

Market Overview

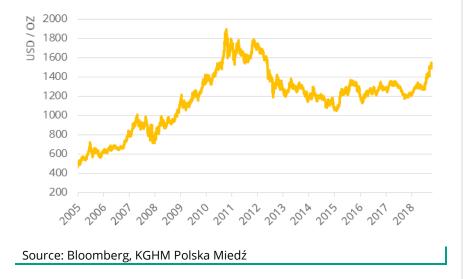
- Copper: The interim report shows that Codelco's net financial debt increased by further 12.8% to \$12.4 billion, increasing the debt / EBITDA ratio to 3.9. China's Daye Non-ferrous Metals Mining will form a joint venture to develop a new 400,000 mt/year copper smelter in central Hubei province's. The smelter's construction expected to begin in the second half of 2019 with completion and commencement of copper cathode production in H1 2021 (page 2).
- Precious metals: The retail price of physical gold in Japan climbed to its highest in nearly 40 years while international benchmark spot gold prices jumped to a fresh six-year high. The reason for that is the yen's fall against the dollar from the early 2010s (page 4).
- **China:** The PBoC said it would cut the reserve requirement ratio by 50 bps for all banks, with an additional 100 bps cut for qualified city commercial banks. The broad-based cut, which will release 800 billion yuan in liquidity, is effective Sept. 16. The additional targeted cut will release 100 billion yuan, in two phases effective Oct. 15 and Nov. 15 (page 5).

as of: 9th September 2019

Key market prices

		Close price	2w chng.
	LME (USD/t)		
	Copper	5 787.50	2.0%
	Nickel	17 500.00	11.1%
	LBMA (USD/troz)		
	Silver	18.15	6.4%
	Gold (PM)	1 523.70	1.3%
	FX		
▼	EURUSD	1.1027	-0.8%
\bullet	EURPLN	4.3392	-0.7%
▼	USDPLN	3.9315	-0.1%
▼	USDCAD	1.3174	-0.8%
	USDCLP	717.52	0.2%
	Stocks		
	KGHM	79.44	7.7%
Source	e: Bloomberg, KGHM Po	olska Miedź; (mor	e on <u>page 8</u>)

Important macroeconomic data									
	Release	For							
*:	Reserve req. ratio	Sep	13.0% 🔻						
	GDP (annlzd., qoq)	2Q	2.0% 🔻						
	Manufacturing PMI	Aug	48.8 🔺						
	Retail sales (yoy)	Jul	4.4% 🔺						
	Manufacturing PMI (sa)	Aug	47.4 🔻						
Source	Source: Bloomberg, KGHM Polska Miedź; (more on page 6)								



The price of gold significantly exceeded the six-year maximum from April 2013.

Market Risk Unit marketrisk@kghm.com

Please see important disclosures at the end of this document (page 10)



Base and precious metals | Other commodities

Copper

The interim report shows that Codelco's net financial debt increased by further 12.8% to \$12.4 billion, increasing the debt / EBITDA ratio to 3.9. China's Daye Non-ferrous Metals Mining will form a joint venture to develop a new 400,000 mt/year copper smelter in central Hubei province's. The smelter's construction expected to begin in the second half of 2019 with completion and commencement of copper cathode production in H1 2021.

Important information on copper market:

