

# Market Overview

 as of: 12<sup>th</sup> February 2018



- Copper:** Labor tensions at the world's biggest copper mine are no longer restricted to relations between union and management, since a group of workers is trying to set up a new union at BHP Billiton's Escondida and hold separate wage talks with the company. Copper price recovery in 2017 had a positive impact on supply side (*page 2*).
- Precious metals:** Gold price has decreased in the recent fortnight, dragging silver price in the same direction. Volatility which came back in the agenda after equity market had plunged became a serious trigger for precious metals. What is also worth mentioning is that excluding first quarter of 2016 gold-to-silver ratio hit its highest level since early 1990s, suggesting too expensive gold or too cheap silver, if compare to the long term average of the ratio. In PGMs space, manufacturers of catalytic converters consider raising their prices with the price of palladium spiking to a record high last month (*page 4*).
- USA:** The selloff in U.S. assets picked up steam - equities sank toward the worst week in two years and Treasuries tumbled to a four-year low. In Europe, a bond selloff deepened across the continent. Some economists though are convinced, that the latest market decline was no surprise given the elevated valuations of technology stocks and absence of any recent drops (*page 6*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	6 755.00	-4.2%
▼ Nickel	12 970.00	-5.0%
<b>LBMA (USD/troz)</b>		
▼ Silver	16.36	-5.4%
▼ Gold (PM)	1 314.10	-2.3%
<b>FX</b>		
▲ EURUSD	1.2273	2.1%
▲ EURPLN	4.2024	0.8%
▼ USDPLN	3.4263	-1.0%
▲ USDCAD	1.2609	0.6%
▼ USDCLP	600.74	-1.4%
<b>Stocks</b>		
▼ KGHM	102.25	-6.5%

 Source: Bloomberg, KGHM Polska Miedź; (*more on page 11*)

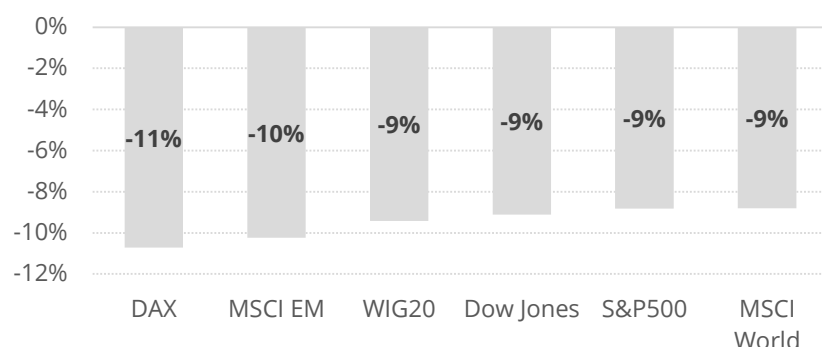
## Important macroeconomic data

Release	For		
 Official manuf. PMI	Jan	51.3	▼
 GDP (sa, yoy)	4Q	2.7%	▼
 Manufacturing PMI	Jan	54.6	▼
 Non-farm payrolls chng.	Jan	200	▲
 Copper production (mt)	Dec	536 643	▲

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

**Correction has (finally?) come to the global equity markets; returns calculated as 9th Feb'17 vs. max Jan'17 value**

## Correction(?) on the equity markets



Source: Bloomberg, KGHM Polska Miedź

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## Base and precious metals | Other commodities

### Copper

**Labor tensions at the world's biggest copper mine are no longer restricted to relations between union and management, since a group of workers is trying to set up a new union at BHP Billiton Ltd.'s Escondida in Chile and hold separate wage talks with the company. Copper price recovery in 2017 had a positive impact on supply side.**

#### Rebel Union push snarls relations at Escondida

**In order to hold separate wage talks the breakaway group needs to convince at least 10% of workforce**

Labor tensions at the world's biggest copper mine are no longer restricted to relations between union and management. A group of workers trying to set up a new union at BHP Billiton Ltd.'s Escondida in Chile say they are being intimidated and insulted by members of the existing union, showing how much is at stake in wage talks set to resume in June. The existing union, known as Union No. 1, held talks with management last year that led to the longest mine strike in modern Chilean history and failed to yield an accord. The breakaway group needs to convince at least 10 percent of the 2,500-strong workforce to join by Feb. 8 in order to hold separate wage talks with the company. Union No. 1, which declined to comment for this story, said in a statement on its website that the breakaway group contains individuals who respond directly to management and want to erode worker unity. Marcelo Fonseca, who is leading the breakaway efforts, describes the current union leadership as "disastrous." "More than a 1,000 workers have been fired under their watch and the 44-day strike was an economic disaster for a majority of workers," he said in a telephone interview Friday.

