

Market Overview

as of: 13th February 2017

- Copper:** Consecutive price spikes were recently mostly related to the supply side developments. The first risk trigger materialized as the miners went on strike in the world largest copper mine – Escondida. The other supply-side risk factor continues to cause troubles as the agreement between Indonesian government and Freeport McMoran regarding concentrate exports is still not resolved (*page 2*).
- Precious Metals:** In first two weeks of February gold continued its move higher but fell in the end of this period. Donald Trump commented that he plans to announce an ambitious tax reform plan to stimulate the economy (that means big tax cuts and support for the dollar). Moreover firm economic data confirmed that Federal Reserve would press ahead with the U.S. interest rate hikes sooner rather than later. All that bullish sentiment for the US economy and the dollar trimmed investor hopes for further growth of gold price (*page 5*).
- Nickel:** Prices on the nickel market are holding up for now although the level of uncertainty is high not only regarding Indonesian rule changes but also due to the Philippines mine closures schedule announcement (*page 6*).
- China:** Prior to the Chinese New Year, People’s Bank of China has injected enormous funds to commercial banks to help them prepare for the withdrawals (=holiday gifts). Then PBoC took the rare step to increase the interest rates on one of its lending facilities by 10bps (*page 8*).

The lack of agreement in Escondida between labor unions and BHP management has been driving the red metal prices sharply



Source: Bloomberg, KGHM Polska Miedź

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	5 872.00	0.4%
▲ Nickel	10 450.00	11.4%
LBMA (USD/troz)		
▲ Silver	17.62	5.5%
▲ Gold (PM)	1 228.30	3.7%
FX		
▼ EUR/USD	1.0629	-0.5%
▼ EUR/PLN	4.3030	-0.9%
▼ USD/PLN	4.0435	-0.4%
▼ USD/CAD	1.3074	-0.3%
▼ USD/CLP	646.82	-0.2%
Stocks		
▲ KGHM	126.85	1.5%

Source: Bloomberg, KGHM Polska Miedź; (*more on page 12*)

Important macroeconomic data

Release	For		
Official manuf. PMI	Jan	51.3	▼
Manufacturing PMI	Jan	55.2	▲
Copper production (mt)	Dec	503 874	▲
Industr. prod. (wda, yoy)	Dec	6.6%	▲
Budget balance (ytd)	Dec	84.6%	▲

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

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Base and precious metals | Other commodities

Copper

Consecutive price spikes were recently mostly related to the supply side developments. The first risk trigger materialized as the miners went on strike in the world largest copper mine – Escondida. The other supply-side risk factor continues to cause troubles as the agreement between Indonesian government and Freeport McMoran regarding concentrate exports is still not resolved.

Copper: A surge in Q4 copper production

Marginal producers back in the game?

The 5,5% global copper production growth in Q4 2016 (yoy) shows that recent sharp increase of copper price encouraged producers to use short-term possibilities to increase their output. As a result, marginal producers restarted their production which positively impacted supply side of the market. Annually copper supply grew by 5,4%, which was mostly driven by Chinese refined production growth concentrated in just the last two months of the year (total increase of Chinese growth is estimated on the level of 9-11% in 2016). Additionally, better price environment influenced scrap market, where merchants released some of their inventories into the market, causing the widening of scrap discounts.

Like 2013, 2016 is perceived to be outlier in terms of production disruptions

The annual supply growth in 2016 was backed by the unexpectedly low level of disruptions in existing mines. The industry consensus taken into consideration by major market analysts is usually 5% loss of annual production (equal to around 1 mln tonnes of copper). In 2016 however, the disruptions were more than balanced by outperformance of some projects (mainly Peruvian operations: Las Bambas and Cerro Verde). The 2017 is expected to be less positive with projected disruptions level coming back to 5%. Such assumption is mainly based on uncertainty around the labor contract negotiations in some major operations and dispute between Freeport, the owner of Grasberg mine, and Indonesian authorities over the license to operate and export copper concentrates.

Strike situation at BHP Billiton's Escondida mine

Workers at BHP Billiton's Escondida in Chile, the world's biggest copper mine, walked off the job, marking the start of a strike that threatens to disrupt the international supply of the widely used industrial metal. No miners arrived for morning work aboard buses which normally deliver them to the vast deposit, which accounted for about 6% of global production in 2015. BHP has said it would halt production during the strike because it could not guarantee the safety of the 80 workers the government had authorized to perform critical duties, such as equipment upkeep and adhering to environmental protocols. Global miner has already declared force majeure on copper shipments from

Escondida mine. Copper prices on the London Metal Exchange rose 4.5% to hit \$6,083 a tonne, its highest since June 2015. The strike at Escondida follows weeks of fractious labor negotiations, as both sides were unable to agree on a new salary and benefits scheme, sending copper prices higher. The sizable gap between the company's latest offer and what workers want suggests it won't be easy to find the agreement.

