

Market Overview

as of: 2nd October 2017

- **Copper:** Prices on the market remained mostly narrowly range-bound in the recent fortnight. Ahead of upcoming talks about TC/RC levels, Chinese CSPT hiked the floor for fourth-quarter treatment and refining charges (TC/RCs) by as much as 10%, more than most traders had expected. In South Korea, amid escalating military tensions in the Korean Peninsula, banks are trimming credit lines for some traders storing metal as the risk of potential conflict cannot be ruled out (*page 2*).
- **Precious metals:** Gold prices in last two weeks of September has turned its course and began falling. The main reason behind the move is optimistic economic data. Moreover slow inflation growth may put forward continuation of rate hikes until inflation hits its 2-percent goal and so investors in anticipation in these moves sell gold now. On geopolitical side there weren't many new developments so golds appeal as uncertainty hedging asset waned (*page 4*).
- **London Metal Exchange:** The London Metal Exchange is planning to introduce a new category of membership, the inter-dealer brokers or the introducing broker category, which will help the exchange grow its volumes in new products including ferrous markets (*page 5*).
- **Global economies:** US Fed's policy unchanged, with one rate hike expected still this year. S&P cut Chinese credit ranking on soaring debt. Angela Merkel CDU/CSU wins elections, but shape of coalition unclear. (*page 6*).

Key market prices

| | Close price | 2w chng. |
|------------------------|-------------|----------|
| LME (USD/t) | | |
| ▲ Copper | 6 485.00 | 0.4% |
| ▼ Nickel | 10 585.00 | -3.8% |
| LBMA (USD/troz) | | |
| ▼ Silver | 16.86 | -4.7% |
| ▼ Gold (PM) | 1 283.10 | -3.0% |
| FX | | |
| ▼ EURUSD | 1.1806 | -1.3% |
| ▲ EURPLN | 4.3091 | 0.7% |
| ▲ USDPLN | 3.6519 | 1.8% |
| ▲ USDCAD | 1.2480 | 2.4% |
| ▲ USDCLP | 636.85 | 1.5% |
| Stocks | | |
| ▼ KGHM | 117.40 | -1.3% |

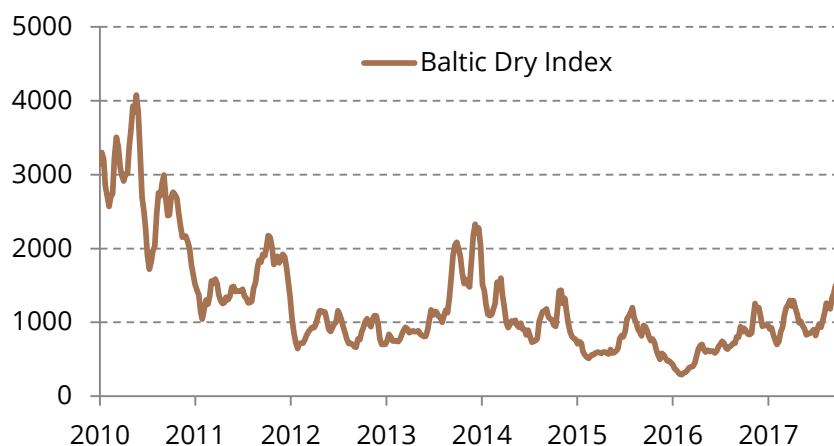
Source: Bloomberg, KGHM Polska Miedź; (*more on page 10*)

Important macroeconomic data

| Release | For | | |
|--|-----|------|---|
|  GDP (annlzd., qoq) | 2Q | 3.1% | ▲ |
|  Official manuf. PMI | Sep | 52.4 | ▲ |
|  Industrial prod. (yoy) | Aug | 8.8% | ▲ |
|  Composite PMI | Sep | 57.8 | ▲ |
|  Industrial prod. (yoy) | Aug | 5.4% | ▲ |

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

The Baltic Dry Index has rebounded recently and in terms of earnings the freight market looks to be in the best shape since 2014



Source: Bloomberg, KGHM Polska Miedź

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Base and precious metals | Other commodities

Copper

Prices on the market remained mostly narrowly range-bound in the recent fortnight. Ahead of upcoming talks about TC/RC levels, Chinese CSPT hiked the floor for fourth-quarter treatment and refining charges (TC/RCs) by as much as 10%, more than most traders had expected. In South Korea, amid escalating military tensions in the Korean Peninsula, banks are trimming credit lines for some traders storing metal as the risk of potential conflict cannot be ruled out.

China's copper smelters hike TC/RCs ahead of 2018 talks

TC/RCs hiked to 95/9.5 by CSPT ahead of 2018 benchmark talks

China's top copper smelters have hiked the floor for fourth-quarter treatment and refining charges (TC/RCs) by as much as 10%, more than most traders had expected, in a sign of growing confidence about supplies ahead of 2018 contract talks. The China Smelters Purchase Team (CSPT) set the minimum level for treatment fees at \$95 per tonne and for refining charges at 9.5 cents per pound, at their latest meeting in Shanghai, according to Reuters. That marks a steep 10.5% hike in the fees that smelters charge to turn concentrate into refined metal from the third-quarter rates of \$86 per tonne and 8.6 cents per pound, and is the highest level since the fourth quarter of 2016.

