

Market Overview


 as of: 30th October 2017

- Copper:** Codelco has risen premium for European clients in 2018 to the level of 88 USD/t, 2 USD/t higher than its European competitor – Aurubis. After a strong rally in the entire base metals' complex, copper price has regained 7 000 USD/t handle for the first time since 2014. Worth noting is the recent change in market sentiment and change in the future price perception given the hot story of electric vehicles. In terms of the price forecasts, Cochilco has recently changed its forecast for 2018 and set the new price to 2.95 USD/lbs, so a little over 6500 USD/t (*page 2*).
- Precious metals:** Gold prices in last two weeks of October has continued a stagnation phase. The main reason behind the lack of decisive move is lack of consistent economic data in US. On geopolitical side there were some usual threats but no new developments to boost gold's appeal (*page 4*).
- China:** China's Communist Party has strengthened Xi Jinping's authority and marked the key directions of Chinese development during next years. Party underlined the importance of economic transformation focused more on domestic consumption and services (*page 6*)

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	6 831.50	-0.4%
▼ Nickel	11 370.00	-2.0%
LBMA (USD/troz)		
▼ Silver	16.72	-2.8%
▼ Gold (PM)	1 266.45	-2.6%
FX		
▼ EURUSD	1.1605	-1.7%
▼ EURPLN	4.2520	-0.2%
▲ USDPLN	3.6568	1.5%
▲ USDCAD	1.2874	3.1%
▲ USDCLP	631.12	1.0%
Stocks		
▼ KGHM	120.15	-1.0%

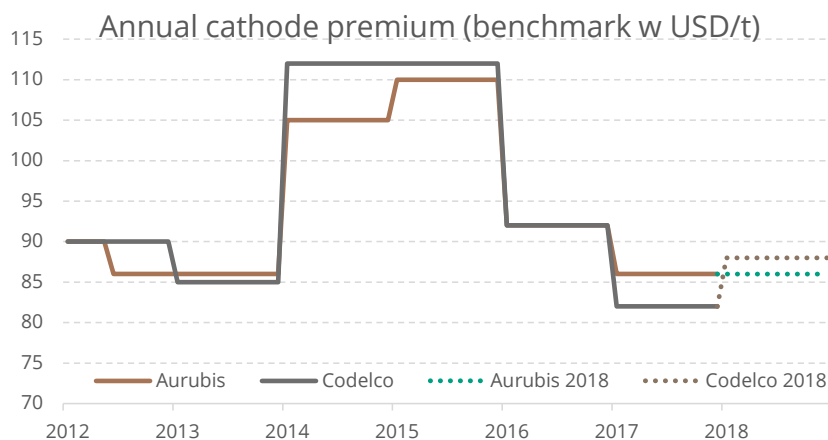
 Source: Bloomberg, KGHM Polska Miedź; (*more on page 10*)

Important macroeconomic data

Release	For		
 GDP (annlzd., qoq)	3Q	3.0%	▼
 Industrial prod. (yoy)	Sep	6.6%	▲
 GDP (yoy)	3Q	6.8%	▼
 Unemployment rate	Sep	6.8%	▼
 CPI (yoy)	Sep	1.5%	-

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

For the first time in four years Codelco has risen the benchmark premium for Europe to the level of 88 USD/t



Source: Thomson Reuters, KGHM Polska Miedź

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Base and precious metals | Other commodities

Copper

Codelco has risen premium for European clients in 2018 to the level of 88 USD/t, 2 USD/t higher than its European competitor – Aurubis. After a strong rally in the entire base metals' complex, copper price has regained 7 000 USD/t handle for the first time since 2014. Worth noting is the recent change in market sentiment and change in the future price perception given the hot story of electric vehicles. In terms of the price forecasts, Cochilco has recently changed its forecast for 2018 and set the new price to 2.95 USD/lbs, so a little over 6500 USD/t.

Codelco rises physical cathode premium for European clients by 7.3% to 88 USD/t

Codelco rises European copper premium for 2018

Codelco, the world's largest copper producer, raised the premium it charges to deliver metal to European customers for the first time in four years amid signs manufacturing is strengthening in the region. The Chilean state-owned company offered to sell copper at \$88 a metric ton above prices on the London Metal Exchange next year. That's 7.3% higher than last year's charge and comes after Europe's top producer Aurubis last week said it would keep its premium at \$86. Manufacturing is picking up in Europe while factory output is also improving in key consumers China and the U.S. That's helped copper prices to rally 23% on the LME this year, and Goldman Sachs Group Inc. has said markets are facing the best demand backdrop in more than a decade.