BHP's offer to Escondida workers:

- 48-month contract
- 8 million-peso end-of-conflict bonus
- No wage increase
- Full health coverage for workers
- 2 million-peso benefit for families of deceased workers
- Reduces some bonuses and benefits
- Introduces different benefits for new and existing workers

Union demands:

- 36-month contract
- 25 million-peso end-of-conflict bonus
- 7 percent wage increase
- No reduction of existing bonuses or benefits
- No difference between benefits for new and existing workers

Other important information on copper market:

- *[Reuters]* Indonesia will temporarily exempt the local unit of Freeport-McMoRan Inc from some new rules while processing its application for new mining rights, a ministry official said, potentially allowing for the resumption of copper concentrate exports. Freeport has warned that the halt to its shipments since the new mining rules took effect on Jan. 12 could lead to a sharp drop in output at its Grasberg mine. It was not immediately clear which of the new rules, which require Freeport to pay more taxes and divest a 51% stake, the company would be temporarily exempted from. Mining Minister Ignasius Jonan said that Freeport could be issued with a temporary permit within one or two days while the government decides on the company's application for a new special mining license. A temporary permit would also allow Freeport to resume concentrate exports. A spokesman for Freeport Indonesia said the company would only adopt the new mining rules after obtaining a stability agreement providing the same rights and the same level of legal and fiscal certainty provided under its contract of work. The company has requested that concentrate exports be permitted while the new license and stability agreement are negotiated, according to the spokesman. What is more, under its current contract, Freeport is not required to pay export duties on concentrate or to conduct further divestments. Freeport is one of Indonesia's biggest taxpayers, paying more than \$16 billion in taxes, royalties, dividends and other payments between 1992 and 2015, according to company data. Freeport is also involved in a

dispute over \$469 million in water taxes and penalties in Papua province dating back to 2011, and has argued that it should not be subjected to any taxes that are not specified in its 1991 contract.

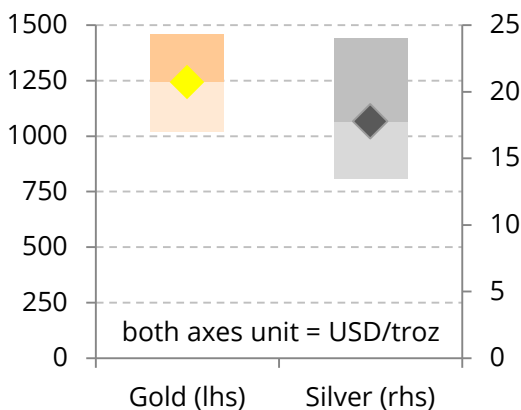
- *[Metal Bulletin]* Copper concentrate TC/RCs firmed to their highest post-benchmark level in line with reduced interest from Chinese smelters as a result of the oncoming holiday and spot deals close to the benchmark there. Major potential mine supply disruptions continue to hang over the market. Freeport's Grasberg experiences another week without export permission from Indonesia, and Escondida miners have already went on strike. Interest in spot concentrates from Chinese smelters has been on the wane for the past month, with the market there moving into holiday mode. But some deals were done at and just below the \$90 per tonne/9 cents per lb level set by the Chinese Copper Smelters Purchase Team (CSPT) as its minimum buying level. The level is close to the \$92.50/9.25 cents agreed as the annual benchmark TC/RC for 2017 between miners and smelters. The spot copper concentrates market is expected to kick back into life once Chinese smelters return in the second week of February, with many needing to purchase stocks for the second quarter. By that point there should also be more clarity concerning looming supply disruptions that affect mines producing 5-6% of the world's copper output. The copper concentrates market in 2016 was characterized by lower-than-normal unscheduled production losses - 3.5% from the usual 5-6%, according to analysts at Citi. But this year could be different, with major mines also shaping up for outages; Escondida workers have already gone on strike. Furthermore, copper exports from Grasberg in Indonesia are still on hold as mining corporation Freeport continues to wrangle with the government there over new mining regulations and a 51% divestment requirement. In 2015 copper concentrates exports were stopped for more than six months, causing major shifts in copper concentrate TC/RCs - sharply down when supply was cut off, and then the opposite when a flood of material was dumped on to the market. According to the market sources, the combination of these mines has a big impact on Japan and, to some extent, Korea. Japanese, Korean and Indian copper smelters are the main customers of high-gold concentrate from Grasberg; similarly, two Japanese consortiums own 12.5% of Escondida. Mined copper concentrate sold to traders by tender secured winning bids largely in the low- to mid-70s/7s; clean material and high-gold has maintained a premium rate so far this year. With sales to smelters rising, this also means that there is up to a \$20/2 cents gap between where some material is being bought and sold.

Precious Metals

In first two weeks of February gold continued its move higher but fell in the end of this period. Donald Trump commented that he plans to announce an ambitious tax reform plan to stimulate the economy (that means big tax cuts and support for the dollar). Moreover firm economic data confirmed that Federal Reserve would press ahead with U.S. interest rate hikes sooner rather than later. All that bullish sentiment for the US economy and the dollar trimmed investor hopes for further growth of gold price.