Fonseca said Union No. 1 leaders stood in front of the labor authority's headquarters to watch which workers went in to sign up for the new union. He also filed a complaint with labor authorities after allegedly being the target of threatening language by union members. Union No. 1 declined to comment on those allegations. BHP's Chile office didn't respond to requests for comment. Fonseca said he and other leaders of the initiative have been repeatedly called "chicken," the Chilean mining industry equivalent of "scab." During last year's strike, workers camping at the mine's entrance built a chicken coop. Inside, they placed a list of names of the workers that didn't join and hung a dummy of Escondida Corporate Affairs Vice President Patricio Vilaplana. Fonseca said he was encouraged by about 100 people signing on to the new union on the first day. "However, anti-union attitudes by Union No. 1 members could impact our numbers." The tensions between workers are building as the Chilean copper industry enters its busiest year ever for wage negotiations, raising the specter of more supply interruptions that last year helped push up metal prices.

**New labor law strengthened the hand of unions last year**

A new labor law implemented last year under outgoing center-left President Michelle Bachelet strengthened the hand of unions, emboldening some in the

world's top copper producer. The Anglo-Australian company and the union last year struggled to agree on issues such as benefits and shift patterns. The union said new, advanced negotiations depended on a formal invitation from BHP, and that any agreement would require approval of its members. "Otherwise, we'll begin to negotiate in four more months, starting on June 1," union leaders said in the letter.

### Other important information on copper market:

- Freeport-McMoRan Inc reinstated its cash dividend on Tuesday, three years after suspending it, reflecting a stronger financial position, improved market conditions and a positive outlook for cash generation. Freeport, the world's biggest publicly listed copper producer, declared a quarterly dividend of 5 cents a share. If that rate is maintained it would equal the 20 cent annual dividend it suspended in December 2015 to save cash and repay debt at a time of weak copper prices. "We expect to continue to strengthen our balance sheet, maintain a disciplined approach to investing in attractive growth projects as economic conditions warrant and provide cash returns to shareholders," Chief Executive Richard Adkerson said in a statement.
- Peru's production of copper, zinc, silver and molybdenum rose in December, while lead and tin production declined, the Energy and Mines Ministry said Tuesday. Copper output climbed 6.3% year on year to 224,651 mt in December from 211,272 mt a year ago, the ministry said in a statement. Freeport-McMoRan's Cerro Verde mine produced 501,815 mt copper for the full year 2017, followed by China Minmetals' Las Bambas (452,950 mt), Antamina (439,248 mt), Southern Copper (306,154 mt), Glencore's Antapaccay (206,493 mt), Chinalco's Toromocho (194,704 mt) and Hudbay Minerals' Constancia deposit (121,782 mt), the ministry said. Copper production for the full year 2017 rose 3.9% to a record 2.45 million mt, while zinc totaled 1.47 million mt (+10.2%), lead fell to 306,794 mt (-2.4%), tin dropped to 17,790 mt (-5.3%) and molybdenum was up 9.3% at 28,141 mt.
- Copper production in Democratic Republic of Congo, Africa's top producer, rose 6.9 percent in 2017 to 1.09 million tonnes, while output of cobalt surged 15.5 percent to 73,940 tonnes, the industry-led chamber of mines said on Wednesday. Gold production rose 2.7 percent to 23,270 kg, the chamber said in a presentation at a mining conference in Cape Town. Similar news are coming from Lusaka, the capital of Africa's second-biggest producer of the metal used in electrical wiring and plumbing. Zambian copper production will climb 6.8 percent to 839,240 metric tons this year, according to a forecast from the southern African nation's Ministry of Mines. Mining companies in Zambia, including Glencore Plc and Vedanta Resources Plc, have benefited from an increased power supply after a shortage forced them to reduce usage in 2015 and 2016 as copper prices fell.
- Chilean copper exports typically fall in January, but this year's decline was particularly steep as heavy swells interrupted operations at one of the country's main ports. The biggest copper-producing nation shipped \$2.58 billion of the red metal last month, a 33 percent slump from December,

making it the biggest monthly decline in four years. The Mejillones port, which serves copper mines in the Antofagasta region, was closed from Jan. 20 to Jan. 28 as surging seas hit the area. Port terminals started opening progressively and operations were back to normal by Feb. 3, according to the port authority. To be sure, metal prices came off their late-December highs. But with mines in the country increasing their production as the industry emerges from a painful downturn (Codelco just had its best quarter in five years), the port stoppages suggest shipments will rebound strongly in the coming month or two.

- Glencore's copper production fell 8% year on year to 1.31 million mt in 2017, the diversified miner said in its production report released Thursday. It said the lower output was due to the sale of its Ernest Henry copper mine in northwest Queensland in the fourth quarter of 2016, end-of-mine-life production declines at the Alumbreira mine in Argentina and various temporary effects including lower throughput at the Mutanda mine in the Democratic Republic of the Congo -- due to constrained supply of sulfuric acid and smelter maintenance at Mount Isa in Queensland. Q4 copper output of 363,200 mt was 59,600 mt or 20% higher than in Q3, reflecting the resolution of such temporary impacts, according to the report.