Other important information on copper market:

- According to Peruvian government more than 20 companies have expressed an interest in bidding on the \$2 billion Peruvian copper project Michiquillay in an auction due to take place on Dec. 20. The auction date had been pushed back from the originally scheduled Nov. 15, state bidding agency Proinversion said in a statement. It said it had given more time for companies to sign up to take part, given the volume of interest. Michiquillay is the first sizable mineral deposit to be offered up in a public auction in more than a decade in Peru, the world's second biggest copper producer. The timing - amid rising copper prices - should help make the auction competitive. Proinversion did not name the companies that have expressed interest in Michiquillay, but Southern Copper Corp and Buenaventura told Reuters in September that they were both evaluating bids. Companies had until November 2 to sign up for the auction. London-listed miner Anglo American Plc had previously been awarded the rights to develop Michiquillay but it returned its contract to Peru in late 2014 due to capital constraints. The company had estimated that the project would produce some 200,000 tonnes of copper per year once developed. Proinversion said that the date extension for the auction would give the government more time to talk with local communities surrounding

the project. So far, seven information sessions with communities have been held, it added. Michiquillay is located at an altitude of nearly 4,000 meters in the northern Peruvian region of Cajamarca.

- China may ban traders from importing scrap copper from the start of next year, as the world's top metals user deepens its crackdown on imports of foreign waste and cuts pollution from heavy industries. Chinese authorities have imposed tougher requirements on issuing receiver and import licenses for scrap metal, making imports nearly impossible, Shanghai Metals Market reported, without saying where it got the information. Beijing has already announced a ban on imports of some scrap metal, including copper, from the end of 2018. A ban on scrap could mean that it must import more refined copper. China imported 3.3 million tonnes of scrap copper last year, slightly lower than 3.6 million tonnes of refined metal.
- Chile state copper commission Cochilco forecasted an average global copper price of \$2.95 per pound in 2018, a sharp upward revision from its mid-year estimate of \$2.68, due to greater demand in China, a key market. For 2017, it predicted an average copper price of \$2.77 per pound, markedly higher than its previous estimate of \$2.64. Cochilco also forecasted Chile's copper output to fall 4% from 2016, to 5.27 million tonnes, due primarily to a 43-day strike at BHP Billiton Ltd's Escondida mine in Chile, the largest copper mine in the world, earlier this year. In 2018, however, with Escondida operating at full capacity, the state commission predicted output will rise 7.8%, to 5.74 million tonnes. Cochilco Vice President Sergio Hernandez attributed higher near-term copper prices to a surge in Chinese demand, a result of higher-than-predicted growth of 6.9% in the first quarter of 2017, but warned there were signs that growth was unsustainable.
- State-owned China metals firm Jiangxi Copper Co Ltd plans to make an acquisition in mineral-rich Africa, as the country's top integrated copper producer aims to step up overseas expansion, according to president and chairman Long Ziping. Long, appointed chairman last month, didn't identify potential targets nor say how much his firm would spend, saying only there were "some plans" for African M&A in an interview with Reuters on the sidelines of the 19th Communist Party Congress. Last year Jiangxi Copper launched a \$300 million fund aimed at buying mining projects in a bid to bolster its international presence. The firm has several mining projects abroad, including in Peru and Afghanistan.
- Red Kite Management Ltd., the world's largest metals hedge fund, is suing Barclays Plc for alleged market abuse in the copper market that it claims cost the firm at least \$850 million between 2010 and 2013. The case pits a \$2 billion hedge fund against a bank that has been hit by a number of scandals in previous years, including large fines for manipulating Libor, the benchmark for interest rates. Red Kite, whose co-founder is the former treasurer of the U.K. Conservative Party, alleges that Barclays allowed staff to share confidential information about its positions with the bank's proprietary traders on the floor of the London Metal Exchange, according to court

documents filed by the hedge fund in the U.K. High Court. Barclays' traders used the knowledge about Red Kite's positions to profit by placing opposing trades, the fund said in court documents filed in October 2016, but only recently made public. Red Kite alleges the bank "sought to manipulate the LME by 'ramping' prices" to manipulate the closing price, a benchmark widely used by traders. In a separate document, Barclays denied all the claims, saying that it had not mishandled Red Kite's confidential information.

