

Market Overview

as of: 25th February 2019






- **Copper:** Despite considerable surplus production capacity, the Chinese put up more smelters, which translates into a fall in the TC/RC. The price of red metal grew rapidly in the recent period, which was influenced by well-received data from China and reduced metal supply (page 2).
- **Precious metals:** Gold price has reached nearly 1350 USD/troz, a level that has not been seen since April 2018. Although the price has come off, investors seem reluctant to take on more risk and keep buying assets which are perceived as safe haven (silver, JPY, CHF, etc.) (page 4).
- **China:** China's credit growth has recently exceeded the expectations of analysts, which was positively received by investors. Data can mitigate concerns about the slowdown in the second largest economy in the world (page 6).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	6 489.00	5.5%
▲ Nickel	12 930.00	3.6%
LBMA (USD/troz)		
▲ Silver	15.87	1.1%
▲ Gold (PM)	1 329.05	1.7%
FX		
▲ EURUSD	1.1325	0.1%
▲ EURPLN	4.3387	0.5%
▲ USDPLN	3.8242	0.1%
▼ USDCAD	1.3173	-0.9%
▼ USDCLP	654.33	-0.3%
Stocks		
▲ KGHM	99.00	7.0%

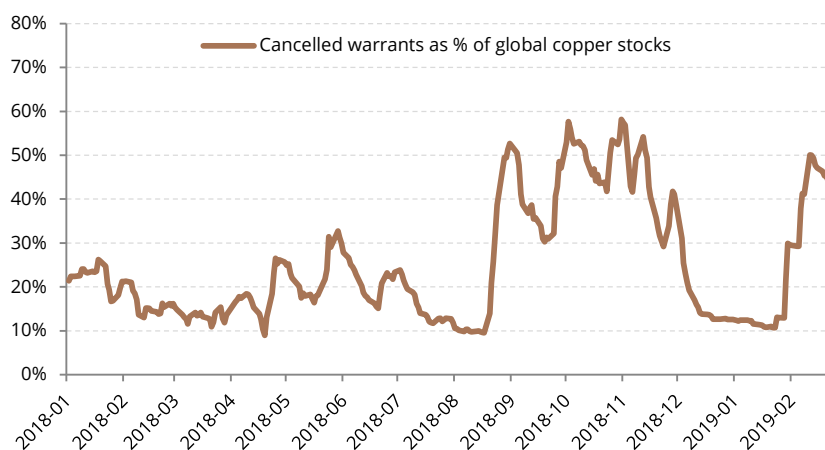
Source: Bloomberg, KGHM Polska Miedź; (more on page 10)

Important macroeconomic data

Release	For		
 GDP (yoy)	4Q	4.9%	▼
 Manufacturing PMI	Feb	53.7	▼
 Industr. prod. (wda, yoy)	Dec	-4.2%	▼
 Manufacturing PMI	Feb	49.2	▼
 New yuan loans	Jan	3 230	▲

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

Are market participants cancelling warrants in order to have access to material or is it another game on the market?



Source: Bloomberg, KGHM Polska Miedź

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Despite considerable surplus production capacity, the Chinese put up more smelters, which translates into a fall in the TC/RC. The price of red metal grew rapidly in the recent period, which was influenced by well-received data from China and reduced metal supply.

China Copper TC/RCs Fall On New Smelters Demand For Concentrate

Spot treatment and refining charges for imported copper concentrates for Chinese smelters were at \$80-88/mt, and 8-8.8 cents/lb, in the limited trading days of February (China was closed during the second week of February on the Lunar New Year holiday), down by \$7/mt and 0.7 cents/lb from the last week of January, citing the anticipated concentrate output cut by Grasberg mine in Indonesia, as well as concentrate demand by China, Chinese industry sources said this week. Back in the first week of January, fees were higher at \$90-94/mt, and 9-9.4 cents/lb, S & P Global Platts reported earlier. Indonesia's Energy and Mineral Resources Ministry back in January told media that Grasberg mine's copper concentrate exports in 2019 was estimated to dip to 200,000 mt, from around 1.2 million mt in 2018, as the mine would change to underground mining in 2019 from open pit mining last year, so cutting output this year. State Development & Investment Corp in its weekly copper report said there was evident fall in spot TC/RCs this month, with the lowest fees at around \$80/mt and 8 cents/lb level. It said the drastic output cut at Grasberg mine in Indonesia, as well as the recent release of new smelting capacity in China has pushed down fees. Chinalco Central China Copper back in September 2018 put online its 400,000 mt/year new copper plant in Ningde City, Fujian Province, according to Aluminum Corp of China.

