KGHM POLSKA MIEDŹ

Market Overview

as of: 25th March 2019

- **Copper:** On March 11-13 market participants gathered at the annual International Copper Conference organized by Fast Markets. General market sentiment was rather neutral. Many market participants emphasized the impact of the difficult to forecast political situation on copper prices *(page 2)*.
- **Precious metals:** In the event of Hard Brexit UK will no longer have access to the Customs Union or Single Market. UK firms wishing to OTC derivatives with EU counterparties will be subject to the regulations in the counterparty's Member State. For gold, delays in physical trade and transit are not expected due to their intrinsic value and the way of transport. However delays may affect the transit of white metals *(page 4)*.
- **Trade war:** President Donald Trump regularly declares that he's winning his trade wars, yet many analysts are pointing out that majority of the cost of the tariffs was being paid by U.S. consumers and companies. Chinese retaliatory tariffs alone were causing roughly $40 billion a year in lost U.S. exports *(page 6)*.

Key market prices

		Close price	2w chng.
	LME (USD/t)		
▼	Copper	6 375.00	-0.9%
▼	Nickel	12 930.00	-0.5%
	LBMA (USD/troz)		
▲	Silver	15.46	1.1%
▲	Gold (PM)	1 311.30	1.4%
	FX		
▲	EURUSD	1.1302	0.5%
▼	EURPLN	4.2894	-0.2%
▼	USDPLN	3.7948	-0.7%
▼	USDCAD	1.3411	0.0%
▼	USDCLP	665.12	-0.9%
	Stocks		
▲	KGHM	103.50	3.9%

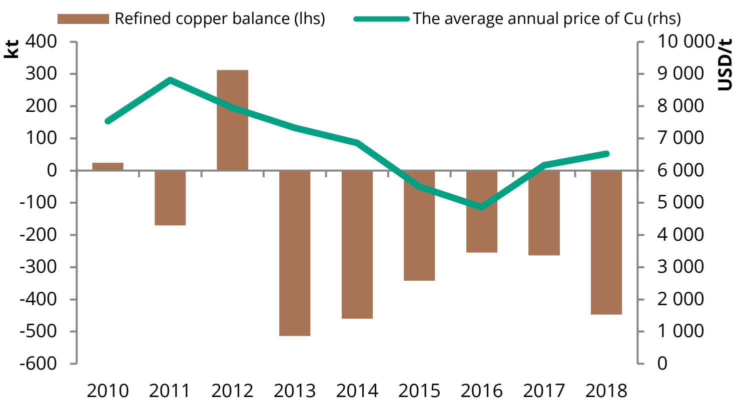
Source: Bloomberg, KGHM Polska Miedź; *(more on page 11)*

Important macroeconomic data

	Release	For		
	Manufacturing PMI	Mar	47.6	▼
	Manufacturing PMI	Mar	44.7	▼
	Industrial prod. (yoy)	Feb	6.9%	▲
	Philadelphia Fed outlook	Mar	13.7	▲
	GDP (yoy)	4Q	3.6%	▲

Source: Bloomberg, KGHM Polska Miedź; *(more on page 9)*

ICSG estimates that the deficit in the previous year was the highest since 2014



Source: ICSG, Bloomberg, KGHM Polska Miedź

Base and precious metals | Other commodities

Copper

On March 11-13 market participants gathered at the annual International Copper Conference organized by Fast Markets. General market sentiment was rather neutral. Many market participants emphasized the impact of the difficult to forecast political situation on copper prices.

Notes from International Copper Conference

The use of red metal in the electrical industry is becoming increasingly important in the global demand. In the recent period, however, a decrease in copper consumption was observed in the clearly slower growth of the car and housing sector in China. The demand in India is growing faster than predicted.

Falling ore grades (0.45% globally) and the increasing content of contaminants is becoming more and more important. The falling copper content in ore (0.45% globally) and the increasing content of contaminants is becoming more and more important. Japanese steel mills import more and more arsenic at the same amount of purchased concentrate. Arsenic emissions in the EU remain stable. In China, despite the Government's clear commitment to limiting the emission of harmful substances, still not all smelters meet the requirements introduced in 2013.

Production capacity of the copper mine in 2018 compared to 2017 increased by only 0.5%, however, due to the closure of the Vedanta smelter in India, the Chinese plants had no problems with the availability of concentrate, which they also aggressively supplied on the spot market. India in 2018 imported about 150 kt of concentrate less than in 2017, while China in the same period more than 600 kt more.