Precious Metals

Gold prices in last two weeks of October has continued a stagnation phase. The main reason behind the lack of decisive move is lack of consistent economic data in US. On geopolitical side there were some usual threats but no new developments to boost golds appeal.

London Bullion Market Association conference 2017

This year's annual London Bullion Market Association (LBMA) conference was held in Barcelona, Spain. Our team attended the event and here are the key takeaways from presentations and meetings with market participants:

Global macroeconomic challenges

Experts took the opportunity at the conference to discuss the various challenges to monetary policy amid increased political uncertainty.

- According to some speakers "we are now at the mid-to-late stage of the bull equity market". Erik Norland for example, executive director and senior economist with CME Group, said that although earnings are stagnating, the equity market has room to continue to climb. Moreover, according to some analysts, even though the US Federal Reserve has started to raise interest rates the global economy will find it challenging to escape from years of loose monetary policy.
- LBMA co-chairman Paul Fisher argued that product and income distribution cannot be controlled, or perhaps even achieved, by central banks.
- Megan Greene, chief economist at MAM, forecasts that the Fed can raise rates twice in 2018. But she argued that growing great downside risks to the economy could force US policymakers to tone down their hawkish rhetoric.
- Market stresses have proliferated this year and are likely to grow further in 2018, strengthening gold's qualities as a portfolio diversifier. The threat of North Korea's possible use of nuclear missiles and US President Donald Trump's extensive use of social media network Twitter are the greatest disruptors of global economic stability.

Equity market has room to continue to climb

Gold still seen as main risk diversifier in turmoil environment**Cryptocurrencies: not a threat to gold**

Growing clarity, acceptance and understanding of how cryptocurrencies work have boosted demand for such products. The price of bitcoin hit a record high recently. It can be traded inexpensively against the falling value of fiat currencies. But bitcoin may not be tangible enough for big banks or hedge funds to consider for the purpose of asset diversification. The majority of panelists at the LBMA conference argued that gold is still the ultimate hedge amid the rising appeal of cryptocurrencies. Gold has withstood many levels of scrutiny over many centuries; its use and value have been well documented as the only hard currency, even in this electronic age. Most agree that gold does an exemplary job as a risk mitigator in times of uncertainty and turmoil.

Attendees mostly bullish on silver and palladium**Price forecasts from LBMA conference in Barcelona**

Attendees at this year's meeting forecast that gold would be trading at \$1,344 per oz by October 2018, when the next conference takes place. This would be an increase of about 8% from the average of analysts' 2017 forecasts. As for the other precious metals, more than 670 delegates in Barcelona expect silver to trade at \$21.60 per oz by October 2018, an increase of about 21.5% on analysts' average forecasts for 2017. Platinum is expected to trade at \$927 per oz by October 2018, a decrease of about 8.6% against the average of analysts' 2017 forecasts, and palladium at \$1,150.35 per oz, up by about 50.1% in the same comparison.

Global economies | Foreign exchange markets

China

China's Communist Party has strengthened Xi Jinping's authority and marked the key directions of Chinese development during next years. Party underlined the importance of economic transformation focused more on domestic consumption and services.

Xi Jinping strengthens power and finds place in CCP Constitution

China's Communist Party unveiled its new leadership lineup on Wednesday, granting President Xi Jinping another five years in power as general secretary and including no obvious successor in the senior-most ranks. Xi introduced the six other members of the Politburo Standing Committee to the media, breaking with recent convention by not including a potential heir in the lineup. That appears to raise the chances that Xi could stay on in power beyond 2022. The Communist Party amended its constitution to insert Xi Jinping Thought as a guiding principle for the party, elevating Xi to the same status as its most important historical figures, Mao Zedong and Deng Xiaoping. That means that Xi is likely to wield ultimate authority in the party as long as he is alive, experts say, and makes any challenge to that authority tantamount to an attack on the party itself. Another change to the constitution was adding Party's absolute leadership over the armed forces.

