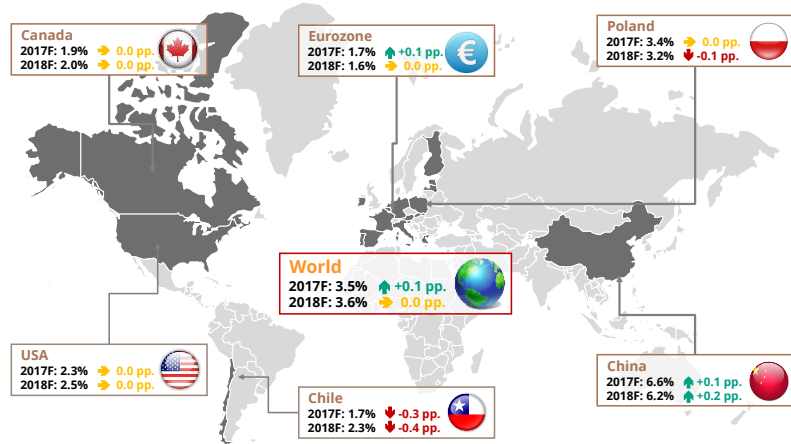


Market Overview

as of: 1st May 2017

- Copper:** The International Copper Study Group (ICSG) met in Lisbon, Portugal on 27-28 April 2017. Government delegates and industry advisors from most of the world's leading copper producing and using countries met to discuss key issues affecting the global copper market (*page 2*).
- Precious metals:** In recent two weeks gold held near a six-week low. After geopolitics, macroeconomic factors came to play. Expectations that the U.S. Federal Reserve may raise interest rates as early as June boosted the dollar and kept gold low. Recently the Fed left interest rates unchanged and downplayed weak first-quarter economic growth while emphasizing the strength of the labor market, in a sign it was still on track for two more rate rises this year. Investors were also awaiting monthly U.S. non-farm payrolls report for greater signs of the Fed's likely rate hike trajectory through the end of the year (*page 4*).
- London Metals Exchange:** The London Metal Exchange will outline a preliminary plan to launch an electronic trading platform for over-the-counter metals derivatives in an upcoming discussion paper (*page 5*).
- International Monetary Fund:** Consistently good economic news since summer 2016 is starting to add up to a brightening global outlook. The economic upswing that the IMF have expected for some time seems to be materializing (*page 6*).

IMF slightly increased World growth forecasts since October 2016 by 0.1 pp in 2017 and left 2018 unchanged



Source: IMF, KGHM Polska Miedź

Key market prices

	Close price	2w chng.
LME (USD/t)		
▲ Copper	5 688.50	0.6%
▼ Nickel	9 485.00	-2.2%
LBMA (USD/troz)		
▼ Silver	17.41	-6.2%
▼ Gold (PM)	1 266.45	-1.4%
FX		
▲ EURUSD	1.0930	2.8%
▼ EURPLN	4.2170	-0.7%
▼ USDPLN	3.8696	-3.0%
▲ USDCAD	1.3665	3.0%
▲ USDCLP	664.28	1.6%
Stocks		
▲ KGHM	123.10	1.4%

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

Important macroeconomic data

Release	For	
🇨🇳 GDP (yoy)	1Q	6.9% ▲
🇺🇸 GDP (annlzd., qoq)	1Q	0.7% ▼
🇨🇳 Industrial prod. (yoy)	Mar	7.6% ▲
🇵🇱 Industrial prod. (yoy)	Mar	11.1% ▲
🇪🇺 Composite PMI	Apr	56.7 ▲

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

Market Risk Unit

marketrisk@kgbm.com

Grzegorz Laskowski

Marek Krochta

Michał Kamiński

Bartosz Jachnik

Wojciech Demski

Base and precious metals | Other commodities

Copper

The International Copper Study Group (ICSG) met in Lisbon, Portugal on 27-28 April 2017. Government delegates and industry advisors from most of the world's leading copper producing and using countries met to discuss key issues affecting the global copper market.

ICSG Copper Market Forecast 2017/2018

After growth of almost 6% in 2016, world mine production after adjusting for historical disruption factors, is expected to decline by 1% in 2017 and remain essentially unchanged in 2018. Lack of significant output from new projects or expansions, contrary to what happened in 2016, and reduced output from some SX-EW mines will impact world mine production growth rates in 2017 and 2018. Furthermore, 2017 production growth is also impacted by the significant supply disruptions that occurred in the 1st quarter of the year notably in Chile, Indonesia and Peru. While world concentrate production is expected to remain essentially unchanged in 2017, an anticipated decline of around 5% in SX-EW output will lead to an overall decline in world mine production of around 1%.

