depreciating 5% in real effective terms in 2016, the renminbi has depreciated some 2% since then and remains broadly in line with fundamentals.






**Chinese economy is maturing thus the potential will continue to fall according to IMF Staff projections**



Source: IMF, KGHM Polska Miedź

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>China</b> 							
⊕	07-Aug	Foreign reserves (USD bn)	Jul	3 081 ▲	3 057	3 075	▲
⊕⊕	08-Aug	Trade balance (USD bn)‡	Jul	46.7 ▲	42.8	45.0	▲
⊕⊕	08-Aug	Exports (yoy)	Jul	7.2% ▼	11.3%	11.0%	◡
⊕⊕⊕⊕	09-Aug	Consumer inflation CPI (yoy)	Jul	1.4% ▼	1.5%	1.5%	◡
⊕⊕	09-Aug	Producer inflation PPI (yoy)	Jul	5.5% -	5.5%	5.6%	◡
⊕⊕⊕⊕	14-Aug	Industrial production (yoy)	Jul	6.4% ▼	7.6%	7.1%	◡
⊕⊕	14-Aug	Fixed assets investments (ytd, yoy)	Jul	8.3% ▼	8.6%	8.6%	◡
⊕	14-Aug	Retail sales (yoy)	Jul	10.4% ▼	11.0%	10.8%	◡
⊕	15-Aug	New yuan loans (CNY bn)	Jul	826 ▼	1 540	800	▲
<b>Poland</b> 							
⊕⊕⊕⊕	11-Aug	Consumer inflation CPI (yoy) - final data	Jul	1.7% -	1.7%	--	○
⊕⊕	11-Aug	Trade balance (EUR mn)‡	Jun	- 227 ▲	- 277	120	◡
⊕⊕	11-Aug	Exports (EUR mn)‡	Jun	16 627 ▲	16 501	16 609	▲
⊕⊕	11-Aug	Current account balance (EUR mn)‡	Jun	- 932 ▼	- 298	- 827	◡
⊕⊕⊕⊕	14-Aug	Core CPI (excluding food and energy, yoy)	Jul	0.8% -	0.8%	0.8%	○
⊕⊕⊕⊕⊕	16-Aug	GDP (yoy) - preliminary data	2Q	3.9% ▼	4.0%	3.8%	▲
⊕⊕⊕⊕⊕	16-Aug	GDP (qoq) - preliminary data	2Q	1.1% -	1.1%	0.8%	▲
⊕	16-Aug	Budget balance (ytd)	Jul	--	--	--	○
⊕⊕	17-Aug	Average gross salary (yoy)	Jul	4.9% ▼	6.0%	5.4%	◡
⊕	17-Aug	Employment (yoy)	Jul	4.5% ▲	4.3%	4.3%	▲
⊕⊕⊕⊕	18-Aug	Sold industrial production (yoy)	Jul	6.2% ▲	4.5%	8.4%	◡
⊕⊕⊕	18-Aug	Retail sales (yoy)	Jul	7.1% ▲	6.0%	7.9%	◡
⊕⊕	18-Aug	Producer inflation PPI (yoy)	Jul	2.2% ▲	1.8%	2.0%	▲
<b>US</b> 							
⊕⊕⊕⊕	11-Aug	Consumer inflation CPI (mom)	Jul	0.1% ▲	0.0%	0.2%	◡
⊕⊕⊕⊕	11-Aug	Consumer inflation CPI (yoy)	Jul	1.7% ▲	1.6%	1.8%	◡
⊕⊕	15-Aug	Retail sales (excluding autos, mom)‡	Jul	0.5% ▲	0.1%	0.3%	▲
⊕⊕⊕⊕	17-Aug	Industrial production (mom)	Jul	0.2% ▼	0.4%	0.3%	◡
⊕⊕	17-Aug	Philadelphia Fed business outlook	Aug	18.9 ▼	19.5	18.0	▲
⊕	17-Aug	Capacity utilization‡	Jul	76.7% -	76.7%	76.7%	○
⊕⊕	18-Aug	University of Michigan confidence index - preliminary data	Aug	97.6 ▲	93.4	94.0	▲
<b>Eurozone</b> 							
⊕⊕⊕⊕	14-Aug	Industrial production (sa, mom)‡	Jun	-0.6% ▼	1.2%	-0.5%	◡
⊕⊕⊕⊕	14-Aug	Industrial production (wda, yoy)‡	Jun	2.6% ▼	3.9%	2.8%	◡
⊕⊕⊕⊕⊕	16-Aug	GDP (sa, yoy) - preliminary data	2Q	2.2% ▲	2.1%	2.1%	▲
⊕⊕⊕⊕⊕	16-Aug	GDP (sa, qoq) - preliminary data	2Q	0.6% -	0.6%	0.6%	○
⊕⊕⊕⊕	17-Aug	Consumer inflation CPI (yoy) - final data	Jul	1.3% -	1.3%	1.3%	○
⊕⊕⊕⊕	17-Aug	Core CPI (yoy) - final data	Jul	1.2% -	1.2%	1.2%	○
⊕	17-Aug	Trade balance (EUR mn)	Jun	26.6 ▲	21.4	25.0	▲
<b>Germany</b> 							
⊕⊕⊕⊕	07-Aug	Industrial production (wda, yoy)‡	Jun	2.4% ▼	4.8%	3.7%	◡
⊕⊕⊕⊕	11-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	1.5% -	1.5%	1.5%	○
⊕⊕⊕⊕	11-Aug	Consumer inflation CPI (yoy) - final data	Jul	1.7% -	1.7%	1.7%	○
⊕⊕⊕⊕⊕	15-Aug	GDP (yoy) - preliminary data‡	2Q	0.8% ▼	3.2%	0.6%	▲
⊕⊕⊕⊕⊕	15-Aug	GDP (sa, qoq) - preliminary data‡	2Q	0.6% ▼	0.7%	0.7%	◡

