

Market Overview

 as of: 7th May 2018





- Copper:** New environmental standards unveiled lately by the Indonesian government have been referred by CEO of Freeport-McMoRan as “shocking and disappointing”, and may become a threat to ongoing divestment talks between Freeport and the government. Early contract talks at Escondida mine ended without an agreement (*page 2*).
- Precious metals:** Gold prices slipped to their lowest level in nearly two weeks as the dollar remained supported on the back of rising U.S. Treasury yields, which hit highest level since Jan 2014. Meanwhile, Silver Institute has published well-recognized World Silver Survey which apart from summary of 2017, provided also the information about market ranks of the biggest silver producers (*page 4*).
- Commodities market:** Accelerating global growth and rising demand are important factors behind broad-based price increases for most commodities and the forecast of higher commodities prices ahead, according to World Bank April Commodities Market Outlook report (*page 5*).
- Europe:** Recovery of European economies may be in trouble, as indicated by the latest PMI readings. ECB chose to wait and see if the slowdown is temporary or fundamental (*page 8*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	6 783.00	-2.0%
▼ Nickel	13 835.00	-1.5%
LBMA (USD/troz)		
▼ Silver	16.42	-3.1%
▼ Gold (PM)	1 309.40	-1.1%
FX		
▼ EURUSD	1.1969	-0.4%
▲ EURPLN	4.2771	2.6%
▲ USDPLN	3.5754	3.3%
▲ USDCAD	1.2861	2.6%
▲ USDCPL	619.18	1.6%
Stocks		
▼ KGHM	92.70	-15.3%

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

Important macroeconomic data

Release	For	
 Official manuf. PMI	Apr	51.4 ▼
 Factory orders (wda, yoy)	Mar	3.1% ▲
 Unemployment rate	Apr	3.9% ▼
 Copper production (mt)	Mar	496 365 ▲
 Manufacturing PMI	Apr	53.9 ▲

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

Top10 silver producers; source with disclaimers:

<https://www.silverinstitute.org/wp-content/uploads/2018/04/WSS-2018.pdf>

Top 10 silver producing companies	Output (mt)	
	2017	2016
1. Fresnillo plc.	1687	1421
2. KGHM Polska Miedź SA Group	1244	1207
3. Glencore plc.	1174	1215
4. Goldcorp Inc.	890	874
5. Polymetal International plc.	834	908
6. Cia. De Minas Buenaventura S.A.A.	822	767
7. Pan American Silver Corp.	777	791
8. Hochschild Mining plc.	595	538
9. Volcan Cia. Minera S.A.A.	538	684
10. Hindustan Zinc Ltd.	526	436

Source: World Silver Survey 2018 – Silver Institute, KGHM Polska Miedź

Market Risk Unit

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Base and precious metals | Other commodities

Copper

New environmental standards unveiled lately by the Indonesian government have been referred by CEO of Freeport-McMoRan as “shocking and disappointing”, and may become a threat to ongoing divestment talks between Freeport and the government. Early contract talks at Escondida mine ended without an agreement.

Freeport plunges after Indonesia toughens environmental rules

According to Freeport-McMoRan CEO it's physically impossible to mine in consistency with these decrees

Freeport-McMoRan Inc. says it would be impossible to keep mining Grasberg, its flagship copper-and-gold asset in Indonesia, if it were to adopt new environmental standards unveiled by the state this month. Within the last two weeks, the Phoenix-based miner was blindsided by “shocking and disappointing” environmental claims from the Ministry of the Environment and Forestry, Chief Executive Officer Richard Adkerson told analysts during the company’s first-quarter earnings call Tuesday. “Nobody could mine this ore body in consistency with these decrees. You just physically can’t do it.”

Located in Indonesia’s Papua province, the high altitude mine is surrounded by rain forest; Grasberg means “grass mountain” in Dutch. For 20 years, the world’s largest publicly traded copper producer has been dumping Grasberg’s tailings into a river, where they make their way downstream to be stored in a “cordoned off area.” This tailings arrangement was struck in the 1990s, after “transparent” discussions between Freeport, its joint venture partner and the government, Adkerson said on the call. “It was always controversial,” but the system has been working ever since with “no unexpected environmental consequences,” he said. The Grasberg mine produces 10,000 tonnes of tailings per hour, half of which is disposed of in rivers, according to the Department.

Freeport shares accelerated their decline during the conference call, and finished the day down 15 percent at \$16.08 in New York. It was the largest drop since January 2016 and made the company the worst performer on the S&P 500 index. The market interpreted the news as a threat to ongoing divestment talks between Freeport and the government, speculating it could prolong those negotiations even further, Jeremy Sussman, an analyst at Clarksons Platou Securities, said Tuesday in an email. The fact that the company lowered production guidance for 2018 and 2019, and raised its cost guidance for this year, are also negatives, he said.

