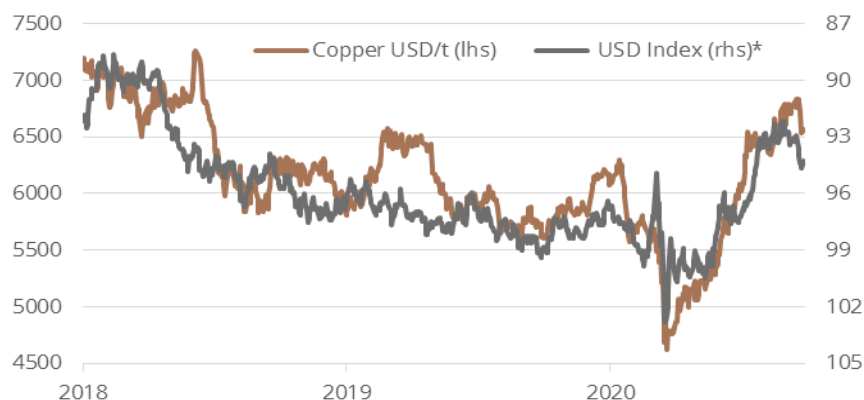


Market Overview

- Copper:** International copper prices presented traders in China with the infrequent opportunity to profit from shipping the metal overseas. The opening of the arbitrage window is unusual because it comes just as China is leading the world's economic recovery. Moreover, this is the season when Chinese demand for the red metal typically peaks as manufacturers and builders ramp-up activity after the summer lull (*page 2*).
- Precious metals:** In the period from January to the end of July 2020, central banks increased their gold reserves by 8.4 million ounces. They are projected to buy 10.5 million ounces net in 2020, compared with 16.2 million ounces and 17.3 million ounces in 2018 and 2019 respectively. There are two primary reasons for the decline in purchases in 2020: higher gold prices and fewer banks that decide to increase their yellow metal holdings (*page 4*).
- EU:** The manufacturing sector reported an increase in production which was stimulated by rising demand and the reopening of retail in many countries. However, the larger service sector plunged into recession again. As demand falls, service companies reduce employment (*page 7*).
- USA:** Fed vice president believes that in order to anchor inflation expectations at 2%, a longer period is necessary in which inflation remains above the inflation target. The FOMC has signaled interest rates will remain close to zero until 2023 (*page 7*).

The dollar price of copper tends to move in the opposite direction to the dollar index



*BBG DXY Index (inverted)

Source: KGHM Polska Miedź S.A.



as of: 28th September 2020

Key market prices

	Close price	2w chng.
LME (USD/t)		
▼ Copper	6 529.00	-3.8%
▼ Nickel	14 285.00	-5.3%
LBMA (USD/troz)		
▼ Silver	22.63	-15.8%
▼ Gold (PM)	1 859.70	-5.1%
FX		
▼ EURUSD	1.1634	-2.0%
▲ EURPLN	4.5477	2.2%
▲ USDPLN	3.9016	4.0%
▲ USDCAD	1.3396	1.7%
▲ USDCLP	788.02	2.6%
Stocks		
▼ KGHM	118.05	-13.7%

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

Important macroeconomic data

Release	For		
Industr. prod. (sa, mom)	Jul	4.1%	▼
Trade balance	Jul	998	▼
Composite PMI	Sep	54.4	▼
Industrial prod. (yoy)	Aug	5.6%	▲
Manufacturing PMI	Sep	56.6	▲

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

Market Risk Unit

marketrisk@kgm.com

Base and precious metals | Other commodities

Copper

International copper prices presented traders in China with the infrequent opportunity to profit from shipping the metal overseas. The opening of the arbitrage window is unusual because it comes just as China is leading the world's economic recovery. Moreover, this is the season when Chinese demand for the red metal typically peaks as manufacturers and builders ramp-up activity after the summer lull.

The Odd Timing of Chinese Copper Smelters Rare Window to Export

The last time the window opened, exports accounted for around 36,000 tons against production of 740,000 tons

