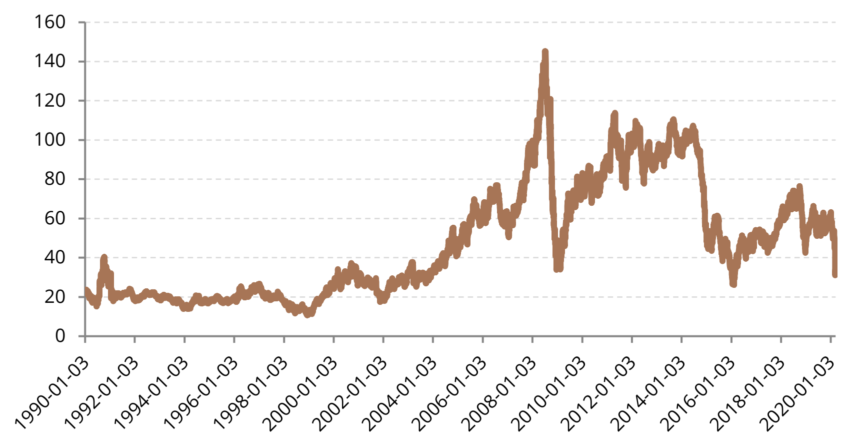
KGHM POLSKA MIEDŹ

Market Overview

as of: 16 March 2020

- **Copper:** Copper inventories on the Shanghai SHFE increased to 380,000. tons, the highest level in almost four years. This shows that despite the low demand associated with coronavirus, copper production in China remains stable *(page 2)*.
- **Precious metals:** In the rush to raise cash and cover losses in other markets, investors are pulling their money out of bullion. The stronger dollar has also made the metal less appealing *(page 4)*.
- **Oil:** During the OPEC+ meeting, Russia rejected Saudi Arabia's proposal to reduce oil production by 1 million barrels per day. In response, Saudi Arabia lowered the prices of its exported crude, which resulted in a price reduction of USD 11 per barrel - the largest daily decline since 1991 *(page 5)*.
- **China:** Too much commentary, especially in the West, focuses on China's supply-side role as an exporter of manufactured products, under-estimating its importance on the demand side. But it is China's vast internal market, not its exports, that makes it a formidable competitor, reshaping the global economy *(page 6)*.

Prices for WTI crude oil collapsed to the level of $20-30 per barrel



Source: Bloomberg, KGHM Polska Miedź S.A.

Key market prices

		Close price	2w chng.
	LME (USD/t)		
▼	Copper	5 530.50	-1.9%
▲	Nickel	12 565.00	1.0%
	LBMA (USD/troz)		
▼	Silver	15.77	-6.8%
▼	Gold (PM)	1 562.80	-2.3%
	FX		
▼	EURUSD	1.1104	-0.2%
▲	EURPLN	4.3618	0.9%
▲	USDPLN	3.9067	0.1%
▲	USDCAD	1.3901	4.1%
▲	USDCLP	852.06	4.1%
	Stocks		
▼	KGHM	52.48	-28.1%

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

Important macroeconomic data

Release	For		
Fed upper rate	Mar	1.25%	▼
Caixin's manuf. PMI	Feb	40.3	▼
GDP (sa, yoy)	4Q	1.0%	▲
Industr. prod. (wda, yoy)	Jan	-1.9%	▲
NBP rate decision	Mar	1.50%	-

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

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

Base and precious metals | Other commodities

Copper

Copper inventories on the Shanghai SHFE increased to 380,000. tons, the highest level in almost four years. This shows that despite the low demand associated with coronavirus, copper production in China remains stable.

China Copper Inventories Near 4-Yr High

Compared to the end of 2019, TC / RC charges have jumped 20%, thus have eased the pressure on smelters

Shanghai Futures Exchange copper inventories rose another 10% to their highest in almost four years amid signs China's production is holding up even as demand struggles to recover from the impact of the coronavirus. Chinese steel stocks, meanwhile, remain at record highs, although the pace of the build has slowed. Inventories of copper climbed by 34,959 tones from the previous week to 380,065 tones, the exchange. That's the most since March 25, 2016. The boost comes after Chinese research house Antaike said February copper output in its smelter survey was flat from January at 656,000 tones, much higher than expected, and as key metal consuming sectors are slow to return to work. "Various companies have increased their sales of sulphuric acid," Antaike said, referring to the byproduct of smelting that copper producers were unable to sell after the virus outbreak, leaving them short of storage space and facing production cuts. Furthermore, copper concentrate treatment charges, have jumped 20% since the end of 2019. Charges above $70 a tone have eased the pressure on smelters, said Antaike, which is forecasting output of around 690,000 tones in March. SHFE copper inventories have now clocked straight weekly gains since Jan. 10, although the bourse did not report numbers for the extended Lunar New Year holiday in late January and early February. Zinc and aluminum stocks are on an even longer rising streak stretching back to December 27.

