

# Market Overview

as of: 2 March 2015






- Copper:** In the last two weeks copper outperformed base metals complex (LMEX) by over 2 percentage points. According to some of market participants, most of the bullish move was purely fundamental, connected with reduced guidance from major miners announced late last year, slower ramp-up amongst the Chinese smelters and potential price-related mine closures. Some of the financial institutions relate this upside move with Chinese New Year holidays which significantly lowered liquidity (*page 2*).
- Precious metals:** The market in the last two weeks moved sideways in a narrow range with little volatility, as investors were waiting for bolder moves, eyeing Fed and ECB signals (*page 4*).
- Poland:** GDP growth has recorded a decent pickup in 2014, broadly in line with expectations at the beginning of the year. Domestic demand was the main growth driver, with fixed investments outperforming expectations (*page 6*).
- China:** Over the past few months, the long-running decline in China's housing sales has visibly bottomed and started to improve. Nevertheless, while this kind of improvement in previous cycles would have translated into a similar turnaround in construction activity, that has not been the case this time (*page 6*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▲ Copper	5 880.50	2.6%
▼ Nickel	14 045.00	-4.7%
<b>LBMA (USD/troz)</b>		
▼ Silver	16.53	-2.0%
▼ Gold (PM)	1 214.00	-1.5%
<b>FX</b>		
▼ EUR/USD	1.1240	-1.2%
▼ EUR/PLN	4.1495	-0.7%
▲ USD/PLN	3.6980	1.2%
▲ USD/CAD	1.2508	0.5%
▼ USD/CLP	617.67	-1.5%
<b>Stocks</b>		
▲ KGHM	121.00	6.4%

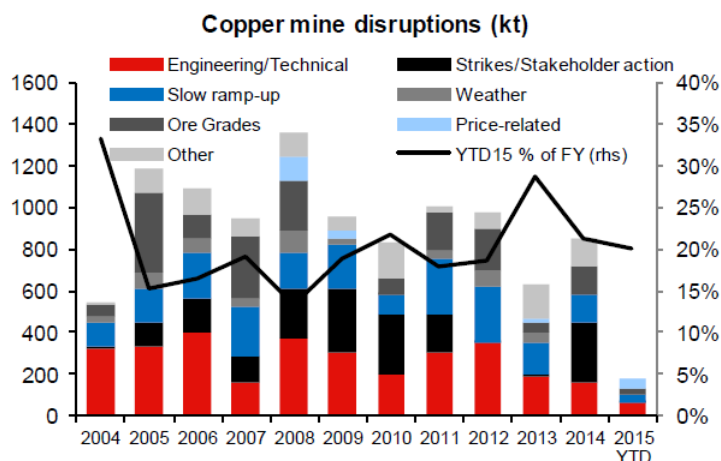
 Source: Bloomberg, KGHM; (*more on page 10*)

## Important macroeconomic data

Release	For		
 GDP (annlzd., qoq)	4Q	2.2%	▼
 Official manuf. PMI	Feb	49.9	▲
 Composite PMI	Feb	53.5	▲
 GDP (yoy)	4Q	3.1%	▲
 FDI (yoy)	Jan	29.4%	▲

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

## Copper mine disruptions reached nearly 200k mt in FY 2015



Source: Macquarie, KGHM

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## Base and precious metals

### Copper

**In the last two weeks copper outperformed base metals complex (LMEX) by over 2 percentage points. According to some of market participants, most of the bullish move was purely fundamental, connected with reduced guidance from major miners announced late last year, slower ramp-up amongst the Chinese smelters and potential price-related mine closures. Some of the financial institutions relate this upside move with Chinese New Year holidays which significantly lowered liquidity.**

#### Drought in Chile curbs copper production

A drought in Chile this summer is hampering copper production – a water-intensive business – and may lead to another round of revisions of expected surplus this year. Water is used in many stages of production process: from bathrooms for workers to separating the metals in the ore body from waste rock and tamping down dust that heavy trucks kick up. Summers in central Chile are becoming drier, and January was one of the driest since records began.

Big global copper producers admit that those market conditions adversely affect their production on Chilean territory. Water scarcity may cause a decline in Los Bronces mine by 3k mt, which accounts for 4 percent of annual production of its owner – Anglo American. Output at BHP Billiton's Escondida, the world's largest copper mine, fell 2% in the second half of 2014, weighing on a strong operating performance of the group. Many Chilean operations, like Escondida, are located in the Atacama, the world's driest desert, which may affect country's total copper output.