The increase by the 10-member group, which reflects greater copper concentrate supply in China, also pushes the TC/RCs above the 2017 annual benchmarks of \$92.50 per tonne and 9.2 cents per pound. Traders said it could be an attempt to give the CSPT, whose members include major smelters such as Jiangxi Copper Co., Jinchuan Group and Tongling Nonferrous Metals Group, more bargaining power as negotiations for 2018 contracts with miners get underway this autumn. Those talks will kick off in late October as the global metals market gathers in London for the annual London Metal Exchange dinner and will determine the prices paid on annual contracts. Miners, smelters and traders often use a combination of the annual benchmark, quarterly benchmarks and spot prices when agreeing TC/RCs.

Banks trimming credit lines for some traders storing metal in S. Korea

Bank are trimming credit lines amid escalating tensions over North Korea's nuclear and missile program

Some banks have begun to pare back credit lines to smaller trading companies holding industrial metals in South Korea amid escalating tensions over North Korea's nuclear and missile program. The banks are reducing their exposure on security concerns in the region. President Donald Trump and North Korean leader Kim Jong Un traded insults and the United States imposed stricter sanctions on the regime. This followed the launch of a second North Korean rocket over the Japanese island of Hokkaido. According to Reuters, Australian

banks are staying away as well as big U.S. banks. European banks are still ok. Some banks have reduced overall lines, but haven't pulled out.

Market participants said that while the overall impact was not huge, some metals traders have been reshuffling the financing for their stockpiles from one bank to another. The paring of the credit lines appears to be directed mainly at smaller trading firms with South Korean storage. Also, two metals traders said that banks have requested they add war insurance to their coverage. The discount of cash copper prices to the three-month forward dropped on Monday to \$52.25 a tonne, the most since December 2007 which sparked concerns that banks may be dumping copper into London Metal Exchange warehouses.

Other important information on copper market:

- According to the Energy and Mining Minister Cayetana Aljovin Peru wants to increase its copper output 30% from the current 2.3 million tons per year by 2020. Peru wants to capture 8% of global exploration investment, from its current 6%. Peru's poverty rate will fall to 14% from 21% if \$51B of projected mining investment goes ahead. The Peruvian government is working to streamline legislation after regulation went to 265 rules in 2016 from 12 in 2001. The government wants to regulate 5,000 informal miners by the end of the year. 1,004 were formalized from August 2016 to June 2017.
- The global world refined copper market showed a 70,000 tonnes deficit in June, compared with a 50,000 tonnes deficit in May, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 6 months of the year, the market was in a 75,000 tonnes deficit compared with a 405,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in June was 1.96 million tonnes, while consumption was 2.03 million tonnes. Bonded stocks of copper in China showed a 102,000 tonnes deficit in June compared with a 87,000 tonnes deficit in May.
- Zambia's copper production is expected to exceed the 770,000 tonnes the southern African nation produced last year, according to the Finance Minister Felix Mutati. Mutati said in a budget speech that copper production in Africa's No.2 producer of the metal stood at 510,369 tonnes at the end of August.
- According to Metal Bulletin commodities trader Louis Dreyfus Co has "fully ring-fenced" its metals division ahead of a potential sale, while also growing volumes in the first half of 2017. Dreyfus, one of the ABCD group of traders that dominates the physical agricultural markets and includes ADM, Bunge and Cargill, is seeking a potential buyer for its metals and orange juice units. It also has agreed to sell its African fertilizer and industrial chemicals business to Helios Investment Partners. The company, registered as Louis Dreyfus Company Metals in Switzerland, the Netherlands, Singapore and China, is a top three trader of metal concentrates, rivalling Glencore and Trafigura. It also trades refined metal with a focus on copper, zinc and aluminium.

Precious Metals

Gold prices in last two weeks of September has turned its course and began falling. The main reason behind the move is optimistic economic data. Moreover slow inflation growth may put forward continuation of rate hikes until inflation hits its 2-percent goal and so investors in anticipation in these moves sell gold now. On geopolitical side there weren't many new developments so golds appeal as uncertainty hedging asset waned.

High sales in Perth Mint

The Perth Mint's sales of gold products doubled in September from a month earlier, while silver sales surged 78 percent. Sales of gold coins and minted bars jumped to 46,415 ounces in September from 23,130 ounces a month ago, the mint said. Silver sales during the month also rose to 697,849 ounces, compared with 392,091 ounces in August. The Perth Mint refines more than 90 percent of newly-mined gold in Australia, the world's No. 2 gold producer after China.

