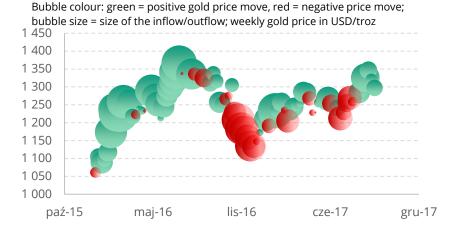


# **Market Overview**

- Copper: The copper price has come off from the highest levels since 2014 of nearly 7 000 USD/t handle in the first days of September into the levels below 6 500 USD/t. Fundamentally not much is going on, however, the price jump and the current price level relative sustainability is more and more visible to the market participants. As a consequence, some of the shelved copper projects are coming back to the miners' agenda (page 2).
- Precious metals: The increase of gold price over last two months is mainly attributed by analysts to market expectations of slower tightening mode of central banks after disappointing inflation readings and weaker US dollar (page 3).
- London Metal Exchange: On Thursday September 7, the London Metal Exchange announced a series of substantial reductions in trading fees in an attempt to support its physical user-base and further encourage the use of its daily date structure. The LME also intends to introduce a new financial OTC fee, effective from January 1, 2018, to, as the LME says, ensure fairness in LME fee structures (page 4).
- German election: With German federal elections in the end of September, an almost universally held view is that Angela Merkel will win a fourth term as Chancellor. Such approach determines investors' confidence. (page 5).

Gold prices has recently been inflated and ETF flows increased due to higher mixed macro data and rise in geopolitical risk



Source: Bloomberg, KGHM Polska Miedź



Key				: a	
Ke/	/ ma	ırke	T D	ric.	68

		Close price	2w chng.
	LME (USD/t)		
•	Copper	6 457.00	-4.7%
•	Nickel	11 005.00	-8.3%
	LBMA (USD/troz)		
	Silver	17.70	1.1%
	Gold (PM)	1 322.85	0.2%
	FX		
	EURUSD	1.1963	0.4%
	EURPLN	4.2781	0.8%
	USDPLN	3.5863	0.5%
$\blacksquare$	USDCAD	1.2182	-1.7%
$\blacksquare$	USDCLP	627.26	-0.3%
	Stocks		
•	KGHM	119.00	-6.4%

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

Important macroeconomic data								
	Release	For						
*‡	Industrial prod. (yoy)	Aug	6.0% ▼					
	CPI (yoy)	Aug	1.9% 🔺					
	Industr. prod. (wda, yoy)	Jul	3.2% 🔺					
*	Econom. activity (yoy)	Jul	2.8% 🔺					
*	BoC rate decision	Sep	1.00% 🔺					
Source: Bloomberg, KGHM Polska Miedź; (more on page 6)								

## **Market Risk Unit**

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## **Base and precious metals | Other commodities**

### Copper

The copper price has come off from the highest levels since 2014 of nearly 7 000 USD/t handle in the first days of September into the levels below 6 500 USD/t. Fundamentally not much is going on, however, the price jump and the current price level relative sustainability is more and more visible to the market participants. As a consequence, some of the shelved copper projects are coming back to the miners' agenda.

### Important information on copper market:

- Zambia's copper production is expected to inch lower this year mainly due to lower output from Konkola Copper Mines, a subsidiary of London-listed Vedanta Resource and is forecast to fall to 753,992 tonnes from 774,290 in 2016, according to the mines ministry. Production at Konkola Copper Mines will fall by 40% while output at Lumwana Mine, owned by Barrick Gold, should decline by 15%, Ministry of Mines Permanent Secretary Paul Chanda said in a statement. The government had said in June that copper production was expected to rise to 850,000 tonnes in 2017 owing to expansion at existing mines and ongoing greenfield projects. The Zambia Chamber of Mines, an industry body, said output would depend on power supply, infrastructure and stability of the fiscal and regulatory regime.
- Investment in Peru's mining sector edged higher in the first seven months of the year, a situation not seen since 2014, according to the country's energy and mines ministry (MEM). Investment totalled \$2.37 billion in January-July 2017, 1.5% higher than the corresponding period of last year. Nearly all sectors showed increased levels of investment during the period, MEM noted. Investment in infrastructure came to \$611 million during the first seven months of 2017, up from \$501 million in the same period a year earlier. Among those companies that had notable increases in investment in infrastructure during the period were Southern Peru Copper Corp, Antamina and Hubday Peru, the ministry said. Meanwhile, investment in mining exploration reached \$237 million in the first seven months of 2017, an increase of 25.2% from the corresponding months of last year. Buenaventura, Poderosa and Marcobre were notable contributors to investment in the mining exploration segment, MEM said.
- Chile's state-owned copper producer Codelco has reached an agreement for a new collective contract with the supervisors' union at its Radomiro Tomic mine. While the professionals will not receive a salary adjustment, the agreement includes a one-time bonus of 6.35 million pesos (\$10,160). The contract also includes incentives associated to productivity targets, according to Codelco. The agreement will be valid from October 1 2017 and will be valid for 35 months, nearly one year longer than the duration of the previous