China's Copper, Aluminum, Nickel Demand To Peak In 2025

One Belt, One Road initiative will provide an impetus to various manufacturing sectors. China Nonferrous Metals Industry Association has forecast that by 2025, Chinese copper, aluminum and nickel demand will reach 12 million mt, 40 million mt and 1 million mt, respectively. Domestic demand for tin, lead and zinc is expected to reach 200,000 mt, 5 million mt, 7.5 million mt, respectively. China's demand for aluminum is expected to slip 0.1% to 36.6 million mt in 2020, with copper demand edging 1.2% higher to 11.4 million mt, data from Beijing Antaike, an affiliate of CNIA, showed. CNIA said that although China's demand has yet to peak, compared with G7 nations, which posted peak aluminum demand of 13.28 million mt in 2006, with China's One Belt, One Road initiative and more international cooperation, China will remain the world's No. 1 nonferrous metals producer and consumer in the years ahead, it said. CNIA considers 2016-2050 the third phase of China's metals development, when global industrialization has matured and there is an imbalance in demand and supply as the strategic importance of metals output and consumption has fallen, resulting in the reduced reliance on metals demand for economic growth.

Given China's reform, there could be changes to the G7 and G20 nations' nonferrous demand in the future, as China becomes the world's pioneer in metals production and consumption. The association said that over 2016-2050, China will have to gradually turn to other nations, with richer resources than itself, for the production of base metals which can meet the needs of China's high-end and medium- to high-end equipment manufacturing sector. However, CNIA does not rule out that China's annual nonferrous metals demand and output could dip, and not rise, in the third phase, with China speeding up to move production to overseas locations which have more ores, while consumption gradually turns to G7, G20 nations.

Other important information on copper market:

- Excelsior Mining finalized an offtake agreement to sell 100% of its copper cathode production in 2020 from its Gunnison copper project in Arizona to Trafigura Trading, the miner said Wednesday. "For an open-pit mine, you normally do an offtake agreement to demonstrate to the market that you can sell your product at the end of the day," JJ Jennex, Excelsior's vice president of corporate affairs, told S&P Global Platts in an interview. Phoenix-based Excelsior forecasts pure copper cathode production at Gunnison to begin in the second quarter of 2020. Excelsior's offtake agreement with Trafigura will continue until the end of the year. Though Excelsior has not experienced any impact from the coronavirus outbreak, Jennex said the deal adds a level of confidence for the company's upcoming production. Excelsior bought the past-producing Gunnison project in 2015 and is completing the retrofit of the site's wellfield to restore fluid recirculation in the mine this month. The miner expects to produce 2.2 billion lb of pure copper cathode over an estimated mine life of 24 years at Gunnison, with direct operating costs of 65 cents/lb and all-in costs of $1.23/lb, according to the company's website.
- Copper output fell sharply at state miner Codelco's deposits in January, while BHP's sprawling Escondida mine saw production jump, according to Chile state copper agency Cochilco. Cochilco said output at Codelco, the world's largest copper miner, plunged 6.8% in January over the same month in 2019, to 118,600 tones. Production at BHP's Escondida, the globe's largest copper mine, rose 10% to 100,900 tones.
- China's Shanghai Futures Exchange (ShFE) said on Friday it would raise trading margins and limits for a large number of commodities futures contracts next week amid recent market fluctuations due to the coronavirus outbreak. Trading margin changes for the futures contracts - mainly base metals - will be effective from March 16 settlement, and new trading limits will come into effect from March 17, the exchange said. The ShFE had warned on Monday of uncertainty in market operations due to the complex international situation. It had also adjusted the trading margin and limit for its crude oil futures contracts.

Precious Metals

In the rush to raise cash and cover losses in other markets, investors are pulling their money out of bullion. The stronger dollar has also made the metal less appealing.

Gold's Worst Week Since 1983 – Still Safe Haven?

On Fri the 13th spot gold fell 2.9% to close at $1,529.83 an ounce in New York, ending the week with a loss of 8.6%

Gold posted its worst week in over three decades, joining the collapse across global markets that not even the traditional safe haven could dodge. In the rush to raise cash and cover losses in other markets, investors are pulling their money out of bullion, typically seen as a store of value amid market volatility and global worries. That meant hedge funds cutting their bullish bets in the last week by the most since early February. The stronger dollar has also made the metal less appealing. "There's a lot of selling of every liquid asset for margin calls," Matthew Miller, a gold market and equities analyst at CFRA in Denver, said by phone. Spot gold fell 2.9% to close at $1,529.83 an ounce in New York, ending the week with a loss of 8.6%, the most since March 1983. On the Comex in New York, futures had their steepest weekly decline since 2011. In other markets, silver fell into a bear market, joining palladium and platinum as worries over economic fallout from the coronavirus pummel precious metals and other raw materials. The flight from gold is stripping the metal of its traditional safe haven status and underscores how extreme the selling pressure has been in every corner of the markets. Despite this week's turmoil, the longer-term outlook for the metal remains bullish. Demand for the metal as a store of value could return if the coronavirus causes a recession in the global economy.