## Precious Metals

**Gold price has decreased in the recent fortnight, dragging silver price in the same direction. Volatility which came back in the agenda after equity market had plunged became a serious trigger for precious metals. What is also worth mentioning is that excluding first quarter of 2016 gold-to-silver ratio hit its highest level since early 1990s, suggesting too expensive gold or too cheap silver, if compare to the long term average of the ratio. In PGMs space, manufacturers of catalytic converters consider raising their prices with the price of palladium spiking to a record high last month.**

### U.S. fines Deutsche Bank, UBS and HSBC for manipulating metals markets via 'spoofing'

U.S. authorities announced fines and charges against three major European banks and eight individuals accused of manipulating futures markets for precious metals. Deutsche Bank, UBS and HSBC will together pay a total of \$46.6 million to settle allegations that traders at the banks worked to manipulate futures markets in precious metals through a process known as "spoofing," the Justice Department and Commodity Futures Trading Commission said. Seven former traders, including ex-UBS trader who was indicted last year, as well as a technology consultant, also face charges of "spoofing" — in which traders place and then abort trades to manipulate prices — on markets for various precious metals, including gold and silver, between early 2008 and about 2014.

[Kluczowa informacja; 1-3 linijki]

The suspects were based in New York, Switzerland, Britain, Australia and the United Arab Emirates. Prior to this case, only three other people had been charged with the crime of spoofing, according to the Justice Department. In actions brought by the CFTC, which regulates derivatives markets, Deutsche Bank suffered the largest penalty at \$30 million, while UBS agreed to pay \$15 million and HSBC was fined \$1.6 million. The suspects allegedly placed hundreds and sometimes thousands of fraudulent "spoof orders" to create the appearance of demand and cause other market players to trade at inflated prices or make moves when they would otherwise have held their positions.

### **Palladium rally may mean auto catalytic converter price hikes coming**

**[Kluczowa informacja; 1-3 linijki]**

With the price of palladium spiking to a record high last month, the effects could be felt in the automotive industry as manufacturers of catalytic converters consider raising their prices and may change the mix of metals in their products. Increased automotive industry demand and a supply shortage boosted the price of palladium, the principal metal used in auto catalyst converters, to an all-time high of \$1,138.00 on Jan. 15, according to records dating back to 1990. Automotive industry and precious metals analysts say the hike in catalytic converter prices will likely hit the secondary aftermarket first - the manufacturers of the units and repair shops that replace them in used vehicles, rather than auto manufacturers.

Company executives anticipated a price increase in early 2017, so they began hedging palladium futures contracts, Lee said, but the hedges expired in July. A manager for a leading provider of catalytic converters for the automotive aftermarket said his company would raise its prices this year. The manager declined to be identified for competitive reasons. The company's most recent palladium hedge expired. It had hedged when palladium was around \$700 in April 2017.

Palladium became more expensive than platinum in September for the first time since 2001 as demand expectations for the two assets diverged. Demand increased throughout the United States and the Caribbean during the latter part of 2017 as consumers replaced vehicles damaged during a series of hurricanes, earthquakes and wildfires. Auto sales rose in China, boosting palladium prices even more. Though automakers primarily use platinum and palladium in catalytic converters, platinum is more heavily used in diesel vehicles, which have fallen out of favor since Volkswagen AG's emissions-rigging scandal in 2015. Palladium also benefits from expectations for growth in hybrid electric vehicles, which are typically gasoline-powered.

## Global economies | Foreign exchange markets

### USA: Treasury Rout Sinks Down 400 Points on Rate

**The selloff in U.S. assets picked up steam - equities sank toward the worst week in two years and Treasuries tumbled to a four-year low. In Europe, a bond selloff deepened across the continent. Some economists though are convinced, that the latest market decline was no surprise given the elevated valuations of technology stocks and absence of any recent drops.**

**Strong jobs data increased the likelihood the Federal Reserve will lift rates next month**

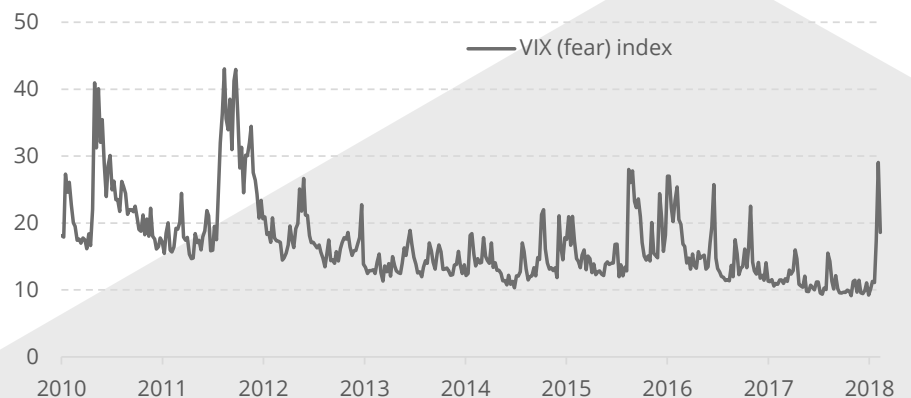
The selloff in U.S. assets picked up steam as strong jobs data increased the likelihood the Federal Reserve will lift rates next month. Equities sank toward the worst week in two years and Treasuries tumbled to a four-year low. The S&P 500 Index dropped the most since August, pushing its five-day rout to 3 percent after the 10-year Treasury yield popped above 2.85 percent for the first time since January 2014. Bloomberg's dollar index surged to erase a weekly loss. Energy shares plunged more than 3 percent Friday, 2. February. The tech selloff worsened, sending the Nasdaq 100 Index lower by 1 percent even as Amazon.com Inc. rallied to a record on earnings. Apple Inc. lost 1.2 percent amid a disappointing sales forecast, while Alphabet Inc. sank 5 percent. U.S. hiring picked up in January and wages rose at the fastest annual pace since the recession ended, as the economy's steady move toward full employment extended into 2018. Equities are being tested by the surge in bond yields, with some fund managers saying 3 percent U.S. 10-year rates would signal a bond bear market. The level is seen by many stock-watchers as a potential trigger for a correction in equities. In Europe, a bond selloff deepened across the continent, and equities dropped for a fifth straight day, the longest streak since November. Disappointing results from companies including Deutsche Bank AG and BT Group Plc. paced losses, with Germany's DAX giving up the year's gains, capping the worst weekly decline since 2016. Bund yields reached a fresh two-year high, while the euro and British pound weakened. Japanese debt gained and the yen declined after the Bank of Japan intervened to stem the rise in rates. "People are finally starting to reprice reflation, it's about time," Jeanne Asseraf-Bitton, head of global cross-asset research at Lyxor Asset Management, said by phone. "Global economic growth is strong and corporate earnings are very solid, so there's no reason to question the equity bull market. The rise in bond yields is good, it's just the speed at which it's happening that is making investors nervous. Bottom line: this is a healthy correction."