Indonesia is insisting Freeport sell some of its local unit, PT-FI, to domestic buyers as part of a deal to allow Freeport to keep operating in the country. Negotiations have dragged on for more than a year, complicated by production rights held by Rio Tinto Group which, if sold, could reduce the amount Freeport has to divest in order to bring local ownership to 51 percent.

ministry is calling for 90 percent of tailings to be stored on land

While the talks grind on, PT-FI has been operating under temporary mining licenses; the current one expires June 30. PT-FI's latest export license expires in February 2019, the company said Tuesday. A key aspect of the new environmental standards appears to be how much of Grasberg's tailings ultimately end up being recovered from the river. Historically, half of the mine's tailings must be stored on land, but the ministry is now calling for that to be 90 percent, a level Adkerson said is simply not achievable. "It cannot be done with 6 months, 24 months, 5 years. This is so far out of bounds it cannot be done." The company has been given six months to discuss the issues with the environmental ministry," Eric Kinneberg, a Freeport spokesman, said by email. "I would not characterize it as a deadline." Freeport has already reached out to Indonesian officials to work through the issue, Adkerson said. While an "academic" cost has been attributed to environmental damage in the area where tailings are stored, there is no specific claim or fine against Freeport, he and Chief Financial Officer Kathleen Quirk told analysts.

"They say that area was degraded by environmental impact. Of course it was. I mean, we had over two-and-a-half billion tons of ore to process, take the concentrate out, and deposit those tailings somewhere -- and that's where we did it," Adkerson said. He stressed that the tailings are chemically benign, that drinking water in the area meets local standards, and that there is a "thriving" mud crab industry in the area.

Adkerson also said the new standards appear to be politically motivated and don't affect the company's view of the asset's value, as there is "no possibility" they will disrupt operations. "You simply can't say 20 years later we're going to change the whole structure of what we're doing," he said. "You can't put the genie back in the bottle."

Other important information on copper market:

- Chile's Escondida, the world's largest copper mine, said on Thursday that early contract talks with its workers' union ended without an agreement, setting the stage for legally scheduled negotiations to begin in June. The union representing workers at the mine, which is controlled by BHP told Reuters this week that it was "highly probable" that an agreement for a new contract would not be reached in the preliminary talks. The union accepted an offer to begin early negotiations with the Anglo-Australian miner in March in an effort to avoid another strike at the northern Chile mine. After a work stoppage of 44 days at the beginning of last year, the workers decided to extend the previous contract for 18 months, until July 31. The official deadline to start contract discussions begins in June.
- The global world refined copper market showed a 33,000 tonnes surplus in January, compared with a 14,000 tonnes surplus in December, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first month of the year, the market was in a 33,000 tonnes surplus compared with a 37,000 tonnes surplus in the same period a year earlier, the

ICSG said. World refined copper output in January was 2.05 million tonnes , while consumption was 2.02 million tonnes. Bonded stocks of copper in China showed a 28,000 tonnes surplus in January compared with a 11,000 tonnes deficit in December.

- Glencore's own-sourced copper production in the first quarter rose 6.6% year on year to 345,400 mt, reflecting the commissioning of phase 1 of the whole ore leach project at its Katanga mining joint venture in the Democratic Republic of Congo in December 2017. Compared with Q4 2017, output fell 4.9%, according to the company's production report released Thursday. Katanga's Q1 copper output was 27,700 mt after Glencore restarted the operation after the completion of a two-year maintenance and upgrade program. It accounted for almost 30% of the 92,900 mt of copper produced in Q1 from Glencore's African operations (including Mutanda in the DRC and Mopani in Zambia). The increase at Katanga, however, was offset by smelter maintenance at Mount Isa in Queensland, Australia, and the expected decline in output from Argentina's Alumbra which is approaching its end of mine life, Glencore said. The company is keeping its 2018 production target unchanged at 1.465 million mt (plus or minus 30,000 mt).

Precious Metals

Gold prices slipped to their lowest level in nearly two weeks as the dollar remained supported on the back of rising U.S. Treasury yields, which hit highest level since Jan 2014. Meanwhile, Silver Institute has published well-recognized World Silver Survey which apart from summary of 2017, provided also the information about market ranks of the biggest silver producers.

LBMA's March Gold daily trade volumes fall 1.5% m/m

The amount of gold and silver transferred between accounts of London Bullion Market Association members fell during March. The LBMA releases clearing statistics each month showing the net volume of gold and silver transferred between accounts of members, essentially providing a snapshot of the amount of trading activity. The volume of gold ounces transferred daily in March fell by 1.5% from February to 18.7 million ounces, although this was 3.4% higher year-on-year, the LBMA said. With the average price of gold in March falling by 0.5%, the value of ounces transferred daily fell 2% to \$24.8 billion, although this was 12% higher than the corresponding period last year, the LBMA said. The number of transfers was 2,704 daily, broadly in line with February, with the clearers settling on average 6,921 ounces per transfer. Meanwhile, the volume of silver ounces transferred daily in March fell by 14.8% month-on-month to 198.8 million ounces but was down just 0.2% year-on-year.