Hubei-based Chinese brokerage Mailyard Futures in its weekly copper report said the dip in fees was related to demand for concentrate by some Chinese smelters who are not members of China Smelters Purchase Team, better known as CSPT. Chinese industry sources said the non CSPT plants, which are medium or small, have not inked annual term concentrate contracts, and have been buying on a spot basis instead. Mailyard said concentrate sellers in overseas tried to push down fees, citing the anticipated resumption of the Sterlite smelter in Tuticorin City of India, as well as the recent commissioning of some new copper smelting capacity in China. India's green court National Green Tribunal back in mid-December put aside the Tamil Nadu government's order to shut Vedanta's Sterlite copper smelter plant permanently, moving the company closer to restarting its plant in Tuticorin, according to local media. Chinese industry analysts said market players were concerned with the resumption of Sterlite smelter as this could tighten concentrate supply, so hitting TC/RCs. Jiangxi

Copper Corp in its weekly report said some smelters in China were preparing to buy concentrates for the second quarter, but longer run fee offers were at below \$90/mt, and 9 cents/lb, less than smelters' levels.

China Smelters Purchase Team set its floor TC/RCs for Q1, 2019 at \$92/mt and 9.2 cents/lb, up from minimum fees of \$90/mt and 9 cents/lb for Q4, 2018, CSPT member Jiangxi Copper said. The team was set up in November 2003 to jointly negotiate TC/RCs with overseas copper mines. Annual term TC/RCs have dipped for a fourth consecutive year, with Jiangxi Copper and Chilean miner 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, according to Jiangxi Copper. Back in 2014 and 2015, term fee was much higher at \$97.35/mt and 9.735 cents/lb, and \$107/mt, and 10.7 cents/lb, respectively, S & P Global Platts reported earlier. Meanwhile, China is forecast to add new copper smelting capacity of 780,000 mt/year in 2019 and 600,000 mt/year in 2020, respectively, Jiangxi Copper said, noting that market players were concerned with a possible conflict in future domestic copper smelting growth and concentrate demand. China's mined copper output growth is lagging behind that of its smelting sector, so causing long run concentrate demand to exceed supply, according to Chinese sources. China imported 1.9716 million mt copper ore and concentrate in 2018, up 13.7% year on year, data by the General Administration of Customs showed.

Other important information on copper market:

- Copper extended a weekly gain to reach the highest in more than seven months as signs of a supply shortage come back in force. Inventories available for delivery in warehouses tracked by the London Metal Exchange fell the most in more than four decades to the lowest since 2005. Global stockpiles would satisfy demand for just 13 days, near a record low, Glencore Plc boss Ivan Glasenberg said this week. Meantime, U.S. President Trump will meet with China's top trade negotiator later Friday as the countries try to forge a preliminary deal. Even as strong credit data in China and supply disruptions in some areas have also supported recent gains, the near-term price outlook for the red metal 'is not very clear,' analysts at Goldman Sachs Group, including Alison Li and Hui Shan, said in a report. "On-the-ground color from the Chinese property market is worrying and it remains to be seen when and to what extent the strong credit flows will transmit into metals intensive sectors," they said. Copper for three-month delivery rises 1.5 percent to settle at \$6,478 a metric ton at 5:51 p.m. in London, the highest close for a most-active contract since early July. Prices gain 4.7 percent this week, most since September. In other base metals, zinc, nickel, tin and aluminum also advanced in London, with each posting weekly gains; lead was also higher on Friday. The Bloomberg Industrial Metals Subindex climbs 4.1% this week, poised for the biggest rally since September..
- The global world refined copper market showed a 52,000 tonnes deficit in November, compared with a 1,000 tonnes surplus in October, the International Copper Study Group (ICSG) said in its latest monthly bulletin.

For the first 11 months of the year, the market was in a 396,000 tonnes deficit compared with a 282,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in November was 2.03 million tonnes, while consumption was 2.09 million tonnes. Bonded stocks of copper in China showed a 42,000 tonnes deficit in November compared with a 6,000 tonnes surplus in October.

Precious Metals

Gold price has reached nearly 1350 USD/troz, a level that has not been seen since April 2018. Although the price has come off, investors seems reluctant to take on more risk and keep buying assets which are perceived as safe haven (silver, JPY, CHF, etc.).