World refined production is expected to increase by around 2% in 2017 with lower growth of about 1.5 % expected for 2018

In 2017, although a 2.5% growth is expected in electrolytic refined production from concentrates, and 5% growth in secondary (from scrap) refined production, world refined production growth will be partially offset by an anticipated decline of 5% in SX-EW output. In 2018, although world secondary refined production is expected to increase and SX-EW output to level off, it is anticipated that growth in electrolytic refined production might be lower constrained by the availability of concentrate. China will remain the biggest contributor to world refined production growth in 2017 and 2018.

World apparent refined usage is expected to increase by around 2% in 2017 and 2018

Infrastructural development in major countries like China and India will continue to sustain growth in copper demand. Improvement is anticipated for the world economy for 2017 and 2018 which, although modest, should support copper demand growth. China will remain the biggest contributor to world growth in copper usage. Apparent demand in China is expected to increase by around 2.5%, although underlying "real" demand growth in China is estimated by others at around 3.5%.

World refined copper balance projections indicate a deficit of about 150,000 t for 2017 and 170,000 t for 2018

Current ICSG projections are for a deficit of about 150,000 metric tonnes (t) in 2017, and about 170,000 t in 2018. This compares with a surplus of 160,000 t and a deficit of 100,000 t for 2017 and 2018, respectively, forecast at our October 2016 meeting. The change is due to stronger than previously anticipated growth in refined copper usage, mainly this year supported by improved global economic outlook.

Other important information on copper market:

- *[source: WBMS]* Copper and zinc were the only base metals with a recorded surplus in January to February 2017, according to metal balances released by the World Bureau of Metal Statistics (WBMS). Following a surplus of 215,000 tonnes in the whole of 2016, the copper market recorded a surplus of 335,000 tonnes. Stocks rose during February and closed 72,000 tonnes higher than at the end of December 2016. Global consumption was down 3.52 million tonnes, compared with 3.70 million tonnes for the same months of 2016.
- *[source: Bloomberg]* The London Metal Exchange named Matt Chamberlain as chief executive officer, giving the 35-year-old the role after a three-month interim stint running the world's largest industrial-metals bourse. Chamberlain becomes the youngest leader of any major international exchange. He takes the reins as the LME explores ways to boost revenue and open up its market to new users such as high-frequency traders, while placating the concerns of traditional hedgers, traders and brokers. He was named interim CEO after predecessor Garry Jones announced his retirement on Jan. 23. The LME approved Chamberlain's appointment Friday, the bourse and parent company Hong Kong Exchanges & Clearing Ltd. said in a joint statement. The appointment is subject to U.K. regulatory approval. The new CEO is challenged with reversing slumping trading volumes on the 140-year-old bourse, while addressing member criticism over higher fees and facing competition from both established and upstart rivals. The LME, which sets benchmark prices for base metals including copper and aluminum, is set to expand into gold and silver futures in June.
- *[source: Reuters]* Indonesian workers at American mining giant Freeport McMoran Inc. will stage a month-long protest starting May 1 against layoffs, as the company ramps down production in the midst of a contract dispute with the Indonesian government. Union member Tri Puspital said the strike at the giant Grasberg copper mine in the eastern province of Papua was intended to disrupt production and that management had already been informed.
- *[source: ICSG]* The global world refined copper market showed a 51,000 tonnes surplus in January, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first month of the year, the market was in a 51,000 tonnes surplus compared with a 44,000 tonnes surplus in the same period a year earlier, the ICSG said. World refined copper output in January was 1.98 million tonnes, while consumption was 1.93 million tonnes. Bonded stocks of copper in China showed a 76,000 tonnes surplus in January compared with a 13,000 tonnes surplus in December.

Precious Metals

In recent two weeks gold held near a six-week low. After geopolitics macroeconomic factors came to play. Expectations that the U.S. Federal Reserve may raise interest rates as early as June boosted the dollar and kept gold low. Recently the Fed left interest rates unchanged and downplayed weak first-quarter economic growth while emphasizing the strength of the labor market, in a sign it was still on track for two more rate rises this year. Investors were also awaiting monthly U.S. non-farm payrolls report for greater signs of the Fed's likely rate hike trajectory through the end of the year.

China average consumer more aware of golds positive attributes

China's actual gold consumption rose 14.73 percent to 304.14 tonnes in the first quarter of 2017 due to steady gold ornament sales and strong sales of gold bars, according to new data. Thanks to strong demand around Chinese New Year, gold ornament sales rose 1.4 percent to 170.93 tonnes and gold bar sales surged 60.18 percent to 101.19 tonnes, the China Gold Association said. The surge in gold bar sales came on the back of more people using them to hedge against risk as the public became more aware of its attributes, according to analysts. Gold output in the first three months stood at 101.2 tonnes, down 9.29 percent from a year earlier, the association said.

