

Market Overview

- Copper: Codelco, the world's top copper producer, informed that
 it boosted output by 4.7% in the first six months of 2020 even as the
 coronavirus outbreak forced it to rely on skeleton crews. Codelco said
 it produced 744,000 tons of copper in the first half (page 2).
- Precious metals: Chinese regulators and major banks are rushing to curb precious metal trading to temper speculation that some fear could cause a repeat of this year's oil trading mishaps (page 4).
- Debt market: With yields evaporating in the government bond market, more investors are expected to jump to credit, pushing more corporate bonds into negative yields (page 6).

Indexed price of silver after following copper for a long time has sharply rebounded, surpassing the dynamics of the YTD gold price



Source: Bloomberg, KGHM Polska Miedź S.A.



Key market prices

		Close price	2w chng.						
	LME (USD/t)								
	Copper	6 446.50	0.5%						
	Nickel	13 756.00	4.5%						
	LBMA (USD/troz)								
	Silver	24.07	23.8%						
	Gold (PM)	1 964.90	8.2%						
	FX								
	EURUSD	1.1848	3.5%						
•	EURPLN	4.4072	-1.4%						
•	USDPLN	3.7166	-4.7%						
•	USDCAD	1.3404	-1.0%						
•	USDCLP	754.45	-4.2%						
	Stocks								
	KGHM	126.05	14.0%						
Source:	Source: Bloomberg, KGHM Polska Miedź S.A.; <i>(more on <u>page 10</u>)</i>								

Important macroeconomic data

	Release	For						
	GDP (annlzd., qoq)	2Q	-32.9% ▼					
	Composite PMI	Jul	54.8 🔺					
★ 〕	Official manuf. PMI	Jul	51.1 🔺					
	Retail sales (yoy)	Jun	-1.9% 🔺					
	Industrial prod. (yoy)	Jun	0.5% 🔺					
Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 8								

Market Risk Unit

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Base and precious metals | Other commodities

Copper

Codelco, the world's top copper producer, informed that it boosted output by 4.7% in the first six months of 2020 even as the coronavirus outbreak forced it to rely on skeleton crews. Codelco said it produced 744,000 tons of copper in the first half.

Chile's June Copper Output Ticks Up Despite Pandemic Restrictions

Copper production in Chile is holding up despite increasing efforts by mining companies to shield workers from coronavirus, government figures showed July 31. The South American country produced 472,172 mt of copper in June, up 0.6% from the same month a year ago. Statistics agency INE attributed the increase to higher throughput at some large mines, as well as the impact of a major strike last year at the state-owned Chuquicamata mining and smelting complex. But June's output slid 4.7% from May, which had an extra day. Since the start of the coronavirus outbreak in March, leading copper producers, including Antofagasta plc, BHP, and state-owned Codelco, have taken drastic steps to contain the spread of the disease, including slashing the number of onsite personnel as much as 40%, halting non-essential tasks including maintenance and mine development, and suspending construction of major projects. But those restrictions appear to have little impact on production so far. Second-quarter output reached 1.443 million mt, up 1.8% from the first three months of the year, the data showed. However, after the number of infections among mineworkers spiked in June, companies have doubled down. In June, Codelco halted construction of giant expansions of its Chuquicamata and El Teniente mines and shut the smelter and refinery at Chuquicamata to reduce staff exposure. Despite that Codelco's copper output in first half 2020 went up. The world's top copper producer, informed that it boosted output by 4.7% in the first six months of 2020 even as the coronavirus outbreak forced it to rely on skeleton crews. Codelco said it produced 744,000 tonnes of copper in the first half, attributing the increase to improved processing, higher ore grades and resilience in the face of the pandemic. Chile has largely maintained copper output despite the pandemic,

Antofagasta Avoids Strike At Chile's Zaldivar and Centinela Copper Mines

with Codelco resisting union pressure to shut down its mines.