The value of the silver transferred daily was 15.9% lower in March than the prior month at \$3.27 billion. The number of transfers in March was 834, which was

Gold turnover has fell by 1.5% month-on-month in March

12.5% lower than the previous month, with the clearers settling on average 238,275 ounces per transfer. The LBMA reported that the average gold/silver price ratio in March was 80.4, the highest monthly average for two years. The LBMA also reported that the total amount of physical gold and silver held in the London vaults as of the end of January was 7,828 tons and 34,482 tons. This was valued at \$338.5 billion and \$19.1 billion, respectively.

Another year of physical deficit on the market, with supply of metal falling second year in a row

World Silver Survey 2018

Industrial demand for silver, fueled by record photovoltaic growth, rose in 2017 for the first time since 2013. A stronger global economy led to healthy demand from the semiconductor market, resulting in greater silver offtake in electrical and electronics applications as well as brazing alloys and solders. The jewelry and silverware sectors also experienced noteworthy gains in 2017, according to the World Silver Survey 2018 released by the Silver Institute and produced on its behalf by the GFMS Team at Thomson Reuters (GFMS).

On the supply side, global mine supply fell for the second consecutive year, following an uninterrupted streak of 13 annual increases prior to 2016. Silver scrap supply, which has been in retreat since 2012, again registered a loss. These factors led to a tightening of the supply/demand balance, contributing to a physical deficit of 26 million ounces (Moz.) in 2017, the fifth consecutive annual deficit.

Global silver industrial fabrication demand returned to growth in 2017, increasing 4% to 599.0 Moz. This growth was bolstered by another year of photovoltaic demand, rising 19% in 2017, the result of a 24% increase in global solar panel installations. Brazing alloy and solder silver fabrication recorded a 4% annual rise to 57.5 Moz, boosted mainly by solid growth from China and Japan.

The surge in electronics, most notably in semiconductor fabrication demand, led to the electrical and electronics segments delivering the first annual increase in offtake in this category since 2010, with 242.9 Moz consumed last year. Silver demand for the production of ethylene oxide dropped by a third from 2016 volumes to 6.9 Moz, mostly due to a decline in new installations. GFMS estimates that silver's use in photography, which fell by 3% last year, appears to have stabilized, with renewed interest in various photographic applications utilizing silver, only falling marginally over the last few years.

Commodities markets

Accelerating global growth and rising demand are important factors behind broad-based price increases for most commodities and the forecast of higher commodities prices ahead, according to World Bank April Commodities Market Outlook report.

World Bank April Commodities Market Outlook

Oil prices are expected to average higher in 2018 according to World Bank

Oil prices are forecast to average USD 65 a barrel over 2018, up from an average of USD 53 a barrel in 2017, on strong demand from consumers and restraint by oil producers, while metals prices are expected to rise 9% this year, also on a pickup in demand and supply constraints, the World Bank said in its April Commodities Market Outlook report. Prices for energy commodities – which include oil, natural gas, and coal -- are forecast to jump 20% in 2018, a 16% point upward revision from October's outlook, the report says. The metals index is expected to rise as a 9% drop in iron ore prices is offset by increases in all base metals prices, led by nickel, which is forecast to rise 30%. Agricultural commodities, including food commodities and raw materials, are anticipated to see a price rise of over 2% this year on diminished planting prospects. Weather disruptions are expected to be minimal.

“Accelerating global growth and rising demand are important factors behind broad-based price increases for most commodities and the forecast of higher commodities prices ahead,” said Shantayanan Devarajan, World Bank Senior Director for Development Economics and acting Chief Economist. “At the same time, policy actions currently under discussion add uncertainty to the outlook.”

Oil prices are expected to average USD 65/bbl over 2019 as well. Although prices are projected to decline from April 2018 levels, they should be supported by continued production restraint by OPEC and non-OPEC producers and strong demand. Upside risks to the forecast include constraints to U.S. shale oil output, geopolitical risks in several producing countries, and concerns the United States may not waive sanctions against Iran. Downside risks include weaker compliance with the oil producers' agreement to restrain output or outright termination of the accord, rising output from Libya and Nigeria, and a quicker-than-expected rise in shale oil output.

“Oil prices have more than doubled since bottoming in early 2016, as the large overhang of inventories has been reduced significantly.” said John Baffes, Senior Economist and lead author of the Commodity Markets Outlook. “Strong oil demand and greater compliance by the OPEC and non-OPEC producers with their agreed output pledges helped tip the market into deficit.”

Upside risks to the metals' price forecast include more robust global demand than expected. Supply could be held back by slow incorporation of new capacity, trade sanctions against metals exporters, and policy actions in China. Downside risks include slower-than-expected growth in major emerging markets, the restart of idle capacity, and an easing of pollution-related policies in China. Precious metals are expected to climb 3% this year in anticipation of US interest rate increases and higher inflation expectations.

