

# Market Overview

as of: 3<sup>rd</sup> December 2018






- **Copper:** Changing the local power in the Cajamarca district of Peru may mean a completely new start for the national mining industry. The drop in the TC/RC in Chinese steel mills is caused by the global slowdown in production dynamics and the construction of new production capacity in China (*page 2*).
- **Precious metals:** Higher gold prices and healthier company fundamentals during the next four years will trigger an increase in gold production, according to Fitch Solutions. In terms of coin markets, the sales of American Eagle gold and silver bullion coins in 2018 are heading toward an 11-year-low (*page 4*).
- **G20 summit:** The meeting of President Trump with Xi Jinping at the G20 summit in Argentina does not bring a solution of the trade conflict, but the parties committed not to impose further sanctions in the next 90 days, during which intense negotiations will take place in that matter (*page 6*).

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	6 238.00	-0.4%
▼ Nickel	11 020.00	-1.6%
<b>LBMA (USD/troz)</b>		
▼ Silver	14.24	-0.9%
▼ Gold (PM)	1 217.55	-0.3%
<b>FX</b>		
▼ EURUSD	1.1359	-0.6%
▼ EURPLN	4.2904	-0.8%
▼ USDPLN	3.7731	-0.3%
▲ USDCAD	1.3301	0.9%
▼ USDCLP	669.43	-0.4%
<b>Stocks</b>		
▼ KGHM	89.72	-1.7%

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

## Important macroeconomic data

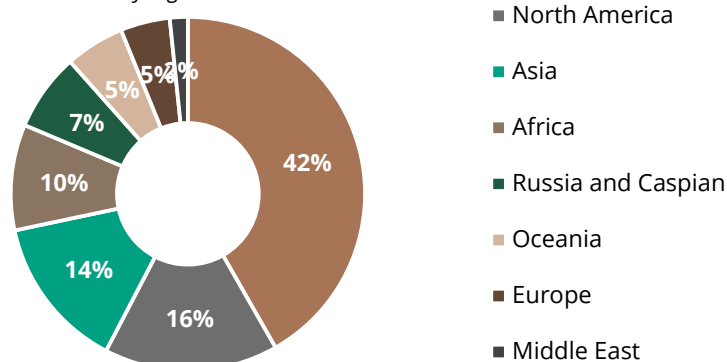
Release	For		
 GDP (annlzd., qoq)	3Q	3.5%	-
 GDP (yoy)	3Q	2.8%	▼
 Official manuf. PMI	Nov	50.0	▼
 Retail sales (yoy)	Oct	9.7%	▲
 Copper production (mt)	Oct	495 923	▲

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

## Most new copper projects are located in Latin America

### Copper mine projects

by region



Source: KGHM Polska Miedź

## Market Risk Unit

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## Base and precious metals | Other commodities

### Copper

**Changing the local power in the Cajamarca district of Peru may mean a completely new start for the national mining industry. The drop in the TC/RC in Chinese steel mills is caused by the global slowdown in production dynamics and the construction of new production capacity in China.**

#### Buenaventura Chairman Sees Peru Closer to Next Copper Mine Wave

**Result of the elections in Peru's copper-belt could be a green light foe**

Peru is getting closer to being able to unlock vast copper reserves in its northern Cajamarca region as anti-mining sentiment eases, said Cia. de Minas Buenaventura Chairman Roque Benavides. The result of last month's elections for the regional governorship suggests opposition to mining has declined, after the candidate for the ruling party of the last eight years came in third, Benavides said in an interview. Neither of the two candidates in a runoff vote on Dec. 9 vote have expressed resistance to developing the region's mining potential, he said.

For the last eight years Cajamarca has been governed by a party that opposed developing projects such as Conga, which Buenaventura was building with partner Newmont Mining Corp. Work was halted after violent protests against the gold and copper project in 2011 and 2012. No other projects have been developed in the area since and Cajamarca's economy fell into a recession, fueling poverty. The change of government could make a series of new copper projects once again viable. "There's a different attitude," Benavides said from Paracas, where he's attending a business forum. "In Cajamarca, they've suffered so much that I'm sure there'll be much more opportunity for dialog." Southern Copper Corp. won rights to develop the Michiquillay copper deposit in Cajamarca in February and is in talks with local communities to obtain their support.

Should Michiquillay go ahead, it would act as a trigger for other projects in Cajamarca with the potential to produce a combined 1.5 million to 2 million tons a year, Benavides said. They include Jiangxi Copper Co.'s Galeno, Rio Tinto Group's La Granja and Conga. Buenaventura also has stakes in two precious-metals mines in the region, La Zanja and Tantahuatay, which hold copper reserves, he said. "The big project next year has to be Michiquillay. It would allow other projects to go ahead," he said. "One has to think about mega projects and the mega project here is all that belt of copper," he said.