UK-listed copper producer Antofagasta's workers at its Zaldivar copper mine in northern Chile voted to approve a new pay deal with management, avoiding a strike at the open pit operation, according to S&P Global Platts. The Zaldivar mine is located next to Escondida mine and produced 116,100 mt of copper in 2019, mostly in the form of refined cathode. The 650-strong union voted to accept the new offer, which included a signing bonus worth Chilean Peso

Chile produced 472,172 mt of copper in June, up 0.6% from the same month a year ago



13 million (\$16,969.06) and a Peso 2.5 million soft loan among other benefits. Unionized staff had been due to strike after rejecting an earlier offer, but the protest was postponed after the company sought mandatory mediated talks. Short after workers at Zaldivar approved a deal also supervisors at another Antofagasta Minerals' copper mine - Centinela have agreed to a new contract offer, avoiding the possibility of a strike.

Other important information on copper market:

- Glencore saw H1 2020 copper production down 11% on year at 588,100 mt, impacted in part by the coronavirus pandemic and related global lockdowns. Ownsourced copper production of 588,100 mt was 74,900 mt lower than H1 2019, mainly reflecting Mutanda in the Democratic Republic of Congo being on care and maintenance, expected lower grades at Antapaccay in Peru and the short-term impact of COVID-19 related demobilization/remobilization at Antamina in Peru, partly offset by stronger milling throughput at Collahuasi in Chile. Own-sourced zinc production of 550,100 mt was in line with H1 2019, reflecting stronger grades at the company's Canadian mines and the various temporary COVID-19 related suspensions at Antamina and other South American operations. Nickel production of 55,200 mt was in line with H1 2019, reflecting a strong period of operations at the Murrin Murrin joint venture in Australia offsetting the delayed delivery of matte from the Sudbury smelter in Canada to the Nikkelverk refinery in Norway.
- Southern Copper is battling months of delays to its investment projects from lockdowns in Peru and Mexico aimed at preventing the spread of coronavirus, CFO Raul Jacob said July 29. The Phoenix-based company, which has lined up \$2.8 billion in copper projects in Peru and \$880 million in Mexico, was forced to halt some activities at its projects to implement health protocols. Company's copper output slid 1.7% to 258,454 mt in the second quarter from 263,029 mt a year ago and zinc was down 11.5% to 15,706 mt because of lower output at its Mexican operations. Silver jumped 13.5% to 5.54 million oz, while molybdenum production rose 16.3% to 7,824 mt.
- The global world refined copper market showed a 86,000 tonnes deficit in April, compared with a 3,000 tonnes deficit in March, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 4 months of the year, the market was in a 59,000 tonnes surplus compared with a 181,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in April was 1.98 million tonnes, while consumption was 2.07 million tonnes. Bonded stocks of copper in China showed a 131,000 tonnes deficit in April compared with a 2,000 tonnes surplus in March.
- Chile`s environmental watchdog said it would charge BHP's Escondida copper mine, the world`s largest, with drawing more water from the parched Chilean desert than its permits allowed. The SMA regulator said the mine had caused a sufficiently serious drop in the water table in one area that the violation could result in the revocation of its environmental permit, closure or a fine. "The



company, despite committing to reduce its extraction of water ... exceeded the maximum level permitted since 2005, tripling that level in 2019," the regulator said in a statement. Chile's northern desert, where BHP operates, is the world's driest. Both copper and lithium miners there have for decades struggled to reduce their water intake to lessen impact on the environment.

Precious Metals

Chinese regulators and major banks are rushing to curb precious metal trading to temper speculation that some fear could cause a repeat of this year's oil trading mishaps.