International copper prices have run ahead of those in China, presenting traders in the world's biggest consumer with the infrequent opportunity to profit from shipping the metal overseas. The opening of the arbitrage window for the first time in over a year is unusual because it comes just as China is leading the world's economic recovery from the pandemic. Moreover, this is the season when Chinese demand for the metal used in pipes, wiring and batteries typically peaks as manufacturers and builders ramp-up activity after the summer lull. But that demand has so far fallen short of expectations, even as smelters have cranked up production of the refined metal in anticipation of an autumn bonanza. It's left prices on the London Metal Exchange at its highs, while exporting copper to China has been a loss-making trade since June. Those losses widened to 1,128 yuan (\$166) a ton at the beginning of September, according to Shanghai Metals Market. Signs of shakiness in domestic demand have been building, and were confirmed last week after inventory monitored by the Shanghai Futures Exchange unexpectedly surged to a four-month high, and above last year's levels, defying the usual seasonal drawdown. "Some smelters have already shipped metal to bonded warehouses for export," said Zhu Ruoyan, an analyst with SMM, "Chinese copper demand has been weakening since July, and peak seasonal demand has been well delayed. We await to see some pickup in October." Recent data from China supports the idea that the nation may well be unique among major economies in enjoying something like a V-shaped recovery from the health crisis. But that carries its own risks as strong policy support is baked into demand forecasts, and if Beijing judges that the rebound is going well enough, it could ease off on the monetary and fiscal stimulus that has driven prices higher. In any case, China's smelting industry, the world's largest, exports just a small portion of its output in term contracts and will only ship additional material on a spot basis when profitable. The last time the window opened in April 2019, exports accounted for around 36,000 tons against production of 740,000 tons.

Other important information on copper market:

- Global copper smelting activity recovered in August, mainly due to a jump in activity in North America, data from satellite surveillance of copper plants showed. According to satellite service SAVANT and broker Marex Spectron, copper processing in top producer China extended its decline, but that was likely due to operations needing maintenance. As Guy Wolf said, global head of analytics at Marex, the most striking data in August was the rebound in North American smelter activity, which has been extremely depressed since the first quarter, with a large amount of capacity to still come online. Earth-i's global dispersion index rose to an average of 44.2 in August, up from 41.5 a month earlier. SAVANT launched the dispersion index in June, with 50 points indicating smelters are operating at the average level of the last 12 months. It also has a second index showing the percentage of active smelters.
- The global world refined copper market showed a 192,000 tonnes deficit in June, compared with a 36,000 tonnes deficit in May, the International Copper Study Group (ICSG) said in its latest monthly bulletin. According to ICSG, for the first 6 months of the year, the market was in a 235,000 tonnes deficit compared with a 309,000 tonnes deficit in the same period a year earlier. World refined copper output in June was 2.06 million tonnes, while consumption was 2.25 million tonnes. Bonded stocks of copper in China showed a 205,000 tonnes deficit in June compared with a 111,000 tonnes deficit in May.
- Canadian listed miner First Quantum posted a positive updated mineral reserve estimate for its Kansanshi copper-gold project in Zambia, showing a 70% increase from May 2015 in total proven and probable copper reserves. The revised model estimates likely copper reserves of 842.7 million mt at an ore grade of 0.64% total copper, up from 492.8 million mt at 0.63% shown in May 2015. The finding would also extend the mine life out to 24 years. "Once internal approvals are granted, construction could potentially re-commence in 2023 with completion by late 2024. An estimated \$408 million of capital would be required for this construction, inclusive of \$25 million for upgrades and enhancements to existing processing facilities," a financial statement read. "The current scenario has the majority of spending occurring between the second half of 2023 and early 2025. The timing could be advanced or delayed depending on capital availability, commodity prices and the Zambian fiscal regime. The update included material increases to both reserves and resources, along with compelling economics on a 25 million mt/year expansion of the sulphide processing circuit at the plant," the Canadian miner added.
- According to research house Antaika China's August refined copper cathode production at major smelters fell 1.7% year-on-year to 725,500 tonnes. The output, based on 22 copper smelters surveyed by Antaika, was up 5.6% last month compared with July and beat an expectation of 710,000 tonnes due to a drop in maintenance. "However, considering that copper concentrate processing fees were still at relatively low levels, it would continue to constrain smelters' normal production," said Antaika, referring to the drop on an annual basis. Smelters with annual capacity at more than 1 million tonnes boosted

cathode production by 2.4% year-on-year in August, mainly from Tongling Nonferrous, China Copper and Jinchuan Group, according to the research house. Antaika also expects refined copper production to continue to climb to around 730,000 tonnes in September with few maintenance plan at big firms.

Precious Metals

Central Banks Still Reign In Gold Purchases

In the period from January to the end of July 2020, central banks increased their gold reserves by 8.4 million ounces. They are projected to buy 10.5 million ounces net in 2020, compared with 16.2 million ounces and 17.3 million ounces in 2018 and 2019 respectively. There are two primary reasons for the decline in purchases in 2020: higher gold prices and fewer banks that decide to increase their yellow metal holdings.