Buenaventura is ready to hold talks with Southern Copper about a potential partnership between Michiquillay and the Yanacocha gold mine it operates with Newmont, he said. Buenaventura is open to a deal to share the infrastructure at the Yanacocha operation with Southern Copper and other projects in Cajamarca. Asked whether Buenaventura would be interested in jointly developing Michiquillay, he said the company is ready to support the project though they

haven't held any talks with Southern. "We would support any scheme that generates synergies," he said.

### China's 2019 Term TC/RCs For Imported Copper Drop On Slow Growth Expectations

Chinese analysts attributed the drop in fees to the anticipated slowdown in the world's mined copper output growth, amid the building of new smelters in China. Spot treatment and refining charges for imported copper concentrates for Chinese smelters were at \$90-\$94/mt and 9-9.4 cents/lb in the week ending November 17, flat from the preceding week. China has inked the 2019 term TC/RCs at \$80.80/mt and 8.08 cents/lb, down \$1.45/mt from this year, Chinese industry sources said Monday. Jiangxi Copper and Chilean Antofagasta inked the term fee for 2019 at \$80.80/mt and 8.08 cents/lb, lower than 2018 rates of \$82.25/mt and 8.225 cents/lb, Jiangxi Copper said in its weekly report, noting that the 2019 fee is in line with Chinese smelters' target level. But Jiangxi Copper said the fee for the first quarter of 2019 was above \$90/mt, and 9 cents/lb, and that they expect ample supply of near term spot concentrate before the restart of overseas smelters.

Spot fees rose from \$73-\$75/mt, and 7.3-7.5 cents/lb in Q1 this year to \$93/mt, and 9.3 cents/lb in the week ended September 22, according to S&P Global Platts data. Jiangxi Copper forecast China's Q4 copper concentrate supply to stay ample, and so are keeping spot fees at high levels from now to the end of this year. Meanwhile, China is forecast to add new copper smelting capacity of 780,000 mt/year in 2019 and 600,000 mt/year in 2020, Jiangxi Copper said, noting that market players were concerned about a possible conflict in future domestic copper smelting growth and concentrate demand. Future domestic mined copper output may not keep pace with the rising smelting capacity in China, which could lead to demand for concentrate exceeding supply, according to Chinese industry sources.

### Other important information on copper market:

- The global world refined copper market showed a 31,000 tonnes deficit in August, compared with a 84,000 tonnes deficit in July, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 8 months of the year, the market was in a 259,000 tonnes deficit compared with a 98,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in August was 1.96 million tonnes, while consumption was 1.99 million tonnes. Bonded stocks of copper in China showed a 64,000 tonnes deficit in August compared with a 96,000 tonnes deficit in July.
- Copper output in Democratic Republic of Congo rose 8.7 percent year on year through the first nine months of 2018 to 908,695 tonnes while cobalt production jumped 92.5 percent to 115,116 tonnes, the central bank said. Congo is Africa's top copper producer and the world's leading miner of cobalt, which is a key component in electric vehicles and other electronic products. Zambia's annual copper output rose 10.4 percent in September to 631,359

tonnes, the central bank in Africa's second-biggest producer of the industrial metal said. Some mining companies operating in Zambia include NFC Africa, majority owned by China Non-ferrous Metals Company Limited (CNMC), Canada's First Quantum Minerals, Glencore, Barrick Gold and Vedanta Resources.

- China's imports of scrap copper from the United States fell 37 percent from the previous month to just 6,065 tonnes in October, according to Reuters calculations based on customs data released on Monday. That is less than one-sixth of the 39,732 tonnes of copper scrap that China imported from the United States, previously one of its top suppliers, in October 2017. China, which is clamping down on waste imports on environmental grounds, imposed a 25 percent tariff on U.S. scrap material in August as part of a tit-for-tat trade row between the world's top two economies;. China imported 330,000 tonnes of scrap metal in October, customs data released on Friday showed, the lowest monthly total since at least 2014. Japan and Hong Kong were China's top scrap copper suppliers last month, sending 39,940 tonnes and 39,621 tonnes, respectively, Monday's data showed. Japan's volumes more than doubled year-on-year but slipped 14 percent from September.
- Norilsk Nickel, one of the world's largest producers of precious metals, is willing to work with London-listed Kaz Minerals on its newly purchased copper mine in the Baimskaya region of Russia, its chief executive said. "Such a big project... will not be that easy to run and maybe they will be looking for partners. And if they decide to go in that direction Norilsk [could] maybe [be] one of the potential partners," Vladimir Potanin told the Financial Times. Kaz Minerals, which is focused on mining for copper in Kazakhstan, shocked investors in August when it said it would buy the project from Roman Abramovich, the oligarch owner of Chelsea Football Club, and some of his business partners for \$900m. The miner, which is controlled by billionaire Vladimir Kim, has said the Baimskaya region contains one of the world's most significant undeveloped copper assets with the "potential to become a large-scale, low-cost, open pit copper mine." It has also said it will consider "potential partnering options" for the project.