Party sets the directions of Chinese development

According to Xi Jinping the Communist Party of China will develop China into a great modern socialist country by the middle of the 21st century. China plans to improve systems and mechanisms for stimulating consumer spending. Final consumption expenditure contributed for nearly 54% of China's GDP in 2016; this proportion will rise by 2 to 3 percentage points by 2020. The key goals of China's poverty alleviation efforts involve road construction, safe drinking water, electricity supply and the renovation of old homes in poverty-stricken areas. The authorities have also made efforts to increase the income of poor people by promoting industry-driven growth, adapting to new technologies and industries. At the Congress Chinese Communist Party incorporated the idea of "Beautiful China", being a set of goals in the area of environmental protection. Green and low-carbon has already become the key-driver of country's energy development. Country's first Environmental Protection Tax Law will come into effect on 1 January 2018. China plans to reduce coal consumption to around 60 % of the total from 64 % in 2015 and lift the ratio of non-fossil fuel consumption in its energy mix to 14.3 % in 2017, up from 13.3 % in previous year. Next key policy direction is the role of innovation in economic transformation. Some key sectors in this area include: new materials, ocean engineering equipment and high-tech ships, energy saving and new energy vehicles and information technology. China wants to become the global innovation center for artificial intelligence by 2030. In July 2017 Chinese government set out goals to build a domestic artificial intelligence industry worth about 148 billion USD by 2030. It may boost China's GDP by 26% (global GDP could be up to 14% higher in 2030 as a result of AI).





Country's economic transformation is firmly underway.








Other underlined policy directions include food security, job creation targets, and modernization of armed forces.