For the period between 2008 and 2019 the correlation between net purchases of gold and the price of gold stood at negative 0.56

Central banks were net buyers of 8.4 million ounces of gold during the first seven months of this year. Central banks are forecast to buy 10.5 million ounces of gold on a net basis during 2020, which compares with net purchases of 16.2 million ounces and 17.3 million ounces in 2018 and 2019, respectively. There are primarily two reasons for the decline in central bank purchases during 2020: Central bank sensitivity to higher gold prices and fewer number of central banks buying. The weakness in central bank net purchases this year can largely be attributed to the sharp increase in gold prices. Central bank buyers have historically been sensitive to gold prices, reducing the amount of gold purchased or completely ceasing to buy gold in a sharply rising price environment. For the period between 2008 and 2019 the correlation between net purchases of gold by central banks and the price of gold stood at negative 0.56. Another factor that has been weighing on net purchases is a reduction in the number of central banks purchasing gold this year. The People's Bank Of China, which has been a large buyer of gold in recent years, has not reported any fresh purchases so far this year. Many of the central banks which have been long time net buyers in the recent past have turned net sellers during 2020. The most notable among this group were the central banks of Kazakhstan and the Kyrgyz Republic. The central bank of Russia, which has been a large consistent buyer of gold since August 2006, suspended indefinitely its gold purchases starting April 2020. The sharp collapse in oil prices has shrunk the country's foreign exchange inflow and government revenue. Russia had been converting a lot of the dollars and euros it had been receiving for its exports into gold as a way of diversifying away from these currencies. Also, Russia's gold holdings as a percentage of total monetary reserves is larger than other major emerging economies. At the end of 2019 gold accounted for 20.4% of the Russian central bank's total monetary reserves. Given that the Russian central bank has already built a fairly large hoard of gold and its foreign exchange inflows have slowed, it is unlikely to be in a rush to build its gold reserves further and is also likely to be more sensitive to the price of gold. That said, the second largest net purchase of gold so far in 2020 are made by the

central bank of Russia, which added around 900,000 ounces of gold to its holdings in the first quarter of this year. The largest buyer of gold this year has been the central bank of Turkey, which has added 7.08 million ounces of gold on a net basis to its holdings during the first seven months of the year. The third largest buyer has been the Reserve Bank of India, which has added 850,000 ounces of gold to its holdings over the same period in 2020. The central banks of Turkey and India are likely to continue adding to their gold holdings in coming months. One of the primary reasons these two central banks have been adding gold to their holdings is the weakness in their domestic currencies, which they seek to hedge by purchasing dollar denominated gold.

Switzerland wants gold segregation by customs for more transparency

The world's gold refining hub wants international customs to differentiate between mined and bank gold to help improve supply chain transparency and traceability.

The Alpine nation submitted a proposal to the World Customs Organization (WCO) to amend the current classification of gold for international customs duty. Currently the WCO's harmonised system has a single code for unwrought gold (impure gold that needs further processing). This means that it is not possible for the system to differentiate if the gold imported into a country was refined or unrefined. By getting customs around the world to differentiate between mined gold and bank gold Switzerland "wishes to improve the traceability of supply chains and to obtain more accurate statistics". A fifth of the world's gold trade passes through Switzerland. The proposal is not completely altruistic, however. If accepted, it will give Swiss gold refiners an even playing field because from next year Swiss gold importers will have to provide additional information on the type of gold in the import declaration form. If the Swiss proposal is accepted by the WCO members, the new customs tariff classification for gold will become the international standard from 2027.

Less than half the gold sent to big refiners comes from mines: LBMA

The LBMA said its accredited refineries processed 4,836 tons of gold in 2018 - a current value of around \$300 billion. Of these, 2,127 tons came from large industrial mines, 26 tons from small and artisanal mines, and the source of 2,683 tons was recycling.

Less than half the gold processed by major refiners in 2018 came from large industrial mines, the London Bullion Market Association said, publishing data revealing for the first time the origin of bullion moving through its system. The LBMA said refiners it accredits, which dominate the industry and supply the world's biggest banks, jewelers and manufacturers, processed 4,836 tons of gold in 2018 -- an amount worth around \$300 billion at current prices. It said 2,127 tons came from large industrial mines, 26 tons was supplied by small and

artisanal mines, and 2,683 tons was recycled gold such as jewelry, bars and coins. The disclosure was part of the LBMA's first annual report on the implementation of its responsible sourcing guidelines, which aim to stop gold whose production is linked to human rights abuses, crime or environmental damage from entering the supply chain. Artisanal and recycled gold is riskier than that from large mines because it often its origins can be difficult or impossible to trace. The LBMA says its refiners process more than 90% of gold from large industrial mines, but they take only a tiny fraction of the roughly 550 tons produced by artisanal and small scale miners each year.

Turkey aims to reach annual 100 tons of gold production in 5 years

The country first started producing gold in 2001 when output was at 1.4 tons. This level was steadily increasing, reaching the record level of 38 tons last year.