The participants of the conference were very cautious about the forecast of red metal prices, but it was pointed out that in recent times it has been difficult to see a correlation between copper prices and the market deficit. In 2019, the deficit forecast by ICSG will amount to around 50 kt, after a deficit of 387 kt in 2018.

In China, the "National Sword" program is being implemented, which has been approved by President Xi Jinping, and national customs offices to limit the inflow of waste from abroad. 25% of customs duty introduced in 2018 for scrap were included in the program, as well as ban on the import of lower category scrap, or meticulous checks of imported material. Introduced duties have already had a significant impact on changing the target location for the export of American scrap. In 2017, 68% of this scrap went to China, while in the first three quarters of 2018 it was only 38%. Copper scrap from the USA which did not go to China was exported mainly to other countries of Southeast Asia as well as Japan and South Korea.

Declining scrap import is going to be replaced by a rapidly growing domestic production – domestic forecasts are very optimistic in this respect. In 2017-26 the average annual increase in scrap production in China is to be around 11%, while in the previous decade it was only 1,6%. The reason behind such a rapid increase is the long life expectancy of copper products in China (around 20 years) and the rapid increase in scrap production in 1997-2006. With a recovery rate estimated at very high 87%, Jinrui Futures predicts that already in 2023, domestic production of scrap will exceed the total amount of scrap that went to the Chinese steelworks in 2018 (both produced in Poland and imported from abroad). Despite these projections, analysts of Jinrui Futures also expect to ease the restrictions on the import of Category 6 scrap in the near future.

Among 300 surveyed companies dealing with scrap pre-treatment/segregation, nearly 40% said that the introduced regulations would make it impossible to run a business, and another 40% - that they would translate into a significant increase in competition and lower profits. Despite this, half of them do not consider moving to other South East Asia countries, only 20% have already moved. The remaining 30% is considering moving the business. Malaysia was chosen the best place to conduct such activity (about 60% of votes), followed by Vietnam (about 15%). Scrap policy in these countries is also becoming more and more restrictive. Another problem is the fact that many of the waste segregation works are often carried out by illegal immigrants, and massive deportation operations have paralyzed activities in those facilities.

Other important information on copper market:

- The global world refined copper market showed a 10,000 tonnes surplus in December, compared with a 68,000 tonnes deficit in November, the International Copper Study Group (ICSG) said in its latest monthly bulletin. After taking in to account whole year, the market was in a 387,000 tonnes deficit compared with a 265,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in December was 2.09 million tonnes , while consumption was 2.08 million tonnes. Bonded stocks of copper in China showed a 21,000 tonnes surplus in December compared with a 58,000 tonnes deficit in November.
- Chilean state-run miner Codelco and its Ecuadorian counterpart Enami will sign an agreement in a few days to jointly develop a copper project in Ecuador, Chilean mining minister Baldo Prokurica said on Tuesday. Llurimagua is in the advanced exploration stage and could become the first mine Codelco, the world's largest copper miner, operates abroad following years of efforts to expand internationally. "We are in the final stages and we hope that with the visit of the Ecuadorian president to Chile, he will be part of the signing of the agreements," the minister told reporters. The project, about 80 km northeast of Ecuador's capital of Quito, has faced resistance from a nearby community over environmental concerns.

- Spot copper treatment and refining charges for China were at $72-$77/mt and 7.2-7.7 cents/lb, respectively, in the week ended March 9, down from $75-$80/mt, 7.5-8.0 cents/lb in the preceding week, with the lowest concentrate deal reported at $70/mt, and 7 cents/lb, on anticipated tighter concentrate supply this year, Chinese sources said Monday. In its report, Jiangxi Copper said spot fees has fallen below $80/mt and 8 cents/lb now, from $90/mt and 9 cents/lb in January, beyond market players' anticipation. It noted in end-2018, market players expected the world's copper concentrate supply in early 2019 to be ample, but with the recent overseas mines' supply interference news, spurring the miners to cut fees. Jiangxi Copper said judging from the dipping tender prices for overseas mine projects, market players deemed long-run tighter concentrate supply to be more acute. It said in early February, rain hit some mines in Peru and Chile forcing some to suspend shipments, though in mid-February, the weather there turned fine and the mines resumed production. Indonesia's Energy and Mineral Resources Ministry in January said Grasberg mine's copper concentrate exports in 2019 could dip to 200,000 mt, from 1.2 million mt in 2018, as the mine becomes an underground operation in 2019 from being open pit previously. The brokerage attributed the tense concentrate supply to the new copper smelting capacity in China. It noted a total of 350,000 mt/year new smelting capacity owned by Guangxi Nanguo Copper and Chifeng Yunnan Copper in Guangxi, Southwest China, Inner Mongolia and Northwest China was set to be online in March-April, so it will tighten concentrate supply. Jiangxi Copper said judging from the dipping tender prices for overseas mine projects, market players deemed long-run tighter concentrate supply to be more acute.