Grains and oils and meal prices are expected to rise in 2018, mostly due to lower planting intentions. The mild La Nina cycle that extended into the early part of the year only affected banana production in Central America and soybean production in Argentina and did not impact global markets for those crops substantially. The possible introduction by China of countervailing duties in response to U.S. tariff increases could impact the soybean market.

A special focus section examines the changed landscape for oil-exporting economies after the 2014 oil price collapse. The oil price plunge eroded oil-related revenues, forcing abrupt cuts in government spending that accentuated the slowdown in private sector activity in many regions. Income inequality and political instability also weakened the ability of some oil-exporting economies to weather low oil prices.

“Oil exporters with flexible currency regimes, relatively large fiscal buffers, and more diversified economies have fared better than others since the oil price collapse,” said Ayhan Kose, director of World Bank’s Development Economics Prospects Group. “However, most oil exporters still face significant fiscal challenges in the face of revenue prospects that have weakened since 2014.”

Global economies | Foreign exchange markets

Europe

Recovery of European economies may be in trouble, as indicated by the latest PMI readings. ECB chose to wait and see if the slowdown is temporary or fundamental.

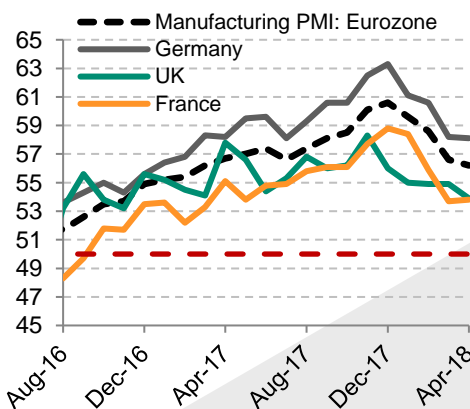
Eurozone slows down, is it temporary?

It has come as an unpleasant surprise, then, that a scattering of data including manufacturing output and business confidence indicators suggests the recovery may be faltering. The euro-area economy looks set for further weakness in May after private-sector activity slowed for a third month in April. A composite purchasing managers' index came in at 55.1, below the flash estimate of 55.2 and the lowest since January 2017. The drag was due to services, where the gauge dropped more than initially estimated to 54.7. Readings above 50 signal expansion. Among the region's biggest economies, composite measures for Germany, Italy and Spain declined, while France recorded an increase. IHS Markit, which compiled the PMI, said euro-region growth remains "solid," but noted that two forward-looking indicators - backlogs of work and business expectations - had declined. "Any further deterioration could herald new concerns among policy makers regarding the economic outlook," said Chris Williamson, chief business economist at IHS Markit.

ECB does not change the approach to stimulus programs, at least for now.

The numbers are the latest in a spate of disappointing reports that prompted the European Central Bank to hold off from discussing the end of its stimulus programs. Policy makers, who met last week, want time to judge whether the trend is temporary or marks a fundamental downturn in demand. While officials have acknowledged the recent data, they've stuck to their view that growth isn't under serious threat. European Central Bank chief Mario Draghi struck a cautious note about the eurozone's growth outlook, saying the region's economy had hit a soft patch, while warning about the threat posed to investment confidence by