Demand for water from copper industry is rising slowly, partially because of Chile's falling ore grades. Moreover, the shortages of water lead to growing tensions between other industries, also relying heavily on this production input. Therefore, miners in Chile are increasingly turning to more expensive options like seawater desalination and sewage treatment plants to get water for their needs and for the communities around them, driving up costs. One of such projects is Escondida's sea water desalination plant, which is due to start operations in 2017 and will cost 3.4 billion USD.

#### Crumbling copper supply output

Year-to-date copper supply-side dysfunction has caused nearly 200k mt of lost output. The main culprits are reduced guidance from major miners announced last year, slower rump up amongst the Chinese smelters and potential price-related mine closures. According to Macquarie, recent disruptions will take out around 85k mt from the supply-demand balance and raise the full-year allowance for 2015 to a little over 900k mt. Such cumbersome supply-side

**In some regions, January was one of the driest months since records began**

**Due to drought Anglo American may lose 4% of its annual production**

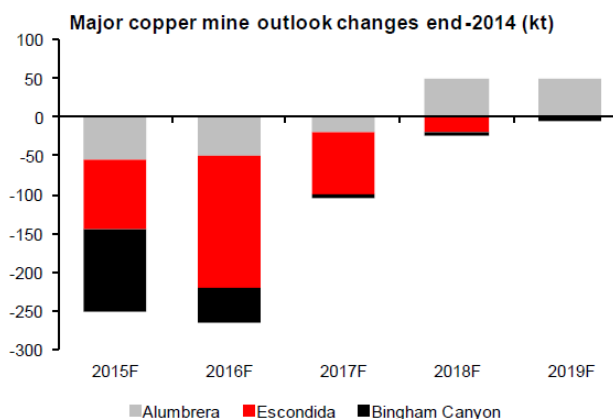
**Copper's cumbersome supply-side is earning its reputation once again; disruptions caused nearly 200k mt of lost output**

might move the copper market balance to a negative territory. Macquarie estimates exclude any potential SRB buying which, in case it materializes, would probably have substantial effect on copper price, once the market participants find out the rare availability of the material.

### Further threats to the market balance

Further threats to supply-demand balance include outcome of the Zambian tax stand-off as well as price-related mine closures. According to Macquarie, from January-to-date, 31% of copper disruptions are related to the recent copper price slump, which in years 2010-2014 happened only once. In case of demand, the biggest potential risk on the demand side, given our recent conversations with market participants, is seen as the Chinese construction sector this year turning out to be worse than the current base case assumed by Macquarie analysts.

### Further copper mine outlook changes might influence market sentiment



Source: Macquarie, KGHM

### Las Bambas ramp-up and deleverage might lead to another big copper deal

### MMG seeks another big deal within a couple of years

MMG Ltd., the overseas unit of China's biggest state-owned metals trader, will likely seek resources for another big acquisition within next years. Last year the company bought the Las Bambas copper project in Peru from Glencore Plc for about 7 bn USD. The main reason for another takeover is the willingness to become one of the top "mid-tier" mining company by 2020, with enterprise value of around 20 bn USD. That in mind, the company would like to first complete the construction of Las Bambas, deleverage and then seek opportunities to develop their business further.

Historically, it took 28 months between MMG's purchase of Anvil Mining Ltd. and the closing of the Las Bambas deal on July 31, according to data compiled by Bloomberg. Michael Nossal, MMG's executive general manager for business development, states that Chinese company would like to be completing the next deal about 30 months after the Las Bambas close, but this is rather Nossal's personal target rather than a formal company objective.

MMG, controlled by China Minmetals Corp., is focused on base metal assets, especially copper and zinc. For now, MMG is concentrating on completing

construction at Las Bambas, where production is targeted for the first quarter of 2016. The company is also considering the next steps at its Dugald River zinc, lead and silver project in north Queensland, and looking for growth opportunities at its copper assets in the Democratic Republic of Congo.

### Other important information on copper market:

- The global refined copper market showed a 42,000 tonnes deficit in November, compared with a 29,000 tonnes deficit in October, the International Copper Study Group (ICSG) reported. For the first 11 months of 2014, the market was in a 640,000 tonnes deficit – 362,000 tonnes higher than in the same period of 2013. World refined copper output in November was 2.00 million tonnes, while consumption was 2.04 million tonnes.
- Democratic Republic of Congo's copper production rose by more than 12 percent to a record 1.03 million tonnes in 2014, the vice president of the chamber of mines reported. Congo competes with Zambia to be Africa's leading copper producer.
- An average of 500,000 tonnes/year were lost in the past 5 years as users switched to alternative materials such as plastics, according to European Copper Institute. Copper prices at 5,500 USD are not low enough to encourage reversal of the substitution in plumbing and roofing, the institute estimates.
- Chilean state-run copper producer Codelco expects red metal production to be reduced by around 4-5k mt in February following a fire at its El Teniente mine last month. The company expect that the fire will also hit production in March, but return to normal in April.