- Chilean Codelco, the world's largest copper mining company, published lately operating and financial statement for the first half of 2019. Net financial debt increased by further 12.8% to \$12.4 billion, increasing the debt / EBITDA ratio to 3.9. That shows the cost Codelco need to suffer for the investment expenditure to maintain the level of production in aging mines. Within 10 years, the company plans to allocate \$40 billion for this purpose. Profit for the first half fell by 74% to \$318 million. Total copper production during this period decreased by 12.2% to 769,000. tons, of which 710,000 tons comes from own mines, and 59,000 tons from projects shared with Anglo American and Freeport. However, according to the assurances of CEO Nelson Pizarro, Codelco is still on track to achieve the target assumed for this year of 1.7 million tons. Despite the difficulties related to the weather and strike in Chuquicamata, the company managed to reduce the cost of production to USD 1.42 per pound. According to Codelco's assumptions, the price of copper in 2019 should be between \$2.47 and \$2.88 per pound.
- As Platts inform, China's liangxi Copper produced 749,000 mt refined copper in the first half of this year, up 3,5% year on year, amid rising concentrate output. Its copper concentrate output in H1 rose 0.2% year on year to 102,000 mt, the company's data showed. Moly concentrate output in H1 hit 3,917 mt, up 4.8% year on year, with copper rod and other copper products output in H1 dipping 1.85% and 23% year on year to 464,100 mt and 62,800 mt, respectively, the data showed. Despite the weak global economy in Q1, it said in Q2, China has cut taxes and encouraged investment, which aided the manufacturing sector. Despite the ongoing Sino-US trade tension, its impact on the financial markets is minimal, it said. Looking ahead, the copper giant sees China keeping its open-door policy in H2 and expansion in infrastructure. Expectations of global interest rate cuts will likely help improve macroeconomic outlook in H2, which will support copper price for the rest of the year. China's copper demand is forecast to rise 3% in 2019 from an estimated demand of 11.07 million mt last year, data by state-run metals consultancy Beijing Antaike showed. Jiangxi



Copper has copper and moly reserves of 9.36 million mt and 205,000 mt, respectively, with copper conc output capacity of over 200,000 mt/year, refined copper of 1.4 million mt/year and copper products over 1 million mt/year, the data showed.

- According to Platts, China Daye Non-ferrous Metals Mining will form a joint venture to develop a new 400,000 mt/year copper smelter in central Hubei province. Daye's main partners in the joint venture are Chinese state-owned China Non-ferrous Metal Mining (Group) Company, CNMC's engineering subsidiary China No. 15 Metallurgical, Huangshi Xingang Development Company. The Chinese copper producer said construction of the Yuan 5.2 billion (\$796.5 million) plant is expected to begin in the second half of 2019 with completion of development and commencement of copper cathode production in H1 2021. Company's H1 copper cathode production already scored a 5.8% annual gain at 269,308 mt, while mined copper rose 2.17% from H1 2018 to 13,184 mt, according to its 2019 interim results. Rapid expansion in production capacity of China's copper smelters through startups as well as the ramping up of existing projects commissioned in 2018 and 2019 has been cited by industry players as one reason for this year's depressed spot treatment and refining charges, which is paid by miners to smelters for processing copper ore into metals.
- Peruvian export volumes of copper, zinc and precious metals all dropped in June, while lead, tin and molybdenum shipments gained, the government said. Total metals export revenue fell 9.4% from a year earlier to \$2.41 billion, the central bank said in a statement posted on its website. Copper shipments slid 1.2% to 217,000 mt from 219,800 mt a year earlier. Zinc shipments fell 14.4% to 103,300 mt from 102,700 mt a year earlier. Lead exports jumped by half to 83,600 mt from 55,300 mt. Tin shipments from Minsur's San Rafael mine rose 25% to 1,800 mt, while molybdenum deliveries were up 18.7% to 23,200 mt.



Precious Metals

The retail price of physical gold in Japan climbed to its highest in nearly 40 years while international benchmark spot gold prices jumped to a fresh sixyear high. The reason for that is the yen's fall against the dollar from the early 2010s.