When looking at the underlined policy directions after the Congress, it seems that China's transformation from a manufacturing-driven and export-led economy to one underpinned by services and domestic consumption is firmly underway. Although it's too early to judge if the trend is stable, recent signs of weakness in real estate and construction may back up such thesis. China's property sector grew 3.9 percent in the quarter from a year earlier, decelerating from 6.2 percent in the second quarter and the slowest pace in nearly two years. Growth in construction activity slowed from 5.4 percent in the second quarter to 4 percent, the weakest expansion since the fourth quarter of 2000. Analysts have long predicted a slowdown in the property sector and construction after city governments began rolling out a flurry of measures from late last year to cool soaring home prices and deter speculators. Though "old economy" stalwarts like property and industry have led the way this year, Beijing continues to push for a more balanced economic growth model driven more by consumption and services.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China 							
⊕⊕⊕⊕	16-Oct	Consumer inflation CPI (yoy)	Sep	1.6% ▼	1.8%	1.6%	○
⊕⊕	16-Oct	Producer inflation PPI (yoy)	Sep	6.9% ▲	6.3%	6.4%	▲
⊕⊕⊕⊕⊕	19-Oct	GDP (yoy)	3Q	6.8% ▼	6.9%	6.8%	○
⊕⊕⊕⊕⊕	19-Oct	GDP (sa, qoq)‡	3Q	1.7% ▼	1.8%	1.7%	○
⊕⊕⊕⊕	19-Oct	Industrial production (yoy)	Sep	6.6% ▲	6.0%	6.5%	▲
⊕⊕	19-Oct	Fixed assets investments (ytd, yoy)	Sep	7.5% ▼	7.8%	7.7%	◡
⊕	19-Oct	Retail sales (yoy)	Sep	10.3% ▲	10.1%	10.2%	▲
⊕⊕	27-Oct	Industrial profits (yoy)	Sep	27.7% ▲	24.0%	--	
Poland 							
⊕⊕	16-Oct	Trade balance (EUR mn)‡	Aug	298 ▲	- 241	- 475	▲
⊕⊕	16-Oct	Exports (EUR mn)‡	Aug	15 682 ▲	15 235	15 499	▲
⊕⊕	16-Oct	Current account balance (EUR mn)‡	Aug	- 100 ▲	- 491	- 660	▲
⊕⊕	17-Oct	Average gross salary (yoy)	Sep	6.0% ▼	6.6%	6.2%	◡
⊕	17-Oct	Employment (yoy)	Sep	4.5% ▼	4.6%	4.6%	◡
⊕⊕⊕⊕	18-Oct	Sold industrial production (yoy)‡	Sep	4.3% ▼	8.7%	5.2%	◡
⊕⊕⊕	18-Oct	Retail sales (yoy)	Sep	8.6% ▲	7.6%	7.9%	▲
⊕⊕	18-Oct	Producer inflation PPI (yoy)	Sep	3.1% ▲	3.0%	3.1%	○
⊕	23-Oct	M3 money supply (yoy)‡	Sep	5.4% ▼	5.5%	5.5%	◡
⊕⊕	24-Oct	Unemployment rate	Sep	6.8% ▼	7.0%	6.9%	◡
US 							
⊕⊕⊕⊕	17-Oct	Industrial production (mom)‡	Sep	0.3% ▲	-0.7%	0.3%	○
⊕	17-Oct	Capacity utilization‡	Sep	76.0% ▲	75.8%	76.2%	◡