China banks, regulators move to cool gold rush

Chinese regulators and major banks are rushing to curb precious metal trading by domestic investors to temper speculation that some fear could cause a repeat of this year's oil trading mishaps. The scramble to limit risks comes as gold prices hit record highs, spurred by investors hunting for safe haven assets in markets rattled by worries of rising coronavirus cases, lofty equity valuations and a falling U.S. dollar. A deepening rift between the United States and China has also become a factor drawing mainland investors to gold. Industrial and Commercial Bank of China (ICBC), said it would bar its clients from opening new trading positions for platinum, palladium and index products linked to precious metal. That directive, was in response to "violent price volatility" and "the need to control risks." Agricultural Bank of China said it had recently suspended new businesses related to gold, while Bank of China said it halted new account openings for platinum and palladium trading. The Shanghai Gold Exchange said gold and silver holdings were high, and it would take risk-control measures if warranted to protect investors. The Shanghai Futures Exchange, also urged its members to strengthen risk-management efforts and invest rationally. "Gold remains a niche investment in China due to limited investment channels," said Frank Hao, an analyst at Hywin Wealth Management in Shanghai. "Investors mainly rely on purchasing paper gold products at commercial banks as a way to counteract risks." Chinese investors are also actively trading gold ETFs, whose turnover has jumped in recent weeks. Huaan Gold ETF, Asia's biggest gold exchange-traded fund, has seen its assets under management soar more than 68% to over 11.8 billion yuan (\$1.69 billion) since end-2019. Regulators are mindful of risks after investors were caught off-guard in late April when Bank of China settled a crude oil futures trading product known as Yuan You Bao at minus \$37.63 per barrel, following a historic slide in oil prices into negative territory. The bank subsequently agreed to settle with more than half its customers facing losses, potentially taking a 6 billion to 7 billion yuan hit.



Covid-19 caused delays in the production of bullion coins at the West Point Mint unit

U.S. Mint reduces silver, gold coin supply to purchasers

The U.S. Mint has reduced the volume of gold and silver coins it's distributing to authorized purchasers as the coronavirus pandemic slows production, a document seen by Bloomberg shows. The Mint's West Point complex in New York is taking measures to prevent the virus from spreading among its employees, and that will slow coin production there for the next 12 to 18 months, the document shows. The facility is no longer able to produce gold and silver coins at the same time, forcing it to choose one metal over the other. The West Point facility is one of the primary sites for bullion production, along with the San Francisco complex, which only partially reopened in May after shutting down earlier in the year. The West Point complex has been producing coins at a lower capacity since reopening the facility and imposing social distancing. The cuts are yet another blow that the pandemic has dealt to America's coin supplies. The reduced allocations are also coming just as investors are clamoring for precious coins. Global uncertainty over the pandemic has driven silver and gold prices to multiyear highs, turning coins made from the metals into a retail safe haven. The premiums for some coins over the spot prices of the metals have surged to record levels. To cope with demand, the Mint is now asking dealers to provide their 10-day and 90-day forecasts for demand for the first time ever. That will allow it to decide what products to make as some are more labor-intensive than others, according to the document.



Global economies | Foreign exchange markets

World's Rising Stock of Sub-Zero Debt Has Investors Adding Risk

With yields evaporating in the government bond market, more investors are expected to jump to credit, pushing more corporate bonds into negative yields.

Negative-yielding euro corporate bonds now amount to 267 billion euros

The world's pile of debt with a negative yield -- bonds that cost investors money simply by holding them - has climbed to near the \$15 trillion mark. Potential returns across the bond market have become increasingly scarce, following the coronavirus crisis and asset purchases by central banks. While still short of a \$17 trillion peak last year, the mountain of negative-yielding debt is set to climb for a fourth month, matching 2019's record streak, according to Bloomberg Barclays indices. Europe is at the heart of the phenomenon, with the rate on all of Germany's bonds below 0%, and now even some of Italy's, considered among the region's riskiest. Those on U.S. Treasuries are still positive, though short-term yields aren't far off. Central banks are pumping in record amounts of money into the bond market to help ease the economic damage caused by the coronavirus. The European Central Bank's pandemic program totals 1.35 trillion euros (\$1.58 trillion), while the Federal Reserve is buying about \$80 billion a month. And the move to lower rates may not have finished. Traders in money markets are pricing the Bank of England will cut interest rates from 0.1% to 0% by March next year. Fed probably won't adopt a shift in strategy after Chair Jerome Powell said rates will stay near zero for a long while. German 10-year yields are currently hovering around minus 0.48%, while U.K. and Japanese bonds out to seven years have yields below 0%. Japan's 10-year is just two basis points above the threshold. Those on Treasuries are at 0.57%, having touched a record low of 0.31% in March. The trend has also been mirrored in the corporate bond world. Negative-yielding euro corporate bonds now amount to 267 billion euros, based on data compiled by Bloomberg. It would take a 25-basis-point drop in average yields to boost this number by another half a trillion euros. It was a different story back in March, when investors were dumping corporate bonds, fearing that the effective shutdown of large parts of advanced economies would impact companies' ability to pay back their debt. That led the amount of corporate bonds quoted at a negative yield to fall to zero. With yields evaporating in the government bond market, more investors are expected to jump to credit, pushing more corporate bonds into negative yields. Bank of America Corp. analysts expect the stock of sub-zero euro corporate bonds to jump to 500 billion euros. "With central bank accommodation likely to continue even as peak pandemic fears fade, it means that this negative-yielding environment is one that investors will have to get used to and adapt for," said Mohammed Kazmi, a portfolio manager at Union Bancaire Privee. He favors U.S. dollar corporate bonds, which remain far away from the 0% threshold.



