

Market Overview

as of: 27th November 2017






- Copper:** The price of red metal has come back just below the 7 000 USD/t handle, with market participants driven by electric cars prospects. Among the most important news, it should be noted that the Chilean elections might overturn the military royalty which is paid by the state-owned Codelco. Both candidates, however, have different attitude towards company's future priorities. On the other side of the world, Chinese smelters agreed among themselves that there will be no shortage of copper concentrate supply in 2018, couple of days before next year's negotiations (*page 2*).
- Precious metals:** Gold prices in last two weeks of November have gradually moved higher towards 1300 USD/troz level. The main reason behind the move was weakening of US dollar as investors looked ahead to congressional testimony by the nominee to chair the U.S. Federal Reserve and a meeting between U.S. President Donald Trump and Senate Republicans on tax reform (*page 4*).
- Monetary policies:** Main central banks are on a careful course to higher rates and balance shortening. Draghi says pay gains to ease ECB pressure as labor tightens. Meanwhile Yellen stick to the plan of increasing rates, but says that it's dangerous to allow inflation to drift lower (*page 6*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	6 967.50	2.5%
▼ Nickel	12 015.00	-2.2%
LBMA (USD/troz)		
▲ Silver	17.05	0.3%
▲ Gold (PM)	1 290.50	0.5%
FX		
▲ EURUSD	1.1877	1.9%
▼ EURPLN	4.2116	-0.4%
▼ USDPLN	3.5486	-2.2%
▲ USDCAD	1.2708	0.2%
▲ USDCLP	634.23	0.4%
Stocks		
▼ KGHM	113.75	-5.5%

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

Important macroeconomic data

Release	For		
 GDP (yoy)	3Q	4.7%	▲
 GDP (sa, yoy)	3Q	2.3%	▲
 Manufacturing PMI	Nov	60.0	▲
 CPI (yoy)	Oct	2.0%	▼
 New yuan loans	Oct	663	▼

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

It seems that Chinese Party Congress has been the inflection point in terms of positive macroeconomic surprises



Source: Bloomberg, KGHM Polska Miedź

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Base and precious metals | Other commodities

Copper

The price of red metal has come back just below the 7 000 USD/t handle, with market participants driven by electric cars prospects. Among the most important news, it should be noted that the Chilean elections might overturn the military royalty which is paid by the state-owned Codelco. Both candidates, however, have different attitude towards company's future priorities. On the other side of the world, Chinese smelters agreed among themselves that there will be no shortage of copper concentrate supply in 2018, couple of days before next year's negotiations.

Codelco might stop funding the military after elections

The world's largest copper miner, Codelco, may see a boost in investment cash regardless of who wins next month's presidential runoff in Chile, as both candidates have vowed to end the state-run firm's funding of the military. According to Reuters, conservative front-runner Sebastian Pinera and his center-left rival Alejandro Guillier, set to face off in the Dec. 17 vote, have both pledged to overturn the dictatorship-era law that transfers to the military 10% of Codelco's export sales, worth \$866 million last year. However, there is no guarantee that Codelco which delivers all its profits to the state, would keep the funds should the law be overturned. That decision would ultimately lie with Congress. But the candidates' rare agreement that the tax should be eliminated bodes well for the cash-strapped miner, which needs to invest an estimated \$20 billion to revamp its aging mines, expand abroad and keep output flowing. The law (10% royalty) dates back to 1958 and was overhauled in 1976 under former dictator Augusto Pinochet to fund the growing military.

The next Chilean president, who will take over from President Michelle Bachelet in March and will have a strong hand assembling Codelco's board, will weigh heavily on the company's investment plans. Though the candidates agree that the military funding law should be eliminated, they differ on what Codelco's priorities should be. Pinera, who has been skeptical of Codelco's management and says he would like to see greater emphasis on efficiency, has called for a "realistic investment plan" and for "maximizing performance of existing assets". Guillier, who hails from the northern mining province of Antofagasta, has emphasized new investment and prioritized company-worker relations, similar to Bachelet.