⊕⊕	19-Oct	Philadelphia Fed business outlook	Oct	27.9 ▲	23.8	22.0	▲
⊕⊕⊕	24-Oct	Composite PMI - preliminary data	Oct	--	54.8	--	
⊕⊕⊕	24-Oct	Manufacturing PMI - preliminary data	Oct	--	53.1	53.4	
⊕⊕⊕	24-Oct	PMI services - preliminary data	Oct	--	55.3	55.2	
⊕	24-Oct	Richmond Fed manufacturing index	Oct	12.0 ▼	19.0	17.0	◡
⊕⊕	25-Oct	Durable goods orders - preliminary data	Sep	2.2% ▲	2.0%	1.0%	▲
⊕⊕⊕⊕⊕	27-Oct	GDP (annualized, qoq) - estimation	3Q	3.0% ▼	3.1%	2.6%	▲
⊕⊕	27-Oct	University of Michigan confidence index - final data	Oct	101 ▼	101	101	○
Eurozone 							
⊕	16-Oct	Trade balance (EUR mn)	Aug	16.1 ▼	23.2	23.3	◡
⊕⊕⊕⊕	17-Oct	Consumer inflation CPI (yoy) - final data	Sep	1.5% -	1.5%	1.5%	○
⊕⊕⊕⊕	17-Oct	Core CPI (yoy) - final data	Sep	1.1% -	1.1%	1.1%	○
⊕	17-Oct	ZEW survey expectations	Oct	26.7 ▼	31.7	--	
⊕	23-Oct	Consumer confidence - estimation	Oct	- 1.0 ▲	- 1.2	- 1.1	▲
⊕⊕⊕	24-Oct	Composite PMI - preliminary data	Oct	--	56.7	56.5	
⊕⊕⊕	24-Oct	Manufacturing PMI - preliminary data	Oct	--	58.1	57.8	
⊕⊕⊕	24-Oct	Services PMI - preliminary data	Oct	--	55.8	55.6	
⊕⊕⊕⊕⊕	26-Oct	ECB main refinancing rate	Oct	0.00% -	0.00%	0.00%	○
⊕⊕⊕⊕⊕	26-Oct	ECB deposit facility rate	Oct	-0.4% -	-0.4%	-0.4%	○
⊕	26-Oct	M3 money supply (yoy)	Sep	5.1% ▲	5.0%	5.0%	▲

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
🔴🔴🔴	24-Oct	Composite PMI - preliminary data	Oct	--	57.7	57.5
🔴🔴🔴	24-Oct	Manufacturing PMI - preliminary data	Oct	--	60.6	60.0
🔴🔴	25-Oct	IFO business climate‡	Oct	117 ▲	115	115
🔴🔴	26-Oct	GfK consumer confidence	Nov	10.7 ▼	10.8	10.8
France 						
🔴🔴🔴	24-Oct	Composite PMI - preliminary data	Oct	--	57.1	57.0
🔴🔴🔴	24-Oct	Manufacturing PMI - preliminary data	Oct	--	56.1	56.0
Italy 						
<i>No major data in the period</i>						
UK 						
🔴🔴🔴🔴	17-Oct	Consumer inflation CPI (yoy)	Sep	3.0% ▲	2.9%	3.0% ○
🔴🔴	18-Oct	Unemployment rate (ILO, 3-months)	Aug	4.3% -	4.3%	4.3% ○
🔴🔴🔴🔴	25-Oct	GDP (yoy) - estimation	3Q	1.5% -	1.5%	1.5% ○
🔴🔴🔴🔴	25-Oct	GDP (qoq) - estimation	3Q	0.4% ▲	0.3%	0.3% ▲
Japan 						
🔴🔴🔴🔴	16-Oct	Industrial production (yoy) - final data	Aug	5.3% ▼	5.4%	--
🔴🔴🔴	24-Oct	Manufacturing PMI - preliminary data	Oct	--	52.9	--
🔴🔴🔴🔴	27-Oct	Consumer inflation CPI (yoy)	Sep	0.7% -	0.7%	0.7% ○
Chile 						
🔴🔴🔴🔴	20-Oct	BCCh overnight rate target	Oct	2.50% -	2.50%	2.50% ○
Canada 						
🔴🔴🔴🔴	20-Oct	Consumer inflation CPI (yoy)	Sep	1.6% ▲	1.4%	1.7% ▼
🔴🔴🔴🔴	25-Oct	BoC base rate decision	Oct	1.00% -	1.00%	1.00% ○