Analysts bullish on precious metals

Recent LBMA survey results (2017 forecasts)



Source: LBMA, KGHM Polska Miedź

LBMA Survey analysts see precious metals on the rise

Contributors to the 2017 Forecast Survey are bullish across the board for all four metals. Analysts are forecasting that the average gold price in 2017 will be 5.3% higher than the average price in the first half of January 2017. They are slightly more bullish about the prospects for silver prices, with an increase of 7.1%, but less bullish about PGM prices. For platinum, they forecast an increase of 4.9%, but expect a more modest outlook for palladium, with a forecast increase of just 2.4%.

Analysts are marginally more optimistic about the prospects for silver prices in 2017. They forecast that the price will increase by 7.1% to an average of \$17.77/oz, with prices expected to trade in an average range of \$15.13/oz to \$20.66/oz. Analysts are less bullish about the prospects for PGM prices in 2017. Platinum prices are forecast to increase by 4.9% to an average price of \$1,014/oz, which is \$27 above the actual average price in 2016. Analysts are forecasting that the price will trade in an average range of \$865/oz to \$1,167/oz. Forecast contributors are predicting that the gold price will average \$1,244/oz in 2017, 5.3% higher than the first half of January 2017, but broadly in line with the actual average price in 2016.

LME plans to launch precious metals contracts

The London Metal Exchange plans to launch its new LMEPrecious suite of precious metals contracts on June 5, subject to regulatory approval. The exchange, which chiefly offers a trading platform for base metals such as copper and zinc, announced its intention to launch spot and futures contracts for gold and silver in August. The LME is one of a number of exchanges to have announced precious metals contracts last year, with InterContinental Exchange (ICE) and CPM Group also offering new products. The \$5 trillion a year London gold market, along with the rest of the City of London, has found itself under increased regulatory scrutiny since the Libor scandal. Fears of inflexibility and rising costs are sapping enthusiasm for the LME's contracts, potentially leaving the exchange reliant on the threat of an increasing regulatory burden to drive uptake.

World Gold Council (WGC) - The Gold Demand Trends Report

The Report for the full year 2016 released by WGC suggests significant decline in gold jewelry demand during the year. The demand hit a seven-year low at 2041,6t in 2016, mainly on account of jump in gold prices. The full year demand declined by 15% over the previous year. India and China accounted for almost 80% of the decline in 2016. India, faced by challenges on several fronts, registered the biggest decline in gold jewelry demand during the year. The Indian gold jewelry demand recorded the biggest ever yearly decline in 2016. The demand totaled 514t, significantly lower by 148,3t when compared with the previous year. The Q1 sales were affected by nationwide jewelers' strike. The demand remained subdued during the initial three quarters of the year. China reported 17% year-on-year decline in gold jewelry demand during the previous year. The demand plunged by 13% during Q4 alone. The gold jewelry demand failed to pick up during the 'Golden Week' national holiday season in October, in spite of a sharp drop in gold prices. The US demand dropped slightly by 1% to 118,3t. The full year demand by the European region remained mostly stable with notable declines in the UK and France.

Nickel

Prices on the nickel market are holding up for now although the level of uncertainty is high not only regarding Indonesian rule changes but also due to the Philippines mine closures schedule announcement.

Mine closure schedule injects even more price volatility

Sentiment in the nickel market has been recently under strong influence of supply-side development in the Philippines and Indonesia. The prospect of more supply from Indonesia following a relaxation of a ban on exports of ore and concentrates drove nickel prices towards the recent lows in January. Then, the Philippines government published the results of a mining audit ordering the closure of more nickel mines in a campaign fighting environmental degradation. The main supply-side issue is that the mines which have been ordered to be closed account for about 50% of the country's annual nickel output and represented just over 11% of global nickel supply, according to Societe Generale analysts.

The decision comes after a months-long audit of the mining sector that began in July and a further review by the Mines and Geosciences Bureau in recent weeks. Exactly how much output will be lost in practice is highly uncertain. According to the DENR, the mines ordered closed can still operate while they appeal their case and President Duterte will decide on the finality of orders for mine closures. Additionally, suspended mines will have 3-6 months to get their act together before being allowed to resume operations. For the records, annual nickel mine output from the Philippines is around 317kt, or 17% of global output, and is now the largest exporter of nickel ore to China (essential to China's NPI sector). In the recent years, before Indonesian ban, the Chinese

Indonesia news bearish (?), whereas the Philippines news bullish (?)

Uncertainty about the lost production is high

accumulated significant ore stockpiles which later on was complemented by imports from the Philippines. However, Philippine nickel ore exports to China are falling in response to low prices, an extended rainy season and mine depletion. That is why the shortfall has been met by the ramp-up of ferronickel plant exports from Indonesia. Chinese customs data show that Indonesia's ferronickel exports to China in 2016 reached 747kt, a yoy rise of 249%.

