

Market Overview

- **Copper:** After months of stormy negotiations, workers at Escondida inked contract ending the risk of a strike that could have paralyzed world's biggest copper mine. Independent committee will decide the fate of Vedanta Copper Smelter, India's second, which was shut by the southern state of Tamil Nadu on environmental grounds (*page 2*).
- Precious metals: Gold and silver prices have fallen to their 2016 lows, breaking important technical levels. Precious metals propelled down by the US dollar strength against both developed and emerging market currencies, particularly against Chinese juan and Turkish lira (page 4).
- Jackson Hole: Jerome Powell laid out a doctrine of basing monetary policy as much on how the economy performs in reality as on the prescriptions of academic models as his Federal Reserve tries to extend a nearly decade-long expansion (page 6).

as of: 27th August 2018

Key market prices

		Close price	2w chng.
	LME (USD/t)		
▼	Copper	6 001.00	-1.3%
▼	Nickel	13 310.00	-2.7%
	LBMA (USD/troz)		
▼	Silver	14.62	-3.7%
▼	Gold (PM)	1 197.70	-0.2%
	FX		
	EURUSD	1.1588	1.6%
▼	EURPLN	4.2801	-0.7%
▼	USDPLN	3.7014	-2.2%
▼	USDCAD	1.3036	-0.8%
	USDCLP	665.58	1.8%
	Stocks		
▼	KGHM	88.06	-3.0%
Source	: Bloomberg, KGHM Po	olska Miedź; (mor	e on <u>page 10</u>)

Imp	Important macroeconomic data										
	Release	For									
	GDP (yoy)	2Q	5.1% 🔻								
*]:	Industrial prod. (yoy)	Jul	6.0% =								
	Industrial prod. (yoy)	Jul	10.3% 🔺								
	GDP (sa, yoy)	2Q	2.3% 🔺								
*	GDP (yoy)	2Q	5.3% 🔺								
Sourc	e: Bloomberg, KGHM Polska Mi	edź; (more	on <u>page 8</u>)								

35% Cancelled warrants as % of global stocks 30% 25% 20% 15% 10% 5% 0% 2018-01 2018-02 2018-03 2018-04 2018-05 2018-06 2018-07 2018-08 Source: Bloomberg, KGHM Polska Miedź

Copper warrants cancellation on the LME took place mostly in New Orleans, Singapore and Netherlands warehouses

Market Risk Unit marketrisk@kghm.com

Please see important disclosures at the end of this document (page 12)



Base and precious metals | Other commodities

Copper

After months of stormy negotiations, workers at Escondida inked contract ending the risk of a strike that could have paralyzed world's biggest copper mine. Independent committee will decide the fate of Vedanta Copper Smelter, India's second, which was shut by the southern state of Tamil Nadu on environmental grounds.

Independent committee to decide fate of Vedanta copper smelter in India

India's environment court said on Monday an independent judicial committee would decide in about six weeks whether to allow Vedanta Ltd to reopen its copper smelter, which was shut by the southern state of Tamil Nadu on environmental grounds. Tamil Nadu ordered the permanent closure of the plant and disconnected its power supply in May following protests that turned violent and culminated in the police opening fire on protesters, killing 13 of them. The company has denied that the plant, India's second biggest copper smelter located in the port city of Thoothukudi, pollutes the area. The National Green Tribunal (NGT) had earlier this month granted Vedanta, the Indian unit of London-listed Vedanta Resources Ltd, conditional access to the smelter for "administrative purposes". "We are pleased that that the NGT has again reiterated that access to the administrative units of its plant should be given to our employees," the company, Sterlite Copper, said in a statement late on Monday.

"We also welcome today's NGT's decision that findings and recommendations of the committee will be final which will supersede all the orders passed by the Tamil Nadu government so far," Sterlite Copper, which is part of Vedanta, said. NGT Chairman Justice Adarsh Kumar Goel said the committee, including representatives from Vedanta, Tamil Nadu Pollution Control Board and the federal environment ministry, will look into the matter afresh. The committee, to be headed by a retired judge, will have to deliver its verdict within four weeks of formation. The smelter has an annual production capacity of more than 400,000 tonnes, and the company said last month the closure has impacted 350 companies that buy its products.