PMI's in Europe









Source: Bloomberg, KGHM Polska Miedź SA

global trade tensions. Economic indicators suggest some moderation in the pace of growth since the start of the year. This moderation may in part reflect a fall back from the high pace of growth observed at the end of last year, while temporary factors may also be at work. Draghi said a range of one-off factors including cold weather, labour strikes and the timing of the Easter holiday period had contributed to weakness seen in a number of readouts across the Eurozone in recent weeks. Overall, growth is expected to remain solid and broad-based and inflation should average 1.5 per cent this year. "The main takeaway is that nothing has changed in the ECB's policy stance and they remain on course to taper later in the year," said Marchel Alexandrovich, European financial economist at Jefferies.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
🔊🔊	27-Apr	Industrial profits (yoy)	Mar	3.1% ▼	10.8%	--
🔊🔊🔊	30-Apr	Official manufacturing PMI	Apr	51.4 ▼	51.5	51.3 ▲
🔊🔊🔊	02-May	Caixin's manufacturing PMI	Apr	51.1 ▲	51.0	50.9 ▲
🔊	07-May	Foreign reserves (USD bn)	Apr	3 125 ▼	3 143	3 131 ▼
🔊🔊	08-May	Trade balance (USD bn)	Apr	28.8 ▲	- 5.0	27.8 ▲
🔊🔊	08-May	Exports (yoy)	Apr	12.9% ▲	-2.7%	8.0% ▲
🔊🔊🔊🔊	10-May	Consumer inflation CPI (yoy)	Apr	1.8% ▼	2.1%	1.9% ▼
🔊🔊	10-May	Producer inflation PPI (yoy)	Apr	3.4% ▲	3.1%	3.4% 🟡
🔊	11-May	New yuan loans (CNY bn)	Apr	1 180 ▲	1 120	1 100 ▲
Poland 						
🔊🔊🔊	23-Apr	Retail sales (yoy)	Mar	9.2% ▲	7.9%	8.0% ▲
🔊	24-Apr	M3 money supply (yoy)	Mar	5.8% ▲	4.9%	5.3% ▲
🔊🔊	25-Apr	Unemployment rate	Mar	6.6% ▼	6.8%	6.5% ▲
🔊🔊🔊🔊	02-May	Consumer inflation CPI (yoy) - preliminary data	Apr	1.6% ▲	1.3%	1.5% ▲
🔊🔊🔊	02-May	Manufacturing PMI	Apr	53.9 ▲	53.7	53.2 ▲
US 						
🔊🔊🔊	23-Apr	Composite PMI - preliminary data	Apr	--	54.2	--
🔊🔊🔊	23-Apr	Manufacturing PMI - preliminary data	Apr	--	55.6	55.2
🔊🔊🔊	23-Apr	PMI services - preliminary data	Apr	--	54.0	54.1
🔊	24-Apr	Richmond Fed manufacturing index	Apr	- 3.0 ▼	15.0	16.0 ▼
🔊	24-Apr	S&P/CaseShiller home price index‡	Feb	207 ▲	205	--
🔊🔊	26-Apr	Durable goods orders - preliminary data‡	Mar	2.6% ▼	3.5%	1.6% ▲
🔊🔊🔊🔊🔊	27-Apr	GDP (annualized, qoq) - estimation	1Q	2.3% ▼	2.9%	2.0% ▲
🔊🔊	27-Apr	University of Michigan confidence index - final data	Apr	98.8 ▲	97.8	98.0 ▲
🔊🔊🔊🔊	30-Apr	Consumer spending inflation PCE (mom)	Mar	0.2% -	0.2%	0.2% 🟡
🔊🔊🔊🔊	30-Apr	Consumer spending inflation PCE (yoy)	Mar	1.9% ▲	1.6%	1.9% 🟡
🔊🔊	30-Apr	Personal income (sa, mom)‡	Mar	0.3% -	0.3%	0.4% ▼
🔊🔊	30-Apr	Personal spending (sa, mom)‡	Mar	0.4% ▲	0.0%	0.4% 🟡
🔊	30-Apr	Dallas Fed manufacturing activity‡	Apr	21.8 ▼	22.8	23.0 ▼
🔊🔊🔊	01-May	Manufacturing PMI - final data	Apr	56.5 -	56.5	56.5 🟡
🔊🔊	01-May	ISM Manufacturing	Apr	57.3 ▼	59.3	58.5 ▼
🔊🔊🔊🔊🔊	02-May	FOMC base rate decision - upper bound (Fed)	May	1.75% -	1.75%	1.75% 🟡
🔊🔊🔊🔊🔊	02-May	FOMC base rate decision - lower bound (Fed)	May	1.50% -	1.50%	1.50% 🟡
🔊🔊🔊	03-May	Composite PMI - final data	Apr	54.9 ▲	54.8	--
🔊🔊🔊	03-May	PMI services - final data	Apr	54.6 ▲	54.4	54.5 ▲
🔊🔊	03-May	Durable goods orders - final data	Mar	2.6% -	2.6%	--
🔊🔊	04-May	Change in non-farm payrolls (ths)‡	Apr	164 ▲	135	193 ▼
🔊🔊	04-May	Underemployment rate (U6)	Apr	7.8% ▼	8.0%	--
🔊🔊	04-May	Unemployment rate	Apr	3.9% ▼	4.1%	4.0% ▼
🔊	04-May	Average hourly earnings (yoy)‡	Apr	2.6% -	2.6%	2.7% ▼
🔊🔊🔊🔊	10-May	Consumer inflation CPI (mom)	Apr	0.2% ▲	-0.1%	0.3% ▼
🔊🔊🔊🔊	10-May	Consumer inflation CPI (yoy)	Apr	2.5% ▲	2.4%	2.5% 🟡
🔊🔊	11-May	University of Michigan confidence index - preliminary data	May	--	98.8	98.3

