

# Market Overview

as of: 22 February 2016






- Copper:** By the time China's New Year celebrations has been over, copper price bottomed once again around 4450 USD/mt and then recovered after the Chinese returned to the market. It is worth to notice that February outstanding copper stocks in the LME warehouses are at their lowest levels since 2008. Such levels are counter-directional to the inventory data from SHFE in which stored copper for February reached all-time highs. (page 2).
- Precious metals:** In recent two weeks market participants have seen big jump in gold's price due to Fed concerns of rate hike path and US stock market's sell off. Now the price is stabilising around 1200 USD/troz and investors await further developments (page 4).
- Crude oil:** Saudi Arabia and Russia preliminarily agreed to freeze oil output at near-record levels, the first coordinated move by the world's two largest producers to counter a slump that has pummeled economies, markets and companies (page 6).
- Investment banks:** Suspicious CDS market participants have priced the risk of default much higher despite the reassurance from Deutsche Bank's co-CEO that the bank's capital position is "absolutely rock solid". Not only was the nervousness felt in the CDS market but also on stock exchanges and emerging market's FX which have been consequently sold out towards so-called safe heaven currencies (page 7).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	4 590.00	-1.7%
▼ Nickel	8 340.00	-1.7%
<b>LBMA (USD/troz)</b>		
▲ Silver	15.37	3.1%
▲ Gold (PM)	1 231.15	7.0%
<b>FX</b>		
▼ EUR/USD	1.1096	-0.9%
▼ EUR/PLN	4.3830	-0.7%
▲ USD/PLN	3.9531	0.3%
▼ USD/CAD	1.3801	-0.5%
▲ USD/CLP	700.74	0.3%
<b>Stocks</b>		
▲ KGHM	66.40	7.8%

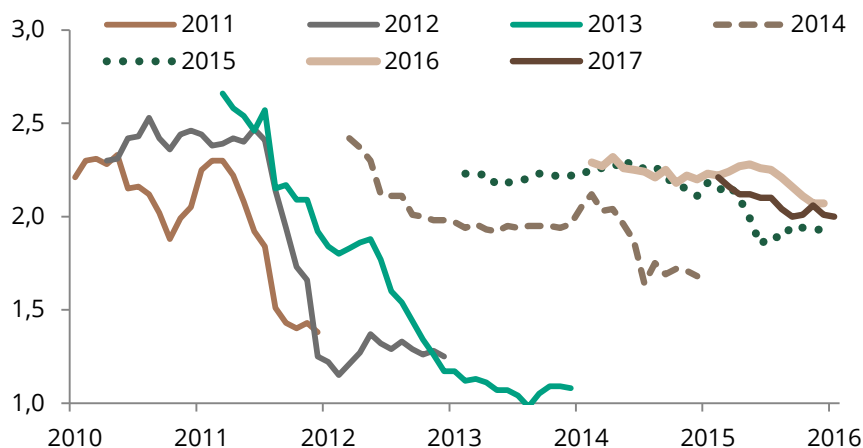
Source: Bloomberg, KGHM; (more on page 10)

## Important macroeconomic data

Release	For		
 GDP (yoy)	4Q	3.9%	▲
 Industrial prod. (mom)	Jan	0.9%	▲
 Industr. prod. (wda, yoy)	Dec	-1.3%	▼
 Industr. prod. (wda, yoy)	Dec	-2.2%	▼
 Copper exports (\$)	Jan	2 054	▼

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

The trend of forecasting global growth for next years has been constantly negative (=forecasts are revised down)



Average GDP growth rate for G10 countries. Source: Bloomberg, KGHM

## Market Risk Unit

marketrisk@kgm.com

Grzegorz Laskowski

Łukasz Bielak

Marek Krochta

Wojciech Demski

Lech Chłopecki

## Base and precious metals | Other commodities

### Copper

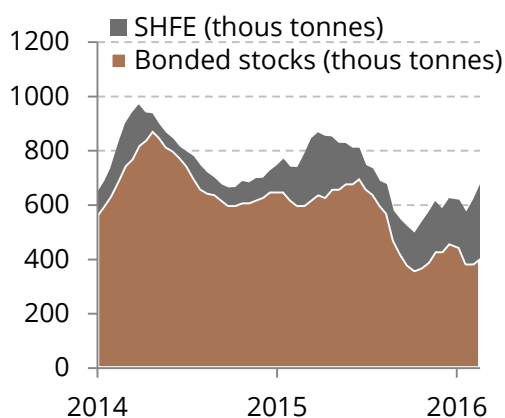
By the time China's New Year celebrations has been over, copper price bottomed once again around 4450 USD/mt and then recovered after the Chinese returned to the market. It is worth to notice that February outstanding copper stocks in the LME warehouses are at their lowest levels since 2008. Such levels are counter-directional to the inventory data from SHFE in which stored copper for February reached all-time highs.