Gold to Silver Ratio Hits 100

Gold is testing its previous 2020 highs, but silver plunged anyway, which created a very special situation. Namely, the gold to silver ratio just jumped to the 100 level. This may not seem like a big deal, because ultimately people buy metals, not their ratio, but it actually is a huge deal. This ratio is observed by investors and traders alike, as it tends to peak at the market extremes. Moving to the 100 level might indicate that we are at a price extreme. The most important thing about the gold and silver ratio chart to keep in mind is that it's after a breakout above the 2008 high. This means the ratio is likely to rally further. Obviously, that's not what happened. Instead, the ratio moved to 100 in the situation where gold rallied, likely based on its safe-haven status, and silver plunged based on its industrial uses.

Crude Oil

During the OPEC+ meeting, Russia rejected Saudi Arabia's proposal to reduce oil production by 1 million barrels per day. In response, Saudi Arabia lowered the prices of its exported crude, which resulted in a price reduction of USD 11 per barrel - the largest daily decline since 1991.

The Saudi Arabia-Russia oil war

A long-standing deal between Saudi Arabia and Russia — two of the world's oil-producing powerhouses — fell through sending global markets into a spiral. It has almost everything to do with the coronavirus — or, more specifically, the drop in Asia's oil consumption. China's refineries cut their imports of foreign oil by about 20 percent last month. Lately OPEC+ nations, met in Vienna to discuss the situation and what to do as the disease's impact has lowered global demand for oil. Saudi Arabia, suggested the participants collectively cut their oil production by about 1 million barrels per day, with Russia making the most dramatic cut of around 500,000 barrels a day. Doing so would keep oil prices higher. The Russians opted against the plan. Saudi Arabia responded by slashing its export prices. That brought the price down by about $11 to $35 a barrel — the biggest one-day drop since 1991. By its move the Saudis have positioned themselves to snatch what's left of Asian oil demand. But there's a big downside: The price for oil is a global one, so when it goes down it goes down pretty much everywhere. That's spooked markets around the world, with shares in Tokyo dropping 5 percent and Wall Street falling by 7 percent. In 2014, the US boomed onto the scene with its revolution in shale energy, capturing a greater and greater slice of the global oil market. That trend continued as the US surpassed both Saudi Arabia and Russia as the world's leading crude producer in 2018. It gave Washington way more power over the energy market and future revenues for Riyadh and Moscow. Still, the Riyadh-Moscow alliance continued, until coronavirus led to drop of demand for oil in Asia. That gave both Saudi Arabia and Russia a choice: continue in their pact, or try to fend for themselves in a more competitive marketplace. The late events make crystal clear the path each side has chosen. Experts are split on the real reason for why this happened. Some say is that Russia wants prices lowered to hurt the American shale industry. This would also be a way to get back at the US for sanctioning Rosneft, for its deals with Venezuela last month. But some experts are skeptical. They say that if smaller US companies go bust during this time, bigger American firms will just buy their assets. There will be more consolidation — fewer companies — but America's production won't go away. Which leads to the second and more convincing theory: that Russia decided to make a play for more power in the global oil market. The problem is that Russia's play and the Saudi response may end up hurting them both. Shares in their national oil companies — Rosneft and Saudi Aramco, respectively — have already dropped. And unlike in 2015-2016 during which China bought up a lot of oil during a period of low prices, there aren't really any buyers like that and demand is dropping worldwide.

Global economies | Foreign exchange markets

China's Internal Not Export Market Matters More

Too much commentary, especially in the West, focuses on China's supply-side role as an exporter of manufactured products, under-estimating its importance on the demand side. But it is China's vast internal market, not its exports, that makes it a formidable competitor, reshaping the global economy.

The share of exports in Chinese GDP fell from 36% in 2006 to 20% in 2018, approaching the US level of 12%

China's coronavirus epidemic and the aggressive measures to contain it have shone a spotlight on its central role in global supply chains and as an engine of the world economy. Severe industrial disruption in China now threatens to push the global economy into its deepest cyclical downturn since the financial crisis of 2008/09. But too much commentary, especially in the West, focuses on China's supply-side role as an exporter of manufactured products, under-estimating its importance on the demand side. Chinese consumption has become critical as its fast-growing middle class drives demand for everything from cars, consumer electronics and food to international services such as tourism.

