Copper-bottomed investment

London, April 2013

Wroclaw University of Economics

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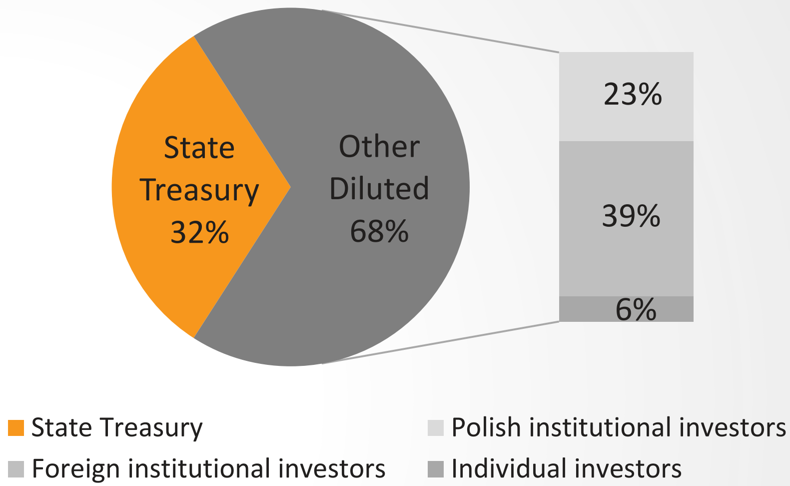
Introduction

Main features

- **9th copper producer globally**
- **1st silver producer globally**
- **4th resource base in the world**
- High quality products

Shareholder structure



Market profile

Ticker(Bloomberg)	KGH:PW
52-week price range (PLN)	111.4 – 194.5
2012 dividend yield	24.2%
Market capitalization (USD bn)	12.1
Average daily traded value (USD mn)	40.6
Free float	68%
Share in WIG 20	14.3%
P/E_{2012}	7.5

Forthcoming Events

2013 HY report	July 30, 2013
Strategy update	Mid-2013
New projects update	Mid-2013

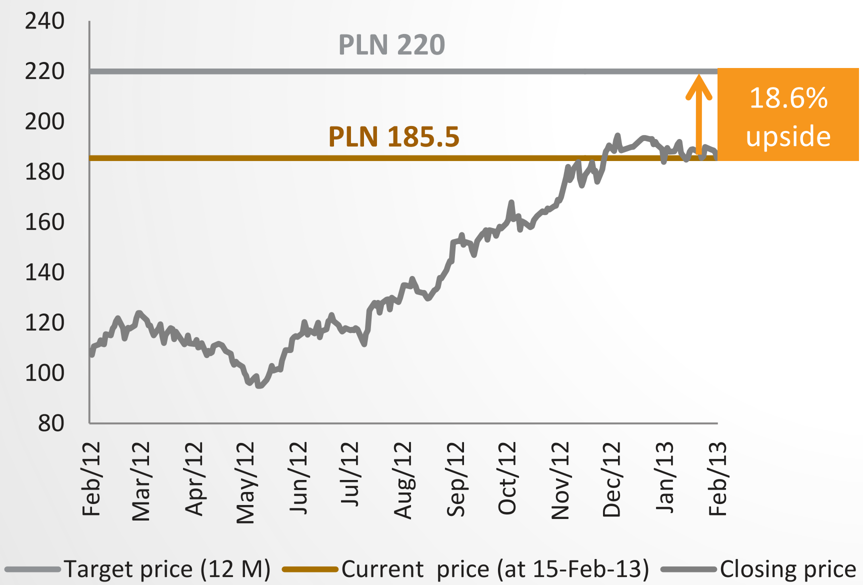
Recommendation

Target price: PLN 220

Upside: 18.6%

Recommendation

BUY



Key drivers

- Robust pipeline of new projects (58% increase in production volume by 2017)
- Increasing operational efficiency (EBITDA margin increase from 35% in 2012 to 45% in 2017)
- Stable market conditions
- Sound financial position (USD 6.4bn Balance sheet headroom)

Holding period return

End of 2013	End of 2014	End of 2015
27%	**39%**	**56%**

Business description

1961
Establishment of KGHM

1997
IPO on Warsaw Stock Exchange

2010
Afton-Ajax – first overseas expansion project in Canada

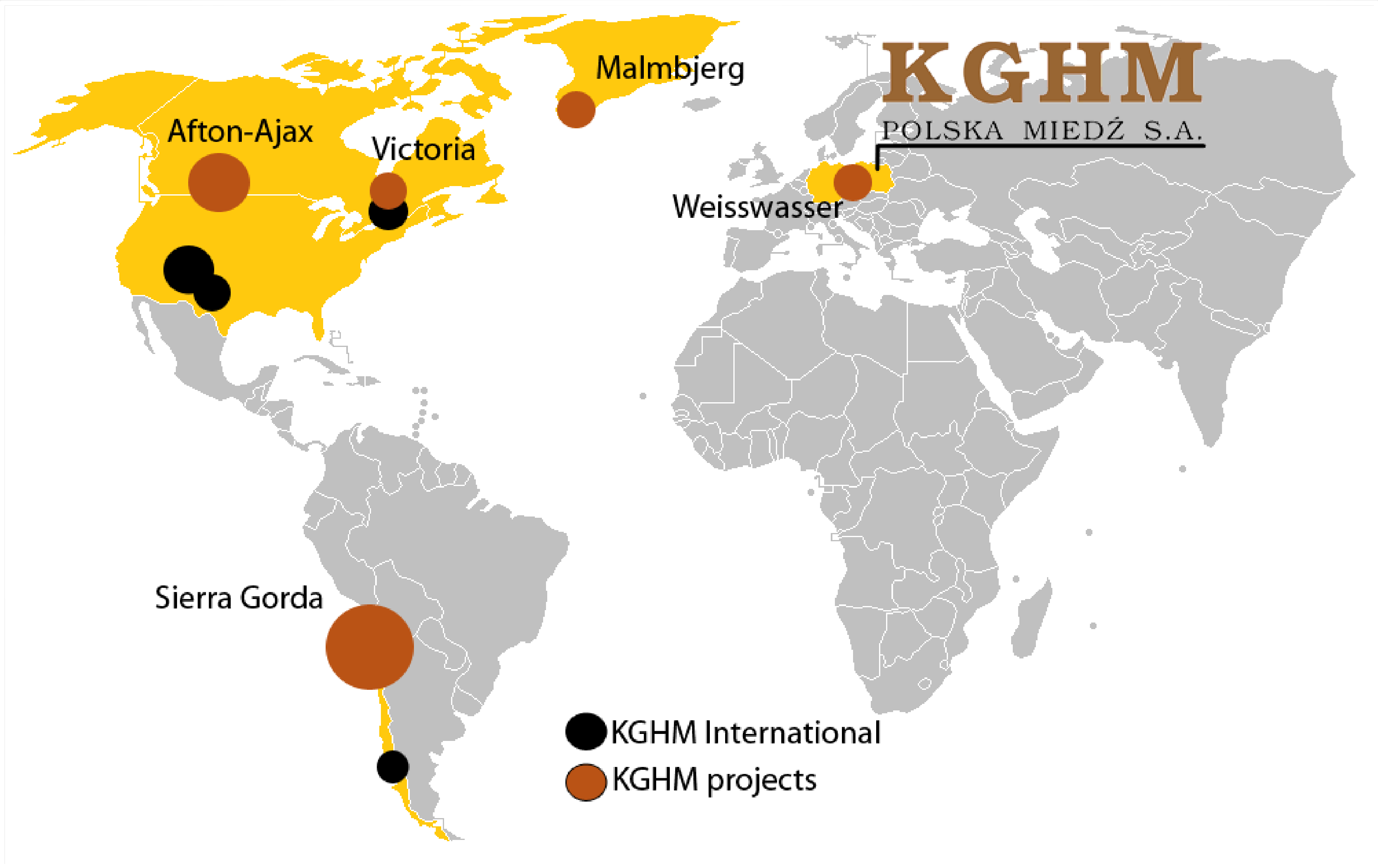
2012
Acquisition of Quadra FNX Mining Ltd - Friendly takeover through Plan of Arrangement