## Precious Metals

**Higher gold prices and healthier company fundamentals during the next four years will trigger an increase in gold production, according to Fitch Solutions. In terms of coin markets, the sales of American Eagle gold and silver bullion coins in 2018 are heading toward an 11-year-low.**

### Global gold output to rise during the next four years

Higher gold prices and healthier company fundamentals during the next four years will trigger an increase in gold production, according to Fitch Solutions. "We forecast global gold production to increase from 104moz in 2018 to 115moz by

**Fitch Solutions forecasts gold production to increase between 2018 and 2022 by an average annual growth rate at 2,6%**

2022, averaging 2.6% annual growth," the company said in a new report. "We expect gold prices to continue to head higher, averaging USD1,275/oz in 2018 and USD1,400/oz by 2022."

A rise to the \$1,400 an ounce level is a significant increase from the current price levels gold is trading at. Fitch Solutions pointed out that Russia will lead the way in gold production growth due to rising domestic demand and the amount of new projects scheduled to come online during the next four years, the report said. There are 14 projects slated to start production between 2018 and 2022, including the Polyus Gold's Natalka project. The estimates for 2018 are that Russia's gold output will climb 4%, up from 0.8% in 2017, Fitch Solutions noted. "We expect Russian gold production growth to accelerate in 2018 as domestic demand for the precious metal is buoyed by the prospect of further western sanctions on state-banks, which will respond by increasing their reserves of gold," the report said. In Australia, gold output will rise an average of 3% annually from 10.1moz in 2018 to 13.0moz in 2027, according to the firm.

In the meantime, the U.S. gold production will remain largely unchanged, rising to 8.6moz by 2027 from this year's 8.0moz, with Newmont's Twin Creeks expansion project playing a significant role. China will keep the spot of the world's top gold ore producer, but its average annual growth rate will only be at 0.2%, Fitch Solutions added, citing falling ore grades and new environmental guidelines. "This represents a notable slowdown compared to average annual growth of 5.5% over the previous 10-year period," the report said.

### Most U.S. bullion coin sales approaching year-end lows

**Sales of American Eagle gold and silver bullion coins in 2018 are heading toward an 11-year-low**

Sales of American Eagle gold and silver bullion coins in 2018 are heading toward an 11-year-low. So far in 2018, sales of American Eagle half-ounce gold bullion coins have reached 15,000 ounces, or 30,000 coins. The total may include sales of some leftover 2017-dated coins sold into the first quarter of 2018. The exact number won't be known until the Mint releases audited sales totals in 2019. The Mint requires its authorized purchasers to accept shipments of coins dated from the previous year, if still in inventory, before newly dated stock is shipped.

From January through the end of November 2017, total American Eagle gold bullion coin sales reached 259,500 ounces. Sales of the 1991 American Eagle half-ounce gold coin totaled 24,100 pieces, the lowest mintage for the series since its introduction in October 1986.

November sales of American Eagle silver bullion coins stood at 1.27 million through Nov. 29. Cumulative annual sales were recorded at 14,835,000 coins. In comparison, through the first 11 months of 2017, American Eagle silver bullion coin sales reached 17.3 million coins. Peak sales for the American Eagle silver bullion coin reached 47 million coins in 2015, the year after the prior sales record was set at 44,006,000 coins.

So far in 2018, the U.S. Mint has recorded sales of 117,500 of the American Buffalo 1-ounce gold coins. During the first 11 months of 2017, the Mint recorded sales of 85,500 coins.

## Global economies | Foreign exchange markets

### G20 summit does not bring a breakthrough in trade conflict

**The meeting of President Trump with Xi Jinping at the G20 summit in Argentina does not bring a solution of the trade conflict, but the parties committed not to impose further sanctions in the next 90 days, during which intense negotiations will take place in that matter.**

**The meeting was to take place in a friendly atmosphere, but there was no joint statement of both sides**

The G20 summit is behind us, but it is difficult to talk about a breakthrough in the resolution of the US-China trade conflict. The meeting of President Trump with Xi Jinping in Argentina took place in a friendly atmosphere, but lack of a joint statement from both parties may be a premise, that it was mostly an exchange of courtesies and agreement on most issues was not reached.