China's copper smelters "announce" no concentrate deficit in 2018

China's top copper smelters have recently held an unscheduled meeting in Shanghai to reaffirm their position that there will be no shortage of copper concentrate supply in 2018 as the key contract renegotiation season heats up. The

After the presidential elections, Codelco's military royalty might be overturned

Both candidates are in agreement that the military funding law should be eliminated, however, they differ on what Codelco's priorities should be

Chinese copper smelters say that there will be no concentrate deficit next year

10 companies on the China Smelters Purchase Team (CSPT) met to conduct a "comprehensive and systematic analysis" of supply and demand dynamics after their return from the recent London Metal Exchange (LME) gathering, according to Reuters. The move came in response to views expressed by miners at LME week, held in London from Oct. 30 to Nov. 3, that there will be a shortage of copper concentrate in 2018. A shortage of concentrate is negative for smelters as they have to compete for supplies by charging miners less to process the raw material into copper metal. Copper prices have risen about 22% so far this year, partly driven by strong demand in China, the world's top copper consumer, providing good margins for miners. The CSPT, however, which sets benchmark treatment and refining charges (TC/RCs) for copper concentrate processed in China, maintains that 2018 supply and demand will be basically balanced, with a slight surplus, according to the China Smelters Purchase Team.

CSPT's fourth-quarter benchmark TC/RCs, at \$95 per tonne and 9.5 cents per pound, respectively, were above market expectations

An ample supply of concentrate allows the CSPT to set to higher charges. Its fourth-quarter benchmark TC/RCs, at \$95 per tonne and 9.5 cents per pound, respectively, were above market expectations. This contrasts with deals in the spot market, however, where fees charged by Chinese smelters have ranged from \$80 to \$90 a tonne and 8 to 9 cents a pound so far this quarter. According to Reuters, two recent spot processing deals look very interesting with Chinese smelters agreed for numbers even in the mid-\$50s, one by a major Chilean producer and another by a smaller Australian miner. Mine supply is also vulnerable to disruption next year with around 40 contract renegotiation agreements due. Members of the CSPT, which include Jiangxi Copper Co, Jinchuan Group and Tongling Nonferrous Metals Group, are expected to sit down for more talks with miners during Asia Copper Week in Shanghai from Nov. 28-Dec. 1. Even without taking into account the impact of China's environmental crackdown on smelters the market remains balanced, the CSPT official said, adding that the date of the group's next meeting had not yet been fixed.

Other important information on copper market:

- The global world refined copper market showed a 85,000 tonnes surplus in August, compared with a 7,000 tonnes deficit in July, according to the International Copper Study Group's (ICSG) recent copper bulletin. For the first 8 months of the year, the market was in a 52,000 tonnes deficit compared with a 139,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in August was 2.01 million tonnes , while consumption was 1.92 million tonnes. Bonded stocks of copper in China showed a 70,000 tonnes surplus in August compared with a 7,000 tonnes deficit in July.
- The Shanghai Futures Exchange has received approval from the China Securities Regulatory Commission to trade copper futures options, the exchange has recently announced. Once launched, the futures options for the red metal would be China's first for an industrial product and serve as a risk management tool in non-ferrous metals derivatives trading, according to the exchange'. Copper is the most traded base metal on the SHFE. During the

first six months of 2017, the trading volume of SHFE copper futures totaled 52.79 million lots, with a turnover of 12.35 trillion yuan (\$1.86 trillion). Market participants believe that the launch of copper futures options on the SHFE will create greater arbitrage opportunities in the metals trading business. Currently, the London Metal Exchange and Comex both offer the trading of copper futures options.

- Spot import premiums for London Metal Exchange-registered brands of copper cathodes delivered to China were unchanged recently amid Codelco reportedly announcing its 2018 annual contract premiums for Asia. Major Chilean miner Codelco is said to have set its 2018 premium at \$75/mt CIF Shanghai, up \$3/mt from 2017, according to market participants. Codelco recently raised its premiums in Europe by 7% year on year to \$88/mt for 2018 annual contracts. Sources said spot premiums have not moved as a result of Codelco's move, as its 2018 premium fell within the spot range. According to Shanghai traders, it's would be unwise to rise premiums too much these days, as Middle Kingdom's production is up and Chinese copper is also similar to international grades, which makes it very competitive. Market participants are now eyeing further direction from a major upcoming industry event in China, Asia Copper Week 2017, which will be held in Shanghai over November 28-December 1.
- The South Korean agency that manages state stockpiles of commodities says it could ramp up its inventories of non-ferrous metals next year amid growing demand for such materials in churning out products like electric vehicles. The Public Procurement Service (PPS) has stockpiled raw materials for around 50 years, using them to help local companies in times of shortage or when prices spiral upwards. The agency typically keeps total non-ferrous and rare metal stockpiles at around 250,000 tonnes, with aluminium accounting for over half of that. Park Chun-sup, the newly-appointed administrator of the PPS, said that companies involved in producing electric vehicles or other new technologies were helping to drive up appetite for metals. Park noted that the agency was currently stockpiling non-ferrous metals equivalent to nearly 58 days of national consumption, above the 56 days it is required to hold. He said that the PPS would likely buy more zinc in 2018 as stockpiles of the base metals are lower-than-usual this year, without giving details. But Park said the agency would not rush into any decisions on buying for next year.