Mine	2015 Nickel Output (kt)
For Suspension	
Berong Nickel Corporation	16
Citinickel Mines and Development Corp.	17
Sub-Total	33
For Closure	
Eramen Minerals Inc.	6
Zambales Diversified Metals Corp.	0
LNL Archipelago Minerals Inc.	2
Emir Minerals Corp.	1
AAMPHIL Natural Resources Exploration	1
Sinosteel Philippines H.Y. Mining Corp.	0
Oriental Synergy Mining Corp.	2
ADNAMA Mining Resources Corp.	9
Claver Mineral Development Corp.	0
Platinum Group Metals Corp.	54
CTP Construction and Mining Corp.	30
Carrascal Nickel Corp.	25
Marcventures Mining and Development Corp.	19
Hinatuan Mining Corp.	25
Wellex Mining Corp.	7
Libjo Mining Corp.	4
Oriental Vision Mining Philippines Corp.	7
Benguet Corporation	7
Sub-Total	199
Total	232
As a % of global nickel output	11,4%
Source: Philippines' Department of Environment and Natural Resources (DENR)	

Global economies | Foreign exchange markets

China: policy change or just marginal tightening?

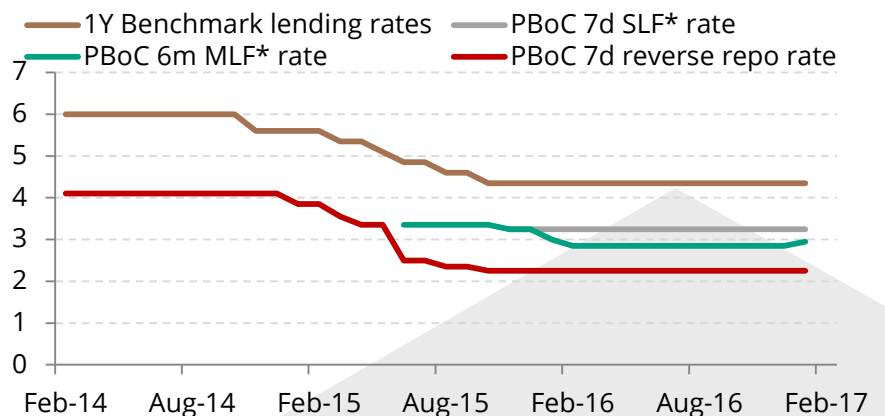
Prior to the Chinese New Year, People's Bank of China has injected enormous funds to commercial banks to help them prepare for the withdrawals (=holiday gifts). Then PBoC took the rare step to increase the interest rates on one of its lending facilities by 10bps.

The rise in interest rates on a PBOC lending facility has raised speculation that a formal rate hike is near

The unusual combination of moves that both loosen and tighten monetary conditions has raised questions about just what the central bank's goal for monetary policy is in 2017. Gavekal Dragonomics thinks that the central bank will use various operational tools to tighten monetary policy at the margin, but is very unlikely to hike benchmark interest rates.

In sum, People Bank of China injected RMB138bn into the interbank market via its 6-month medium-term lending facility, and another RMB107bn via the 1-year MLF. It was the first time since 2013 that People Bank of China has decided to raise 7-day reverse-repo rate. That is why the move quickly led to speculation among the market participants that the PBOC is preparing to hike benchmark interest rates as well.

PBoC is trying not to shock the market (*SLF = short term lending facility; MLF = medium term lending facility)



Source: Bloomberg, Gavekal Dragonomics, KGHM Polska Miedź








































PBoC is trying to properly communicate with the market








PBOC also wants to ensure the market that these record injections do not send the wrong signal. In Q4'16 the central bank shown a slight tightening bias, expressing concern about financial leverage and rising property prices. In particular, despite the fall in foreign exchange reserves, it has not cut the reserve requirement on banks, likely because it did not want to send a signal that monetary policy is easing. However, huge open market operations, the creation of the new lending facility and the decline of the interbank repo rate cannot be mistaken with any other kind of monetary policy bias. Therefore, the increase in MLF rates is probably intended to clarify that policy is still tightening