Central bank sector demand subdued – it's all about China

Central bank gold demand hit its lowest in nearly six years in the first quarter as Chinese buying dried up, the World Gold Council said in recent report, causing an 18 percent year-on-year drop in overall demand. The official sector added just 76 tonnes of bullion to its holdings in that period, down by more than a quarter from a year before and the lowest of any quarter since Q2 2011. China, a major official sector buyer of gold in recent years, has held off making any additions to its reserves since October, the first time it has done so since it started releasing quarterly reserves data in 2015. According to analysts China's forex reserves have declined significantly over the last 18 months, edging beneath \$3 trillion at the start of this year. "At the same time gold as a percentage of FX reserves has increased. That is partly a function of the decline in FX reserves and also the increase in the gold price." The WGC is forecasting central bank purchases of 250-350 tonnes this year, down from 377 tonnes in 2016. Russia and Kazakhstan are expected to remain buyers of gold. The first-quarter drop in central bank buying fed into an 18 percent fall in global gold demand to 1,034.5 tonnes, the weakest first quarter since 2010, the WGC said.

London Metals Exchange

The London Metal Exchange will outline a preliminary plan to launch an electronic trading platform for over-the counter metals derivatives in an upcoming discussion paper.

LME to discuss plans for over-the-counter trading venue

The London Metal Exchange will outline a preliminary plan to launch an electronic trading platform for over-the counter metals derivatives in an upcoming discussion paper. Market rumors say that the LME will suggest linking up major dealers to create a unified OTC metals market. The proposal is part of a broader set of market reforms that the LME is putting forward. The discussions are at an initial stage and could change depending on market feedback.

Bilateral OTC contracts have long been used for transactions such as large hedges that would be difficult to execute on an exchange. They're now also gaining popularity among electronic traders looking for a monthly futures-style contract, rather than the LME's rolling three-month forward. Banks including JPMorgan Chase & Co. and Goldman Sachs Group Inc., as well as brokers such as Marex Spectron Group Ltd. have built popular OTC trading platforms in recent years, helping them capture business from LME users frustrated with rising transaction costs. The migration to OTC has contributed to declining trading volumes on the LME at the same time as the exchange lost market share to rivals. The LME's plans could put it in competition with financial technology firm Autilla Inc., which is building a trading platform to capture OTC metals trades. Autilla is developing the venue in partnership with Martin Abbott, a former LME chief executive officer.

The discussion paper includes proposals for other reforms. For example, promoting electronic trading in monthly contracts that are similar to those offered by CME Group Inc. and the Shanghai Futures Exchange. The new business plans are being spearheaded by Chief Executive Officer Matthew Chamberlain, who took on the role in January following the retirement of predecessor Garry Jones. The LME's relations with the metals industry have been strained in recent years after the exchange raised fees and encouraged more algorithmic trading. The discussion paper also reiterates plans to keep open-outcry trading, which takes place in a ring of red leather couches at the LME's London headquarters.

Source: Bloomberg

Global economies | Foreign exchange markets

IMF: World Economic Outlook – April 2017

Consistently good economic news since summer 2016 is starting to add up to a brightening global outlook. The economic upswing that the IMF have expected for some time seems to be materializing.

4Q16 economic growth momentum is expected to persist

The world economy gained speed in the fourth quarter of 2016 and the momentum is expected to persist. Global growth is projected to increase from an estimated 3.1% in 2016 to 3.5% in 2017 and 3.6 percent in 2018. Activity is projected to pick up markedly in emerging market and developing economies because conditions in commodity exporters experiencing macroeconomic strains are gradually expected to improve, supported by the partial recovery in commodity prices, while growth is projected to remain strong in China and many other commodity importers. In advanced economies, the pickup is primarily driven by higher projected growth in the United States, where activity was held back in 2016 by inventory adjustment and weak investment.

World growth has been slightly increased, more changes in the regional breakdown

Although changes to the global growth forecast for 2017 and 2018 since the October 2016 WEO are small, there have been meaningful changes to forecasts for country groups and individual countries. In line with stronger-than-expected momentum in the second half of 2016, the forecast envisages a stronger rebound in advanced economies. And while growth is still expected to pick up notably for the emerging market and developing economies group, weaker-than-expected activity in some large countries has led to small downward revisions to the group's growth prospects for 2017.