Energy and Natural Resources Minister Fatih Dönmez said that gold production in Turkey peaked at 38 tons last year, adding that their target is reaching 44-45 tons in 2020 despite the COVID-19 pandemic. "We also aim to reach an annual 100 tons of gold production in the next five years," Dönmez told Anadolu Agency (AA). The energy minister noted that gold production requires long-term research and investment, and there had been no efforts on the issue until the 2000s. "Our target for 2020 is 44-45 tons despite the pandemic, but this amount is not enough. We import 130-160 tons of gold every year. The amount we pay is no less than \$8 billion-\$10 billion. This year, the price we paid for gold imports in the first six months was \$11 billion. Dönmez added that the ministry has stepped up its exploration activities in various fields. The country first started producing gold in 2001 when output was at 1.4 tons. That level climbed steadily to reach a then-record high of 33.5 tons in 2013 when 7,500 people were employed in the country's gold production sector. Gold output in Turkey fell from 2014 through 2017, but climbed to 27.1 tons in 2018 and increased by around 40% from that year to reach 38 tons in 2019, according to Turkey's Gold Miners Association (AMD) data.

Global economies | Foreign exchange markets

Euro Zone Sept Business Growth Halts As Services Reverse

The manufacturing sector reported an increase in production which was stimulated by rising demand and the reopening of retail in many countries. However, the larger service sector plunged into recession again. As demand falls, service companies reduce employment.

Euro zone business growth ground to a halt this month as the service industry slammed into reverse, knocked by a resurgence in coronavirus cases that pushed governments to reintroduce restrictions and citizens to stay at home, a survey showed. That renewed downturn for services more than offset the strongest manufacturing growth in two years. During the height of the pandemic, countries imposed tough lockdown measures to quell the spread of the virus, bringing economic activity to a virtual standstill, but as infection rates fell sharply, most measures were relaxed. But case numbers have started rising again in key economies and governments have had to reimpose partial restrictions, sending IHS Markit's Flash Purchasing Managers' Index down to 50.1 in September from August's 51.9. "A two-speed economy is evident, with factories reporting that production growth was buoyed by rising demand, notably from export markets and the reopening of retail in many countries, but the larger service sector has sunk back into decline" said Chris Williamson, chief business economist at IHS Markit. With demand falling, services firms cut staffing levels. Manufacturers fared much better, with the factory PMI climbing to a just over two-year high of 53.7 from 51.7 and a median forecast of 51.9. While services came in below all expectations, manufacturing was above all of them. A sub-index measuring output which feeds into the Composite PMI rose to 56.8 from 55.6, its highest since early 2018. But factories also cut headcount despite a surge in demand to its highest since February 2018. The new orders sub-index rose to 57.1 from 55.4, suggesting the manufacturing recovery would continue. Overall optimism improved, with the composite future output sub-index rising to 60.3 from 57.8, its highest since February, just before the full effects of the pandemic were felt. "Encouragement comes from a further improvement in companies' expectations for the year ahead, but this optimism often rests on infection rates falling, which remains far from guaranteed for the coming months," Markit's Williamson said.

Fed's Clarida Says Months of 2% Inflation Needed for Liftoff





Fed vice president believes that in order to anchor inflation expectations at 2%, a longer period is necessary in which inflation remains above the inflation target. The FOMC has signaled interest rates will remain close to zero until 2023.








Federal Reserve Vice Chairman Richard Clarida said the central bank won't consider raising interest rates from near zero until it actually achieves 2% inflation for at least a few months as well as full employment. The FOMC signaled

rates would stay near zero through 2023 and adapted their post-meeting statement to reflect their new strategy - of allowing inflation to rise above 2% after periods of under-performance. "We don't want it to be a fleeting, you know, one quarter and done," Clarida said. "At that point we will assess what is the appropriate liftoff and timing, but that's really down the road." The vice chairman said that liftoff is several years off, as the economy is recovering from the deepest recession since the Great Depression in the 1930s. He repeated the Fed's call for additional fiscal support to help speed the recovery. "The economy is recovering robustly, but we are still in a deep hole," he said. "Long term, the U.S. needs to get back on a sustainable fiscal path, but you don't want to start that in the midsts of the worst economic hit in 90 years." The current slack in the economy is generating inflation that is undershooting the Fed's goals, Clarida said. The upshot is the central bank must aim for higher than 2% inflation to offset weakness during downturns or the expectations of the public will drift below target, he said. "We now think that to anchor inflation expectations at 2%, we need, coming out of recessions, to spend some time above 2% to balance off those times that we've been below," Clarida said. While Fed Chair Jerome Powell during a press briefing repeatedly described the policy committee's new guidance as powerful, the vague wording of it has resulted in a wide variety of assessments. Evans, answering questions during a virtual event on Tuesday, said the new guidance implies that "we could start raising rates before we start averaging 2%. It's still -- we need to discuss that." Meanwhile, Richmond President Thomas Barkin said the new guidance meant "a low level of unemployment alone would not lead to proactive increases in interest rates."