Fed Extends Emergency Programs Three Months to End of Year

The facilities have the potential to deploy trillions of dollars, but so far have only about \$100 billion in loans outstanding, partly because traditional lenders have returned to short-term markets, making Fed liquidity unnecessary

The Federal Reserve extended most of its emergency lending programs by three months, through the remainder of 2020, to help an economy still struggling with the coronavirus pandemic. "It's a sign that more support is needed for the economy," said Scott Brown, chief economist at Raymond James. In particular for facilities like the Main Street Lending Program, Brown said the Fed is signaling it still anticipates significant demand in the coming months. The dollar held steady and Treasury yields and U.S. stocks largely maintained their declines after the news. Since mid-March, the Fed has opened nine emergency programs aimed at pumping liquidity into short-term credit markets and extending credit to businesses and local governments hit hard by the economic fallout from the virus. The facilities have the potential to deploy trillions of dollars, but so far have only about \$100 billion in loans outstanding, partly because traditional lenders have returned to short-term markets, making Fed liquidity unnecessary. "The three-month extension will facilitate planning by potential facility participants and provide certainty that the facilities will continue to be available to help the economy recover from the Covid-19 pandemic," the Fed said in a statement. The extension applies to seven programs; the Municipal Liquidity Facility was already set to expire on Dec. 31, and the Commercial Paper Funding Facility was due to end on March 17, 2021.



Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For Reading		Previous	Consensus ²	
		China				*1	
00	27-Jul	Industrial profits (yoy)	Jun	11.5%	6.0%		
000	31-Jul	Official manufacturing PMI	Jul	51.1	50.9	50.8	
		Poland					
0000	20-Jul	Sold industrial production (yoy)	Jun	0.5%	-17.0%	-6.9%	
00	20-Jul	Producer inflation PPI (yoy)‡	Jun	-0.8%	-1.7%	-1.0%	
000	21-Jul	Retail sales (yoy)	Jun	-1.9% 🔺	-8.6%	-4.1%	
0	22-Jul	M3 money supply (yoy)	Jun	18.1%	16.0%	17.3%	
00	23-Jul	Unemployment rate	Jun	6.1%	6.0%	6.2%	
0000	31-Jul	Consumer inflation CPI (yoy) - preliminary data	Jul	3.1%	3.3%	3.1%	
		US					
000	24-Jul	Composite PMI - preliminary data	Jul	50.0	47.9		
000	24-Jul	Manufacturing PMI - preliminary data	Jul		49.8	52.0	
000	24-Jul	PMI services - preliminary data	Jul	49.6	47.9	51.0	
00	27-Jul	Durable goods orders - preliminary data‡	Jun	7.3%	15.1%	6.9%	
٥	27-Jul	Dallas Fed manufacturing activity	Jul	- 3.0 🛕	- 6.1	- 4.8	
٥	28-Jul	Richmond Fed manufacturing index	Jul	10.0	0.0	5.0	
٥	28-Jul	S&P/CaseShiller home price index‡	May	225 🔺	224	225	
00000	29-Jul	FOMC base rate decision - upper bound (Fed)	Jul	0.25% =	0.25%	0.25%	
00000	29-Jul	FOMC base rate decision - lower bound (Fed)	Jul	0.00% =	0.00%	0.00%	
00000	30-Jul	GDP (annualized, qoq) - estimation	2Q	-32.9%	-5.0%	-34.5%	
0000	31-Jul	Consumer spending inflation PCE (mom)‡	Jun	0.2% =	0.2%	0.2%	
0000	31-Jul	Consumer spending inflation PCE (yoy)	Jun	0.9%	1.0%	1.0%	
00	31-Jul	Personal income (sa, mom)‡	Jun	-1.1% 🔺	-4.4%	-0.6%	
00	31-Jul	Personal spending (sa, mom)‡	Jun	5.6%	8.5%	5.2%	
00	31-Jul	University of Michigan confidence index - final data	Jul	72.5	73.2	72.9	
		Eurozone				400	
•	23-Jul	Consumer confidence - estimation	Jul	- 15.0	- 14.7	- 12.0	
000	24-Jul	Composite PMI - preliminary data	Jul	54.8	48.5	51.1	
000	24-Jul	Manufacturing PMI - preliminary data	Jul		47.4	50.1	
000	24-Jul	Services PMI - preliminary data	Jul	55.1	48.3	51.0	
0	27-Jul	M3 money supply (yoy)	Jun	9.2%	8.9%	9.3%	
00	30-Jul	Unemployment rate‡	Jun	7.8%	7.7%	7.7%	
0	30-Jul	Economic confidence‡	Jul	82.3	75.8	81.4	
0	30-Jul	Industrial confidence‡	Jul	- 16.2 🔺	- 21.6	- 17.0	
0	30-Jul	Consumer confidence - final data	Jul	- 15.0 =	- 15.0		
00000	31-Jul	GDP (sa, yoy) - estimation	2Q	-15.0%	-3.1%	-14.5%	
