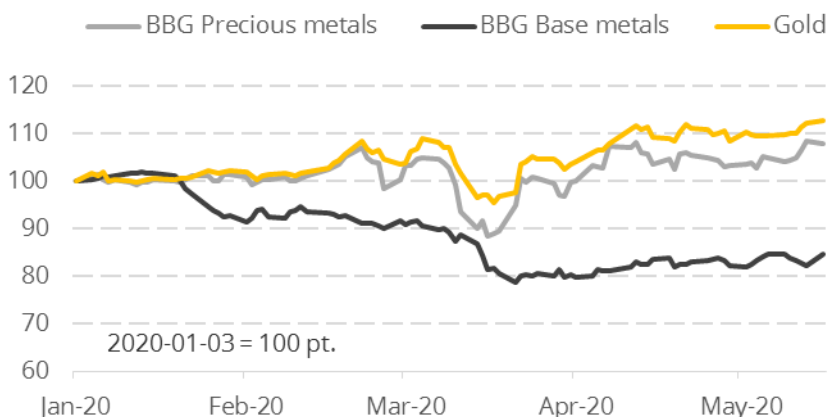


# Market Overview

- **Copper:** Chinese producers have increasingly opted to consume primary aluminum instead of aluminum scrap due to the tight supply of scrap and a sustained slump in primary aluminum prices. Similar situation is observed on the copper market (*page 2*).
- **Precious metals:** The global gold production, which recorded its first decline in more than a decade in 2019, is expected to report another year of lowered production in 2020. The gold production is expected to return to positive growth in 2021, said S&P Global research report (*page 4*).
- **Logistics:** The destruction of railway near Tanzania's city of Dar es Salaam, rendering the railroad impassable. The disruption chokes mineral shipments through the sole rail export route for landlocked Zambia and Congo, two nations that account for nearly Africa's entire copper and cobalt output ***Błąd! Nie zdefiniowano zakładek.***
- **China:** China leaders will not set a new growth target for gross domestic product (GDP) as country faces economy slowdown due to coronavirus outbreak. Government reduces its targets for new urban jobs and increases forecasts for a 2020 budget deficit to boost stimulus to bolster the economy (*page 6*).
- **Europe:** Chancellor Angela Merkel and President Emmanuel Macron have tabled a joint plan that includes, among other items, a shared 500 billion-euro (\$543 billion) "recovery fund" for the EU. Essentially, this clears the way for fiscal transfers from financially secure countries to those less fortunate (*page 7*).

## Gold shines both among precious and base metals



Source: Bloomberg, KGHM Polska Miedź S.A.

as of: 25<sup>th</sup> May 2020

## Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▲ Copper	5 242.50	0.2%
▼ Nickel	12 124.00	-0.5%
<b>LBMA (USD/troz)</b>		
▲ Silver	17.00	10.1%
▲ Gold (PM)	1 733.55	1.8%
<b>FX</b>		
▲ EURUSD	1.0904	0.7%
▼ EURPLN	4.5234	-0.7%
▼ USDPLN	4.1503	-1.5%
▲ USDCAD	1.4015	0.0%
▼ USDCLP	806.17	-2.6%
<b>Stocks</b>		
▲ KGHM	79.92	6.1%

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

## Important macroeconomic data

Release	For	
 Retail sales (mom)	Apr	-17.2% ▼
 Industrial prod. (yoy)	Apr	3.9% ▲
 Industrial prod. (yoy)	Apr	-24.6% ▼
 Trade balance	Mar	- 69.0 ▼
 Retail sales (yoy)	Apr	-7.5% ▲

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

## Market Risk Unit

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## Base and precious metals | Other commodities

### Copper

**Chinese producers have increasingly opted to consume primary aluminum instead of aluminum scrap due to the tight supply of scrap and a sustained slump in primary aluminum prices. Similar situation is observed on the copper market.**

#### China Issues Seventh Batch Of Aluminum/Copper Scrap Import Quotas For 2020

China has issued import allowances for 1,480 mt of aluminum scrap and 10,423 mt of copper scrap in its seventh batch of quotas for 2020, up 385% and 44% higher respectively from its sixth batch issued in April, the China Solid Waste and Chemicals Management Bureau said lately. The seven batches of aluminum scrap and copper scrap import quotas issued to date in 2020 total 478,159 mt and 540,184 mt respectively. Chinese producers have increasingly opted to consume primary aluminum instead of aluminum scrap due to the tight supply of aluminum scrap and a sustained slump in primary aluminum prices, and consume refined copper instead copper scrap for the same tight supply/lower price reasons. However, a recent rebound in domestic primary aluminum and copper cathode prices was expected to reverse the trend within weeks. The tightness in metals scrap supply was expected to ease as major scrap exporters to China gradually relax coronavirus lockdown restrictions on economic activity and as China's domestic supply continues to increase, market sources said. China imported 198,876 mt of aluminum scrap and 209,773 mt of copper scrap over January-March, down 39.8% and 37.1% respectively from a year earlier, S&P Global Platts calculations showed based on General Administration of Customs data showed. The country's State Administration for Market Regulation released new scrap metal standards in mid-January, which come into effect from July, that have prompted market speculation scrap metal that meets the new standards will be classified as a resource rather than waste. Some market sources argue this would mean that import licenses would no longer needed to source material meeting the new standards, although no official