Precious Metals

In the event of Hard Brexit UK will no longer have access to the Customs Union or Single Market. UK firms wishing to OTC derivatives with EU counterparties will be subject to the regulations in the counterparty's Member State. For gold, delays in physical trade and transit are not expected due to their intrinsic value and the way of transport. However delays may affect the transit of white metals.

Impact of Brexit on Precious Metals Markets

The EU (Withdrawal) Act 2018 provides that legislation currently in application or in force but due to apply after exit day will apply immediately before exit day. In the event of no deal, exit day will be 29 March 2019. The current end date of the transition period is 31 December 2020, however it will only occur if a deal between the UK and EU is reached. During the transition period the UK will be free to enter trade negotiations with Member States. The UK will no longer be subject to the jurisdiction of the ECJ following exit day. However under the proposed Withdrawal Agreement, any judgements handed down by the ECJ during the implementation period, if it occurs will become binding to the UK.

In the event of hard Brexit the UK will depart the existing EU VAT model on exit day. However if that happens there is a declared will on the UK side to keep VAT procedures as close as possible to those currently applicable.

Presently, the Terminal Markets Order (TMO) provides a domestic framework through which certain supplies of precious metals by Members can be zero-rated for VAT when dealing with clients form UK, EU and Third country.

The Memorandum of Understanding (MoU) between LBMA, LPPM and HMRC sets out how each precious metal is treated depending on the type of trade and between whom the trade is made.

At a European level, the tax treatment for investment gold is contained within EU law (2006/112/EC), which is closely aligned with the TMO. Therefore the regime applicable to gold in the UK or the EU remains unaffected by Brexit. The TMO will continue to apply to white metals transactions in the UK following Brexit. In the event of no deal it is important that Members look to EU taxation frameworks and their treatment of third country clients (which UK-registered Members will become) in order to ensure any VAT is being applied correctly in Europe.

In the absence of an agreement between the UK and EU, the UK will no longer have access to the Customs Union or Single Market. In consequence an emergency traffic system will have to be put in place in Dover in order to prevent congestion.

For gold, delays in physical trade and transit are not expected due to their intrinsic value as well as the fact it is transported by commercial airlines. However delays may affect the transit of white metals given the lower prioritization, and that it is transported via road or sea.

In terms of Customs and Tariffs in the proposed Political Declaration, the UK agrees to not create an improved tariff system.

If no deal is reached, the UK's exit from the Single Market will allow freedom to negotiate new deals and conditions for financial services. However in this scenario, the UK may not receive mutual recognition and passporting rights from Member States, which are critical to cross-border financial services.

A Temporary Permissions Regime (TPR) has been drafted to apply if the implementation period does not come into effect. Under the TPR, EEA firms may apply to the FCA to continue to provide financial services for three years from exit day. The EU has yet to indicate whether a reciprocal arrangement will be put in place for UK firms providing financial services into the EU.

In the absence of agreed passporting rights after exit day, UK firms wishing to OTC derivatives with EU counterparties will be subject to the regulations in the counterparty's Member State.

Global economies | Foreign exchange markets

Evidence Grows That Trump's Trade Wars Are Hitting U.S. Economy

President Donald Trump regularly declares that he's winning his trade wars, yet many analysts are pointing out that majority of the cost of the tariffs was being paid by U.S. consumers and companies. Chinese retaliatory tariffs alone were causing roughly $40 billion a year in lost U.S. exports.

President Donald Trump regularly declares that he's winning his trade wars. Yet evidence is growing that the U.S. economy loses on it.

In two separate recently published papers, some of the world's leading trade economists shared an opinion that the initial cost of Trump's duties to the U.S. economy was in the billions and being borne largely by American consumers.

Economists from the Federal Reserve Bank of New York, Princeton University and Columbia University found that tariffs imposed last year by Trump on products worth $250 billion in Chinese imports were costing U.S. companies and consumers $3 billion a month in additional tax costs and companies a further $1.4 billion in deadweight losses.

They also were causing the diversion of $165 billion a year in trade leading to significant costs for companies having to reorganize supply chains.

The analysis of import price data by Mary Amiti, Stephen Redding and David Weinstein also found that almost all of the cost of the tariffs was being paid by U.S. consumers and companies. That contradicts Trump's claim that China is paying the tariffs.