**Could sharp stock market decline in a matter of minutes come from automated trading algorithms?**

Federal Reserve Bank of St. Louis President James Bullard said the latest market decline was no surprise given the elevated valuations of technology stocks and absence of any recent drops. "This is the most predicted selloff of all time because the markets have been up so much and they have had so many days in a row without meaningful down days," Bullard told reporters after a speech Tuesday in Lexington, Kentucky. "So it is probably not surprising that something that has gone up 40 percent like the S&P tech sector would at some point have a selloff. Before there was a selloff, people said repeatedly someday this will sell

off.” Bullard said data Friday showing a surge in average hourly earnings contributed to rising Treasury yields, as traders bet the Fed would boost interest rates four times this year rather than two or three. That may be an incorrect interpretation because other measures of wages are more restrained, and improved pay doesn’t necessarily feed into inflation, he added. In addition, Monday’s sharp stock market decline in a matter of minutes seemed to come from automated trading, Bullard said. “What is more interesting is it has been very fast, it’s been possibly aided and abetted by technical trading -- algorithmic trading,” he said. Asked if that was a concern, he said, “I’d be interested to see an analysis and see what role that played.” Bullard said he agreed with former Chair Janet Yellen’s analysis that stock prices were elevated. “They look high compared to historical norms, things like prices to trailing earnings,” he said. While the central bank is sometimes seen as stepping in to protect investors from steep market declines with a “Greenspan put” or a “Bernanke put” named after former chairs, Bullard said the Fed isn’t focused on helping markets so much as it reacts to the same data. “The stock market and the Fed are looking at the same thing, which is the future of the U.S. economy and the future of the global economy,” he said. “To the extent the markets see something that is different from what the Fed sees, it is important information. It is not so clear to me here that there is a story like that -- that the U.S. economy is not as robust as we thought it was.” Bullard, who doesn’t vote on monetary policy this year, repeated he doesn’t see a need for the Fed to raise rates further with inflation stuck below the central bank’s 2 percent target. “I don’t think we have to be preemptive,” he said. Bullard’s views have sometimes been influential to the Federal Open Market Committee, though in the past two years he has been one of the most dovish Fed officials. Bullard has argued that the U.S. economy has been saddled with persistently low growth, so there is little need to raise interest rates much.

**Correction on the S&P500 has caused serious spike in market implied volatility**



Source: Bloomberg, KGHM Polska Miedź





The situation was similarly assessed by Federal Reserve Bank of Dallas President Robert Kaplan, who said that the recent financial market upheavals may actually be beneficial and that he doesn’t expect them to have a negative impact on the







economy. “More volatility in the markets, and maybe addressing some of the excesses and imbalances in the markets, by having a little more volatility, may be a healthy thing,” he said in an interview with Bloomberg Television’s Manus Cranny, adding that the preceding months of smooth sailing were “historically unusual. The VIX index, which uses derivatives to track expected volatility in U.S. stocks, has spiked in recent days after months of calm, causing substantial losses for investors who had been making returns betting against its rise.



# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>China</b> 							
🌟🌟🌟	31-Jan	Official manufacturing PMI	Jan	51.3 ▼	51.6	51.6	📉
🌟🌟🌟	01-Feb	Caixin's manufacturing PMI	Jan	51.5 -	51.5	51.5	📊
🌟	07-Feb	Foreign reserves (USD bn)	Jan	3 162 ▲	3 140	3 170	📉
🌟🌟	08-Feb	Trade balance (USD bn)	Jan	20.3 ▼	54.7	54.7	📉
🌟🌟	08-Feb	Exports (yoy)	Jan	11.1% ▲	10.9%	10.7%	📈
🌟🌟🌟🌟	09-Feb	Consumer inflation CPI (yoy)	Jan	1.5% ▼	1.8%	1.5%	📊
🌟🌟	09-Feb	Producer inflation PPI (yoy)	Jan	4.3% ▼	4.9%	4.3%	📊
<b>Poland</b> 							
🌟🌟🌟	01-Feb	Manufacturing PMI	Jan	54.6 ▼	55.0	55.2	📉
🌟🌟🌟🌟🌟	07-Feb	NBP base rate decision	Feb	1.50% -	1.50%	1.50%	📊
<b>US</b> 							
🌟🌟🌟🌟🌟	29-Jan	Consumer spending inflation PCE (mom)	Dec	0.2% ▲	0.1%	0.2%	📊
🌟🌟🌟🌟🌟	29-Jan	Consumer spending inflation PCE (yoy)	Dec	1.5% -	1.5%	1.5%	📊
🌟🌟	29-Jan	Personal income (sa, mom)	Dec	0.4% ▲	0.3%	0.3%	📈
🌟🌟	29-Jan	Personal spending (sa, mom)‡	Dec	0.4% ▼	0.8%	0.4%	📊
🌟	29-Jan	Dallas Fed manufacturing activity	Jan	33.4 ▲	29.7	25.4	📈
🌟	30-Jan	S&P/CaseShiller home price index‡	Nov	204 ▲	204	--	📈
🌟🌟🌟🌟🌟🌟	31-Jan	FOMC base rate decision - upper bound (Fed)	Jan	1.50% -	1.50%	1.50%	📊
🌟🌟🌟🌟🌟🌟	31-Jan	FOMC base rate decision - lower bound (Fed)	Jan	1.25% -	1.25%	1.25%	📊
🌟🌟🌟	01-Feb	Manufacturing PMI - final data	Jan	55.5 -	55.5	55.5	📊
🌟🌟	01-Feb	ISM Manufacturing‡	Jan	59.1 ▼	59.3	58.6	📈
🌟🌟	02-Feb	Change in non-farm payrolls (ths)‡	Jan	200 ▲	160	180	📈
🌟🌟	02-Feb	Durable goods orders - final data	Dec	2.8% ▼	2.9%	--	📉
🌟🌟	02-Feb	Underemployment rate (U6)	Jan	8.2% ▲	8.1%	--	📈
🌟🌟	02-Feb	Unemployment rate	Jan	4.1% -	4.1%	4.1%	📊
🌟🌟	02-Feb	University of Michigan confidence index - final data	Jan	95.7 ▲	94.4	95.0	📈
🌟	02-Feb	Average hourly earnings (yoy)‡	Jan	2.9% ▲	2.7%	2.6%	📈
🌟🌟🌟	05-Feb	Composite PMI - final data	Jan	53.8 -	53.8	--	📊
🌟🌟🌟	05-Feb	PMI services - final data	Jan	53.3 -	53.3	53.3	📊
<b>Eurozone</b> 							
🌟🌟🌟🌟🌟🌟	30-Jan	GDP (sa, yoy) - estimation‡	4Q	2.7% ▼	2.8%	2.7%	📊
🌟🌟🌟🌟🌟🌟	30-Jan	GDP (sa, qoq) - estimation‡	4Q	0.6% ▼	0.7%	0.6%	📊
🌟	30-Jan	Economic confidence‡	Jan	115 ▼	115	116	📉
🌟	30-Jan	Industrial confidence‡	Jan	8.8 -	8.8	8.9	📉
🌟	30-Jan	Consumer confidence - final data	Jan	1.3 -	1.3	1.3	📊
🌟	30-Jan	Business climate indicator‡	Jan	1.5 ▼	1.6	1.7	📉
🌟🌟🌟🌟	31-Jan	Core CPI (yoy) - estimation	Jan	1.0% ▲	0.9%	1.0%	📊
🌟🌟🌟🌟	31-Jan	CPI estimate (yoy)	Jan	1.3% ▼	1.4%	1.2%	📈
🌟🌟	31-Jan	Unemployment rate	Dec	8.7% -	8.7%	8.7%	📊
🌟🌟🌟	01-Feb	Manufacturing PMI - final data	Jan	59.6 -	59.6	59.6	📊
🌟🌟	02-Feb	Producer inflation PPI (yoy)	Dec	2.2% ▼	2.8%	2.3%	📉
🌟🌟🌟	05-Feb	Composite PMI - final data	Jan	58.8 ▲	58.6	58.6	📈
🌟🌟🌟	05-Feb	Services PMI - final data	Jan	58.0 ▲	57.6	57.6	📈
🌟🌟	05-Feb	Retail sales (yoy)‡	Dec	1.9% ▼	3.9%	1.9%	📊

