

Market Overview

as of: 11th February 2019




- **Copper:** Zambia, Africa's second-largest copper producer won't consider a review of recent changes to its mining royalties regime, despite warnings from the industry that it could deter investment and result in job losses. Despite lower grades in Codelco's mines, Chile's total copper production rose by 6 percent in 2018 (*page 2*).
- **Precious metals:** Last year, the silver market faced a challenging environment which was reflected in a muted price performance. Preliminary estimates point towards a minor 0.3 percent increase in total supply whereas demand contracted 3 percent. A slowing Chinese economy, coupled with rising U.S. interest rates, an equity market bull run, and global trade tensions, affected the price performance across many markets, including gold and silver (*page 4*).
- **Freight market:** Hyundai Heavy Industries, the world's biggest shipbuilding group, has announced a share swap deal worth 2.1 trillion won (\$1.98 billion) to take over second-ranked Daewoo and create a global heavyweight controlling over 20 percent of the market (*page 6*).

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	6 207.00	3.5%
▲ Nickel	12 735.00	7.5%
LBMA (USD/troz)		
▲ Silver	15.78	0.6%
▲ Gold (PM)	1 314.85	1.0%
FX		
▼ EURUSD	1.1346	-0.6%
▲ EURPLN	4.3082	0.5%
▲ USDPLN	3.8040	1.2%
▲ USDCAD	1.3270	0.1%
▼ USDCPL	654.44	-1.9%
Stocks		
▲ KGHM	94.44	2.8%

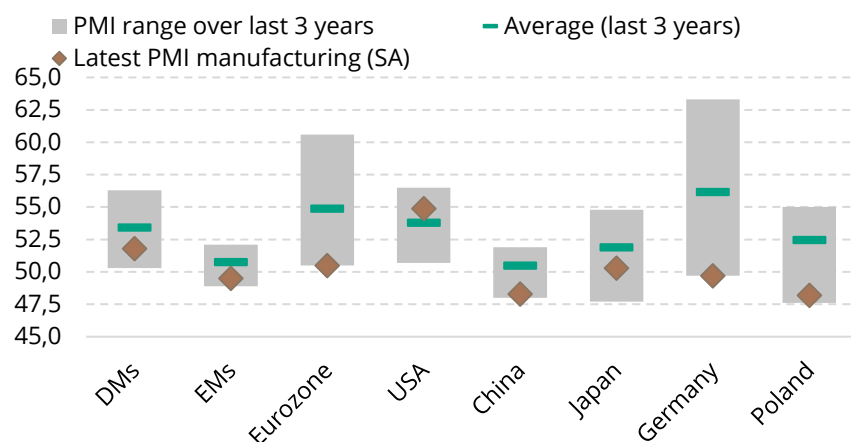
Source: Bloomberg, KGHM Polska Miedź; (*more on page 9*)

Important macroeconomic data

Release	For	
 GDP (sa, yoy)	4Q	1.2% ▼
 ISM Manufacturing	Jan	56.6 ▲
 Official manuf. PMI	Jan	49.5 ▲
 Non-farm payrolls chng.	Jan	304 ▲
 Manufacturing PMI	Jan	48.2 ▲

Source: Bloomberg, KGHM Polska Miedź; (*more on page 7*)

Recent PMI readings in many cases are not impressive



Source: Bloomberg, KGHM Polska Miedź

Market Risk Unit

marketrisk@kgm.com

Base and precious metals | Other commodities

Copper

Zambia, Africa's second-largest copper producer won't consider a review of recent changes to its mining royalties regime, despite warnings from the industry that it could deter investment and result in job losses. Despite lower grades in Codelco's mines, Chile's total copper production rose by 6 percent in 2018.

Zambia Finance Minister Holds Firm on Increased Mining Royalties

New tax means a raise of 1.5 percentage point across the board

Zambia, Africa's second-largest copper producer, sees recent changes to its mining royalties regime as fair and won't consider a review despite warnings from the industry that it could deter investment and result in job losses, Finance Minister Margaret Mwanakatwe said. "There is no renegotiation taking place because a law has been passed in parliament to change the tax regime," Mwanakatwe said Tuesday in an interview in Cape Town. "We don't want to keep changing regimes frequently. We want a regime that is stable, that can ensure that government gets a fair share of revenue to support its development agenda. I can't see the royalty tax changing." The minister in September announced a 1.5 percentage point across-the-board increase in mining royalties in the budget for the year from Jan. 1 and a 10 percent charge if the copper price climbs above \$7,500 a metric ton. The previous tax rates ranged from 4 percent to 6 percent, depending on price of the metal. The Chamber of Mines, which represents companies including Vedanta Resources Plc, First Quantum Minerals Ltd. and Glencore Plc, warned that the move could lead to the industry shedding more than 21,000 jobs and cutting \$500 million in capital spending over the next three years.