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>France</b>						
⊕⊕⊕⊕	10-Aug	Industrial production (yoy)‡	Jun	2.6% ▼	3.1%	3.1% ◡
⊕⊕⊕⊕	11-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	0.8% -	0.8%	0.8% ○
⊕⊕⊕⊕	11-Aug	Consumer inflation CPI (yoy) - final data	Jul	0.7% -	0.7%	0.7% ○
<b>Italy</b>						
⊕⊕⊕⊕	09-Aug	Industrial production (wda, yoy)‡	Jun	5.3% ▲	2.7%	3.5% ◡
⊕⊕⊕⊕	11-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	1.2% -	1.2%	1.2% ○
⊕⊕⊕⊕⊕	16-Aug	GDP (wda, yoy) - preliminary data	2Q	1.5% ▲	1.2%	1.4% ◡
⊕⊕⊕⊕⊕	16-Aug	GDP (wda, qoq) - preliminary data	2Q	0.4% -	0.4%	0.4% ○
<b>UK</b>						
⊕⊕⊕⊕	10-Aug	Industrial production (yoy)	Jun	0.3% ▲	-0.2%	-0.1% ◡
⊕⊕⊕⊕	15-Aug	Consumer inflation CPI (yoy)	Jul	2.6% -	2.6%	2.7% ◡
⊕⊕	16-Aug	Unemployment rate (ILO, 3-months)	Jun	4.4% ▼	4.5%	4.5% ◡
<b>Japan</b>						
⊕⊕⊕⊕⊕	14-Aug	GDP (annualized, qoq) - preliminary data‡	2Q	4.0% ▲	1.5%	2.5% ◡
⊕⊕⊕⊕⊕	14-Aug	GDP (qoq, sa) - preliminary data‡	2Q	1.0% ▲	0.4%	0.6% ◡
⊕⊕⊕⊕	15-Aug	Industrial production (yoy) - final data	Jun	5.5% ▲	4.9%	--
<b>Chile</b>						
⊕⊕⊕⊕	07-Aug	Economic activity (yoy)	Jun	1.4% ▲	1.3%	1.1% ◡
⊕⊕⊕	07-Aug	Copper exports (USD mn)‡	Jul	2 451 ▼	2 776	--
⊕⊕	07-Aug	Nominal wages (yoy)	Jun	4.4% -	4.4%	4.4% ○
⊕⊕⊕⊕	08-Aug	Consumer inflation CPI (yoy)	Jul	1.7% -	1.7%	1.6% ◡
⊕⊕⊕⊕⊕	17-Aug	BCCh overnight rate target	Aug	2.50% -	2.50%	2.50% ○
⊕⊕⊕⊕⊕	18-Aug	GDP (yoy)‡	2Q	0.9% ▲	0.1%	1.0% ◡
<b>Canada</b>						
⊕⊕⊕⊕	18-Aug	Consumer inflation CPI (yoy)	Jul	1.2% ▲	1.0%	1.2% ○

