



# **Metal Bulletin's 12<sup>th</sup> Zinc & its Markets Seminar**

**Erling Sorensen, Chief Marketing Officer  
Nyrstar**

**21 May 2008, Brussels**

# Important Notice

This presentation has been prepared by the management of Nyrstar NV (the "Company"). It does not constitute or form part of, and should not be construed as, an offer, solicitation or invitation to subscribe for, underwrite or otherwise acquire, any securities of the Company or any member of its group nor should it or any part of it form the basis of, or be relied on in connection with, any contract to purchase or subscribe for any securities of the Company or any member of its group, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

The information included in this presentation has been provided to you solely for your information and background and is subject to updating, completion, revision and amendment and such information may change materially. Unless required by applicable law or regulation, no person is under any obligation to update or keep current the information contained in this presentation and any opinions expressed in relation thereto are subject to change without notice. No representation or warranty, express or implied, is made as to the fairness, accuracy, reasonableness or completeness of the information contained herein. Neither the Company nor any other person accepts any liability for any loss howsoever arising, directly or indirectly, from this presentation or its contents.

This presentation includes forward-looking statements that reflect the Company's intentions, beliefs or current expectations concerning, among other things, the Company's results of operations, financial condition, liquidity, performance, prospects, growth, strategies and the industry in which the Company operates. These forward-looking statements are subject to risks, uncertainties and assumptions and other factors that could cause the Company's actual results of operations, financial condition, liquidity, performance, prospects, growth or opportunities, as well as those of the markets it serves or intends to serve, to differ materially from those expressed in, or suggested by, these forward-looking statements. The Company cautions you that forward-looking statements are not guarantees of future performance and that its actual results of operations, financial condition, liquidity and growth and the development of the industry in which the Company operates may differ materially from those made in or suggested by the forward-looking statements contained in this presentation. In addition, even if the Company's results of operations, financial condition, liquidity and growth and the development of the industry in which the Company operates are consistent with the forward-looking statements contained in this presentation, those results or developments may not be indicative of results or developments in future periods. The Company and each of its directors, officers and employees expressly disclaim any obligation or undertaking to review, update or release any update of or revisions to any forward-looking statements in this presentation or any change in the Company's expectations or any change in events, conditions or circumstances on which these forward-looking statements are based, except as required by applicable law or regulation.

This document and any materials distributed in connection with this document are not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction.