While several companies announced plans to fire workers, they later withdrew the threat following fierce opposition from the government. The new royalty "is actually not a drastic increase," Mwanakatwe said. "The fact that each one of the companies has come back and said there will not be any job losses, I think is a very good development and a very progressive one and a recognition that in fact some of them are going to expand. I believe the mining sector will invest where it needs to invest." Zambia's Mines Minister Richard Musukwa said in an interview Monday at the Investing in African Mining Indaba in Cape Town that while the government is holding firm on the new law, it was prepared to make temporary concessions on the recent changes to its mining taxes if companies can show they need it. Mwanakatwe said the government may consider offering concessions to encourage local production of concentrates and is open to further engagement with the mining industry. "Mining contributes about 14 percent of gross domestic product," she said. "I need to ensure that we have a mining sector that is thriving and investing."

So far, however, it does not seem that the royalty increase would discourage investment in Zambia. First Quantum Minerals Ltd. has offered to buy the Zambian government's 20 percent stake in Africa's biggest copper mine for as much as \$700 million, according to Bloomberg. Vancouver-based First Quantum already owns 80 percent of the Kansanshi mine in Zambia's North-Western Province, while state-owned ZCCM Investments Holdings Plc holds the rest. The proposal, which was submitted last year, includes \$300 million to \$400 million in cash, and an equal amount in special royalties, over more than 10 years. First Quantum spokesman John Gladston declined to comment. Amos Chanda, Zambian President Edgar Lungu's spokesman, didn't immediately respond to a call and message seeking comment, and neither did a spokeswoman for ZCCM-IH. The deal would also include ZCCM-IH dropping a \$1.4 billion legal claim against First Quantum over a loan the company received from Kansanshi, the people said. The government is still considering the proposal, according to one of the people. First Quantum and the government have been at loggerheads over other issues too. The country's revenue authority handed it a \$7.9 billion tax bill last year, while an increase in royalties this year prompted First Quantum to announce plans to fire 2,500 workers. The company has since backtracked on the proposal.

Other important information on copper market:

- Chilean state miner Codelco said on Friday (Feb 8th) heavy rains had forced suspension of operations at its northern copper mines Chuquibambilla and Ministro Hales. The world's biggest copper producer said that operations at its other mines in the area, Radomiro Tomic and Gabriela Mistral, would continue as usual albeit with precautionary measures in place. Chile's Interior Ministry declared a red alert overnight in the neighboring provinces of El Loa and Antofagasta after several days of heavy rain and electric storms, which saw three people killed, roads cut off, houses damaged and bridges collapse. The state geological agency has warned of land and rock slides. Codelco said emergency teams had been deployed to both suspended mines along with management staff to monitor and mitigate any impact caused by the weather. Twelve percent of Codelco's total output came from Ministro Hales in 2017. Similar news from Freeport-McMoRan mine. Company confirmed that due to heavy rainfall and localized flooding it have suspended operations at its El Abra mine in Chile since Feb. 4. "We are assessing damage and working to clear roads for safe passage to our operations, as weather conditions allow," spokeswoman Linda Hayes says in email. Heavy rainfall continues in area of El Abra mine. Freeport's Cerro Verde mine in Peru is operating normally "at this time," Hayes says..
- A joint venture between Trafigura and a Saudi Arabian company will start building a major copper, zinc and lead smelter complex in Saudi Arabia approximately one year from now, a company source has confirmed with Fastmarkets. The designated capacity at the complex will be 400,000 tonnes per year of copper, 200,000 tpy of zinc and 55,000 tpy of lead, the source said.

The \$2.8 billion project in Ras Al-Khair Mineral City, named SmeltCo, will be jointly developed and equally owned by Trafigura and Modern Mining Holding - an affiliate of the Riyadh-based Modern Industrial Investment Holding Group. Its copper production capacity will be similar to some of the world's major copper smelters, including Sterlite Copper's Tuticorin 400,000 tpy smelter in India that has been cleared to resume production, and Chinalco's Ningde 400,000 tpy project due to commence output in August. Saudi Arabia is home to major copper mining assets, including Jabal Sayid mine co-owned by Barrick and Ma'aden. The construction of the new copper smelter could mean a higher demand for copper concentrates when it begins operations.