## Precious metals

**The market in the last two weeks moved sideways in a narrow range with little volatility, as investors were waiting for bolder moves, eying Fed and ECB signals.**

### India to introduce new measures to control gold imports

The Indian Budget recently disappointed those, who had hoped for a cut in the import tax on gold. Instead, the RBI will allow gold deposit accounts, where bank clients will be able to earn interest on metal, while jewellers receive loans. The RBI would also plan to launch a sovereign gold bond, as well as gold coin, all these measures in hope of mobilizing the country's physical metal hoard. The new regulations are not really new, as a gold deposit scheme has been in place since 1998 and according to the World Gold Council has only attracted up to 20 tons of gold in all these years. More attractive interest rates than the present 0.75-1% p.a. for 3-5 years maturities might be needed.

**10% gold import tax intact in India**

### More than 10 banks investigated

### Gold, silver, platinum and palladium prices may have been manipulated

## Possible precious metals prices rigging investigated

The US Department of Justice and the Commodity Futures Trading Commission (CFTC) are investigating at least 10 major banks for a possible rigging of precious metals markets, the Wall Street Journal reported.

Justice Department prosecutors are analysing the price-setting process for gold, silver, platinum and palladium in London, while the CFTC has opened a civil investigation. The institutions under scrutiny are: HSBC, Bank of Nova Scotia, Barclays PLC, Credit Suisse Group AG, Deutsche Bank AG, Goldman Sachs Group Inc, JPMorgan Chase & Co, Societe Generale, Standard Bank Group Ltd and UBS AG. HSBC was one of a number of banks named in lawsuits filed in US courts last year. Apart from manipulating metals' prices banks are accused also of distorting precious metals derivatives.

## Global economies | Foreign exchange markets

### Poland: Robust 2014 GDP performance

**GDP growth has recorded a decent pickup in 2014, broadly in line with expectations at the beginning of the year. Domestic demand was the main growth driver, with fixed investments outperforming expectations.**

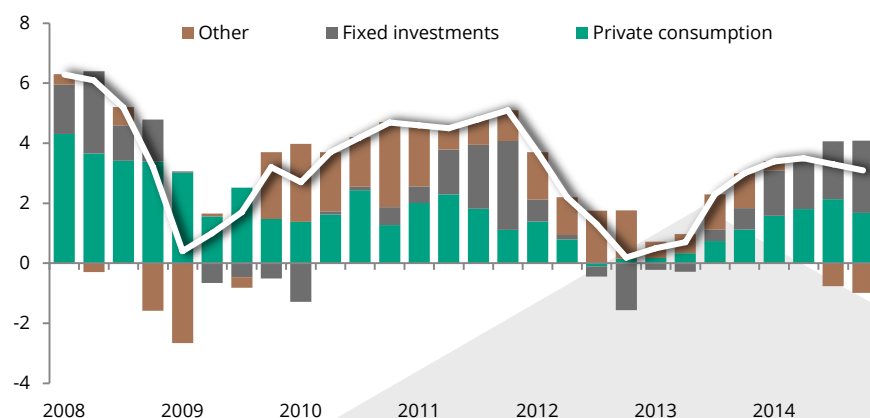
**GDP moderated in Q4, but stayed above 3.0%**

Pace of growth moderated through the year. The last quarter of 2014 saw the economy expanding at the weakest rate in yoy and qoq terms, but the slowdown was marginal and stayed above 3.0% level.

**Fixed investments highest since pre-crisis**

Domestic demand growth accelerated to 4.6% yoy, up from 0.2% in 2013, the strongest reading since 2008. Fixed investments grew at 9.5% yoy, the most since 2007. Private consumption growth came at 3.1% yoy, the highest pace since 2009. Both exports and imports growth picked up in the last quarter of 2014 compared to the previous two quarters, but overall net exports contributed negatively to 2014 growth at -1.3 pts.

#### Households' consumption and fixed investments continue to contribute robustly to GDP (% yoy)



Source: Bloomberg, KGHM

### China: property market correction continues

Over the past few months, the long-running decline in China's housing sales has visibly bottomed and started to improve. Nevertheless, while this kind of improvement in previous cycles would have translated into a similar turnaround in construction activity, that has not been the case this time.

### Construction starts decline much faster than sales (in annual terms)

December's sales weakened by 4% yoy, compared to the 16% drop in July. However, the decline in new starts has only deepened, and growth in real estate investment is now the slowest in five years. Therefore, while demand looks relatively well, it is not strong enough to encourage supply side to restart construction activities, which in turn may weigh on economy growth. It seems that in fact supply is adjusting not only to lower expected future demand, but to current high levels of inventories. This correction is likely to last for another two years before inventories can be worked off effectively. As it progresses, the traditional correlation between housing sales and indicators like steel use and construction starts will break down.