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
★★★★	15-Sep	Industrial production (yoy)	Aug	5.6% ▲	4.8%	5.1% ▲
★★	15-Sep	Fixed assets investments (ytd, yoy)	Aug	-0.3% ▲	-1.6%	-0.4% ▲
★	15-Sep	Retail sales (yoy)	Aug	0.5% ▲	-1.1%	0.0% ▲
★★	27-Sep	Industrial profits (yoy)	Aug	19.1% ▼	19.6%	--
Poland 						
★★	14-Sep	Trade balance (EUR mn)	Jul	998 ▼	2 666	2 462
★★	14-Sep	Exports (EUR mn)	Jul	19 563 ▲	18 689	19 799
★★	14-Sep	Current account balance (EUR mn)	Jul	1 620 ▼	2 842	2 054
★★★★★	15-Sep	NBP base rate decision	Sep	0.10% -	0.10%	0.10%
★★★★	15-Sep	Consumer inflation CPI (yoy) - final data	Aug	2.9% -	2.9%	--
★★★★	16-Sep	Core CPI (excluding food and energy, yoy)	Aug	4.0% ▼	4.3%	4.1%
★★	17-Sep	Average gross salary (yoy)	Aug	4.1% ▲	3.8%	4.0%
★	17-Sep	Employment (yoy)	Aug	-1.5% ▲	-2.3%	-1.5%
★★★★	18-Sep	Sold industrial production (yoy)	Aug	1.5% ▲	1.1%	3.0%
★★	18-Sep	Producer inflation PPI (yoy)	Aug	-1.2% ▼	-0.6%	-1.0%
★★★	21-Sep	Retail sales (yoy)	Aug	0.4% ▼	2.7%	2.4%
★	22-Sep	M3 money supply (yoy)	Aug	16.2% ▼	16.8%	16.4%
★★	23-Sep	Unemployment rate	Aug	6.1% -	6.1%	6.1%
US 						
★★★★	15-Sep	Industrial production (mom)‡	Aug	0.4% ▼	3.5%	1.0%
★	15-Sep	Capacity utilization‡	Aug	71.4% ▲	71.1%	71.4%
★★★★★	16-Sep	FOMC base rate decision - upper bound (Fed)	Sep	0.25% -	0.25%	0.25%
★★★★★	16-Sep	FOMC base rate decision - lower bound (Fed)	Sep	0.00% -	0.00%	0.00%
★★	16-Sep	Retail sales (excluding autos, mom)‡	Aug	0.7% ▼	1.3%	1.0%
★★	17-Sep	Philadelphia Fed business outlook	Sep	15.0 ▼	17.2	15.0
★★	18-Sep	University of Michigan confidence index - preliminary data	Sep	78.9 ▲	74.1	75.0
★	22-Sep	Richmond Fed manufacturing index	Sep	21.0 ▲	18.0	12.0
★★★	23-Sep	Composite PMI - preliminary data	Sep	54.4 ▼	54.6	--
★★★	23-Sep	Manufacturing PMI - preliminary data	Sep	53.5 ▲	53.1	53.5
★★★	23-Sep	PMI services - preliminary data	Sep	54.6 ▼	55.0	54.7
★★	25-Sep	Durable goods orders - preliminary data‡	Aug	0.4% ▼	11.7%	1.5%
Eurozone 						
★★★★	14-Sep	Industrial production (sa, mom)‡	Jul	4.1% ▼	9.5%	4.2%
★★★★	14-Sep	Industrial production (wda, yoy)‡	Jul	-7.7% ▲	-12.0%	-8.1%
★★	15-Sep	Labour costs (yoy)‡	2Q	4.2% ▲	3.7%	--
★	15-Sep	ZEW survey expectations	Sep	73.9 ▲	64.0	--
★	16-Sep	Trade balance (EUR mn)	Jul	27.9 ▲	21.2	--
★★★★	17-Sep	Consumer inflation CPI (yoy) - final data	Aug	-0.2% -	-0.2%	-0.2%
★★★★	17-Sep	Core CPI (yoy) - final data	Aug	0.4% -	0.4%	0.4%
★	22-Sep	Consumer confidence - estimation	Sep	-13.9 ▲	-14.7	-14.7
★★★	23-Sep	Composite PMI - preliminary data	Sep	50.1 ▼	51.9	51.9
★★★	23-Sep	Manufacturing PMI - preliminary data	Sep	53.7 ▲	51.7	51.9
★★★	23-Sep	Services PMI - preliminary data	Sep	47.6 ▼	50.5	50.6
★	25-Sep	M3 money supply (yoy)‡	Aug	9.5% ▼	10.1%	10.1%