Precious Metals

Gold prices in last two weeks of November have gradually moved higher towards 1300 USD/troz level. The main reason behind the move was weakening of US dollar as investors looked ahead to congressional testimony by the nominee to chair the U.S. Federal Reserve and a meeting between U.S. President Donald Trump and Senate Republicans on tax reform.

Mali says industrial gold mining on track to beat 2017 forecasts

Industrial gold production in Mali, Africa's third biggest producer, is on track to exceed earlier forecasts for this year, a government official reported. Mali's industrial miners produced 46.9 tonnes of gold last year, but the government said in May that production in 2017 would slip to about 45 tonnes as the country waited for new mines to come online next year. The output for the first nine months hit 35.2 tonnes, five percent higher than projected, Reuters noted. Major investors in Mali's gold sector include Anglo Gold Ashanti and Randgold Resources. In 2017 output would be boosted by last month's start of production at B2Gold's giant Fekola project. Fekola and Hummingbird Resources' new Yanfolila mine are expected to hit full production next year. The government, meanwhile, said earlier this year that it expects informal artisanal miners to produce 50 tonnes of gold this year, more than double last year's haul of 20.1 tonnes. If so, total production from industrial and informal mines could top 95 tonnes, a more than 40 percent rise on last year.

Brazil's Serabi to buy Coringa gold project for \$22 mln

Brazilian miner Serabi Gold said recently it would buy Brazil's Coringa gold project for \$22 million from Anfield Gold Corp, a move that will double its production and lower its overall costs. The purchase price for Coringa would be paid in three staggered tranches, while the project was in the process of being fully permitted, Serabi said in a statement issued with its results. London-listed Serabi runs the Polita and Sao Chico mines in Brazil. The Coringa project will churn out 32,000 ounces per annum of gold at a cost of \$783 per ounce, adding to the 38,000 ounces now produced from Serabi's two mines. Serabi plans to fund the acquisition from its own cash reserves, an extension of some of its loan agreements with its lender Sprott and a cash raise from the shareholders. The deal was conditional on completing a due diligence report. Peel Hunt analysts said Coringa had large exploration opportunity. Coringa's construction was expected to cost \$20 million to \$25 million, a lower figure than the initial \$28 million forecasted by the mine's previous owners.

Global economies | Foreign exchange markets

Monetary policies: cautious tone of central banks leaders

Main central banks are on a careful course to higher rates and balance shortening. Draghi says pay gains to ease ECB pressure as labor tightens. Meanwhile Yellen stick to the plan of increasing rates, but says that it's dangerous to allow inflation to drift lower.

ECB optimistic regarding Eurozone economy and inflation goals, but patience is needed.

Mario Draghi predicted that euro-area workers will soon start winning bigger pay increases, relieving pressure on his European Central Bank to keep supporting the economy. The ECB president, who has for years struggled to combat low inflation, reiterated on Friday that a "key issue" keeping prices down is that wages aren't rising. But after pumping in monetary stimulus that has helped bring unemployment down and spur consumption, he now sees a nascent change. "With well-anchored inflation expectations, the effects of past low inflation in wage formation should not be persistent," According to Draghi, as the labor market tightens and uncertainty falls, the relationship between slack and wage growth should begin reasserting itself. But we have to remain patient. Any sign workers are winning more pay will be crucial in pushing inflation closer to the ECB's goal and allowing it to unwind the extraordinary measures, including bond purchases and negative interest rates, that have been pursued for years. Officials have already decided to pare back some support from January and Draghi noted that economic growth in the region is "clearly improving," but he also warned that progress on consumer prices remains "incomplete and partial." Governing Council member Jens Weidmann, who heads Germany's central bank, argues that a slightly less supportive monetary policy in the next year and a clear end-date for quantitative easing would have been justified. "We must be attuned to the fact that the economic recovery has progressed further than inflation figures currently suggest, and that domestic price pressures will gradually increase in keeping with a path toward our definition of price stability," Weidmann said. Policy makers' optimism is fed by the region's labor-market recovery. Employment in the 19-nation bloc is at a record high while joblessness has fallen to the lowest level since 2009. At the same time, the participation rate has risen 2 percentage points above the pre-crisis level, driven in particular by women and older people joining the workforce. "The fact that unemployment has fallen so much while labor participation has been rising is a remarkable success story," Draghi said. The strengthening recovery was one reason why, at the ECB's most recent policy meeting on Oct. 26, the Governing Council decided to halve the pace of its monthly bond purchases to 30 billion euros (\$35 billion) starting in January, while extending the program until at least September. According to ECB chief economist - Peter Praet, policy guidance will focus increasingly on interest rates as the end of quantitative easing nears.














