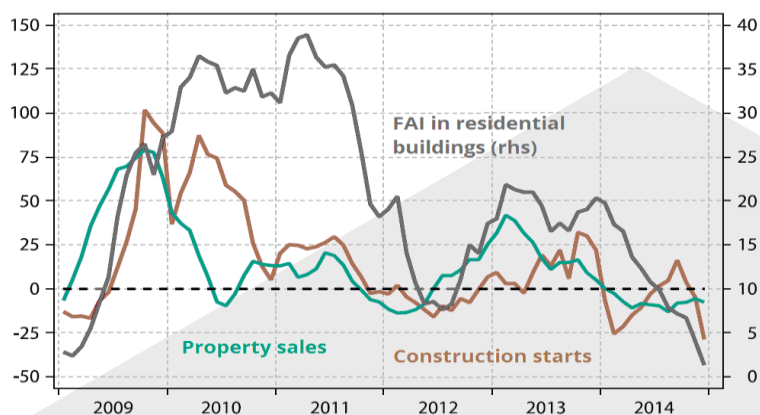
### Government contribution will not help construction this time

Another factor likely to weigh on starts in 2015 may be a reduced contribution from government social housing programs. The public projects have been regularly used in recent years to help offset weakness in private sector construction. But given the obvious problems of high inventories in many cities, building more new housing is not a great solution. Instead, official attention is turning to repurposing some of this stock of unsold housing.

### Subsidized rental housing may take some pressure off inventories

A notice from the housing ministry in January officially encouraged local governments to use social housing funds to purchase existing units and turn them into subsidized rental housing. The available funds could cover the purchase of up to 1 million units of housing in 2015, about 13% of the new housing completed in 2014. This is a way of taking some inventory pressure off the market, but does not seem enough to help construction growth.





### Sales stabilization is not followed by construction this time (% yoy)










Source: Gavekal Research, KGHM

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>China</b> 							
☆☆☆	01-Mar	Official manufacturing PMI	Feb	49.9 ▲	49.8	49.7	▲
☆☆☆	25-Feb	HSBC's manufacturing PMI - preliminary data	Feb	--	49.7	49.5	
☆	16-Feb	Foreign direct investment (yoy)	Jan	29.4% ▲	10.3%	--	
<b>Poland</b> 							
☆☆☆☆☆	27-Feb	GDP (yoy) - final data	4Q	3.1% ▲	3.0%	--	
☆☆☆☆☆	27-Feb	GDP (qoq) - final data	4Q	0.7% ▲	0.6%	--	
☆☆☆☆	18-Feb	Sold industrial production (yoy)‡	Jan	1.7% ▼	7.9%	2.4%	●
☆☆☆	18-Feb	Retail sales (yoy)	Jan	0.1% ▼	1.8%	0.9%	●
☆☆	24-Feb	Unemployment rate	Jan	12.0% ▲	11.5%	12.0%	○
☆☆	17-Feb	Average gross salary (yoy)	Jan	3.6% ▼	3.7%	3.3%	●
☆☆	18-Feb	Producer inflation PPI (yoy)‡	Jan	-2.9% ▼	-2.7%	-2.9%	○