Western commentators continue to frame China mostly as an export-oriented processing economy, importing raw materials then re-exporting them as manufactured products. While that may have been true in the late 1990s and early 2000s, it is no longer an accurate and representative picture. China has shifted from a small open economy into a very large continent-sized and much more closed economy in the 2020s. It has become more like the United States, and quite different from trade-dependent economies such as Japan, Germany or the United Kingdom, or large emerging markets like Brazil. As a result, China has joined the United States as a generator of shocks to the international economy, while becoming more resilient to shocks originating elsewhere.

And like the United States, international trade has become less central to China. Chinese exports accounted for almost 20% of gross domestic product in 2018, down from a 2006 peak of 36%, World Bank data shows. China's export orientation is not far above the United States (12%) and well below Britain and France (30%) let alone South Korea (43%) and Germany (47%). Its imports accounted for 19% of GDP in 2018, down from 29% in 2006, and not far above the United States at 15% . Nonetheless, despite its increasing domestic orientation, China's economy plays an increasingly central role in the world system because it is both very large and growing rapidly. While it may not be particularly reliant on imports or exports, its sheer size means it is capable of sending shockwaves across the globe.

China accounted for almost 30% of all global output growth between 2013 and 2018, International Monetary Fund data shows. China's contribution to global growth was bigger than the next two economies, the United States (12%) and India (12%), combined. In cash terms China's merchandise imports increased at an average annual rate of 1.8% per year over the five years from 2013 to 2018, more than twice as fast as import growth in rest of the world at 0.7%. On the services side, China's outbound tourism increased by almost 11% per year or a total of 70% between 2012 and 2017, according to the World Tourism Organization. By contrast, outbound tourism from the United States grew by 8% per year and from the United Kingdom by just 6% per year over the same period. China accounts for an increasing share of global final demand, so when its economy is hit by a recession, credit tightening or epidemic, the consequences are inevitably transmitted to firms and employees around the world.

Most western economic commentators still employ a core-periphery model, with the United States at the core (sometimes expanded to include the OECD) and emerging markets and commodity exporters on the periphery. For decades it was a simple but reasonably accurate heuristic. Shocks tended to be transmitted from the core to the periphery rather than the other way around, for example when the U.S. Federal Reserve raised interest rates. In recent years, however, China has emerged as a second core, not quite as large or as decisive yet, but almost as capable of generating shocks. China's economic slowdown in 2014/15, which contributed to a simultaneous global slowdown in manufacturing and commodity markets, was an early indication of this growing global impact. Coronavirus has underscored how Beijing's policy decisions, in this case public health policy, quarantines and business shutdowns, can now impact the rest of the world.