No key difference in US monetary policy goals after the change of Fed's Chair








Meanwhile, US Federal Reserve Chair Janet Yellen cautioned that raising US interest rates too quickly risked stranding inflation below the U.S. central bank's 2 percent target and said there'd been "some hint" that expectations for future

price increases may be drifting down. “It can be quite dangerous to allow inflation to drift down and not to achieve over time a central bank’s inflation target,” she said, while also discussing perils of leaving rates too low for too long. The Fed announced Monday that Yellen, 71, would step down once current Fed Governor Jerome Powell -- who President Donald Trump nominated to replace her when her term expires in February -- is confirmed by the Senate and sworn into office. Yellen, Powell and the rest of the U.S. central bank’s policy-setting Federal Open Market Committee are attempting to guide interest rates back to what they deem a more neutral level after years of keeping them near zero to combat the effects of the financial crisis. Their median forecast pegged neutral at about 2.75 percent when quarterly projections were last published in September. The Fed currently targets a range of 1 percent to 1.25 percent for its benchmark overnight rate. Yellen said that with rates so low by historical standards, the central bank would have less scope than in the past to respond to possible economic weakness by easing policy. While unemployment fell to 4.1 percent last month, the lowest in nearly 17 years, inflation has remained below the central bank’s target and has slowed unexpectedly this year. The deceleration led to increased investor pessimism about higher interest rates, but guidance from Fed officials in the past two months that they are looking through what they see as a temporary abatement of price pressures has led to a rebound in market rates. Investors are nearly certain the FOMC will raise the overnight rate when they gather next in December. Additionally, the FOMC projections published in September had three increases penciled in for 2018.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
⊗	13-Nov	New yuan loans (CNY bn)	Oct	663 ▼	1 270	783 
⊗⊗⊗⊗	14-Nov	Industrial production (yoy)	Oct	6.2% ▼	6.6%	6.3% 
⊗⊗	14-Nov	Fixed assets investments (ytd, yoy)	Oct	7.3% ▼	7.5%	7.3% 
⊗	14-Nov	Retail sales (yoy)	Oct	10.0% ▼	10.3%	10.5% 
Poland 						
⊗⊗⊗⊗	13-Nov	Consumer inflation CPI (yoy) - final data	Oct	2.1% -	2.1%	-- 
⊗⊗	13-Nov	Trade balance (EUR mn)‡	Sep	764 ▲	278	396 
⊗⊗	13-Nov	Exports (EUR mn)‡	Sep	17 207 ▲	15 661	17 050 
⊗⊗	13-Nov	Current account balance (EUR mn)‡	Sep	- 100 ▼	- 80.0	- 350 
⊗⊗⊗⊗⊗	14-Nov	GDP (yoy) - preliminary data‡	3Q	4.7% ▲	4.0%	4.5% 
⊗⊗⊗⊗⊗	14-Nov	GDP (qoq) - preliminary data‡	3Q	1.1% ▲	0.9%	0.8% 
⊗⊗⊗⊗	14-Nov	Core CPI (excluding food and energy, yoy)	Oct	0.8% ▼	1.0%	0.9% 
⊗⊗	17-Nov	Average gross salary (yoy)	Oct	7.4% ▲	6.0%	6.6% 
⊗	17-Nov	Employment (yoy)	Oct	4.4% ▼	4.5%	4.5% 
⊗⊗⊗⊗	20-Nov	Sold industrial production (yoy)‡	Oct	12.3% ▲	4.2%	9.9% 
⊗⊗⊗	20-Nov	Retail sales (yoy)	Oct	8.0% ▼	8.6%	8.5% 
⊗⊗	20-Nov	Producer inflation PPI (yoy)‡	Oct	3.0% ▼	3.2%	2.9% 
⊗	23-Nov	M3 money supply (yoy)	Oct	5.7% ▲	5.4%	5.5% 
⊗⊗	24-Nov	Unemployment rate	Oct	6.6% ▼	6.8%	6.7% 
US 						
⊗⊗⊗⊗	15-Nov	Consumer inflation CPI (mom)	Oct	0.1% ▼	0.5%	0.1% 
⊗⊗⊗⊗	15-Nov	Consumer inflation CPI (yoy)	Oct	2.0% ▼	2.2%	2.0% 
⊗⊗	15-Nov	Retail sales (excluding autos, mom)‡	Oct	0.1% ▼	1.2%	0.2% 
⊗⊗⊗⊗	16-Nov	Industrial production (mom)‡	Oct	0.9% ▲	0.4%	0.5% 
⊗⊗	16-Nov	Philadelphia Fed business outlook	Nov	22.7 ▼	27.9	24.6 
⊗	16-Nov	Capacity utilization‡	Oct	77.0% ▲	76.4%	76.3% 
⊗⊗	22-Nov	Durable goods orders - preliminary data‡	Oct	-1.2% ▼	2.2%	0.3% 
⊗⊗	22-Nov	University of Michigan confidence index - final data	Nov	98.5 ▲	97.8	98.0 
⊗⊗⊗	24-Nov	Composite PMI - preliminary data	Nov	54.6 ▼	55.2	-- 
⊗⊗⊗	24-Nov	Manufacturing PMI - preliminary data	Nov	53.8 ▼	54.6	55.0 
⊗⊗⊗	24-Nov	PMI services - preliminary data	Nov	54.7 ▼	55.3	55.3 
Eurozone 						
⊗⊗⊗⊗⊗	14-Nov	GDP (sa, yoy) - preliminary data	3Q	2.5% -	2.5%	2.5% 
⊗⊗⊗⊗⊗	14-Nov	GDP (sa, qoq) - preliminary data	3Q	0.6% -	0.6%	0.6% 
⊗⊗⊗⊗	14-Nov	Industrial production (sa, mom)	Sep	-0.6% ▼	1.4%	-0.6% 
⊗⊗⊗⊗	14-Nov	Industrial production (wda, yoy)‡	Sep	3.3% ▼	3.9%	3.2% 
⊗	14-Nov	ZEW survey expectations	Nov	30.9 ▲	26.7	-- 
⊗	15-Nov	Trade balance (EUR mn)	Sep	26.4 ▲	16.1	-- 
⊗⊗⊗⊗	16-Nov	Consumer inflation CPI (yoy) - final data	Oct	1.4% -	1.4%	1.4% 
⊗⊗⊗⊗	16-Nov	Core CPI (yoy) - final data	Oct	0.9% -	0.9%	0.9% 
⊗	22-Nov	Consumer confidence - estimation‡	Nov	0.1 ▲	- 1.1	- 0.8 
⊗⊗⊗	23-Nov	Composite PMI - preliminary data	Nov	57.5 ▲	56.0	56.0 
⊗⊗⊗	23-Nov	Manufacturing PMI - preliminary data	Nov	60.0 ▲	58.5	58.2 
⊗⊗⊗	23-Nov	Services PMI - preliminary data	Nov	56.2 ▲	55.0	55.2 