- contract. The agreement was approved by 86% of the union's members, the company said. The Radomiro Tomic division produced 152,000 tonnes of copper in the first half of 2017.
- The London Metal Exchange's average daily volumes (ADVs) increased for the second month in a row, climbing 16.8% in August from the previous year, according to Metal Bulletin. Aluminium and lead volumes have climbed considerably compared with last year, with a majority of the base metals complex in positive territory following an uplifting August where prices achieved record highs. Copper's ADV was 2.5% higher than August 2016 at 139,973 lots, on top of a 6.1% yearly rise in July. This follows significant declines in volume over the last few months, which are down 26.5% from June last year. Aluminium saw the largest percentage increase from the previous year, up 24.7% to 223.736 lots following a 7.7% decline last month. Lead also recovered from a decline in July, the metal's ADV was up 23% year on year to 46,135 lots. Zinc continued to see an improvement in ADV, with its ADV in August up 13.5% to 190,978 lots, following an annual rise of 7.2% in July and 9.4% in June. Nickel increased 3% from last year to 91,139 lots. The only base metal to see a decline in ADV was tin, dropping 2.5% from last year to 4,889 lots, following a dip of 3.9% in July.

### **Precious Metals**

The increase of gold price over last two months is mainly attributed by analysts to market expectations of slower tightening mode of central banks after disappointing inflation readings and weaker US dollar.

#### The drivers behind gold rally

Key economy indicators drove investors' decisions rather than geopolitics

Gold price has broken out of its previously established narrow range, pushing through the \$1,300/oz ceiling it had previously unsuccessfully attempted to rise above three times prior since April 2017. The march higher is two months old now and began in July when disappointing inflation readings in developed economies reinforced the willingness of central banks to pull back from their tapering mode signaled in June, thus triggering a rally in global bonds. Five consecutive downside misses on US inflation versus expectations have resulted in lower expectations for another Fed hike this year, with the implied odds of another rate increase in 2017 slipping to 25% from about 48% two months ago. The new-found love for gold has been expressed both by inflows into gold ETPs and through notable growth in speculative longs on the COMEX. In the last two months, investors have almost doubled their outright long positions significantly above average of 15 mn oz since 2006. Gold ETF buyers joined money managers who accumulated positions in bullion futures only a month ago by rapidly building up their holdings from 66.2 mn oz a month ago to 68.5 mn oz. Some market opinions put into consideration the events in North Korea as a ground for gold rally. Even if the geopolitical situation is very serious, the lack of a large North Korean risk premium could suggest that the market views military



escalation and disarmament as tail risks. It seems that (so far) main readings in US economy and weaker dollar were much more important factors of price increase. The continuation of the uptrend may depend by next inflation data in main developed economies and the eventual decisions made by central banks on monetary policies. The general consensus of opinions suggest that higher inflation shall appear sooner or later, which may dull current price trend.

## **London Metal Exchange**

On Thursday September 7, the London Metal Exchange announced a series of substantial reductions in trading fees in an attempt to support its physical user-base and further encourage the use of its daily date structure. The LME also intends to introduce a new financial OTC fee, effective from January 1, 2018, to, as the LME says, ensure fairness in LME fee structures.