The U.S./China trade conflict has centered on manufacturing production and imbalances in merchandise exports, which has led to a distorted view of the long-term economic and strategic balance. In reality, U.S. economic dominance over the last 150 years has stemmed from the unsurpassed size of its internal market, which dwarfed competitors such as the Britain, Germany and Japan. Market size allowed the United States to create dominant manufacturing and services firms, in part through the provision of selective protection, investment controls, procurement preferences and regulatory standard-setting. In contrast to Britain, Germany, Japan or the Soviet Union, China is the first competitor for more than a century with a similar-sized domestic market. It is China's vast internal market, not its exports, that makes it a formidable competitor, reshaping the global economy.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹		Previous	Consensus ²
		China					
✪✪✪	02-Mar	Caixin's manufacturing PMI	Feb	40.3	▼	51.1	46.0
✪	07-Mar	Foreign reserves (USD bn)	Feb	3 107	▼	3 116	3 109
✪✪✪✪	10-Mar	Consumer inflation CPI (yoy)	Feb	5.2%	▼	5.4%	5.2%
✪✪	10-Mar	Producer inflation PPI (yoy)	Feb	-0.4%	▼	0.1%	-0.3%
✪	11-Mar	New yuan loans (CNY bn)	Feb	906	▼	3 340	1 120
		Poland					
✪✪✪	02-Mar	Manufacturing PMI	Feb	48.2	▲	47.4	48.0
✪✪✪✪✪	04-Mar	NBP base rate decision	Mar	1.50%	-	1.50%	1.50%
✪✪✪✪	13-Mar	Consumer inflation CPI (yoy)‡	Feb	4.7%	▲	4.3%	4.4%
		US					
✪✪✪	02-Mar	Manufacturing PMI - final data	Feb	50.7	▼	50.8	50.8
✪✪	02-Mar	ISM Manufacturing	Feb	50.1	▼	50.9	50.5
✪✪✪✪✪	03-Mar	FOMC base rate decision - upper bound (Fed)	Mar	1.25%	▼	1.75%	1.50%
✪✪✪✪✪	03-Mar	FOMC base rate decision - lower bound (Fed)	Mar	1.00%	▼	1.50%	1.25%
✪✪✪	04-Mar	Composite PMI - final data	Feb	49.6	-	49.6	--
✪✪✪	04-Mar	PMI services - final data	Feb	49.4	-	49.4	49.4
✪✪	05-Mar	Durable goods orders - final data	Jan	-0.2%	-	-0.2%	-0.2%
✪✪	06-Mar	Change in non-farm payrolls (ths)‡	Feb	273	-	273	175
✪✪	06-Mar	Underemployment rate (U6)	Feb	7.0%	▲	6.9%	--
✪✪	06-Mar	Unemployment rate	Feb	3.5%	▼	3.6%	3.6%
✪	06-Mar	Average hourly earnings (yoy)	Feb	3.0%	▼	3.1%	3.0%
✪✪✪✪	11-Mar	Consumer inflation CPI (mom)	Feb	0.1%	-	0.1%	0.0%
✪✪✪✪	11-Mar	Consumer inflation CPI (yoy)	Feb	2.3%	▼	2.5%	2.2%
✪✪	13-Mar	University of Michigan confidence index - preliminary data	Mar	95.9	▼	101	95.0
		Eurozone					
✪✪✪	02-Mar	Manufacturing PMI - final data	Feb	49.2	▲	49.1	49.1
✪✪✪✪	03-Mar	Core CPI (yoy) - preliminary data	Feb	1.2%	▲	1.1%	1.2%
✪✪✪✪	03-Mar	CPI estimate (yoy)	Feb	1.2%	▼	1.4%	1.2%
✪✪	03-Mar	Unemployment rate	Jan	7.4%	-	7.4%	7.4%
✪✪	03-Mar	Producer inflation PPI (yoy)‡	Jan	-0.5%	▲	-0.6%	-0.4%
✪✪✪	04-Mar	Composite PMI - final data	Feb	51.6	-	51.6	51.6
✪✪✪	04-Mar	Services PMI - final data	Feb	52.6	▼	52.8	52.8
✪✪	04-Mar	Retail sales (yoy)‡	Jan	1.7%	-	1.7%	1.1%
✪✪✪✪✪	10-Mar	GDP (sa, yoy) - final data	4Q	1.0%	▲	0.9%	0.9%
✪✪✪✪✪	10-Mar	GDP (sa, qoq) - final data	4Q	0.1%	-	0.1%	0.1%
✪✪✪	10-Mar	Gross fixed capital (qoq)‡	4Q	4.2%	▲	-3.8%	0.3%
✪✪✪	10-Mar	Households consumption (qoq)	4Q	0.1%	▼	0.5%	0.1%
✪✪✪✪✪	12-Mar	ECB main refinancing rate	Mar	0.00%	-	0.00%	0.00%
✪✪✪✪✪	12-Mar	ECB deposit facility rate	Mar	-0.5%	-	-0.5%	-0.5%
✪✪✪✪	12-Mar	Industrial production (sa, mom)‡	Jan	2.3%	▲	-1.8%	1.5%
✪✪✪✪	12-Mar	Industrial production (wda, yoy)‡	Jan	-1.9%	▲	-3.6%	-2.9%