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Germany</b>							
⊙⊙⊙⊙	30-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.4% ▼	1.6%	1.6%	☹
⊙⊙⊙⊙	30-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.6% ▼	1.7%	1.7%	☹
⊙⊙⊙	31-Jan	Retail sales (yoy)‡	Dec	-1.9% ▼	4.3%	2.8%	☹
⊙⊙	31-Jan	Unemployment rate	Jan	5.4% ▼	5.5%	5.4%	⊙
⊙⊙⊙	01-Feb	Manufacturing PMI - final data	Jan	61.1 ▼	61.2	61.2	☹
⊙⊙⊙	05-Feb	Composite PMI - final data	Jan	59.0 ▲	58.8	58.8	☺
⊙⊙⊙	06-Feb	Factory orders (wda, yoy)‡	Dec	7.2% ▼	9.1%	3.1%	☺
⊙⊙⊙⊙	07-Feb	Industrial production (wda, yoy)‡	Dec	6.5% ▲	5.5%	6.8%	☹
<b>France</b>							
⊙⊙⊙⊙⊙	30-Jan	GDP (yoy) - estimation	4Q	2.4% ▲	2.3%	2.3%	☺
⊙⊙⊙⊙⊙	30-Jan	GDP (qoq) - estimation‡	4Q	0.6% ▲	0.5%	0.6%	⊙
⊙⊙⊙⊙	31-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.5% ▲	1.2%	1.1%	☺
⊙⊙⊙⊙	31-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.4% ▲	1.2%	1.2%	☺
⊙⊙⊙	01-Feb	Manufacturing PMI - final data	Jan	58.4 ▲	58.1	58.1	☺
⊙⊙⊙	05-Feb	Composite PMI - final data	Jan	59.6 ▼	59.7	59.7	☹
⊙⊙⊙⊙	09-Feb	Industrial production (yoy)	Dec	4.5% ▲	2.5%	3.5%	☺
<b>Italy</b>							
⊙⊙	31-Jan	Unemployment rate - preliminary data‡	Dec	10.8% ▼	10.9%	10.9%	☹
⊙⊙⊙	01-Feb	Manufacturing PMI	Jan	59.0 ▲	57.4	57.4	☺
⊙⊙⊙⊙	02-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.1% ▲	1.0%	0.8%	☺
⊙⊙⊙	05-Feb	Composite PMI	Jan	59.0 ▲	56.5	57.4	☺
⊙⊙⊙⊙	09-Feb	Industrial production (wda, yoy)‡	Dec	4.9% ▲	2.3%	1.9%	☺
<b>UK</b>							
⊙⊙⊙	01-Feb	Manufacturing PMI (sa)‡	Jan	55.3 ▼	56.2	56.5	☹
⊙⊙⊙	05-Feb	Composite PMI	Jan	53.5 ▼	54.9	54.6	☹
⊙⊙⊙⊙⊙	08-Feb	BoE base rate decision	Feb	0.50% -	0.50%	0.50%	⊙
⊙⊙⊙⊙	08-Feb	BoE asset purchase target (GBP bn)	Feb	435 -	435	435	⊙
⊙⊙⊙⊙	09-Feb	Industrial production (yoy)‡	Dec	0.0% ▼	2.6%	0.3%	☹
<b>Japan</b>							
⊙⊙⊙⊙	31-Jan	Industrial production (yoy) - preliminary data	Dec	4.2% ▲	3.6%	3.3%	☺
⊙⊙⊙	01-Feb	Manufacturing PMI - final data	Jan	54.8 ▲	54.4	--	
⊙⊙⊙	05-Feb	Composite PMI	Jan	52.8 ▲	52.2	--	
<b>Chile</b>							
⊙⊙⊙	31-Jan	Total copper production (metric tons)	Dec	536 643 ▲	505 658	--	
⊙⊙⊙	31-Jan	Manufacturing (yoy)	Dec	-3.4% ▼	1.9%	0.5%	☹