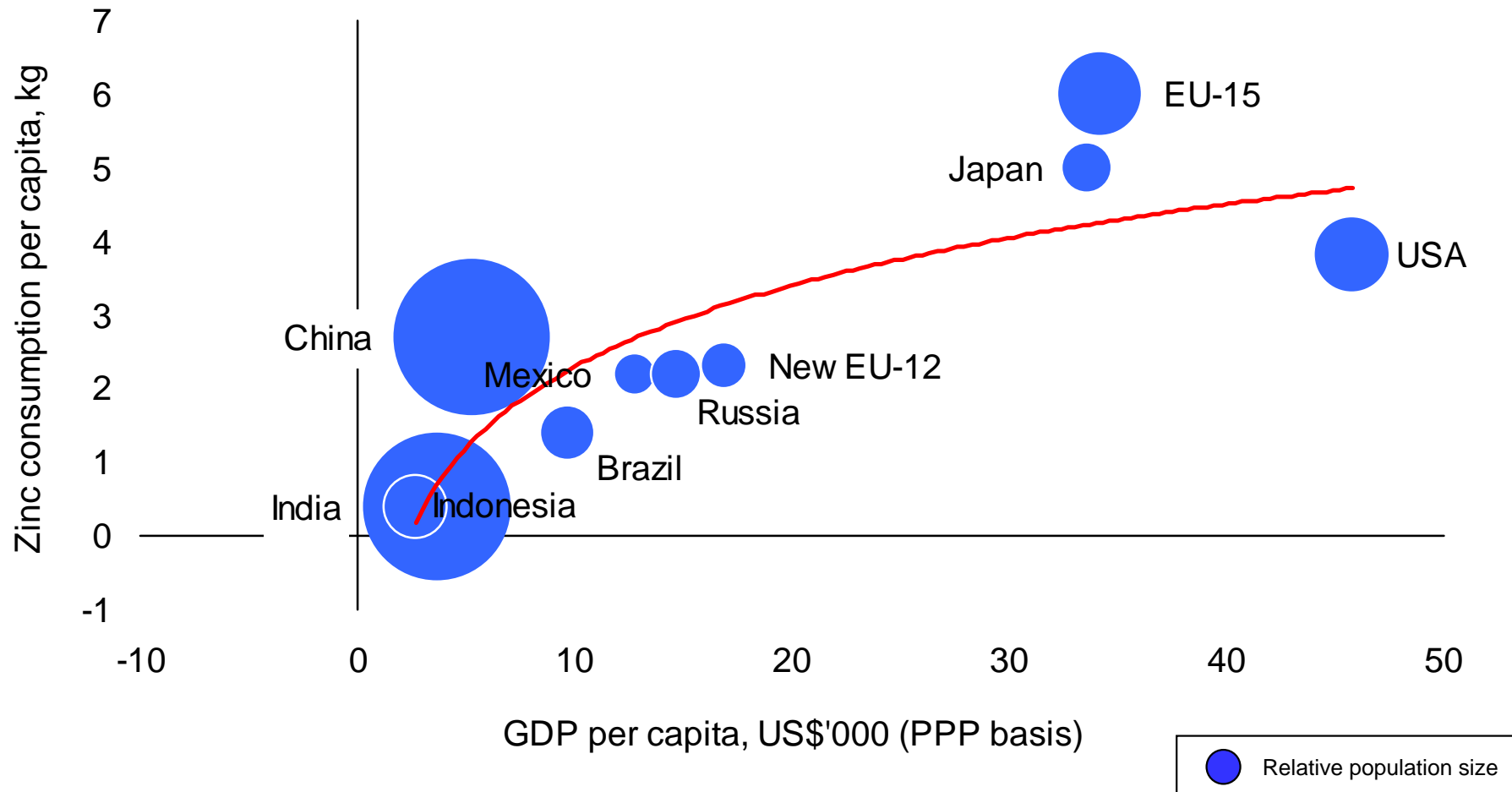
The distribution of this document in certain jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe any such restrictions. The Company's shares have not been and will not be registered under the US Securities Act of 1933 (the "Securities Act") and may not be offered or sold in the United States absent registration under the Securities Act or exemption from the registration requirement thereof.

# Agenda

- Zinc consumption: strong growth potential
- Substitution: risks and opportunities
- Price projections and cost pressures
- Industry structure and future investment

# A country's zinc consumption per capita increases as its average income rises

Relationship between first use zinc consumption and GDP per capita  
(2007)