00000	31-Jul	GDP (sa, qoq) - estimation	2Q	-12.1%	-3.6%	-12.1%	
0000	31-Jul	Core CPI (yoy) - preliminary data	Jul	1.2%	0.8%	0.8%	
0000	31-Jul	CPI estimate (yoy)	Jul	0.4%	0.3%	0.2%	



Weight	Date	Event	For	Reading 1	Previous	Consensus ²
		Germany				
00	23-Jul	GfK consumer confidence‡	Aug	- 0.3	- 9.4	- 4.5
000	24-Jul	Composite PMI - preliminary data	Jul	55.5	47.0	50.2
000	24-Jul	Manufacturing PMI - preliminary data	Jul		45.2	48.0
00	27-Jul	IFO business climate‡	Jul	90.5	86.3	89.3
00000	30-Jul	GDP (yoy) - preliminary data‡	2Q	-11.7%	-1.8%	-10.7%
00000	30-Jul	GDP (sa, qoq) - preliminary data‡	2Q	-10.1%	-2.0%	-9.0%
0000	30-Jul	Harmonized consumer inflation HICP (yoy) - preliminary data	Jul	0.0%	0.8%	0.3%
0000	30-Jul	Consumer inflation CPI (yoy) - preliminary data	Jul	-0.1%	0.9%	0.1%
00	30-Jul	Unemployment rate	Jul	6.4%	6.4%	6.5%
000	31-Jul	Retail sales (yoy)‡	Jun	5.9%	3.2%	3.0%
		France				
000	24-Jul	Composite PMI - preliminary data	Jul	57.6	51.7	53.5
000	24-Jul	Manufacturing PMI - preliminary data	Jul		52.3	53.0
00000	31-Jul	GDP (yoy) - preliminary data‡	2Q	-19.0%	-5.7%	-20.0%
00000	31-Jul	GDP(qoq) - preliminary data‡	2Q	-13.8%	-5.9%	-15.2%
0000	31-Jul	Harmonized consumer inflation HICP (yoy) - preliminary data	Jul	0.9%	0.2%	0.4%
0000	31-Jul	Consumer inflation CPI (yoy) - preliminary data	Jul	0.8%	0.2%	0.3%
		Italy				
00	30-Jul	Unemployment rate - preliminary data‡	Jun	8.8%	8.3%	8.6%
00000	31-Jul	GDP (wda, yoy) - preliminary data‡	2Q	-17.3%	-5.5%	-17.3%
00000	31-Jul	GDP (wda, qoq) - preliminary data‡	2Q	-12.4%	-5.4%	-15.5%
0000	31-Jul	Harmonized consumer inflation HICP(yoy) - preliminary data	Jul	0.9%	-0.4%	-0.2%
		UK				
000	24-Jul	Manufacturing PMI (sa) - preliminary data	Jul		50.1	52.0
000	24-Jul	Composite PMI - preliminary data	Jul	57.1	47.7	51.7
		Japan				
0000	21-Jul	Consumer inflation CPI (yoy)	Jun	0.1%	0.1%	0.1%
000	22-Jul	Composite PMI - preliminary data	Jul	43.9	40.8	
000	22-Jul	Manufacturing PMI - preliminary data	Jul		40.1	
0000	31-Jul	Industrial production (yoy) - preliminary data	Jun	-17.7%	-26.3%	-19.3%
		Chile				*
000	31-Jul	Total copper production (metric tons)	Jun	472 172	4 95 604	
000	31-Jul	Manufacturing (yoy)	Jun	-8.3%	-13.3%	-5.0%
		Canada				*
0000	22-Jul	Consumer inflation CPI (yoy)	Jun	0.7%	-0.4%	0.2%
00000	31-Jul	GDP(yoy)‡	May	-13.8%	-17.3%	-14.6%