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany 							
🔊🔊🔊	23-Sep	Composite PMI - preliminary data	Sep	53.7 ▼	54.4	54.0	🔻
🔊🔊🔊	23-Sep	Manufacturing PMI - preliminary data	Sep	56.6 ▲	52.2	52.5	🔼
🔊🔊	23-Sep	GfK consumer confidence‡	Oct	-1.6 ▲	-1.7	-0.8	🔻
🔊🔊	24-Sep	IFO business climate‡	Sep	93.4 ▲	92.5	93.8	🔻
France 							
🔊🔊🔊🔊	15-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	0.2% =	0.2%	0.2%	🔵
🔊🔊🔊🔊	15-Sep	Consumer inflation CPI (yoy) - final data	Aug	0.2% =	0.2%	0.2%	🔵
🔊🔊🔊	23-Sep	Composite PMI - preliminary data	Sep	48.5 ▼	51.6	51.9	🔻
🔊🔊🔊	23-Sep	Manufacturing PMI - preliminary data	Sep	50.9 ▲	49.8	50.6	🔼
Italy 							
🔊🔊🔊🔊	15-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	-0.5% =	-0.5%	-0.5%	🔵
UK 							
🔊🔊	15-Sep	Unemployment rate (ILO, 3-months)	Jul	4.1% ▲	3.9%	4.1%	🔵
🔊🔊🔊🔊	16-Sep	Consumer inflation CPI (yoy)	Aug	0.2% ▼	1.0%	0.0%	🔼
🔊🔊🔊🔊🔊	17-Sep	BoE base rate decision	Sep	0.10% =	0.10%	0.10%	🔵
🔊🔊🔊	23-Sep	Manufacturing PMI (sa) - preliminary data	Sep	54.3 ▼	55.2	54.0	🔼
🔊🔊🔊	23-Sep	Composite PMI - preliminary data	Sep	55.7 ▼	59.1	56.1	🔻
Japan 							
🔊🔊🔊🔊	14-Sep	Industrial production (yoy) - final data	Jul	-15.5% ▲	-16.1%	--	🔵
🔊🔊🔊🔊	18-Sep	Consumer inflation CPI (yoy)	Aug	0.2% ▼	0.3%	0.2%	🔵
🔊🔊🔊	23-Sep	Composite PMI - preliminary data	Sep	45.5 ▲	45.2	--	🔵
🔊🔊🔊	23-Sep	Manufacturing PMI - preliminary data	Sep	47.3 ▲	47.2	--	🔵
Chile 							
<i>No major data in the period</i>							
Canada 							
🔊🔊🔊🔊	16-Sep	Consumer inflation CPI (yoy)	Aug	0.1% =	0.1%	0.4%	🔻