☆	17-Feb	Employment (yoy)	Jan	1.2% ▲	1.1%	1.5%	●
☆	16-Feb	Budget balance (ytd)	Jan	1.3%	--	--	
☆	27-Feb	NBP inflation expectations	Feb	0.2% -	0.2%	0.2%	○
<b>US</b> 							
☆☆☆☆☆	27-Feb	GDP (annualized, qoq)	4Q	2.2% ▼	2.6%	2.0%	●
☆☆☆☆	26-Feb	Consumer inflation CPI (mom)‡	Jan	-0.7% ▼	-0.3%	-0.6%	●
☆☆☆☆	26-Feb	Consumer inflation CPI (yoy)	Jan	-0.1% ▼	0.8%	-0.1%	○
☆☆☆☆	18-Feb	Industrial production (mom)‡	Jan	0.2% ▲	-0.3%	0.3%	●
☆☆☆	24-Feb	Composite PMI - preliminary data	Feb	56.8 ▲	54.4	--	
☆☆☆	20-Feb	Manufacturing PMI - preliminary data	Feb	54.3 ▲	53.9	53.6	●
☆☆☆	24-Feb	PMI services - preliminary data	Feb	57.0 ▲	54.2	54.5	●
☆☆	26-Feb	Durable goods orders‡	Jan	2.8% ▲	-3.7%	1.6%	●
☆☆	19-Feb	Philadelphia Fed business outlook	Feb	5.2 ▼	6.3	9.0	●
☆☆	27-Feb	University of Michigan confidence index - final data	Feb	95.4 ▲	93.6	94.0	●
☆	18-Feb	Capacity utilization‡	Jan	79.4% -	79.4%	79.9%	●
☆	23-Feb	Dallas Fed manufacturing activity	Feb	-11.2 ▼	-4.4	-4.0	●
☆	24-Feb	Richmond Fed manufacturing index	Feb	0.0 ▼	6.0	6.0	●
☆	24-Feb	S&P/CaseShiller home price index‡	Dec	173 ▲	173	173	●
<b>Eurozone</b> 							
☆☆☆☆	24-Feb	Consumer inflation CPI (yoy) - final data‡	Jan	-0.6% ▼	-0.2%	-0.6%	○
☆☆☆☆	24-Feb	Core CPI (yoy) - final data	Jan	0.6% -	0.6%	0.6%	○
☆☆☆	20-Feb	Composite PMI - preliminary data	Feb	53.5 ▲	52.6	53.0	●
☆☆☆	20-Feb	Manufacturing PMI - preliminary data	Feb	51.1 ▲	51.0	51.5	●
☆☆☆	20-Feb	Services PMI - preliminary data	Feb	53.9 ▲	52.7	53.0	●
☆	16-Feb	Trade balance (EUR mn)‡	Dec	24.3 ▲	21.2	20.0	●
☆	17-Feb	ZEW survey expectations	Feb	52.7 ▲	45.2	--	
☆	26-Feb	M3 money supply (yoy)‡	Jan	4.1% ▲	3.8%	3.7%	●
☆	26-Feb	Economic confidence‡	Feb	102 ▲	101	102	●
☆	26-Feb	Industrial confidence‡	Feb	-4.7 ▲	-4.8	-4.5	●
☆	19-Feb	Consumer confidence - estimation	Feb	-6.7 ▲	-8.5	-7.5	●
☆	26-Feb	Consumer confidence - final data	Feb	-6.7 -	-6.7	-6.7	○
☆	26-Feb	Business climate indicator‡	Feb	0.1 ▼	0.1	0.2	●