Japan's retail gold price clambers to highest since 1980

According to Reuters, the retail price of physical gold in Japan climbed to its highest in nearly 40 years in the first week of September, a surge accentuated by fluctuations in the value of the yen but mirroring a global hunt for the safe-haven precious metal amid worries that the U.S.-China trade row could further depress the global economy. Japan's biggest gold retailer Tanaka Kikinzoku said the retail price of refined gold, reached 5,325 yen (\$49.99) per gramme. That was the highest since Feb. 14, 1980 - a year when the U.S. President was Jimmy Carter. "Demand for gold transactions has picked up since mid-August," said Tanaka Kikinzoku spokeswoman Rie Kato. "Retail customers now need to wait for twothree hours to get their deals done." The sharp gain comes in line with a rally in global gold prices. International benchmark spot gold prices jumped to a fresh six-year high, or highest since April 2013, due to jitters about the state of the global economy. They have risen more than 20% so far this year. Tokyo Commodity Exchange (TOCOM) gold futures have also been surging since August. The benchmark contract for August 2020 delivery touched an intra-day record high of 5,285 yen per gramme. "The reason why Japan's gold prices hit an about 40 years high, instead of a six-year high, is the yen's fall against the dollar from the early 2010s," said Toshitaka Tazawa, an analyst at commodities broker Fujitomi Co. The yen has gained about 3% against the dollar so far this year, but it is still 8% weaker than levels in April 2013. The highest prices in four decades attracted many retail investors to take profit, Tazawa said. Tanaka's monthly gold purchase from customers increased 40% in July and as much as 70% in August compared with the average monthly volume between January and June. Tanaka's sales volume, meanwhile, fell slightly, sliding 10% in July and 20% in August from a monthly average for the first half of this year. "With the retail prices above 5,000 yen, we may see more individuals cashing out gold,"

Australian gold interest boosts exploration spending

Australia's investment in mineral exploration has surged during the 2018-2019 period on the back of growing interest in gold. Australian Bureau of Statistics (ABS) data revealed the country spent more than \$2.3 billion on mineral exploration during the period, representing a 19 per cent increase from the previous year. This was largely attributed to a record investment in gold exploration, which rose 19 per cent from the previous year to \$964 million. The highest increase in exploration spending came from South Australia, up by 55 per cent to \$85 million. Minerals Council Australia chief executive officer Tania Constable said. "This exploration investment is creating and supporting jobs throughout the country, especially in regional Australia."

Demand for gold transactions has picked up so much that retail customers now need to wait for two-three hours to get their deals done

Australia's investment in gold exploration has risen during the 2018-2019 period by 19 per cent



Global economies | Foreign exchange markets

China Cuts Banks' Reserve Ratios, Frees Up \$126 Billion for Loans as Economy Slows

The PBoC said it would cut the reserve requirement ratio by 50 bps for all banks, with an additional 100 bps cut for qualified city commercial banks. The broad-based cut, which will release 800 billion yuan in liquidity, is effective Sept. 16. The additional targeted cut will release 100 billion yuan, in two phases effective Oct. 15 and Nov. 15.

As Reuters informs. China's central bank is about to cut the amount of cash that banks must hold as reserves for the third time this year, releasing 900 billion yuan (103 billion pound) in liquidity to shore up the flagging economy. The People's Bank of China (PBoC) said it would cut the reserve requirement ratio (RRR) by 50 basis points (bps) for all banks, with an additional 100 bps cut for qualified city commercial banks. The RRR for large banks will be lowered to 13.0%. The PBoC has now slashed the ratio seven times since early 2018. The size of the latest move was at the upper end of market expectations, and the amount of funds released will be the largest so far in the current easing cycle. The broadbased cut, which will release 800 billion yuan in liquidity, is effective Sept. 16. The additional targeted cut will release 100 billion yuan, in two phases effective Oct. 15 and Nov. 15. The latest move to spur bank lending followed a cabinet meeting on Sept. 4 that pledged to implement both broad and targeted cuts in the RRR "in a timely manner". The PBoC said it will maintain a prudent monetary policy and avoid flood-like stimulus, while increasing counter-cyclical adjustments and maintaining reasonable and abundant liquidity. Analysts say China's economic growth has likely cooled further this quarter from a near 30-year low of 6.2% in April-June. With Washington imposing new tariffs, some economists have recently cut their China growth estimates for next year to below 6%. The central bank is also widely expected to cut one or more of its key policy interest rates in mid-September -- for the first time in four years -- as it works to reduce corporate funding costs. Prior to the latest RRR cut, the central bank had pumped out 3.63 trillion yuan in net liquidity through reserve cuts since early 2018, according to Reuters calculations based on PBoC data and analyst estimates. But analysts have cautioned that some companies may be merely refinancing existing debt at better rates, rather than borrowing to fund fresh investments. Analysts say the problem is not a lack of credit but weakening business and consumer confidence as the trade war drags on. Many local governments are facing increasing fiscal strains as tax cuts and the broader economic slowdown reduce revenues, hampering their ability to implement infrastructure projects.