#### Copper LME stocks falling, SHFE on a rise

Copper inventories in the LME warehouses in comparison to historical volumes outstanding are at their lowest level in February since 2008, completely counter-directional to the Shanghai Futures Exchange (SHFE) in which stored copper volume has just beaten the all-time high. Historical near end-of-month inventory data trends in 2016 behave akin to stockpile flows in 2014 and 2012. The recent low in inventories is worse on a relative basis when adjusting for the fact that with global consumption increasing since 2010, the LME inventory to current global consumption ratio is low. According to the Barclays research, if global consumption grows, then inventories need to grow as well to maintain a constant rate of stocks-to-consumption. In the bank's latest Commodities Weekly, the analyst states that if this low level of inventories continues, it may prove bullish, or at least supportive, for prices. Current LME inventories stand at 210kt, declines of about 13% m/m and 29% y/y.

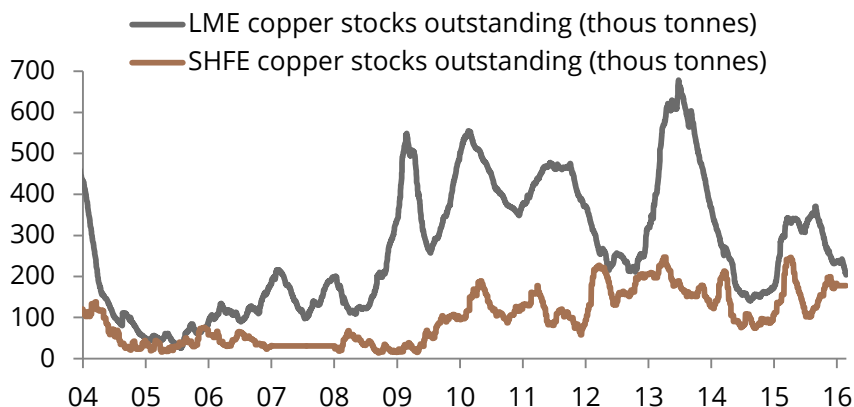
In contrast to the declining stocks and historical lows of the LME, copper stored in SHFE warehouses has increased to a record high for February. The surge in metal stored within China has occurred over the past several weeks of data releases. For the last two weeks of January, SHFE inventories rose 4.3% w/w and then 9.1% w/w, respectively. For the two reported weeks of SHFE stocks in February, inventories rose by 13.8% w/w and then 14.8% w/w, bringing the total inventory amount to 272kt. According to Barclays, it is difficult to assess whether this surge in SHFE inventories is a result of metal being moved from China's bonded warehouses and into SHFE, or if instead it represents a slowdown in real demand after the Chinese New Year. An argument in favor of the latter interpretation comes from CRU, which reports a rise in China's bonded inventories to 405kt from 385kt.

Chinese SHFE inventory versus bonded stocks



Source: CRU, Thomson Reuters, KGHM

**While LME stocks kept falling in the recent months, open arbitrage might have caused partial reshuffling of the material to SHFE**



Source: Thomson Reuters, KGHM

### Other important information on copper market:

- Indonesia's Mining Ministry recommended that Freeport McMoRan will receive a new 6-month copper export permit which ends a near 2-week stoppage after previous permit expired last month. Freeport was forced to halt overseas shipments from one of the world's biggest copper mines in Papua after the government demanded the U.S. mining giant first pay a \$530 million deposit for a new smelter before a new export permit could be approved. A lengthy export stoppage would have hit Freeport's profits and denied the Indonesian government desperately needed revenue from one of its biggest taxpayers. Freeport is allowed to ship up to 1,033,758 tonnes of copper over the next six months. Indonesia will review rules banning exports of partially processed metal ores, including copper and zinc, as the smelters they were intended to develop have not materialized amid low commodity prices.
- It is highly probable that Peru will surpass China as the world's second-largest copper producer after the South American country's biggest new mine, Las Bambas, began shipments last month. According to the country's central bank, Peru's copper output will increase 19% in 2016 to 1.9 mn tonnes, as a consequence of Melbourne-based MMG Ltd. ramp up to full production in 2Q16 at Las Bambas. The company said it expects to produce 275,000 to 330,000 tonnes from the mine this year.
- Copper production in Democratic Republic of Congo dropped for the first time in six years in 2015 output dropped 3.3% in Africa's top copper producer to 995,805 tonnes from 1.03 million tonnes in 2014, the first time production fell since the global economic downturn in 2009. The sharpest fall was in the fourth quarter when production slumped 12% year-on-year, in part due to the suspension of some production at miner and trader Glencore's Katanga Mining unit.