Russia mulls eliminating gold tax to boost investment at greenback's expense

The abolition of VAT on the purchase of gold is intended to help Russia attract Russian capital back to the country

Russia's Finance Ministry told the Izvestia newspaper it is considering complete abolition of value added tax (VAT) on gold purchases. This would give Russian savers an option of investing in gold, rather than foreign currencies. The ministry said earlier the measure could also help returning capital worth tens of billions of rubles to the country. Gold bar buyers in Russia are currently obliged to pay 20 percent VAT. However, when selling ingots, the tax is not returned. As a result, demand for gold investment in the country sits at just under 3 tons per year. Experts say that if the tax is dropped, demand could skyrocket to 50–100 tons.

The abolition of VAT will create an investment gold market in Russia, Sberbank Vice President Andrey Shemetov told the newspaper. According to him, as a financial instrument, gold is protected from inflation, and at a time of geopolitical risks, the metal could be an excellent substitute for traditional investments in US dollars. Resetting the VAT on gold bullion could support the idea of de-dollarization of the Russian economy, said Aleksey Panferov, deputy chairman of the board of Sovcombank.

According to the World Gold Council, demand for gold in Russia in 2018 was very robust. In China it reached 304.2 tons, in India - 162 tons, and in Germany - 96 tons. Compared to 2014, demand in Russia has dropped almost three-fold. A significant increase in demand for gold was recorded in China and Kazakhstan after their abolition of the tax.

Italy considers gold sales to ease budgetary pressure

A more difficult budget situation could lead to gold being sold by the Italian government

Italy risks encountering stress in managing its public finances in the medium term, according to a European Commission report discussed at the recent ECOFIN meeting. European Commissioner for the Euro Valdis Dombrovskis said that Italy's budget trajectory is wrong after the downward revision of growth, although the damage was "already done" in terms of business confidence, financial stability, and slowed growth.

According to the Italian press, the government is preparing for further turmoil with the ruling Lega, or League, party having drafted a law proposal that could allow the government to sell the country's gold reserves through a change to the constitution. Italy is the world's third-largest holder of gold reserves, behind the United States and Germany, with 2,451.8 tonnes, according to the World Gold Council.

Visible palladium stocks have fallen by 75%

This year palladium ETF holdings have started to rise in the US (+10 koz) and South Africa (+28 koz). If investors continue to add to their ETF holdings then this will tighten the palladium market further. Most primary producers' output is sponge for industrial users, not bars needed to back physical ETFs. A rapid increase in ETF demand could further tighten the supply of available metal, pushing up lease rates and the palladium price.

Physical palladium ETF holdings have fallen by 2.2 moz, from a peak of 2.9 moz in 2014 to 0.7 moz at the end of 2018, so visible stocks have shrunk significantly. Given the substantial market deficits of the last few years, a large proportion of this metal is likely to have been used for industrial purposes. The high lease rates over the last 18 months indicate that there is little metal available to be leased out. However, there are other sources of stock. Nor Nickel has created a palladium fund with metal acquired from third-party sources that has delivered over 1 moz to its customers on top of its mine production in 2017-2018.

In the palladium market, deficits have been the normal state of affairs for a long time. In the 1990s and 2000s, there were large sales of stocks from Russia that had been built up during the Soviet period which kept the market well supplied. It is estimated that over 25 moz of palladium stock came out of Russia over a 20-year period, with the last sales occurring in 2013. While the exact level of global stocks is hard to gauge, various sources have estimated a range between 10 moz and 18 moz, or roughly one to two years of demand. While not all of this would be immediately available, there are still several million ounces of metal held as liquid stock, so a chronic shortage is unlikely.

Global economies | Foreign exchange markets

China Credit Growth at Record in January Amid Seasonal Surge

China's credit growth has recently exceeded the expectations of analysts, which was positively received by investors. Data can mitigate concerns about the slowdown in the second largest economy in the world.

China's credit growth exceeded expectations in January amid a seasonal lending surge at the start of the year. Aggregate financing was 4.64 trillion yuan (\$685 billion) in January, the People's Bank of China said. That compares with an estimated 3.3 trillion yuan in a Bloomberg survey. Financial institutions made a record 3.23 trillion yuan of new loans, versus a projected 3 trillion yuan. That was the most in any month back to at least 1992, when the data began.

Growth in M2 broad money supply and aggregate financing is reasonable and the macro leverage ratio remains stable, which means China isn't flooding the financial system with liquidity and the monetary policy stance hasn't changed, Sun Guofeng, director of the PBOC's monetary policy department, said at a press conference. Asked if an interest-rate cut was possible, Sun said the central bank should "focus more on the changes in real interest rates," which have declined since last year, and let policy rates be better transmitted into lending costs.