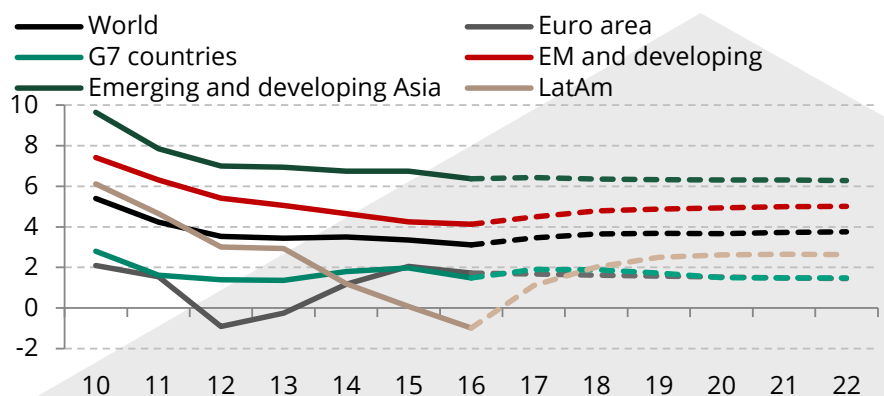
Since the U.S. election, expectations of looser fiscal policy in the United States have contributed to a stronger dollar and higher U.S. Treasury interest rates, pushing up yields elsewhere as well. Market sentiment has generally been strong, with notable gains in equity markets in both advanced and emerging market economies. Stronger activity and expectations of more robust global demand going forward, coupled with agreed restrictions on oil supply, have helped commodity prices recover from their troughs of early 2016. Headline inflation has been picking up in advanced economies due to higher commodity prices, but core inflation dynamics remain subdued and heterogeneous (consistent with diversity in output gaps). Core inflation has improved little where it had been the weakest (for instance, in Japan and parts of the euro area). Headline inflation has also picked up in many emerging market and developing economies due to higher commodity prices, but in a number of cases it has receded as pass-through from the sharp currency depreciations in 2015 and early 2016 continues to fade.

Risks remain skewed to the downside, however, especially over the medium term, with pervasive uncertainty surrounding policies. Buoyant market sentiment implies that there is now more tangible upside potential for the near term, but in light of the sources of uncertainties discussed below, a sharp

increase in risk aversion is possible. Risks to medium-term growth appear more clearly negative, also because policy support in the United States and China will have to be unwound or reversed down the road to avoid unsustainable fiscal dynamics. More generally, downside risks stem from several potential factors:

- An inward shift in policies, including toward protectionism, with lower global growth caused by reduced trade and cross-border investment flows
- A faster-than-expected pace of interest rate hikes in the United States, which could trigger a more rapid tightening in global financial conditions and a sharp dollar appreciation, with adverse repercussions for vulnerable economies
- An aggressive rollback of financial regulation, which could spur excessive risk taking and increase the likelihood of future financial crises
- Financial tightening in emerging market economies, made more likely by mounting vulnerabilities in China's financial system associated with fast credit growth and continued balance sheet weaknesses in other emerging market economies
- Adverse feedback loops among weak demand, low inflation, weak balance sheets, and anemic productivity growth in some advanced economies operating with high levels of excess capacity
- Noneconomic factors, including geopolitical tensions, domestic political discord, risks from weak governance and corruption, extreme weather events, and terrorism and security concerns.