- According to the Mines Minister, mining companies operating in Zambia will have to get used to higher power tariffs because the government cannot afford to subsidize them and needs to encourage private investment in generation to alleviate a chronic supply shortage. The government increased electricity charges for mining companies to 10.35 U.S. cents a kilowatt-hour from Jan. 1. While it reversed a 200% increase in charges for commercial and industrial customers on 6<sup>th</sup> February, two months after it came into effect, no concession was announced for the mines, which utilize more than half the southern African nation's power. Zambia, Africa's second-biggest copper producer, get most of its electricity from hydropower plants, which have been hobbled by drought. Some power is being imported at a cost of 19 cents per kilowatt-hour, meaning mines are still being subsidized and the government will consider further price increases.
- Zambia's cabinet has approved a new royalty system that varies depending on the copper price as Africa's second-biggest producer seeks to keep struggling mines open and limit job losses. Mining lobbies had asked for a price-based royalty structure to ease the tax burden during a period of depressed prices. The cabinet also approved the suspension of the 10% export duty on ores and concentrates for which there are no processing facilities in Zambia and to remove the variable profit tax on income from mining operations. The government will maintain the corporate income tax for mining companies at 30% while a flat mineral royalty rate of 6% would be introduced for precious metals and gems, Kambwili said. For minerals and base metals other than copper, royalties will be fixed at 5%.

## Precious metals

**In recent two weeks market participants have seen big jump in gold's price due to Fed concerns of rate hike path and US stock market's sell off. Now the price is stabilising around 1200 USD/troz and investors await further developments.**

### Recent situation on gold – stabilising after a rally

According to HSBC's analysts gold could be vulnerable to more corrections if stock markets strengthen. Greater investor risk appetite erodes demand for gold, while increased scrap adds to supply as major consumers are shying away from physical purchases. Top consumers China and India have turned recently as sellers of gold as prices rally. Discounts in India have hit a record high, while prices in China have also turned cheaper relative to the global benchmark, in a sign of waning demand.

**Gold's price jump has been triggered by the uncertainty on the financial markets**

Gold has gained this year largely on the back of turmoil in stock markets and concerns over the global economy. But now the metal has given back some of those gains as markets have stabilized. The volatility index, which measures implied volatility of stock options and is often seen as an investor fear gauge,

fell below 20 percent last week, hitting the lowest closing level since early January. Assets in Gold ETFs, reached 53,5 million troz recently, the highest since January 2015.

### World Gold Council report sees firm fundamentals for gold market

According to "Gold demand trends report" issued by World Gold Council gold demand in 2015 Q4 grew 4% (+47t) to 1,117.7t. Demand was weaker for both jewelry (-6t) and technology (-6t). Mine production (-16t) fell for the first time since 2008 and recycling continued to shrink. Annual demand was almost unchanged at 4212.2t, contracting by a negligible amount (-14t).

### Central banks remain big buyers

Central banks bought 336.2t of gold in the second half, versus 252.1t in the first half and 308.8t in the second half of 2014. Demand for jewelry, bars and coins totaled 934.9t, and exceeded its 5-year average (913.8t). India and China were the main buyers of the market, despite facing some not insignificant hurdles. But growth also came from some unexpected quarters, including Japan, Vietnam and Iran. Investment demand in 2015 was up 8% on 2014. Modest growth in bar and coin demand was supported by smaller outflows from ETFs.

### Total holdings of Gold ETF's - viable rebound of demand



Source: Bloomberg, KGHM

## Crude oil

**Saudi Arabia and Russia preliminarily agreed to freeze oil output at near-record levels, the first coordinated move by the world's two largest producers to counter a slump that has pummeled economies, markets and companies.**

### Saudi, Russia, Qatar and Venezuela freezing production at January levels

#### Will Saudi and Russia turn the tide in the crude oil market?

The deal is still preliminary and does not include Iran. It is worth to notice that it's the first significant cooperation between OPEC (Organization of Petroleum Exporting Countries) and non-OPEC producers in 15 years and Saudi Arabia said it is open to further action. According to Saudi Oil Minister Ali Al-Naimi the deal to fix production at January levels, which includes Qatar and Venezuela, is the beginning of a process that could require "other steps to stabilize and improve the market. On the other hand Saudi Arabia did not agree to making any cuts in the output with the main argument of losing market share. Unless other market participants reduce their deliveries, Saudi will keep producing which again emphasize never-ending game theory in today's commodities markets.

### Discipline is needed to stabilize production and influence the price

The announcement, according to Commerzbank research, is not a game changer on the market since these countries have kept their production stable in the recent months. Moreover, if Iran and Iraq are not a part of the agreement, it's not worth much - and even then there is still a question of compliance, as OPEC discipline has never been its strength. It's been more than a year since Organization of Petroleum Exporting Countries decided not to cut production to boost prices, oil remains about 70% below its 2014 peak. Supply still exceeds demand and record global oil stockpiles continue to swell which, according to Goldman Sachs, might push the prices lower, even below 20 USD/bbl.