While the data may relieve some concerns over a deceleration in the world's second-largest economy, distortions caused by the Lunar New Year holiday timing make it tough to get a definitive read on the health of the broader economy. The government and central bank have been rolling out measures aimed at spurring lending, especially to smaller businesses.

"China has been encouraging credit supply, and the effect of that is showing in January," said Ding Shuang, chief economist at Standard Chartered Ltd. for Greater China & North Asia, adding that the seasonal lending increase at the start of the year also contributed. "The authorities have been tackling the supply side of the credit, and more proactive fiscal policies will help on the demand side." China's 10-year government bond futures erased an advance of as much as 0.32 percent after the data release, reflecting abating bets on any imminent easing of monetary policy.

Policy makers are struggling to arrest the economic downturn with months of targeted stimulus measures. The central bank has added liquidity through five cuts to the reserve-requirement ratio since early 2018, but hasn't shifted the more powerful one-year lending rate since 2015. That's spurred some economists to bet an interest rate cut may be coming soon.





Broad M2 money supply increased 8.4 percent. The government announced new policies to help private and small companies get financing lately, including further boosting lending, expediting stock listing reviews and supporting bill financing.








That's the latest in a raft of policies – including inventing new central bank policy tools – to relieve the funding pressures faced by those businesses, which are usually less able to access bank loans than bigger, state-owned companies.

That support is also reflected in January's shadow banking data, which rose for the first time in 11 months. Growth in off-balance sheet financing will continue to decline but the pace will decelerate, Ruan Jianhong, director of the PBOC's statistics and analysis department, said at the press conference..

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
⊕	11-Feb	Foreign reserves (USD bn)	Jan	3 088 ▲	3 073	3 080 ▲
⊕⊕	14-Feb	Trade balance (USD bn)‡	Jan	39.2 ▼	56.8	34.3 ▲
⊕⊕	14-Feb	Exports (yoy)	Jan	9.1% ▲	-4.4%	-3.3% ▲
⊕⊕⊕⊕	15-Feb	Consumer inflation CPI (yoy)	Jan	1.7% ▼	1.9%	1.9% ◐
⊕⊕	15-Feb	Producer inflation PPI (yoy)	Jan	0.1% ▼	0.9%	0.3% ◐
⊕	15-Feb	New yuan loans (CNY bn)	Jan	3 230 ▲	1 080	3 000 ▲
Poland 						
⊕⊕	13-Feb	Trade balance (EUR mn)‡	Dec	-1 340 ▼	- 222	-1 156 ◐
⊕⊕	13-Feb	Exports (EUR mn)‡	Dec	16 005 ▼	20 058	16 600 ◐
⊕⊕	13-Feb	Current account balance (EUR mn)‡	Dec	-1 400 ▼	- 240	- 960 ◐
⊕⊕⊕⊕⊕	14-Feb	GDP (yoy) - preliminary data	4Q	4.9% ▼	5.1%	4.8% ▲
⊕⊕⊕⊕⊕	14-Feb	GDP (qoq) - preliminary data‡	4Q	0.5% ▼	1.6%	0.7% ◐
⊕⊕⊕⊕	15-Feb	Consumer inflation CPI (yoy)	Jan	0.9% ▼	1.1%	1.0% ◐
⊕⊕	19-Feb	Average gross salary (yoy)	Jan	7.5% ▲	6.1%	6.9% ▲
⊕	19-Feb	Employment (yoy)	Jan	2.9% ▲	2.8%	1.8% ▲
⊕⊕⊕⊕	20-Feb	Sold industrial production (yoy)	Jan	6.1% ▲	2.8%	3.7% ▲
⊕⊕	20-Feb	Producer inflation PPI (yoy)‡	Jan	2.2% ▲	2.1%	2.1% ▲
⊕⊕⊕	21-Feb	Retail sales (yoy)	Jan	6.6% ▲	4.7%	6.4% ▲
⊕	22-Feb	M3 money supply (yoy)	Jan	8.8% ▼	9.2%	9.4% ◐
US 						
⊕⊕⊕⊕	13-Feb	Consumer inflation CPI (mom)‡	Jan	0.0% -	0.0%	0.1% ◐
⊕⊕⊕⊕	13-Feb	Consumer inflation CPI (yoy)	Jan	1.6% ▼	1.9%	1.5% ▲
⊕⊕	14-Feb	Retail sales (excluding autos, mom)‡	Dec	-1.8% ▼	0.0%	0.0% ◐
⊕⊕⊕⊕	15-Feb	Industrial production (mom)‡	Jan	-0.6% ▼	0.1%	0.1% ◐
⊕⊕	15-Feb	University of Michigan confidence index - preliminary data	Feb	95.5 ▲	91.2	93.7 ▲
⊕	15-Feb	Capacity utilization‡	Jan	78.2% ▼	78.8%	78.7% ◐
⊕⊕⊕	21-Feb	Composite PMI - preliminary data	Feb	55.8 ▲	54.4	--
⊕⊕⊕	21-Feb	Manufacturing PMI - preliminary data	Feb	53.7 ▼	54.9	54.8 ◐
⊕⊕⊕	21-Feb	PMI services - preliminary data	Feb	56.2 ▲	54.2	54.3 ▲
⊕⊕	21-Feb	Durable goods orders - preliminary data‡	Dec	1.2% ▲	1.0%	1.7% ◐
⊕⊕	21-Feb	Philadelphia Fed business outlook	Feb	- 4.1 ▼	17.0	14.0 ◐
Eurozone 						
⊕⊕⊕⊕	13-Feb	Industrial production (sa, mom)	Dec	-0.9% ▲	-1.7%	-0.4% ◐
⊕⊕⊕⊕	13-Feb	Industrial production (wda, yoy)‡	Dec	-4.2% ▼	-3.0%	-3.3% ◐
⊕⊕⊕⊕⊕	14-Feb	GDP (sa, yoy) - preliminary data	4Q	1.2% -	1.2%	1.2% ◐
⊕⊕⊕⊕⊕	14-Feb	GDP (sa, qoq) - preliminary data	4Q	0.2% -	0.2%	0.2% ◐
⊕	15-Feb	Trade balance (EUR mn)	Dec	17.0 ▼	19.0	--
⊕	19-Feb	ZEW survey expectations	Feb	- 16.6 ▲	- 20.9	--
⊕	20-Feb	Consumer confidence - estimation	Feb	- 7.4 ▲	- 7.9	- 7.7 ▲
⊕⊕⊕	21-Feb	Composite PMI - preliminary data	Feb	51.4 ▲	51.0	51.1 ▲
⊕⊕⊕	21-Feb	Manufacturing PMI - preliminary data	Feb	49.2 ▼	50.5	50.3 ◐
⊕⊕⊕	21-Feb	Services PMI - preliminary data	Feb	52.3 ▲	51.2	51.3 ▲
⊕⊕⊕⊕	22-Feb	Consumer inflation CPI (yoy) - final data	Jan	1.4% -	1.4%	1.4% ◐
⊕⊕⊕⊕	22-Feb	Core CPI (yoy) - final data	Jan	1.1% -	1.1%	1.1% ◐