The trade war was only one factor affecting the U.S. economy, Weinstein said, and with the U.S. less exposed to trade than other major western economies such as Germany, it was not having as much of an impact as it might.

But the numbers were still consequential, he insisted. They also did not capture all of the costs to the U.S. economy.

The three economists are now working on quantifying the amount of investment that has been put on hold as a result of the heightened uncertainty caused by the trade wars, Weinstein said.

Four other economists including Pinelopi Goldberg, the World Bank's chief economist and a former editor-in-chief of the prestigious American Economic Review, put the annual losses from the higher cost of imports alone for the U.S. economy at $68.8 billion, or almost 0.4 percent of gross domestic product.

That was offset by the gains from protectionism derived by U.S. producers benefiting from the tariffs, the economists found. After accounting for the impact of higher tariff revenue and the benefits of higher prices to domestic producers the study found the aggregate annual loss for the U.S. economy fell to $6.4 billion, or 0.03 percent of GDP.

The study by Goldberg, Pablo Fajgelbaum of UCLA, Patrick Kennedy of the University of California, Berkeley, and Amit Khandelwal of Columbia also found that consumers and U.S. companies were paying most of the costs of the tariffs.

But it also went a step further: After factoring in the retaliation by other countries, the main victims of Trump's trade wars had been farmers in areas that supported Trump in the 2016 election. The reason is that retaliations targeted disproportionately agricultural sectors and the U.S. tariffs raised the costs of inputs used by these counties.

Economists at the Institute of International Finance recently calculated Chinese retaliatory tariffs alone were causing roughly $40 billion a year in lost U.S. exports.

Official trade data due to be released also are expected to show the U.S. trade deficit in goods with the world hitting a new record in 2018 because of the combination of a surge in imports to get ahead of the new tariffs last year and slowing exports.

A spokeswoman for Trump's Council of Economic Advisers declined to comment on the new papers and referred inquiries to the office of U.S. Trade Representative Robert Lighthizer.

In a speech to conservative activists Trump dismissed criticism of his tariffs and boasted that he was simply following what he argued was a glorious history of using import taxes in American history.

"I found some very old laws from when our country was rich - really rich - the old tariff laws. We had to dust them off. You could hardly see, they were so dusty," Trump told the Conservative Political Action Conference.

At a minimum, Trump said, tariffs were "the greatest negotiating tool in the history of our country," pointing to talks now underway with China which appear increasingly likely to result in a deal in the coming weeks.

Morgan Stanley takes top spot in ranking of commodities banks

Morgan Stanley brought in the most revenue from commodities of any of the major investment banks in 2018, data from analytics firm Coalition showed on Thursday.

The bank beat rival JPMorgan into second place and Citibank and Goldman Sachs into joint third in Coalition's ranking of the twelve largest global investment banks' commodities businesses.

The score caps a rapid rise for Morgan Stanley, which in the 2017 rankings tied for first place with JPMorgan and before that had not been inside the top three since 2014, when it placed third.

For Goldman, traditionally a major force in commodities, it is a partial return to form after it fell from the top three in 2017, after its commodities business suffered one its worst years on record.

Citi's ranking was unchanged from 2017.

Coalition did not give figures for each bank, but said in February overall revenues at the top twelve investment banks from commodity trading, selling derivatives and other activities in the sector were $3.6 billion (2.7 billion pounds) last year, up 45 percent from 2017.

That increase however follows a long period of declining revenues as banks exited or shrank their commodity businesses due to more stringent regulation and poor performance from the sector.