The reserve requirement ratio for large banks will be lowered to 13.0%



Macroeconomic calendar

Important macroeconomic data releases

/eight	Date	Event	For	Reading ¹	Previous	Consensus ²	
		China				*)	
Û	27-Aug	Industrial profits (yoy)	Jul	2.6% 🔺	-3.1%		
00	31-Aug	Official manufacturing PMI	Aug	49.5 🔻	49.7	49.6	
00	02-Sep	Caixin's manufacturing PMI	Aug	50.4 🔺	49.9	49.8	
0000	06-Sep	Reserve requirement ratio	Sep	13.0% 🔻	13.5%		
	07-Sep	Foreign reserves (USD bn)	Aug	3 107 🔺	3 104	3 100	
0	08-Sep	Trade balance (USD bn)‡	Aug	34.8 🔻	44.6	44.3	
0	08-Sep	Exports (yoy)	Aug	-1.0% 🔻	3.3%	2.2%	
		Poland					
0	26-Aug	Un employment rate	Jul	5.2% 🔻	5.3%	5.2%	
0000	30-Aug	GDP (yoy) - final data	2Q	4.5% 🔺	4.4%		
0000	30-Aug	GDP (qoq) - final data	2Q	0.8% =	0.8%		
000	30-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	2.8%	2.9%	2.8%	
00	02-Sep	Manufacturing PMI	Aug	48.8 🔺	47.4	47.7	
		US					
0	26-Aug	Durable goods orders - preliminary data‡	Jul	2.1% 🔺	1.8%	1.2%	
	26-Aug	Dallas Fed manufacturing activity	Aug	2.7 🔺	- 6.3	- 4.0	
	27-Aug	Richmond Fed manufacturing index	Aug	1.0 🔺	- 12.0	- 4.0	
	27-Aug	S&P/CaseShiller home price index‡	Jun	218 🔺	217	218	
0000	29-Aug	GDP (annualized, qoq) -	2Q	2.0%	2.1%	2.0%	
000	30-Aug	Consumer spending inflation PCE (mom)	Jul	0.2% =	0.2%	0.2%	
000	30-Aug	Consumer spending inflation PCE (yoy)	Jul	1.6% =	1.6%	1.6%	
0	30-Aug	Personal income (sa, mom)‡	Jul	0.1% 🔻	0.5%	0.3%	
0	30-Aug	Personal spending (sa, mom)	Jul	0.6% 🔺	0.3%	0.5%	
0	30-Aug	University of Michigan confidence index - final data	Aug	89.8 🔻	92.1	92.4	
00	03-Sep	Manufacturing PMI - final data	Aug	50.3 🔺	49.9	50.0	
0	03-Sep	ISM Manufacturing	Aug	49.1 🔻	51.2	51.3	
00	05-Sep	Composite PMI - final data	Aug	50.7 🔻	50.9		
00	05-Sep	PMI services - final data	Aug	50.7 🔻	50.9	50.9	
9	05-Sep	Durable goods orders - final data	Jul	2.0% 🔻	2.1%	2.1%	
9	06-Sep	Change in non-farm payrolls (ths)‡	Aug	130 🔻	159	160	
0	06-Sep	Underemployment rate (U6)	Aug	7.2% 🔺	7.0%		
0	06-Sep	Unemployment rate	Aug	3.7% =	3.7%	3.7%	
	06-Sep	Average hourly earnings (yoy)‡	Aug	3.2%	3.3%	3.0%	



Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		Eurozone				\odot
0	28-Aug	M3 money supply (yoy)	Jul	5.2% 🔺	4.5%	4.7% 🦱
0	29-Aug	Economic confidence	Aug	103 🔺	103	102 🔴
0	29-Aug	Industrial confidence‡	Aug	- 5.9 🔺	- 7.3	- 7.3 🔴
0	29-Aug	Consumer confidence - final data	Aug	- 7.1 =	- 7.1	- 7.1 🔘
0	29-Aug	Business climate indicator‡	Aug	0.1 🔺	- 0.1	- 0.1 🦱
0000	30-Aug	Core CPI (yoy) - estimation	Aug	0.9% =	0.9%	1.0% 🕳
0000	30-Aug	CPI estimate (yoy)	Aug	1.0% 🔻	1.1%	1.0% 🔘
00	30-Aug	Unemployment rate	Jul	7.5% =	7.5%	7.5% 🔘
000	02-Sep	Manufacturing PMI - final data	Aug	47.0 =	47.0	47.0 🔘
00	03-Sep	Producer inflation PPI (yoy)	Jul	0.2%	0.7%	0.2% 🔘
000	04-Sep	Composite PMI - final data	Aug	51.9 🔺	51.8	51.8 🔴
000	04-Sep	Services PMI - final data	Aug	53.5 🔺	53.4	53.4 🦱
00	04-Sep	Retail sales (yoy)‡	Jul	2.2%	2.8%	2.0% 🦱
00000	06-Sep	GDP (sa, yoy) - final data	2Q	1.2% 🔺	1.1%	1.1% 🔴
00000	06-Sep	GDP (sa, qoq) - final data	2Q	0.2% =	0.2%	0.2% 🔘
000	06-Sep	Gross fixed capital (qoq)‡	2Q	0.5% 🔺	0.2%	0.2% 🔴
000	06-Sep	Households consumption (qoq)‡	2Q	0.2% 🔻	0.4%	0.2% 🔘
		Germany				
00	26-Aug	IFO business climate‡	Aug	94.3 🔻	95.8	95.1 🕳
00000	27-Aug	GDP (yoy) - final data	2Q	0.0% =	0.0%	0.0% 🔘
00000	27-Aug	GDP (sa, qoq) - final data	2Q	-0.1% =	-0.1%	-0.1% 🔘
00	28-Aug	GfK consumer confidence	Sep	9.7 =	9.7	9.6 🦱
0000	29-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	1.0% 🔻	1.1%	1.2% 🕳
0000	29-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	1.4% 🔻	1.7%	1.5% 🕳
00	29-Aug	Unemployment rate	Aug	5.0% =	5.0%	5.0% 🔘
000	30-Aug	Retail sales (yoy)	Jul	4.4% 🔺	-1.6%	3.3% 🔴
000	02-Sep	Manufacturing PMI - final data	Aug	43.5 🔻	43.6	43.6 🕳
000	04-Sep	Composite PMI - final data	Aug	51.7 🔺	51.4	51.4 🔴
000	05-Sep	Factory orders (wda, yoy)‡	Jul	-5.6%	-3.5%	-4.2% 🕳
0000	06-Sep	Industrial production (wda, yoy)‡	Jul	-4.2% 🔺	-4.7%	-3.9%
		France				
00000	29-Aug	GDP (yoy) - final data‡	2Q	1.4% =	1.4%	1.3%
00000	29-Aug	GDP (qoq) - final data‡	2Q	0.3% =	0.3%	0.2% 🔷
0000	30-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	1.2% 🔻	1.3%	1.2% 🔘
0000	30-Aug	Consumer inflation CPI (yoy) - preliminary data	Aug	1.1% =	1.1%	1.0% 🔷
000	02-Sep	Manufacturing PMI - final data	Aug	51.1 🔺	51.0	51.0 🔷
000	04-Sep	Composite PMI - final data	Aug	52.9 🔺	52.7	52.7
		Italy				
00000	30-Aug	GDP (wda, yoy) - final data	2Q	-0.1% 🔻	0.0%	0.0% 🕳
00000	30-Aug	GDP (wda, qoq) - final data	2Q	0.0% =	0.0%	0.0% O
0000	30-Aug	Harmonized consumer inflation HICP (yoy) - preliminary data	Aug	0.5% 🔺	0.3%	0.5% 🔘
00	30-Aug	Unemployment rate - preliminary data‡	Jul	9.9% 🔺	9.8%	9.6% 🔷
000	02-Sep	Manufacturing PMI	Aug	48.7 🔺	48.5	48.5 🔷
			Aug		51.0	50.6 🚽