Weight	Date	Event	For	Reading [1]		Previous	Consensus [2]	
		Germany						
✪✪✪	02-Mar	Manufacturing PMI - final data	Feb	48.0	▲	47.8	47.8	◓
✪✪✪	04-Mar	Composite PMI - final data	Feb	50.7	▼	51.1	51.1	◒
✪✪✪	04-Mar	Retail sales (yoy)‡	Jan	1.8%	▼	2.2%	1.5%	◓
✪✪✪	06-Mar	Factory orders (wda, yoy)‡	Jan	-1.4%	▲	-8.9%	-5.2%	◓
✪✪✪✪	09-Mar	Industrial production (wda, yoy)‡	Jan	-1.3%	▲	-5.3%	-3.9%	◓
✪✪✪✪	13-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	1.7%	-	1.7%	1.7%	○
✪✪✪✪	13-Mar	Consumer inflation CPI (yoy) - final data	Feb	1.7%	-	1.7%	1.7%	○
		France						
✪✪✪	02-Mar	Manufacturing PMI - final data	Feb	49.8	▲	49.7	49.7	◓
✪✪✪	04-Mar	Composite PMI - final data	Feb	52.0	▲	51.9	51.9	◓
✪✪✪✪	10-Mar	Industrial production (yoy)	Jan	-2.8%	▲	-3.0%	-1.9%	◒
✪✪✪✪	13-Mar	Harmonized consumer inflation HICP (yoy) - final data	Feb	1.6%	-	1.6%	1.6%	○
✪✪✪✪	13-Mar	Consumer inflation CPI (yoy) - final data	Feb	1.4%	-	1.4%	1.4%	○
		Italy						
✪✪✪	02-Mar	Manufacturing PMI	Feb	48.7	▼	48.9	49.0	◒
✪✪	03-Mar	Unemployment rate - preliminary data	Jan	9.8%	-	9.8%	9.8%	○
✪✪✪✪✪	04-Mar	GDP (wda, yoy) - final data‡	4Q	0.1%	-	0.1%	0.0%	◓
✪✪✪✪✪	04-Mar	GDP (wda, qoq) - final data	4Q	-0.3%	-	-0.3%	-0.3%	○
✪✪✪	04-Mar	Composite PMI	Feb	50.7	▲	50.4	50.1	◓
✪✪✪✪	10-Mar	Industrial production (wda, yoy)‡	Jan	-0.1%	▲	-4.4%	-3.7%	◓
		UK						
✪✪✪	02-Mar	Manufacturing PMI (sa) - final data	Feb	51.7	▼	51.9	51.9	◒
✪✪✪	04-Mar	Composite PMI - final data	Feb	53.0	▼	53.3	53.3	◒
✪✪✪✪✪	11-Mar	BoE base rate decision	Mar	0.25%	▼	0.75%	--	
✪✪✪✪	11-Mar	Industrial production (yoy)	Jan	-2.9%	▼	-1.8%	-2.6%	◒
✪✪✪✪	11-Mar	BoE asset purchase target (GBP bn)	Mar	435	-	435	--	
		Japan						
✪✪✪	02-Mar	Manufacturing PMI - final data	Feb	47.8	▲	47.6	--	
✪✪✪	04-Mar	Composite PMI - final data	Feb	47.0	-	47.0	--	
✪✪✪✪✪	09-Mar	GDP (annualized, qoq) - final data	4Q	-7.1%	▼	-6.3%	-6.6%	◒
✪✪✪✪✪	09-Mar	GDP (qoq, sa) - final data	4Q	-1.8%	▼	-1.6%	-1.7%	◒
		Chile						
✪✪✪✪	02-Mar	Economic activity (yoy)	Jan	1.5%	▲	1.1%	1.2%	◓
✪✪	05-Mar	Nominal wages (yoy)	Jan	4.7%	▲	4.5%	--	
✪✪✪	09-Mar	Copper exports (USD mn)	Feb	2 484	▼	2 716	--	
		Canada						
✪✪✪✪✪	04-Mar	BoC base rate decision	Mar	1.25%	▼	1.75%	1.50%	◒
✪✪✪	06-Mar	Net change in employment (ths)	Feb	30.3	▼	34.5	11.0	◓
✪✪✪	11-Mar	Capacity utilization‡	4Q	81.2%	▼	81.5%	81.1%	◓
✪✪✪✪✪	13-Mar	BoC base rate decision	Mar	0.75%	▼	1.25%	--	

[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

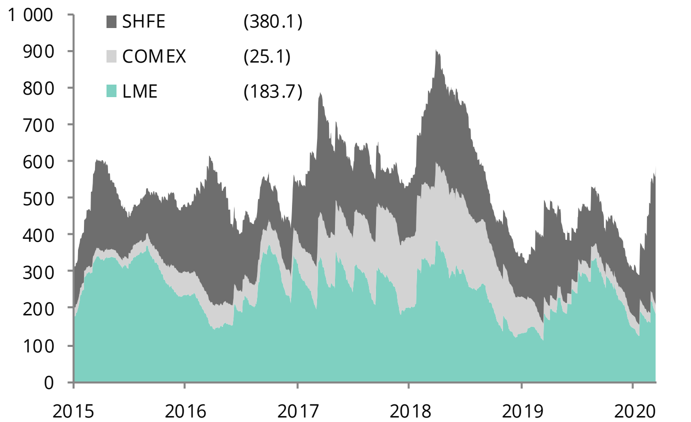
Key base & precious metal prices, exchange rates and other important market factors