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Germany 						
⊕⊕⊕⊕⊕	14-Feb	GDP (yoy) - preliminary data	4Q	0.9% ▼	1.1%	0.8% ▲
⊕⊕⊕⊕⊕	14-Feb	GDP (sa, qoq) - preliminary data	4Q	0.0% ▲	-0.2%	0.1% ◡
⊕⊕⊕⊕	21-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	1.7% -	1.7%	1.7% ○
⊕⊕⊕⊕	21-Feb	Consumer inflation CPI (yoy) - final data	Jan	1.4% -	1.4%	1.4% ○
⊕⊕⊕	21-Feb	Composite PMI - preliminary data	Feb	52.7 ▲	52.1	52.0 ▲
⊕⊕⊕	21-Feb	Manufacturing PMI - preliminary data	Feb	47.6 ▼	49.7	49.8 ◡
⊕⊕⊕⊕⊕	22-Feb	GDP (yoy) - final data	4Q	0.9% -	0.9%	0.9% ○
⊕⊕⊕⊕⊕	22-Feb	GDP (sa, qoq) - final data	4Q	0.0% -	0.0%	0.0% ○
⊕⊕	22-Feb	IFO business climate‡	Feb	98.5 ▼	99.3	98.9 ◡
France 						
⊕⊕⊕⊕	21-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	1.4% -	1.4%	1.4% ○
⊕⊕⊕⊕	21-Feb	Consumer inflation CPI (yoy) - final data	Jan	1.2% -	1.2%	1.2% ○
⊕⊕⊕	21-Feb	Composite PMI - preliminary data	Feb	49.9 ▲	48.2	48.9 ▲
⊕⊕⊕	21-Feb	Manufacturing PMI - preliminary data	Feb	51.4 ▲	51.2	51.0 ▲
Italy 						
⊕⊕⊕⊕	21-Feb	Harmonized consumer inflation HICP (yoy) - final data	Jan	0.9% -	0.9%	0.9% ○
UK 						
⊕⊕⊕⊕⊕	11-Feb	GDP (yoy) - preliminary data	4Q	1.3% ▼	1.5%	1.4% ◡
⊕⊕⊕⊕⊕	11-Feb	GDP (qoq) - preliminary data	4Q	0.2% ▼	0.6%	0.3% ◡
⊕⊕⊕⊕	11-Feb	Industrial production (yoy)‡	Dec	-0.9% ▲	-1.3%	-0.5% ◡
⊕⊕⊕⊕	13-Feb	Consumer inflation CPI (yoy)	Jan	1.8% ▼	2.1%	1.9% ◡
⊕⊕	19-Feb	Unemployment rate (ILO, 3-months)	Dec	4.0% -	4.0%	4.0% ○
Japan 						
⊕⊕⊕⊕⊕	14-Feb	GDP (annualized, qoq) - preliminary data‡	4Q	1.4% ▲	-2.6%	1.4% ○
⊕⊕⊕⊕⊕	14-Feb	GDP (qoq, sa) - preliminary data‡	4Q	0.3% ▲	-0.7%	0.4% ◡
⊕⊕⊕⊕	15-Feb	Industrial production (yoy) - final data	Dec	-1.9% -	-1.9%	--
⊕⊕⊕	21-Feb	Manufacturing PMI - preliminary data	Feb	48.5 ▼	50.3	--
⊕⊕⊕⊕	22-Feb	Consumer inflation CPI (yoy)	Jan	0.2% ▼	0.3%	0.2% ○
Chile 						
<i>No major data in the period</i>						
Canada 						
<i>No major data in the period</i>						