### Iran and Iraq the biggest future oil supply question marks

Iran, OPEC's fifth-largest producer, ruled out any curbs on its oil production when the group met in December. It plans to boost output and exports by 1 million barrels a day this year following the lifting of international sanctions last month. Iraq continues to boost production as it recovers from years of conflict and under investment. The nation's output reached a record 4.35 million barrels a day in January and more increases could follow, according to the International Energy Agency. The freeze deal comes after months of competition for market share between Russia and Saudi Arabia. Riyadh has taken the rare step of selling crude into eastern Europe, Moscow's backyard, while Russia overtook Saudi Arabia in oil exports into China.

## Global economies | Foreign exchange markets

### Investment banks: CDS market react to higher uncertainty in the global banking sector

Suspicious CDS market participants have priced the risk of default much higher despite the reassurance from Deutsche Bank's co-CEO that the bank's capital position is "absolutely rock solid". Not only was the nervousness felt in the CDS market but also on stock exchanges and emerging market's FX which have been consequently sold out towards so-called safe heaven currencies.

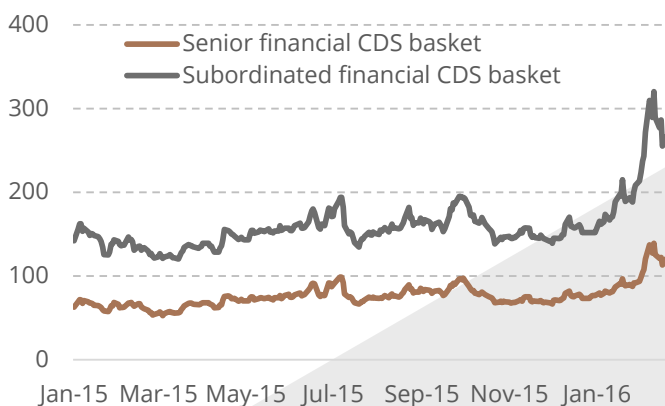
**Deutsche Bank's co-CEO says the bank's capital position was "absolutely rock solid"**

Deutsche Bank AG, which is Europe's biggest investment bank, fell recently to its lowest since 2009, having lost 40 % so far this year. The turmoil in financial markets clouds the outlook for its trading business. Fear about its ability to cope with a low-growth, low interest rate environment is fueling the sell-off, which has echoes of the 2008-09 financial crisis. In an effort to calm investors, Deutsche Bank said it had "sufficient" reserves to make due payments and bank's co-Chief Executive John Cryan reiterated in a mail to employees telling them they could reassure clients that the bank's capital position was "absolutely rock solid". Deutsche was not the only bank stricken as Credit Suisse, Standard Chartered, Bank of America Merrill Lynch and Morgan Stanley were among the other banks suffering steep falls.

**Worries about financial sector caused CDS market to react abruptly**

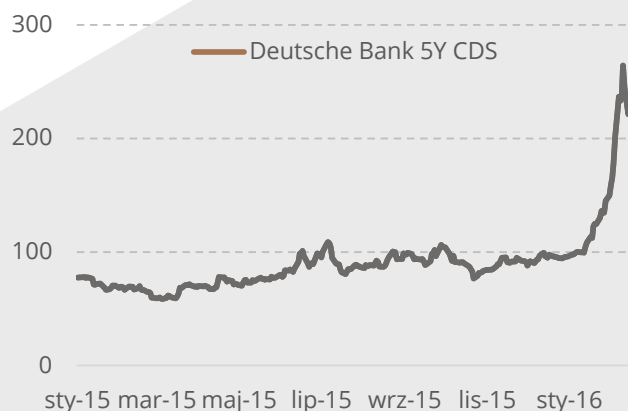
Data from Markit showed that five-year subordinated credit default swaps (CDS) for Deutsche Bank rose in about 3 weeks to a record high of 270 basis points. In the same time the STOXX Europe 600 Banks index fell to its lowest level since August 2012. The iTraxx European senior financials index of credit default swaps also hit its highest since September 2013. The indexes track financial groups' CDS and serve as a proxy for credit risk.