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; = equal to previous.
² Reading difference to consensus: ● = higher than consensus; ● = lower than consensus; ● = equal to consensus.
mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.
Source: Bloomberg, KGHM Polska Miedź



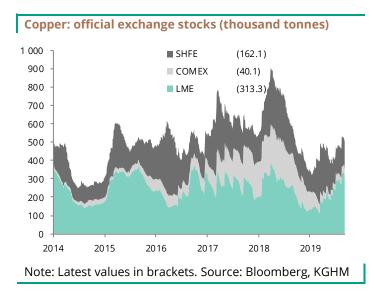
Key market data

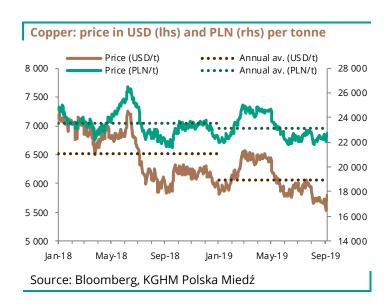
Key base & precious metal prices, exchange rates and other	important market factors
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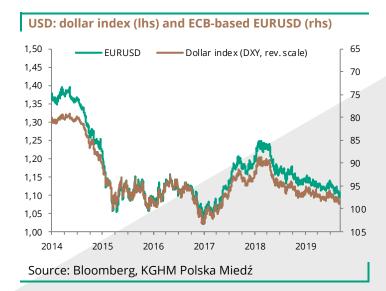
(as of: 06-Sep-19)		Price change ¹				From year beginning ²						
	Price		2W		QTD		YTD		1Y	Average	Min	Мах
LME (USD/t)												
Copper	5 787.50		2.0%	▼	-3.1%	▼	-3.0%	▼	-2.6%	6 065.11	5 537.00	6 572.00
Molybdenum		-		-		-		-				
Nickel	17 500.00		11.1%		38.2%		65.2%		40.1%	13 037.43	10 440.00	18 625.00
Aluminum	1 761.50		0.9%	▼	-0.7%	▼	-5.8%	▼	-13.2%	1 808.88	1 712.50	1 923.00
Tin	17 075.00		6.4%	▼	-9.2%	▼	-12.4%	▼	-9.5%	19 540.35	15 710.00	21 925.00
Zinc	2 312.00		2.3%	▼	-10.4%	▼	-7.9%	▼	-6.4%	2 624.69	2 211.00	3 018.00
Lead	2 036.00	\bullet	-2.2%		6.4%		1.3%	▼	-0.4%	1 975.05	1 768.00	2 154.00
LBMA (USD/troz)												
Silver	18.15		6.4%		19.2%		17.3%		27.2%	15.63	14.38	19.3´
Gold ²	1 523.70		1.3%		8.1%		18.9%		26.4%	1 350.56	1 269.50	1 546.10
LPPM (USD/troz)												
Platinum ²	947.00		11.3%		15.8%		19.3%		19.9%	840.42	782.00	977.00
Palladium ²	1 541.00		5.5%		1.1%		22.0%		57.6%	1 437.44	1 267.00	1 604.00
FX ³												
EURUSD	1.1027	\bullet	-0.8%	▼	-3.1%	▼	-3.7%	▼	-5.2%	1.1257	1.0937	1.1535
EURPLN	4.3392	\bullet	-0.7%		2.1%		0.9%		0.4%	4.2973	4.2406	4.3857
USDPLN	3.9315	\bullet	-0.1%		5.3%		4.6%		5.8%	3.8171	3.7243	3.9882
USDCAD	1.3174	\bullet	-0.8%		0.7%	▼	-3.4%	▼	-0.1%	1.3297	1.3038	1.3600
USDCNY	7.1164	\bullet	-0.5%		3.6%		3.5%		4.1%	6.8444	6.6872	7.1789
USDCLP	717.52		0.2%		5.5%		3.3%		3.8%	682.91	649.22	725.69
Money market												
3m LIBOR USD	2.134	\bullet	-0.01	▼	-0.19	▼	-0.67	▼	-0.19	2.491	2.102	2.804
3m EURIBOR	-0.437	\bullet	-0.02	▼	-0.09	▼	-0.13	▼	-0.12	-0.335	-0.448	-0.306
3m WIBOR	1.720	-	0.00	-	0.00	-	0.00		0.01	1.720	1.720	1.720
5y USD interest rate swap	1.366	\bullet	0.00	▼	-0.40	▼	-1.20	▼	-1.51	2.128	1.254	2.715
5y EUR interest rate swap	-0.491	\bullet	-0.01	▼	-0.26	▼	-0.69	▼	-0.78	-0.080	-0.553	0.222
5y PLN interest rate swap	1.690		0.10	▼	-0.18	▼	-0.43	▼	-0.78	1.925	1.440	2.240
Fuel												
WTI Cushing	56.52		5.4%	▼	-3.3%		24.5%	▼	-16.6%	57.07	46.54	66.40
Brent	62.15		6.6%	▼	-3.5%		16.9%	▼	-18.6%	64.71	53.83	73.89
Diesel NY (ULSD)	189.23		6.1%	▼	-2.6%		12.5%	▼	-14.2%	193.32	170.01	212.40
Others												
VIX	15.00	\bullet	-4.32	▼	-0.08	▼	-10.42		0.35	15.93	12.01	25.45
BBG Commodity Index	77.89		2.0%	▼	-2.2%		1.5%	▼	-5.5%	79.62	75.97	83.06
S&P500	2 978.71		3.5%		1.3%		18.8%		3.5%	2 843.18	2 447.89	3 025.86
DAX	12 191.73		4.6%	▼	-1.7%		15.5%		2.0%	11 787.11	10 416.66	12 629.90
Shanghai Composite	2 999.60		4.8%		0.7%		20.3%		11.4%	2 903.84	2 464.36	3 270.80
WIG 20	2 122.60		1.2%	▼	-8.8%	▼	-6.8%	▼	-7.4%	2 287.29	2 051.44	2 414.4
КБНМ	79.44		7.7%	•	-23.2%	•	-10.6%	•	-8.8%	95.72	73.76	112.00