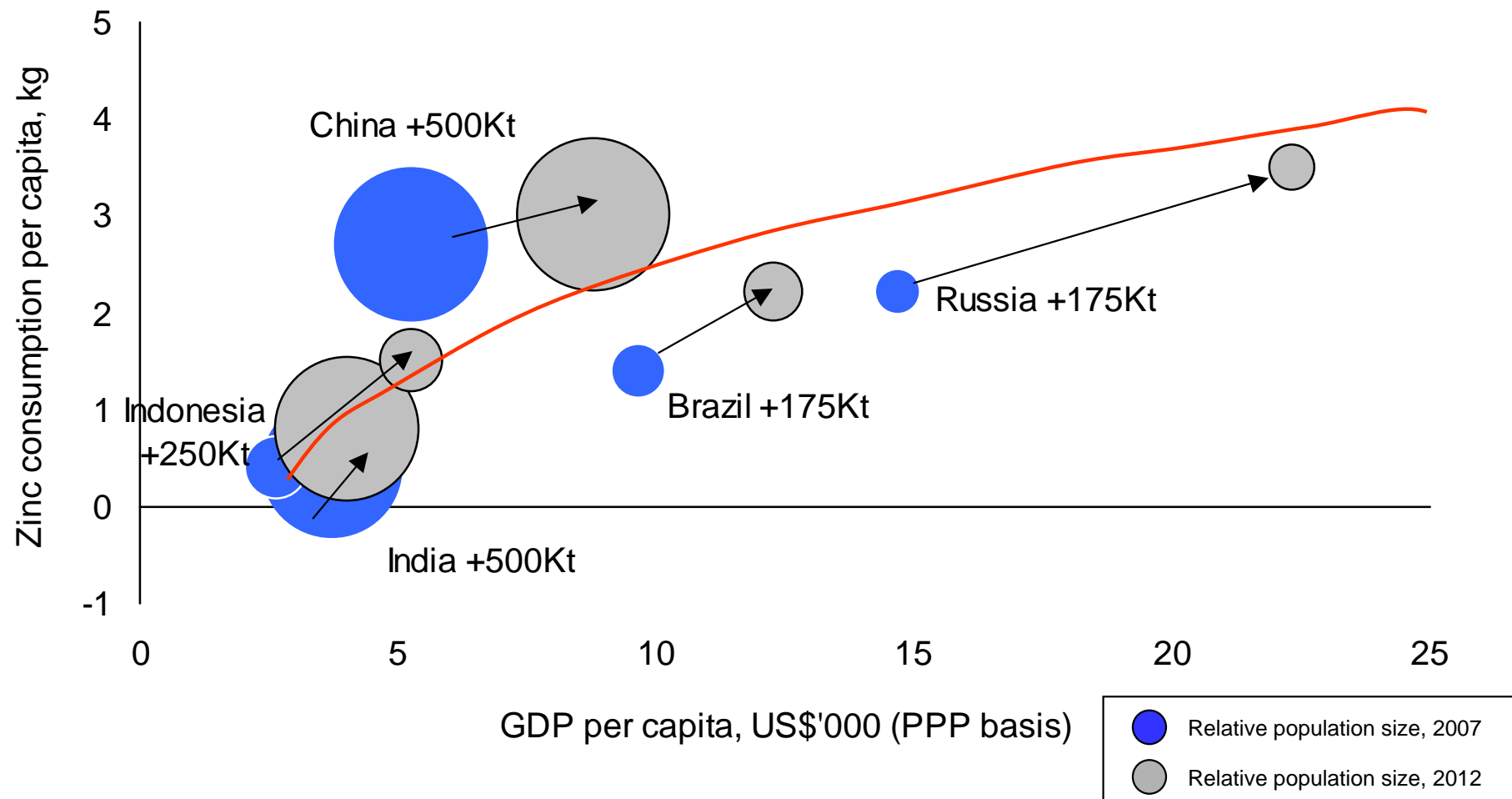


Note: Size of bubbles is proportional to size of population in each country or region. PPP is purchasing power parity

Source: Brook Hunt, IMF, US Census Bureau, Nyrstar analysis

# Significant growth in population and average incomes are expected in emerging markets

Relationship between first use zinc consumption and GDP per capita  
(2007, 2012)