**CDS basket for both senior and subordinated banks' debt have risen sharply in the recent month...**



Source: Bloomberg, Markit, KGHM

**...driven mostly by DB's co-CEO whose "absolutely rock solid" reassurance has drawn public attention**



Source: Bloomberg, Markit, KGHM



## Macroeconomic calendar

### Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>China</b>							
☼☼	15-Feb	Trade balance (USD bn)	Jan	63.3 ▲	60.1	60.6	▲
☼☼	15-Feb	Exports (yoy)	Jan	-11.2% ▼	-1.4%	-1.8%	▼
☼	16-Feb	New yuan loans (CNY bn)	Jan	2 510 ▲	598	1 900	▲
☼☼☼☼	18-Feb	Consumer inflation CPI (yoy)	Jan	1.8% ▲	1.6%	1.9%	▼
☼☼	18-Feb	Producer inflation PPI (yoy)	Jan	-5.3% ▲	-5.9%	-5.4%	▲
<b>Poland</b>							
☼☼☼☼☼	12-Feb	GDP (yoy) - preliminary data	4Q	3.9% ▲	3.5%	3.8%	▲
☼☼☼☼☼	12-Feb	GDP (qoq) - preliminary data	4Q	1.1% ▲	0.9%	1.1%	○
☼☼☼☼	12-Feb	Consumer inflation CPI (yoy)	Jan	-0.7% ▼	-0.5%	-0.5%	▼
☼☼	12-Feb	Trade balance (EUR mn)‡	Dec	373 ▼	717	- 26.0	▲
☼☼	12-Feb	Exports (EUR mn)‡	Dec	13 849 ▼	15 457	13 575	▲
☼☼	12-Feb	Current account balance (EUR mn)‡	Dec	- 410 ▼	582	- 343	▼
☼	12-Feb	M3 money supply (yoy)	Jan	10.2% ▲	9.1%	9.5%	▲
☼☼	16-Feb	Average gross salary (yoy)	Jan	4.0% ▲	3.1%	3.4%	▲
☼	16-Feb	Employment (yoy)	Jan	2.3% ▲	1.4%	1.5%	▲
☼☼☼☼	17-Feb	Sold industrial production (yoy)	Jan	1.4% ▼	6.7%	2.9%	▼
☼☼☼	17-Feb	Retail sales (yoy)	Jan	0.9% ▼	4.9%	2.9%	▼
☼☼	17-Feb	Producer inflation PPI (yoy)	Jan	-1.2% ▼	-0.8%	-0.7%	▼
☼		Budget balance (ytd)	Jan	--	--	--	○
<b>US</b>							
☼☼	12-Feb	Retail sales (excluding autos, mom)‡	Jan	0.1% -	0.1%	0.0%	▲
☼☼	12-Feb	University of Michigan confidence index - preliminary data	Feb	90.7 ▼	92.0	92.3	▼
☼☼☼☼	17-Feb	Industrial production (mom)‡	Jan	0.9% ▲	-0.7%	0.4%	▲
☼	17-Feb	Capacity utilization‡	Jan	77.1% ▲	76.4%	76.7%	▲
☼☼	18-Feb	Philadelphia Fed business outlook	Feb	- 2.8 ▲	- 3.5	- 3.0	▲
☼☼☼☼	19-Feb	Consumer inflation CPI (mom)	Jan	0.0% ▲	-0.1%	-0.1%	▲
☼☼☼☼	19-Feb	Consumer inflation CPI (yoy)	Jan	1.4% ▲	0.7%	1.3%	▲
<b>Eurozone</b>							
☼☼☼☼☼	12-Feb	GDP (sa, yoy) - estimation	4Q	1.5% ▼	1.6%	1.5%	○
☼☼☼☼☼	12-Feb	GDP (sa, qoq) - estimation	4Q	0.3% -	0.3%	0.3%	○
☼☼☼☼	12-Feb	Industrial production (sa, mom)‡	Dec	-1.0% ▼	-0.5%	0.3%	▼
☼☼☼☼	12-Feb	Industrial production (wda, yoy)‡	Dec	-1.3% ▼	1.4%	0.7%	▼
☼	15-Feb	Trade balance (EUR mn)	Dec	24.3 ▲	23.6	27.5	▼
☼	16-Feb	ZEW survey expectations	Feb	13.6 ▼	22.7	--	○
☼	19-Feb	Consumer confidence - estimation	Feb	- 8.8 ▼	- 6.3	- 6.6	▼
<b>Germany</b>							
☼☼☼☼	09-Feb	Industrial production (wda, yoy)	Dec	-2.2% ▼	0.1%	-0.6%	▼
☼☼☼☼☼	12-Feb	GDP (yoy) - preliminary data‡	4Q	2.1% ▲	1.7%	1.7%	▲
☼☼☼☼☼	12-Feb	GDP (sa, qoq) - preliminary data	4Q	0.3% -	0.3%	0.3%	○
☼☼☼☼	12-Feb	Consumer inflation CPI (yoy) - final data	Jan	0.5% -	0.5%	0.5%	○
<b>France</b>							
☼☼☼☼	10-Feb	Industrial production (yoy)‡	Dec	-0.7% ▼	3.0%	1.7%	▼
☼☼☼☼	18-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	0.3% ▼	0.4%	0.4%	▼
☼☼☼☼	18-Feb	Consumer inflation CPI (yoy) - final data	Jan	0.2% -	0.2%	0.2%	○