Both parties have committed not to impose further sanctions within the next 90 days during which conflict resolution should be reached. However, the parties have not yet agreed on any negotiation schedule, although - after the summit - Donald Trump confirmed that the American side will be represented by Robert Lighthizer - US Trade Representative. The Chinese also did not refer to the Saturday speech of the White House Press Secretary Sarah Sanders, in which she mentioned the disposition of the Middle Kingdom to open some markets.

The Chinese side, however, agreed to some concessions. Fentanyl, a substance an overdose of which resulted in a series of deaths in the United States, will be designate as a controlled substance, what was called by the White House a "wonderful humanitarian gesture". It concludes negotiations started by President Barrack Obama, which can certainly be considered a political success of the current administration. Only last year, due to the overdose of this, used mostly in painkillers substance, died nearly 30,000 Americans.





This wasn't the only concession Xi Jinping have made. During the summit, he also committed to regulate the theft of intellectual property, and immediately after returning from Argentina announced a whole set of potential consequences that companies that engage in such practices must be reckoned with. The most severe may be difficulties in the availability of financing. Previously, United States accused the Chinese government of supporting such practices among domestic entrepreneurs, or even help in the organization of cyber-attacks aimed at technology theft.

The American side, after the summit, changed its rhetoric quite drastically. The initial optimism that appeared on the market on Monday quickly disappeared after the comments of American officials suggesting smaller concessions in talks with China. On Tuesday, on the other hand, there was only the impression among investors that the positive comments of Donald Trump after the talks with the President of China could be "exaggerated". As a result, European and American stock indices fell significantly, which had a positive effect on bonds and the dollar. Pessimism moved to the Asian session on Wednesday - even the decisive rebound of the Chinese PMI for the services sector did not help here (from 50.8








points to 53.8). News from Argentina had a positive, albeit brief, impact on the commodity sector. The price of copper reacted by a sudden jump of about 250 USD / t up, but later it started to systematically fall and already on Wednesday was below 6 200 USD / t, the level from the end of last week. The USD strengthened against the euro, although given its high volatility this week, it is difficult to clearly indicate the news from the G20 summit as the reason for these movements.