Limited risk of Quadra's acquisition

- Quadra's experience in M&A
- Know-how regarding open pit mines
- Strong financial position of KGHM before acquisition
- Takeover price < NAV

- New projects in business-friendly countries
- Exhaustive due-diligence prior to acquisition
- Positive updates
- Strict monitoring

Business description

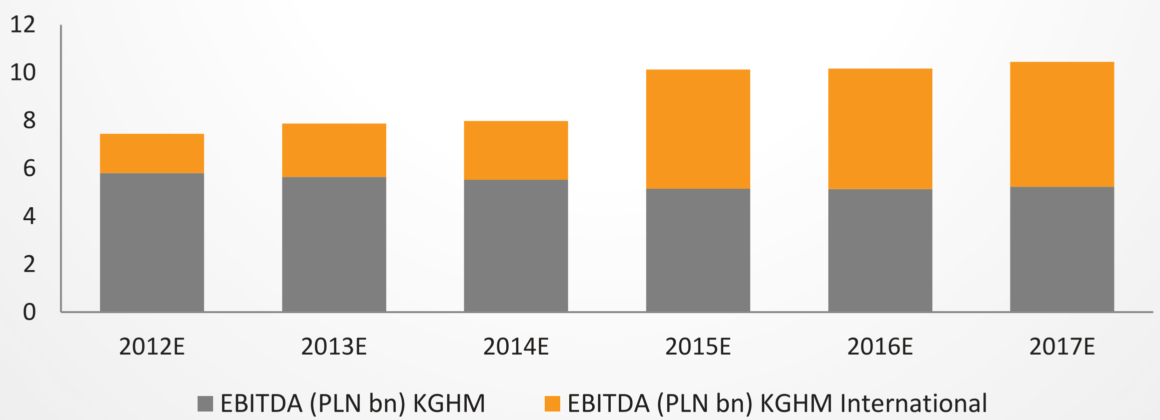


Business description

Specification

- High operational leverage - strong labour unions, underground mines conditions
- Revenues dependent on copper price and USD/PLN exchange rate – effective hedging strategies

Foreign operations contribution to EBITDA

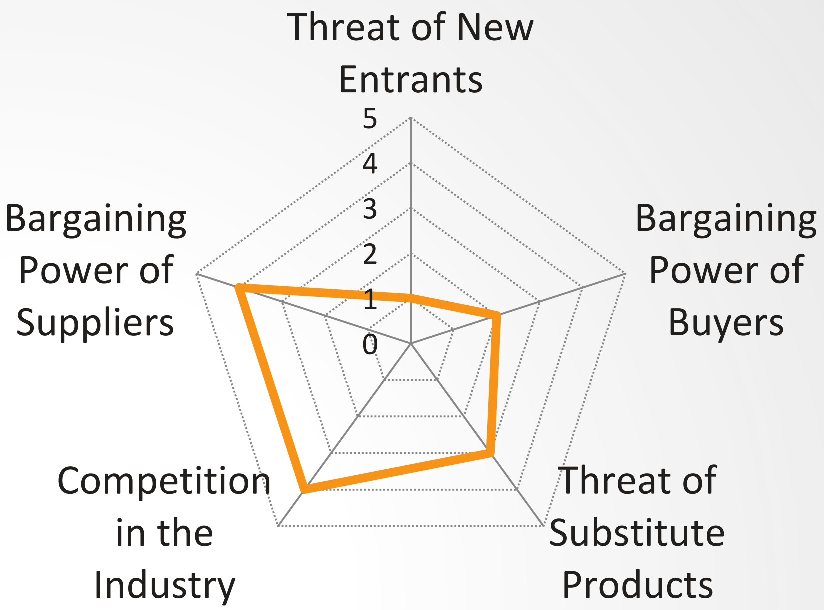


Industry overview
& competitive positioning

Industry overview

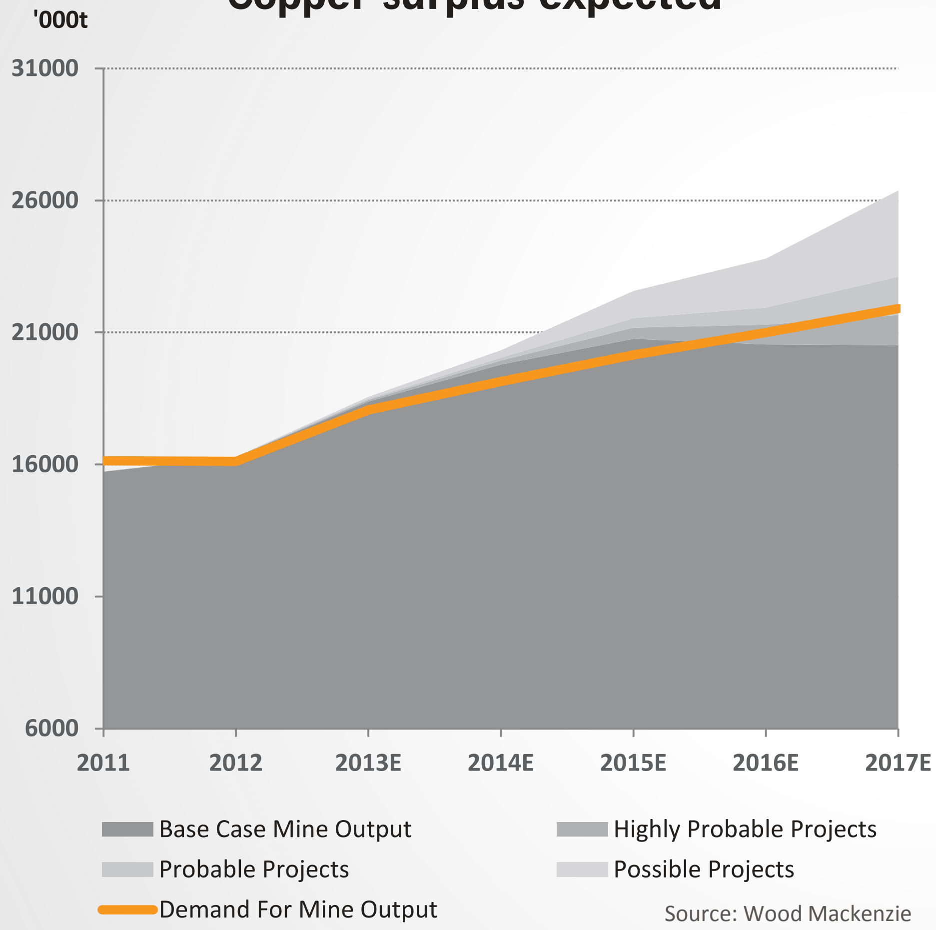
Key copper market characteristics

- High entry barriers
- Low product differentiation
- Lack of copper perfect substitutes
- Individual copper producer as price-taker