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

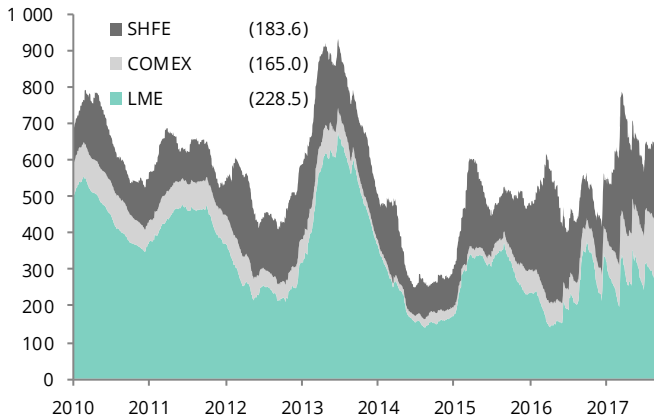
Key base & precious metal prices, exchange rates and other important market factors

(as of: 27-Oct-17)		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 831.50	▼ -0.4%	▲ 5.3%	▲ 24.2%	▲ 43.1%	6 032.61	5 466.00	7 073.50	
Molybdenum	16 000.00	- 0.0%	- 0.0%	▲ 4.9%	▲ 4.9%	15 883.97	15 250.00	17 500.00	
Nickel	11 370.00	▼ -2.0%	▲ 7.4%	▲ 13.6%	▲ 10.8%	10 142.08	8 715.00	12 150.00	
Aluminum	2 119.00	▼ -1.0%	▲ 0.4%	▲ 23.7%	▲ 26.0%	1 943.89	1 701.00	2 175.00	
Tin	19 800.00	▼ -5.4%	▼ -5.7%	▼ -6.2%	▼ -4.8%	20 224.74	18 760.00	21 300.00	
Zinc	3 201.00	▼ -3.7%	▼ -0.5%	▲ 24.9%	▲ 36.2%	2 829.34	2 434.50	3 370.00	
Lead	2 431.00	▼ -4.4%	▼ -3.5%	▲ 22.5%	▲ 17.8%	2 283.63	2 007.00	2 585.00	
LBMA (USD/troz)									
Silver	16.72	▼ -2.8%	▼ -0.8%	▲ 3.0%	▼ -5.3%	17.14	15.22	18.56	
Gold ²	1 266.45	▼ -2.6%	▼ -1.3%	▲ 9.3%	▲ 0.0%	1 254.03	1 151.00	1 346.25	
LPPM (USD/troz)									
Platinum ²	917.00	▼ -2.6%	▼ -0.3%	▲ 1.1%	▼ -5.5%	953.88	891.00	1 033.00	
Palladium ²	972.00	▼ -2.4%	▲ 4.0%	▲ 43.8%	▲ 57.5%	842.02	706.00	1 006.00	
FX³									
EURUSD	1.1605	▼ -1.7%	▼ -1.7%	▲ 10.1%	▲ 6.2%	1.1203	1.0385	1.2060	
EURPLN	4.2520	▼ -0.2%	▼ -1.3%	▼ -3.9%	▼ -2.0%	4.2657	4.1737	4.4002	
USDPLN	3.6568	▲ 1.5%	▲ 0.1%	▼ -12.5%	▼ -8.0%	3.8160	3.5239	4.2271	
USDCAD	1.2874	▲ 3.1%	▲ 3.2%	-	-	1.3029	1.2128	1.3743	
USDCNY	6.6505	▲ 1.1%	▼ 0.0%	▼ -4.2%	▼ -2.0%	6.7879	6.4865	6.9640	
USDCLP	631.12	▲ 1.0%	▼ -0.9%	▼ -5.4%	▼ -3.4%	651.98	615.58	679.05	
Money market									
3m LIBOR USD	1.380	▲ 0.03	▲ 0.05	▲ 0.38	▲ 0.49	1.212	0.999	1.380	
3m EURIBOR	-0.331	▼ 0.00	▼ 0.00	▼ -0.01	▼ -0.02	-0.329	-0.332	-0.319	
3m WIBOR	1.730	- 0.00	- 0.00	- 0.00	▲ 0.01	1.730	1.730	1.730	
5y USD interest rate swap	2.117	▲ 0.14	▲ 0.11	▲ 0.14	▲ 0.75	1.945	1.711	2.239	
5y EUR interest rate swap	0.214	▲ 0.00	▼ -0.04	▲ 0.14	▲ 0.20	0.196	0.078	0.326	
5y PLN interest rate swap	2.515	▲ 0.10	▲ 0.07	▲ 0.12	▲ 0.35	2.402	2.165	2.625	
Fuel									
WTI Cushing	53.90	▲ 4.8%	▲ 4.3%	▲ 0.3%	▲ 8.4%	49.50	42.31	54.10	
Brent	60.34	▲ 5.7%	▲ 6.7%	▲ 8.9%	▲ 24.2%	52.46	44.21	60.34	
Diesel NY (ULSD)	186.57	▲ 3.8%	▲ 3.3%	▲ 9.9%	▲ 19.2%	159.96	135.85	186.57	
Others									
VIX	9.80	▲ 0.19	▲ 0.29	▼ -4.24	▼ -5.56	11.23	9.19	16.04	
BBG Commodity Index	85.87	▼ 0.0%	▲ 1.7%	▼ -1.9%	▼ -0.4%	84.68	79.36	89.36	
S&P500	2 581.07	▲ 1.1%	▲ 2.4%	▲ 15.3%	▲ 21.0%	2 412.58	2 257.83	2 581.07	
DAX	13 217.54	▲ 1.7%	▲ 3.0%	▲ 15.1%	▲ 23.3%	12 299.83	11 509.84	13 217.54	
Shanghai Composite	3 416.81	▲ 0.8%	▲ 2.0%	▲ 10.1%	▲ 9.8%	3 228.30	3 052.79	3 416.81	
WIG 20	2 488.50	▼ -1.6%	▲ 1.4%	▲ 27.8%	▲ 38.6%	2 309.56	1 989.64	2 551.78	
KGHM	120.15	▼ -1.0%	▲ 2.3%	▲ 29.9%	▲ 69.8%	118.91	94.00	135.50	

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

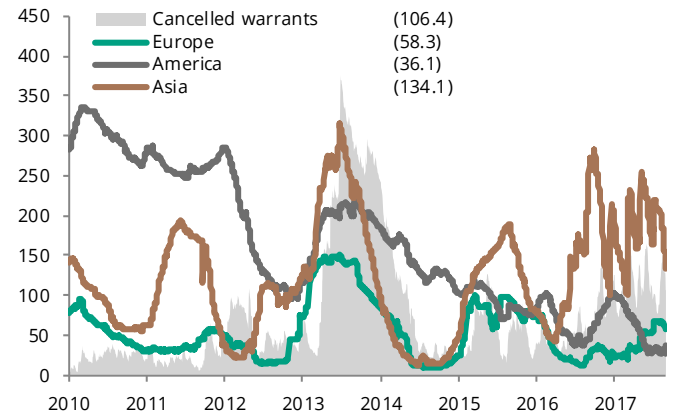
Source: LME, LBMA, LPPM, Central Banks (ECB, Fed, NBP, BCCh, COMEX, Bloomberg, KGHM)

Copper: official exchange stocks (thousand tonnes)