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
🔴🔴	27-Nov	Industrial profits (yoy)	Oct	3.6% ▼	4.1%	--
🔴🔴🔴	30-Nov	Official manufacturing PMI	Nov	50.0 ▼	50.2	50.2 📉
🔴🔴🔴	03-Dec	Caixin's manufacturing PMI	Nov	50.2 ▲	50.1	50.1 📈
<b>Poland</b> 						
🔴🔴	19-Nov	Average gross salary (yoy)	Oct	7.6% ▲	6.7%	6.7% 📈
🔴	19-Nov	Employment (yoy)	Oct	3.2% -	3.2%	3.2% 📊
🔴🔴🔴🔴	20-Nov	Sold industrial production (yoy)‡	Oct	7.4% ▲	2.7%	6.6% 📈
🔴🔴	20-Nov	Producer inflation PPI (yoy)‡	Oct	3.2% ▲	3.0%	3.0% 📈
🔴🔴🔴	22-Nov	Retail sales (yoy)	Oct	9.7% ▲	5.6%	7.6% 📈
🔴	23-Nov	M3 money supply (yoy)	Oct	8.3% ▲	7.9%	7.8% 📈
🔴🔴	27-Nov	Unemployment rate	Oct	5.7% -	5.7%	5.7% 📊
🔴🔴🔴🔴🔴	30-Nov	GDP (yoy) - final data	3Q	5.1% -	5.1%	--
🔴🔴🔴🔴🔴	30-Nov	GDP (qoq) - final data	3Q	1.7% -	1.7%	--
🔴🔴🔴🔴	30-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	1.2% ▼	1.8%	1.6% 📉
🔴🔴🔴	03-Dec	Manufacturing PMI	Nov	49.5 ▼	50.4	50.3 📉
<b>US</b> 						
🔴🔴	21-Nov	Durable goods orders - preliminary data‡	Oct	-4.4% ▼	-0.1%	-2.6% 📉
🔴🔴	21-Nov	University of Michigan confidence index - final data	Nov	97.5 ▼	98.3	98.3 📉
🔴🔴🔴	23-Nov	Composite PMI - preliminary data	Nov	--	54.9	--
🔴🔴🔴	23-Nov	Manufacturing PMI - preliminary data	Nov	--	55.7	55.7
🔴🔴🔴	23-Nov	PMI services - preliminary data	Nov	--	54.8	55.0
🔴	26-Nov	Dallas Fed manufacturing activity	Nov	17.6 ▼	29.4	24.5 📉
🔴	27-Nov	S&P/CaseShiller home price index‡	Sep	214 ▼	214	--
🔴🔴🔴🔴🔴	28-Nov	GDP (annualized, qoq) -	3Q	3.5% -	3.5%	3.5% 📊
🔴	28-Nov	Richmond Fed manufacturing index	Nov	14.0 ▼	15.0	15.0 📉
🔴🔴🔴🔴	29-Nov	Consumer spending inflation PCE (mom)	Oct	0.1% ▼	0.2%	0.2% 📉
🔴🔴🔴🔴	29-Nov	Consumer spending inflation PCE (yoy)‡	Oct	1.8% ▼	1.9%	1.9% 📉
🔴🔴	29-Nov	Personal income (sa, mom)	Oct	0.5% ▲	0.2%	0.4% 📈
🔴🔴	29-Nov	Personal spending (sa, mom)‡	Oct	0.6% ▲	0.2%	0.4% 📈
🔴🔴🔴	03-Dec	Manufacturing PMI - final data	Nov	55.3 ▼	55.4	55.4 📉
🔴🔴	03-Dec	ISM Manufacturing	Nov	59.3 ▲	57.7	57.5 📈
<b>Eurozone</b> 						
🔴	22-Nov	Consumer confidence - estimation	Nov	-3.9 ▼	-2.7	-3.0 📉
🔴🔴🔴	23-Nov	Composite PMI - preliminary data	Nov	--	53.1	53.0
🔴🔴🔴	23-Nov	Manufacturing PMI - preliminary data	Nov	--	52.0	52.0
🔴🔴🔴	23-Nov	Services PMI - preliminary data	Nov	--	53.7	53.6
🔴	28-Nov	M3 money supply (yoy)‡	Oct	3.9% ▲	3.6%	3.5% 📈
🔴	29-Nov	Economic confidence‡	Nov	110 ▼	110	109 📉
🔴	29-Nov	Industrial confidence	Nov	3.4 ▲	3.0	2.5 📈
🔴	29-Nov	Consumer confidence - final data	Nov	-3.9 -	-3.9	-3.9 📊
🔴	29-Nov	Business climate indicator	Nov	1.1 ▲	1.0	1.0 📈
🔴🔴🔴🔴	30-Nov	Core CPI (yoy) - estimation	Nov	1.0% ▼	1.1%	1.1% 📉
🔴🔴🔴🔴	30-Nov	CPI estimate (yoy)	Nov	2.0% ▼	2.2%	2.0% 📉
🔴🔴	30-Nov	Unemployment rate	Oct	8.1% -	8.1%	8.0% 📊