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
Eurozone 						
☆☆☆	23-Apr	Composite PMI - preliminary data	Apr	--	55.2	54.8
☆☆☆	23-Apr	Manufacturing PMI - preliminary data	Apr	--	56.6	56.1
☆☆☆	23-Apr	Services PMI - preliminary data	Apr	--	54.9	54.6
☆☆☆☆☆	26-Apr	ECB main refinancing rate	Apr	0.00% -	0.00%	0.00% ○
☆☆☆☆☆	26-Apr	ECB deposit facility rate	Apr	-0.4% -	-0.4%	-0.4% ○
☆☆	27-Apr	Economic confidence‡	Apr	113 -	113	112 ▲
☆☆	27-Apr	Industrial confidence‡	Apr	7.1 ▲	7.0	5.8 ▲
☆☆	27-Apr	Consumer confidence - final data	Apr	0.4 -	0.4	0.4 ○
☆☆	27-Apr	Business climate indicator‡	Apr	1.4 ▼	1.4	1.3 ▲
☆☆	30-Apr	M3 money supply (yoy)	Mar	3.7% ▼	4.2%	4.1% ▼
☆☆☆☆☆	02-May	GDP (sa, yoy) - estimation‡	1Q	2.5% ▼	2.8%	2.5% ○
☆☆☆☆☆	02-May	GDP (sa, qoq) - estimation‡	1Q	0.4% ▼	0.7%	0.4% ○
☆☆☆	02-May	Manufacturing PMI - final data	Apr	56.2 ▲	56.0	56.0 ▲
☆☆	02-May	Unemployment rate	Mar	8.5% -	8.5%	8.5% ○
☆☆☆☆	03-May	Core CPI (yoy) - estimation	Apr	0.7% ▼	1.0%	0.9% ▼
☆☆☆☆	03-May	CPI estimate (yoy)	Apr	1.2% ▼	1.3%	1.3% ▼
☆☆	03-May	Producer inflation PPI (yoy)	Mar	2.1% ▲	1.6%	2.1% ○
☆☆☆	04-May	Composite PMI - final data	Apr	55.1 ▼	55.2	55.2 ▼
☆☆☆	04-May	Services PMI - final data	Apr	54.7 ▼	55.0	55.0 ▼
☆☆	04-May	Retail sales (yoy)	Mar	0.8% ▼	1.8%	1.9% ▼
Germany 						
☆☆☆	23-Apr	Composite PMI - preliminary data	Apr	--	55.1	54.8
☆☆☆	23-Apr	Manufacturing PMI - preliminary data	Apr	--	58.2	57.5
☆☆	24-Apr	IFO business climate‡	Apr	102 ▼	103	103 ▼
☆☆	26-Apr	GfK consumer confidence	May	10.8 ▼	10.9	10.8 ○
☆☆	27-Apr	Unemployment rate	Apr	5.3% -	5.3%	5.3% ○
☆☆☆☆	30-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	1.4% ▼	1.5%	1.5% ▼
☆☆☆☆	30-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	1.6% -	1.6%	1.5% ▲
☆☆☆	30-Apr	Retail sales (yoy)	Mar	1.3% -	1.3%	1.2% ▲
☆☆☆	02-May	Manufacturing PMI - final data	Apr	58.1 -	58.1	58.1 ○
☆☆☆	04-May	Composite PMI - final data	Apr	54.6 ▼	55.3	55.3 ▼
☆☆☆	07-May	Factory orders (wda, yoy)‡	Mar	3.1% ▲	3.0%	5.0% ▼
☆☆☆☆	08-May	Industrial production (wda, yoy)‡	Mar	3.2% ▲	2.2%	3.0% ▲
France 						
☆☆☆	23-Apr	Composite PMI - preliminary data	Apr	--	56.3	55.9