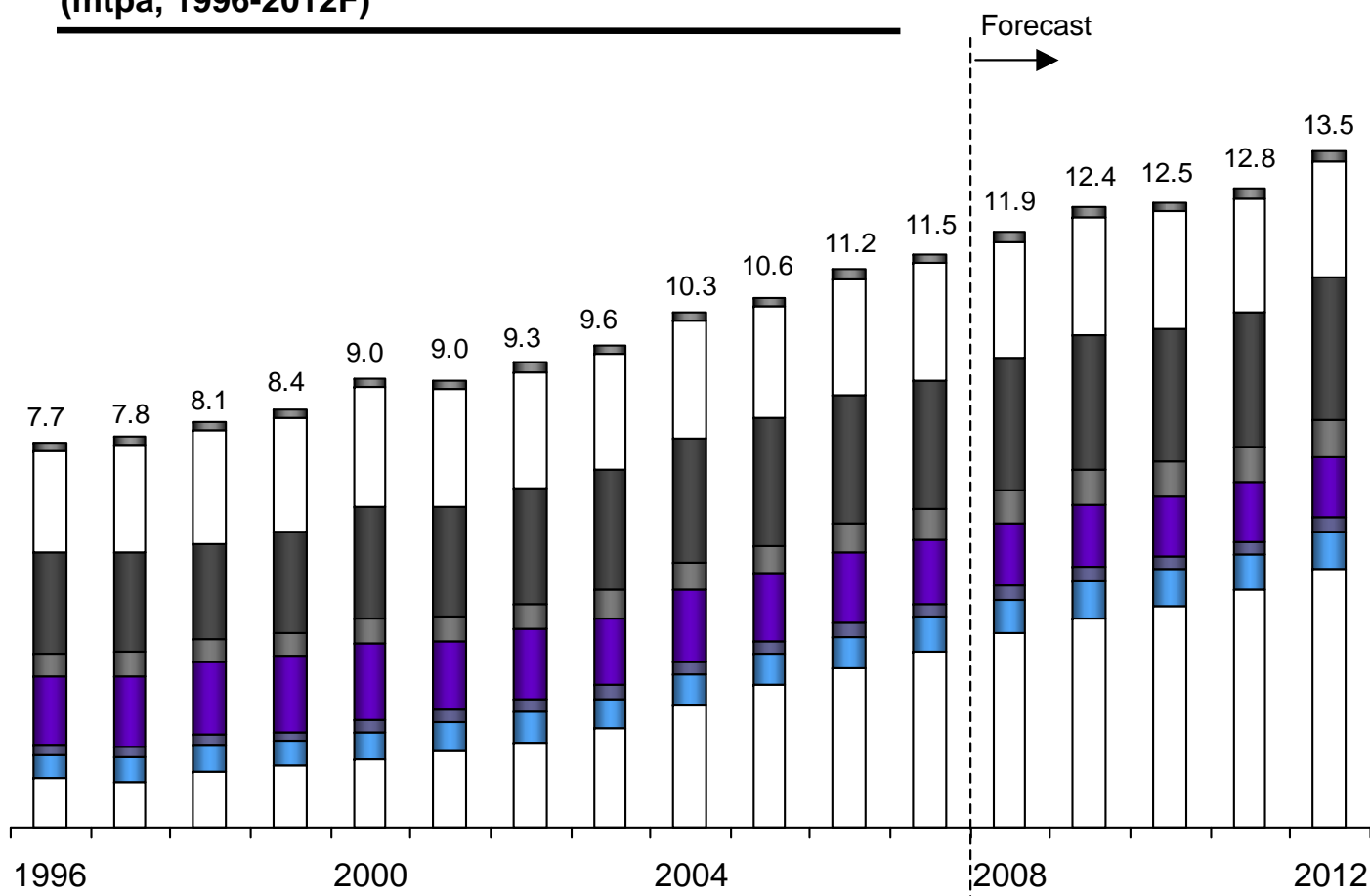


Note: Zinc Consumption per capita is an estimate based upon curve from previous slide

Source: IMF, US Census Bureau, Nyrstar analysis

# Consequently, global zinc consumption is forecast to grow, driven by emerging economies

**Zinc Slab Consumption (Actuals and Forecast)**  
(mtpa, 1996-2012F)



	CAGR 96-08	CAGR 08-12
<b>Total</b>	<b>3.7%</b>	<b>3.3%</b>
Africa	2.3%	1.1%
W. Europe	1.2%	0.0%
Asia	2.3%	2.0%
E. Europe/ CIS	2.1%	3.2%
N. America	-0.6%	-0.5%
Oceania	3.5%	-0.3%
L. America	3.5%	2.0%
China	12.3%	7.5%