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Italy</b>							
⊕⊕⊕⊕	10-Feb	Industrial production (wda, yoy)‡	Dec	-1.0% ▼	1.1%	1.4%	☹
⊕⊕⊕⊕⊕	12-Feb	GDP (wda, yoy) - preliminary data	4Q	1.0% ▲	0.8%	1.2%	☹
⊕⊕⊕⊕⊕	12-Feb	GDP (wda, qoq) - preliminary data	4Q	0.1% ▼	0.2%	0.3%	☹
<b>UK</b>							
⊕⊕⊕⊕	10-Feb	Industrial production (yoy)‡	Dec	-0.4% ▼	0.7%	1.0%	☹
⊕⊕⊕⊕	16-Feb	Consumer inflation CPI (yoy)	Jan	0.3% ▲	0.2%	0.3%	⊕
⊕⊕	17-Feb	Unemployment rate (ILO, 3-months)	Dec	5.1% =	5.1%	5.0%	⊕
<b>Japan</b>							
⊕⊕⊕⊕⊕	15-Feb	GDP (annualized, qoq) - preliminary data‡	4Q	-1.4% ▼	1.3%	-0.8%	☹
⊕⊕⊕⊕⊕	15-Feb	GDP (qoq, sa) - preliminary data	4Q	-0.4% ▼	0.3%	-0.2%	☹
⊕⊕⊕⊕	15-Feb	Industrial production (yoy) - final data	Dec	-1.9% ▼	-1.6%	--	☹
<b>Chile</b>							
⊕⊕⊕⊕	08-Feb	Consumer inflation CPI (yoy)	Jan	4.8% ▲	4.4%	4.6%	⊕
⊕⊕⊕	08-Feb	Copper exports (USD mn)	Jan	2 054 ▼	2 597	--	☹
⊕⊕⊕⊕⊕	11-Feb	BCCCh overnight rate target	Feb	3.50% =	3.50%	3.50%	⊕
<b>Canada</b>							
⊕⊕⊕⊕	19-Feb	Consumer inflation CPI (yoy)	Jan	2.0% ▲	1.6%	1.8%	⊕