# LME intends to substantially cut short and medium-term dated carry fees effective Q2-2017

With effect from October 1, 2017, short-dated carries trades – where both legs are within 15 days of the tom date - executed by members on the Ring and LMEselect will be reduced to \$0.15 and \$0.25 respectively, from \$0.50 previously, with inter-office and basis trades discounted to \$0.35 from \$0.50. As LME noted in a release, these levels are lower than those in force in 2011, prior to increases in third-party clearing fees and LME commercialisation. From November 1, 2017, a new fee category of medium-dated carry trades - where both legs fall within 35 calendar days forward from the closest prompt date - will be introduced. Trades in this category executed by members on the Ring and LMEselect will be reduced to \$0.25 and \$0.45, respectively, from \$0.50 and \$0.90, with inter-office trades discounted to \$0.70 from \$0.90. Member-to-member basis trades and all client contracts in this category will be reduced to \$0.45 from \$0.90. These fees for medium-dated carries remain slightly higher than those in 2011. Client contracts for medium-dated carries will be reduced to \$0.45 from \$0.90, which is still double those in 2011. From January 1, 2018, the LME intends to introduce a fair booking fee for dealers issuing OTC client contracts that reference LME prices. This would seek to rebalance the current disparity in fees between members offering their customers LME-client contracts, and those offering OTC contracts based on LME prices at a substantially reduced fee, it said.

Substantial reduction in trading fees on the LME is coming



## **Global economies | Foreign exchange markets**

#### **German elections**

With German federal elections in the end of September, an almost universally held view is that Angela Merkel will win a fourth term as Chancellor. Such approach determines investors' confidence.

No market volatility based on coming elections

Such consensus of opinions can be seen on the markets, where investors seem to be quite relaxed. Not only does Ms Merkel hold a commanding lead over Martin Schulz, her challenger from the Social Democrats but, in contrast to the battle for the French presidency, there is no chance of the winner wanting to scrap the euro and tear down the edifice of European Monetary Union. A popular opinion is that, in case Ms Merkel continues as Germany's longest-serving leader, she will team with French President Macron to implement transformative policies that stimulate the region's economy and deepen European integration, both of which would have material implications for capital inflows and European asset prices.

Future shape of the Eurozone may depend on the coalition partners

Emmanuel Macron is planning to barge in on German coalition talks next week by detailing ambitious reforms for the Eurozone, in an attempt to force Berlin to shift ground on its approach to the single currency. The French president intends to flesh out proposals for buttressing the euro - including a separate budget, a finance ministry and a European Monetary Fund - in the immediate aftermath of Sunday's German election. He hopes to fuel public debate and force Angela Merkel and other German party leaders to take a stand on the plan during negotiations on forming the next federal government. At stake is the extent and pace of Eurozone reform after a decade of crisis and, until recently, weak economic growth. Apart from proposed institutional changes, Mr Macron is pushing for significant budget of "several percentage points" of GDP, funded by tax revenues that currently go into national budgets (the present EU budget amounts to 1 per cent of GDP). Whether Ms Merkel will budge is unclear and partly depends on her coalition partners. The closest coalition fit for her CDU/CSU bloc would be the liberal Free Democrats, who often served as the conservatives' junior partners. It would not be good news for Mr Macron because the FDP is skeptical about increasing Eurozone integration and would enforce fiscal regulations with sanctions. But if the polls are right, a deal with the FDP will not bring Ms Merkel an overall majority. So her main option is likely to be renewing the "grand coalition" with the Social Democrats, who are more supportive of Mr Macron's ideas.