(as of: 13-Mar-20)	Price	2W	QTD	YTD	1Y	Average	Min	Max
		Price change[1]				From year beginning[2]		
LME (USD/t; Mo in USD/lbs)								
Copper	5 530.50	▼ -1.9%	▼ -10.2%	▼ -10.2%	▼ -13.7%	5 820.30	5 386.50	6 300.50
Molybdenum	9.16	▼ -3.1%	▼ -0.4%	▼ -0.4%	-	9.90	9.16	10.90
Nickel	12 565.00	▲ 1.0%	▼ -10.3%	▼ -10.3%	▼ -2.8%	13 045.10	11 855.00	14 290.00
Aluminum	1 677.00	▼ -0.4%	▼ -6.8%	▼ -6.8%	▼ -10.5%	1 721.81	1 643.00	1 810.50
Tin	16 400.00	▼ -0.2%	▼ -2.7%	▼ -2.7%	▼ -23.0%	16 759.71	16 155.00	17 775.00
Zinc	1 986.50	▼ -1.1%	▼ -13.4%	▼ -13.4%	▼ -31.0%	2 192.81	1 925.50	2 466.50
Lead	1 781.00	▼ -6.5%	▼ -7.4%	▼ -7.4%	▼ -15.6%	1 890.07	1 749.00	2 027.00
LBMA (USD/troz)								
Silver	15.77	▼ -6.8%	▼ -12.6%	▼ -12.6%	▲ 3.5%	17.74	15.77	18.78
Gold[2]	1 562.80	▼ -2.3%	▲ 2.6%	▲ 2.6%	▲ 20.6%	1 588.32	1 527.10	1 683.65
LPPM (USD/troz)								
Platinum[2]	782.00	▼ -8.8%	▼ -19.5%	▼ -19.5%	▼ -5.9%	952.12	782.00	1 017.00
Palladium[2]	1 744.00	▼ -30.9%	▼ -9.2%	▼ -9.2%	▲ 12.6%	2 372.37	1 744.00	2 781.00
FX [3]								
EURUSD	1.1104	▼ -0.2%	▼ -1.2%	▼ -1.2%	▼ -1.7%	1.1052	1.0790	1.1456
EURPLN	4.3618	▲ 0.9%	▲ 2.4%	▲ 2.4%	▲ 1.4%	4.2759	4.2279	4.3618
USDPLN	3.9067	▲ 0.1%	▲ 2.9%	▲ 2.9%	▲ 2.8%	3.8703	3.7861	3.9772
USDCAD	1.3901	▲ 4.1%	▲ 7.0%	▲ 7.0%	▲ 4.3%	1.3256	1.2970	1.3901
USDCNY	7.0087	▲ 0.7%	▲ 0.7%	▲ 0.7%	▲ 4.2%	6.9605	6.8598	7.0297
USDCLP	852.06	▲ 4.1%	▲ 14.4%	▲ 14.4%	▲ 28.0%	792.28	748.74	852.06
Money market								
3m LIBOR USD	0.843	▼ -0.41	▼ -1.07	▼ -1.07	▼ -1.77	1.596	0.741	1.900
3m EURIBOR	-0.428	▲ 0.01	▼ -0.05	▼ -0.05	▼ -0.12	-0.412	-0.489	-0.379
3m WIBOR	1.690	▼ -0.02	▼ -0.02	▼ -0.02	▼ -0.03	1.707	1.690	1.710
5y USD interest rate swap	0.782	▼ -0.23	▼ -0.95	▼ -0.95	▼ -1.71	1.323	0.561	1.693
5y EUR interest rate swap	-0.272	▲ 0.13	▼ -0.16	▼ -0.16	▼ -0.37	-0.274	-0.453	-0.129
5y PLN interest rate swap	1.470	▲ 0.20	▼ -0.31	▼ -0.31	▼ -0.57	1.724	1.033	2.050
Fuel								
WTI Cushing	31.73	▼ -32.1%	▼ -48.0%	▼ -48.0%	▼ -45.9%	51.15	31.13	63.27
Brent	33.55	▼ -36.4%	▼ -49.5%	▼ -49.5%	▼ -49.7%	56.08	31.23	69.02
Diesel NY (ULSD)	114.49	▼ -25.7%	▼ -43.5%	▼ -43.5%	▼ -42.3%	166.29	114.49	206.01
Others								
VIX	57.83	▲ 24.41	▲ 44.05	▲ 44.05	▲ 44.33	22.77	12.10	75.47
BBG Commodity Index	65.31	▼ -9.9%	▼ -19.3%	▼ -19.3%	▼ -19.7%	75.54	65.31	81.64
S&P500	2 711.02	▼ -12.3%	▼ -16.1%	▼ -16.1%	▼ -3.5%	3 197.86	2 480.64	3 386.15
DAX	9 232.08	▼ -22.1%	▼ -30.3%	▼ -30.3%	▼ -20.3%	12 887.55	9 161.13	13 789.00
Shanghai Composite	2 887.43	▼ -2.8%	▼ -5.3%	▼ -5.3%	▼ -3.5%	2 991.52	2 746.61	3 115.57
WIG 20	1 365.97	▼ -24.4%	▼ -36.5%	▼ -36.5%	▼ -41.1%	2 014.45	1 305.73	2 200.10
KGHM	52.48	▼ -28.1%	▼ -45.1%	▼ -45.1%	▼ -48.0%	88.30	49.40	101.00

° 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].