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 Polska Miedź

Key market data

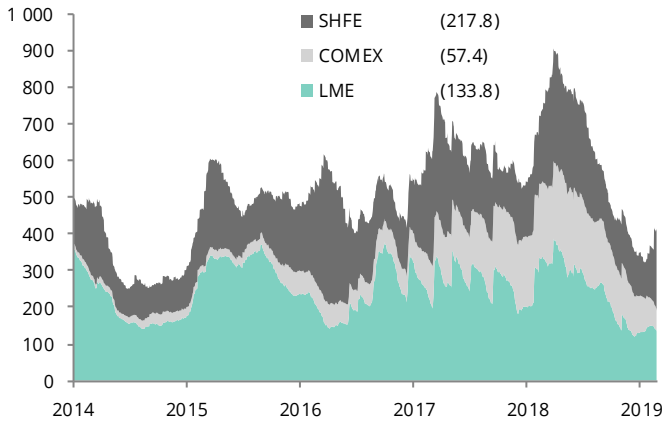
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 22-Feb-19)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 489.00	▲ 5.5%	▲ 8.8%	▲ 8.8%	▼ -7.7%	6 052.17	5 811.00	6 489.00	
Molybdenum	26 000.00	- 0.0%	- 0.0%	- 0.0%	▲ 62.5%	26 000.00	26 000.00	26 000.00	
Nickel	12 930.00	▲ 3.6%	▲ 22.0%	▲ 22.0%	▼ -4.8%	11 929.47	10 440.00	12 930.00	
Aluminum	1 890.50	▲ 2.3%	▲ 1.1%	▲ 1.1%	▼ -13.8%	1 848.76	1 775.50	1 896.50	
Tin	21 650.00	▲ 2.6%	▲ 11.0%	▲ 11.0%	- 0.0%	20 755.53	19 500.00	21 650.00	
Zinc	2 718.00	▲ 2.6%	▲ 8.3%	▲ 8.3%	▼ -22.9%	2 613.42	2 462.00	2 785.00	
Lead	2 059.00	▲ 0.4%	▲ 2.5%	▲ 2.5%	▼ -18.4%	2 018.86	1 934.50	2 107.50	
LBMA (USD/troz)									
Silver	15.87	▲ 1.1%	▲ 2.6%	▲ 2.6%	▼ -3.6%	15.68	15.26	16.08	
Gold ²	1 329.05	▲ 1.7%	▲ 3.7%	▲ 3.7%	▲ 0.1%	1 303.20	1 279.55	1 343.75	
LPPM (USD/troz)									
Platinum ²	830.00	▲ 4.9%	▲ 4.5%	▲ 4.5%	▼ -16.2%	807.03	782.00	830.00	
Palladium ²	1 482.00	▲ 6.8%	▲ 17.3%	▲ 17.3%	▲ 43.5%	1 367.95	1 267.00	1 491.00	
FX³									
EURUSD	1.1325	▲ 0.1%	▼ -1.1%	▼ -1.1%	▼ -7.7%	1.1386	1.1260	1.1535	
EURPLN	4.3387	▲ 0.5%	▲ 0.9%	▲ 0.9%	▲ 3.8%	4.3036	4.2706	4.3394	
USDPLN	3.8242	▲ 0.1%	▲ 1.7%	▲ 1.7%	▲ 12.4%	3.7794	3.7243	3.8516	
USDCAD	1.3173	▼ -0.9%	▼ -3.4%	▼ -3.4%	▲ 3.7%	1.3266	1.3095	1.3600	
USDCNY	6.7137	▼ -1.2%	▼ -2.4%	▼ -2.4%	▲ 5.7%	6.7760	6.6961	6.8721	