<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

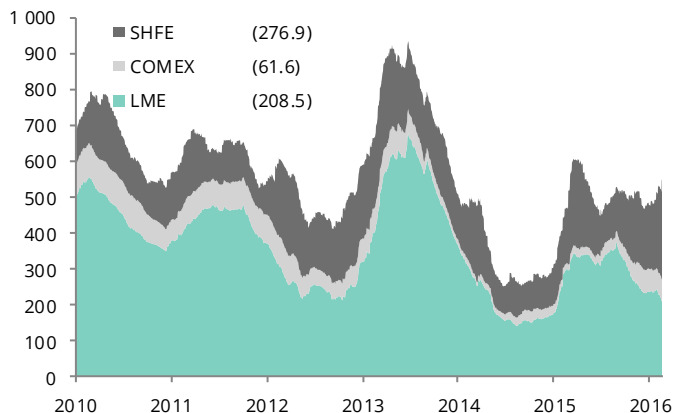
## Key market data

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

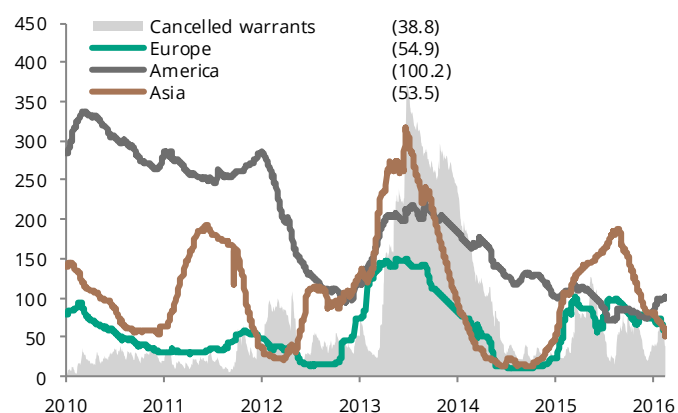
<i>(as of: 19-Feb-16)</i>		Price change °				From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max
<b>LME (USD/t)</b>								
Copper	4 590.00	▼ -1.7%	▼ -2.4%	▼ -2.4%	▼ -19.8%	4 507.83	4 310.50	4 685.00
Molybdenum	12 200.00	▲ 1.7%	▲ 1.7%	▲ 1.7%	▼ -26.9%	11 992.86	11 750.00	12 200.00
Nickel	8 340.00	▼ -1.7%	▼ -3.8%	▼ -3.8%	▼ -40.1%	8 369.71	7 710.00	8 725.00
Aluminum	1 552.00	▲ 1.4%	▲ 3.0%	▲ 3.0%	▼ -13.9%	1 495.03	1 453.00	1 552.00
Tin	15 950.00	▲ 4.8%	▲ 9.2%	▲ 9.2%	▼ -12.3%	14 492.57	13 235.00	15 950.00
Zinc	1 734.00	▲ 1.1%	▲ 8.4%	▲ 8.4%	▼ -16.4%	1 589.04	1 453.50	1 734.00
Lead	1 733.00	▼ -3.1%	▼ -3.8%	▼ -3.8%	▼ -2.8%	1 707.93	1 597.00	1 854.00
<b>LBMA (USD/troz)</b>								
Silver	15.37	▲ 3.1%	▲ 11.2%	▲ 11.2%	▼ -8.1%	14.46	13.58	15.65
Gold ¹	1 231.15	▲ 7.0%	▲ 15.9%	▲ 15.9%	▲ 1.8%	1 136.15	1 077.00	1 241.00
<b>LPPM (USD/troz)</b>								
Platinum ¹	941.00	▲ 4.7%	▲ 7.9%	▲ 7.9%	▼ -19.6%	880.83	814.00	957.00
Palladium ¹	507.00	▼ -0.4%	▼ -7.3%	▼ -7.3%	▼ -35.1%	503.91	470.00	550.00
<b>FX ³</b>								
EUR/USD	1.1096	▼ -0.9%	▲ 1.9%	▲ 1.9%	▼ -2.6%	1.0978	1.0742	1.1347
EUR/PLN	4.3830	▼ -0.7%	▲ 2.9%	▲ 2.9%	▲ 4.9%	4.4110	4.2935	4.4987
USD/PLN	3.9531	▲ 0.3%	▲ 1.3%	▲ 1.3%	▲ 7.9%	4.0151	3.9074	4.1475
USD/CAD	1.3801	▼ -0.5%	▼ -0.3%	▼ -0.3%	▲ 10.5%	1.4073	1.3684	1.4589
USD/CNY	6.5223	▼ -0.8%	▲ 0.4%	▲ 0.4%	▲ 4.3%	6.5645	6.4962	6.5948
USD/CLP	700.74	▲ 0.3%	▼ -1.3%	▼ -1.3%	▲ 12.9%	715.90	698.49	730.31
<b>Money market</b>								
3m LIBOR USD	0.618	▼ 0.00	▲ 0.01	▲ 0.01	▲ 0.36	0.619	0.612	0.624
3m EURIBOR	-0.198	▼ -0.03	▼ -0.07	▼ -0.07	▼ -0.25	-0.159	-0.198	-0.132
3m WIBOR	1.690	- 0.00	▼ -0.03	▼ -0.03	▼ -0.20	1.700	1.690	1.720
5y USD interest rate swap	1.145	▼ -0.07	▼ -0.59	▼ -0.59	▼ -0.60	1.326	1.045	1.709
5y EUR interest rate swap	0.053	▼ 0.00	▼ -0.28	▼ -0.28	▼ -0.26	0.139	0.038	0.309
5y PLN interest rate swap	1.798	▼ -0.04	▼ -0.19	▼ -0.19	▼ -0.01	1.899	1.755	2.040
<b>Fuel</b>								
WTI Cushing	29.64	▼ -4.0%	▼ -20.0%	▼ -20.0%	▼ -42.1%	30.81	26.21	36.76
Brent	32.52	▼ -3.5%	▼ -9.0%	▼ -9.0%	▼ -45.2%	31.50	26.39	36.23
Diesel NY (ULSD)	101.30	▼ -3.5%	▼ -5.8%	▼ -5.8%	▼ -50.1%	99.94	86.44	108.03
<b>Others</b>								
VIX	20.53	▼ -2.85	▲ 2.32	▲ 2.32	▲ 5.24	23.65	19.34	28.14
BBG Commodity Index	75.11	▼ -0.6%	▼ -4.4%	▼ -4.4%	▼ -27.2%	75.33	72.88	77.91
S&P500	1 917.78	▲ 2.0%	▼ -6.2%	▼ -6.2%	▼ -8.6%	1 906.46	1 829.08	2 016.71
DAX	9 388.05	▲ 1.1%	▼ -12.6%	▼ -12.6%	▼ -14.7%	9 576.07	8 752.87	10 310.10
Shanghai Composite	2 860.02	▲ 3.5%	▼ -19.2%	▼ -19.2%	▼ -11.9%	2 918.75	2 655.66	3 361.84
WIG 20	1 841.06	▲ 2.8%	▼ -1.0%	▼ -1.0%	▼ -21.6%	1 756.93	1 674.57	1 853.76
KGHM	66.40	▲ 7.8%	▲ 4.6%	▲ 4.6%	▼ -44.0%	57.57	52.29	66.40