at the margin. It's a warning to financial institutions that they should not take on too much interbank leverage, as the liquidity injections are only temporary arrangements.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
☺☺☺	01-Feb	Official manufacturing PMI	Jan	51.3 ▼	51.4	51.2	
☺☺☺	03-Feb	Caixin's manufacturing PMI	Jan	51.0 ▼	51.9	51.8	
☺	07-Feb	Foreign reserves (USD bn)	Jan	2 998 ▼	3 011	3 004	
☺☺	10-Feb	Trade balance (USD bn)‡	Jan	51.4 ▲	40.7	48.5	
☺☺	10-Feb	Exports (yoy)‡	Jan	7.9% ▲	-6.2%	3.2%	
Poland							
☺	31-Jan	Budget balance (ytd) - preliminary data	Dec	84.6% ▲	50.4%	--	
☺☺☺	01-Feb	Manufacturing PMI	Jan	54.8 ▲	54.3	54.0	
☺☺☺☺☺	08-Feb	NBP base rate decision	Feb	1.50% -	1.50%	1.50%	
US							
☺☺☺☺	30-Jan	Consumer spending inflation PCE (mom)	Dec	0.1% ▲	0.0%	0.1%	
☺☺☺☺	30-Jan	Consumer spending inflation PCE (yoy)‡	Dec	1.7% -	1.7%	1.7%	
☺☺	30-Jan	Personal income (sa, mom)‡	Dec	0.3% ▲	0.1%	0.4%	
☺☺	30-Jan	Personal spending (sa, mom)	Dec	0.5% ▲	0.2%	0.5%	
☺	30-Jan	Dallas Fed manufacturing activity‡	Jan	22.1 ▲	17.7	15.0	
☺	31-Jan	S&P/CaseShiller home price index‡	Nov	192 ▲	192	--	
☺☺☺☺☺	01-Feb	FOMC base rate decision - upper bound (Fed)	Feb	0.75% -	0.75%	0.75%	
☺☺☺☺☺	01-Feb	FOMC base rate decision - lower bound (Fed)	Feb	0.50% -	0.50%	0.50%	
☺☺☺	01-Feb	Manufacturing PMI - final data	Jan	55.0 ▼	55.1	55.1	
☺☺	01-Feb	ISM Manufacturing‡	Jan	56.0 ▲	54.5	55.0	
☺☺☺	03-Feb	Composite PMI - final data	Jan	55.8 ▲	55.4	--	
☺☺☺	03-Feb	PMI services - final data	Jan	55.6 ▲	55.1	--	
☺☺	03-Feb	Change in non-farm payrolls (ths)‡	Jan	227 ▲	157	180	
☺☺	03-Feb	Durable goods orders - final data	Dec	-0.5% ▼	-0.4%	-0.4%	
☺☺	03-Feb	Underemployment rate (U6)	Jan	9.4% ▲	9.2%	--	
☺☺	03-Feb	Unemployment rate	Jan	4.8% ▲	4.7%	4.7%	
☺	03-Feb	Average hourly earnings (yoy)‡	Jan	2.5% ▼	2.8%	2.7%	
☺☺	10-Feb	University of Michigan confidence index - preliminary data	Feb	95.7 ▼	98.5	98.0	
Eurozone							
☺	30-Jan	Economic confidence	Jan	108 ▲	108	108	
☺	30-Jan	Industrial confidence‡	Jan	0.8 ▲	0.0	0.2	
☺	30-Jan	Consumer confidence - final data	Jan	-4.9 -	-4.9	-4.9	
☺	30-Jan	Business climate indicator‡	Jan	0.8 -	0.8	0.8	
☺☺☺☺☺	31-Jan	GDP (sa, yoy) - estimation‡	4Q	1.8% -	1.8%	1.7%	
☺☺☺☺☺	31-Jan	GDP (sa, qoq) - estimation‡	4Q	0.5% ▲	0.4%	0.5%	
☺☺☺☺	31-Jan	Core CPI (yoy) - estimation	Jan	0.9% -	0.9%	0.9%	
☺☺☺☺	31-Jan	CPI estimate (yoy)	Jan	1.8% ▲	1.1%	1.5%	
☺☺	31-Jan	Unemployment rate‡	Dec	9.6% ▼	9.7%	9.8%	
☺☺☺	01-Feb	Manufacturing PMI - final data	Jan	55.2 ▲	55.1	55.1	
☺☺	02-Feb	Producer inflation PPI (yoy)	Dec	1.6% ▲	0.1%	1.2%	
☺☺☺	03-Feb	Composite PMI - final data	Jan	54.4 ▲	54.3	54.3	
☺☺☺	03-Feb	Services PMI - final data	Jan	53.7 ▲	53.6	53.6	
☺☺	03-Feb	Retail sales (yoy)‡	Dec	1.1% ▼	2.5%	1.8%	