Other important information on copper market:

The union representing workers of Chilean copper mine Escondida signed a new collective labor contract on Friday, ending the risk of a strike that could have paralyzed the world's biggest copper mine. Mine operator BHP had said earlier in the week that terms had been reached but the union needed to vote on the new pact. "We have managed to defend all of our benefits and we have

Closed smelter has an annual production capacity of more than 400,000 tonnes



been able to move forward on the relevant issues that have been long postponed," the union said in a statement, adding that the proposal received 93 percent approval. The company issued a statement saying the agreement "satisfies both workers and their families, as well as the need for Escondida to be sustainable over time." The negotiations took place just over a year after the failure of a labor agreement that led to a historic 44-day strike at the mine, which shook the international copper market.

- China Nonferrous Mining announced Thursday that the \$830 million Chambishi South-East copper-cobalt mine project in Zambia developed by its 85%-owned subsidiary NFC Africa Mining began trial production August 22. The project, which cost \$830 million to develop, is designed to have ore processing capacity of 3.3 million mt/year. It is capable of churning out 63,000 mt/year of copper contained in copper concentrates and 1,000 mt/year of cobalt when ramped up to full production, China Nonferrous said in a statement filed with the Stock Exchange of Hong Kong. Chambishi South-East is estimated to hold 2.79 million mt of copper resources and 150,000 mt of cobalt resources. China Nonferrous' mined copper production capacity is expected to get a significant boost with Chambishi South-East kicking off trial production, the Africa-focused Chinese integrated copper producer said. In 2017, the company's mining assets in Zambia produced 34,725 mt of copper in concentrates, up 22.1% year on year. Of the 2017 total, NFC Africa alone harvested 29,699 mt of copper in concentrates from its Chambishi Main mine and Chambishi West mine last year, 10.5% more than 2016. China Nonferrous had previously targeted the launch of Chambishi South-East for end-2016, but pushed back the schedule to the third guarter of this year due to construction delay, power shortage in Zambia, and tumbling prices of base metals in the global market over 2014-2016.
- The global world refined copper market showed a 31,000 tonnes deficit in May, compared with a 105,000 tonnes deficit in April, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 5 months of the year, the market was in a 21,000 tonnes surplus compared with a 66,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in May was 2.02 million tonnes , while consumption was 2.05 million tonnes. Bonded stocks of copper in China showed a 21,000 tonnes deficit in May compared with a 102,000 tonnes deficit in April.
- Quantum aims to finish its Cobre Panama copper project. Cobre Panama is moving toward a phased-in commissioning in late 2018 with ramp-up expected in 2019 and into 2020. The mine is projected to produce 150,000 tons of copper in 2019 and 270,000-300,000 tons in 2020, adding to the company's existing mines, which are expected to produce 590,000 tons in 2018. The project is 76% complete and spending to date amounts to \$5.5 billion of the \$6.3 billion total.
- A unit of Sichuan Road & Bridge Co. will start producing copper, zinc, gold and silver at a mine in Eritrea by early next year, helping diversify the country's agrarian economy, a mines ministry official said. The project will add to two



operating mines in the Horn of Africa nation, which is reemerging as an investor destination after a rapprochement with neighboring Ethiopia last month ended two decades of political tensions. Sichuan Road & Bridge Mining Investment Development Corp. bought 60 percent of the Asmara Mining Share Co. for \$65 million from Sunridge Gold Corp. in 2016. Eritrea's government owns the remaining 40 percent of AMSC, which plans to mine four deposits outside the capital, Asmara, known as Emba Derho, Adi Nefas, Gupo and Debarwa. "We expect by the first guarter of 2019 it will start," Alem Kibreab, director-general of mines in the Energy and Mines Ministry, said in an interview in Asmara. "Operations will be in phases: the first phase will be direct shipments of high-grade copper ore." The mine is expected to have a life of 17 years, producing an estimated 381,000 metric tons of copper, 850,000 tons of zinc, 436,000 ounces of gold and 11 million ounces of silver, according to a ministry presentation provided by Alem. Eritrea has two producing mines - Bisha, which produces gold, copper and zinc and is 60 percent owned by Nevsun Resources Ltd., and the Zara gold mine 60 percent owned by Shanghai Sfeco Group of China. Construction of another mine, the Colluli potash mine jointly owned by Australia's Danakali Ltd. and the government, is expected to start later this year.