° 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

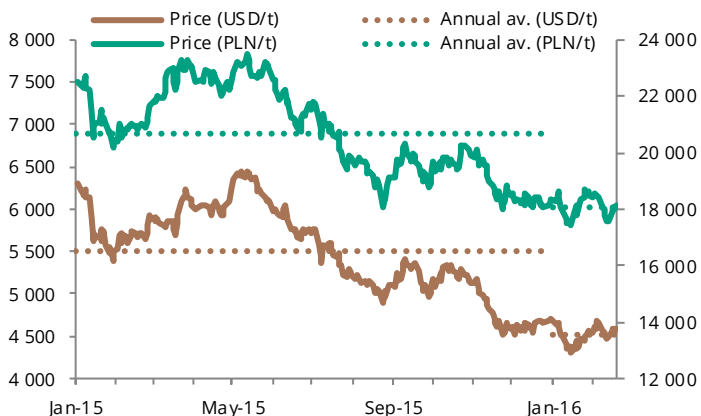
Source: Bloomberg, KGHM

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


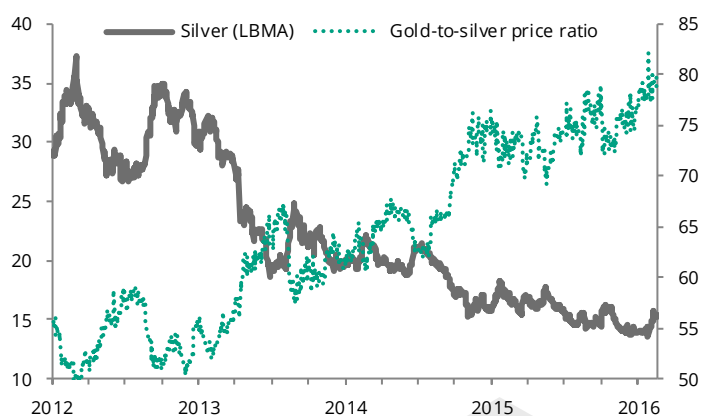
Note: Latest values in brackets. Source: Bloomberg, KGHM

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


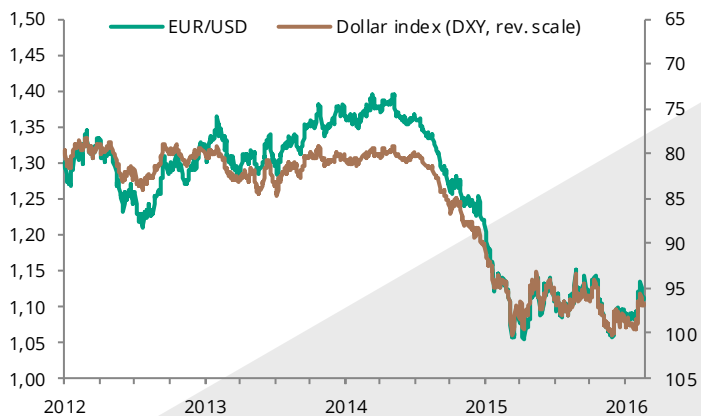
Note: Latest values in brackets. Source: Bloomberg, KGHM

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


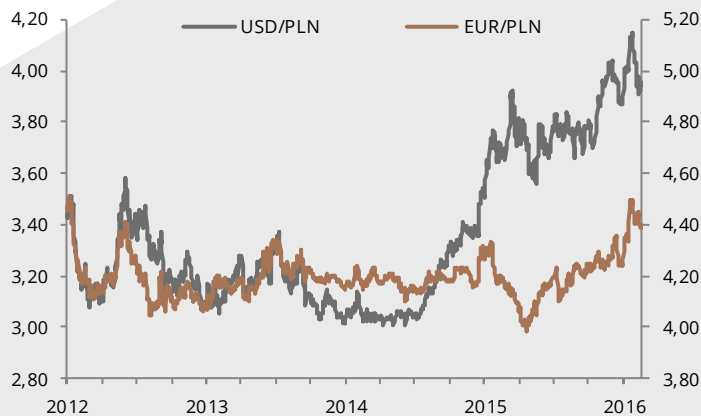
Source: Bloomberg, KGHM

**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: **8 February 2016 – 21 February 2016.**

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

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

Official metals prices are available on following websites:

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

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In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.

Departament Zarządzania Ryzykiem Rynkowym i Kredytowym (Market and Credit Risk Management Department)

Wydział Ryzyka Rynkowego (Market Risk Unit)

ul. M. Skłodowskiej-Curie 48

59-301 Lubin, Poland