- Chilean state copper miner Codelco saw a 1.9 percent drop in its output in 2018, at 1.8 million tonnes, while production at the world's largest copper mine, Escondida, shot up 34 percent in the same year, Chile's copper commission said. Codelco was affected by a natural decline in ore grades, an issue it is seeking to reverse with a major program of upgrades. Production at Escondida, controlled by BHP Group Ltd, rose to 1.24 million tonnes because of a low base of comparison due to the impact in 2017 of a workers strike that lasted for 44 days. Meanwhile, Chile's second-largest copper mine, Collahuasi - a joint venture between Glencore Plc and Anglo American Plc with Japanese firms - recorded growth of 6.7 percent in its production to 559,200 tonnes last year. Last year, Chile's total copper production rose by 6 percent to 5.83 million tonnes, according to figures from the commission, known as Cochilco.

Precious Metals

Last year, the silver market faced a challenging environment which was reflected in a muted price performance. Preliminary estimates point towards a minor 0.3 percent increase in total supply whereas demand contracted 3 percent. A slowing Chinese economy, coupled with rising U.S. interest rates, an equity market bull run, and global trade tensions, affected the price performance across many markets, including gold and silver.

Silver Market Trends – 2019

This year, Silver Institute expects the sentiment to be more supportive for the silver market. The start of 2019 has already proven to be good for silver investors. The U.S. Mint for example, sold 12 percent more American Eagles in January compared to January 2018. In addition, the expected slowdown in the U.S. Fed rate hiking cycle should also benefit silver, which in comparison to gold, has a very attractive price point based on the high gold:silver ratio at around 82.

Silver demand from industrial fabrication, responsible for approximately 60 percent of total demand, is forecast to rise modestly in 2019. Silver Institute

Silver Institute expects the sentiment to be more supportive for the silver market in 2019.

expects most sectors to record reasonable growth based on silver's use in a wide variety of applications. Silver demand from brazing alloys and solders as well as electrical and electric applications is expected to rise again this year. This is on the back of continued demand from the automotive sector, which uses an increasing amount of applications, such as safety features, window defogging and infotainment systems, and for electric and hybrid vehicles. Silver Institute also forecasts growth in silver's use in a variety of additional sectors, such as water purification, chemical applications, LED lighting, flexible electronics and screens as well as anti-microbial applications in textiles.

Photovoltaic (PV) demand has been expanding considerably in recent years due to various countries stepping up the pace to diversify their energy generating portfolio away from conventional fossil fuels and towards a higher share of renewable sources. Even with legislative changes in China, coupled with global overstocking and continued attempts at thrifting, PV demand will still be very supportive of silver usage, as many governments will continue to provide incentives to install more solar power. Indeed, global solar capacity additions are likely to be above 100 GW per year over the 2018-2022 period. Even though growth of solar capacity additions in China slowed modestly last year, that slack is expected to be offset by other countries, such as India, Australia and various European countries in the coming years.

India is expected to continue to be one of the largest silver consumers in 2019. Silver imports reached nearly 225 million ounces (Moz) last year, which was over 35 percent higher compared to 2017. Silver imports fell in India after the implementation of the demonetization plan at the end of 2016 and the introduction of the goods-and-services-tax (GST) in mid-2017, which reduced the amount of cash in circulation that was previously used for silver imports.

Jewelry demand is expected to record a solid year of growth in 2019, with Thailand set to be one of the driving forces behind the rise. In the United States, silver jewelry will remain a popular alternative to lower carat gold items, driven by many issues, but especially female self-purchases. Globally, silver jewelry is expected to continue to expand, due to its diversity of design, fine quality and excellent retail margins.

Exchange traded products (ETPs) are forecast to expand by 8 million ounces this year. Silver-backed ETPs are "stickier" than other precious metal products, as a majority are held by retail investors, rather than institutional investors.

Silver physical investment demand is likely to increase by approximately 5 percent in 2019. Bullion coin demand has been strong in the United States during January of this year, and we expect sentiment in Europe, which rose by 6 percent in 2018, and India to be supportive of global growth as the year continues.

Silver mine production is forecast to decline by 2 percent this year. While Silver Institute expects a small rise from silver recovered in gold mining, all other primary and by-product production is expected to fall, except for supply from lead/zinc operations which are forecast to rise this year.

Silver scrap supply is forecast to pick up modestly in 2019, following four consecutive years of stable scrap flows. That will be mainly a function of scrap generated from industrial processes but also from jewelry items, which tend to be strongly price elastic.