Protesters block Goldcorp's top Peñasquito mine in Mexico

Protesters in northern Mexico blocked access to a gold mine operated by Canada's Goldcorp over a water dispute, a development that could hit the facility's production of the precious metal. The entrances to the Peñasquito mine have been occupied since Thursday last week by protesters who demand the company make good on a commitment to supply nearby communities with water, said leader of the protesters. In a statement, the company accepted there were "outstanding commitments between the two parties," and said the protest broke off established negotiations. Protest leader said the protesters were only allowing workers to leave the mine, which is located in northern Zacatecas state and last year produced 465,000 ounces of gold.

Goldcorp's director of corporate affairs, said in a statement the company is open to dialogue with the local communities, but it would not negotiate under the threat of a continued blockade, which it deems illegal. The company did not detail any potential impact on production at the mine from an extended blockade. Last year, truck drivers and local residents blocked for more than a week the entrances to the mine as they demanded jobs and compensation for environmental damages as well as water used by the company.

London Metal Exchange

The London Metal Exchange is planning to introduce a new category of membership, the inter-dealer brokers or the introducing broker category, which will help the exchange grow its volumes in new products including ferrous markets.

LME's new membership category will help grow volumes on new products

The LME plans to launch this new "introducing broker membership" in the first half of next year and will help the exchange grow its precious and ferrous contracts. Matthew Chamberlain called it the "Category X" membership and elaborated that this model comes from the shipbrokers. This is unlike base metals on the LME, where the members are generally dealers that are taking risks and making prices to their customers.

The LME, in its strategic pathways document issued earlier in the month, said it plans to consult on the rule changes to have introducing brokers as new category of membership. The LME plans to conduct a trial of this membership for new and growth products first to allow the potential impact on all of the LME's more mature contracts to be fully assessed before the model is made available to all contracts.

Global economies | Foreign exchange markets

US monetary policy

Majority of market analysts expect one more US rate hike in December 2017 after Fed's statement, despite low inflation readings in recent months. The balance sheet normalization programs will be initiated in October.

Low inflation described as 'mystery' by Fed's Chair

In their statement Fed informed about the US economy readings since July, including labor market strengthening and moderate rise of economic activity. July and August data showed solid gains of jobs and low unemployment rate. Storm-related disruptions and rebuilding is expected to affect economic activity in the near term, but past experience suggests that the storms are unlikely to materially alter the course of the national economy over the medium term. Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but to stabilize around the Fed's 2 percent objective over the medium term. Federal Reserve Chair Janet Yellen is acknowledging that the Fed is puzzled by the persistence of unusually low inflation and that it might have to adjust the timing of its interest rate policies accordingly. She says officials still expect the forces keeping inflation low to fade eventually. But she concedes that the Fed may need to adjust its assumptions.

Market expects one more rate hike in 2017 and initiation of balance sheet normalization program.

Most analysts expect the central bank to raise rates in December, for a third time this year, in a reflection of the economy's improvement. But the Fed has said its rate hikes will depend on incoming data: "In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation". The U.S. Federal Reserve will begin in October to gradually unwind its US\$4.2-trillion quantitative-easing portfolio of bonds and other financial instruments, affirming that the economy's slow-but-steady growth is likely to continue. The program began during the 2008 financial crisis to bolster recession-shattered financial markets. The initiation of the balance sheet normalization program in October is in line with June 2017 Addendum to the Committee's Policy Normalization Principles and Plans.

S&P cuts credit ranking of China

China's credit rating cut as S&P cites risk from debt growth.

Soaring debt as a background of S&P decision.

S&P Global Ratings cut China's sovereign credit rating for the first time since 1999, citing the risks from soaring debt, and revised its outlook to stable from negative. The sovereign rating was cut by one step, to A+ from AA-. The analysts also lowered their rating on three foreign banks that primarily operate in China, saying HSBC China, Hang Seng China and DBS Bank China Ltd. would be unlikely to avoid default should the nation default on its sovereign debt. According to S&P "China's prolonged period of strong credit growth has increased its economic and financial risks. Although this credit growth had contributed to strong real gross

domestic product growth and higher asset prices, we believe it has also diminished financial stability to some extent.” The downgrade, the second by a major ratings company this year, represents ebbing international confidence that China can strike a balance between maintaining economic growth and cleaning up its financial sector. The move may also be uncomfortable for Communist Party officials, who are just weeks away from their twice-a-decade leadership reshuffle.

Limited consequences of S&P decision.

In May, it refuted the downgrade by Moody’s Investors Service, saying the company had overestimated economic difficulties. Scholars at the Chinese Academy of Social Sciences, a government think tank in Beijing, said recently that the level of government debt isn’t as risky as it might look, given the amount of assets that the state commands. CASS calculates that government assets stood at about 125.4 trillion yuan (\$19 trillion) in 2015, or about 1.8 times gross domestic product. The S&P’s cut impact for China is believed to be pretty limited. China is a country with a huge store of domestic savings and a still tightly controlled capital account and doesn’t rely on foreign funding. History confirms this scenario, suggesting little relationship between sovereign rating cuts and debt performance.

Elections in Germany





Angela Merkel is set for a fourth term as Germany’s chancellor, after her CDU/CSU won a projected 33% of votes. After SPD score is sharply down, its leaders announced the end of coalition.