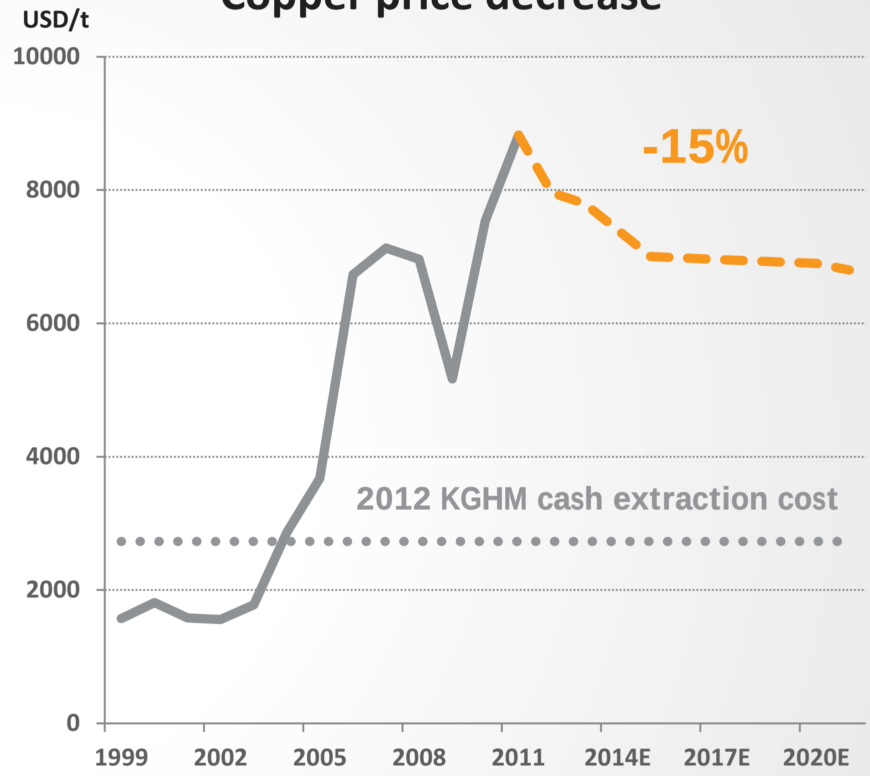
Industry overview

Copper surplus expected



Source: Wood Mackenzie

Copper price decrease



Source: World Bank Commodity Price Forecast

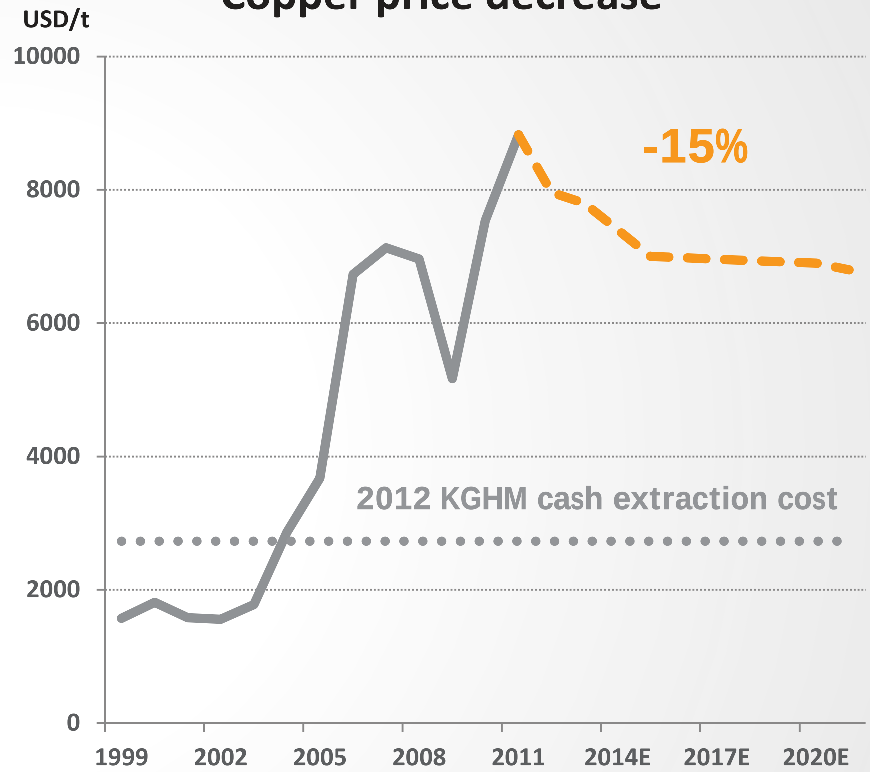
Industry overview

QE positive effects on copper and silver prices

	QE1*	QE2**
Copper	108%	20%
Silver	64%	81%

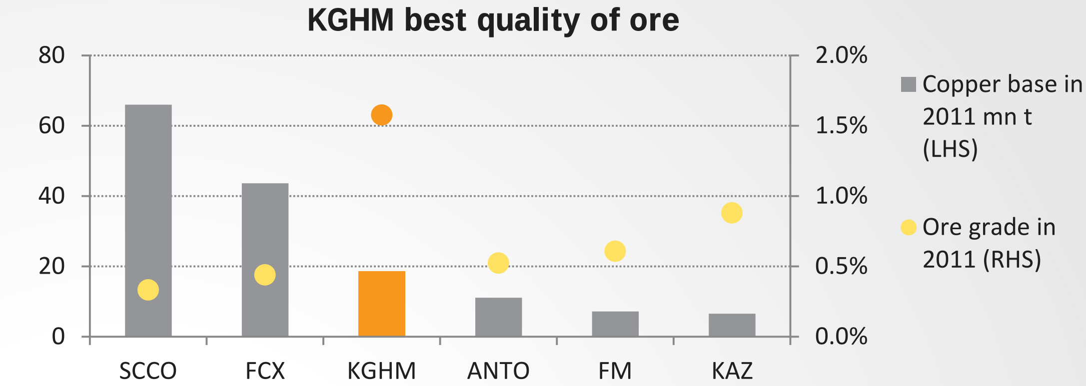
*(11/2008-03/2010)
** (08/2010-06/2011)