USDCLP	654.33	▼ -0.3%	▼ -5.8%	▼ -5.8%	▲ 10.0%	668.98	652.78	697.64	
Money market									
3m LIBOR USD	2.646	▼ -0.04	▼ -0.16	▼ -0.16	▲ 0.70	2.738	2.641	2.804	
3m EURIBOR	-0.310	▼ 0.00	▼ 0.00	▼ 0.00	▲ 0.02	-0.308	-0.310	-0.306	
3m WIBOR	1.720	- 0.00	- 0.00	- 0.00	- 0.00	1.720	1.720	1.720	
5y USD interest rate swap	2.532	▼ -0.02	▼ -0.04	▼ -0.04	▼ -0.24	2.600	2.419	2.715	
5y EUR interest rate swap	0.114	▼ -0.01	▼ -0.08	▼ -0.08	▼ -0.37	0.159	0.103	0.222	
5y PLN interest rate swap	1.955	▼ -0.07	▼ -0.16	▼ -0.16	▼ -0.67	2.040	1.935	2.140	
Fuel									
WTI Cushing	57.11	▲ 9.0%	▲ 25.8%	▲ 25.8%	▼ -8.9%	52.81	46.54	57.11	
Brent	66.52	▲ 8.2%	▲ 25.1%	▲ 25.1%	▲ 0.7%	61.37	53.83	66.66	
Diesel NY (ULSD)	202.86	▲ 7.4%	▲ 20.6%	▲ 20.6%	▲ 4.0%	189.21	170.01	203.26	
Others									
VIX	13.51	▼ -2.46	▼ -11.91	▼ -11.91	▼ -5.21	17.81	13.51	25.45	
BBG Commodity Index	82.12	▲ 3.1%	▲ 7.1%	▲ 7.1%	▼ -7.4%	80.18	76.99	82.12	
S&P500	2 792.67	▲ 3.1%	▲ 11.4%	▲ 11.4%	▲ 3.3%	2 664.74	2 447.89	2 792.67	
DAX	11 457.70	▲ 4.0%	▲ 8.5%	▲ 8.5%	▼ -8.1%	11 075.87	10 416.66	11 457.70	
Shanghai Composite	2 804.23	▲ 5.7%	▲ 12.4%	▲ 12.4%	▼ -14.2%	2 611.51	2 464.36	2 804.23	
WIG 20	2 355.77	▲ 0.1%	▲ 3.5%	▲ 3.5%	▼ -2.3%	2 354.31	2 247.22	2 414.41	
KGHM	99.00	▲ 7.0%	▲ 11.4%	▲ 11.4%	▼ -9.4%	93.29	86.12	99.60	

^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

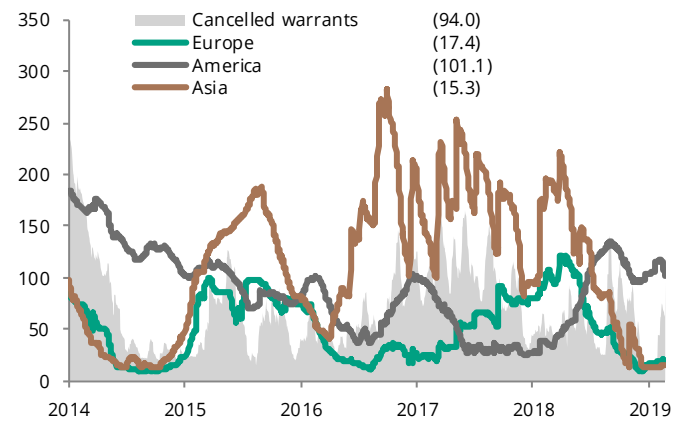
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