#### China Copper Inventories Drop By Most Since September 2019

Copper inventories in warehouses tracked by the Shanghai Futures Exchange (ShFE) dropped at the fastest rate in nearly eight months. Copper inventories in ShFE warehouses for the week ending May 22 fell to 175,825 tonnes, down 15.8% from a week earlier and the biggest decline since Sept. 27. Aluminium stocks in ShFE warehouses extended their downward trend, falling 8.6% from a week earlier to 322,060 tonnes, amid solid demand in China, the world's biggest user and producer of the light metal. Lead was the only metal with rising stocks in ShFE warehouses this week, up 2.6% to 7,401 tonnes. Inventories of the metal in

April hit their lowest since October 2018. Nickel stockpiles fell 2.5% to 26,799 tonnes, tin stocks declined 4.1% to 3,368 tonnes while zinc inventories fell 4.1% to 111,289 tonnes. Steel stockpiles held by traders in China dropped for the tenth straight week, down 5.5% from a week earlier to 16.2 million tonnes, data compiled by Mysteel consultancy showed.

### Other important information on copper market:

- Canadian miner Hudbay Minerals Inc expects a delay of up to four months before it can start mining an extension at its Constancia copper mine in Peru, the miner's chief executive said. Hudbay said in February it expected to start mining the Pampacancha satellite deposit in late 2020, but restrictions imposed to fight coronavirus have limited the government's ability to consult with a local indigenous community, said Peter Kukielski, Hudbay's president and CEO. "It is a process that requires intensive human contact and so we think that there certainly will be a little bit of a lag" he told Reuters. The company expects to spend \$70 million at Pampacancha this year, with mining commencing in early 2021, he added. Hudbay was among numerous miners in Peru to shutter operations after the government declared a state of emergency. Hudbay temporarily closed its flagship Constancia operation but the mine resumed full capacity in a week ending May 22. Constancia produced 113,825 tonnes of copper in 2019.
- The open-outcry floor at the London Metal Exchange (LME) may remain closed for several more months because reopening is impossible under COVID-19 social distancing restrictions. LME Chief Executive Matthew Chamberlain said "It is certainly a possibility that if social distancing is required for many more months, then the ring is closed for many more months," he added
- Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec consequat lorem a nibh scelerisque blandit. Global copper smelting recovered in April due to renewed activity in China and has been even stronger so far in May, an index based on satellite surveillance of copper plants showed. Smelting activity in China, has been rebounding as COVID-19 lockdowns are lifted. Earth-i, which specialises in geospatial data, tracks 100 smelters accounting for between 80% and 90% of global production. The global index rose to an average of 87.2 in April, up 0.6 point from the previous month. The index represents the percentage of the world's smelters that are active. Overall activity was weakest at the start of April as smelters in many regions used the Easter period for maintenance. The index generally sees the annual lows in April but the unique circumstances resulting from COVID-19 have meant that April was instead the first signs of recovery. "Indications from the product data in May are that the pick-up in activity has accelerated, particularly in China."
- Copper concentrate treatment and refining charges (TC/RCS) on the spot market were now at their lowest level for the past eight months. Fastmarkets' copper concentrates TC index, cif Asia Pacific, dropped to \$49.60 per

tonne/4.96 cents per lb on Friday May 15. This was the first time the index has dipped below \$50 per tonne/5 cents per lb since September last year.

## Precious Metals

**The global gold production, which recorded its first decline in more than a decade in 2019, is expected to report another year of lowered production in 2020. The gold production is expected to return to positive growth in 2021, said S&P Global research report.**

### Gold Exploration Spending to Shrink by \$800 Million

The latest report published by S&P Global Market Intelligence predicts that 2020 will turn out to be the worst year in nearly 15 years for global exploration spending. This is despite rallying gold price, which are currently at all-time peaks. The industry wide outlays for exploration are expected to witness 29% year-on-year decline from \$9.3 billion in 2019 to \$6.6 billion in 2020. The total money spent on drilling gold is likely to decline by almost \$800 million during the current year. The gold exploration activities by junior miners will continue to remain under pressure during the rest of the year, said Chris Galbraith, mining and metals analyst, S&P Global. The junior mining companies raised \$781 million in Q1 2020, significantly down by almost 50% from \$1.54 billion in Q4 last year. The global gold production, which recorded its first decline in more than a decade in 2019, is expected to report another year of lowered production in 2020. This is mainly due to prolonged mine shutdowns on account of lockdowns imposed by various countries across the world to arrest the spread of Covid-19 pandemic. The production from Latin America and South Africa are likely to be impacted the most. The gold production is expected to return to positive growth in 2021, said S&P Global research report.