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>Germany</b> 						
⊕⊕⊕⊕⊕	23-Nov	GDP (yoy) - final data	3Q	1.1% ▬	1.1%	1.1% ⊙
⊕⊕⊕⊕⊕	23-Nov	GDP (sa, qoq) - final data	3Q	-0.2% ▬	-0.2%	-0.2% ⊙
⊕⊕⊕	23-Nov	Composite PMI - preliminary data	Nov	--	53.4	53.1
⊕⊕⊕	23-Nov	Manufacturing PMI - preliminary data	Nov	--	52.2	52.2
⊕⊕	23-Nov	Exports (qoq)‡	3Q	-0.9% ▼	0.8%	-0.3% ◡
⊕⊕	26-Nov	IFO business climate‡	Nov	102 ▼	103	102 ◡
⊕⊕	28-Nov	GfK consumer confidence	Dec	10.4 ▼	10.6	10.5 ◡
⊕⊕⊕⊕	29-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	2.2% ▼	2.4%	2.3% ◡
⊕⊕⊕⊕	29-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	2.3% ▼	2.5%	2.4% ◡
⊕⊕	29-Nov	Unemployment rate	Nov	5.0% ▼	5.1%	5.1% ◡
⊕⊕⊕	30-Nov	Retail sales (yoy)‡	Oct	5.0% ▲	-2.8%	1.4% ◢
⊕⊕⊕	03-Dec	Manufacturing PMI - final data	Nov	51.8 ▲	51.6	51.6 ◢
<b>France</b> 						
⊕⊕⊕	23-Nov	Composite PMI - preliminary data	Nov	--	54.1	53.9
⊕⊕⊕	23-Nov	Manufacturing PMI - preliminary data	Nov	--	51.2	51.2
⊕⊕⊕⊕⊕	29-Nov	GDP (yoy) - preliminary data	3Q	1.4% ▼	1.5%	1.5% ◡
⊕⊕⊕⊕⊕	29-Nov	GDP (qoq) - preliminary data	3Q	0.4% ▬	0.4%	0.4% ⊙
⊕⊕⊕⊕	30-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	2.2% ▼	2.5%	2.3% ◡
⊕⊕⊕⊕	30-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	1.9% ▼	2.2%	2.0% ◡
⊕⊕⊕	03-Dec	Manufacturing PMI - final data	Nov	50.8 ▲	50.7	50.7 ◢
<b>Italy</b> 						
⊕⊕⊕⊕⊕	30-Nov	GDP (wda, yoy) - final data‡	3Q	0.7% ▬	0.7%	0.8% ◡
⊕⊕⊕⊕⊕	30-Nov	GDP (wda, qoq) - final data‡	3Q	-0.1% ▬	-0.1%	0.0% ◡
⊕⊕⊕⊕	30-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	1.7% ▬	1.7%	1.6% ◢
⊕⊕	30-Nov	Unemployment rate - preliminary data‡	Oct	10.6% ▲	10.3%	10.1% ◢
⊕⊕⊕	03-Dec	Manufacturing PMI	Nov	48.6 ▼	49.2	48.9 ◡
<b>UK</b> 						
⊕⊕⊕	03-Dec	Manufacturing PMI (sa)	Nov	53.1 ▲	51.1	51.7 ◢
<b>Japan</b> 						
⊕⊕⊕⊕	22-Nov	Consumer inflation CPI (yoy)	Oct	1.4% ▲	1.2%	1.4% ⊙
⊕⊕⊕	26-Nov	Manufacturing PMI - preliminary data	Nov	--	52.9	--
⊕⊕⊕⊕	30-Nov	Industrial production (yoy) - preliminary data	Oct	4.2% ▲	-2.5%	2.5% ◢
⊕⊕⊕	03-Dec	Manufacturing PMI - final data	Nov	52.2 ▲	51.8	--
<b>Chile</b> 						
⊕⊕⊕⊕⊕	19-Nov	GDP (yoy)‡	3Q	2.8% ▼	5.4%	2.9% ◡
⊕⊕⊕	30-Nov	Total copper production (metric tons)	Oct	495 923 ▲	484 059	--
⊕⊕⊕	30-Nov	Manufacturing (yoy)	Oct	9.1% ▲	-5.4%	5.0% ◢
<b>Canada</b> 						
⊕⊕⊕⊕	23-Nov	Consumer inflation CPI (yoy)	Oct	2.4% ▲	2.2%	2.2% ◢
⊕⊕⊕⊕⊕	30-Nov	GDP (yoy)‡	Sep	2.1% ▼	2.4%	2.3% ◡
⊕⊕⊕⊕⊕	30-Nov	GDP (annualized, qoq)	3Q	2.0% ▼	2.9%	2.0% ⊙