The silver market balance (total supply less total demand) in 2019 is projected to be the third consecutive year, within the boundaries of margin, where all the silver produced is absorbed by the various downstream sectors.

Freight market

Hyundai Heavy Industries, the world's biggest shipbuilding group, has announced a share swap deal worth 2.1 trillion won (\$1.98 billion) to take over second-ranked Daewoo and create a global heavyweight controlling over 20 percent of the market.

South Korea to combine world's two biggest shipbuilders in \$2 billion deal

The deal will raise the fundamental competitiveness of Daewoo, at a time when the threat from latecomers in China and Singapore is growing

The move comes as the worldwide shipbuilding sector recovers from a global economic downturn that led to massive losses, widespread job cuts and, in 2017, the \$2.6 billion bailout of South Korea's Daewoo Shipbuilding & Marine Engineering Co Ltd.



































State-funded Korea Development Bank (KDB) owns 55.7 percent of Daewoo, and has said it intends to sell the stake and consolidate the country's three biggest shipbuilders - which includes Samsung Heavy Industries Co Ltd - into two. The combination of two of the giant shipbuilders would ease competition and excess capacity, which have depressed ship prices, KDB Chairman Lee Dong-gull said at a news conference.

Hyundai and Daewoo hold a combined market share of 21.2 percent, followed by Japan's Imabari Shipbuilding with a 6.6 percent, showed data from Clarksons Research. Lee said it will take several months to gain approval from antitrust regulators from related countries. He said the size of the resulting entity's market share would not be detrimental to the interests of customers. The shipbuilding industry accounts for 7 percent of both exports and employment in Asia's fourth-biggest economy.

Daewoo will also receive liquidity support of 2.5 trillion won (\$2.25 billion) from KDB and Hyundai, Hyundai said in a stock exchange filing. Hyundai's holding company is set to raise funds for acquisitions through the sale of part of its stake in refiner Hyundai Oilbank Co Ltd to Saudi Aramco for up to 1.8 trillion won.

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
China							
☼☼	28-Jan	Industrial profits (yoy)	Dec	-1.9% ▼	-1.8%	--	
☼☼☼	31-Jan	Official manufacturing PMI	Jan	49.5 ▲	49.4	49.3	
☼☼☼	01-Feb	Caixin's manufacturing PMI	Jan	48.3 ▼	49.7	49.6	
Poland							
☼☼☼	01-Feb	Manufacturing PMI	Jan	48.2 ▲	47.6	48.0	
☼☼☼☼☼	06-Feb	NBP base rate decision	Feb	1.50% -	1.50%	1.50%	
US							
☼	28-Jan	Dallas Fed manufacturing activity	Jan	1.0 ▲	-5.1	-2.7	
☼	29-Jan	S&P/CaseShiller home price index‡	Nov	214 ▼	214	--	
☼☼☼☼☼	30-Jan	FOMC base rate decision - upper bound (Fed)	Jan	2.50% -	2.50%	2.50%	
☼☼☼☼☼	30-Jan	FOMC base rate decision - lower bound (Fed)	Jan	2.25% -	2.25%	2.25%	
☼☼	31-Jan	Personal income (sa, mom)	Dec	--	0.2%	0.5%	
☼☼☼	01-Feb	Manufacturing PMI - final data	Jan	54.9 -	54.9	54.9	
☼☼	01-Feb	Change in non-farm payrolls (ths)‡	Jan	304 ▲	222	165	
☼☼	01-Feb	ISM Manufacturing‡	Jan	56.6 ▲	54.3	54.0	
☼☼	01-Feb	Underemployment rate (U6)	Jan	8.1% ▲	7.6%	--	
☼☼	01-Feb	Unemployment rate	Jan	4.0% ▲	3.9%	3.9%	
☼☼	01-Feb	University of Michigan confidence index - final data	Jan	91.2 ▲	90.7	90.7	
☼	01-Feb	Average hourly earnings (yoy)‡	Jan	3.2% ▼	3.3%	3.2%	
☼☼	04-Feb	Durable goods orders - final data	Nov	0.7% ▼	0.8%	1.5%	
☼☼☼	05-Feb	Composite PMI - final data	Jan	54.4 ▼	54.5	--	
☼☼☼	05-Feb	PMI services - final data	Jan	54.2 -	54.2	54.2	
Eurozone							
☼	28-Jan	M3 money supply (yoy)	Dec	4.1% ▲	3.7%	3.8%	
☼	30-Jan	Economic confidence‡	Jan	106 ▼	107	107	
☼	30-Jan	Industrial confidence‡	Jan	0.5 ▼	2.3	0.5	
☼	30-Jan	Consumer confidence - final data	Jan	-7.9 -	-7.9	-7.9	
☼	30-Jan	Business climate indicator‡	Jan	0.7 ▼	0.9	0.8	
☼☼☼☼☼	31-Jan	GDP (sa, yoy) - estimation	4Q	1.2% ▼	1.6%	1.2%	
☼☼☼☼☼	31-Jan	GDP (sa, qoq) - estimation	4Q	0.2% -	0.2%	0.2%	
☼☼	31-Jan	Unemployment rate	Dec	7.9% -	7.9%	7.9%	
☼☼☼☼	01-Feb	Core CPI (yoy) - estimation	Jan	1.1% ▲	1.0%	1.0%	
☼☼☼☼	01-Feb	CPI estimate (yoy)	Jan	1.4% ▼	1.6%	1.4%	
☼☼☼	01-Feb	Manufacturing PMI - final data	Jan	50.5 -	50.5	50.5	
☼☼	04-Feb	Producer inflation PPI (yoy)	Dec	3.0% ▼	4.0%	3.1%	
☼☼☼	05-Feb	Composite PMI - final data	Jan	51.0 ▲	50.7	50.7	
☼☼☼	05-Feb	Services PMI - final data	Jan	51.2 ▲	50.8	50.8	
☼☼	05-Feb	Retail sales (yoy)‡	Dec	0.8% ▼	1.8%	0.5%	