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Germany</b>							
⊕⊕⊕⊕⊕	24-Feb	GDP (yoy) - final data	4Q	1.6%	-	1.6%	1.6% ⊙
⊕⊕⊕⊕⊕	24-Feb	GDP (sa, qoq) - final data	4Q	0.7%	-	0.7%	0.7% ⊙
⊕⊕⊕⊕	27-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Feb	-0.1%	▲	-0.5%	-0.5% ▲
⊕⊕⊕⊕	27-Feb	Consumer inflation CPI (yoy) - preliminary data	Feb	0.1%	▲	-0.4%	-0.3% ▲
⊕⊕⊕	20-Feb	Composite PMI - preliminary data	Feb	54.3	▲	53.5	54.0 ▲
⊕⊕⊕	20-Feb	Manufacturing PMI - preliminary data	Feb	50.9	-	50.9	51.5 ◡
⊕⊕	23-Feb	IFO business climate	Feb	107	▲	107	108 ◡
⊕⊕	26-Feb	GfK consumer confidence	Mar	9.7	▲	9.3	9.5 ▲
⊕⊕	26-Feb	Unemployment rate	Feb	6.5%	-	6.5%	6.5% ⊙
⊕⊕	24-Feb	Exports (qoq)‡	4Q	1.3%	▼	2.0%	1.2% ▲
<b>France</b>							
⊕⊕⊕⊕	19-Feb	Harmonized consumer inflation HICP (yoy)	Jan	-0.4%	▼	0.1%	-0.3% ◡
⊕⊕⊕⊕	19-Feb	Consumer inflation CPI (yoy)	Jan	-0.4%	▼	0.1%	-0.3% ◡
⊕⊕⊕	20-Feb	Composite PMI - preliminary data	Feb	52.2	▲	49.3	49.8 ▲
⊕⊕⊕	20-Feb	Manufacturing PMI - preliminary data	Feb	47.7	▼	49.2	49.6 ◡
<b>Italy</b>							
⊕⊕⊕⊕	20-Feb	Harmonized consumer inflation HICP (yoy) - final data‡	Jan	-0.5%	-	-0.5%	-0.4% ◡
<b>UK</b>							
⊕⊕⊕⊕⊕	26-Feb	GDP (yoy) - preliminary data	4Q	2.7%	-	2.7%	2.7% ⊙
⊕⊕⊕⊕⊕	26-Feb	GDP (qoq) - preliminary data	4Q	0.5%	-	0.5%	0.5% ⊙
⊕⊕⊕⊕	17-Feb	Consumer inflation CPI (yoy)	Jan	0.3%	▼	0.5%	0.4% ◡
⊕⊕	18-Feb	Unemployment rate (ILO, 3-months)	Dec	5.7%	▼	5.8%	5.8% ◡
<b>Japan</b>							
⊕⊕⊕⊕⊕	16-Feb	GDP (annualized, qoq) - preliminary data‡	4Q	2.2%	▲	-2.3%	3.7% ◡
⊕⊕⊕⊕⊕	16-Feb	GDP (qoq, sa) - preliminary data‡	4Q	0.6%	▲	-0.6%	0.9% ◡
⊕⊕⊕⊕	27-Feb	Consumer inflation CPI (yoy)	Jan	2.4%	-	2.4%	2.4% ⊙
⊕⊕⊕⊕	16-Feb	Industrial production (yoy) - final data	Dec	0.1%	▼	0.3%	--
⊕⊕⊕	20-Feb	Manufacturing PMI - preliminary data	Feb	--		52.2	52.5
<b>Chile</b>							
⊕⊕⊕	27-Feb	Total copper production (metric tons)	Jan	524 296	▲	522 674	--
⊕⊕⊕	27-Feb	Manufacturing (yoy)	Jan	1.0%	▼	3.1%	1.1% ◡
<b>Canada</b>							
⊕⊕⊕⊕	26-Feb	Consumer inflation CPI (yoy)	Jan	1.0%	▼	1.5%	0.8% ▲