### Production drop of nearly 1M gold ounces by top miners in Q1

Senior gold miners listed on the NYSE gold production dropped a cumulative of 974,000 ounces in Q1 compared to production totals in Q4 2019. In a study of the top gold miners listed on the NYSE, nine out of ten miners recorded production drops in Q1. (AngloGold Ashanti did not release a Q4 total for 2019. Instead, the Q4 total was averaged from the company's six-month total. The other exception was Kinross Gold, which released production in gold equivalent ounces.) Cumulative fourth quarter production in 2019 for the largest gold miners listed on the NYSE was 6.834 million ounces. In Q1 of 2020, production dropped 15% to 5.859 million ounces. Miners were affected by governments enforcing closures on mines around the world, such as Mexico, South Africa and the province of Quebec in Canada. COVID-19 wasn't the only reason for the fall off. Production was also affected by seasonal changes, modified mine plans and variability in operations. The sole miner that recorded an uptick, Kirkland Lake Gold, was an unusual case. It added production due to summing production from its newly-acquired Detour Gold. Its operations in Australia were also largely

unaffected by COVID-19 work restrictions. Production numbers could be worse in Q2, said Wheaton Precious Metals' CEO, Randy Smallwood. "In terms of financial impact and impact on cash flows, Q2 is going to capture the bulk of it," he said. "The suspensions that we've had all started in late March, early April." Sibanye-Stillwater concurred. "I think quite obvious what the impact on quarter two is. So South Africa went into a COVID-19 lockdown in the last week in March. Um, the initial lockdown was for three weeks, and it was a total lockdown," said CEO Neal Fonenman.

## Logistics

### Tanzania-Zambia Railway Suspends Operations to Fix Damaged Section

**The destruction of railway near Tanzania's city of Dar es Salaam, rendering the railroad impassable. The disruption chokes mineral shipments through the sole rail export route for landlocked Zambia and Congo, two nations that account for nearly Africa's entire copper and cobalt output.**

Zambia and Tanzania's jointly-owned railway company, Tazara, has suspended all train services—including the transportation of mineral cargo—to fix a section of the line damaged by landslides, a company spokesman said Friday. A landslide caused by heavy rains destroyed some 35 meters of the track, around 32 kilometers from Tanzania's main port city of Dar es Salaam, rendering the railroad impassable. The disruption chokes mineral shipments through the sole rail export route for landlocked Zambia and Congo, two nations that account for nearly Africa's entire copper and cobalt output. "The authority continues to make round-the-clock efforts to repair the defect and anticipates to restore operations within the next two weeks," Conrad Simuchile, Tazara's spokesman, said. It's another setback for the region's mining industry, already beset by disruptions caused by border closures and lockdowns as countries seek to halt the spreading coronavirus. The Copperbelt region in Zambia and Congo holds around 10% of the world's copper deposits, according to the U.S. Geological Survey. Congo is also the world's largest source of cobalt, a metal that is increasingly in demand driven by a boom in electric-vehicle manufacturing. Zambia and Congo produce more than 2 million metric tons of copper every year.

## Global economies | Foreign exchange markets

### China Drops GDP Goal As Parliament Opens, Virus Slams Economy

**China leaders will not set a new growth target for gross domestic product (GDP) as country faces economy slowdown due to coronavirus outbreak. Government reduces its targets for new urban jobs and increases forecasts for a 2020 budget deficit to boost stimulus to bolster the economy.**

China for the first time since the government began publishing such goals in 1990 has dropped its annual growth target for gross domestic product (GDP). The economy shrank 6.8% in the first quarter, the first contraction in decades, hit by the outbreak of the new coronavirus. "We have not set a specific target for economic growth for the year, mainly because the global epidemic situation and economic and trade situation are very uncertain, and China's development is facing some unpredictable factors," Li said at the start of parliament. Domestic consumption, investment and exports are falling, and the pressure on employment is rising significantly, while financial risks are mounting, he warned. China has set a target to create over 9 million urban jobs this year, according to Li's report, down from a goal of at least 11 million in 2019 and the lowest since 2013. Ahead of the National People's Congress, China's top leaders have promised to boost stimulus to bolster the economy. Beijing is also planning security legislation for Hong Kong, which Li said will provide a "sound" legal system and enforcement mechanisms but which critics say could curb autonomy in the city. The move drew warnings from the United States, falls on Asian stock markets and calls among Hong Kong activists for protests in the former British colony. China is targeting a 2020 budget deficit of at least 3.6% of GDP, above last year's 2.8%, and fixed the quota on local-government special bond issuance at 3.75 trillion yuan (\$527 billion), up from 2.15 trillion yuan, according to Li. The government will issue 1 trillion yuan in special treasury bonds this year, the first such issuance. It will transfer 2 trillion yuan raised from the bigger 2020 budget deficit and special anti-coronavirus treasury bonds to local governments, Li said. Local government bonds could be used to fund infrastructure projects, while special treasury bonds could be used to support firms and regions hit by the outbreak. But Nie Wen, economist at Shanghai-based Hwabao Trust, said Li's report indicates China will "not resort to mass stimulus that some market players have been betting on." Nie expects GDP growth to slow sharply this year to around 2% or 3% from last year's 6.1. Monetary policy will be more flexible, Li said, adding that growth in M2 - a broad gauge of money supply - and total social financing will be significantly higher this year. The People's Bank of China (PBOC) will guide its benchmark lending rate lower, he said. The central bank has cut the Loan Prime Rate (LPR) by 46 basis points since August 2019, when it replaced the previous benchmark lending rate. The one-year LPR rate is now 3.85%. The PBOC has cut reserve requirement ratios 10 times since early 2018, including three cuts this year. Small and midsize companies can delay paying loans and interest by a