Precious Metals

Gold and silver prices have fallen to their 2016 lows, breaking important technical levels. Precious metals propelled down by the US dollar strength against both developed and emerging market currencies, particularly against Chinese juan and Turkish lira.

India's July gold imports surge as jewellers replenish inventory

India's gold imports rose for the first time in seven months in July after a fall in prices ahead of a jewellery exhibition prompted jewellers to replenish stocks, provisional data from metals consultancy GFMS showed. The 44.2 percent year-on-year jump in gold purchases to 75 tonnes last month by the world's second-biggest consumer could support global prices, which have recently dropped to 17-month lows. But higher gold imports may widen the South Asian country's trade deficit and put further pressure on its currency, the rupee that hit a record low of 69.89 against the dollar on Monday.

"The recent rise in imports was due to stock building due to lower prices ahead of the jewellery show and in anticipation that the rupee may continue to weaken till 71 rupees," said GFMS analyst Cameron Alexander. Indian gold prices fell to their lowest level in six months in July. For the first seven months of 2018, the country's gold imports fell 28 percent from a year ago to 406.2 tonnes, data compiled by GFMS showed. Indian gold demand is set to improve in the second half of the year after falling 6 percent in January-June, as government steps to

July imports in India jumped by over 44% year-on-year, to 75 tonnes



boost farmers' incomes are expected to lift rural buying power, the World Gold Council said earlier this month.

Imports will remain robust this month as peak festival season is approaching, said Mukesh Kothari, director at bullion dealer RiddiSiddhi Bullions in Mumbai. Demand for gold usually strengthens in the final quarter of the year as India gears up for the wedding season as well as festivals such as Diwali and Dussehra, when buying the precious metal is considered auspicious.

Russian central bank buys more gold in face of tougher sanctions

Russia added more gold reserves in July than any other month this year as it continues to buy up the metal in the face of U.S. sanctions. The Russian central bank added 26.1 tons last month, bringing its holdings to 2,170 tons, according to International Monetary Fund data compiled by Bloomberg. The stockpile was valued at \$77.4 billion at the end of the month, according to the central bank's website. The last time Russia bought more gold in a single month was in November.

In April and May, Russia reduced its holdings of U.S. bills, notes and bonds by about four-fifths, and bought more gold, leading to speculation that the nation was dumping American assets to shield itself from the growing risk of harsher sanctions. Gold is "a 100 percent guarantee from legal and political risks," the central bank's First Deputy Governor Dmitry Tulin said at the time.

The pressure on Russia is mounting, with the U.S. stepping up sanctions and the U.K.'s top diplomat Jeremy Hunt on Tuesday calling on the European Union to follow suit in response to the poisoning of a former Russian spy on British soil last year. "The Americans are weaponizing the U.S. dollar, and it's absolutely right for Russia to want to diversify its foreign currency holdings," said John Meyer, a partner at SP Angel in London. "Gold is the ultimate liquid investment if you don't want exposure to the dollar."

The Russian central bank added 26.1 tons last month, bringing its holdings to 2,170 tons



Global economies | Foreign exchange markets

Powell doctrine emerges as Fed Chief debuts at Jackson Hole

Jerome Powell laid out a doctrine of basing monetary policy as much on how the economy performs in reality as on the prescriptions of academic models as his Federal Reserve tries to extend a nearly decade-long expansion.

Investors have fully priced in a rate increase next month and see an above-60% probability of another move by the Fed's meeting in December. In his first speech as Fed chief at an annual conference in Jackson Hole, Wyoming, Powell defended his gradualist approach and, in the process, hardened expectations for a September interest-rate increase. Investors have fully priced in a rate increase next month and see an above-60 percent probability of another move by the Fed's meeting in December. In addition, he stressed that estimates of how the economy works – like those followed by Ph.D. economists on the Fed staff – were at best "hazy" navigational guides. As a result, they often need to be tested by close observation of real economic data. The approach means that because policy makers often operate amid uncertainty they need to feel their way rather than rush to tighten because of what models say. The Fed's job is set to become more complicated as its benchmark rate turns restrictive and the expansion ages.