The twelve banks in Coalition's ranking also include Bank of America Merrill Lynch, Barclays, BNP Paribas, Credit Suisse, Deutsche Bank, HSBC, Societe Generale and UBS.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹		Previous	Consensus ²	
		China						
✪✪	14-Mar	Fixed assets investments (ytd, yoy)	Feb	6.1%	▲	5.9%	6.1%	○
		Poland						
✪✪✪✪	15-Mar	Consumer inflation CPI (yoy)‡	Feb	1.2%	▲	0.7%	1.2%	○
✪✪✪✪	18-Mar	Core CPI (excluding food and energy, yoy)	Feb	1.0%	▲	0.8%	1.0%	○
✪✪	18-Mar	Trade balance (EUR mn)	Jan	279	▲	-1 340	- 342	◓
✪✪	18-Mar	Exports (EUR mn)	Jan	18 493	▲	16 005	18 441	◓
✪✪	18-Mar	Current account balance (EUR mn)	Jan	2 316	▲	-1 400	1 588	◓
✪✪	19-Mar	Average gross salary (yoy)	Feb	7.6%	▲	7.5%	7.2%	◓
✪	19-Mar	Employment (yoy)	Feb	2.9%	▪	2.9%	2.9%	○
✪✪✪✪	20-Mar	Sold industrial production (yoy)‡	Feb	6.9%	▲	6.0%	4.8%	◓
✪✪	20-Mar	Producer inflation PPI (yoy)	Feb	2.9%	▲	2.2%	2.7%	◓
✪✪✪	21-Mar	Retail sales (yoy)	Feb	6.5%	▼	6.6%	6.9%	◒
✪	22-Mar	M3 money supply (yoy)	Feb	9.8%	▲	8.8%	9.0%	◓
		US						
✪✪	11-Mar	Retail sales (excluding autos, mom)‡	Jan	0.9%	▲	-2.1%	0.3%	◓
✪✪✪✪	12-Mar	Consumer inflation CPI (mom)	Feb	0.2%	▲	0.0%	0.2%	○
✪✪✪✪	12-Mar	Consumer inflation CPI (yoy)	Feb	1.5%	▼	1.6%	1.6%	◒
✪✪	13-Mar	Durable goods orders - preliminary data‡	Jan	0.4%	▼	1.3%	-0.4%	◓
✪✪✪✪	15-Mar	Industrial production (mom)‡	Feb	0.1%	▲	-0.4%	0.4%	◒
✪✪	15-Mar	University of Michigan confidence index - preliminary data	Mar	97.8	▲	93.8	95.6	◓
✪	15-Mar	Capacity utilization‡	Feb	78.2%	▼	78.3%	78.5%	◒
✪✪	19-Mar	Durable goods orders - final data	Jan	0.3%	▼	0.4%	0.4%	◒
✪✪✪✪✪	20-Mar	FOMC base rate decision - upper bound (Fed)	Mar	2.50%	▪	2.50%	2.50%	○
✪✪✪✪✪	20-Mar	FOMC base rate decision - lower bound (Fed)	Mar	2.25%	▪	2.25%	2.25%	○
✪✪	21-Mar	Philadelphia Fed business outlook	Mar	13.7	▲	- 4.1	4.8	◓
✪✪✪	22-Mar	Composite PMI - preliminary data	Mar	54.3	▼	55.5	--	
✪✪✪	22-Mar	Manufacturing PMI - preliminary data	Mar	52.5	▼	53.0	53.5	◒
✪✪✪	22-Mar	PMI services - preliminary data	Mar	54.8	▼	56.0	55.5	◒
		Eurozone						
✪✪✪✪	13-Mar	Industrial production (sa, mom)	Jan	1.4%	▲	-0.9%	1.0%	◓
✪✪✪✪	13-Mar	Industrial production (wda, yoy)	Jan	-1.1%	▲	-4.2%	-2.1%	◓
✪✪✪✪	15-Mar	Consumer inflation CPI (yoy) - final data‡	Feb	1.5%	▲	1.4%	1.5%	○
✪✪✪✪	15-Mar	Core CPI (yoy) - final data	Feb	1.0%	▪	1.0%	1.0%	○
✪	18-Mar	Trade balance (EUR mn)‡	Jan	1.5	▼	17.4	--	
✪✪	19-Mar	Labour costs (yoy)	4Q	2.3%	▼	2.5%	--	
✪	19-Mar	ZEW survey expectations	Mar	- 2.5	▲	- 16.6	--	
✪	21-Mar	Consumer confidence - estimation	Mar	- 7.2	▲	- 7.4	- 7.1	◒
✪✪✪	22-Mar	Composite PMI - preliminary data	Mar	51.3	▼	51.9	52.0	◒
✪✪✪	22-Mar	Manufacturing PMI - preliminary data	Mar	47.6	▼	49.3	49.5	◒
✪✪✪	22-Mar	Services PMI - preliminary data	Mar	52.7	▼	52.8	52.7	○
		Germany						
✪✪✪✪	11-Mar	Industrial production (wda, yoy)‡	Jan	-3.3%	▼	-2.7%	-3.3%	○
✪✪✪✪	14-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	1.7%	▪	1.7%	1.7%	○
✪✪✪✪	14-Mar	Consumer inflation CPI (yoy) - final data‡	Feb	1.5%	▪	1.5%	1.6%	◒