<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

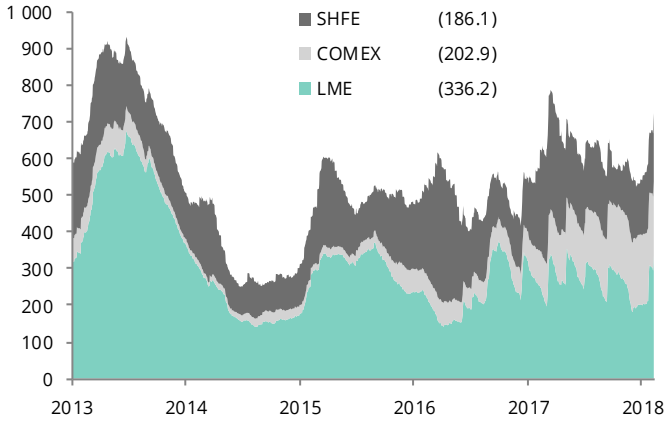
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 09-Feb-18)</i>		Price change <sup>1</sup>					From year beginning <sup>2</sup>		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t)</b>									
Copper	6 755.00	▼ -4.2%	▼ -5.6%	▼ -5.6%	▲ 15.2%	7 054.09	6 755.00	7 202.50	
Molybdenum	16 000.00	- 0.0%	- 0.0%	- 0.0%	▲ 4.9%	16 000.00	16 000.00	16 000.00	
Nickel	12 970.00	▼ -5.0%	▲ 5.8%	▲ 5.8%	▲ 25.0%	13 003.45	12 415.00	13 890.00	
Aluminum	2 142.00	▼ -3.9%	▼ -4.4%	▼ -4.4%	▲ 16.5%	2 208.78	2 142.00	2 256.00	
Tin	21 180.00	▼ -3.9%	▲ 6.6%	▲ 6.6%	▲ 10.0%	20 956.38	19 960.00	22 105.00	
Zinc	3 435.50	▼ -4.2%	▲ 3.8%	▲ 3.8%	▲ 20.0%	3 466.64	3 350.50	3 609.50	
Lead	2 530.00	▼ -3.5%	▲ 1.4%	▲ 1.4%	▲ 5.5%	2 594.10	2 530.00	2 683.00	
<b>LBMA (USD/troz)</b>									
Silver	16.36	▼ -5.4%	▼ -3.0%	▼ -3.0%	▼ -7.7%	17.07	16.35	17.52	
Gold <sup>2</sup>	1 314.10	▼ -2.3%	▲ 1.4%	▲ 1.4%	▲ 6.3%	1 330.63	1 311.00	1 354.95	
<b>LPPM (USD/troz)</b>									
Platinum <sup>2</sup>	969.00	▼ -3.5%	▲ 4.5%	▲ 4.5%	▼ -4.9%	989.47	936.00	1 020.00	
Palladium <sup>2</sup>	969.00	▼ -10.5%	▼ -8.2%	▼ -8.2%	▲ 24.7%	1 074.72	969.00	1 129.00	
<b>FX<sup>3</sup></b>									
EURUSD	1.2273	▼ -1.2%	▲ 2.3%	▲ 2.3%	▲ 14.8%	1.2240	1.1932	1.2492	
EURPLN	4.2024	▲ 1.4%	▲ 0.8%	▲ 0.8%	▼ -2.6%	4.1646	4.1423	4.2024	
USDPLN	3.4263	▲ 2.5%	▼ -1.6%	▼ -1.6%	▼ -15.0%	3.4030	3.3299	3.4999	
USDCAD	1.2609	▲ 2.3%	▲ 0.5%	▲ 0.5%	▼ -3.9%	1.2442	1.2288	1.2609	
USDCNY	6.3032	▼ -0.3%	▼ -3.1%	▼ -3.1%	▼ -8.2%	6.3966	6.2778	6.5297	
USDCLP	600.74	▼ -0.6%	▼ -2.4%	▼ -2.4%	▼ -7.1%	604.47	596.53	614.75	
<b>Money market</b>									
3m LIBOR USD	1.820	▲ 0.05	▲ 0.13	▲ 0.13	▲ 0.79	1.750	1.696	1.820	
3m EURIBOR	-0.329	▼ 0.00	- 0.00	- 0.00	▼ 0.00	-0.329	-0.329	-0.327	
3m WIBOR	1.720	- 0.00	- 0.00	- 0.00	▼ -0.01	1.720	1.720	1.720	
5y USD interest rate swap	2.642	▲ 0.06	▲ 0.40	▲ 0.40	▲ 0.69	2.484	2.283	2.685	
5y EUR interest rate swap	0.488	▲ 0.01	▲ 0.18	▲ 0.18	▲ 0.34	0.398	0.292	0.489	
5y PLN interest rate swap	2.665	▼ -0.04	▲ 0.17	▲ 0.17	▲ 0.10	2.553	2.400	2.740	
<b>Fuel</b>									
WTI Cushing	59.20	▼ -8.2%	▼ -2.0%	▼ -2.0%	▲ 11.7%	63.50	59.20	66.14	
Brent	62.42	▼ -8.3%	▼ -6.6%	▼ -6.6%	▲ 13.0%	68.41	62.42	70.42	
Diesel NY (ULSD)	185.76	▼ -10.2%	▼ -10.0%	▼ -10.0%	▲ 14.3%	204.99	185.76	212.60	
<b>Others</b>									
VIX	29.06	▲ 14.27	▲ 18.02	▲ 18.02	▲ 18.18	15.02	9.15	37.32	
BBG Commodity Index	85.64	▼ -5.1%	▼ -2.9%	▼ -2.9%	▼ -3.3%	88.75	85.64	90.80	
S&P500	2 619.55	▼ -7.2%	▼ -2.0%	▼ -2.0%	▲ 13.5%	2 764.15	2 581.00	2 872.87	
DAX	12 107.48	▼ -8.3%	▼ -6.3%	▼ -6.3%	▲ 4.0%	13 095.93	12 107.48	13 559.60	
Shanghai Composite	3 129.85	▼ -10.3%	▼ -5.4%	▼ -5.4%	▼ -1.7%	3 431.82	3 129.85	3 559.47	
WIG 20	2 382.79	▼ -7.1%	▼ -3.2%	▼ -3.2%	▲ 11.7%	2 538.63	2 382.79	2 630.37	
KGHM	102.25	▼ -8.4%	▼ -8.0%	▼ -8.0%	▼ -17.4%	111.25	102.25	115.00	