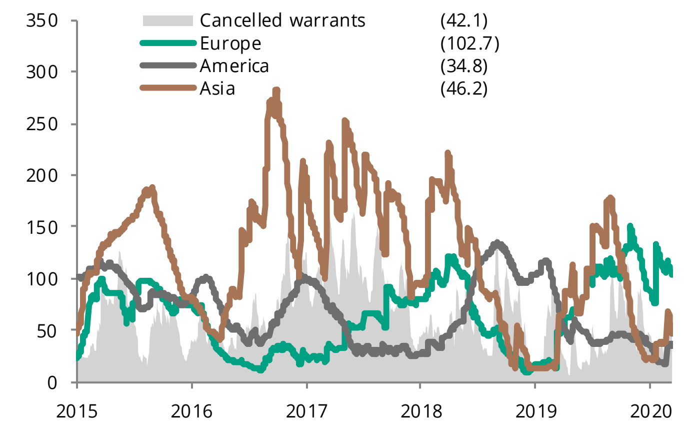
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



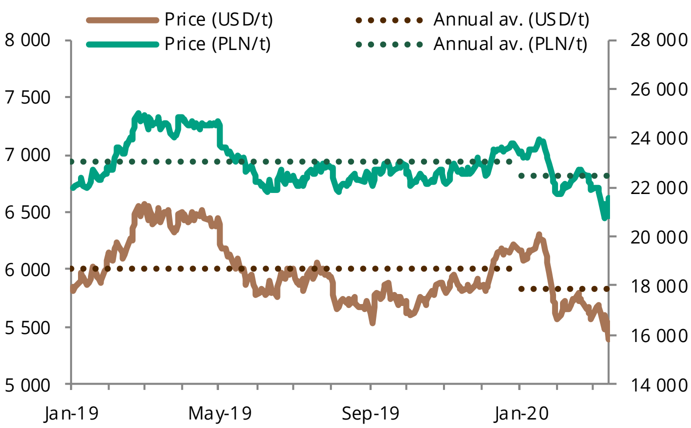
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



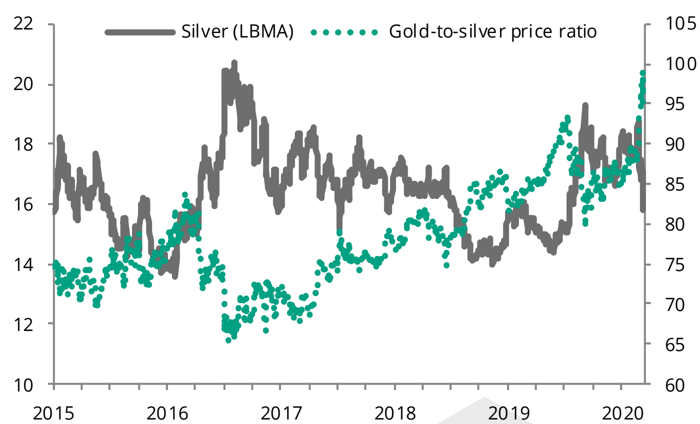
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



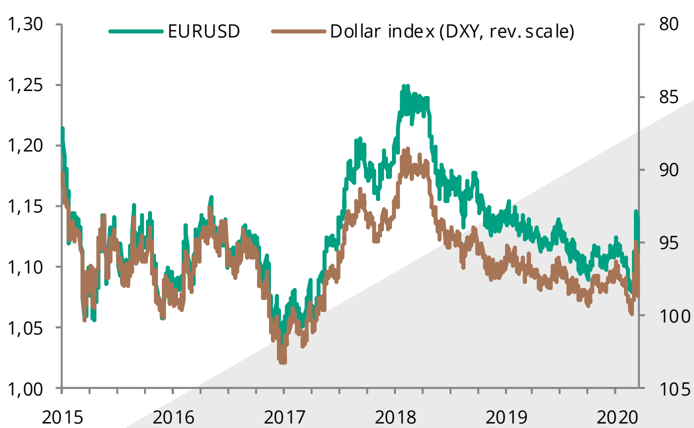
Source: Bloomberg, KGHM Polska Miedź

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



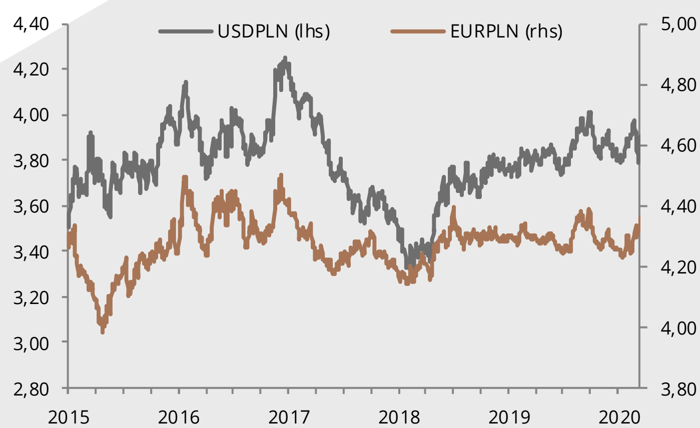
Source: Bloomberg, KGHM Polska Miedź

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: **2 – 15 March 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

In case of questions or comments please contact us:

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