<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

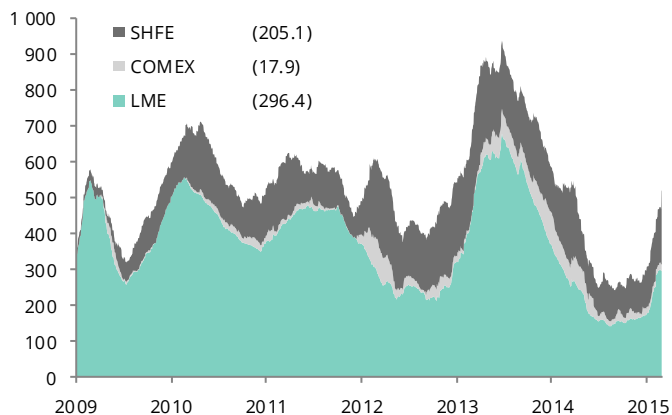
(as of: 27-Feb-15)

	Price	Price change <sup>4</sup>					From year beginning <sup>2</sup>		
		2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t)</b>									
Copper	5 880.50	▲ 2.6%	▼ -7.5%	▼ -7.5%	▼ -17.1%	5 760.34	5 390.50	6 309.00	
Molybdenum	17 000.00	▼ -2.3%	▼ -19.0%	▼ -19.0%	▼ -24.4%	19 157.32	16 350.00	21 500.00	
Nickel	14 045.00	▼ -4.7%	▼ -6.0%	▼ -6.0%	▼ -1.0%	14 655.61	13 915.00	15 455.00	
Aluminum	1 794.50	▼ -2.0%	▼ -2.0%	▼ -2.0%	▲ 4.6%	1 814.43	1 762.00	1 871.50	
Tin	17 920.00	▼ -1.8%	▼ -8.1%	▼ -8.1%	▼ -24.0%	18 891.83	17 830.00	19 750.00	
Zinc	2 060.50	▼ -4.3%	▼ -4.9%	▼ -4.9%	▼ -0.6%	2 106.98	2 021.00	2 183.50	
Lead	1 726.00	▼ -5.9%	▼ -6.9%	▼ -6.9%	▼ -17.8%	1 817.22	1 726.00	1 881.50	
<b>LBMA (USD/troz)</b>									
Silver	16.53	▼ -2.0%	▲ 3.5%	▲ 3.5%	▼ -22.7%	16.97	15.71	18.23	
Gold <sup>1</sup>	1 214.00	▼ -1.5%	▲ 1.2%	▲ 1.2%	▼ -8.9%	1 239.82	1 172.00	1 295.75	
<b>LPPM (USD/troz)</b>									
Platinum <sup>1</sup>	1 177.00	▼ -2.0%	▼ -2.7%	▼ -2.7%	▼ -18.7%	1 221.10	1 160.00	1 285.00	
Palladium <sup>1</sup>	808.00	▲ 2.8%	▲ 1.3%	▲ 1.3%	▲ 8.7%	785.27	757.00	817.00	
<b>FX <sup>3</sup></b>									
EUR/USD	1.1240	▼ -1.2%	▼ -7.4%	▼ -7.4%	▼ -17.7%	1.1489	1.1198	1.2043	
EUR/PLN	4.1495	▼ -0.7%	▼ -2.6%	▼ -2.6%	▼ -0.9%	4.2291	4.1495	4.3335	
USD/PLN	3.6980	▲ 1.2%	▲ 5.4%	▲ 5.4%	▲ 20.6%	3.6814	3.5725	3.7687	
USD/CAD	1.2508	▲ 0.5%	▲ 7.8%	▲ 7.8%	▲ 12.3%	1.2298	1.1728	1.2717	
USD/CNY	6.2694	▲ 0.5%	▲ 1.0%	▲ 1.0%	▲ 2.3%	6.2354	6.1883	6.2694	
USD/CLP	617.67	▼ -1.5%	▲ 1.7%	▲ 1.7%	▲ 10.5%	622.23	606.75	632.19	
<b>Money market</b>									
3m LIBOR USD	0.262	▲ 0.02	▲ 0.02	▲ 0.02	▲ 0.11	0.256	0.251	0.263	
3m EURIBOR	0.039	▼ -0.19	▼ -0.50	▼ -0.50	▼ -0.86	0.056	0.039	0.076	
3m WIBOR	1.810	▼ -0.07	▼ -0.12	▼ -0.12	▼ -0.33	1.974	1.810	2.060	
5y USD interest rate swap	1.650	▼ -0.03	▼ -0.07	▼ -0.07	▲ 0.05	1.569	1.313	1.765	
5y EUR interest rate swap	0.268	▼ -0.12	▼ -0.26	▼ -0.26	▼ -0.72	0.309	0.263	0.350	
5y PLN interest rate swap	1.775	▲ 0.02	▼ -0.09	▼ -0.09	▼ -0.51	1.740	1.563	1.920	
<b>Fuel</b>									
WTI Cushing	49.76	▼ -5.7%	▼ -6.6%	▼ -6.6%	▼ -51.4%	48.89	44.45	53.53	
Brent	61.81	▲ 4.0%	▲ 10.9%	▲ 10.9%	▼ -43.3%	52.88	45.25	61.81	
Diesel NY (ULSD)	233.64	▲ 17.0%	▲ 28.1%	▲ 28.1%	▼ -25.3%	182.83	161.84	233.64	
<b>Others</b>									
VIX	13.34	▼ -0.09	▼ -0.31	▼ -0.31	▼ -0.05	17.55	13.34	22.39	
BBG Commodity Index	103.44	▼ -1.0%	▼ -0.9%	▼ -0.9%	▼ -22.4%	102.41	98.76	104.47	
S&P500	2 104.50	▲ 0.4%	▲ 2.2%	▲ 2.2%	▲ 13.5%	2 054.49	1 992.67	2 115.48	
DAX	11 401.66	▲ 4.0%	▲ 16.3%	▲ 16.3%	▲ 18.9%	10 547.54	9 469.66	11 401.66	
Shanghai Composite	3 310.30	▲ 3.3%	▲ 2.3%	▲ 2.3%	▲ 61.7%	3 247.88	3 075.91	3 383.18	
WIG 20	2 367.10	▲ 0.9%	▲ 2.2%	▲ 2.2%	▼ -4.1%	2 328.62	2 242.42	2 367.65	
KGHM	121.00	▲ 6.4%	▲ 11.2%	▲ 11.2%	▲ 6.8%	110.96	100.95	122.70	