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
⊕⊕⊕⊕	30-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.9% ▲	1.7%	2.0%	☹
⊕⊕⊕⊕	30-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.9% ▲	1.7%	2.0%	☹
⊕⊕⊕	31-Jan	Retail sales (yoy)‡	Dec	-1.1% ▼	3.5%	0.5%	☹
⊕⊕	31-Jan	Unemployment rate	Jan	5.9% ▼	6.0%	6.0%	☹
⊕⊕⊕	01-Feb	Manufacturing PMI - final data	Jan	56.4 ▼	56.5	56.5	☹
⊕⊕⊕	03-Feb	Composite PMI - final data	Jan	54.8 ▲	54.7	54.7	☺
⊕⊕⊕	06-Feb	Factory orders (wda, yoy)‡	Dec	8.1% ▲	2.0%	4.2%	☺
⊕⊕⊕⊕	07-Feb	Industrial production (wda, yoy)‡	Dec	-0.7% ▼	2.3%	2.5%	☹
France							
⊕⊕⊕⊕⊕	31-Jan	GDP (yoy) - estimation‡	4Q	1.1% ▲	0.9%	1.1%	⊕
⊕⊕⊕⊕⊕	31-Jan	GDP (qoq) - estimation	4Q	0.4% ▲	0.2%	0.4%	⊕
⊕⊕⊕⊕	31-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.6% ▲	0.8%	1.2%	☺
⊕⊕⊕⊕	31-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.4% ▲	0.6%	1.1%	☺
⊕⊕⊕	01-Feb	Manufacturing PMI - final data	Jan	53.6 ▲	53.4	53.4	☺
⊕⊕⊕	03-Feb	Composite PMI - final data	Jan	54.1 ▲	53.8	53.8	☺
⊕⊕⊕⊕	10-Feb	Industrial production (yoy)‡	Dec	1.3% ▼	1.9%	1.4%	☹
Italy							
⊕⊕	31-Jan	Unemployment rate - preliminary data‡	Dec	12.0% =	12.0%	11.8%	☺
⊕⊕⊕	01-Feb	Manufacturing PMI	Jan	53.0 ▼	53.2	53.3	☹
⊕⊕⊕⊕	03-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	0.7% ▲	0.5%	0.8%	☹
⊕⊕⊕	03-Feb	Composite PMI	Jan	52.8 ▼	52.9	53.0	☹
⊕⊕⊕⊕	10-Feb	Industrial production (wda, yoy)‡	Dec	6.6% ▲	3.3%	3.2%	☺
UK							
⊕⊕⊕	01-Feb	Manufacturing PMI (sa)	Jan	55.9 ▼	56.1	55.9	⊕
⊕⊕⊕⊕⊕	02-Feb	BoE base rate decision	Feb	0.25% =	0.25%	0.25%	⊕
⊕⊕⊕⊕	02-Feb	BoE asset purchase target (GBP bn)	Feb	435 =	435	435	⊕
⊕⊕⊕	03-Feb	Composite PMI	Jan	55.5 ▼	56.7	56.0	☹
⊕⊕⊕⊕	10-Feb	Industrial production (yoy)‡	Dec	4.3% ▲	2.2%	3.2%	☺
Japan							
⊕⊕⊕⊕	31-Jan	Industrial production (yoy) - preliminary data	Dec	3.0% ▼	4.6%	3.0%	⊕
⊕⊕⊕	01-Feb	Manufacturing PMI - final data	Jan	52.7 ▼	52.8	--	
⊕⊕⊕	03-Feb	Composite PMI	Jan	52.3 ▼	52.8	--	
Chile							
⊕⊕⊕	30-Jan	Total copper production (metric tons)	Dec	503 874 ▲	479 959	--	
⊕⊕⊕	30-Jan	Manufacturing (yoy)‡	Dec	-0.3% ▲	-1.9%	-1.2%	☺
⊕⊕⊕⊕	06-Feb	Economic activity (yoy)	Dec	1.2% ▲	0.8%	1.0%	☺
⊕⊕⊕	07-Feb	Copper exports (USD mn)	Jan	2 319 ▼	2 943	--	
⊕⊕	07-Feb	Nominal wages (yoy)	Dec	4.7% ▼	4.9%	4.8%	☹
⊕⊕⊕⊕	08-Feb	Consumer inflation CPI (yoy)	Jan	2.8% ▲	2.7%	2.5%	☺
Canada							
⊕⊕⊕⊕⊕	31-Jan	GDP (yoy)‡	Nov	1.6% =	1.6%	1.4%	☺
⊕⊕⊕	10-Feb	Net change in employment (ths)‡	Jan	48.3 ▲	46.1	- 10.0	☺

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; = = equal to previous.

² Reading difference to consensus: ☺ = higher than consensus; ☹ = lower than consensus; ⊕ = equal to consensus.

mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.

Source: Bloomberg, KGHM

Key market data

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

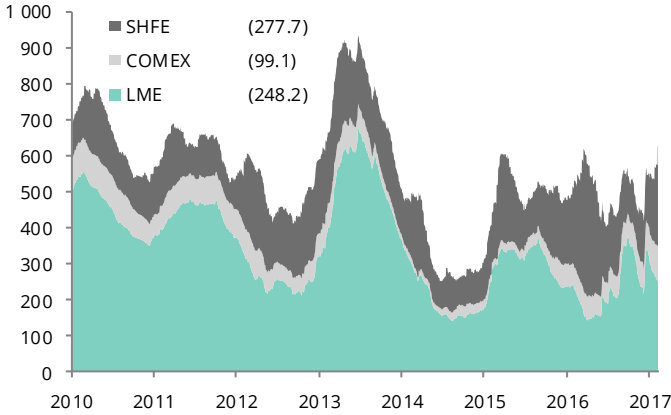
(as of: 10-Feb-17)