Weight	Date	Event	For	Reading [1]		Previous	Consensus [2]	
		France						
✪✪✪✪	14-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	1.6%	▲	1.5%	1.5%	◓
✪✪✪✪	14-Mar	Consumer inflation CPI (yoy) - final data	Feb	1.3%	▪	1.3%	1.3%	○
✪✪✪	22-Mar	Composite PMI - preliminary data	Mar	48.7	▼	50.4	50.7	◒
✪✪✪	22-Mar	Manufacturing PMI - preliminary data	Mar	49.8	▼	51.5	51.4	◒
		Italy						
✪✪✪✪	15-Mar	Harmonized consumer inflation HICP (yoy) - final data‡	Feb	1.1%	▪	1.1%	1.2%	◒
		UK						
✪✪✪✪	12-Mar	Industrial production (yoy)	Jan	-0.9%	▪	-0.9%	-1.3%	◓
✪✪	19-Mar	Unemployment rate (ILO, 3-months)	Jan	3.9%	▼	4.0%	4.0%	◒
✪✪✪✪	20-Mar	Consumer inflation CPI (yoy)	Feb	1.9%	▲	1.8%	1.8%	◓
✪✪✪✪✪	21-Mar	BoE base rate decision	Mar	0.75%	▪	0.75%	0.75%	○
✪✪✪✪	21-Mar	BoE asset purchase target (GBP bn)	Mar	435	▪	435	435	○
		Japan						
✪✪✪✪	18-Mar	Industrial production (yoy) - final data	Jan	0.3%	▲	0.0%	--	
✪✪✪✪	22-Mar	Consumer inflation CPI (yoy)	Feb	0.2%	▪	0.2%	0.3%	◒
✪✪✪	22-Mar	Manufacturing PMI - preliminary data	Mar	48.9	▪	48.9	--	
		Chile						
✪✪✪✪✪	18-Mar	GDP (yoy)‡	4Q	3.6%	▲	2.6%	3.3%	◓
		Canada						
✪✪✪✪	22-Mar	Consumer inflation CPI (yoy)	Feb	1.5%	▲	1.4%	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 Polska Miedź

Key market data

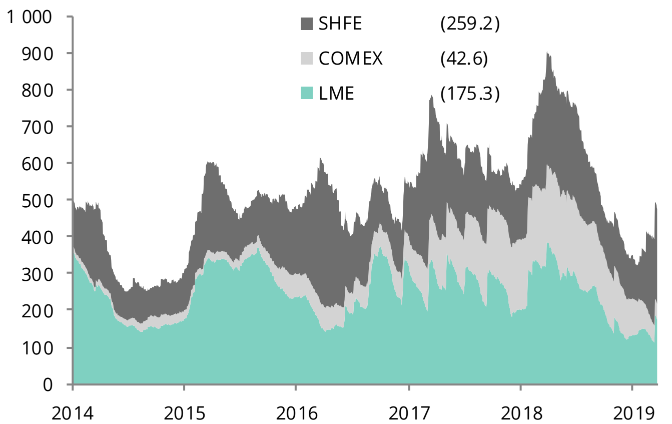
Key base & precious metal prices, exchange rates and other important market factors