Uncertain shape of coalition may affect EUR strength.

According to official election results, CDU/CSU led by Angela Merkel won 33% of votes, while their coalition partner SPD got 20.5%. Chairman of the SPD Parliamentary Group, Thomas Oppermann, has indicated just after exit poll results, that his party will move to opposition. First after-election opinions shows that Angela Merkel will try to build the coalition with liberal FDP (10.7%) and The Greens (8.9%). The upcoming period in German politics may be full of vagueness regarding shape of coalition. Meanwhile its shape is believed to influence the German position on the future direction of Eurozone and European Union. As a result, current uncertainty in German politics may limit the potential of further EUR appreciation.

Macroeconomic calendar

Important macroeconomic data releases

| Weight | Date | Event | For | Reading ¹ | Previous | Consensus ² |
|---|--------|--|-----|----------------------|----------|------------------------|
| China  | | | | | | |
| 🔴🔴 | 27-Sep | Industrial profits (yoy) | Aug | 24.0% ▲ | 16.5% | -- |
| 🔴🔴🔴 | 30-Sep | Official manufacturing PMI | Sep | 52.4 ▲ | 51.7 | 51.6 🟢 |
| 🔴🔴🔴 | 30-Sep | Caixin's manufacturing PMI | Sep | 51.0 ▼ | 51.6 | 51.5 🟡 |
| Poland  | | | | | | |
| 🔴🔴 | 18-Sep | Average gross salary (yoy) | Aug | 6.6% ▲ | 4.9% | 5.7% 🟢 |
| 🔴 | 18-Sep | Employment (yoy) | Aug | 4.6% ▲ | 4.5% | 4.6% 🟡 |
| 🔴🔴🔴🔴 | 19-Sep | Sold industrial production (yoy) | Aug | 8.8% ▲ | 6.2% | 5.9% 🟢 |
| 🔴🔴🔴 | 19-Sep | Retail sales (yoy) | Aug | 7.6% ▲ | 7.1% | 7.1% 🟢 |
| 🔴🔴 | 19-Sep | Producer inflation PPI (yoy) | Aug | 3.0% ▲ | 2.2% | 2.9% 🟢 |
| 🔴🔴 | 22-Sep | Unemployment rate | Aug | 7.0% ▼ | 7.1% | 7.0% 🟡 |
| 🔴 | 22-Sep | M3 money supply (yoy) | Aug | 5.5% ▲ | 5.0% | 5.2% 🟢 |
| 🔴🔴🔴🔴 | 29-Sep | Consumer inflation CPI (yoy) - preliminary data | Sep | 2.2% ▲ | 1.8% | 2.0% 🟢 |
| US  | | | | | | |
| 🔴🔴🔴🔴🔴 | 20-Sep | FOMC base rate decision - upper bound (Fed) | Sep | 1.25% - | 1.25% | 1.25% 🟡 |
| 🔴🔴🔴🔴🔴 | 20-Sep | FOMC base rate decision - lower bound (Fed) | Sep | 1.00% - | 1.00% | 1.00% 🟡 |
| 🔴🔴 | 21-Sep | Philadelphia Fed business outlook | Sep | 23.8 ▲ | 18.9 | 17.1 🟢 |
| 🔴🔴🔴 | 22-Sep | Composite PMI - preliminary data | Sep | 54.6 ▼ | 55.3 | -- |
| 🔴🔴🔴 | 22-Sep | Manufacturing PMI - preliminary data | Sep | -- | 52.8 | 53.0 |
| 🔴🔴🔴 | 22-Sep | PMI services - preliminary data | Sep | 55.1 ▼ | 56.0 | 55.8 🟡 |
| 🔴 | 25-Sep | Dallas Fed manufacturing activity | Sep | 21.3 ▲ | 17.0 | 11.5 🟢 |
| 🔴 | 26-Sep | Richmond Fed manufacturing index | Sep | 19.0 ▲ | 14.0 | 13.0 🟢 |
| 🔴 | 26-Sep | S&P/CaseShiller home price index‡ | Jul | 202 ▲ | 201 | -- |
| 🔴🔴 | 27-Sep | Durable goods orders - preliminary data | Aug | 1.7% ▲ | -6.8% | 1.0% 🟢 |
| 🔴🔴🔴🔴🔴 | 28-Sep | GDP (annualized, qoq) - | 2Q | 3.1% ▲ | 3.0% | 3.0% 🟢 |
| 🔴🔴🔴🔴 | 29-Sep | Consumer spending inflation PCE (mom) | Aug | 0.1% - | 0.1% | 0.2% 🟡 |
| 🔴🔴🔴🔴 | 29-Sep | Consumer spending inflation PCE (yoy) | Aug | 1.3% ▼ | 1.4% | 1.4% 🟡 |
| 🔴🔴 | 29-Sep | Personal income (sa, mom)‡ | Aug | 0.2% ▼ | 0.3% | 0.2% 🟡 |
| 🔴🔴 | 29-Sep | Personal spending (sa, mom) | Aug | 0.1% ▼ | 0.3% | 0.1% 🟡 |
| 🔴🔴 | 29-Sep | University of Michigan confidence index - final data | Sep | 95.1 ▼ | 95.3 | 95.3 🟡 |
| Eurozone  | | | | | | |
| 🔴🔴🔴🔴 | 18-Sep | Consumer inflation CPI (yoy) - final data‡ | Aug | 1.5% ▲ | 1.3% | 1.5% 🟡 |
| 🔴🔴🔴🔴 | 18-Sep | Core CPI (yoy) - final data | Aug | 1.2% - | 1.2% | 1.2% 🟡 |
| 🔴 | 19-Sep | ZEW survey expectations | Sep | 31.7 ▲ | 29.3 | -- |
| 🔴 | 21-Sep | Consumer confidence - estimation | Sep | - 1.2 ▲ | - 1.5 | - 1.5 🟢 |
| 🔴🔴🔴 | 22-Sep | Composite PMI - preliminary data | Sep | 56.7 ▲ | 55.7 | 55.6 🟢 |
| 🔴🔴🔴 | 22-Sep | Manufacturing PMI - preliminary data | Sep | -- | 57.4 | 57.2 |
| 🔴🔴🔴 | 22-Sep | Services PMI - preliminary data | Sep | 55.6 ▲ | 54.7 | 54.8 🟢 |
| 🔴 | 27-Sep | M3 money supply (yoy) | Aug | 5.0% ▲ | 4.5% | 4.6% 🟢 |
| 🔴 | 28-Sep | Economic confidence | Sep | 113 ▲ | 112 | 112 🟢 |
| 🔴 | 28-Sep | Industrial confidence‡ | Sep | 6.6 ▲ | 5.0 | 5.2 🟢 |
| 🔴 | 28-Sep | Consumer confidence - final data | Sep | - 1.2 - | - 1.2 | - 1.2 🟡 |
| 🔴 | 28-Sep | Business climate indicator‡ | Sep | 1.3 ▲ | 1.1 | 1.1 🟢 |
| 🔴🔴🔴🔴 | 29-Sep | Core CPI (yoy) - estimation | Sep | 1.1% ▼ | 1.2% | 1.2% 🟡 |
| 🔴🔴🔴🔴 | 29-Sep | CPI estimate (yoy) | Sep | 1.5% - | 1.5% | 1.6% 🟡 |