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
⊕⊕⊕⊕⊕	14-Nov	GDP (yoy) - preliminary data‡	3Q	2.3% ▲	1.0%	2.0%	▲
⊕⊕⊕⊕⊕	14-Nov	GDP (sa, qoq) - preliminary data	3Q	0.8% ▲	0.6%	0.6%	▲
⊕⊕⊕⊕	14-Nov	Harmonized consumer inflation HICP (yoy) - final data	Oct	1.5% -	1.5%	1.5%	○
⊕⊕⊕⊕	14-Nov	Consumer inflation CPI (yoy) - final data	Oct	1.6% -	1.6%	1.6%	○
⊕⊕⊕⊕⊕	23-Nov	GDP (yoy) - final data	3Q	2.3% -	2.3%	2.3%	○
⊕⊕⊕⊕⊕	23-Nov	GDP (sa, qoq) - final data	3Q	0.8% -	0.8%	0.8%	○
⊕⊕⊕	23-Nov	Composite PMI - preliminary data	Nov	57.6 ▲	56.6	56.7	▲
⊕⊕⊕	23-Nov	Manufacturing PMI - preliminary data	Nov	62.5 ▲	60.6	60.4	▲
⊕⊕	23-Nov	Exports (qoq)‡	3Q	1.7% ▲	1.0%	1.0%	▲
⊕⊕	24-Nov	IFO business climate‡	Nov	118 ▲	117	117	▲
France							
⊕⊕⊕⊕	15-Nov	Harmonized consumer inflation HICP (yoy) - final data	Oct	1.2% -	1.2%	1.2%	○
⊕⊕⊕⊕	15-Nov	Consumer inflation CPI (yoy) - final data	Oct	1.1% -	1.1%	1.1%	○
⊕⊕⊕	23-Nov	Composite PMI - preliminary data	Nov	60.1 ▲	57.4	57.2	▲
⊕⊕⊕	23-Nov	Manufacturing PMI - preliminary data	Nov	57.5 ▲	56.1	55.9	▲
Italy							
⊕⊕⊕⊕⊕	14-Nov	GDP (wda, yoy) - preliminary data	3Q	1.8% ▲	1.5%	1.7%	▲
⊕⊕⊕⊕⊕	14-Nov	GDP (wda, qoq) - preliminary data‡	3Q	0.5% ▲	0.3%	0.5%	○
⊕⊕⊕⊕	14-Nov	Harmonized consumer inflation HICP (yoy) - final data	Oct	1.1% -	1.1%	1.1%	○
UK							
⊕⊕⊕⊕	14-Nov	Consumer inflation CPI (yoy)	Oct	3.0% -	3.0%	3.1%	●
⊕⊕	15-Nov	Unemployment rate (ILO, 3-months)	Sep	4.3% -	4.3%	4.3%	○
⊕⊕⊕⊕⊕	23-Nov	GDP (yoy) - preliminary data	3Q	1.5% -	1.5%	1.5%	○
⊕⊕⊕⊕⊕	23-Nov	GDP (qoq) - preliminary data	3Q	0.4% -	0.4%	0.4%	○
Japan							
⊕⊕⊕⊕⊕	15-Nov	GDP (annualized, qoq) - preliminary data‡	3Q	1.4% ▼	2.6%	1.5%	●
⊕⊕⊕⊕⊕	15-Nov	GDP (qoq, sa) - preliminary data	3Q	0.3% ▼	0.6%	0.4%	●
⊕⊕⊕⊕	15-Nov	Industrial production (yoy) - final data	Sep	2.6% ▲	2.5%	--	
⊕⊕⊕	24-Nov	Manufacturing PMI - preliminary data	Nov	53.8 ▲	52.8	--	
Chile							
⊕⊕⊕⊕⊕	14-Nov	BCCh overnight rate target	Nov	2.50% -	2.50%	2.50%	○
⊕⊕⊕⊕⊕	20-Nov	GDP (yoy)‡	3Q	2.2% ▲	1.0%	2.2%	○
Canada							
⊕⊕⊕⊕	17-Nov	Consumer inflation CPI (yoy)	Oct	1.4% ▼	1.6%	1.4%	○