Powell used the term "shifting stars" several times in his speech Friday at the Kansas City Fed's annual policy symposium in Wyoming's Grand Teton National Park, referring to the guideposts in economic models often symbolized with an asterisk, or "star." The Federal Open Market Committee's job, as Powell defined it, is to be aware of how these estimates are changing and not take them as set in stone. The chairman reminded his audience of central bankers and economists that if the Fed stubbornly tried to defend a previous estimate for full employment – a term economists refer to as U-star – the cost would be 1.6 million jobs.

The Fed chairman said he expected the economy's "strong performance will continue" and as a result the Fed's "gradual process of normalization remains appropriate." The word "normalization" is significant in that it signals the central bank, even with the economy now in its 10th year of expansion, is still returning policy to something more consistent with a neutral interest rate, or one that doesn't slow or stimulate the economy. Even so, the policy has attracted the ire of President Donald Trump, who nominated Powell to the top Fed job and has since complained about his rate hikes.

Powell's discussion of the challenges of monetary policy at a time of uncertainty is an introduction to his chairmanship and how different it will be from his predecessors. Under chairs Ben Bernanke and Janet Yellen, the case for holding off on rate hikes was simple as the unemployment rate declined from a devastating peak of 10 percent in 2009 with an economy still scarred by the financial crisis. Powell took over from Yellen in February in the midst of a mature expansion that was given a big boost by Republican tax cuts and a higher federal



spending. Unemployment stood at 3.9 percent in July, well below 4.5 percent that the Fed sees as consistent with full employment in the longer run.

Still, central bankers have shown patience, raising rates at a careful pace while inflation has slowly moved higher. Powell defended the approach, noting "when unsure of the potency of a medicine, start with a somewhat smaller dose."

Powell said the FOMC must balance the threat of moving too fast and shortening the expansion, or moving too slowly and allowing for overheating. The fulcrum of Powell's policy is straight out of modern economic theory -- keeping inflation expectations low and stable. Measures of what the public expects longer-run inflation to be can be somewhat hazy, but most gauges show them at low and stable rates. If they ever broke free, the Fed would act aggressively. "I am confident that the FOMC would resolutely 'do whatever it takes' should inflation expectations drift materially up or down or should crisis again threaten," Powell said.