| Weight | Date | Event | For | Reading ¹ | Previous | Consensus ² | |
|----------------|--------|---|-----|----------------------|----------|------------------------|---|
| Germany | | | | | | |  |
| ☆☆☆ | 22-Sep | Composite PMI - preliminary data | Sep | 57.8 ▲ | 55.8 | 55.7 | ▲ |
| ☆☆☆ | 22-Sep | Manufacturing PMI - preliminary data | Sep | -- | 59.3 | 59.0 | |
| ☆☆ | 25-Sep | IFO business climate | Sep | 115 ▼ | 116 | 116 | ▼ |
| ☆☆☆☆ | 28-Sep | Harmonized consumer inflation HICP (yoy) - preliminary data | Sep | 1.8% - | 1.8% | 1.9% | ▼ |
| ☆☆☆☆ | 28-Sep | Consumer inflation CPI (yoy) - preliminary data | Sep | 1.8% - | 1.8% | 1.8% | ○ |
| ☆☆ | 28-Sep | GfK consumer confidence | Oct | 10.8 ▼ | 10.9 | 11.0 | ▼ |
| ☆☆☆ | 29-Sep | Retail sales (yoy)‡ | Aug | 2.8% - | 2.8% | 3.2% | ▼ |
| ☆☆ | 29-Sep | Unemployment rate | Sep | 5.6% ▼ | 5.7% | 5.7% | ▼ |
| France | | | | | | |  |
| ☆☆☆☆☆ | 22-Sep | GDP (yoy) - final data | 2Q | 1.8% ▲ | 1.7% | 1.7% | ▲ |
| ☆☆☆☆☆ | 22-Sep | GDP (qoq) - final data | 2Q | 0.5% - | 0.5% | 0.5% | ○ |
| ☆☆☆ | 22-Sep | Composite PMI - preliminary data | Sep | 57.2 ▲ | 55.2 | 55.0 | ▲ |
| ☆☆☆ | 22-Sep | Manufacturing PMI - preliminary data | Sep | -- | 55.8 | 55.5 | |
| ☆☆☆☆ | 29-Sep | Harmonized consumer inflation HICP (yoy) - preliminary data | Sep | 1.1% ▲ | 1.0% | 1.0% | ▲ |
| ☆☆☆☆ | 29-Sep | Consumer inflation CPI (yoy) - preliminary data | Sep | 1.0% ▲ | 0.9% | 1.0% | ○ |
| Italy | | | | | | |  |
| ☆☆☆☆ | 29-Sep | Harmonized consumer inflation HICP (yoy) - preliminary data | Sep | 1.3% ▼ | 1.4% | 1.4% | ▼ |
| UK | | | | | | |  |
| ☆☆☆☆☆ | 29-Sep | GDP (yoy) - final data | 2Q | 1.5% ▼ | 1.7% | 1.7% | ▼ |
| ☆☆☆☆☆ | 29-Sep | GDP (qoq) - final data | 2Q | 0.3% - | 0.3% | 0.3% | ○ |
| Japan | | | | | | |  |
| ☆☆☆ | 25-Sep | Manufacturing PMI - preliminary data | Sep | -- | 52.2 | -- | |
| ☆☆☆☆ | 29-Sep | Consumer inflation CPI (yoy) | Aug | 0.7% ▲ | 0.4% | 0.6% | ▲ |
| ☆☆☆☆ | 29-Sep | Industrial production (yoy) - preliminary data | Aug | 5.4% ▲ | 4.7% | 5.2% | ▲ |
| Chile | | | | | | |  |
| ☆☆☆ | 29-Sep | Total copper production (metric tons) | Aug | 508 598 ▲ | 473 544 | -- | |
| ☆☆☆ | 29-Sep | Manufacturing (yoy)‡ | Aug | 1.4% ▼ | 2.4% | 1.7% | ▼ |
| Canada | | | | | | |  |
| ☆☆☆☆ | 22-Sep | Consumer inflation CPI (yoy) | Aug | 1.4% ▲ | 1.2% | 1.5% | ▲ |
| ☆☆☆☆☆ | 29-Sep | GDP (yoy)‡ | Jul | 3.8% ▼ | 4.4% | 3.9% | ▼ |