further nine months, through March 2021, and lending to SMEs by big commercial banks should grow more than 40%, Li said. The tax and fee burden shouldered by companies will be cut by 2.5 trillion yuan this year, Li said.

### **Merkel and Macron Make a Stunning Proposal**





**Chancellor Angela Merkel and President Emmanuel Macron have tabled a joint plan that includes, among other items, a shared 500 billion-euro (\$543 billion) “recovery fund” for the EU. Essentially, this clears the way for fiscal transfers from financially secure countries to those less fortunate.**

Germany and France have suddenly decided they want to lead the way out of the economic crisis. Chancellor Angela Merkel and President Emmanuel Macron have tabled a joint plan that includes, among other items, a shared 500 billion-euro (\$543 billion) “recovery fund” for the EU. Berlin and Paris are front-running the European Commission, which is meant to present its own proposal for the fund. The two leaders are sending a clear signal to the more hawkish euro area members — such as the Netherlands and Austria — that the worst-affected nations need more than financial wizardry to get through this emergency. The Franco-German proposal would see the Commission raising the money on the financial markets and then distributing it in the form of grants. This would be a remarkable change for the EU, whose response so far has been that each country should take on more debt individually. In Merkel’s and Macron’s plan, each member of the bloc will contribute depending on its share of the EU budget, which in turn hinges on the relative size of national incomes. But the Commission would disburse the money as it saw fit. Essentially, this clears the way for fiscal transfers from financially secure countries to those less fortunate.





The European Stability Mechanism, the euro zone’s rescue fund, has offered loans in the past to countries in crisis in exchange for a package of austerity and structural reforms. The pandemic has pushed Europe’s leaders to vastly improve the ESM’s lending terms and to let it offer money for the strengthening of national health systems without the usual conditions. However, these are still loans, meaning they’ll have to be paid back eventually. The shift by the Germans from their usually conservative position is all the more noteworthy, and the financial markets certainly see it that way. Italy would be a clear beneficiary of the fund. Its 10-year bond yields dropped by nearly 20 basis points on the news, to 1.67%. The inevitable negotiations may reduce the size and scope of these transfers, or demand stricter conditions from recipients. However, if the EU does accept this plan without watering it down too much, the proposal would have significant long-term implications. The “recovery fund” is being presented as an extraordinary, one-off facility. However, it could be the seed for a larger EU budget, based not just on individual contributions from member states but also on new EU-wide taxes. If that happened, the euro zone would move somewhat closer to a “fiscal union,” which is needed to put it on a more solid footing.