<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

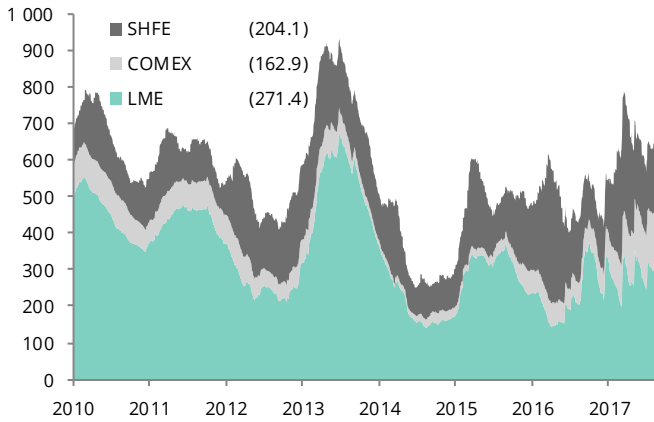
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 18-Aug-17)</i>		Price change °					From year beginning <sup>2</sup>		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t)</b>									
Copper	6 453.00	▲ 1.9%	▲ 9.2%	▲ 17.3%	▲ 34.4%	5 833.51	5 466.00	6 465.00	
Molybdenum	16 000.00	- 0.0%	- 0.0%	▲ 4.9%	- 0.0%	15 848.44	15 250.00	17 500.00	
Nickel	10 730.00	▲ 3.8%	▲ 15.6%	▲ 7.2%	▲ 3.9%	9 785.72	8 715.00	11 045.00	
Aluminum	2 104.50	▲ 11.3%	▲ 10.3%	▲ 22.8%	▲ 24.5%	1 892.69	1 701.00	2 104.50	
Tin	20 375.00	▼ -2.3%	▲ 0.9%	▼ -3.4%	▲ 10.6%	20 080.88	18 760.00	21 300.00	
Zinc	3 117.00	▲ 11.4%	▲ 13.2%	▲ 21.6%	▲ 35.4%	2 721.28	2 434.50	3 117.00	
Lead	2 389.00	▲ 1.7%	▲ 5.1%	▲ 20.4%	▲ 26.2%	2 238.61	2 007.00	2 457.00	
<b>LBMA (USD/troz)</b>									
Silver	17.15	▲ 2.7%	▲ 4.1%	▲ 5.6%	▼ -13.3%	17.12	15.22	18.56	
Gold <sup>1</sup>	1 295.80	▲ 3.0%	▲ 4.3%	▲ 11.8%	▼ -4.0%	1 240.59	1 151.00	1 295.80	
<b>LPPM (USD/troz)</b>									
Platinum <sup>1</sup>	985.00	▲ 2.0%	▲ 6.8%	▲ 8.6%	▼ -12.2%	954.87	891.00	1 033.00	
Palladium <sup>1</sup>	932.00	▲ 5.4%	▲ 10.8%	▲ 37.9%	▲ 33.0%	810.64	706.00	932.00	
<b>FX <sup>3</sup></b>									
EURUSD	1.1740	▼ -1.1%	▲ 2.9%	▲ 11.4%	▲ 3.7%	1.1004	1.0385	1.1868	
EURPLN	4.2826	▲ 0.9%	▲ 1.3%	▼ -3.2%	▼ 0.0%	4.2646	4.1737	4.4002	