Copper price decrease



Source: World Bank Commodity Price Forecast

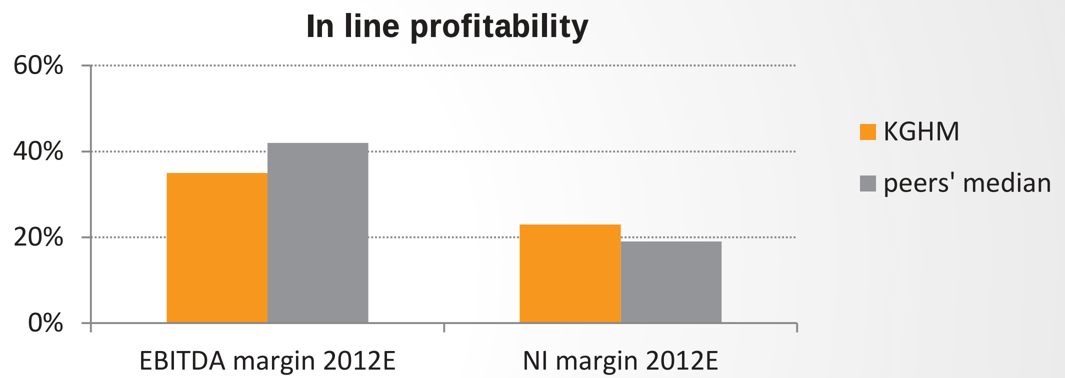
KGHM vs. Competitors

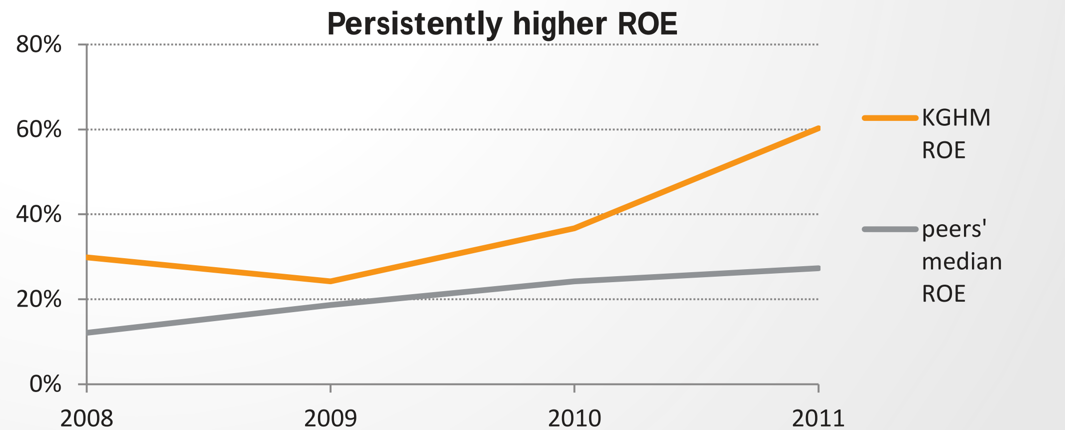


Resource base **after**
Quadra acquisition (mn t)

1	Codelco	93.2
2	Southern Copper	58.2
3	Freeport McMoRan	55.8
4	**KGHM**	**37.5**
5	BHP Billiton	35.2
6	Anglo American	31.6
7	Xstrata	18.1
8	Rio Tinto	17.0
9	RAO Norilsk	9.1
10	Antofagasta	8.9

Source: Company data

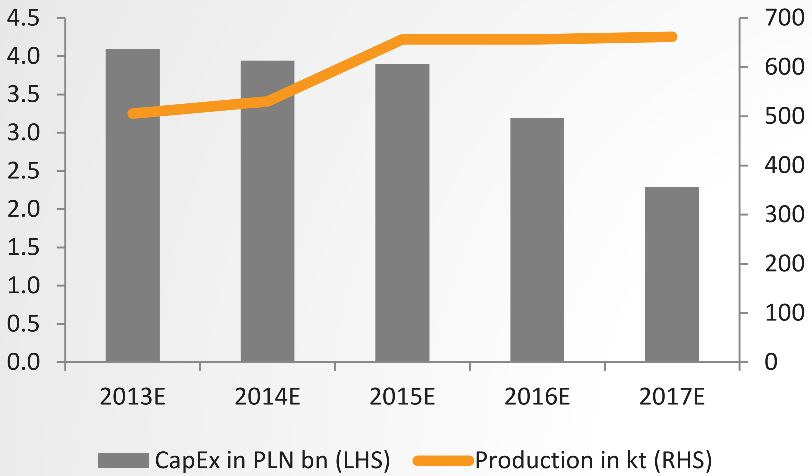




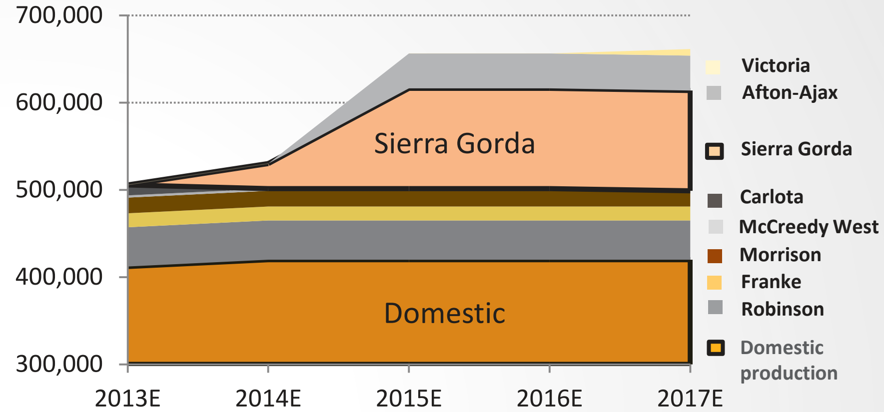
Financial Analysis

International expansion improves financial position

CapEx vs. production

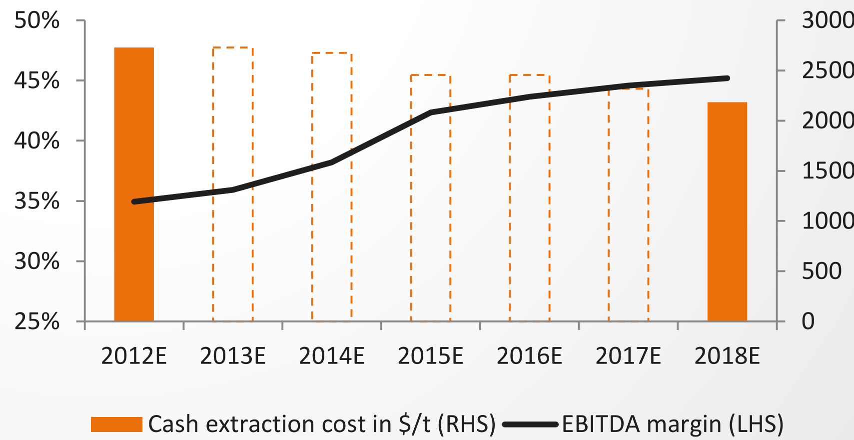


Detailed copper production in t



- CapEx will translate into production
- KGHM will significantly increase its pipeline
- Falling cash extraction cost will improve EBITDA margin