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
⊛	11-May	New yuan loans (CNY bn)‡	Apr	1 700 ▼	2 853	1 300 ▲
⊛⊛⊛⊛	12-May	Consumer inflation CPI (yoy)	Apr	3.3% ▼	4.3%	3.7% ◡
⊛⊛	12-May	Producer inflation PPI (yoy)	Apr	-3.1% ▼	-1.5%	-2.5% ◡
⊛⊛⊛⊛	15-May	Industrial production (yoy)	Apr	3.9% ▲	-1.1%	1.5% ▲
⊛⊛	15-May	Fixed assets investments (ytd, yoy)	Apr	-10.3% ▲	-16.1%	-10.0% ◡
⊛	15-May	Retail sales (yoy)	Apr	-7.5% ▲	-15.8%	-6.0% ◡
<b>Poland</b> 						
⊛⊛	14-May	Trade balance (EUR mn)‡	Mar	- 69.0 ▼	842	642 ◡
⊛⊛	14-May	Exports (EUR mn)‡	Mar	18 763 ▼	19 789	18 915 ◡
⊛⊛	14-May	Current account balance (EUR mn)‡	Mar	2 438 ▲	878	580 ▲
⊛⊛⊛⊛⊛	15-May	GDP (yoy) - preliminary data	1Q	1.9% ▼	3.2%	1.7% ▲
⊛⊛⊛⊛⊛	15-May	GDP (qoq) - preliminary data‡	1Q	-0.5% ▼	0.2%	-1.2% ▲
⊛⊛⊛⊛	15-May	Consumer inflation CPI (yoy) - final data	Apr	3.4% -	3.4%	--
⊛⊛⊛⊛	18-May	Core CPI (excluding food and energy, yoy)	Apr	3.6% -	3.6%	3.5% ▲
⊛⊛	20-May	Average gross salary (yoy)	Apr	1.9% ▼	6.3%	4.5% ◡
⊛	20-May	Employment (yoy)	Apr	-2.1% ▼	0.3%	-0.5% ◡
⊛⊛⊛⊛	21-May	Sold industrial production (yoy)	Apr	-24.6% ▼	-2.3%	-12.4% ◡
⊛⊛	21-May	Producer inflation PPI (yoy)‡	Apr	-1.3% ▼	-0.3%	-1.4% ▲
⊛⊛⊛	22-May	Retail sales (yoy)‡	Apr	-22.6% ▼	-7.0%	-19.0% ◡
<b>US</b> 						
⊛⊛⊛⊛	12-May	Consumer inflation CPI (mom)	Apr	-0.8% ▼	-0.4%	-0.8% ○
⊛⊛⊛⊛	12-May	Consumer inflation CPI (yoy)	Apr	0.3% ▼	1.5%	0.4% ◡
⊛⊛⊛⊛	15-May	Industrial production (mom)‡	Apr	-11.2% ▼	-4.5%	-12.0% ▲
⊛⊛	15-May	Retail sales (excluding autos, mom)‡	Apr	-17.2% ▼	-4.0%	-8.5% ◡
⊛⊛	15-May	University of Michigan confidence index - preliminary data	May	73.7 ▲	71.8	68.0 ▲
⊛	15-May	Capacity utilization‡	Apr	64.9% ▼	73.2%	63.8% ▲
⊛⊛⊛	21-May	Composite PMI - preliminary data	May	36.4 ▲	27.0	--
⊛⊛⊛	21-May	Manufacturing PMI - preliminary data	May	39.8 ▲	36.1	40.0 ◡
⊛⊛⊛	21-May	PMI services - preliminary data	May	36.9 ▲	26.7	32.5 ▲
⊛⊛	21-May	Philadelphia Fed business outlook	May	-43.1 ▲	-56.6	-40.0 ◡
<b>Eurozone</b> 						
⊛⊛⊛⊛	13-May	Industrial production (sa, mom)	Mar	-11.3% ▼	-0.1%	-12.5% ▲
⊛⊛⊛⊛	13-May	Industrial production (wda, yoy)‡	Mar	-12.9% ▼	-2.2%	-13.6% ▲
⊛⊛⊛⊛⊛	15-May	GDP (sa, yoy) - preliminary data‡	1Q	-3.2% -	-3.2%	-3.3% ▲
⊛⊛⊛⊛⊛	15-May	GDP (sa, qoq) - preliminary data	1Q	-3.8% -	-3.8%	-3.8% ○
⊛	15-May	Trade balance (EUR mn)	Mar	28.2 ▲	23.0	--
⊛	19-May	ZEW survey expectations	May	46.0 ▲	25.2	--
⊛⊛⊛⊛	20-May	Consumer inflation CPI (yoy) - final data	Apr	0.3% ▼	0.4%	0.4% ◡
⊛⊛⊛⊛	20-May	Core CPI (yoy) - final data	Apr	0.9% -	0.9%	0.9% ○
⊛	20-May	Consumer confidence - estimation‡	May	- 18.8 ▲	- 22.0	- 23.8 ▲
⊛⊛⊛	21-May	Composite PMI - preliminary data	May	30.5 ▲	13.6	27.0 ▲
⊛⊛⊛	21-May	Manufacturing PMI - preliminary data	May	39.5 ▲	33.4	38.0 ▲
⊛⊛⊛	21-May	Services PMI - preliminary data	May	28.7 ▲	12.0	25.0 ▲