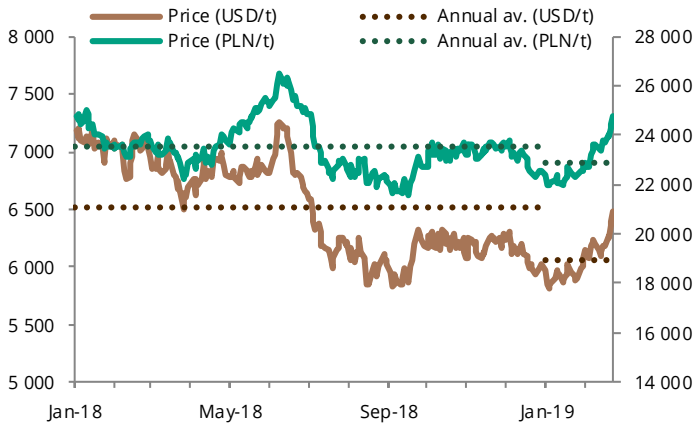
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



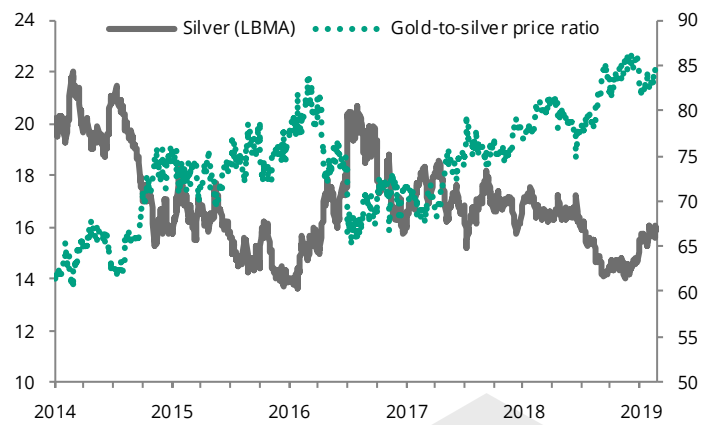
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



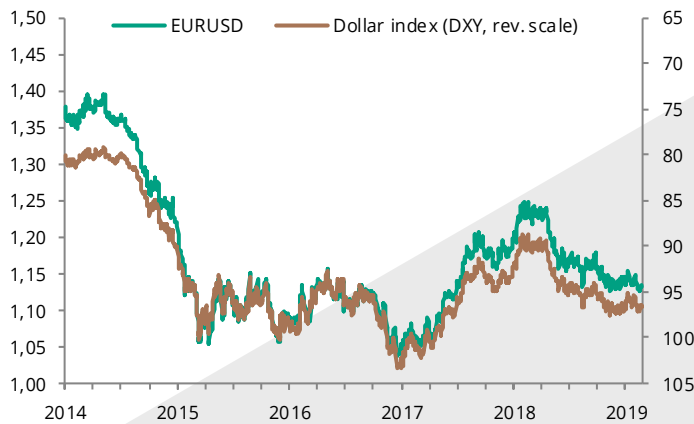
Source: Bloomberg, KGHM Polska Miedź

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



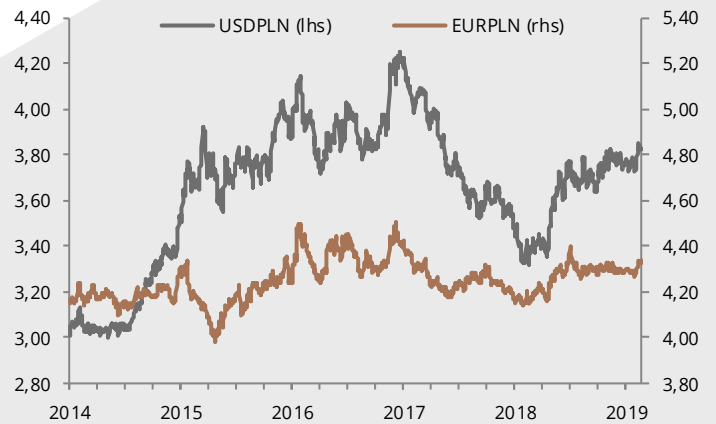
Source: Bloomberg, KGHM Polska Miedź

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: **11th – 24th February 2019.**

- 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 (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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