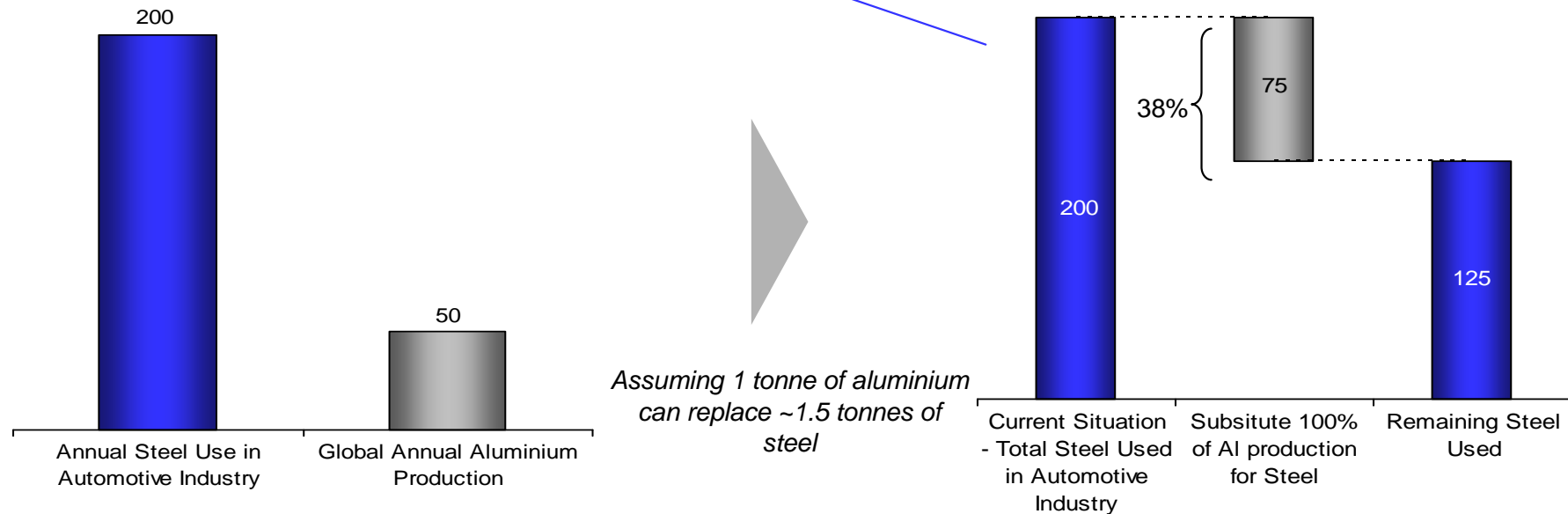
# Substitution risks are not expected to adversely impact zinc use to any significant extent

- Drivers of substitution
  - Cost differentials
  - Total cost of end products
  - Process technology evolution
  - End-use requirements
- Worst case substitution risks over next five years estimated only to amount to less than one conservative year's growth in zinc consumption

# The scope to substitute away from (galvanised) steel in automotive production is limited

## Case Study – Automotive Industry Metal Consumption (million tonnes)

- If 100% of world aluminium production was used to replace steel in cars it would displace only 38% of the steel used
- Anyway this is not practical as:
  - Aluminium has other uses for which it is required
  - Aluminium prices would rise while steel prices would fall



