

# **Market Overview**

- Copper: LME Copper bounced back off the ~4800 USD/mt levels, as a continuation of 2016 range-bound trading. Antaike forecasts China's national blister copper and refined copper capacity to hit 6.91 million mt/year and 11.37 million mt/year, respectively, by end-2017. Aurubis will offer 2017 copper cathode premiums to its customers at 86 USD/t, down 6.5% from 92 USD in 2016 (page 2).
- Precious metals: Precious metals complex has been under pressure
  of better than expected macroeconomic data which moved the
  market-implied probability of policy rate hike in December to little
  over 65% (page 3).
- Composite leading indicators: Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend, continue to point to stable growth momentum in the OECD area as a whole (page 5).
- China: A key part of the 2016 recovery in metals demand has been the relative strength in the Chinese property market contributing to a more commodity-friendly growth environment (page 5).

Various economies has been facing only micro trends in the recent history; CLIs do not show clear sign regarding the future



Source: Thomson Reuters Datastream, KGHM Polska Miedź



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		Close price	2w chng.
	LME (USD/t)		
$\blacksquare$	Copper	4 672.50	-3.3%
$\blacksquare$	Nickel	10 435.00	-0.2%
	LBMA (USD/troz)		
$\blacksquare$	Silver	17.47	-9.7%
$\blacksquare$	Gold (PM)	1 251.75	-5.3%
	FX		
$\blacksquare$	EUR/USD	1.1002	-1.4%
$\blacksquare$	EUR/PLN	4.2955	-0.4%
	USD/PLN	3.8965	1.1%
	USD/CAD	1.3168	0.4%
	USD/CLP	670.88	1.8%
	Stocks		
$\blacksquare$	KGHM	69.76	-6.4%
Sou	rce: Bloomberg, KGHM	Polska Miedź; (n	nore on <u>page 9</u> )

Impo	ortant macroeconomic	data				
	Release	For				
	Non-farm payrolls chng.	Sep	156 ▼			
	Industr. prod. (wda, yoy)	Aug	1.8% 🔺			
	ISM Manufacturing	Sep	51.5 🔺			
	Industr. prod. (wda, yoy)	Aug	1.9% 🔺			
*	Econom. activity (yoy)	Aug	2.5% 🔺			
Source: Bloomberg, KGHM Polska Miedź; (more on page 7)						

## **Market Risk Unit**

marketrisk@kghm.com

Grzegorz Laskowski Marek Krochta Wojciech Demski In cooperation with:

Michał Kamiński



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

## Copper

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Chinese blister and refined capacity continues to be extended

### Antaike forecasts continued capacity growth in China

According to state-owned metals consultancy Beijing Antaike, China's national blister copper and refined copper capacity is forecast to hit 6.91 million mt/year and 11.37 million mt/year, respectively, by end-2017. The Beijing agency predicted that China would add 450k mt/year of blister copper capacity and 550k mt/year of refined copper capacity next year, boosting national blister copper and refined copper capacity to 6.91 million mt/year and 11.37 million mt/year by end-2017. Antaike estimates China's addition of blister copper capacity at 230k mt/year for 2016, and refined copper at 230k mt/year, lifting national blister copper and refined capacity to 6.46 million mt/year and 10.82 million mt/year by end-2016.

The agency also forecast that China's national refined copper output would grow 5.8% year on year, hitting 7.8 million mt in 2016, but would remain stable going into 2017. Although China's copper consumption growth is expected to slow down significantly, ahead, Antaike said China is expected to stay as the main driver of global copper demand growth with consumption stemming from power network reforms, as well as new energy industries.