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

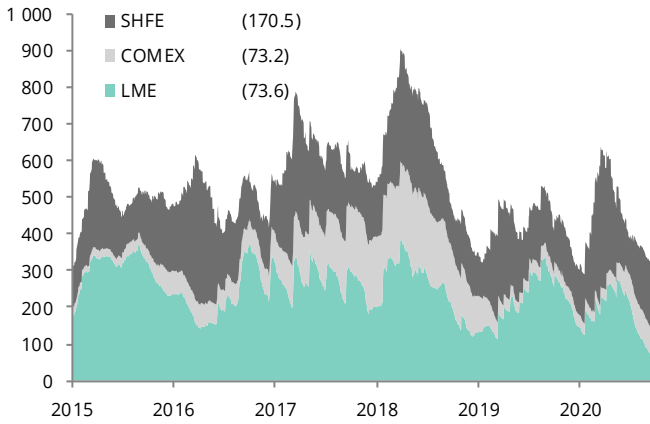
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 25-Sep-20)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t; Mo in USD/lbs)									
Copper	6 529.00	▼ -3.8%	▲ 8.1%	▲ 6.1%	▲ 13.4%	5 836.89	4 617.50	6 837.00	
Molybdenum	8.29	▼ -0.2%	▲ 12.3%	▼ -9.9%	▼	8.57	7.00	10.90	
Nickel	14 285.00	▼ -5.3%	▲ 11.7%	▲ 2.0%	▼ -17.7%	13 046.65	11 055.00	15 660.00	
Aluminum	1 708.50	▼ -2.3%	▲ 6.6%	▼ -5.1%	▼ -0.9%	1 630.95	1 421.50	1 810.50	
Tin	17 080.00	▼ -5.6%	▲ 1.4%	▲ 1.4%	▲ 2.3%	16 591.91	13 400.00	18 420.00	
Zinc	2 365.00	▼ -3.6%	▲ 15.0%	▲ 3.1%	▲ 1.2%	2 141.10	1 773.50	2 554.00	
Lead	1 815.00	▼ -3.1%	▲ 1.5%	▼ -5.6%	▼ -13.9%	1 799.90	1 576.50	2 027.00	
LBMA (USD/troz)									
Silver	22.63	▼ -15.8%	▲ 26.8%	▲ 25.4%	▲ 25.9%	19.18	12.01	28.89	
Gold ²	1 859.70	▼ -5.1%	▲ 5.2%	▲ 22.1%	▲ 23.5%	1 733.15	1 474.25	2 067.15	
LPPM (USD/troz)									
Platinum ²	841.00	▼ -11.2%	▲ 3.3%	▼ -13.4%	▼ -9.8%	865.44	593.00	1 017.00	
Palladium ²	2 204.00	▼ -5.8%	▲ 15.7%	▲ 14.8%	▲ 32.5%	2 139.49	1 557.00	2 781.00	
FX ³									
EURUSD	1.1634	▼ -2.0%	▲ 3.9%	▲ 3.6%	▲ 6.4%	1.1243	1.0707	1.1987	
EURPLN	4.5477	▲ 2.2%	▲ 1.8%	▲ 6.8%	▲ 3.7%	4.4220	4.2279	4.6044	
USDPLN	3.9016	▲ 4.0%	▼ -2.0%	▲ 2.7%	▼ -2.7%	3.9378	3.6707	4.2654	
USDCAD	1.3396	▲ 1.7%	▼ -1.7%	▲ 3.1%	▲ 1.0%	1.3544	1.2970	1.4496	
USDCNY	6.8238	▲ 0.2%	▼ -3.4%	▼ -2.0%	▼ -4.3%	6.9962	6.7548	7.1671	
USDCLP	788.02	▲ 2.6%	▼ -3.5%	▲ 5.8%	▲ 8.4%	802.66	748.74	867.83	
Money market									
3m LIBOR USD	0.218	▼ -0.02	▼ -0.08	▼ -1.69	▼ -1.89	0.802	0.218	1.900	
3m EURIBOR	-0.498	▼ -0.01	▼ -0.08	▼ -0.12	▼ -0.09	-0.393	-0.508	-0.161	
3m WIBOR	0.220	▼ -0.01	▼ -0.04	▼ -1.49	▼ -1.50	0.815	0.220	1.710	
5y USD interest rate swap	0.338	▲ 0.01	▲ 0.01	▼ -1.39	▼ -1.18	0.645	0.243	1.693	
5y EUR interest rate swap	-0.431	▼ -0.02	▼ -0.08	▼ -0.32	▼ -0.03	-0.305	-0.453	-0.090	
5y PLN interest rate swap	0.530	▼ -0.09	▼ 0.00	▼ -1.25	▼ -1.11	0.927	0.480	2.050	
Fuel									
WTI Cushing	40.10	▲ 7.6%	▲ 2.1%	▼ -34.3%	▼ -28.9%	38.08	-37.63	63.27	
Brent	41.14	▲ 5.8%	▲ 0.6%	▼ -38.1%	▼ -33.8%	41.46	17.32	69.02	
Diesel NY (ULSD)	113.12	▲ 3.3%	▼ -4.4%	▼ -44.2%	▼ -42.2%	123.43	60.67	206.01	
Others									
VIX	26.38	▲ 0.53	▼ -4.05	▲ 12.60	▲ 10.31	30.55	12.10	82.69	
BBG Commodity Index	70.69	▼ -1.5%	▲ 8.8%	▼ -12.6%	▼ -10.1%	68.51	59.48	81.64	
S&P500	3 298.46	▼ -2.5%	▲ 6.4%	▲ 2.1%	▲ 10.8%	3 099.89	2 237.40	3 580.84	
DAX	12 469.20	▼ -5.5%	▲ 1.3%	▼ -5.9%	▲ 1.5%	12 115.55	8 441.71	13 789.00	
Shanghai Composite	3 219.42	▼ -1.8%	▲ 7.9%	▲ 5.6%	▲ 9.9%	3 051.50	2 660.17	3 451.09	
WIG 20	1 674.14	▼ -4.8%	▼ -4.8%	▼ -22.1%	▼ -22.9%	1 792.74	1 305.73	2 200.10	
KGHM	118.05	▼ -13.7%	▲ 29.9%	▲ 23.5%	▲ 49.4%	95.67	49.40	139.35	

° 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

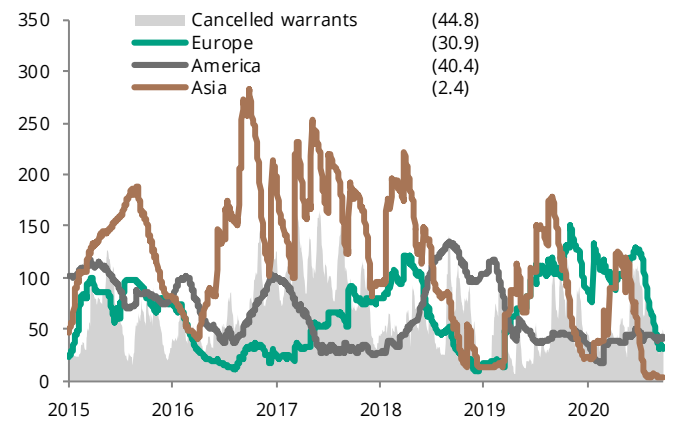
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