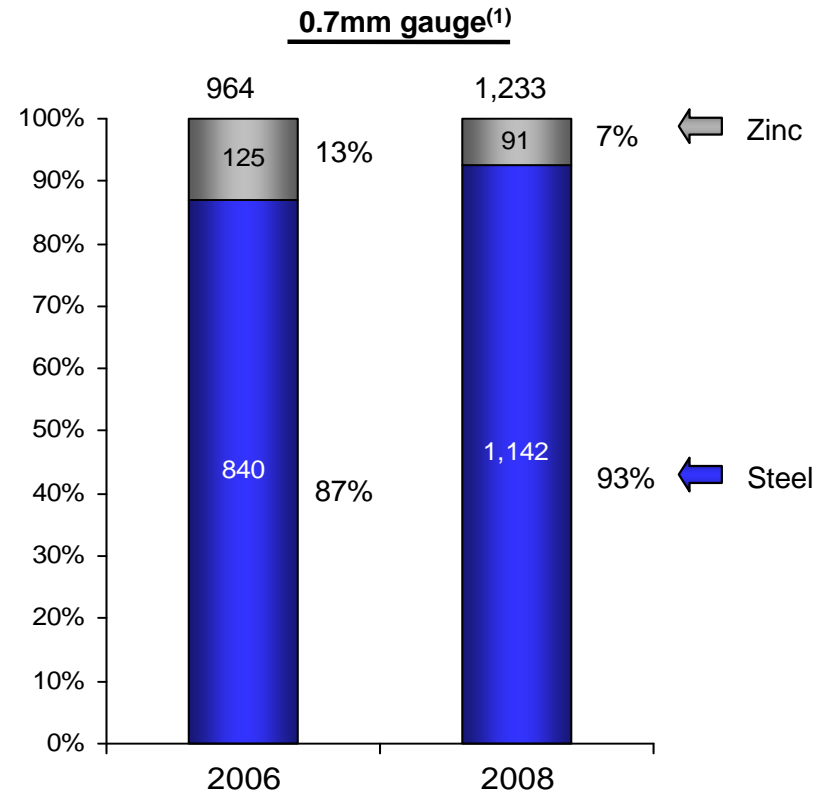
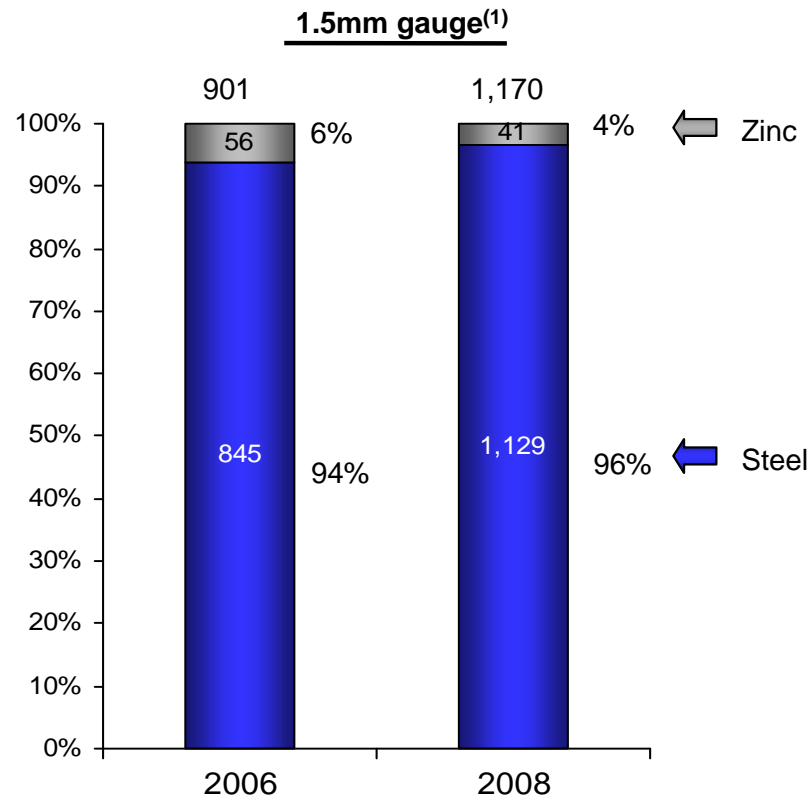
- Aluminium has poor reparability characteristics further limiting its ability to be substituted in place of galvanised steel in the automotive industry
  - Aluminium is not easily welded
  - Lack of repair shops set up to handle aluminium



# Furthermore, zinc is only a small part of the cost of galvanised sheet steel

## Case Study – Automotive Industry

**Zinc cost per tonne of Hot Dipped Galvanised Steel  
(US\$ per tonne)**



Ability to save costs in automotive industry through substituting zinc in galvanising with other coatings or no coatings is minimal – particularly given galvanised steel is only a modest proportion of the cost of a car

# And there are growth opportunities for expanding galvanised steel use, for example in construction

## Case Example – Residential Homes

Generally, galvanised steel has not been widely used in housing. However, there are many housing applications that can use galvanised steel

How much galvanised steel is used in this house?