° 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

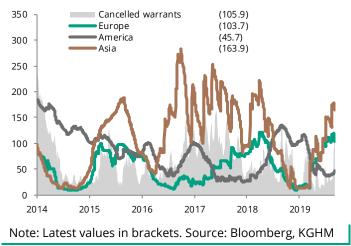












Silver: price (lhs) and gold ratio (rhs)



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





Legal note

This document has been prepared based on the below listed reports, among others, published in the following period: **26th August – 8th September 2019.**

- Barclays Capital, BofA Merrill Lynch, Citi Research, CRU Group, Deutsche Bank Markets Research,
- GavekalDragonomics,
 Goldman Sachs,
 JPMorgan,
 Macquarie Capital Research,
 Mitsui Bussan Commodities,
- Morgan Stanley Research,
 SMM Information & Technology,
 Sharps Pixley.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: • thebulliondesk.com, • lbma.org.uk, • lme.co.uk, • metalbulletin.com, • nbp.pl, , also: Bloomberg and Thomson Reuters.

Official metals prices are available on following websites:

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

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In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A. Departament Ryzyka Finansowego i Rynkowego (Financial and Market Risk Department) Wydzial Ryzyka Rynkowego (Market Risk Unit) ul. M. Sklodowskiej-Curie 48 59-301 Lubin, Poland