China's mined copper will slow greatly but will be offset by growing number of domestic scrap volume The agency said the era of high speed copper smelting capacity growth was over, but China's reliance on imported copper concentrate is expected to maintain comparatively high growth, due mainly to the commissioning of new copper smelting projects, as well as the gradual higher utilization rates of the existing capacity. Antaike also predicted that China's annual mined copper output growth would slow down greatly, but noted that the country's recycling volume of copper scrap would keep growing at a quick pace. The domestic copper scrap recycling volume is expected to exceed its annual copper scrap import volume in years to come, with recycled domestic copper scrap to be the main source of scrap supply.

#### Other important information on copper market:

Aurubis will offer 2017 copper cathode premiums to its customers at 86 USD/t, down 6.5% from 92 USD in 2016. The premium is paid above the London Metal Exchange (LME) average cash copper price. Term premiums are typically negotiated between suppliers and consumers for long-term



- contracts and deals are discussed during LME Week, an annual London gathering of the global metals industry.
- Codelco said it would delay some 2.25 USD bn worth of planned investment, as its profits have dried up due to weak prices globally for copper. The staterun company is part-way through an ambitious investment plan, with five major projects underway to expand its old mines and keep its output flowing. After making a financial loss in the first half of 2016, its chief executive described Codelco's situation as "extremely fragile". Now Codelco is planning to reduce investment by 2.25 USD bn in relation to its original spending plan. Now, for the five years to 2020 spending will be 18 USD bn. Among other changes, phase two of Codelco's Radomiro Tomic sulphur project will be postponed to 2024, while a project to build a new level at El Teniente, originally slated to be complete by 2020, is now seen operational in 2023. A key project to expand the century-old Chuquicamata mine underground, which is already underway and is due to be completed by 2019, will continue as planned. Production in September had been in line with expectations, despite falling ore grades and work stoppages.

### **Precious metals**

Precious metals complex has been under pressure of better than expected macroeconomic data which moved the market-implied probability of policy rate hike in December to little over 65%.

### Tensions between platinum producer and its employees

The platinum industry last week averted a strike after producers reached an in "principle agreement" with the Association of Mineworkers and Construction Union (Amcu) over wages and other conditions of employment. Amcu, the biggest union in the platinum industry, had demanded a 50 percent increase in monthly wages to R12 500 at the beginning of the talks.

In 2012, Amcu lead a protracted strike for almost six months in the platinum industry to demand a R12 500 wage for the lowest paid workers. The strike resulted in the deaths of 44 people, 41 of whom were striking mineworkers killed by police.

### South African platinum mines reported weaker results

Profit margins on South African platinum mines dropped to 8.5% in 2016 from 9% in 2015 remaining at levels too low to be sustainable according to the latest report highlighting trends in the SA mining industry and produced annually by accounting firm PwC. By comparison, profit margins on the country's gold mines rose to 26% from 24% over the same period as the gold producers benefitted from prior decisions taken to chop capital expenditure and close loss-making shafts. According to PwC energy and mining assurance partner Andries Rossouw a "realistic" margin level for the mining companies was above 30% and he added, "a 9% margin is not sufficient to cover tax and borrowings,

Strike averted after producers reached "principle agreement"



let alone capital expenditure. According to the SA Mine report, in the platinum sector "a large portion of the cost base created before 2008 was not removed from the industry once prices had crashed. Although input costs grew at a rate closer to CPI they did not decrease proportionately." The report said platinum has now been trading below average for 7.5 years and previous down cycles did not exceed nine years. PwC pointed out that, based on supplier-based real price averages, platinum is due for a recovery in rand terms. The report – which covered 27 of the 31 most important SA mining companies – found that the mining industry overall made a R46bn net loss for 2016 which was the first aggregated net loss since the start of the survey eight years ago. The survey also reported SA mining companies chopped dividends to R8 bn in 2016 from R22 bn in 2015.



# **Global economies | Foreign exchange markets**

### CLIs continue to point to stable growth in the OECD area

Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend, continue to point to stable growth momentum in the OECD area as a whole.

Stable growth momentum is anticipated in the United States, Japan and Canada as well as the euro area as a whole, particularly in Germany and France.

Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend, continue to point to stable growth momentum in the OECD area as a whole. Stable growth momentum is anticipated in the United States, Japan and Canada as well as the euro area as a whole, particularly in Germany and France. In Italy, the CLI points to weak growth momentum. Though uncertainty persists about the nature of the agreement the UK will eventually conclude with the EU, the short-term outlook for the United Kingdom remains unchanged from last month's assessment, with the CLI continuing to point to growth stabilising around a lower rate. Amongst major emerging economies, stable growth momentum is expected in China while in Russia and Brazil the CLIs continue to point to growth picking up. In India the CLI anticipates firming growth.

### Is the Chinese property cycle starting to turn?

A key part of the 2016 recovery in metals demand has been the relative strength in the Chinese property market contributing to a more commodity-friendly growth environment

The real estate sales are expected to fall by 10%

A key part of the 2016 recovery in metals demand has been the relative strength in the Chinese property market contributing to a more commodity-friendly growth environment. According to Macquarie research, the cycle is at the turning point, with the sales expected to fall 10% next year, but steady momentum will continue till the end of 1H17 owing to cashed up developers and a need to underpin growth, supporting sequential metals demand out of Chinese New Year.

China's renewed fixed asset investment push has been core to the demand improvement. Every RMB spent in infrastructure and construction in China is more commodity intensive than one spent elsewhere in the economy.

According to Macquarie estimates, the housing stock was 19bn sqm as at end-2015. Given a current urban population of 767mn, China's per capita living space was 25 sqm in 2015. China's urbanisation rate was 56% in 2015. If one followed PRoC plan to extend the urban population to 65% by 2026, this implies the urban population would increase by 170mn over the next ten years. With 25 sqm per person, this means 4.3bn sqm extra demand.

Is the real estate boom really be over?

All in all, it is estimated that total demand would equal 10.8bn sqm for the next decade. In comparison, total residential housing sales could be around 1.5bn sqm in 2016. Basing on the numbers, it might mean that boom days for the sector are gone, noting that the 26% growth in residential housing sales seen so



far in 2016 has largely been due to the frontloading of future demand to the present.

Average housing prices in the biggest Chinese cities have been strong since the beginning of the year