<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 Polska Miedź

## Key market data

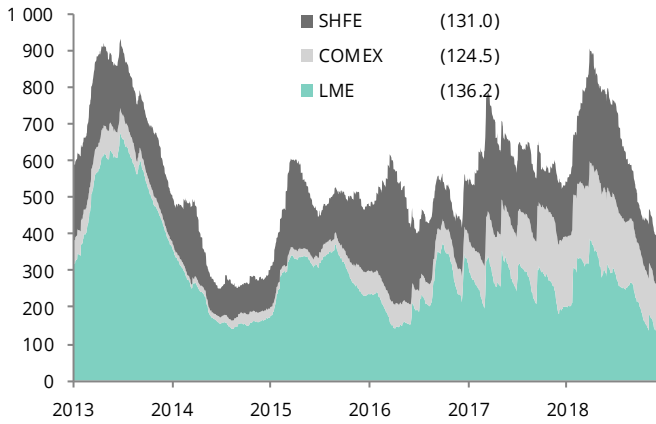
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 10-Aug-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	6 120.00	▼ -1.1%	▼ -7.9%	▼ -14.5%	▼ -4.6%	6 781.10	5 982.00	7 262.50
Molybdenum	26 000.00	- 0.0%	- 0.0%	▲ 62.5%	▲ 62.5%	22 648.39	16 000.00	26 000.00
Nickel	13 635.00	▼ -0.5%	▼ -8.6%	▲ 11.2%	▲ 26.6%	13 842.52	12 415.00	15 750.00
Aluminum	2 039.00	▼ -0.7%	▼ -6.6%	▼ -9.0%	▲ 0.7%	2 184.24	1 967.00	2 602.50
Tin	19 560.00	▼ -2.2%	▼ -0.6%	▼ -1.6%	▼ -3.9%	20 813.77	19 405.00	22 105.00
Zinc	2 552.50	▼ -1.4%	▼ -13.4%	▼ -22.9%	▼ -13.0%	3 148.38	2 527.00	3 618.00
Lead	2 092.00	▼ -1.9%	▼ -14.0%	▼ -16.2%	▼ -11.3%	2 403.91	2 073.00	2 683.00
<b>LBMA (USD/troz)</b>								
Silver	15.38	▼ -0.7%	▼ -4.1%	▼ -8.8%	▼ -10.0%	16.46	15.26	17.52
Gold <sup>2</sup>	1 214.40	▼ -0.8%	▼ -2.9%	▼ -6.3%	▼ -5.5%	1 301.13	1 209.55	1 354.95
<b>LPPM (USD/troz)</b>								
Platinum <sup>2</sup>	828.00	▲ 0.2%	▼ -2.7%	▼ -10.7%	▼ -15.7%	919.90	798.00	1 020.00
Palladium <sup>2</sup>	911.00	▼ -1.8%	▼ -4.4%	▼ -13.7%	▲ 0.8%	991.76	886.00	1 129.00
<b>FX <sup>3</sup></b>								
EURUSD	1.1456	▼ -2.0%	▼ -1.7%	▼ -4.5%	▼ -2.4%	1.2018	1.1456	1.2493
EURPLN	4.2942	▲ 0.2%	▼ -1.5%	▲ 3.0%	▲ 0.5%	4.2383	4.1423	4.3978
USDPLN	3.7481	▲ 2.2%	▲ 0.1%	▲ 7.7%	▲ 2.9%	3.5287	3.3173	3.7759
USDCAD	1.3113	▲ 0.7%	▼ -0.4%	▲ 4.5%	▲ 3.2%	1.2840	1.2288	1.3310
USDCNY	6.8463	▲ 0.5%	▲ 3.4%	▲ 5.2%	▲ 3.0%	6.4473	6.2690	6.8535
USDCLP	645.95	▲ 0.4%	▼ -0.3%	▲ 5.0%	▼ -0.5%	618.95	588.28	662.43
<b>Money market</b>								
3m LIBOR USD	2.319	▼ -0.02	▼ -0.02	▲ 0.62	▲ 1.01	2.171	1.696	2.369
3m EURIBOR	-0.319	- 0.00	▲ 0.00	▲ 0.01	▲ 0.01	-0.325	-0.329	-0.319
3m WIBOR	1.700	- 0.00	- 0.00	▼ -0.02	▼ -0.03	1.706	1.700	1.720
5y USD interest rate swap	2.878	▼ -0.10	▼ -0.01	▲ 0.63	▲ 1.02	2.793	2.283	3.036
5y EUR interest rate swap	0.274	▼ -0.05	▲ 0.00	▼ -0.04	▲ 0.08	0.372	0.224	0.509
5y PLN interest rate swap	2.458	▼ -0.04	▲ 0.00	▼ -0.04	▲ 0.08	2.472	2.280	2.740
<b>Fuel</b>								
WTI Cushing	67.63	▼ -3.6%	▼ -8.8%	▲ 11.9%	▲ 39.2%	66.36	59.19	74.15
Brent	72.06	▼ -3.3%	▼ -8.3%	▲ 7.8%	▲ 40.1%	71.40	62.33	79.18
Diesel NY (ULSD)	213.72	▼ -1.5%	▼ -3.2%	▲ 3.5%	▲ 31.2%	207.91	183.32	229.33
<b>Others</b>								
VIX	13.16	▼ -1.10	▼ -2.93	▲ 2.12	▼ -2.88	15.65	9.15	37.32
BBG Commodity Index	84.23	▼ -1.3%	▼ -3.6%	▼ -4.5%	▲ 0.8%	87.93	82.82	91.57
S&P500	2 833.28	▲ 1.1%	▲ 4.2%	▲ 6.0%	▲ 16.2%	2 734.70	2 581.00	2 872.87
DAX	12 424.35	▼ -2.9%	▲ 1.0%	▼ -3.8%	▲ 3.4%	12 643.15	11 787.26	13 559.60
Shanghai Composite	2 795.31	▼ -2.6%	▼ -1.8%	▼ -15.5%	▼ -14.3%	3 128.86	2 705.16	3 559.47
WIG 20	2 247.15	▼ -3.5%	▲ 5.2%	▼ -8.7%	▼ -5.7%	2 313.52	2 098.75	2 630.37
KGHM	90.30	▼ -5.9%	▲ 2.6%	▼ -18.8%	▼ -25.1%	97.63	84.20	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>