# **Macroeconomic calendar**

#### Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
		China				*}	
<b>©</b>	07-Sep	Foreign reserves (USD bn)	Aug	3 092	3 081	3 095	
00	08-Sep	Trade balance (USD bn)‡	Aug	42.0	46.7	48.5	
00	08-Sep	Exports (yoy)	Aug	5.5%	7.2%	6.0%	
0000	09-Sep	Consumer inflation CPI (yoy)	Aug	1.8%	1.4%	1.6%	
00	09-Sep	Producer inflation PPI (yoy)	Aug	6.3%	5.5%	5.7%	
0000	14-Sep	Industrial production (yoy)	Aug	6.0%	6.4%	6.6%	
00	14-Sep	Fixed assets investments (ytd, yoy)	Aug	7.8%	8.3%	8.2%	
٥	14-Sep	Retail sales (yoy)	Aug	10.1%	10.4%	10.5%	
٥	15-Sep	New yuan loans (CNY bn)	Aug	1 090 🔺	826	950	
		Poland					
00000	06-Sep	NBP base rate decision	Sep	1.50% =	1.50%	1.50%	
0000	11-Sep	Consumer inflation CPI (yoy) - final data	Aug	1.8% =	1.8%		
0000	12-Sep	Core CPI (excluding food and energy, yoy)	Aug	0.7%	0.8%	0.8%	
00	13-Sep	Trade balance (EUR mn)	Jul	- 547	- 227	- 496 👅	
00	13-Sep	Exports (EUR mn)	Jul	14 939	16 627	15 250 👅	
00	13-Sep	Current account balance (EUR mn)	Jul	- 878 🛕	- 932	- 835	
		US					
00	05-Sep	Durable goods orders - final data	Jul	-6.8% =	-6.8%	-2.9%	
000	06-Sep	Composite PMI - final data	Aug	55.3	56.0		
000	06-Sep	PMI services - final data	Aug	56.0	56.9	56.9	
0000	14-Sep	Consumer inflation CPI (mom)	Aug	0.4%	0.1%	0.3%	
0000	14-Sep	Consumer inflation CPI (yoy)	Aug	1.9%	1.7%	1.8%	
0000	15-Sep	Industrial production (mom)‡	Aug	-0.9%	0.4%	0.1%	
00	15-Sep	Retail sales (excluding autos, mom)‡	Aug	0.2%	0.4%	0.5%	
00	15-Sep	University of Michigan confidence index - preliminary data	Sep	95.3	96.8	95.0	
•	15-Sep	Capacity utilization‡	Aug	76.1%	76.9%	76.7%	
		Eurozone				(O)	
00	04-Sep	Producer inflation PPI (yoy)‡	Jul	2.0%	2.4%	2.1%	
000	05-Sep	Composite PMI - final data	Aug	55.7	55.8	55.8	
000	05-Sep	Services PMI - final data	Aug	54.7	54.9	54.9	
00	05-Sep	Retail sales (yoy)‡	Jul	2.6%	3.3%	2.6%	
00000	07-Sep	ECB main refinancing rate	Sep	0.00% =	0.00%	0.00%	
00000	07-Sep	ECB deposit facility rate	Sep	-0.4% =	-0.4%	-0.4%	
00000	07-Sep	GDP (sa, yoy) - final data	2Q	2.3%	2.2%	2.2%	
00000	07-Sep	GDP (sa, qoq) - final data	2Q	0.6% =	0.6%	0.6%	
000	07-Sep	Gross fixed capital (qoq)‡	2Q	0.9%	-0.3%	1.0%	
000	07-Sep	Households consumption (qoq)‡	2Q	0.5%	0.4%	0.5%	
0000	13-Sep	Industrial production (sa, mom)	Jul	0.1%	-0.6%	0.1%	
0000	13-Sep	Industrial production (wda, yoy)‡	Jul	3.2%	2.8%	3.3%	
00	15-Sep	Labour costs (yoy)‡	2Q	1.8%	1.4%		
٥	15-Sep	Trade balance (EUR mn)	Jul	23.2	26.6		



Weight Date		Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
		Germany				
000	05-Sep	Composite PMI - final data	Aug	55.8 🛕	55.7	55.7
000	06-Sep	Factory orders (wda, yoy)	Jul	5.0%	5.1%	5.8%
0000	07-Sep	Industrial production (wda, yoy)‡	Jul	4.0%	2.7%	4.6%
0000	13-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	1.8% =	1.8%	1.8%
0000	13-Sep	Consumer inflation CPI (yoy) - final data	Aug	1.8% =	1.8%	1.8%
		France				
000	05-Sep	Composite PMI - final data	Aug	55.2	55.6	55.6
0000	08-Sep	Industrial production (yoy)‡	Jul	3.7%	2.4%	3.6%
0000	14-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	1.0% =	1.0%	1.0%
0000	14-Sep	Consumer inflation CPI (yoy) - final data	Aug	0.9% =	0.9%	0.9%
		Italy				
900	05-Sep	Composite PMI	Aug	55.8	56.2	55.8
0000	11-Sep	Industrial production (wda, yoy)‡	Jul	4.4%	5.2%	3.7%
0000	14-Sep	Harmonized consumer inflation HICP (yoy) - final data	Aug	1.4% =	1.4%	1.4%
		UK				
000	05-Sep	Composite PMI	Aug	54.0	54.1	54.0
0000	08-Sep	Industrial production (yoy)	Jul	0.4%	0.3%	0.4%
0000	12-Sep	Consumer inflation CPI (yoy)	Aug	2.9%	2.6%	2.8%
00	13-Sep	Unemployment rate (ILO, 3-months)	Jul	4.3%	4.4%	4.4%
00000	14-Sep	BoE base rate decision	Sep	0.25% =	0.25%	0.25%
0000	14-Sep	BoE asset purchase target (GBP bn)	Sep	435 =	435	435
		Japan				
000	05-Sep	Composite PMI	Aug	51.9	51.8	
00000	08-Sep	GDP (annualized, qoq) - final data	2Q	2.5%	4.0%	2.9%
00000	08-Sep	GDP (qoq, sa) - final data	2Q	0.6%	1.0%	0.7%
0000	14-Sep	Industrial production (yoy) - final data	Jul	4.7% =	4.7%	
		Chile				*
0000	05-Sep	Economic activity (yoy)	Jul	2.8%	1.4%	2.3%
000	07-Sep	Copper exports (USD mn)	Aug	2 994 🔺	2 451	
00	07-Sep	Nominal wages (yoy)	Jul	5.8%	4.4%	4.4%
0000	08-Sep	Consumer inflation CPI (yoy)	Aug	1.9%	1.7%	1.9%
00000	15-Sep	BCCh overnight rate target	Sep	2.50% =	2.50%	2.50%
		Canada				•
00000	06-Sep	BoC base rate decision	Sep	1.00%	0.75%	0.75%
000	08-Sep	Capacity utilization‡	2Q	85.0%	83.2%	85.0%
000	08-Sep	Net change in employment (ths)	Aug	22.2	10.9	15.0
	-		-			