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Germany</b> 							
⊙⊙⊙⊙	14-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	0.8% -	0.8%	0.8%	⊙
⊙⊙⊙⊙	14-May	Consumer inflation CPI (yoy) - final data	Apr	0.9% ▲	0.8%	0.8%	▲
⊙⊙⊙⊙⊙	15-May	GDP (yoy) - preliminary data‡	1Q	-1.9% ▼	0.2%	-1.6%	▼
⊙⊙⊙⊙⊙	15-May	GDP (sa, qoq) - preliminary data‡	1Q	-2.2% ▼	-0.1%	-2.2%	⊙
⊙⊙⊙	21-May	Composite PMI - preliminary data	May	31.4 ▲	17.4	33.1	▼
⊙⊙⊙	21-May	Manufacturing PMI - preliminary data	May	36.8 ▲	34.5	39.4	▼
<b>France</b> 							
⊙⊙⊙⊙	15-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	0.4% ▼	0.5%	0.5%	▼
⊙⊙⊙⊙	15-May	Consumer inflation CPI (yoy) - final data	Apr	0.3% ▼	0.4%	0.4%	▼
⊙⊙⊙	21-May	Composite PMI - preliminary data	May	30.5 ▲	11.1	32.4	▼
⊙⊙⊙	21-May	Manufacturing PMI - preliminary data	May	40.3 ▲	31.5	36.0	▲
<b>Italy</b> 							
⊙⊙⊙⊙	11-May	Industrial production (wda, yoy)‡	Mar	-29.3% ▼	-2.3%	-18.3%	▼
⊙⊙⊙⊙	15-May	Harmonized consumer inflation HICP (yoy) - final data	Apr	0.1% -	0.1%	0.1%	⊙
<b>UK</b> 							
⊙⊙⊙⊙⊙	13-May	GDP (yoy) - preliminary data	1Q	-1.6% ▼	1.1%	-2.2%	▲
⊙⊙⊙⊙⊙	13-May	GDP (qoq) - preliminary data	1Q	-2.0% ▼	0.0%	-2.6%	▲
⊙⊙⊙⊙	13-May	Industrial production (yoy)‡	Mar	-8.2% ▼	-3.4%	-9.1%	▲
⊙⊙	19-May	Unemployment rate (ILO, 3-months)	Mar	3.9% ▼	4.0%	4.3%	▼
⊙⊙⊙⊙	20-May	Consumer inflation CPI (yoy)	Apr	0.8% ▼	1.5%	0.9%	▼
⊙⊙⊙	21-May	Manufacturing PMI (sa) - preliminary data	May	40.6 ▲	32.6	37.2	▲
⊙⊙⊙	21-May	Composite PMI - preliminary data	May	28.9 ▲	13.8	25.7	▲
<b>Japan</b> 							
⊙⊙⊙⊙⊙	18-May	GDP (annualized, qoq) - preliminary data‡	1Q	-3.4% ▲	-7.3%	-4.5%	▲
⊙⊙⊙⊙⊙	18-May	GDP (qoq, sa) - preliminary data‡	1Q	-0.9% ▲	-1.9%	-1.1%	▲
⊙⊙⊙⊙	19-May	Industrial production (yoy) - final data	Mar	-5.2% -	-5.2%	--	
⊙⊙⊙	21-May	Composite PMI - preliminary data	May	27.4 ▲	25.8	--	
⊙⊙⊙	21-May	Manufacturing PMI - preliminary data	May	38.4 ▼	41.9	--	
⊙⊙⊙⊙	22-May	Consumer inflation CPI (yoy)	Apr	0.1% ▼	0.4%	0.2%	▼
<b>Chile</b> 							
⊙⊙⊙⊙⊙	18-May	GDP (yoy)	1Q	0.4% ▲	-2.1%	-0.1%	▲
<b>Canada</b> 							
⊙⊙⊙⊙	20-May	Consumer inflation CPI (yoy)	Apr	-0.2% ▼	0.9%	-0.1%	▼

<sup>1</sup> Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; = = equal to previous.