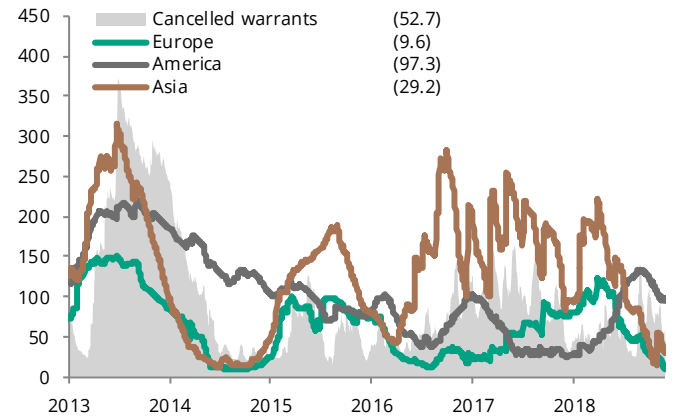
Source: Bloomberg, KGHM Polska Miedź

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



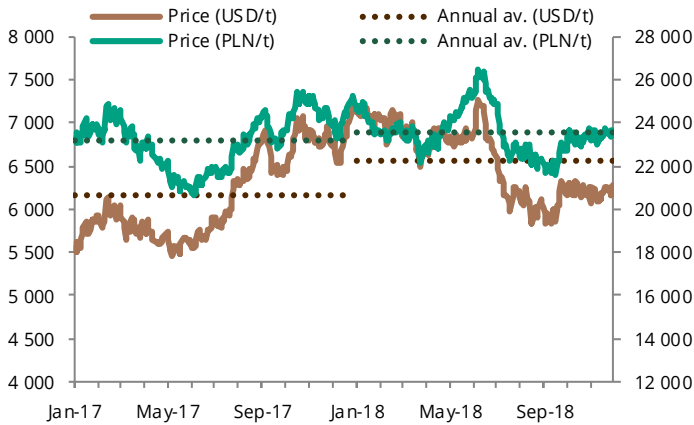
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



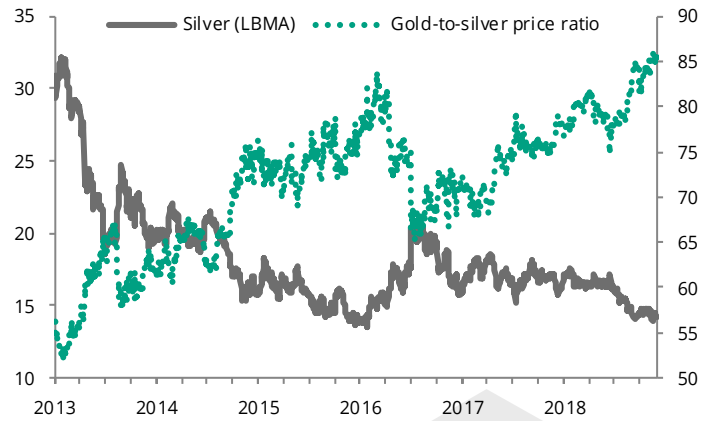
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



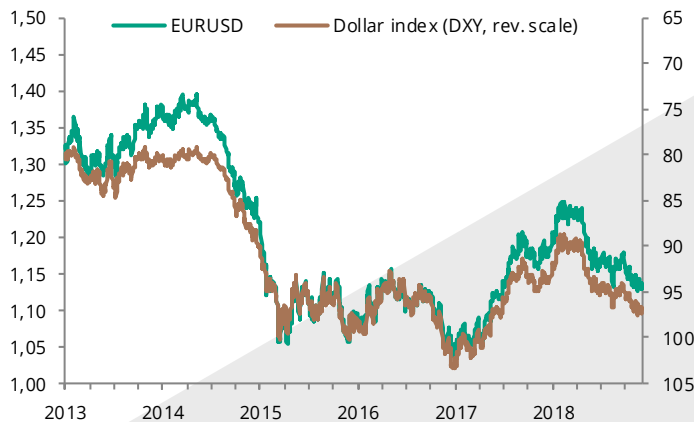
Source: Bloomberg, KGHM Polska Miedź

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



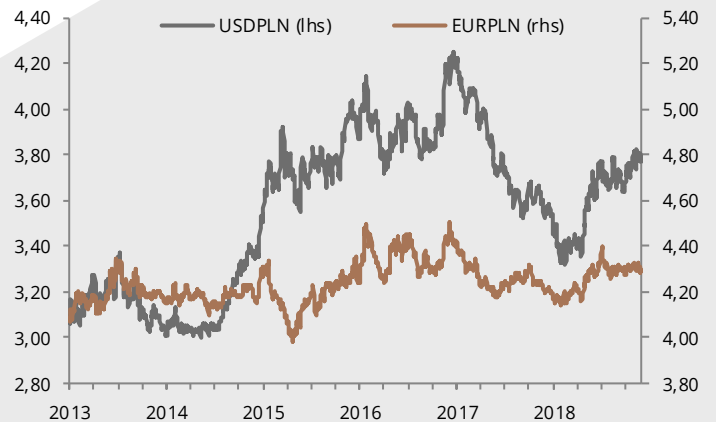
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

**PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs)**



Source: Bloomberg, KGHM Polska Miedź

## Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:  
**19<sup>th</sup> November – 2<sup>nd</sup> December 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, ▪ Sharps Pixley.

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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