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

² Reading difference to consensus: ▲ = higher than consensus; ● = lower than consensus; ○ = equal to consensus.

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

Source: Bloomberg, KGHM

Key market data

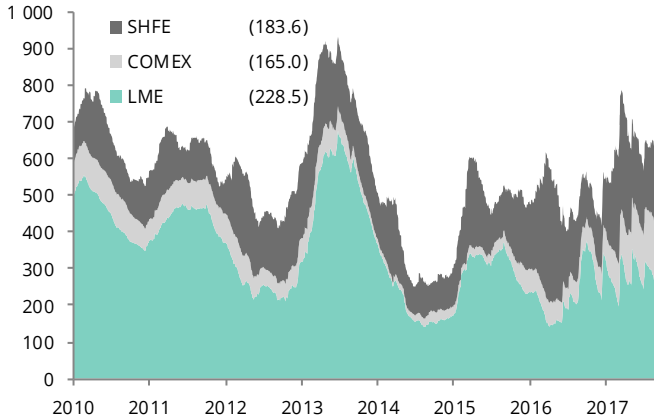
Key base & precious metal prices, exchange rates and other important market factors

(as of: 24-Nov-17)		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 967.50	▲ 2.5%	▲ 7.4%	▲ 26.7%	▲ 19.4%	6 102.15	5 466.00	7 073.50	
Molybdenum	16 000.00	- 0.0%	- 0.0%	▲ 4.9%	▲ 4.9%	15 894.10	15 250.00	17 500.00	
Nickel	12 015.00	▼ -2.2%	▲ 13.5%	▲ 20.0%	▲ 3.8%	10 311.29	8 715.00	12 830.00	
Aluminum	2 104.00	▲ 0.7%	▼ -0.3%	▲ 22.8%	▲ 18.6%	1 958.40	1 701.00	2 188.00	
Tin	19 650.00	▼ -0.3%	▼ -6.4%	▼ -6.9%	▼ -9.1%	20 168.58	18 760.00	21 300.00	
Zinc	3 271.50	▼ -0.5%	▲ 1.7%	▲ 27.6%	▲ 21.5%	2 866.26	2 434.50	3 370.00	
Lead	2 480.50	▼ -2.6%	▼ -1.5%	▲ 25.0%	▲ 10.9%	2 299.26	2 007.00	2 585.00	
LBMA (USD/troz)									
Silver	17.05	▲ 0.3%	▲ 1.1%	▲ 5.0%	▲ 4.5%	17.12	15.22	18.56	
Gold ²	1 290.50	▲ 0.5%	▲ 0.6%	▲ 11.3%	▲ 8.8%	1 256.31	1 151.00	1 346.25	
LPPM (USD/troz)									
Platinum ²	935.00	▼ -0.2%	▲ 1.6%	▲ 3.1%	▲ 2.3%	951.76	891.00	1 033.00	
Palladium ²	1 001.00	▲ 0.1%	▲ 7.1%	▲ 48.1%	▲ 36.6%	855.39	706.00	1 016.00	
FX ³									
EURUSD	1.1877	▲ 1.9%	▲ 0.6%	▲ 12.7%	▲ 12.6%	1.1246	1.0385	1.2060	
EURPLN	4.2116	▼ -0.4%	▼ -2.3%	▼ -4.8%	▼ -4.8%	4.2631	4.1737	4.4002	
USDPLN	3.5486	▼ -2.2%	▼ -2.8%	▼ -15.1%	▼ -15.3%	3.7995	3.5239	4.2271	