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

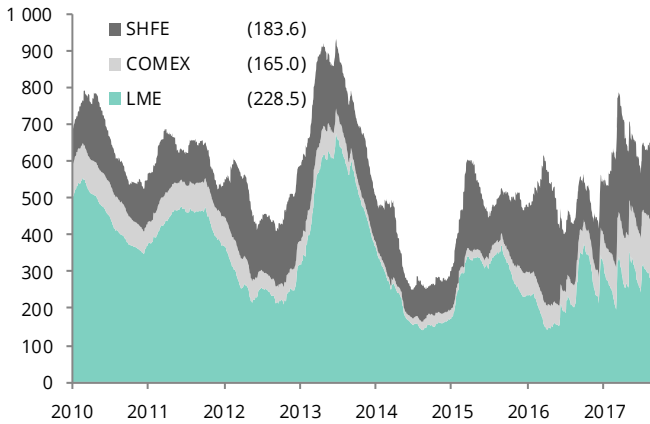
Key base & precious metal prices, exchange rates and other important market factors

| (as of: 29-Sep-17) | | Price change ¹ | | | | | From year beginning ² | | |
|---------------------------|-----------|---------------------------|---------|----------|----------|-----------|----------------------------------|-----------|--|
| | Price | 2W | QTD | YTD | 1Y | Average | Min | Max | |
| LME (USD/t) | | | | | | | | | |
| Copper | 6 485.00 | ▲ 0.4% | ▲ 9.8% | ▲ 17.9% | ▲ 34.6% | 5 951.84 | 5 466.00 | 6 904.00 | |
| Molybdenum | 16 000.00 | - 0.0% | - 0.0% | ▲ 4.9% | ▲ 5.6% | 15 871.69 | 15 250.00 | 17 500.00 | |
| Nickel | 10 585.00 | ▼ -3.8% | ▲ 14.1% | ▲ 5.7% | ▲ 0.5% | 10 020.61 | 8 715.00 | 12 150.00 | |
| Aluminum | 2 110.50 | ▲ 2.1% | ▲ 10.6% | ▲ 23.2% | ▲ 27.7% | 1 924.26 | 1 701.00 | 2 164.00 | |
| Tin | 20 995.00 | ▲ 1.5% | ▲ 3.9% | ▼ -0.5% | ▲ 4.5% | 20 190.85 | 18 760.00 | 21 300.00 | |
| Zinc | 3 217.00 | ▲ 5.8% | ▲ 16.8% | ▲ 25.5% | ▲ 36.7% | 2 782.52 | 2 434.50 | 3 217.00 | |
| Lead | 2 519.00 | ▲ 8.7% | ▲ 10.8% | ▲ 26.9% | ▲ 23.8% | 2 259.13 | 2 007.00 | 2 519.00 | |
| LBMA (USD/troz) | | | | | | | | | |
| Silver | 16.86 | ▼ -4.7% | ▲ 2.4% | ▲ 3.8% | ▼ -11.3% | 17.16 | 15.22 | 18.56 | |
| Gold ² | 1 283.10 | ▼ -3.0% | ▲ 3.3% | ▲ 10.7% | ▼ -2.7% | 1 251.25 | 1 151.00 | 1 346.25 | |
| LPPM (USD/troz) | | | | | | | | | |
| Platinum ² | 920.00 | ▼ -5.7% | ▼ -0.2% | ▲ 1.4% | ▼ -9.9% | 957.31 | 891.00 | 1 033.00 | |
| Palladium ² | 935.00 | ▲ 1.2% | ▲ 11.2% | ▲ 38.3% | ▲ 31.9% | 829.74 | 706.00 | 984.00 | |
| FX³ | | | | | | | | | |
| EURUSD | 1.1806 | ▼ -1.3% | ▲ 3.5% | ▲ 12.0% | ▲ 5.2% | 1.1144 | 1.0385 | 1.2060 | |
| EURPLN | 4.3091 | ▲ 0.7% | ▲ 2.0% | ▼ -2.6% | ▲ 0.2% | 4.2655 | 4.1737 | 4.4002 | |
| USDPLN | 3.6519 | ▲ 1.8% | ▼ -1.5% | ▼ -12.6% | ▼ -4.8% | 3.8362 | 3.5239 | 4.2271 | |