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
★★★★	30-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.7% -	1.7%	1.8%	☹
★★★★	30-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.4% ▼	1.7%	1.6%	☹
★★	30-Jan	GfK consumer confidence‡	Feb	10.8 ▲	10.5	10.3	☺
★★★★	31-Jan	Retail sales (yoy)‡	Dec	-2.1% ▼	1.9%	1.5%	☹
★★	31-Jan	Unemployment rate	Jan	5.0% -	5.0%	5.0%	⊖
★★★★	01-Feb	Manufacturing PMI - final data	Jan	49.7 ▼	49.9	49.9	☹
★★★★	05-Feb	Composite PMI - final data	Jan	52.1 -	52.1	52.1	⊖
★★★★	06-Feb	Factory orders (wda, yoy)‡	Dec	-7.0% ▼	-3.4%	-6.7%	☹
★★★★	07-Feb	Industrial production (wda, yoy)‡	Dec	-3.9% ▲	-4.0%	-3.4%	☹
France							
★★★★★	30-Jan	GDP (yoy) - estimation‡	4Q	0.9% ▼	1.3%	0.9%	⊖
★★★★★	30-Jan	GDP (qoq) - estimation	4Q	0.3% -	0.3%	0.2%	☺
★★★★	31-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	1.4% ▼	1.9%	1.4%	⊖
★★★★	31-Jan	Consumer inflation CPI (yoy) - preliminary data	Jan	1.2% ▼	1.6%	1.2%	⊖
★★★	01-Feb	Manufacturing PMI - final data	Jan	51.2 -	51.2	51.2	⊖
★★★	05-Feb	Composite PMI - final data	Jan	48.2 ▲	47.9	47.9	☺
★★★★	08-Feb	Industrial production (yoy)‡	Dec	-1.4% ▲	-2.2%	-1.4%	⊖
Italy							
★★★★★	31-Jan	GDP (wda, yoy) - preliminary data‡	4Q	0.1% ▼	0.6%	0.3%	☹
★★★★★	31-Jan	GDP (wda, qoq) - preliminary data	4Q	-0.2% ▼	-0.1%	-0.1%	☹
★★	31-Jan	Unemployment rate - preliminary data	Dec	10.3% ▼	10.5%	10.6%	☹
★★★	01-Feb	Manufacturing PMI	Jan	47.8 ▼	49.2	48.8	☹
★★★★	04-Feb	Harmonized consumer inflation HICP (yoy) - preliminary data	Jan	0.9% ▼	1.2%	0.8%	☺
★★★	05-Feb	Composite PMI	Jan	48.8 ▼	50.0	49.4	☹
★★★★	08-Feb	Industrial production (wda, yoy)	Dec	-5.5% ▼	-2.6%	-2.7%	☹
UK							
★★★	01-Feb	Manufacturing PMI (sa)	Jan	52.8 ▼	54.2	53.5	☹
★★★	05-Feb	Composite PMI	Jan	50.3 ▼	51.4	51.4	☹
★★★★★	07-Feb	BoE base rate decision	Feb	0.75% -	0.75%	0.75%	⊖
★★★★	07-Feb	BoE asset purchase target (GBP bn)	Feb	435 -	435	435	⊖
Japan							
★★★★	31-Jan	Industrial production (yoy) - preliminary data	Dec	-1.9% ▼	1.5%	-2.3%	☺
★★★	01-Feb	Manufacturing PMI - final data	Jan	50.3 ▲	50.0	--	
★★★	05-Feb	Composite PMI	Jan	50.9 ▼	52.0	--	
Chile							
★★★★★	30-Jan	BCCh overnight rate target	Jan	3.00% ▲	2.75%	3.00%	⊖
★★★	31-Jan	Total copper production (metric tons)	Dec	560 903 ▲	540 720	--	
★★★	31-Jan	Manufacturing (yoy)	Dec	0.8% ▲	-4.7%	0.9%	☹
★★★★	05-Feb	Economic activity (yoy)	Dec	2.6% ▼	3.1%	3.2%	☹
★★	07-Feb	Nominal wages (yoy)	Dec	3.8% ▼	4.1%	--	
★★★★	08-Feb	Consumer inflation CPI (yoy)	Jan	1.8% ▼	2.6%	2.3%	☹
Canada							
★★★★★	31-Jan	GDP (yoy)	Nov	1.7% ▼	2.2%	1.6%	☺
★★★	08-Feb	Net change in employment (ths)‡	Jan	66.8 ▲	7.8	5.0	☺