Source: China Index Academy, KGHM Polska Miedź



# **Macroeconomic calendar**

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
		China				*3	
٥	07-Oct	Foreign reserves (USD bn)	Sep	3 166	3 185	3 180 👅	
00	13-Oct	Trade balance (USD bn)	Sep	42.0	52.1	53.0	
00	13-Oct	Exports (yoy)	Sep	-10.0%	-2.8%	-3.3%	
0000	14-Oct	Consumer inflation CPI (yoy)	Sep	1.9%	1.3%	1.6%	
00	14-Oct	Producer inflation PPI (yoy)	Sep	0.1%	-0.8%	-0.3%	
		Poland					
000	03-Oct	Manufacturing PMI	Sep	52.2	51.5	52.1	
00000	05-Oct	NBP base rate decision	Oct	1.50%	1.50%	1.50%	
0000	11-Oct	Consumer inflation CPI (yoy) - final data	Sep	-0.5%	-0.5%		
0000	12-Oct	Core CPI (excluding food and energy, yoy)	Sep	-0.4%	-0.4%	-0.3%	
00	14-Oct	Trade balance (EUR mn)‡	Aug	- 509	- 322	- 90.0	
00	14-Oct	Exports (EUR mn)‡	Aug	13 750	13 520	13 861 👅	
00	14-Oct	Current account balance (EUR mn)‡	Aug	-1 047	- 635	- 366 👅	
٥	14-Oct	M3 money supply (yoy)‡	Sep	9.3%	10.1%	9.5%	
		US					
000	03-Oct	Manufacturing PMI - final data	Sep	51.5	51.4	51.4	
00	03-Oct	ISM Manufacturing	Sep	51.5	49.4	50.4	
000	05-Oct	Composite PMI - final data	Sep	52.3	52.0		
000	05-Oct	PMI services - final data	Sep	52.3	51.9	51.9	
00	05-Oct	Durable goods orders - final data	Aug	0.1%	0.0%	0.0%	
00	07-Oct	Change in non-farm payrolls (ths)‡	Sep	156	167	172 🕳	
00	07-Oct	Underemployment rate (U6)	Sep	9.7%	9.7%		
00	07-Oct	Unemployment rate	Sep	5.0%	4.9%	4.9%	
٥	07-Oct	Average hourly earnings (yoy)	Sep	2.6%	2.4%	2.6%	
00	14-Oct	Retail sales (excluding autos, mom)‡	Sep	0.5%	-0.2%	0.5%	
00	14-Oct	University of Michigan confidence index - preliminary data	Oct	87.9	91.2	91.8	
		Eurozone					
000	03-Oct	Manufacturing PMI - final data	Sep	52.6	52.6	52.6	
00	04-Oct	Producer inflation PPI (yoy)‡	Aug	-2.1%	-2.6%	-2.1%	
000	05-Oct	Composite PMI - final data	Sep	52.6	52.6	52.6	
000	05-Oct	Services PMI - final data	Sep	52.2	52.1	52.1	
00	05-Oct	Retail sales (yoy)‡	Aug	0.6%	1.8%	1.5%	
0	11-Oct	ZEW survey expectations	Oct	12.3	5.4		
0000	12-Oct	Industrial production (sa, mom)‡	Aug	1.6%	-0.7%	1.5%	
0000	12-Oct	Industrial production (wda, yoy)	Aug	1.8%	-0.5%	1.5%	
0	14-Oct	Trade balance (EUR mn)	Aug	18.4	25.3	15.3	
		Germany					
000	03-Oct	Manufacturing PMI - final data	Sep	54.3	54.3	54.3 🔾	
000	05-Oct	Composite PMI - final data	Sep	52.8	52.7	52.7	
000	06-Oct	Factory orders (wda, yoy)‡	Aug	2.1%	-0.6%	1.6%	
0000	07-Oct	Industrial production (wda, yoy)‡	Aug	1.9%	-1.3%	0.4%	
0000	13-Oct	Harmonized consumer inflation HICP (yoy) - final data	Sep	0.5%	0.5%	0.5%	
0000	13-Oct	Consumer inflation CPI (yoy) - final data	Sep	0.7%	0.7%	0.7%	



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
		France				
000	03-Oct	Manufacturing PMI - final data	Sep	49.7	49.5	49.5
000	05-Oct	Composite PMI - final data	Sep	52.7	53.3	53.3
0000	07-Oct	Industrial production (yoy)	Aug	0.5%	-0.1%	-1.3%
0000	12-Oct	Harmonized consumer inflation HICP (yoy) - final data	Sep	0.5% =	0.5%	0.5%
0000	12-Oct	Consumer inflation CPI (yoy) - final data	Sep	0.4% =	0.4%	0.4%
		Italy				
000	03-Oct	Manufacturing PMI	Sep	51.0 🛕	49.8	50.3
000	05-Oct	Composite PMI	Sep	51.1	51.9	51.5
0000	10-Oct	Industrial production (wda, yoy)	Aug	4.1%	-0.3%	-0.3%
0000	14-Oct	Harmonized consumer inflation HICP (yoy) - final data	Sep	0.1% =	0.1%	0.1%
		UK				
000	03-Oct	Manufacturing PMI (sa)‡	Sep	55.4 🛕	53.4	52.1
000	05-Oct	Composite PMI	Sep	53.9	53.6	52.3
0000	07-Oct	Industrial production (yoy)	Aug	0.7%	2.1%	1.3%
		Japan				
000	03-Oct	Manufacturing PMI - final data	Sep	50.4 🛕	50.3	
000	05-Oct	Composite PMI	Sep	48.9 ▼	49.8	
		Chile				*
0000	05-Oct	Economic activity (yoy)	Aug	2.5% 🔺	0.5%	2.0%
00	06-Oct	Nominal wages (yoy)	Aug	5.5%	4.9%	4.8%
0000	07-Oct	Consumer inflation CPI (yoy)	Sep	3.1%	3.4%	3.4%
000	07-Oct	Copper exports (USD mn)	Sep	2 311	2 082	
		Canada				*
000	07-Oct	Net change in employment (ths)	Sep	67.2	26.2	7.5