Projected growth in different economic regions

































Source: IMF, KGHM Polska Miedź

Macroeconomic calendar

Important macroeconomic data releases

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²
China 						
★★★★★	17-Apr	GDP (yoy)	1Q	6.9% ▲	6.8%	6.8% ●
★★★★★	17-Apr	GDP (sa, qoq)	1Q	1.3% ▼	1.7%	1.5% ◐
★★★★	17-Apr	Industrial production (yoy)	Mar	7.6% ▲	6.0%	6.3% ●
★★	17-Apr	Fixed assets investments (ytd, yoy)	Mar	9.2% ▲	8.9%	8.8% ●
★	17-Apr	Retail sales (yoy)	Mar	10.9% -	10.9%	9.7% ●
★★	27-Apr	Industrial profits (yoy)	Mar	23.8% ▲	2.3%	--
★★★	30-Apr	Official manufacturing PMI	Apr	51.2 ▼	51.8	51.7 ◐
Poland 						
★★	19-Apr	Average gross salary (yoy)	Mar	5.2% ▲	4.0%	4.3% ●
★	19-Apr	Employment (yoy)	Mar	4.5% ▼	4.6%	4.6% ◐
★★★★	20-Apr	Sold industrial production (yoy)‡	Mar	11.1% ▲	1.1%	7.4% ●
★★★	20-Apr	Retail sales (yoy)	Mar	9.7% ▲	7.3%	8.6% ●
★★	20-Apr	Producer inflation PPI (yoy)‡	Mar	4.7% ▲	4.5%	4.6% ●
★	25-Apr	Budget balance (ytd)	Mar	3.8%	--	--
★★	26-Apr	Unemployment rate	Mar	8.1% ▼	8.5%	8.2% ◐
★★★★	28-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	2.0% -	2.0%	2.0% ○
US 						
★★★★	18-Apr	Industrial production (mom)‡	Mar	0.5% ▲	0.1%	0.5% ○
★	18-Apr	Capacity utilization‡	Mar	76.1% ▲	75.7%	76.1% ○
★★	20-Apr	Philadelphia Fed business outlook	Apr	22.0 ▼	32.8	25.5 ◐
★★★	21-Apr	Composite PMI - preliminary data	Apr	52.7 ▼	53.0	--
★★★	21-Apr	Manufacturing PMI - preliminary data	Apr	--	53.3	53.8
★★★	21-Apr	PMI services - preliminary data	Apr	52.5 ▼	52.8	53.2 ◐
★	24-Apr	Dallas Fed manufacturing activity	Apr	16.8 ▼	16.9	17.0 ◐
★	25-Apr	Richmond Fed manufacturing index	Apr	20.0 ▼	22.0	16.0 ●
★	25-Apr	S&P/CaseShiller home price index‡	Feb	193 ▲	193	--
★★	27-Apr	Durable goods orders - preliminary data‡	Mar	0.7% ▼	2.3%	1.3% ◐
★★★★★	28-Apr	GDP (annualized, qoq) - estimation	1Q	0.7% ▼	2.1%	1.0% ◐
★★	28-Apr	University of Michigan confidence index - final data	Apr	97.0 ▼	98.0	98.0 ◐
Eurozone 						
★★★★	19-Apr	Consumer inflation CPI (yoy) - final data‡	Mar	1.5% ▼	2.0%	1.5% ○
★★★★	19-Apr	Core CPI (yoy) - final data	Mar	0.7% -	0.7%	0.7% ○
★	19-Apr	Trade balance (EUR mn)‡	Feb	17.8 ▲	-0.4	16.2 ●
★	20-Apr	Consumer confidence - estimation	Apr	-3.6 ▲	-5.0	-4.8 ●
★★★	21-Apr	Composite PMI - preliminary data	Apr	56.7 ▲	56.4	56.4 ●
★★★	21-Apr	Manufacturing PMI - preliminary data	Apr	--	56.2	56.0
★★★	21-Apr	Services PMI - preliminary data	Apr	56.2 ▲	56.0	55.9 ●
★★★★★	27-Apr	ECB main refinancing rate	Apr	0.00% -	0.00%	0.00% ○
★★★★★	27-Apr	ECB deposit facility rate	Apr	-0.4% -	-0.4%	-0.4% ○
★	27-Apr	Economic confidence‡	Apr	110 ▲	108	108 ●
★	27-Apr	Industrial confidence‡	Apr	2.6 ▲	1.3	1.3 ●
★	27-Apr	Consumer confidence - final data	Apr	-3.6 -	-3.6	-3.6 ○
★	27-Apr	Business climate indicator‡	Apr	1.1 ▲	0.8	0.8 ●
★★★★	28-Apr	Core CPI (yoy) - estimation	Apr	1.2% ▲	0.7%	1.0% ●
★★★★	28-Apr	CPI estimate (yoy)	Apr	1.9% ▲	1.5%	1.8% ●
★	28-Apr	M3 money supply (yoy)	Mar	5.3% ▲	4.7%	4.7% ●

Weight	Date	Event	For	Reading ¹	Previous	Consensus ²	
Germany							
☆☆☆	21-Apr	Composite PMI - preliminary data	Apr	56.3 ▼	57.1	56.8	
☆☆☆	21-Apr	Manufacturing PMI - preliminary data	Apr	--	58.3	58.0	
☆☆	24-Apr	IFO business climate‡	Apr	113 ▲	112	112	
☆☆☆☆	27-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	2.0% ▲	1.5%	1.9%	
☆☆☆☆	27-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	2.0% ▲	1.6%	1.9%	
☆☆	27-Apr	GfK consumer confidence	May	10.2 ▲	9.8	9.9	
☆☆☆	28-Apr	Retail sales (yoy)‡	Mar	2.3% ▲	-2.3%	2.2%	
France							
☆☆☆	21-Apr	Composite PMI - preliminary data	Apr	57.4 ▲	56.8	56.2	
☆☆☆	21-Apr	Manufacturing PMI - preliminary data	Apr	--	53.3	53.1	
☆☆☆☆☆	28-Apr	GDP (yoy) - estimation‡	1Q	0.8% ▼	1.2%	0.9%	
☆☆☆☆☆	28-Apr	GDP (qoq) - estimation‡	1Q	0.3% ▼	0.5%	0.4%	
☆☆☆☆	28-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	1.4% -	1.4%	1.4%	
☆☆☆☆	28-Apr	Consumer inflation CPI (yoy) - preliminary data	Apr	1.2% ▲	1.1%	1.2%	
Italy							
☆☆☆☆	28-Apr	Harmonized consumer inflation HICP (yoy) - preliminary data	Apr	2.0% ▲	1.4%	1.6%	
UK							
☆☆☆☆☆	28-Apr	GDP (yoy) - estimation	1Q	2.1% ▲	1.9%	2.2%	
☆☆☆☆☆	28-Apr	GDP (qoq) - estimation	1Q	0.3% ▼	0.7%	0.4%	
Japan							
☆☆☆	21-Apr	Manufacturing PMI - preliminary data	Apr	--	52.4	--	
☆☆☆☆	28-Apr	Consumer inflation CPI (yoy)	Mar	0.2% ▼	0.3%	0.3%	
☆☆☆☆	28-Apr	Industrial production (yoy) - preliminary data	Mar	3.3% ▼	4.7%	3.9%	
Chile							
☆☆☆	28-Apr	Total copper production (metric tons)	Mar	378 261 ▲	376 948	--	
☆☆☆	28-Apr	Manufacturing (yoy)	Mar	1.9% ▲	-1.0%	-1.5%	
Canada							
☆☆☆☆	21-Apr	Consumer inflation CPI (yoy)	Mar	1.6% ▼	2.0%	1.8%	
☆☆☆☆☆	28-Apr	GDP (yoy)	Feb	2.5% ▲	2.3%	2.6%	