USDPLN	3.6459	▲ 2.1%	▼ -1.6%	▼ -12.8%	▼ -3.6%	3.8832	3.5702	4.2271	
USDCAD	1.2586	▼ -0.4%	▼ -3.0%	-	-	1.3204	1.2447	1.3743	
USDCNY	6.6704	▼ -0.9%	▼ -1.6%	▼ -4.0%	▲ 0.6%	6.8434	6.6470	6.9640	
USDCLP	645.29	▼ -0.8%	▼ -2.7%	▼ -3.3%	▼ -1.9%	658.82	638.35	679.05	
<b>Money market</b>									
3m LIBOR USD	1.315	▲ 0.00	▲ 0.02	▲ 0.32	▲ 0.50	1.174	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	1.831	▼ -0.07	▼ -0.13	▼ -0.14	▲ 0.70	1.950	1.797	2.239	
5y EUR interest rate swap	0.205	▼ -0.04	▼ -0.08	▲ 0.13	▲ 0.35	0.192	0.078	0.326	
5y PLN interest rate swap	2.315	▼ -0.08	▼ -0.04	▼ -0.08	▲ 0.55	2.410	2.165	2.625	
<b>Fuel</b>									
WTI Cushing	48.51	▼ -2.2%	▲ 5.4%	▼ -9.7%	▲ 0.6%	49.37	42.31	54.10	
Brent	52.47	▲ 1.1%	▲ 8.8%	▼ -5.3%	▲ 4.9%	51.57	44.21	56.46	
Diesel NY (ULSD)	160.79	▼ -2.1%	▲ 8.8%	▼ -5.3%	▲ 6.3%	154.80	135.85	167.82	
<b>Others</b>									
VIX	14.26	▲ 4.23	▲ 3.08	▲ 0.22	▲ 2.83	11.45	9.36	16.04	
BBG Commodity Index	83.23	▼ -0.1%	▲ 0.8%	▼ -4.9%	▼ -4.0%	84.66	79.36	89.36	
S&P500	2 425.55	▼ -2.1%	▲ 0.1%	▲ 8.3%	▲ 10.9%	2 382.57	2 257.83	2 480.91	
DAX	12 165.19	▼ -1.1%	▼ -1.3%	▲ 6.0%	▲ 14.7%	12 203.98	11 509.84	12 888.95	
Shanghai Composite	3 268.72	▲ 0.2%	▲ 2.4%	▲ 5.3%	▲ 5.3%	3 188.91	3 052.79	3 292.64	
WIG 20	2 359.87	▼ -0.9%	▲ 2.6%	▲ 21.1%	▲ 29.6%	2 254.29	1 989.64	2 425.02	
KGHM	118.70	▼ -1.0%	▲ 7.3%	▲ 28.4%	▲ 49.9%	117.99	94.00	135.50	