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

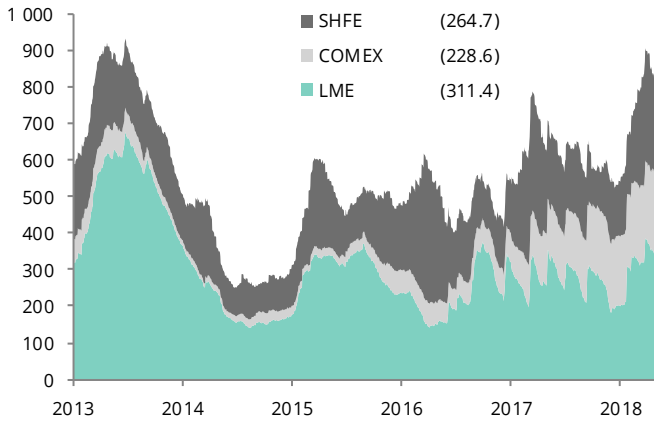
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 04-May-18)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 783.00	▼ -2.0%	▲ 1.5%	▼ -5.2%	▲ 22.4%	6 924.91	6 500.00	7 202.50	
Molybdenum	26 000.00	- 0.0%	- 0.0%	▲ 62.5%	▲ 70.5%	20 028.74	16 000.00	26 000.00	
Nickel	13 835.00	▼ -1.5%	▲ 4.5%	▲ 12.8%	▲ 53.6%	13 452.99	12 415.00	15 710.00	
Aluminum	2 316.00	▼ -5.5%	▲ 16.0%	▲ 3.3%	▲ 21.3%	2 185.57	1 967.00	2 602.50	
Tin	21 375.00	▼ -2.2%	▲ 1.2%	▲ 7.5%	▲ 6.9%	21 232.59	19 960.00	22 105.00	
Zinc	2 968.00	▼ -7.7%	▼ -10.9%	▼ -10.3%	▲ 15.5%	3 350.63	2 968.00	3 618.00	
Lead	2 274.00	▼ -3.2%	▼ -5.7%	▼ -8.9%	▲ 4.5%	2 474.54	2 274.00	2 683.00	
LBMA (USD/troz)									
Silver	16.42	▼ -3.1%	▲ 0.8%	▼ -2.7%	▼ -0.5%	16.72	16.25	17.52	
Gold ²	1 309.40	▼ -1.1%	▼ -1.1%	▲ 1.0%	▲ 6.6%	1 329.60	1 304.20	1 354.95	
LPPM (USD/troz)									
Platinum ²	901.00	▼ -2.1%	▼ -3.7%	▼ -2.8%	▲ 0.4%	961.78	897.00	1 020.00	
Palladium ²	963.00	▼ -1.8%	▼ -0.7%	▼ -8.8%	▲ 21.0%	1 017.54	909.00	1 129.00	
FX³									
EURUSD	1.1969	▼ -2.2%	▼ -2.9%	▼ -0.2%	▲ 9.5%	1.2278	1.1932	1.2493	
EURPLN	4.2771	▲ 2.3%	▲ 1.6%	▲ 2.5%	▲ 1.4%	4.1859	4.1423	4.2771	
USDPLN	3.5754	▲ 4.7%	▲ 4.7%	▲ 2.7%	▼ -7.4%	3.4083	3.3173	3.5754	
USDCAD	1.2861	▲ 0.2%	▼ -0.3%	▲ 2.5%	▼ -6.4%	1.2677	1.2288	1.3088	
USDCNY	6.3627	▲ 0.7%	▲ 1.4%	▼ -2.2%	▼ -7.7%	6.3452	6.2690	6.5297	
USDCLP	619.18	▲ 3.8%	▲ 2.6%	▲ 0.6%	▼ -7.4%	602.30	588.28	619.18	
Money market									
3m LIBOR USD	2.369	▲ 0.01	▲ 0.06	▲ 0.67	▲ 1.19	2.043	1.696	2.369	
3m EURIBOR	-0.328	- 0.00	- 0.00	▲ 0.00	▲ 0.00	-0.328	-0.329	-0.327	
3m WIBOR	1.700	- 0.00	- 0.00	▼ -0.02	▼ -0.03	1.712	1.700	1.720	
5y USD interest rate swap	2.914	▼ -0.01	▲ 0.21	▲ 0.67	▲ 0.93	2.689	2.283	2.958	
5y EUR interest rate swap	0.366	▼ -0.06	▼ 0.00	▲ 0.05	▲ 0.14	0.413	0.292	0.509	
5y PLN interest rate swap	2.423	▲ 0.03	▲ 0.05	▼ -0.08	▼ -0.03	2.481	2.280	2.740	
Fuel									
WTI Cushing	69.72	▲ 1.6%	▲ 7.4%	▲ 15.4%	▲ 53.2%	63.98	59.19	69.72	
Brent	74.90	▲ 0.4%	▲ 8.3%	▲ 12.1%	▲ 56.8%	68.42	62.33	74.90	
Diesel NY (ULSD)	216.90	▲ 0.8%	▲ 7.5%	▲ 5.1%	▲ 53.6%	201.12	183.32	217.24	
Others									
VIX	14.77	▼ -1.57	▼ -5.20	▲ 3.73	▲ 4.31	17.49	9.15	37.32	
BBG Commodity Index	89.99	▲ 0.9%	▲ 2.9%	▲ 2.1%	▲ 9.5%	88.41	85.64	90.80	
S&P500	2 663.42	▼ -0.3%	▲ 0.9%	▼ -0.4%	▲ 11.5%	2 709.91	2 581.00	2 872.87	
DAX	12 819.60	▲ 2.0%	▲ 6.0%	▼ -0.8%	▲ 1.4%	12 595.01	11 787.26	13 559.60	
Shanghai Composite	3 091.03	▲ 0.8%	▼ -2.5%	▼ -6.5%	▼ -1.2%	3 280.75	3 066.80	3 559.47	
WIG 20	2 233.35	▼ -2.5%	▲ 1.0%	▼ -9.3%	▼ -6.2%	2 391.18	2 200.99	2 630.37	
KGHM	92.70	▲ 1.3%	▲ 6.8%	▼ -16.6%	▼ -21.9%	102.37	84.20	115.00	