¹ Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; == equal to previous.

² Reading difference to consensus: ▲ = higher than consensus; ▼ = lower than consensus; ○ = equal to consensus.

mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.

Source: Bloomberg, KGHM

Key market data

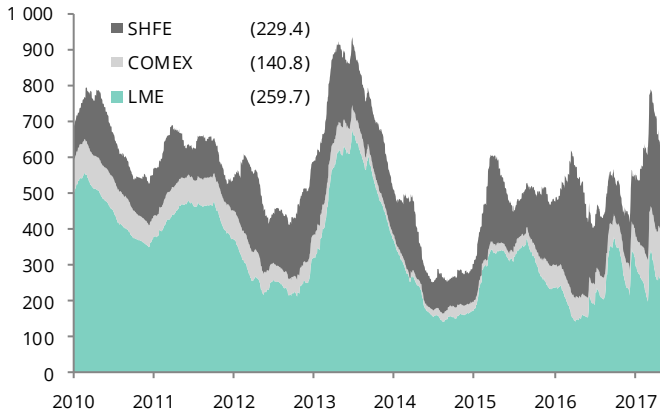
Key base & precious metal prices, exchange rates and other important market factors

(as of: 28-Apr-17)		Price change °					From year beginning ²		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
LME (USD/t)									
Copper	5 688.50	▲ 0.6%	▼ -2.7%	▲ 3.4%	▲ 15.8%	5 802.07	5 500.50	6 145.00	
Molybdenum	15 250.00	- 0.0%	- 0.0%	- 0.0%	▲ 12.1%	15 250.00	15 250.00	15 250.00	
Nickel	9 485.00	▼ -2.2%	▼ -3.9%	▼ -5.2%	▲ 3.7%	10 138.96	9 190.00	11 045.00	
Aluminum	1 930.00	▲ 2.1%	▼ -0.8%	▲ 12.6%	▲ 17.0%	1 868.73	1 701.00	1 962.00	
Tin	19 850.00	▲ 0.5%	▼ -1.2%	▼ -5.9%	▲ 16.1%	20 018.84	18 760.00	21 300.00	
Zinc	2 639.00	▲ 3.0%	▼ -5.2%	▲ 3.0%	▲ 40.4%	2 747.76	2 530.00	2 971.00	
Lead	2 280.00	▲ 1.1%	▼ -1.3%	▲ 14.9%	▲ 31.4%	2 267.64	2 007.00	2 442.00	
LBMA (USD/troz)									
Silver	17.41	▼ -6.2%	▼ -3.6%	▲ 7.2%	▲ 0.3%	17.56	15.95	18.56	
Gold ¹	1 266.45	▼ -1.4%	▲ 1.7%	▲ 9.3%	▲ 0.8%	1 229.62	1 151.00	1 284.15	
LPPM (USD/troz)									
Platinum ¹	946.00	▼ -3.0%	▲ 0.6%	▲ 4.3%	▼ -9.0%	975.17	929.00	1 033.00	
Palladium ¹	824.00	▲ 2.1%	▲ 3.3%	▲ 21.9%	▲ 33.5%	774.15	706.00	824.00	
FX ³									
EURUSD	1.0930	▲ 2.8%	▲ 2.2%	▲ 3.7%	▼ -3.8%	1.0667	1.0385	1.0930	
EURPLN	4.2170	▼ -0.7%	▼ -0.1%	▼ -4.7%	▼ -4.0%	4.3020	4.2170	4.4002	
USDPLN	3.8696	▼ -3.0%	▼ -1.9%	▼ -7.4%	▲ 0.0%	4.0329	3.8696	4.2271	
USDCAD	1.3665	▲ 3.0%	▲ 2.6%	▲ 1.8%	▲ 8.9%	1.3286	1.3004	1.3667	
USDCNY	6.8935	▲ 0.1%	▲ 0.1%	▼ -0.7%	▲ 6.4%	6.8888	6.8450	6.9640	