<sup>2</sup> 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

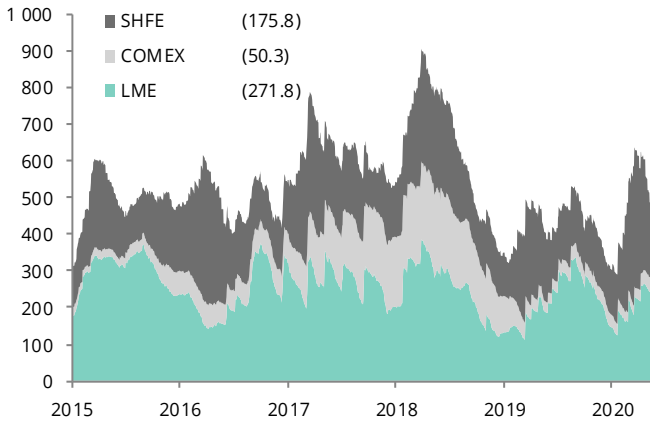
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 22-May-20)</i>		Price change <sup>1</sup>					From year beginning <sup>2</sup>		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t; Mo in USD/lbs)</b>									
Copper	5 242.50	▲ 0.2%	▲ 9.3%	▼ -14.8%	▼ -10.5%	5 453.42	4 617.50	6 300.50	
Molybdenum	8.77	▼ -3.1%	▲ 4.0%	▼ -4.7%	-	9.27	7.90	10.90	
Nickel	12 124.00	▼ -0.5%	▲ 7.9%	▼ -13.4%	▲ 2.1%	12 436.56	11 055.00	14 290.00	
Aluminum	1 473.00	▲ 1.3%	▼ -1.1%	▼ -18.2%	▼ -15.3%	1 606.20	1 421.50	1 810.50	
Tin	15 495.00	▲ 0.6%	▲ 7.6%	▼ -8.0%	▼ -21.4%	15 888.11	13 400.00	17 775.00	
Zinc	1 963.00	▼ -1.8%	▲ 5.1%	▼ -14.4%	▼ -26.4%	2 056.32	1 773.50	2 466.50	
Lead	1 603.50	▼ -1.6%	▼ -6.3%	▼ -16.6%	▼ -10.0%	1 772.03	1 576.50	2 027.00	
<b>LBMA (USD/troz)</b>									
Silver	17.00	▲ 10.1%	▲ 22.0%	▼ -5.8%	▲ 17.4%	16.38	12.01	18.78	
Gold <sup>2</sup>	1 733.55	▲ 1.8%	▲ 7.7%	▲ 13.8%	▲ 35.0%	1 623.32	1 474.25	1 748.30	
<b>LPPM (USD/troz)</b>									
Platinum <sup>2</sup>	835.00	▲ 10.3%	▲ 14.9%	▼ -14.0%	▲ 4.6%	853.61	593.00	1 017.00	
Palladium <sup>2</sup>	1 915.00	▲ 4.6%	▼ -17.0%	▼ -0.3%	▲ 46.1%	2 182.52	1 557.00	2 781.00	
<b>FX<sup>3</sup></b>									
EURUSD	1.0904	▲ 0.7%	▼ -0.5%	▼ -2.9%	▼ -2.1%	1.0969	1.0707	1.1456	
EURPLN	4.5234	▼ -0.7%	▼ -0.6%	▲ 6.2%	▲ 4.9%	4.4063	4.2279	4.6044	
USDPLN	4.1503	▼ -1.5%	▲ 0.1%	▲ 9.3%	▲ 7.3%	4.0192	3.7861	4.2654	
USDCAD	1.4015	▲ 0.0%	▼ -1.2%	▲ 7.9%	▲ 4.0%	1.3664	1.2970	1.4496	
USDCNY	7.1294	▲ 0.4%	▲ 0.7%	▲ 2.4%	▲ 3.2%	7.0191	6.8598	7.1294	
USDCLP	806.17	▼ -2.6%	▼ -4.7%	▲ 8.3%	▲ 15.7%	817.47	748.74	867.83	
<b>Money market</b>									
3m LIBOR USD	0.369	▼ -0.06	▼ -1.08	▼ -1.54	▼ -2.15	1.272	0.358	1.900	
3m EURIBOR	-0.279	▼ -0.02	▲ 0.08	▲ 0.10	▲ 0.03	-0.354	-0.489	-0.161	
3m WIBOR	0.680	-	▼ -0.49	▼ -1.03	▼ -1.04	1.309	0.680	1.710	
5y USD interest rate swap	0.373	▲ 0.01	▼ -0.15	▼ -1.36	▼ -1.75	0.912	0.333	1.693	
5y EUR interest rate swap	-0.286	▲ 0.00	▼ -0.05	▼ -0.18	▼ -0.23	-0.257	-0.453	-0.090	
5y PLN interest rate swap	0.735	▲ 0.09	▼ -0.13	▼ -1.05	▼ -1.27	1.226	0.515	2.050	
<b>Fuel</b>									
WTI Cushing	33.55	▲ 39.0%	▲ 63.8%	▼ -45.1%	▼ -41.9%	36.43	-37.63	63.27	
Brent	34.52	▲ 24.3%	▲ 60.8%	▼ -48.0%	▼ -49.0%	41.29	17.32	69.02	
Diesel NY (ULSD)	95.70	▲ 16.2%	▼ -7.3%	▼ -52.8%	▼ -51.2%	128.76	60.67	206.01	
<b>Others</b>									
VIX	28.16	▲ 0.59	▼ -25.38	▲ 14.38	▲ 11.24	33.46	12.10	82.69	
BBG Commodity Index	62.74	▲ 1.5%	▲ 1.4%	▼ -22.4%	▼ -19.5%	68.77	59.48	81.64	
S&P500	2 955.45	▲ 0.9%	▲ 14.3%	▼ -8.5%	▲ 4.7%	2 967.23	2 237.40	3 386.15	
DAX	11 073.87	▲ 2.3%	▲ 11.5%	▼ -16.4%	▼ -7.4%	11 625.85	8 441.71	13 789.00	
Shanghai Composite	2 813.77	▼ -2.8%	▲ 2.3%	▼ -7.7%	▼ -1.4%	2 902.81	2 660.17	3 115.57	
WIG 20	1 630.44	▲ 2.7%	▲ 7.8%	▼ -24.2%	▼ -25.0%	1 797.41	1 305.73	2 200.10	
KGHM	79.92	▲ 6.1%	▲ 33.6%	▼ -16.4%	▼ -13.2%	78.92	49.40	101.00	