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

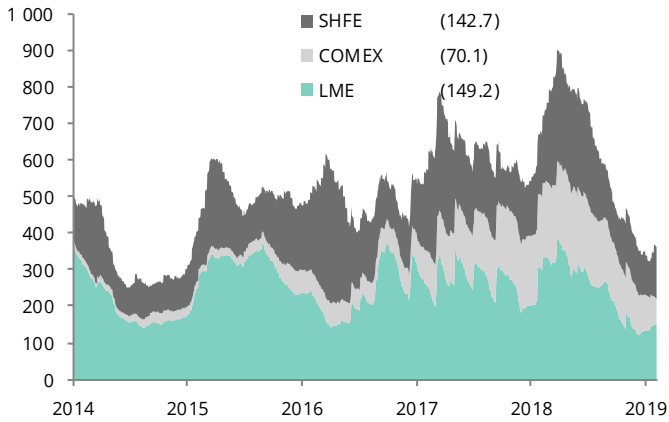
Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 08-Feb-19)</i>		Price change ¹					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	6 207.00	▲ 3.5%	▲ 4.1%	▲ 4.1%	▼ -9.2%	5 982.02	5 811.00	6 227.00	
Molybdenum	26 000.00	- 0.0%	- 0.0%	- 0.0%	▲ 62.5%	26 000.00	26 000.00	26 000.00	
Nickel	12 735.00	▲ 7.5%	▲ 20.2%	▲ 20.2%	▼ -2.2%	11 732.68	10 440.00	12 930.00	
Aluminum	1 865.00	▲ 0.3%	▼ -0.2%	▼ -0.2%	▼ -14.0%	1 851.16	1 775.50	1 896.50	
Tin	21 050.00	▲ 1.4%	▲ 7.9%	▲ 7.9%	▼ -2.3%	20 583.93	19 500.00	21 100.00	
Zinc	2 688.50	▼ -0.4%	▲ 7.1%	▲ 7.1%	▼ -22.3%	2 597.00	2 462.00	2 785.00	
Lead	2 066.00	▼ -2.0%	▲ 2.8%	▲ 2.8%	▼ -18.7%	2 012.98	1 934.50	2 107.50	
LBMA (USD/troz)									
Silver	15.78	▲ 0.6%	▲ 2.0%	▲ 2.0%	▼ -3.5%	15.64	15.26	16.08	
Gold ²	1 314.85	▲ 1.0%	▲ 2.6%	▲ 2.6%	▼ 0.0%	1 296.45	1 279.55	1 323.25	
LPPM (USD/troz)									
Platinum ²	799.00	▼ -1.5%	▲ 0.6%	▲ 0.6%	▼ -18.1%	808.39	785.00	825.00	
Palladium ²	1 394.00	▲ 3.9%	▲ 10.4%	▲ 10.4%	▲ 41.5%	1 341.64	1 267.00	1 398.00	
FX³									
EURUSD	1.1346	▼ -0.6%	▼ -0.9%	▼ -0.9%	▼ -7.4%	1.1414	1.1341	1.1535	
EURPLN	4.3082	▲ 0.5%	▲ 0.2%	▲ 0.2%	▲ 3.2%	4.2938	4.2706	4.3082	
USDPLN	3.8040	▲ 1.2%	▲ 1.2%	▲ 1.2%	▲ 11.5%	3.7615	3.7243	3.8040	
USDCAD	1.3270	▲ 0.1%	▼ -2.7%	▼ -2.7%	▲ 5.4%	1.3276	1.3095	1.3600	
USDCNY	6.7451	▼ 0.0%	▼ -1.9%	▼ -1.9%	▲ 6.6%	6.7845	6.6961	6.8721	