<sup>&</sup>lt;sup>1</sup> Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; == equal to previous. <sup>2</sup> Reading difference to consensus: ● = higher than consensus; ● = lower than consensus; ○ = equal to consensus.



# **Key market data**

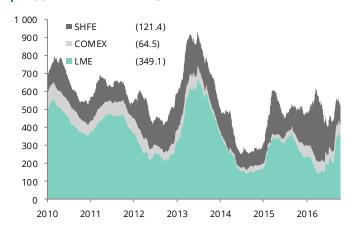
Key base & precious metal prices, exchange rates and other important market factors

(as of: 14-Oct-16)	Price change ° From year b						year beginn	eginning <sup>2</sup>				
	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t)												
Copper	4 672.50	_	-3.3%	$\blacksquare$	-3.3%	$\blacksquare$	-0.6%	•	-12.6%	4 727.31	4 310.50	5 103.00
Molybdenum	15 500.00		1.6%		1.6%		29.2%		44.9%	14 241.25	11 750.00	17 000.00
Nickel	10 435.00	_	-0.2%	•	-0.2%		20.4%	•	-1.3%	9 264.18	7 710.00	10 900.00
Aluminum	1 685.00		1.6%		1.6%		11.8%		7.5%	1 575.15	1 453.00	1 690.50
Tin	19 575.00	_	-3.5%	•	-3.5%		34.1%		20.5%	17 194.78	13 235.00	20 295.00
Zinc	2 232.50	_	-6.1%	$\blacksquare$	-6.1%		39.5%		23.6%	1 972.67	1 453.50	2 404.00
Lead	1 991.50	_	-5.4%	$\blacksquare$	-5.4%		10.5%		9.6%	1 793.42	1 597.00	2 105.50
LBMA (USD/troz)	_											
Silver	17.47	_	-9.7%	$\blacksquare$	-9.7%		26.4%		8.0%	17.16	13.58	20.71
Gold <sup>1</sup>	1 251.75	_	-5.3%	$\blacksquare$	-5.3%		17.8%		5.7%	1 260.49	1 077.00	1 366.25
LPPM (USD/troz)	_											
Platinum <sup>1</sup>	933.00	_	-9.8%	$\blacksquare$	-9.8%		7.0%	•	-5.6%	1 000.90	814.00	1 182.00
Palladium <sup>1</sup>	642.00	_	-11.1%	$\blacksquare$	-11.1%		17.4%	•	-9.3%	594.89	470.00	730.00
FX <sup>3</sup>	_											
EUR/USD	1.1002	_	-1.4%	•	-1.4%		1.1%	•	-3.8%	1.1160	1.0742	1.1569
EUR/PLN	4.2955	_	-0.4%	$\blacksquare$	-0.4%		0.8%		1.6%	4.3555	4.2355	4.4987
USD/PLN	3.8965		1.1%		1.1%	$\blacksquare$	-0.1%		5.5%	3.9032	3.7193	4.1475
USD/CAD	1.3168		0.4%		0.4%	$\blacksquare$	-4.9%		2.0%	1.3218	1.2544	1.4589
USD/CNY	6.7283		0.8%		0.8%		3.6%		6.0%	6.5857	6.4536	6.7283
USD/CLP	670.88		1.8%		1.8%	$\blacksquare$	-5.5%	•	-1.5%	679.59	645.22	730.31
Money market	_											
3m LIBOR USD	0.882		0.03		0.03		0.27		0.57	0.696	0.612	0.882
3m EURIBOR	-0.311	•	-0.01	$\blacksquare$	-0.01	$\blacksquare$	-0.18	$\blacksquare$	-0.26	-0.252	-0.311	-0.132
3m WIBOR	1.720		0.01		0.01	-	0.00	$\blacksquare$	-0.01	1.694	1.670	1.720
5y USD interest rate swap	1.298		0.12		0.12	$\blacksquare$	-0.44	$\blacksquare$	-0.05	1.217	0.928	1.709
5y EUR interest rate swap	-0.051		0.10		0.10	$\blacksquare$	-0.38	$\blacksquare$	-0.39	-0.019	-0.183	0.309
5y PLN interest rate swap	2.065		0.13		0.13		0.08		0.14	1.878	1.735	2.118
Fuel	_											
WTI Cushing	50.35		4.4%		4.4%		35.9%		8.6%	41.83	26.21	51.35
Brent	50.36		5.6%		5.6%		40.9%		3.5%	42.56	26.39	51.56
Diesel NY (ULSD)	155.48		1.8%		1.8%		44.5%		7.7%	130.21	86.44	160.02
Others	_											
VIX	16.12		2.83		2.83	$\blacksquare$	-2.09		0.07	16.30	11.34	28.14
BBG Commodity Index	86.34		1.2%		1.2%		9.9%	•	-3.9%	82.33	72.88	89.94
S&P500	2 132.98	•	-1.6%	$\blacksquare$	-1.6%		4.4%		5.4%	2 068.82	1 829.08	2 190.15
DAX	10 580.38		0.7%		0.7%	$\blacksquare$	-1.5%		5.1%	10 018.80	8 752.87	10 752.98
Shanghai Composite	3 063.81		2.0%		2.0%	•	-13.4%	•	-8.2%	2 958.15	2 655.66	3 361.84
WIG 20	1 719.64		0.6%		0.6%	_	-7.5%		-19.5%	1 811.23	1 674.57	1 999.93
WIG 20												