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

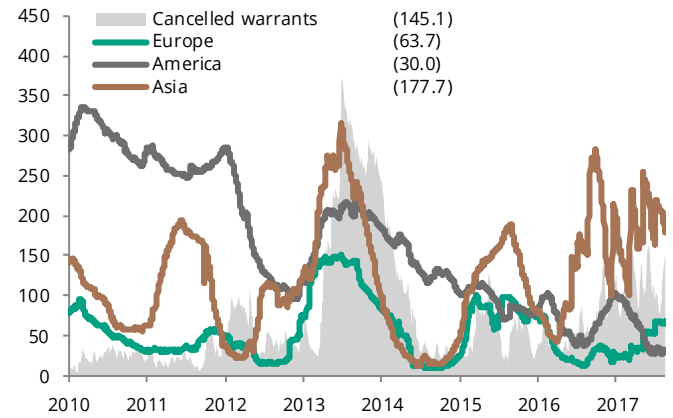
Source: Bloomberg, KGHM

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



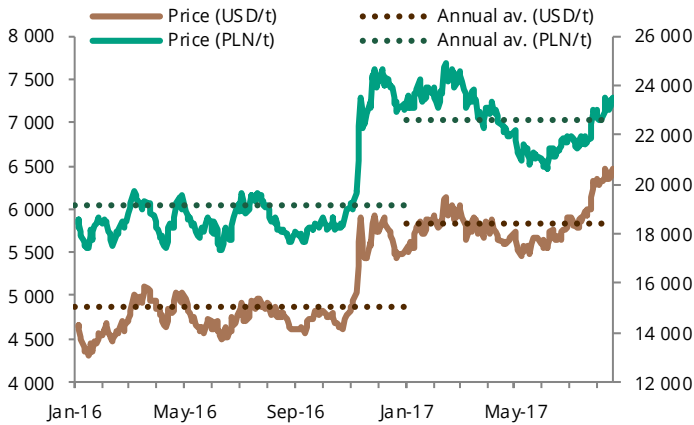
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



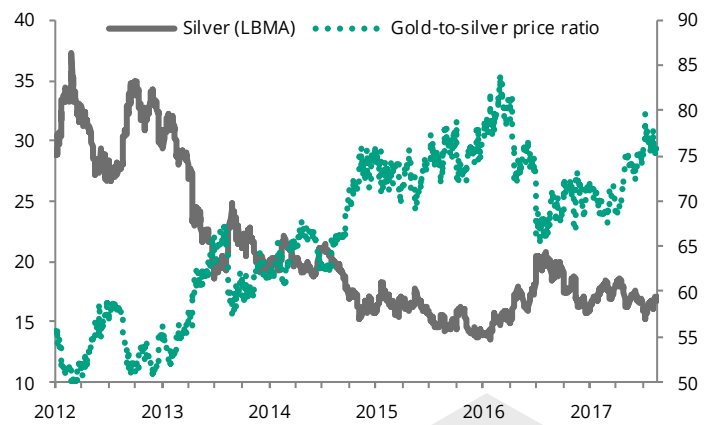
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



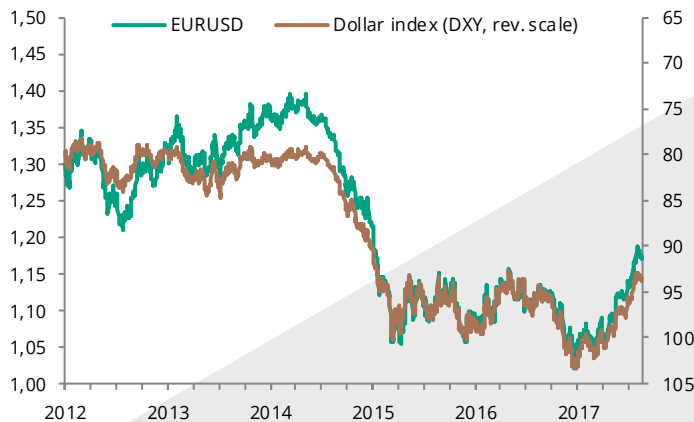
Source: Bloomberg, KGHM Polska Miedź

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



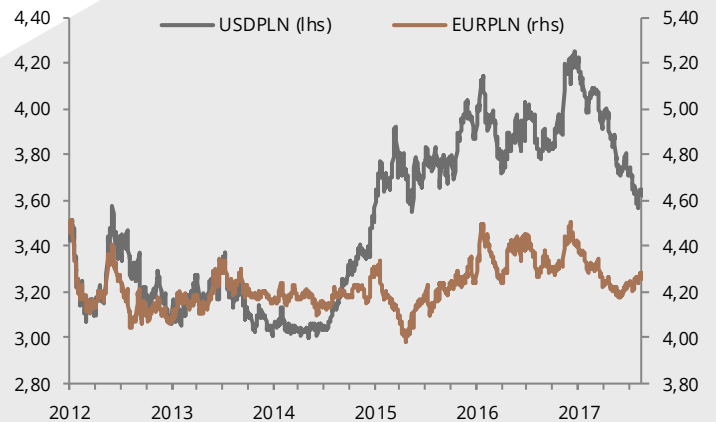
Source: Bloomberg, KGHM Polska Miedź

**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:  
**7<sup>th</sup> – 20<sup>th</sup> 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](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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