	Price	Price change °					From year beginning ²		
		2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	5 872.00	▲ 0.4%	▲ 6.7%	▲ 6.7%	▲ 31.2%	5 770.48	5 500.50	5 931.00	
Molybdenum	15 250.00	- 0.0%	- 0.0%	- 0.0%	▲ 27.1%	15 250.00	15 250.00	15 250.00	
Nickel	10 450.00	▲ 11.4%	▲ 4.4%	▲ 4.4%	▲ 35.5%	10 076.38	9 380.00	10 450.00	
Aluminum	1 849.00	▲ 1.2%	▲ 7.9%	▲ 7.9%	▲ 23.8%	1 799.17	1 701.00	1 870.00	
Tin	19 210.00	▼ -3.8%	▼ -9.0%	▼ -9.0%	▲ 23.1%	20 354.14	18 760.00	21 300.00	
Zinc	2 906.00	▲ 5.2%	▲ 13.4%	▲ 13.4%	▲ 68.8%	2 744.48	2 530.00	2 906.00	
Lead	2 406.00	▲ 1.7%	▲ 21.2%	▲ 21.2%	▲ 31.7%	2 268.59	2 007.00	2 406.00	
LBMA (USD/troz)									
Silver	17.62	▲ 5.5%	▲ 8.5%	▲ 8.5%	▲ 12.6%	17.03	15.95	17.74	
Gold ¹	1 228.30	▲ 3.7%	▲ 6.0%	▲ 6.0%	▼ -1.0%	1 201.75	1 151.00	1 242.10	
LPPM (USD/troz)									
Platinum ¹	993.00	▲ 2.9%	▲ 9.5%	▲ 9.5%	▲ 4.7%	980.83	929.00	1 019.00	
Palladium ¹	781.00	▲ 8.2%	▲ 15.5%	▲ 15.5%	▲ 49.9%	753.52	706.00	787.00	
FX ³									
EUR/USD	1.0629	▼ -0.5%	▲ 0.8%	▲ 0.8%	▼ -6.3%	1.0647	1.0385	1.0808	
EUR/PLN	4.3030	▼ -0.9%	▼ -2.7%	▼ -2.7%	▼ -3.1%	4.3500	4.2864	4.4002	
USD/PLN	4.0435	▼ -0.4%	▼ -3.2%	▼ -3.2%	▲ 3.1%	4.0831	3.9835	4.2271	
USD/CAD	1.3074	▼ -0.3%	▼ -2.6%	▼ -2.6%	▼ -6.1%	1.3165	1.3004	1.3438	
USD/CNY	6.8785	▼ -0.1%	▼ -1.0%	▼ -1.0%	▲ 4.6%	6.8892	6.8450	6.9640	
USD/CLP	646.82	▼ -0.2%	▼ -3.1%	▼ -3.1%	▼ -9.1%	656.62	639.35	673.36	
Money market									
3m LIBOR USD	1.036	▼ 0.00	▲ 0.04	▲ 0.04	▲ 0.42	1.028	0.999	1.043	
3m EURIBOR	-0.329	▼ 0.00	▼ -0.01	▼ -0.01	▼ -0.15	-0.327	-0.329	-0.319	
3m WIBOR	1.730	- 0.00	- 0.00	- 0.00	▲ 0.04	1.730	1.730	1.730	
5y USD interest rate swap	1.976	▼ -0.04	▲ 0.00	▲ 0.00	▲ 0.93	1.963	1.872	2.033	
5y EUR interest rate swap	0.144	▼ -0.05	▲ 0.07	▲ 0.07	▲ 0.09	0.135	0.078	0.198	
5y PLN interest rate swap	2.590	▼ 0.00	▲ 0.19	▲ 0.19	▲ 0.75	2.525	2.390	2.625	
Fuel									
WTI Cushing	53.86	▲ 1.3%	▲ 0.3%	▲ 0.3%	▲ 105.5%	52.71	50.82	53.99	
Brent	56.00	▲ 2.1%	▲ 1.1%	▲ 1.1%	▲ 80.4%	55.02	52.88	56.46	
Diesel NY (ULSD)	164.71	▲ 3.7%	▼ -3.0%	▼ -3.0%	▲ 70.6%	161.88	156.92	167.82	
Others									
VIX	10.85	▲ 0.27	▼ -3.19	▼ -3.19	▼ -17.29	11.53	10.58	12.85	
BBG Commodity Index	89.36	▲ 1.6%	▲ 2.1%	▲ 2.1%	▲ 20.8%	87.96	86.07	89.36	
S&P500	2 316.10	▲ 0.9%	▲ 3.5%	▲ 3.5%	▲ 26.6%	2 280.87	2 257.83	2 316.10	
DAX	11 666.97	▼ -1.2%	▲ 1.6%	▲ 1.6%	▲ 33.3%	11 617.09	11 509.84	11 848.63	
Shanghai Composite	3 196.70	▲ 1.2%	▲ 3.0%	▲ 3.0%	▲ 15.7%	3 143.79	3 101.30	3 196.70	
WIG 20	2 154.79	▲ 3.4%	▲ 10.6%	▲ 10.6%	▲ 22.5%	2 045.79	1 989.64	2 154.79	
KGHM	126.85	▲ 1.5%	▲ 37.2%	▲ 37.2%	▲ 122.2%	114.71	94.00	126.85	