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; •= equal to previous.



Key market data

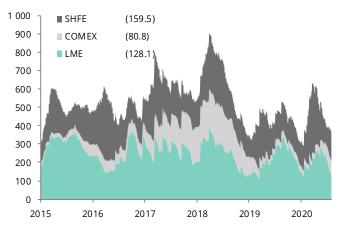
Key base & precious metal prices, exchange rates and other important market factors

(as of: 31-Jul-20)					Price	cha	nge ¹			From	year beginr	ning²
, ., ., .,	Price			1Y	Average Min		Max					
LME (USD/t; Mo in USD/lbs)												
Copper	6 446.50		0.5%		6.8%		4.7%		9.7%	5 632.56	4 617.50	6 545.00
Molybdenum	7.28		4.0%	_	-1.4%	_	-20.9%	_		8.73	7.00	10.90
Nickel	13 756.00		4.5%		7.6%	_	-1.7%	_	-3.7%	12 609.45	11 055.00	14 290.00
Aluminum	1 685.50		4.0%		5.2%	_	-6.4%	_	-4.1%	1 602.25	1 421.50	1 810.50
Tin	17 880.00		2.8%		6.1%		6.1%		3.5%	16 259.94	13 400.00	18 195.00
Zinc	2 299.00		5.9%		11.8%		0.3%	_	-4.0%	2 064.62	1 773.50	2 466.50
Lead	1 843.00		2.1%		3.0%	_	-4.2%	_	-6.6%	1 769.69	1 576.50	2 027.00
LBMA (USD/troz)												
Silver	24.07		23.8%		34.9%		33.4%		50.4%	17.23	12.01	24.38
Gold ²	1 964.90		8.2%		11.1%		29.0%		39.7%	1 676.18	1 474.25	1 964.90
LPPM (USD/troz)	_											
Platinum ²	905.00		7.1%		11.2%	•	-6.8%		7.2%	849.26	593.00	1 017.00
Palladium²	2 065.00		1.2%		8.4%		7.6%		42.3%	2 114.63	1 557.00	2 781.00
FX ³	_											
EURUSD	1.1848		3.5%		5.8%		5.5%		7.3%	1.1089	1.0707	1.1848
EURPLN	4.4072	_	-1.4%	•	-1.3%		3.5%		2.7%	4.4200	4.2279	4.6044
USDPLN	3.7166	_	-4.7%	•	-6.6%	•	-2.1%	•	-4.4%	3.9895	3.7166	4.2654
USDCAD	1.3404	_	-1.0%	•	-1.6%		3.2%		1.4%	1.3628	1.2970	1.4496
USDCNY	6.9752	_	-0.1%	•	-1.3%		0.2%		1.1%	7.0309	6.8598	7.1671
USDCLP	754.45	_	-4.2%	•	-7.6%		1.3%		7.7%	808.97	748.74	867.83
Money market	_											
3m LIBOR USD	0.249	•	-0.01	\blacksquare	-0.05	•	-1.66	\blacksquare	-2.04	0.948	0.245	1.900
3m EURIBOR	-0.463	•	-0.02	\blacksquare	-0.04	•	-0.08	\blacksquare	-0.09	-0.369	-0.489	-0.161
3m WIBOR	0.230	•	-0.02	\blacksquare	-0.03	•	-1.48	\blacksquare	-1.49	0.973	0.230	1.710
5y USD interest rate swap	0.251	•	-0.06	\blacksquare	-0.08	•	-1.48	\blacksquare	-1.41	0.728	0.251	1.693
5y EUR interest rate swap	-0.398	•	-0.03	\blacksquare	-0.05	•	-0.29	\blacksquare	-0.05	-0.280	-0.453	-0.090
5y PLN interest rate swap	0.503	•	-0.04	\blacksquare	-0.03	•	-1.28	\blacksquare	-1.33	1.011	0.485	2.050
Fuel	_											
WTI Cushing	40.27	•	-1.3%		2.5%	•	-34.0%	\blacksquare	-25.4%	37.30	-37.63	63.27
Brent	42.81	•	-0.2%		4.7%	•	-35.5%	\blacksquare	-29.8%	41.12	17.32	69.02
Diesel NY (ULSD)	121.96	•	-1.5%		3.1%	•	-39.8%	\blacksquare	-33.8%	124.82	60.67	206.01
Others	_											
VIX	24.46	-	0.00	•	-5.97		10.68		6.59	31.97	12.10	82.69
BBG Commodity Index	68.68		3.6%		5.7%	•	-15.1%	•	-10.8%	67.68	59.48	81.64
S&P500	3 271.12		0.6%		5.5%		1.2%		10.8%	3 025.36	2 237.40	3 386.15
DAX	12 313.36	•	-5.6%		0.0%	•	-7.1%		0.5%	11 895.34	8 441.71	13 789.00
Shanghai Composite	3 310.01	•	-0.1%		10.9%		8.5%		13.8%	2 969.40	2 660.17	3 450.59
WIG 20	1 767.54	•	-4.0%		0.5%	•	-17.8%	•	-21.1%	1 794.12	1 305.73	2 200.10
KGHM	126.05		14.0%		38.7%		31.9%		38.0%	85.36	49.40	131.40

[°]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

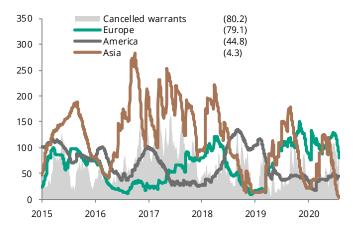


Copper: official exchange stocks (thousand tonnes)



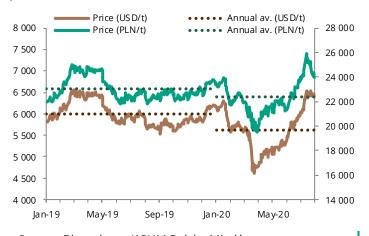
Note: Latest values in brackets. Source: Bloomberg, KGHM

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)

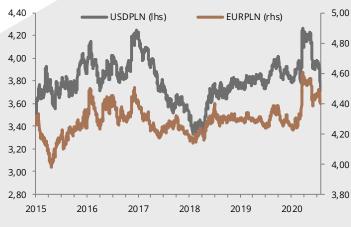


Source: Bloomberg, KGHM Polska Miedź

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



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: **20 June – 2 August 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 (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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