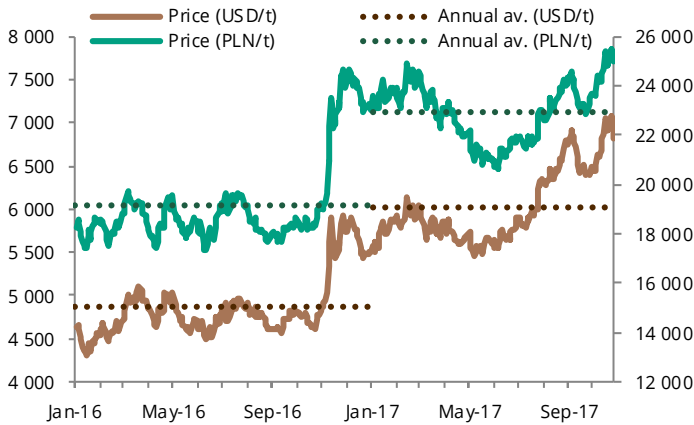
Note: Latest values in brackets. Source: LME, COMEX, SHFE, KGHM

Copper: official LME stocks (thousand tonnes)



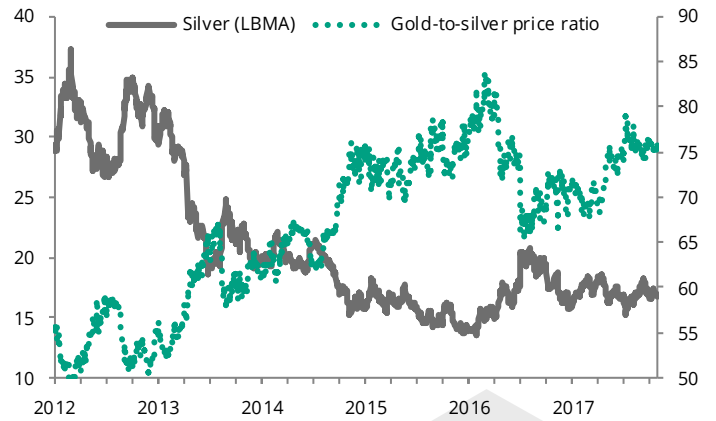
Note: Latest values in brackets. Source: LME, KGHM

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



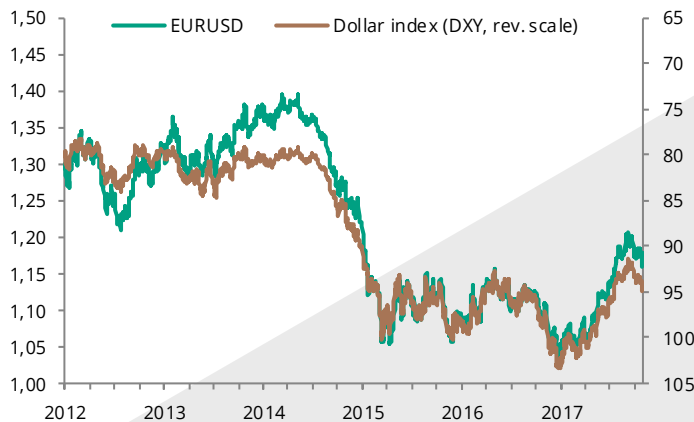
Source: LME, NBP, KGHM Polska Miedź

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



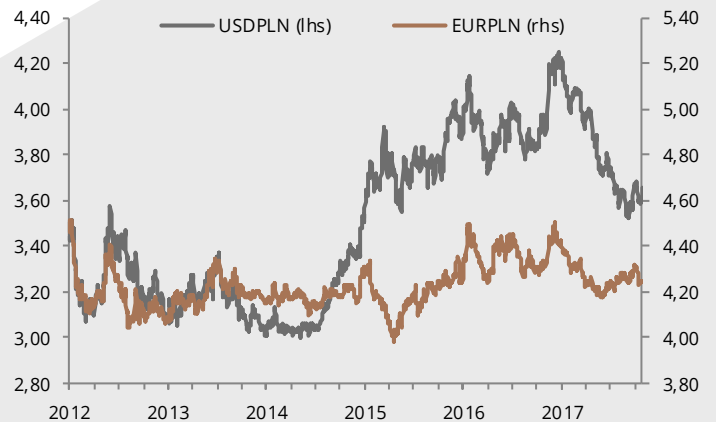
Source: LBMA, Bloomberg, KGHM Polska Miedź

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



Source: ECB, Bloomberg, KGHM Polska Miedź

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



Source: NBP, KGHM Polska Miedź

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period: **16th – 29th October 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, ▪ Bloomberg, ▪ Reuters.

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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