° 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

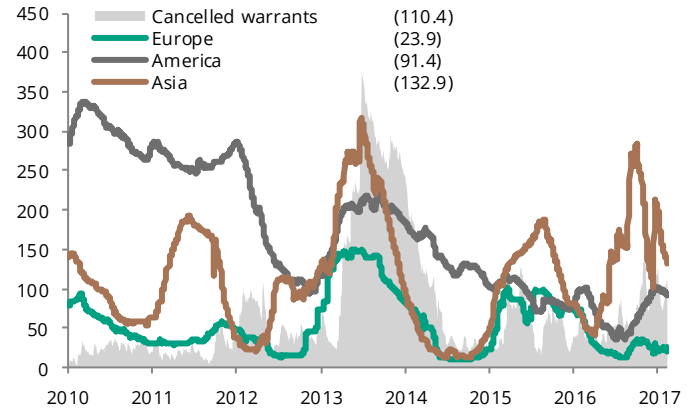
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



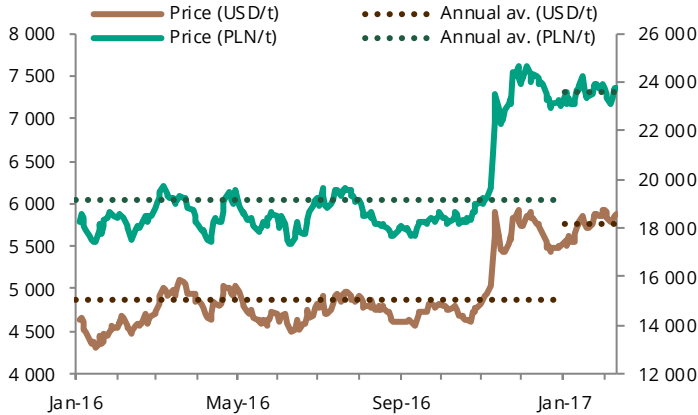
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



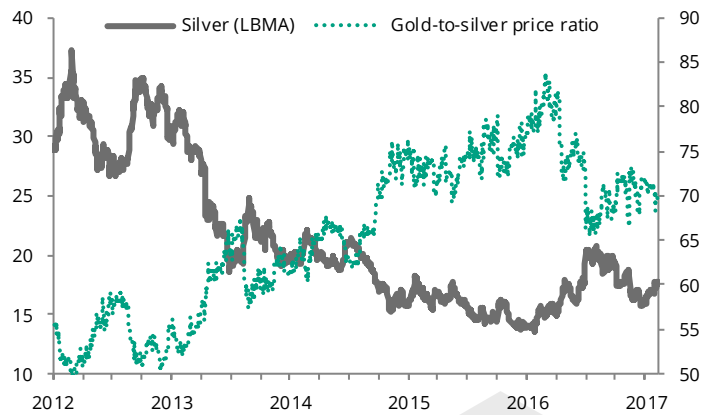
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



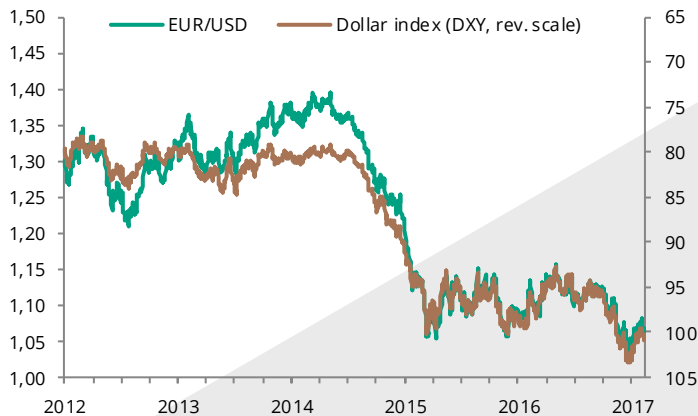
Source: Bloomberg, KGHM

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



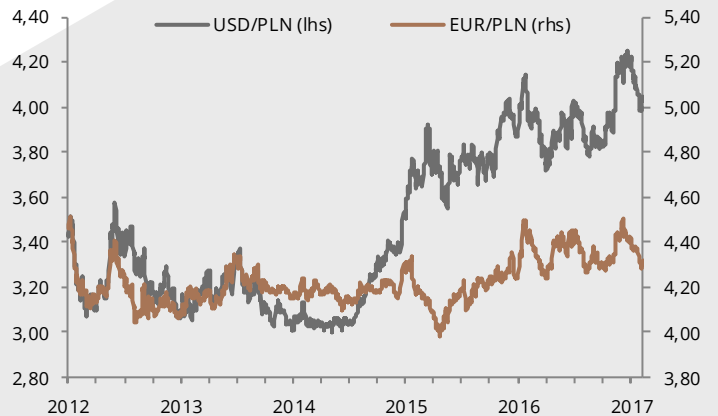
Source: Bloomberg, KGHM

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:
30th January – 12th February 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, ▪ SNL Metals & Mining.

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

Official metals prices are available on following websites:

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

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