<sup>o</sup> 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>

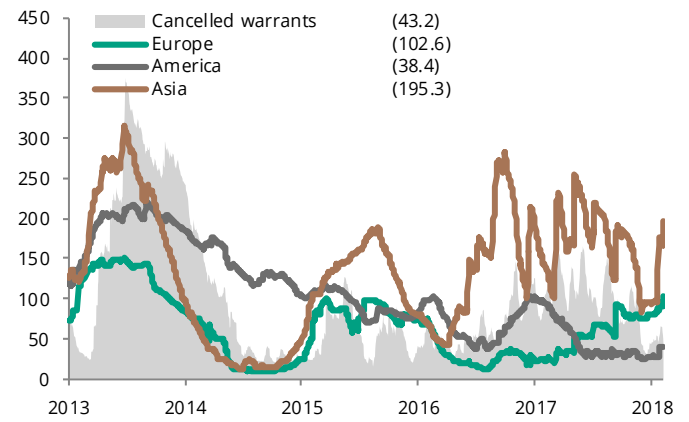
Source: Bloomberg, KGHM

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



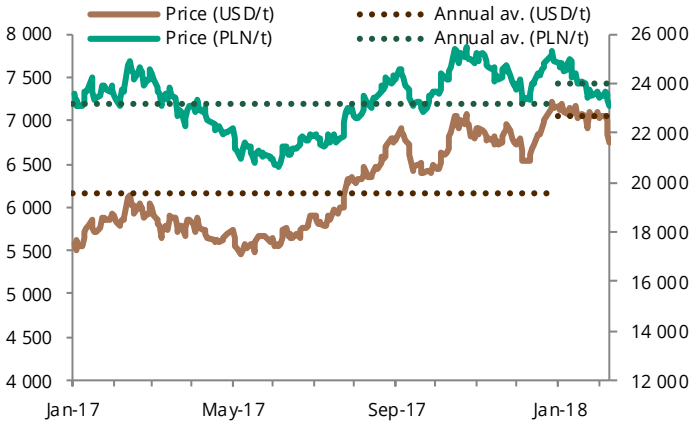
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



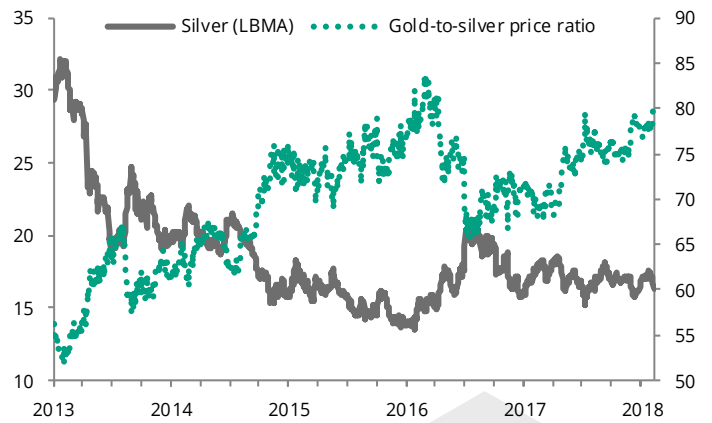
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



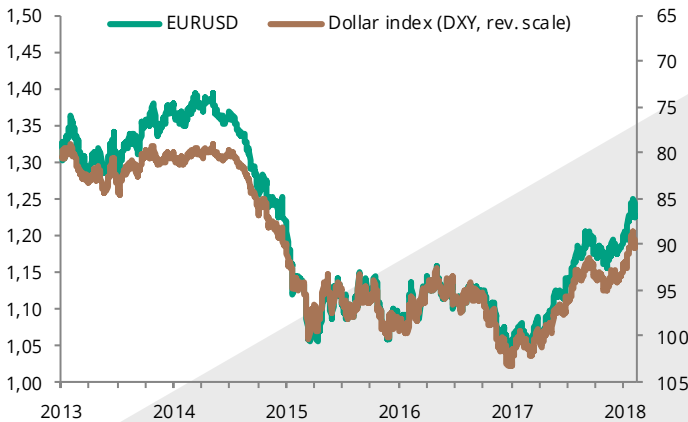
Source: Bloomberg, KGHM Polska Miedź

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



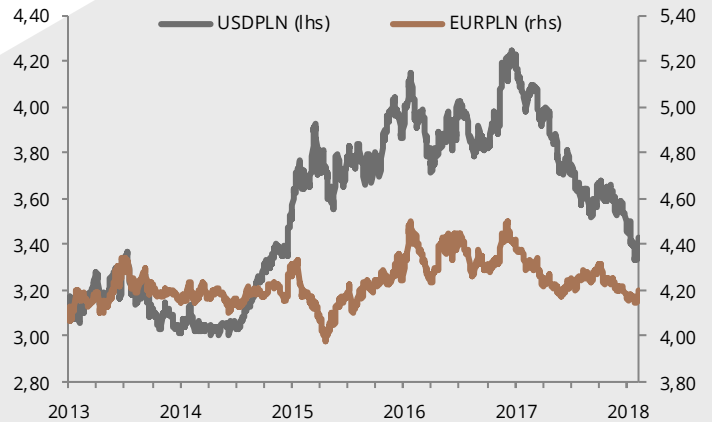
Source: Bloomberg, KGHM Polska Miedź

**USD: dollar index (rhs) and ECB-based EURUSD (lhs)**



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:  
**29<sup>th</sup> January – 10<sup>th</sup> February 2018.**

- 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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