| USDCAD | 1.2480 | ▲ 2.4% | ▼ -3.8% | - | - | 1.3074 | 1.2128 | 1.3743 | |
| USDCNY | 6.6528 | ▲ 1.5% | ▼ -1.9% | ▼ -4.2% | ▼ -0.2% | 6.8020 | 6.4865 | 6.9640 | |
| USDCLP | 636.85 | ▲ 1.5% | ▼ -4.0% | ▼ -4.6% | ▼ -3.8% | 654.33 | 615.58 | 679.05 | |
| Money market | | | | | | | | | |
| 3m LIBOR USD | 1.334 | ▲ 0.01 | ▲ 0.03 | ▲ 0.34 | ▲ 0.49 | 1.197 | 0.999 | 1.335 | |
| 3m EURIBOR | -0.329 | - 0.00 | ▲ 0.00 | ▼ -0.01 | ▼ -0.03 | -0.329 | -0.332 | -0.319 | |
| 3m WIBOR | 1.730 | - 0.00 | - 0.00 | - 0.00 | ▲ 0.02 | 1.730 | 1.730 | 1.730 | |
| 5y USD interest rate swap | 2.004 | ▲ 0.11 | ▲ 0.05 | ▲ 0.03 | 0.85 | 1.934 | 1.711 | 2.239 | |
| 5y EUR interest rate swap | 0.252 | ▲ 0.03 | ▼ -0.03 | ▲ 0.18 | ▲ 0.42 | 0.192 | 0.078 | 0.326 | |
| 5y PLN interest rate swap | 2.445 | ▲ 0.18 | ▲ 0.09 | ▲ 0.05 | ▲ 0.50 | 2.394 | 2.165 | 2.625 | |
| Fuel | | | | | | | | | |
| WTI Cushing | 51.67 | ▲ 3.6% | ▲ 12.2% | ▼ -3.8% | ▲ 8.0% | 49.31 | 42.31 | 54.10 | |
| Brent | 56.53 | ▲ 2.2% | ▲ 17.2% | ▲ 2.0% | ▲ 18.2% | 51.96 | 44.21 | 58.86 | |
| Diesel NY (ULSD) | 180.54 | ▲ 0.3% | ▲ 22.1% | ▲ 6.3% | ▲ 19.6% | 157.94 | 135.85 | 185.88 | |
| Others | | | | | | | | | |
| VIX | 9.51 | ▼ -0.66 | ▼ -1.67 | ▼ -4.53 | ▼ -4.51 | 11.35 | 9.36 | 16.04 | |
| BBG Commodity Index | 84.46 | ▼ -0.9% | ▲ 2.2% | ▼ -3.5% | ▼ -0.9% | 84.64 | 79.36 | 89.36 | |
| S&P500 | 2 519.36 | ▲ 0.8% | ▲ 4.0% | ▲ 12.5% | ▲ 17.1% | 2 397.40 | 2 257.83 | 2 519.36 | |
| DAX | 12 828.86 | ▲ 2.5% | ▲ 4.1% | ▲ 11.7% | ▲ 23.3% | 12 229.75 | 11 509.84 | 12 888.95 | |
| Shanghai Composite | 3 348.94 | ▼ -0.1% | ▲ 4.9% | ▲ 7.9% | ▲ 11.7% | 3 215.43 | 3 052.79 | 3 385.39 | |
| WIG 20 | 2 453.46 | ▼ -1.8% | ▲ 6.7% | ▲ 26.0% | ▲ 41.8% | 2 290.47 | 1 989.64 | 2 531.31 | |
| KGHM | 117.40 | ▼ -1.3% | ▲ 6.1% | ▲ 26.9% | ▲ 58.2% | 118.63 | 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).