<sup>&</sup>lt;sup>1</sup> Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; == equal to previous.



## **Key market data**

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

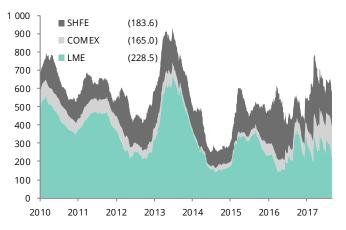
(as of: 15-Sep-17)					Price	cha	nge¹			From	year beginn	ning <sup>2</sup>
	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t)												
Copper	6 457.00	_	-4.7%		9.3%		17.4%		36.6%	5 924.20	5 466.00	6 904.00
Molybdenum	16 000.00	-	0.0%	-	0.0%		4.9%	$\blacksquare$	-1.5%	15 864.53	15 250.00	17 500.00
Nickel	11 005.00	_	-8.3%		18.6%		9.9%		12.9%	9 982.71	8 715.00	12 150.00
Aluminum	2 068.00	_	-2.2%		8.4%		20.7%		32.6%	1 913.31	1 701.00	2 113.50
Tin	20 675.00	_	-1.5%		2.4%	$\blacksquare$	-2.0%		6.6%	20 153.07	18 760.00	21 300.00
Zinc	3 042.00	_	-3.3%		10.5%		18.7%		35.4%	2 762.16	2 434.50	3 194.00
Lead	2 317.00	_	-2.2%		1.9%		16.7%		19.7%	2 247.97	2 007.00	2 457.00
LBMA (USD/troz)												
Silver	17.70		1.1%		7.5%		9.0%	$\blacksquare$	-6.6%	17.16	15.22	18.56
Gold <sup>2</sup>	1 322.85		0.2%		6.5%		14.1%		0.9%	1 248.73	1 151.00	1 346.25
LPPM (USD/troz)												
Platinum <sup>2</sup>	976.00	_	-2.3%		5.9%		7.6%	$\blacksquare$	-5.3%	958.65	891.00	1 033.00
Palladium <sup>2</sup>	924.00	_	-2.3%		9.9%		36.7%		40.9%	824.72	706.00	984.00
FX <sup>3</sup>												
EURUSD	1.1963		0.4%		4.8%		13.5%		6.3%	1.1103	1.0385	1.2060
EURPLN	4.2781		0.8%		1.2%	$\blacksquare$	-3.3%	$\blacksquare$	-1.3%	4.2642	4.1737	4.4002
USDPLN	3.5863		0.5%	_	-3.2%	$\blacksquare$	-14.2%	$\blacksquare$	-7.1%	3.8490	3.5239	4.2271
USDCAD	1.2182	_	-1.7%	_	-6.1%	-		-		1.3115	1.2128	1.3743
USDCNY	6.5526	_	-0.1%	_	-3.4%	$\blacksquare$	-5.7%	$\blacksquare$	-1.8%	6.8128	6.4865	6.9640
USDCLP	627.26	_	-0.3%	_	-5.4%	$\blacksquare$	-6.0%	$\blacksquare$	-7.1%	655.59	615.58	679.05
Money market												
3m LIBOR USD	1.324		0.01		0.02		0.33		0.47	1.190	0.999	1.324
3m EURIBOR	-0.329	-	0.00		0.00	$\blacksquare$	-0.01	$\blacksquare$	-0.03	-0.329	-0.332	-0.319
3m WIBOR	1.730	-	0.00	-	0.00	-	0.00		0.02	1.730	1.730	1.730
5y USD interest rate swap	1.889		0.09	$\blacksquare$	-0.07	$\blacksquare$	-0.09		0.70	1.933	1.711	2.239
5y EUR interest rate swap	0.222		0.05	$\blacksquare$	-0.06		0.15		0.33	0.189	0.078	0.326
5y PLN interest rate swap	2.268	•	-0.04	•	-0.09	$\blacksquare$	-0.13		0.30	2.395	2.165	2.625
Fuel												
WTI Cushing	49.89		5.5%		8.4%	$\blacksquare$	-7.1%		13.6%	49.22	42.31	54.10
Brent	55.30		5.5%		14.7%	$\blacksquare$	-0.2%		22.1%	51.70	44.21	56.46
Diesel NY (ULSD)	180.01		1.7%		21.8%		6.0%		28.8%	156.58	135.85	180.11
Others												
VIX	10.17		0.04	•	-1.01	$\blacksquare$	-3.87	$\blacksquare$	-6.13	11.44	9.36	16.04
BBG Commodity Index	85.19		0.3%		3.1%	•	-2.7%		2.5%	84.62	79.36	89.36
S&P500	2 500.23		1.0%		3.2%		11.7%		16.4%	2 391.35	2 257.83	2 500.23
DAX	12 518.81		3.1%		1.6%		9.0%		20.0%	12 207.66	11 509.84	12 888.95
Shanghai Composite	3 353.62	•	-0.4%		5.0%		8.1%		11.7%	3 207.61	3 052.79	3 385.39
WIG 20	2 498.32	•	-1.2%		8.6%		28.3%		43.1%	2 280.53	1 989.64	2 531.31
KGHM	119.00	_	-6.4%		7.5%	•	28.7%	•	66.4%	118.73	94.00	135.50