Cash extraction cost vs. EBITDA

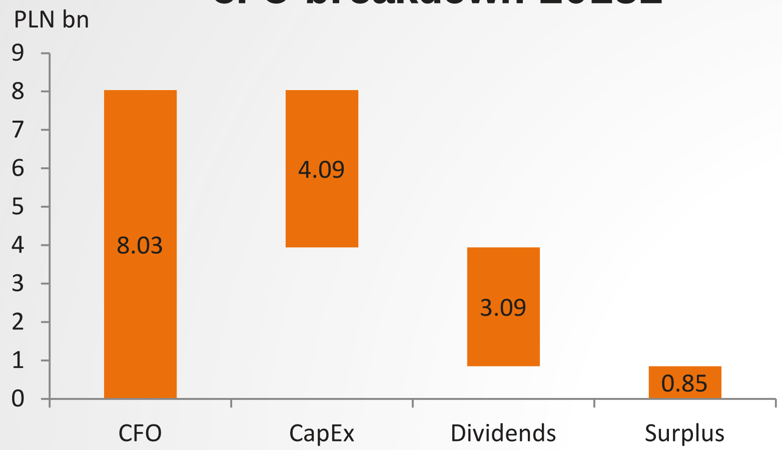


Source: Team estimates, Company data

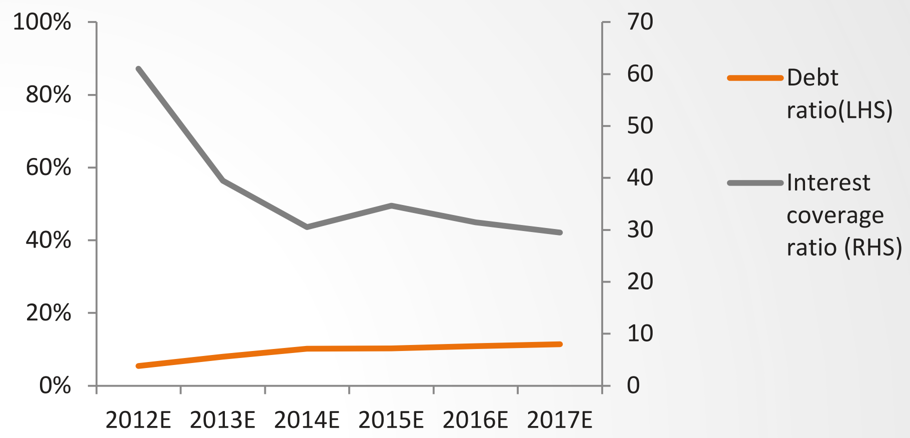
USD/PLN rate = 3.30

High debt capacity for possible further expansion

CFO breakdown 2013E

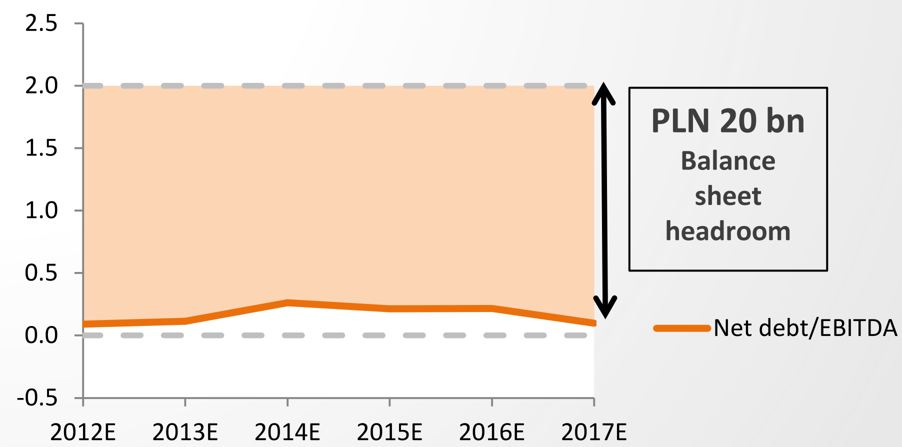


Debt ratio and interest coverage



- CFOs will cover expenditures and high dividends
- The least indebted mining company among its peers
- Net debt/EBITDA at low levels
- **Possible easy access to debt in case of new big projects/acquisitions**

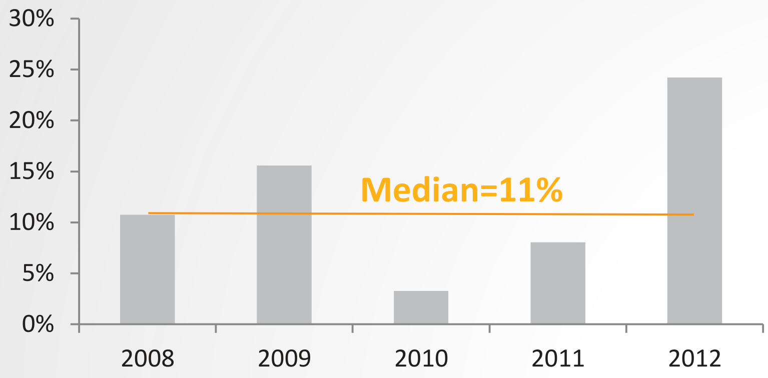
Net debt/EBITDA and balance sheet headroom



USD/PLN rate = 3.30

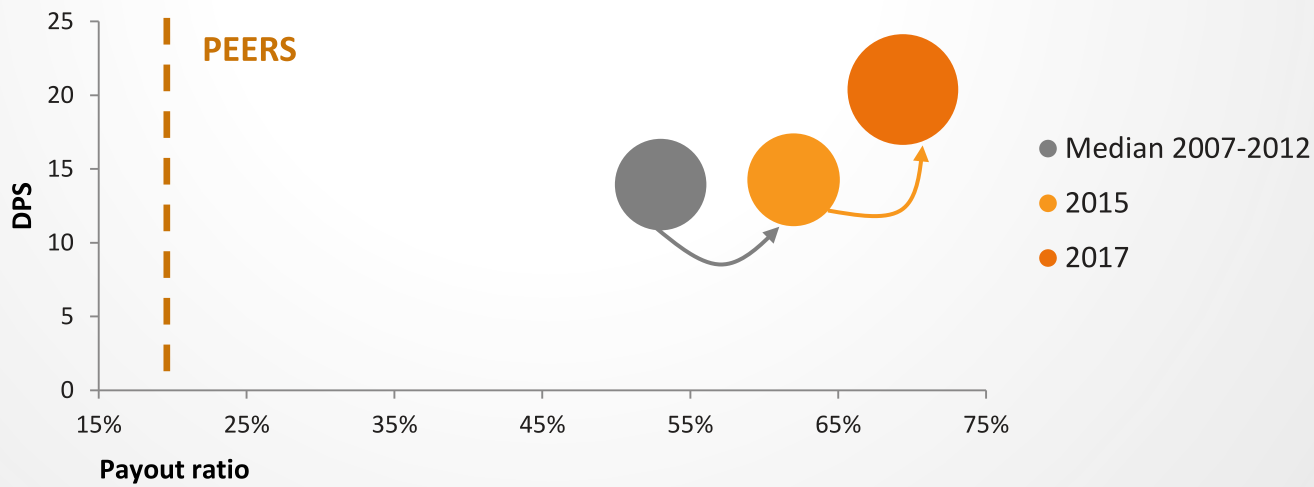
Attractive dividend policy, unique in copper sector

Dividend yields in period 2008-2012



- Estimated median dividend per share in period 2013E-2017E at level of PLN 16.91
- Estimated median payout ratio in period 2013E-2017E at level of 62%

Dividends per share and payout ratios of KGHM



Valuation

Multipliers pricing

FIRST QUANTUM MINERALS LTD.
KAZAKHMYS
ANTOFAGASTA PLC
FREEPORT-MCMORAN COPPER & GOLD
SOUTHERN COPPER GRUPO MEXICO

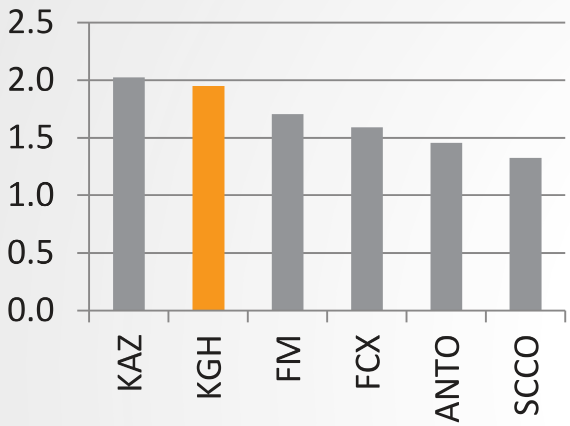
Peer group selection criteria

- At least 75% of revenues derived from copper sales
- Total revenues of at least USD 5bn
- Copper sold produced primarily from own resources