USDCLP	654.44	▼ -1.9%	▼ -5.8%	▼ -5.8%	▲ 9.7%	672.27	652.78	697.64	
Money market									
3m LIBOR USD	2.698	▼ -0.05	▼ -0.11	▼ -0.11	▲ 0.89	2.763	2.697	2.804	
3m EURIBOR	-0.308	▼ 0.00	▲ 0.00	▲ 0.00	▲ 0.02	-0.308	-0.310	-0.306	
3m WIBOR	1.720	- 0.00	- 0.00	- 0.00	- 0.00	1.720	1.720	1.720	
5y USD interest rate swap	2.536	▼ -0.12	▼ -0.03	▼ -0.03	▼ -0.09	2.613	2.419	2.715	
5y EUR interest rate swap	0.103	▼ -0.07	▼ -0.09	▼ -0.09	▼ -0.38	0.172	0.103	0.222	
5y PLN interest rate swap	2.000	▼ -0.06	▼ -0.11	▼ -0.11	▼ -0.69	2.057	1.965	2.140	
Fuel									
WTI Cushing	52.72	▲ 1.4%	▲ 16.1%	▲ 16.1%	▼ -13.8%	52.03	46.54	55.26	
Brent	61.86	▲ 4.0%	▲ 16.3%	▲ 16.3%	▼ -3.5%	60.10	53.83	62.58	
Diesel NY (ULSD)	190.73	▲ 4.1%	▲ 13.4%	▲ 13.4%	▼ -0.8%	186.43	170.01	191.23	
Others									
VIX	15.72	▼ -3.15	▼ -9.70	▼ -9.70	▼ -17.74	18.74	15.38	25.45	
BBG Commodity Index	80.07	▲ 0.2%	▲ 4.4%	▲ 4.4%	▼ -8.0%	79.96	76.99	81.38	
S&P500	2 707.88	▲ 2.4%	▲ 8.0%	▲ 8.0%	▲ 4.9%	2 632.22	2 447.89	2 737.70	
DAX	10 906.78	▼ -2.7%	▲ 3.3%	▲ 3.3%	▼ -11.0%	11 010.51	10 416.66	11 367.98	
Shanghai Composite	2 618.23	▲ 0.8%	▲ 5.0%	▲ 5.0%	▼ -19.7%	2 561.03	2 464.36	2 618.23	
WIG 20	2 354.11	▼ -0.7%	▲ 3.4%	▲ 3.4%	▼ -2.2%	2 357.88	2 247.22	2 414.41	
KGHM	94.44	▲ 2.8%	▲ 6.3%	▲ 6.3%	▼ -9.0%	92.29	86.12	99.14	

^o 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

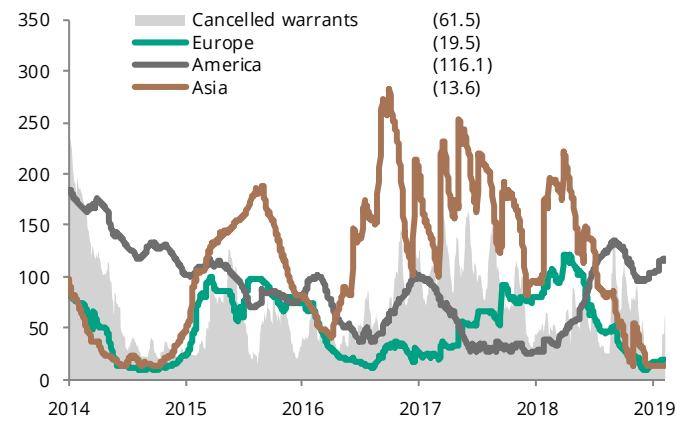
Source: Bloomberg, KGHM Polska Miedź

Copper: official exchange stocks (thousand tonnes)