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

Source: LME, LBMA, LPPM, Central Banks (ECB, Fed, NBP, BCCh, COMEX, Bloomberg, KGHM

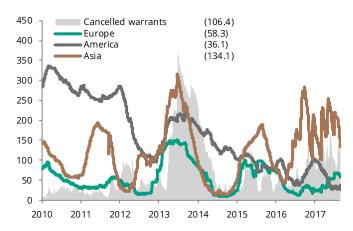


#### Copper: official exchange stocks (thousand tonnes)



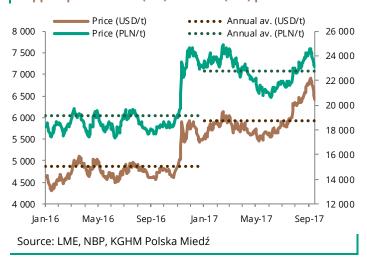
Note: Latest values in brackets. Source: LME, COMEX, SHFE, KGHM

### Copper: official LME stocks (thousand tonnes)



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

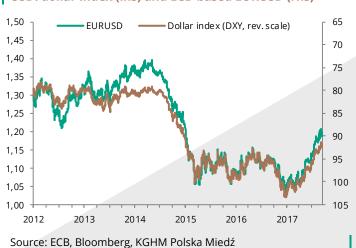
#### Copper: price in USD (lhs) and PLN (rhs) per tonne



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



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



PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs)





## **Legal note**

This document has been prepared based on the below listed reports, among others, published in the following period: **4**<sup>th</sup> – **17**<sup>th</sup> **September 2017.** 

- Barclays Capital, BofA Merrill Lynch, Citi Research, CRU Group, Deustche Bank Markets Research,
- GavekalDragonomics,
   Goldman Sachs,
   JPMorgan,
   Macquarie Capital Research,
   Mitsui Bussan Commodities,
- Morgan Stanley Research,
   SMM Information & Technology,
   Bloomberg,
   Reuters.

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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