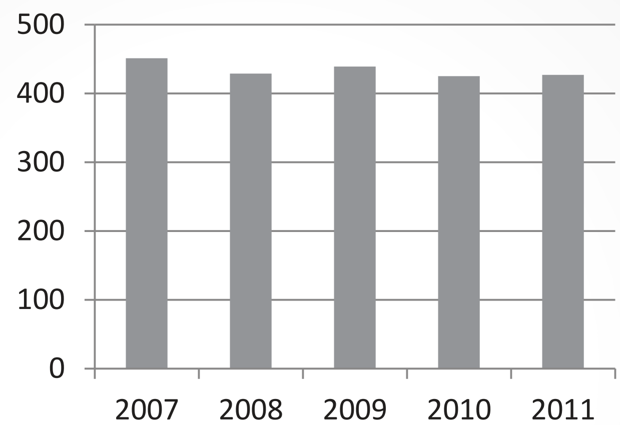
Multipliers	P/E		EV/EBITDA	
Forward years	2013	2014	2013	2014
Multipliers' values	13.6	10.9	6.0	5.1
Weights for years	50%	50%	50%	50%
Weights for multipliers	50%		50%	
	PLN 247.5			

Multipliers pricing

Peer group beta
- higher KGHM's systematic risk

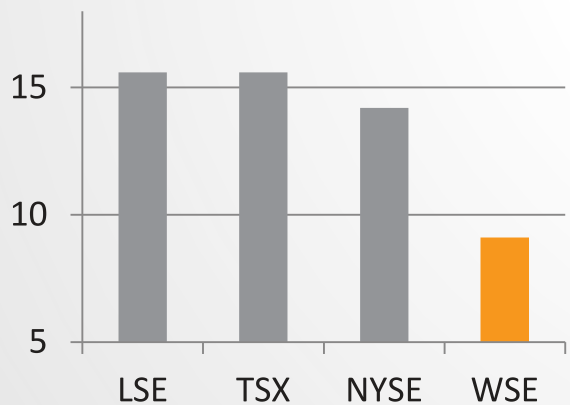


Mined copper production (kt)
- no organic growth in the past



-50%
Historical discount

P/E on selected exchanges

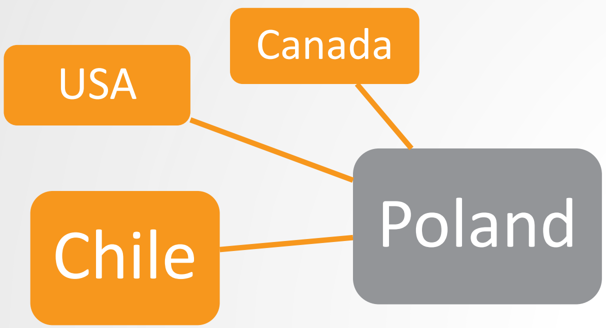


Impact of the State Treasury

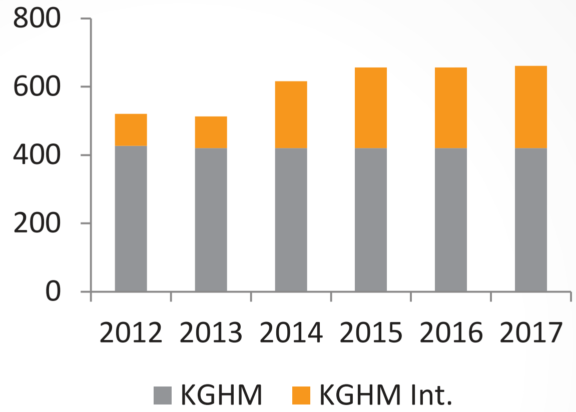
?

Multipliers pricing

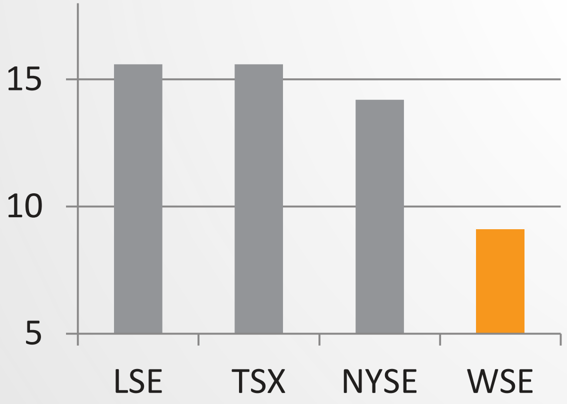
Diversification



Growth in production (kt)



P/E on selected exchanges



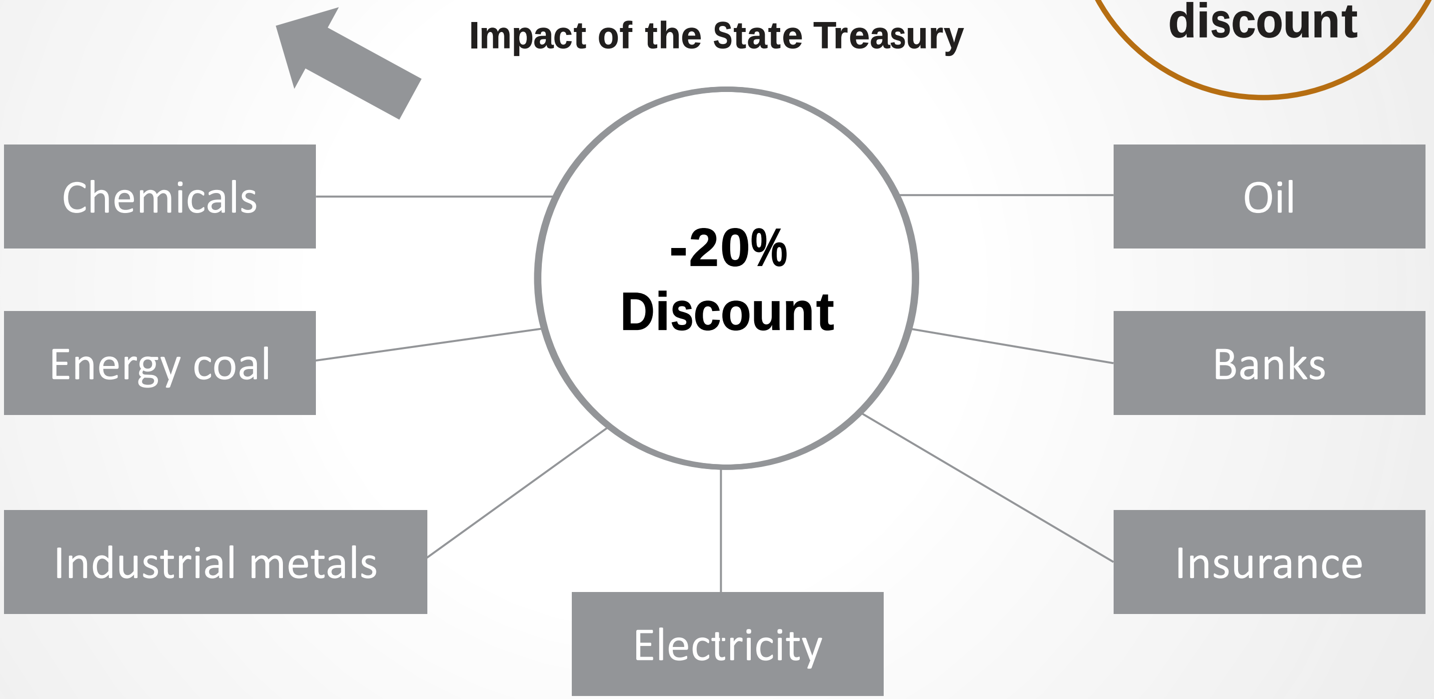
Impact of the State Treasury

Multipliers pricing

International competitors

Impact of the State Treasury

-50%
Historical discount



Multipliers pricing

-50%

Historical discount

Multipliers	P/E		EV/EBITDA	
Forward years / Applied discount	2015 / [illegible]	2014 / [illegible]	2015 / [illegible]	2014 / [illegible]
Multipliers' values / Adjusted multipliers	[illegible]	[illegible]	[illegible]	[illegible]
Weights for years	50%	50%	50%	50%
Weights for multipliers	50%		50%	
Final price	PLN 192.1			