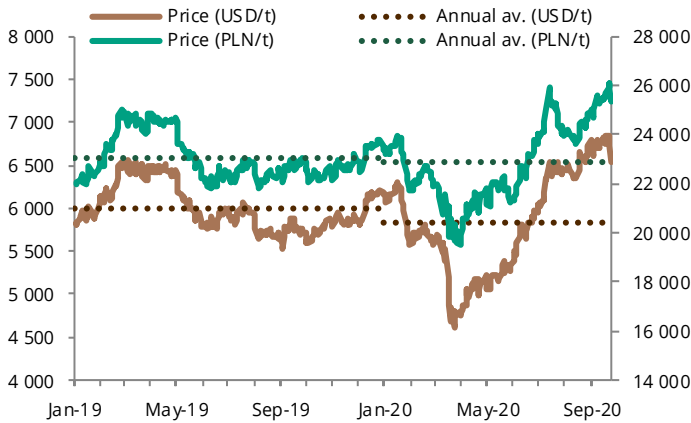
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



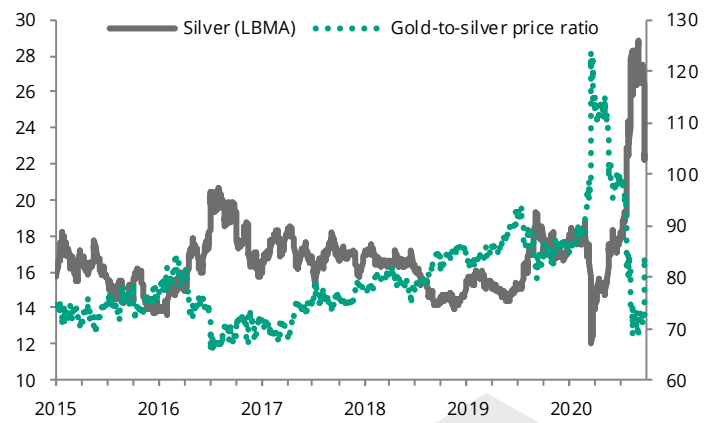
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



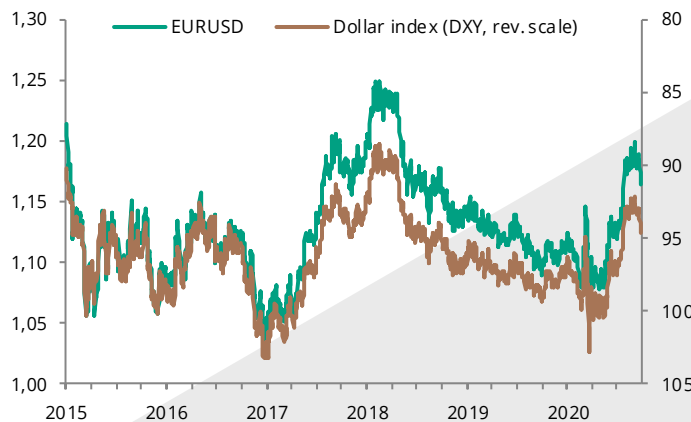
Source: Bloomberg, KGHM Polska Miedź

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



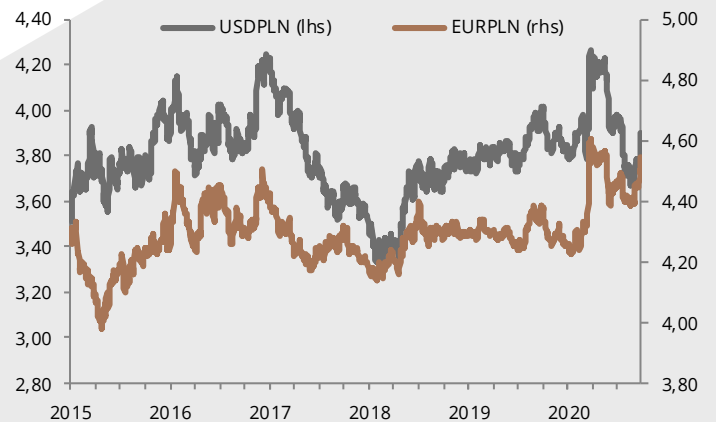
Source: Bloomberg, KGHM Polska Miedź

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



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:
14 – 27 September 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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