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

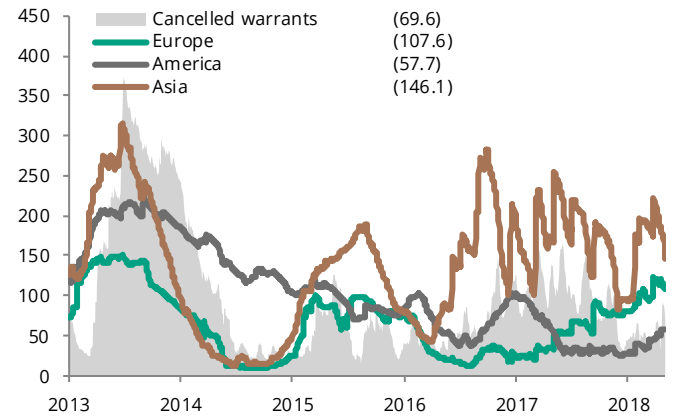
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



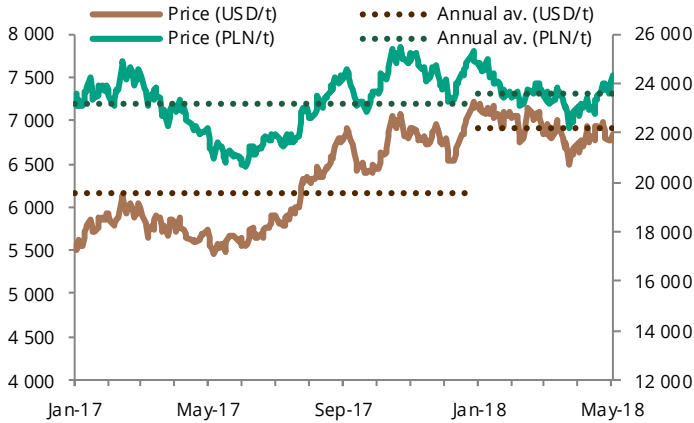
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



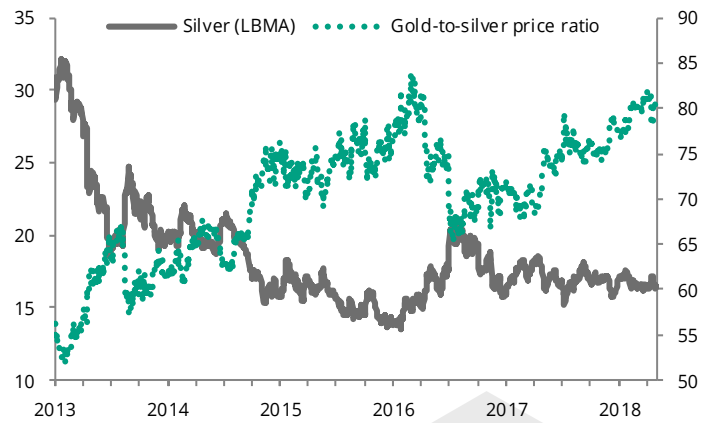
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



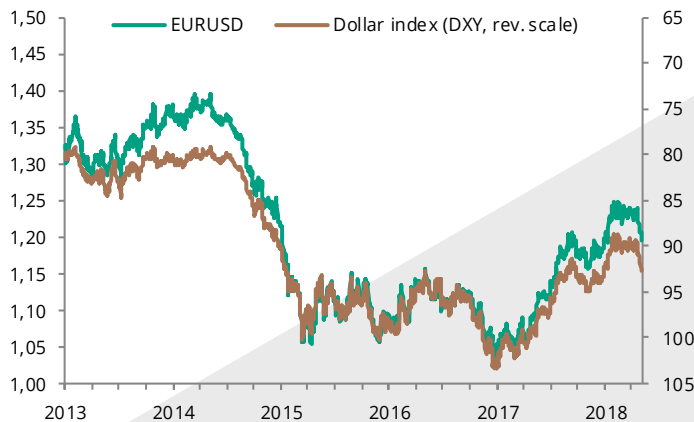
Source: Bloomberg, KGHM Polska Miedź

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



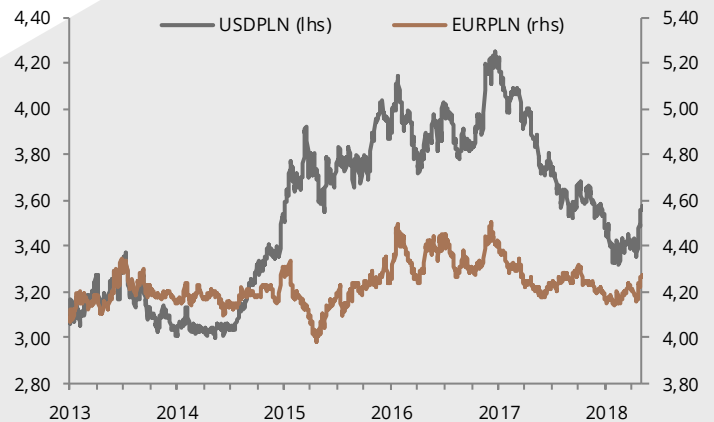
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:
23rd April – 7th May 2018.

- 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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