Macroeconomic calendar

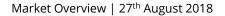
Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
		China				*3	
0	13-Aug	New yuan loans (CNY bn)	Jul	1 450 🔻	1 840	1 275	
0000	14-Aug	Industrial production (yoy)	Jul	6.0% =	6.0%	6.3%	
00	14-Aug	Fixed assets investments (ytd, yoy)	Jul	5.5% 🔻	6.0%	6.0%	
0	14-Aug	Retail sales (yoy)	Jul	8.8% 🔻	9.0%	9.1%	
		Poland				_	
00	13-Aug	Trade balance (EUR mn)‡	Jun	- 413 🔻	119	- 66.0	
00	13-Aug	Exports (EUR mn)‡	Jun	18 071 🔺	17 244	17 736	
00	13-Aug	Current account balance (EUR mn)‡	Jun	- 240 🔻	169	- 303	
00000	14-Aug	GDP (yoy) - preliminary data	2Q	5.1% 🔻	5.2%	5.0%	
00000	14-Aug	GDP (qoq) - preliminary data	2Q	0.9% 🔻	1.6%	1.0%	
0000	14-Aug	Consumer inflation CPI (yoy) - final data	Jul	2.0% =	2.0%		
0000	16-Aug	Core CPI (excluding food and energy, yoy)	Jul	0.6% =	0.6%	0.6%	
00	17-Aug	Average gross salary (yoy)	Jul	7.2%	7.5%	7.6%	
)	17-Aug	Employment (yoy)	Jul	3.5% 🔻	3.7%	3.6%	
0000	20-Aug	Sold industrial production (yoy)‡	Jul	10.3% 🔺	6.7%	10.0%	
00	20-Aug	Producer inflation PPI (yoy)	Jul	3.4% 🔻	3.7%	3.5%	
000	22-Aug	Retail sales (yoy)	Jul	9.3% 🔻	10.3%	9.5%	
,	23-Aug	M3 money supply (yoy)	Jul	7.3% =	7.3%	7.3%	
0	24-Aug	Unemployment rate	Jul	5.9% =	5.9%	5.9%	
		US	(CNY bn) Jul 1450 ▼ inction (yoy) Jul 6.0% - estments (ytd, yoy) Jul 5.5% ▼ Jul 8.8% ▼ EUR mn)‡ Jun -413 ▼ i))‡ Jun 18.071 ▲ ibalance (EUR mn)‡ Jun -240 ▼ minary data 2Q 5.1% ▼ ion CP((yoy) - final data Jul 2.0% - ing food and energy, yoy) Jul 0.6% - silary (yoy) Jul 7.2% ▼ y) Jul 0.6% - rate Jul 0.3% ▼ y(yoy) Jul 7.3% - rate Jul 0.1% ▼ uding autos, mom)‡ Jul 0.1% ▲ on‡ Jul 0.6% A preliminary data Aug 95.3 ▼ PMI - preliminary data Aug 95.2 ▼ PMI - preliminary data Aug 55.2 ▼ <td></td> <td></td>				
0000	15-Aug	Industrial production (mom)‡	Jul	0.1% 🔻	1.0%	0.3%	
00	15-Aug	Retail sales (excluding autos, mom)‡	Jul	0.6% 🔺	0.2%	0.3%	
>	15-Aug	Capacity utilization‡	Jul	78.1% =	78.1%	78.2%	
00	16-Aug	Philadelphia Fed business outlook	Aug	11.9 🔻	25.7	22.0	
00	17-Aug	University of Michigan confidence index - preliminary data	Aug	95.3 🔻	97.9	98.0	
000	23-Aug	Composite PMI - preliminary data	Aug	55.0 🔻	55.7		
000	23-Aug	Manufacturing PMI - preliminary data	Aug	54.5 🔻	55.3	55.0	
000	23-Aug	PMI services - preliminary data	Aug	55.2 🔻	56.0	55.8	
00	24-Aug	Durable goods orders - preliminary data‡	Jul	-1.7% 🔻	0.7%	-1.0%	
		Eurozone					
00000	14-Aug	GDP (sa, yoy) - preliminary data‡	2Q	2.2% =	2.2%	2.1%	
00000	14-Aug	GDP (sa, qoq) - preliminary data‡		0.4% =	0.4%	0.3%	
000	14-Aug	Industrial production (sa, mom)‡	Jun	-0.7% 🔻	1.4%	-0.4%	
0000	14-Aug	Industrial production (wda, yoy)‡	Jun	2.5% 🔻	2.6%	2.4%	
)	14-Aug	ZEW survey expectations	Aug	- 11.1 🔺	- 18.7		
•	16-Aug	Trade balance (EUR mn)	Jun	22.5 🔺	16.5		
000	17-Aug	Consumer inflation CPI (yoy) - final data	-		2.1%	2.1%	
000	17-Aug	Core CPI (yoy) - final data	-		1.1%	1.1%	
000	23-Aug	Composite PMI - preliminary data	-		54.3	54.5	
000	23-Aug	Manufacturing PMI - preliminary data	•		55.1	55.2	
000	23-Aug	Services PMI - preliminary data	•		54.2	54.4	
2	23-Aug		-		- 0.5	- 0.7	



Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
		Germany				
00000	14-Aug	GDP (yoy) - preliminary data‡	2Q	2.3% 🔺	1.4%	2.5% 🕳
00000	14-Aug	GDP (sa, qoq) - preliminary data‡	2Q	0.5% 🔺	0.4%	0.4% 🦱
0000	14-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	2.1% =	2.1%	2.1% 🔘
0000	14-Aug	Consumer inflation CPI (yoy) - final data	Jul	2.0% =	2.0%	2.0% 🔘
000	23-Aug	Composite PMI - preliminary data	Aug	55.7 🔺	55.0	55.1 🦰
000	23-Aug	Manufacturing PMI - preliminary data	Aug	56.1 🔻	56.9	56.5 🕳
00000	24-Aug	GDP (yoy) - final data	2Q	2.3% =	2.3%	2.3% 🔘
00000	24-Aug	GDP (sa, qoq) - final data	2Q	0.5% =	0.5%	0.5% 🔘
00	24-Aug	Exports (qoq)‡	2Q	0.7% 🔺	-0.3%	1.4% 🛑
		France				
0000	14-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	2.6% =	2.6%	2.6%
0000	14-Aug	Consumer inflation CPI (yoy) - final data	Jul	2.3% =	2.3%	2.3% 🔘
000	23-Aug	Composite PMI - preliminary data	Aug	55.1 🔺	54.4	54.6 🔴
000	23-Aug	Manufacturing PMI - preliminary data	Aug	53.7 🔺	53.3	53.5
		Italy				
0000	13-Aug	Harmonized consumer inflation HICP (yoy) - final data	Jul	1.9% =	1.9%	1.9% O
		υκ				
00	14-Aug	Unemployment rate (ILO, 3-months)	Jun	4.0% 🔻	4.2%	4.2% 🕳
0000	15-Aug	Consumer inflation CPI (yoy)	Jul	2.5% 🔺	2.4%	2.5% 🔘
		Japan				•
0000	14-Aug	Industrial production (yoy) - final data	Jun	-0.9% 🔺	-1.2%	
000	23-Aug	Manufacturing PMI - preliminary data	Aug	52.5 🔺	52.3	
0000	24-Aug	Consumer inflation CPI (yoy)	Jul	0.9% 🔺	0.7%	1.0%
		Chile				*
00000	20-Aug	GDP (yoy)‡	2Q	5.3% 🔺	4.3%	5.2%
		Canada				*
0000	17-Aug	Consumer inflation CPI (yoy)	Jul	3.0% 🔺	2.5%	2.5%

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

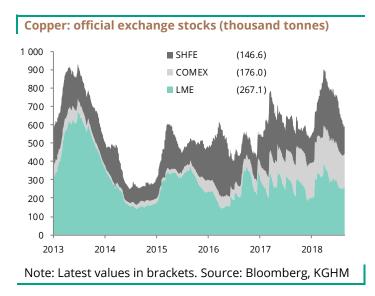
KGH

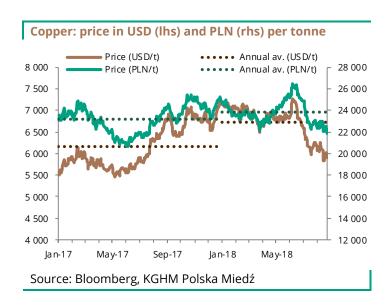
Key	v base &	precious meta	Inrices	exchange	rates and	other im	portant market	factors
The second secon	buse a		i prices	, cachange	Tutes und		ipor curre mur de c	Iuccor 5