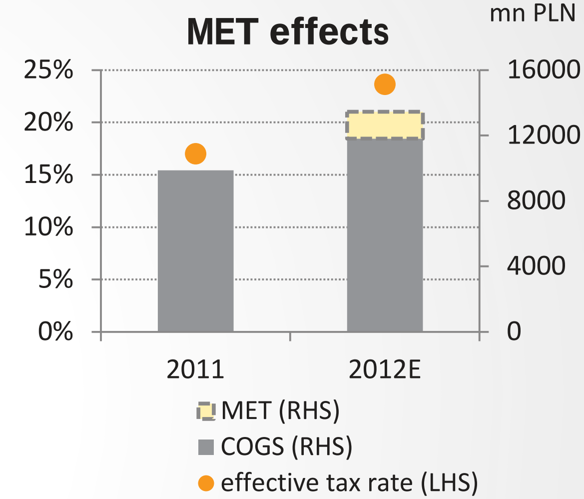
DCF assumptions

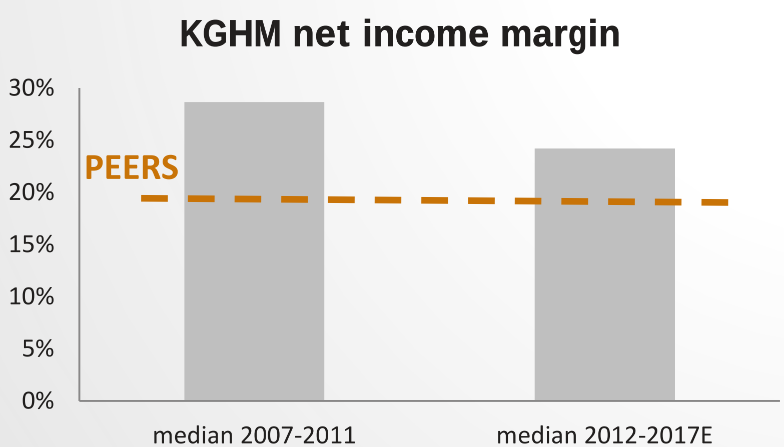
- Decrease in the main revenue drivers: copper and silver prices – according to World Bank forecasts

	2012E	2013E	2014E	2015E	2016E	2017E
Cu price USD/t	7 962	7 800	7 400	7 000	6 900	6 800
Ag price USD/troz	31.14	31	29.5	28	27.68	26.5
USD/PLN	3.30	3.23	3.14	3.10	3.06	3.05

Source: World Bank Commodity Price Forecast, exchange rate EMIS database (based on a analysts' consensus)

- Introduction of Mineral Extraction Tax (MET) in 2012 increases COGS and effective tax rate





Changing WACC

	2012	residual value
Risk free rate	3.44%	3.44%
Beta	1.9	1.4
Market risk premium	5%	5%
Country risk premium	1.5%	1.5%
Cost of debt	6.2%	6.2%
WACC	15.3%	11.5%

Target price

DCF analysis
50%

PLN 248

PLN 192

Multiples analysis
50%

PLN 220

Year-end target price
Upside : 18.6%
Holding period return: 27%

Risk Analysis

Main risks

Market	Economic
Operational	Political

PROBABILITY (high / moderate / low)

		Influence of the State Treasury	Fluctuations of Cu and Ag prices FX risk
	Changes in environmental policy	Cost inflation	
	Strikes	Deterioration in the quality of ore	Delay in the growth projects Drop in GDP growth rate
	Poland entering the Euro Zone		Lack of extension of the mining concessions

insignificant moderate severe

IMPACT

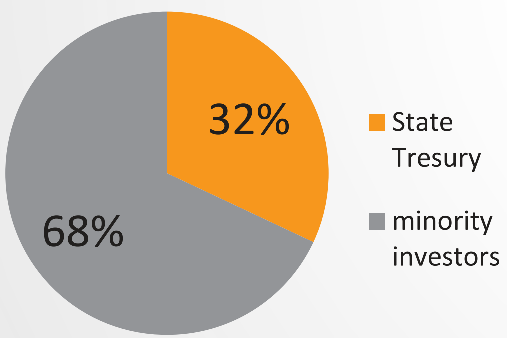
Main risks

State Treasury - influence on strategic decisions

- acquisitions
  - limiting new acquisitions due to savings for high dividends
- investments
  - shale gas, energy sector, atomic power plant – risky and highly capital consuming
- high dividend payout
  - putting pressure on high dividends (as they can be a way to decrease fiscal deficit)

Influence of the State Treasury	Fluctuations of Cu and Ag prices FX risk
Cost inflation	

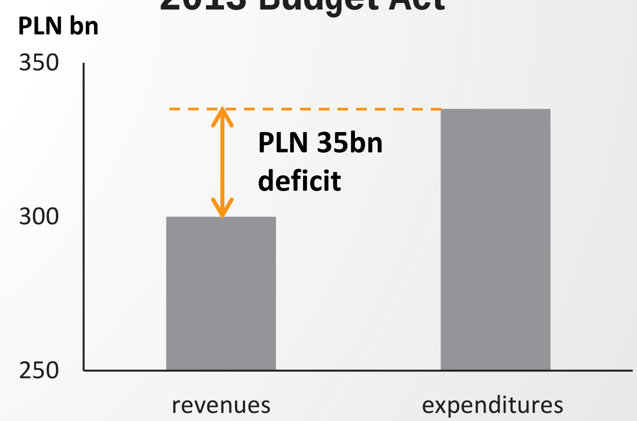
Shareholders structure



Dividend statistics

average dividend payout ratio 2009-2017E	60%
average dividend per share 2009-2017E	PLN 16

Polish Fiscal Deficit based on 2013 Budget Act

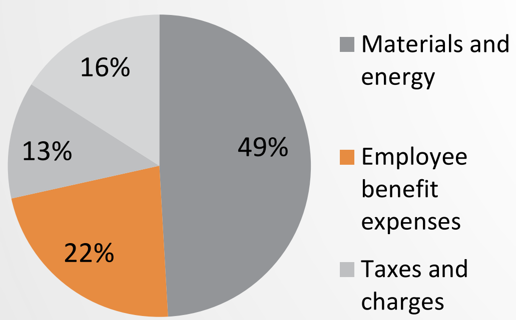


Main risks

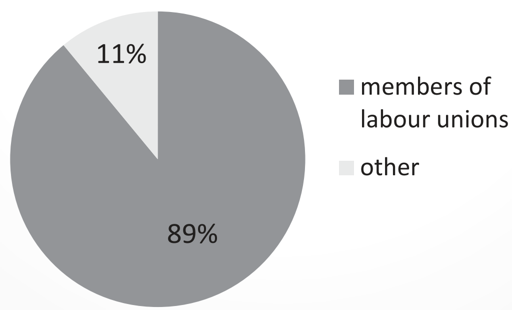
Reducing the impact of possible increase in energy, labour and extraction costs