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

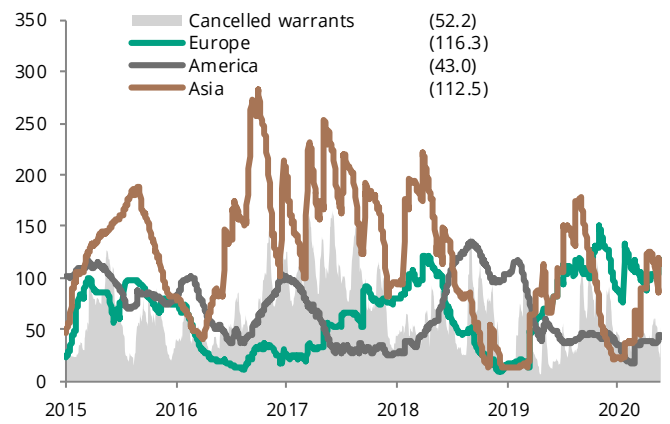
Source: Bloomberg, KGHM Polska Miedź

**Copper: official exchange stocks (thousand tonnes)**



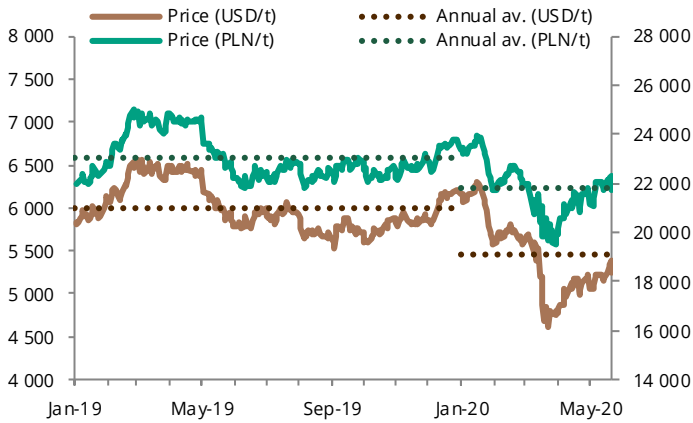
Note: Latest values in brackets. Source: Bloomberg, KGHM

**Copper: official LME stocks (thousand tonnes)**



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

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



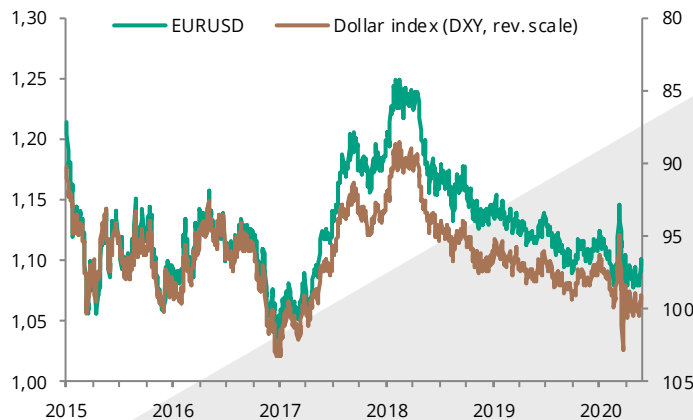
Source: Bloomberg, KGHM Polska Miedź

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



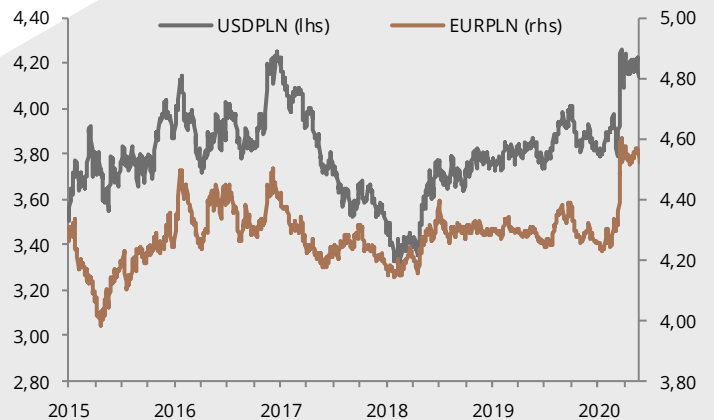
Source: Bloomberg, KGHM Polska Miedź

**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:  
**11 – 24 May 2020.**

- 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](http://www.lme.com/dataprices_products.asp) (charge-free logging)
- silver and gold: [www.lbma.org.uk/pricing-and-statistics](http://www.lbma.org.uk/pricing-and-statistics)
- platinum and palladium: [www.lppm.com/statistics.aspx](http://www.lppm.com/statistics.aspx)

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