(as of: 22-Mar-19)	Price	Price change[1] 2W	QTD	YTD	1Y	From year beginning[2] Average	Min	Max
LME (USD/t)								
Copper	6 375.00	▼ -0.9%	▲ 6.9%	▲ 6.9%	▼ -5.5%	6 200.73	5 811.00	6 572.00
Molybdenum		-	-	-	-			
Nickel	12 930.00	▼ -0.5%	▲ 22.0%	▲ 22.0%	▼ -3.2%	12 324.74	10 440.00	13 610.00
Aluminum	1 867.00	▲ 2.0%	▼ -0.1%	▼ -0.1%	▼ -9.3%	1 857.19	1 775.50	1 923.00
Tin	21 600.00	▲ 2.2%	▲ 10.8%	▲ 10.8%	▲ 2.6%	21 013.79	19 500.00	21 925.00
Zinc	2 865.00	▲ 3.3%	▲ 14.1%	▲ 14.1%	▼ -11.1%	2 683.03	2 462.00	2 901.50
Lead	2 020.00	▼ -2.9%	▲ 0.5%	▲ 0.5%	▼ -15.1%	2 038.96	1 934.50	2 154.00
LBMA (USD/troz)								
Silver	15.46	▲ 1.1%	▼ 0.0%	▼ 0.0%	▼ -6.4%	15.59	15.08	16.08
Gold[2]	1 311.30	▲ 1.4%	▲ 2.3%	▲ 2.3%	▼ -1.3%	1 303.49	1 279.55	1 343.75
LPPM (USD/troz)								
Platinum[2]	853.00	▲ 4.8%	▲ 7.4%	▲ 7.4%	▼ -10.2%	819.81	782.00	872.00
Palladium[2]	1 554.00	▲ 2.2%	▲ 23.0%	▲ 23.0%	▲ 57.9%	1 430.19	1 267.00	1 604.00
FX [3]								
EURUSD	1.1302	▲ 0.5%	▼ -1.3%	▼ -1.3%	▼ -8.2%	1.1366	1.1222	1.1535
EURPLN	4.2894	▼ -0.2%	▼ -0.2%	▼ -0.2%	▲ 1.5%	4.3037	4.2706	4.3402
USDPLN	3.7948	▼ -0.7%	▲ 0.9%	▲ 0.9%	▲ 10.8%	3.7862	3.7243	3.8516
USDCAD	1.3411	▼ 0.0%	▼ -1.7%	▼ -1.7%	▲ 3.9%	1.3285	1.3095	1.3600
USDCNY	6.7182	▼ -0.1%	▼ -2.3%	▼ -2.3%	▲ 6.0%	6.7507	6.6872	6.8721
USDCLP	665.12	▼ -0.9%	▼ -4.3%	▼ -4.3%	▲ 9.5%	666.26	649.22	697.64
Money market								
3m LIBOR USD	2.610	▲ 0.00	▼ -0.20	▼ -0.20	▲ 0.32	2.695	2.593	2.804
3m EURIBOR	-0.309	▼ 0.00	- 0.00	- 0.00	▲ 0.02	-0.308	-0.310	-0.306
3m WIBOR	1.720	- 0.00	- 0.00	- 0.00	▲ 0.02	1.720	1.720	1.720
5y USD interest rate swap	2.288	▼ -0.23	▼ -0.28	▼ -0.28	▼ -0.49	2.565	2.288	2.715
5y EUR interest rate swap	0.048	▼ -0.04	▼ -0.15	▼ -0.15	▼ -0.35	0.142	0.048	0.222
5y PLN interest rate swap	1.910	▼ -0.11	▼ -0.20	▼ -0.20	▼ -0.48	2.040	1.910	2.140
Fuel								
WTI Cushing	58.94	▲ 3.8%	▲ 29.8%	▲ 29.8%	▼ -8.2%	54.46	46.54	59.83
Brent	66.45	▲ 0.6%	▲ 25.0%	▲ 25.0%	▼ -2.9%	62.97	53.83	68.05
Diesel NY (ULSD)	196.84	▼ -1.3%	▲ 17.0%	▲ 17.0%	▼ -0.9%	192.91	170.01	203.26
Others								
VIX	16.48	▲ 2.15	▼ -8.94	▼ -8.94	▼ -6.86	16.61	12.88	25.45
BBG Commodity Index	81.75	▲ 1.9%	▲ 6.6%	▲ 6.6%	▼ -6.1%	80.59	76.99	82.38
S&P500	2 800.71	▲ 0.6%	▲ 11.7%	▲ 11.7%	▲ 5.9%	2 712.67	2 447.89	2 854.88
DAX	11 364.17	▼ -1.6%	▲ 7.6%	▲ 7.6%	▼ -6.1%	11 244.61	10 416.66	11 788.41
Shanghai Composite	3 104.15	▲ 2.5%	▲ 24.5%	▲ 24.5%	▼ -4.9%	2 770.61	2 464.36	3 106.42
WIG 20	2 319.10	▲ 0.8%	▲ 1.9%	▲ 1.9%	▲ 2.0%	2 346.61	2 247.22	2 414.41
KGHM	103.50	▲ 3.9%	▲ 16.4%	▲ 16.4%	▲ 12.6%	96.36	86.12	106.25

° 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].

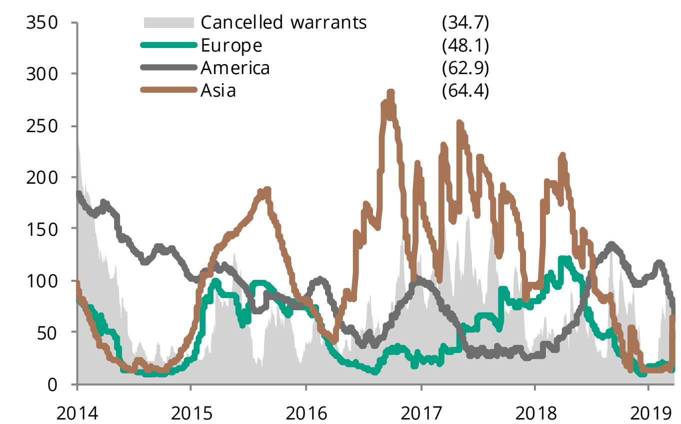
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