<sup>°</sup> 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

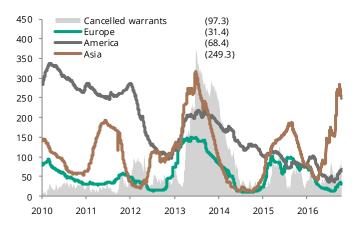


### Copper: official exchange stocks (thousand tonnes)



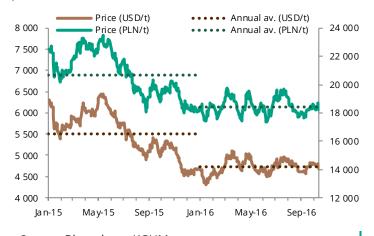
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



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

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

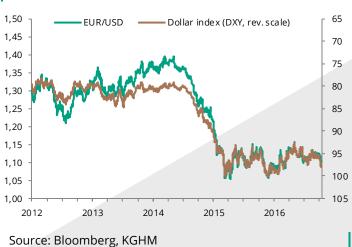


Source: Bloomberg, KGHM

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



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



4,20 5,20 USD/PLN 4,00 5,00 3,80 4,80 3,60 4,60 3,40 4,40 4,20 3,20 3,00 4,00 2,80 3,80 2012 2013 2014 2015 2016

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

Source: Bloomberg, KGHM



# **Legal note**

This document has been prepared based on the below listed reports, among others, published in the following period:  $3^{rd} - 16^{th}$  October 2016.

- 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,SNL Metals & Mining.

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, a także systemów: Bloomberg oraz 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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KGHM Polska Miedz (Polish Copper) S.A.

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

Wydzial Ryzyka Rynkowego (Market Risk Unit)

ul. M. Sklodowskiej-Curie 48

59-301 Lubin, Poland