USDCLP	664.28	▲ 1.6%	▲ 0.2%	▼ -0.5%	▼ -0.6%	655.52	638.35	673.36	
Money market									
3m LIBOR USD	1.172	▲ 0.01	▲ 0.02	▲ 0.17	▲ 0.54	1.090	0.999	1.172	
3m EURIBOR	-0.329	▲ 0.00	- 0.00	▼ -0.01	▼ -0.08	-0.329	-0.332	-0.319	
3m WIBOR	1.730	- 0.00	- 0.00	- 0.00	▲ 0.06	1.730	1.730	1.730	
5y USD interest rate swap	1.933	▲ 0.06	▼ -0.12	▼ -0.04	▲ 0.67	2.004	1.813	2.239	
5y EUR interest rate swap	0.196	▲ 0.08	▲ 0.01	▲ 0.12	▲ 0.15	0.167	0.078	0.321	
5y PLN interest rate swap	2.410	▲ 0.07	▲ 0.06	▲ 0.01	▲ 0.48	2.480	2.300	2.625	
Fuel									
WTI Cushing	49.33	▼ -7.2%	▼ -2.5%	▼ -8.2%	▲ 7.2%	51.55	47.00	54.10	
Brent	50.88	▼ -7.0%	▼ -3.5%	▼ -8.2%	▲ 9.1%	53.77	49.92	56.46	
Diesel NY (ULSD)	150.27	▼ -8.5%	▼ -4.4%	▼ -11.5%	▲ 6.9%	158.59	148.07	167.82	
Others									
VIX	10.82	▼ -5.14	▼ -1.55	▼ -3.22	▼ -4.40	12.03	10.36	15.96	
BBG Commodity Index	84.01	▼ -2.6%	▼ -1.6%	▼ -4.0%	▼ -1.0%	86.52	83.62	89.36	
S&P500	2 384.20	▲ 2.4%	▲ 0.9%	▲ 6.5%	▲ 14.9%	2 333.76	2 257.83	2 395.96	
DAX	12 438.01	▲ 2.7%	▲ 1.0%	▲ 8.3%	▲ 20.5%	11 905.29	11 509.84	12 472.80	
Shanghai Composite	3 154.66	▼ -3.7%	▼ -2.1%	▲ 1.6%	▲ 7.1%	3 203.05	3 101.30	3 288.97	
WIG 20	2 376.87	▲ 6.4%	▲ 9.2%	▲ 22.0%	▲ 25.2%	2 173.82	1 989.64	2 383.97	
KGHM	123.10	▲ 1.4%	▲ 6.3%	▲ 33.1%	▲ 70.3%	121.13	94.00	135.50	

° change over: 2W = two weeks; QTD = quarter-to-day; YTD = year-to-date; 1Y = one year. ¹ based on daily closing prices. ² latest quoted price. ³ central banks' fixing rates (Bank of China HK for USD/CNY). ⁴

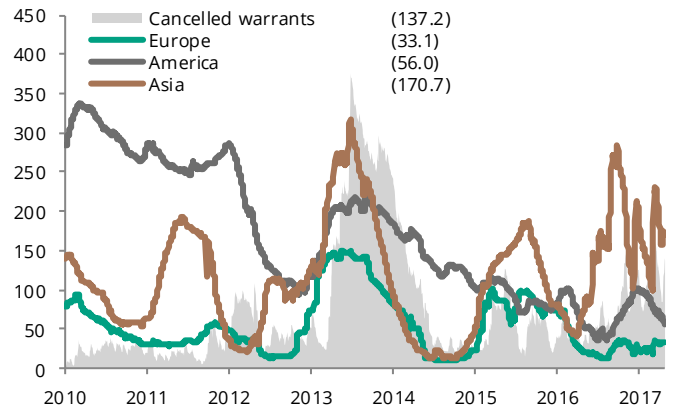
Source: Bloomberg, KGHM

Copper: official exchange stocks (thousand tonnes)



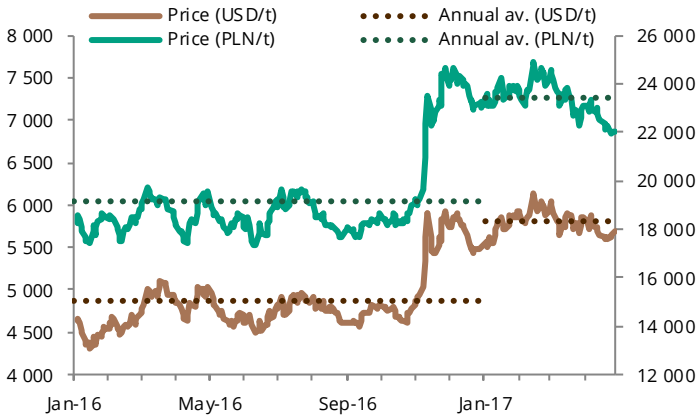
Note: Latest values in brackets. Source: Bloomberg, KGHM