- investments in energy sector (joint venture with Tauron)
- maintaining good relations with labour unions
- development of new cost-efficient technologies
- decreasing the average Group extraction cash cost (C1) after acquisition of Quadra

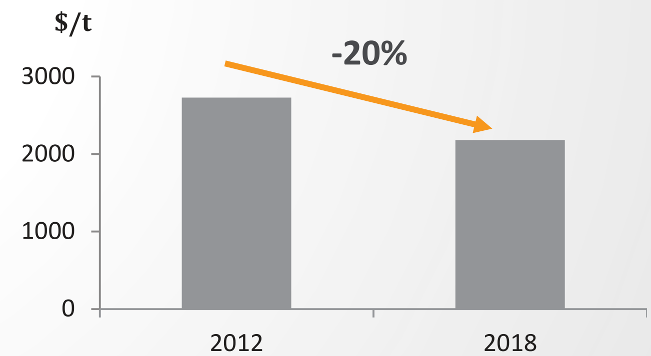
2012 Q3 expenses by nature



Employees in labour unions



C1 extraction cash cost

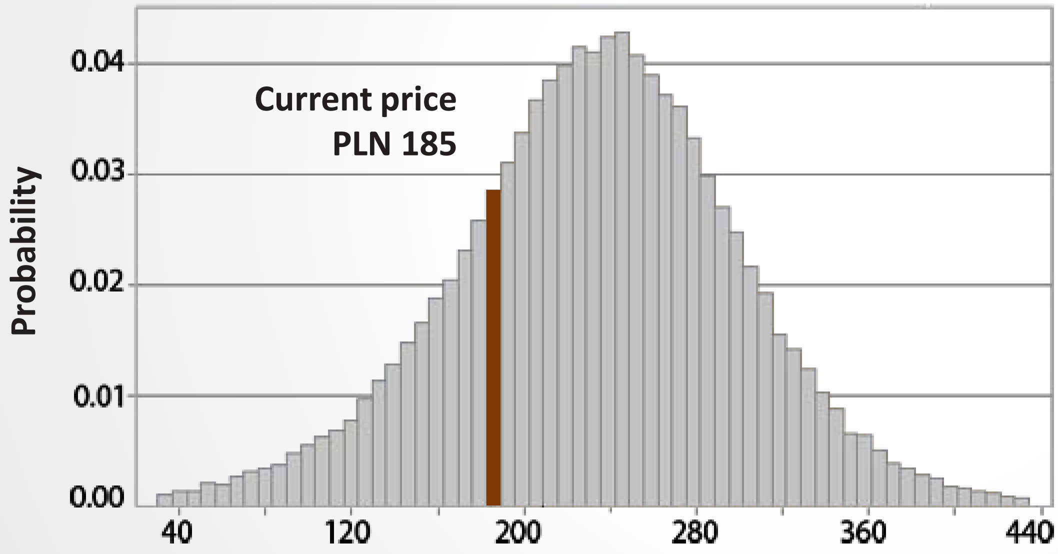


Monte Carlo simulation

The main revenue drivers

- Copper & silver prices
- USD/PLN exchange rate

Influence of the State Treasury	Fluctuations of Cu and Ag prices FX risk
Costs inflation	

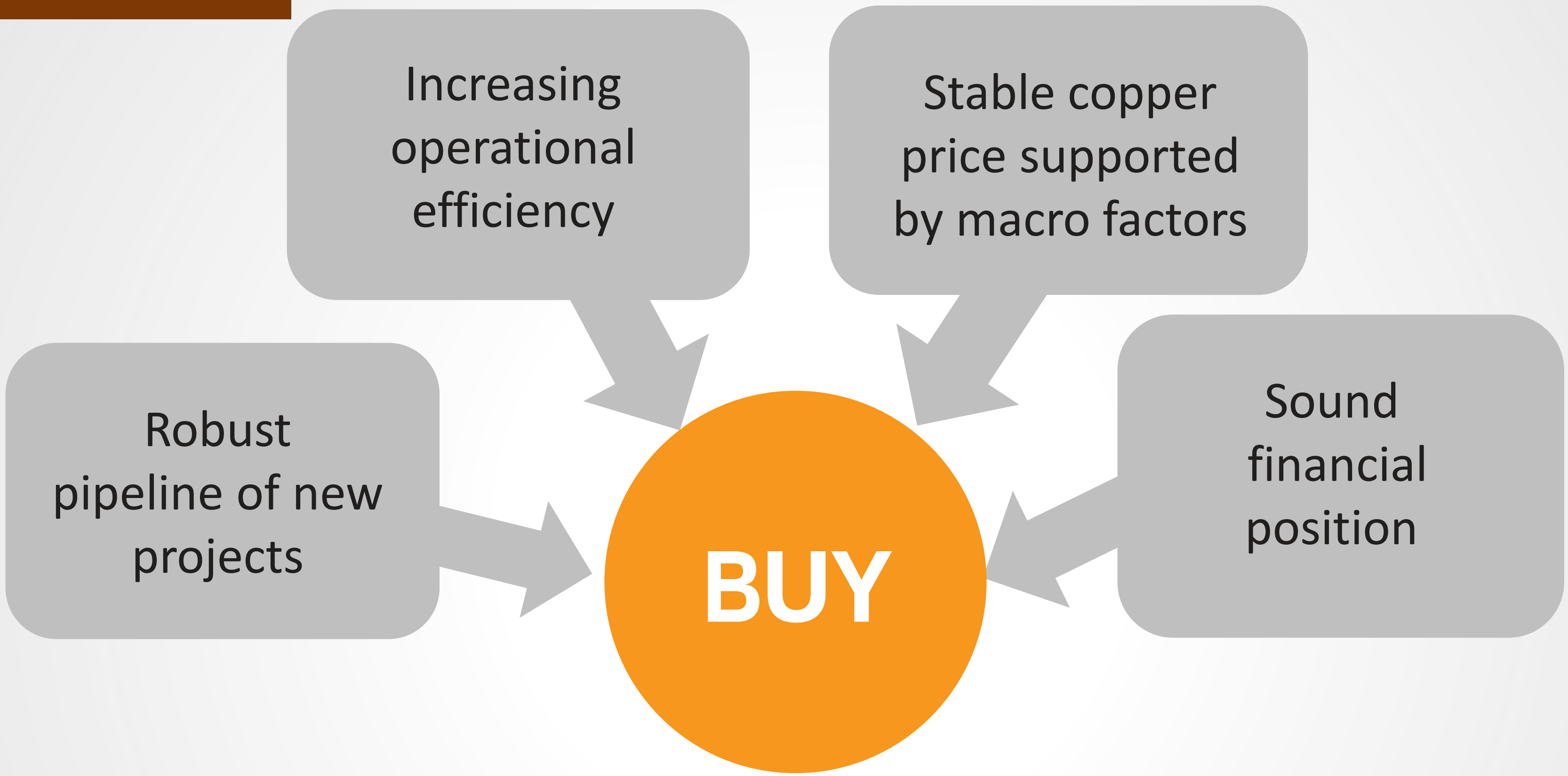


Monte Carlo summarizing statistics

Mean	233.15
10th percentile	PLN 146.41
90th percentile	PLN 319.81
Upside potential	75%

Conclusion

Conclusion



12 M Target price	Upside potential	3Y HPR
PLN 220	18.6%	56%

Thank you for your attention!