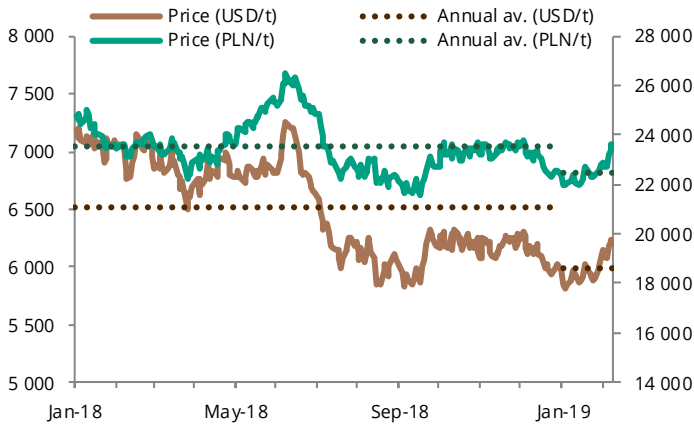
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



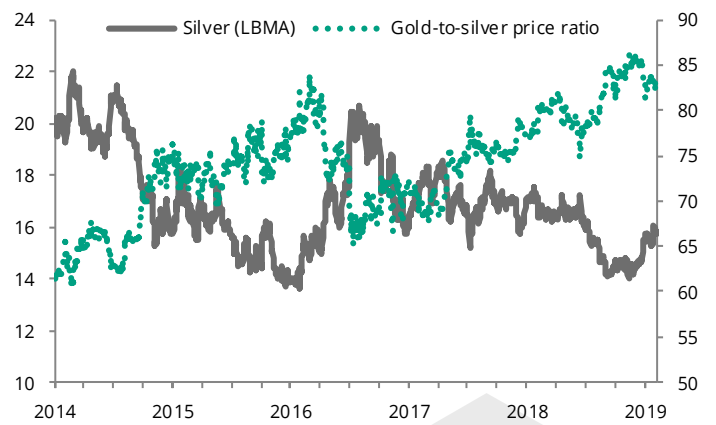
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



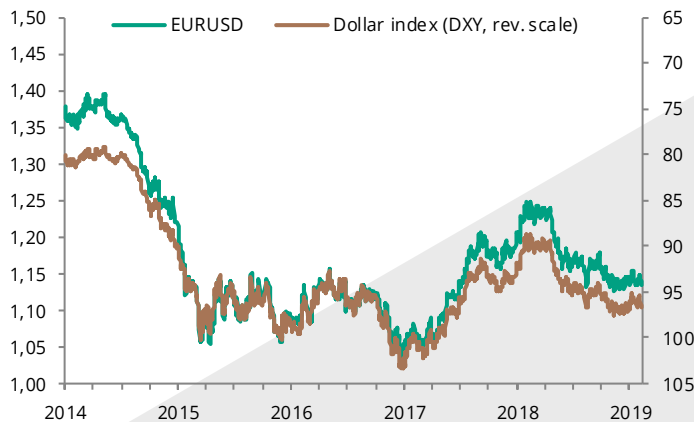
Source: Bloomberg, KGHM Polska Miedź

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



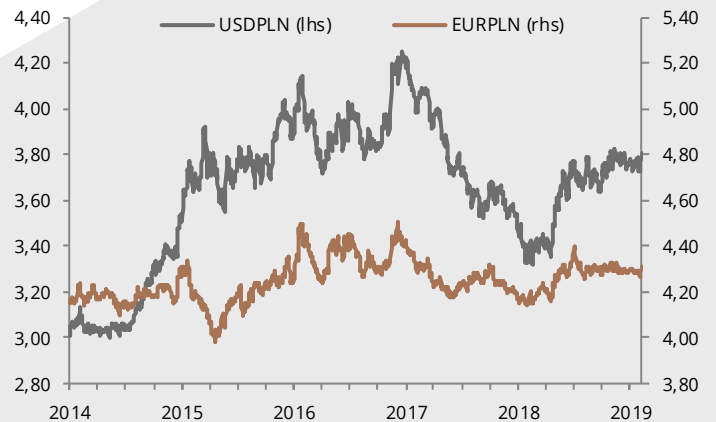
Source: Bloomberg, KGHM Polska Miedź

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:
28th January – 10th February 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 Department)
Wydział Ryzyka Rynkowego (Market Risk Unit)
ul. M. Skłodowskiej-Curie 48
59-301 Lubin, Poland