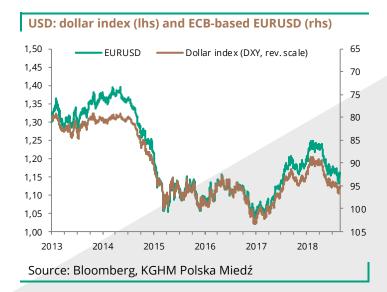
(as of: 24-Aug-18)					Price	cha	nge ¹			From	ning²	
	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t)												
Copper	6 001.00	\bullet	-1.3%	▼	-9.7%	▼	-16.2%	▼	-8.8%	6 731.26	5 843.00	7 262.5
Molybdenum	26 000.00	-	0.0%	-	0.0%		62.5%		62.5%	22 851.52	16 000.00	26 000.0
Nickel	13 310.00	▼	-2.7%	▼	-10.7%		8.6%		14.3%	13 813.42	12 415.00	15 750.0
Aluminum	2 062.00		0.5%	▼	-5.5%	▼	-8.0%	▼	-2.0%	2 174.75	1 967.00	2 602.5
Tin	19 250.00	\bullet	-0.8%	▼	-2.2%	▼	-3.1%	▼	-6.8%	20 702.48	18 675.00	22 105.0
Zinc	2 508.00		0.6%	▼	-14.9%	▼	-24.2%	▼	-19.0%	3 104.11	2 325.00	3 618.0
Lead	2 079.00		0.4%	▼	-14.5%	▼	-16.7%	▼	-10.8%	2 380.71	1 977.00	2 683.0
LBMA (USD/troz)												
Silver	14.62	▼	-3.7%	▼	-8.8%	▼	-13.3%	▼	-13.6%	16.36	14.61	17.5
Gold ²	1 197.70	▼	-0.2%	▼	-4.2%	▼	-7.6%	▼	-7.1%	1 294.39	1 178.40	1 354.9
LPPM (USD/troz)												
Platinum ²	786.00	▼	-3.4%	▼	-7.6%	▼	-15.2%	▼	-19.5%	912.08	775.00	1 020.0
Palladium ²	932.00		3.0%	▼	-2.2%	▼	-11.7%	▼	-0.9%	986.39	849.00	1 129.0
FX ³												
EURUSD	1.1588		1.6%	▼	-0.6%	▼	-3.4%	▼	-1.8%	1.1984	1.1321	1.249
EURPLN	4.2801	▼	-0.7%	▼	-1.9%		2.6%	▼	-0.1%	4.2416	4.1423	4.397
USDPLN	3.7014	▼	-2.2%	▼	-1.1%		6.3%		1.9%	3.5408	3.3173	3.787
USDCAD	1.3036		-0.8%	▼	-1.0%		3.9%		4.0%	1.2855	1.2288	1.331
USDCNY	6.8105	▼	-1.2%		2.9%		4.7%		2.2%	6.4731	6.2690	6.934
USDCLP	665.58		1.8%		2.7%		8.2%		3.8%	621.59	588.28	669.8
Money market												
3m LIBOR USD	2.317		0.00	▼	-0.02		0.62		1.00	2.179	1.696	2.36
3m EURIBOR	-0.319	-	0.00		0.00		0.01		0.01	-0.325	-0.329	-0.31
3m WIBOR	1.710		0.01		0.01	▼	-0.01	▼	-0.02	1.706	1.700	1.72
5y USD interest rate swap	2.848	▼	-0.03	▼	-0.04		0.60		1.02	2.797	2.283	3.03
5y EUR interest rate swap	0.279		0.01		0.01	▼	-0.03		0.09	0.365	0.224	0.50
5y PLN interest rate swap	2.420	\bullet	-0.04	▼	-0.04	▼	-0.08		0.13	2.469	2.280	2.74
Fuel												
WTI Cushing	69.82		3.9%	▼	-5.8%		15.6%		47.8%	66.41	59.19	74.1
Brent	75.01		4.3%	▼	-4.6%		12.3%		45.6%	71.44	62.33	79.1
Diesel NY (ULSD)	219.72		2.9%	▼	-0.4%		6.4%		35.5%	208.23	183.32	229.3
Others												
VIX	11.99	•	-2.79	▼	-4.10		0.95	▼	-0.24	15.50	9.15	37.3
BBG Commodity Index	83.69		0.2%	▼	-4.3%	▼	-5.1%		0.2%	87.65	82.17	91.5
S&P500	2 874.69		1.9%		5.8%		7.5%		17.9%	2 741.63	2 581.00	2 874.6
DAX	12 394.52		0.3%		0.7%	▼	-4.0%		1.8%	12 623.50	11 787.26	13 559.6
Shanghai Composite	2 729.43	•	-2.0%	▼	-4.1%	▼	-17.5%	▼	-16.6%	3 103.55	2 668.97	3 559.4
WIG 20	2 312.70		2.3%		8.3%	•		▼	-5.8%	2 311.30	2 098.75	2 630.3
KGHM	88.06		-3.0%		0.1%	-	-20.8%	-	-28.7%	97.05	83.80	115.0

° 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

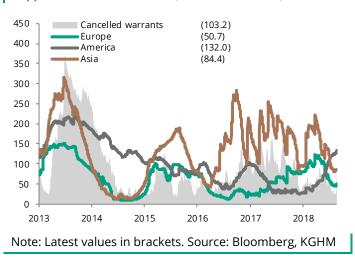




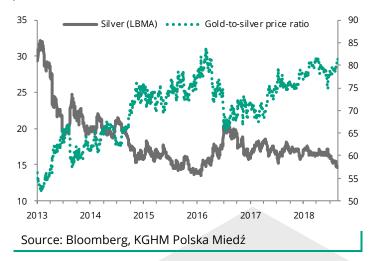




Copper: official LME stocks (thousand tonnes)



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: **13th – 26th August 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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