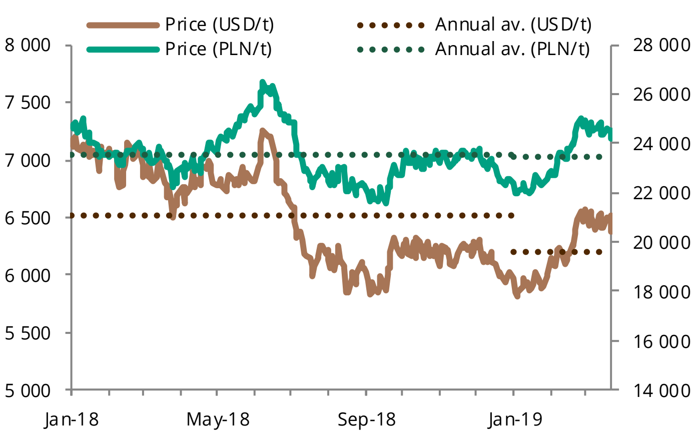
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



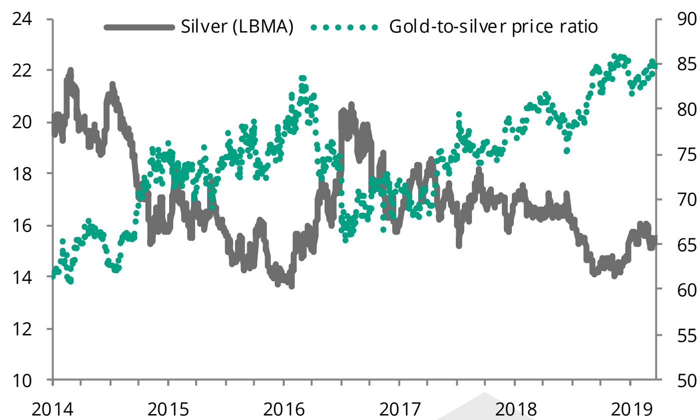
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



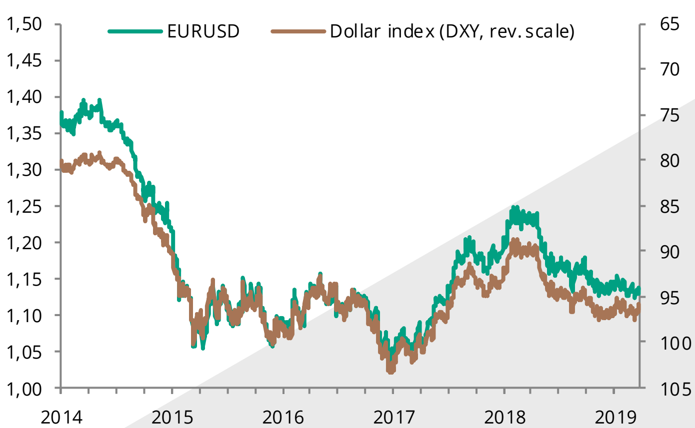
Source: Bloomberg, KGHM Polska Miedź

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



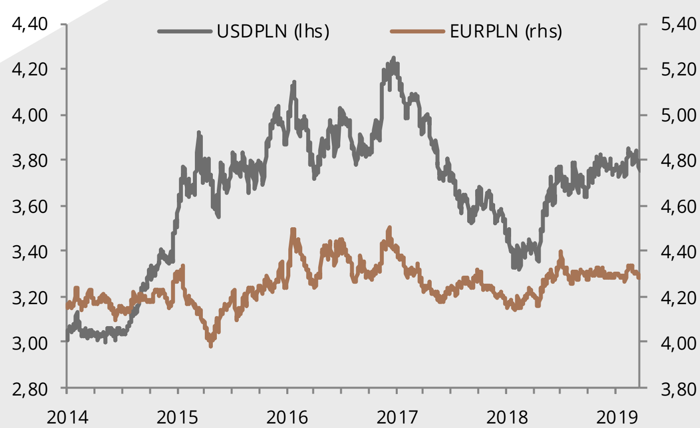
Source: Bloomberg, KGHM Polska Miedź

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 March 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

DISCLAIMER

In case of questions or comments please contact us:

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