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

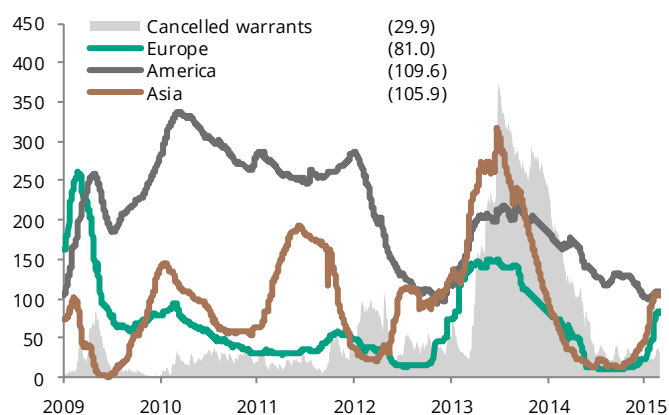
Source: Bloomberg, KGHM

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



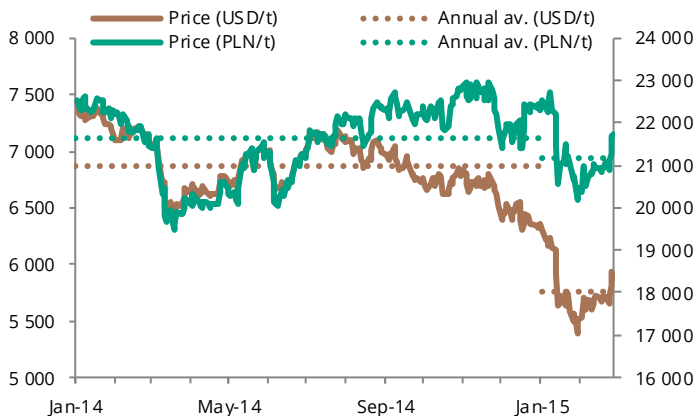
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



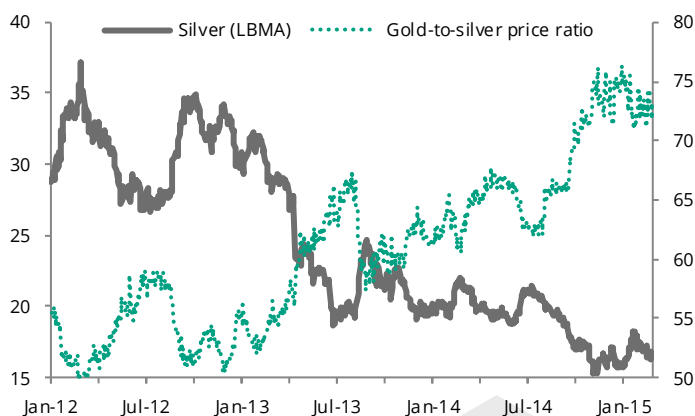
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



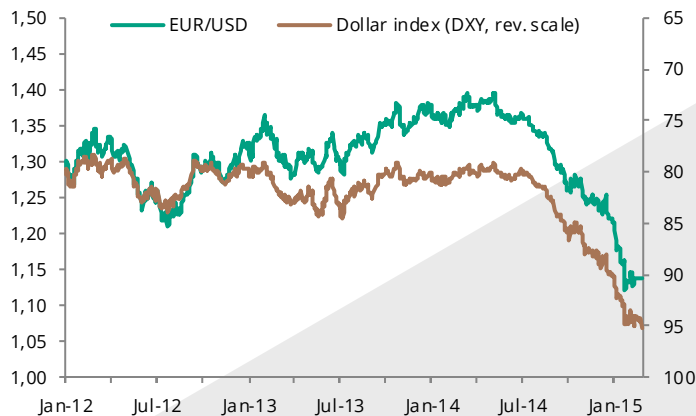
Source: Bloomberg, KGHM

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



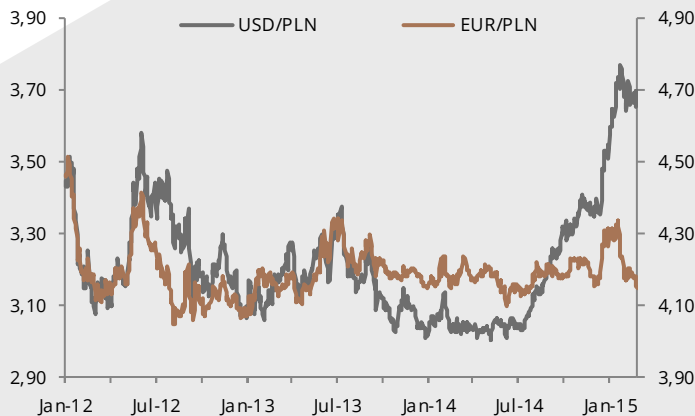
Source: Bloomberg, KGHM

**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:  
**16 February – 1 March 2015.**

- “Commodities Comment” Macquarie Research Metals and Mining, ▪ “Commodities Daily” Standard Bank, ▪ “Commodities Weekly” Barclays Capital Research, ▪ “Metals Market Update” Morgan Stanley, ▪ “Daily Copper Wrap” Mitsui, ▪ “Base and Precious Metals Daily” JPMorgan, ▪ „Codziennik” BZ WBK, ▪ „Tygodnik Ekonomiczny” BZ WBK, ▪ „Raport dzienny” mBank, ▪ „Biuletyn Dzienny” Bank PEKAO S.A., ▪ „Dragonomics: China Research” Gavekal

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ lme.co.uk, ▪ lbma.org.uk, ▪ economy.com/dismal, ▪ thebulliondesk.com, ▪ lbma.org.uk/stats, ▪ crumonitor.com, ▪ metalbulletin.com, ▪ nbportal.pl, ▪ nbp.pl, as well as data providing systems: Thomson Reuters and Bloomberg.

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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