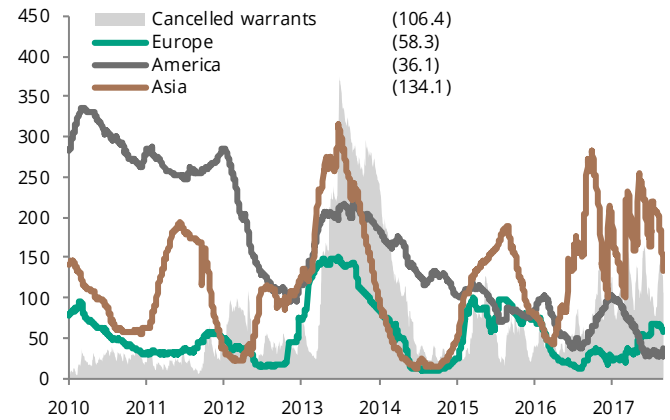
Source: LME, LBMA, LPPM, Central Banks (ECB, Fed, NBP, BCCh, COMEX, Bloomberg, KGHM)

Copper: official exchange stocks (thousand tonnes)



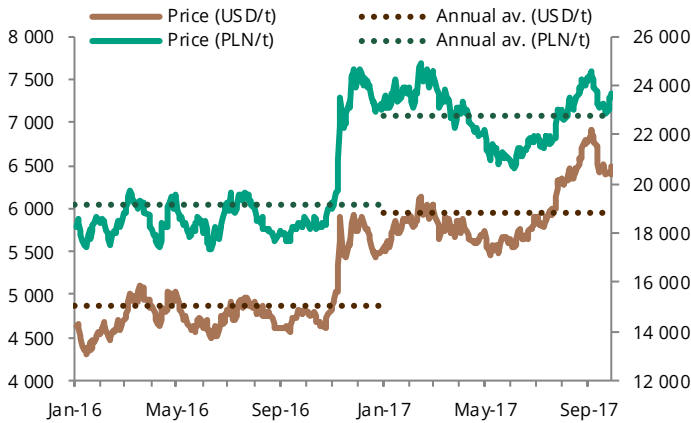
Note: Latest values in brackets. Source: LME, COMEX, SHFE, KGHM

Copper: official LME stocks (thousand tonnes)



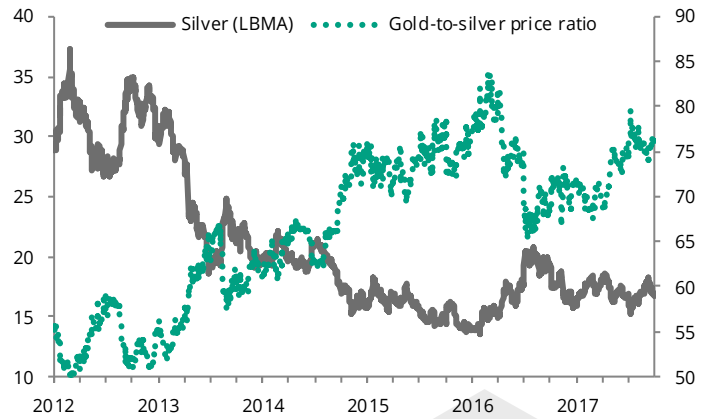
Note: Latest values in brackets. Source: LME, KGHM

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



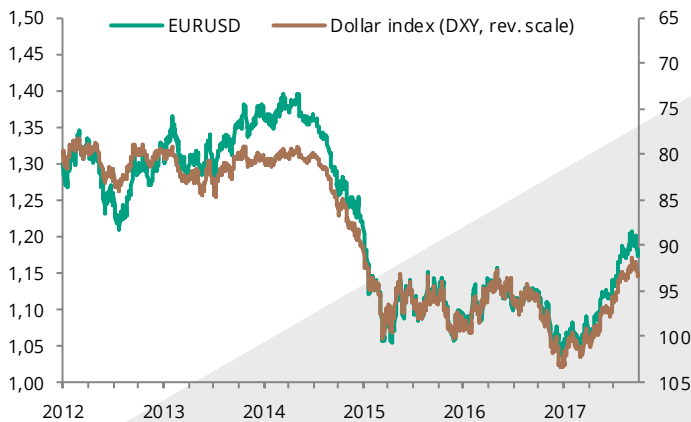
Source: LME, NBP, KGHM Polska Miedź

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



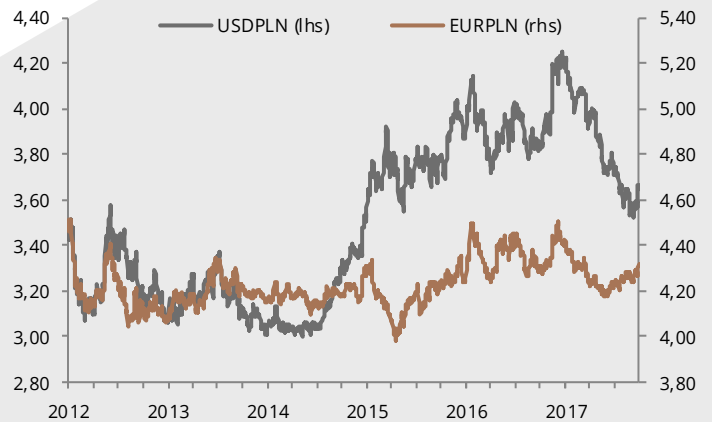
Source: LBMA, Bloomberg, KGHM Polska Miedź

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:
18th September – 1st 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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