Copper: official LME stocks (thousand tonnes)



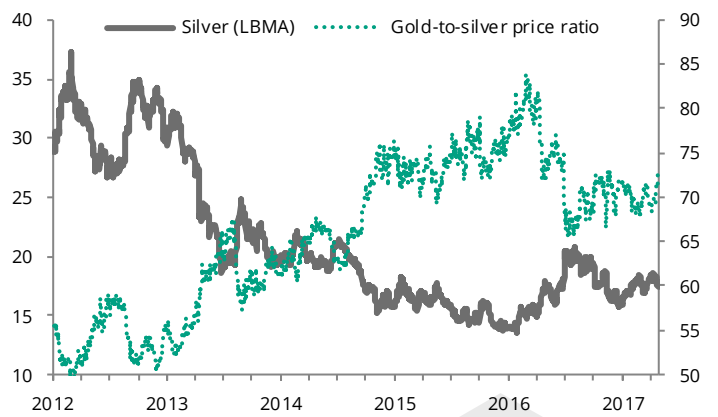
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



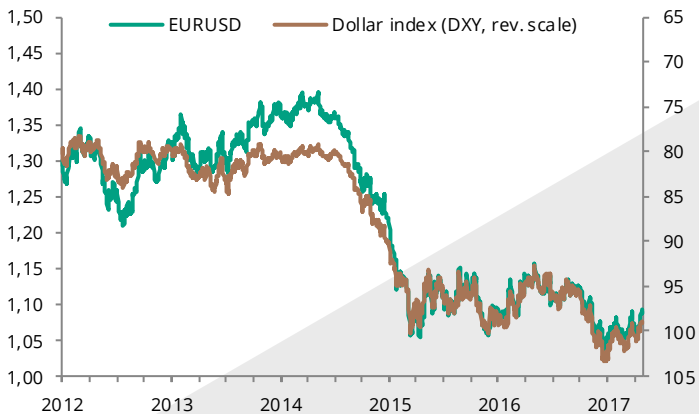
Source: Bloomberg, KGHM Polska Miedź

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



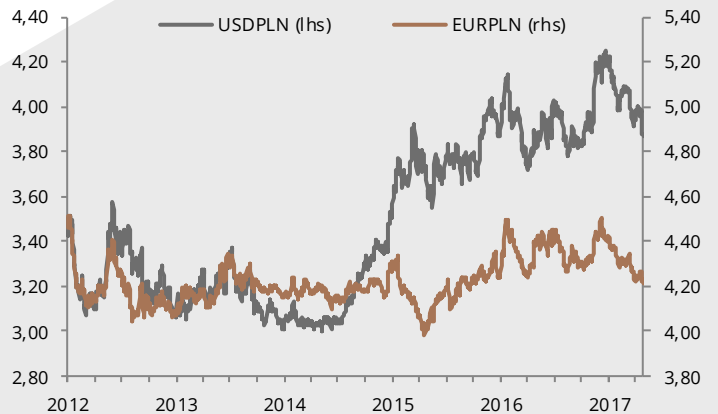
Source: Bloomberg, KGHM Polska Miedź

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: **17th – 30th April 2017.**

- 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.

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

DISCLAIMER

This document reflects the market view of the staff of KGHM Polska Miedz (Polish Copper)'s Market Risk Unit employees on the economy, commodity as well as financial markets. Although, according to the our best of our knowledge, all the facts presented in this publication come from or are based on reliable sources, we do not guarantee their correctness. Moreover, they may be incomplete or shortened. All the opinions and forecasts are backed by diligently-performed analyses valid as of the publishing date and may be subject to change. KGHM Polska Miedz (Polish Copper) S.A. is not obligated to announce any subsequent change of these opinions or forecasts. This document's purpose is solely informative and must not be interpreted as an offer or advice with regards to the purchase/sale of any mentioned financial instrument, nor it is part of such offer or advice.

Re-printing or using this publication or its in whole or part requires prior written consent from KGHM. To acquire that such consent please contact the Communications and CSR Department of Communication (Departament Komunikacji i CSR) of and CSR KGHM Polska Miedz SA.

In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.

Departament Zarządzania Ryzykiem Rynkowym i Kredytowym (Market and Credit Risk Management Department)

Wydział Ryzyka Rynkowego (Market Risk Unit)

ul. M. Skłodowskiej-Curie 48

59-301 Lubin, Poland