USDCAD	1.2708	▲ 0.2%	▲ 1.8%	-	-	1.3007	1.2128	1.3743	
USDCNY	6.6018	▼ -0.6%	▼ -0.8%	▼ -4.9%	▼ -4.6%	6.7732	6.4870	6.9640	
USDCLP	634.23	▲ 0.4%	▼ -0.4%	▼ -5.0%	▼ -6.6%	650.48	615.58	679.05	
Money market									
3m LIBOR USD	1.468	▲ 0.05	▲ 0.13	▲ 0.47	▲ 0.53	1.231	0.999	1.468	
3m EURIBOR	-0.329	- 0.00	- 0.00	▼ -0.01	▼ -0.02	-0.329	-0.332	-0.319	
3m WIBOR	1.730	- 0.00	- 0.00	- 0.00	- 0.00	1.730	1.730	1.730	
5y USD interest rate swap	2.133	▲ 0.01	▲ 0.13	▲ 0.16	▲ 0.33	1.959	1.711	2.239	
5y EUR interest rate swap	0.217	▲ 0.00	▼ -0.04	▲ 0.14	▲ 0.13	0.196	0.078	0.326	
5y PLN interest rate swap	2.509	▲ 0.03	▲ 0.06	▲ 0.11	▲ 0.15	2.412	2.165	2.625	
Fuel									
WTI Cushing	58.85	▲ 3.7%	▲ 13.9%	▲ 9.5%	▲ 26.1%	50.06	42.31	58.85	
Brent	63.48	▼ 0.0%	▲ 12.3%	▲ 14.6%	▲ 31.7%	53.30	44.21	64.13	
Diesel NY (ULSD)	192.90	▼ -0.1%	▲ 6.8%	▲ 13.6%	▲ 27.8%	162.56	135.85	194.36	
Others									
VIX	9.67	▼ -1.62	▲ 0.16	▼ -4.37	▼ -2.76	11.17	9.14	16.04	
BBG Commodity Index	87.00	▼ -0.3%	▲ 3.0%	▼ -0.6%	▲ 1.9%	84.86	79.36	89.36	
S&P500	2 602.42	▲ 0.8%	▲ 3.3%	▲ 16.2%	▲ 18.0%	2 427.00	2 257.83	2 602.42	
DAX	13 059.84	▼ -0.5%	▲ 1.8%	▲ 13.8%	▲ 22.2%	12 373.93	11 509.84	13 478.86	
Shanghai Composite	3 353.82	▼ -2.3%	▲ 0.1%	▲ 8.1%	▲ 3.5%	3 244.05	3 052.79	3 447.84	
WIG 20	2 479.25	▲ 0.9%	▲ 1.1%	▲ 27.3%	▲ 37.2%	2 324.07	1 989.64	2 551.78	
KGHM	113.75	▼ -5.5%	▼ -3.1%	▲ 23.0%	▲ 26.7%	118.84	94.00	135.50	

^o 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

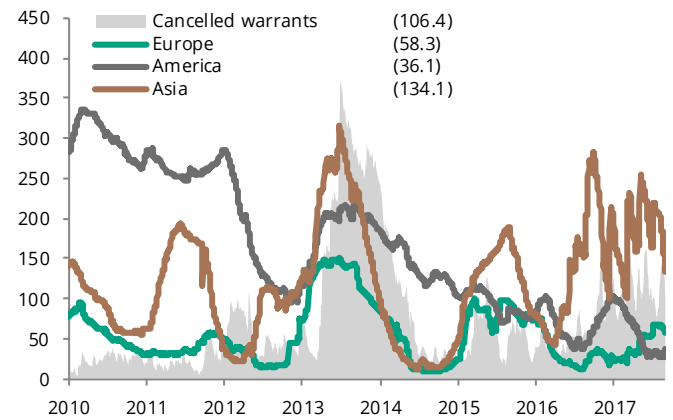
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



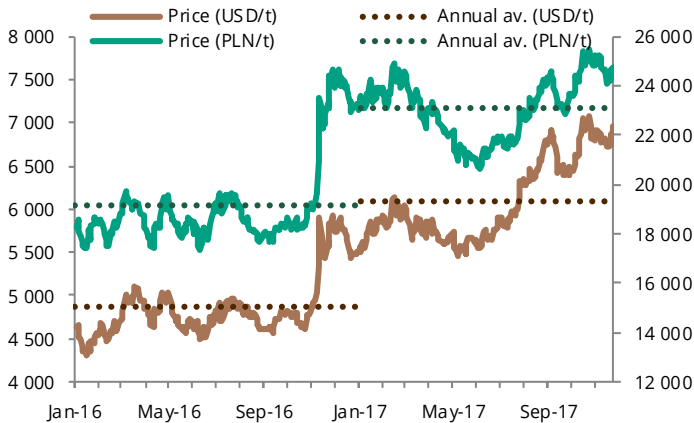
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



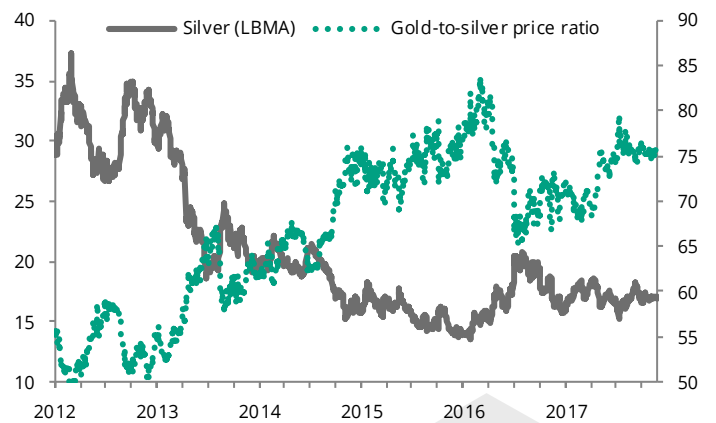
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



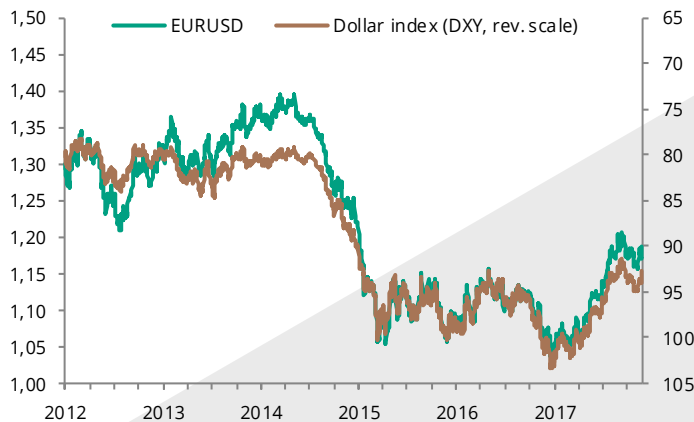
Source: Bloomberg, KGHM Polska Miedź

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



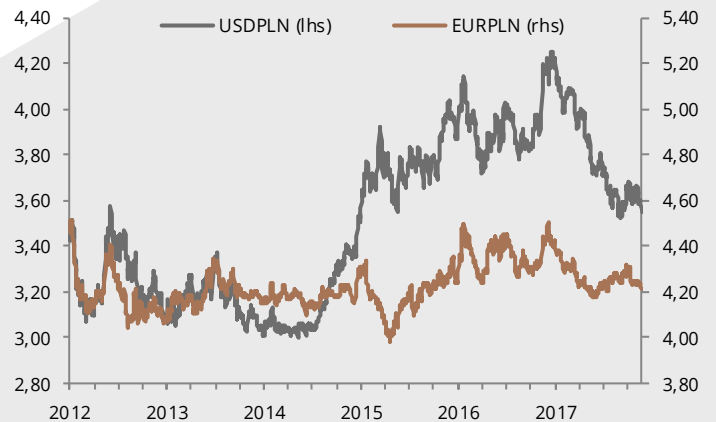
Source: Bloomberg, KGHM Polska Miedź

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: **13th – 26th November 2017.**

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

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

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