### Tonnes of galvanised steel used in this house<sup>(1)</sup>

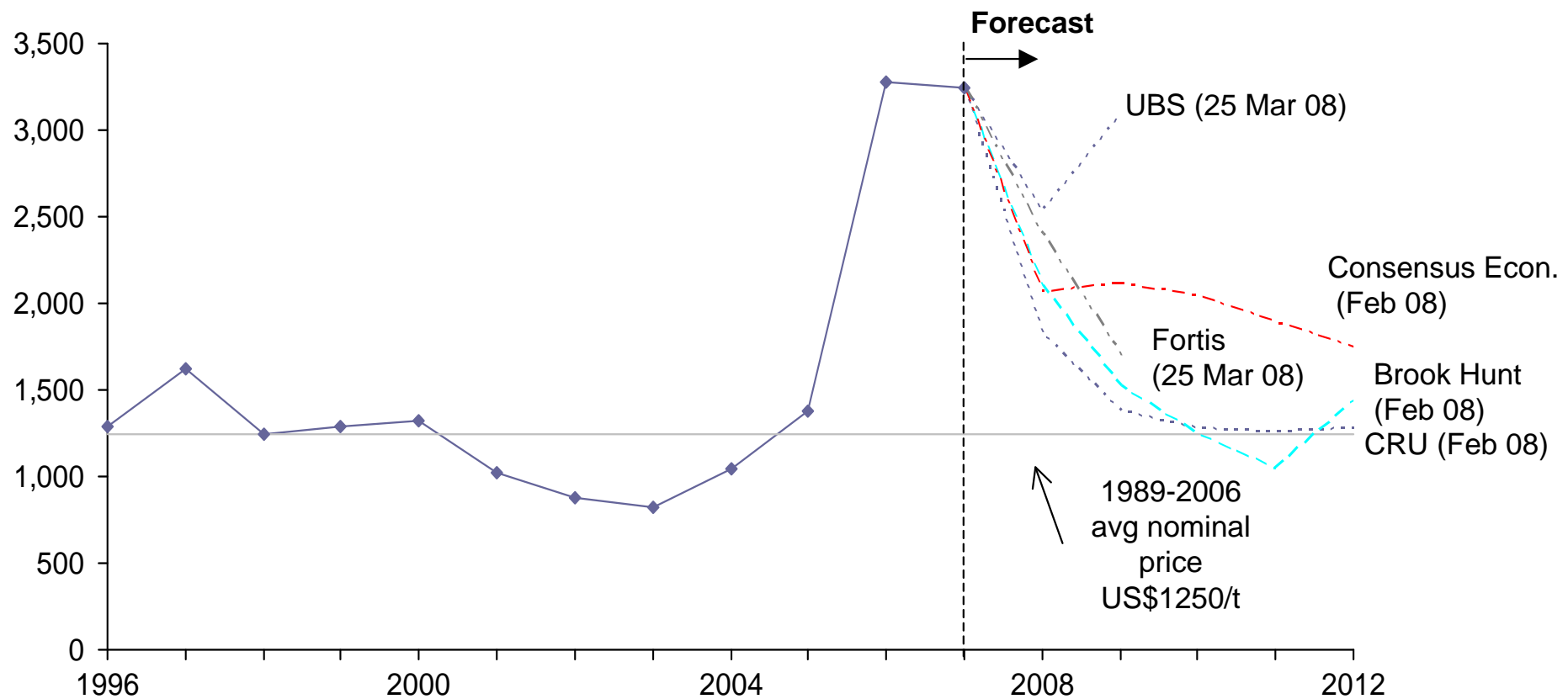
- Roof - 1.1
- Wall framing - 1.7
- Roof trusses - 1.1
- Flooring - 1.0
- Privacy fence - 0.4
- Rain Water Goods - 0.35
- Balustrade - 0.3
- Garage Door - 0.05
- Others ?

**TOTAL 6.00t**

Other opportunities are also available – internal walls & ceilings, stairs, home improvements, window frames etc

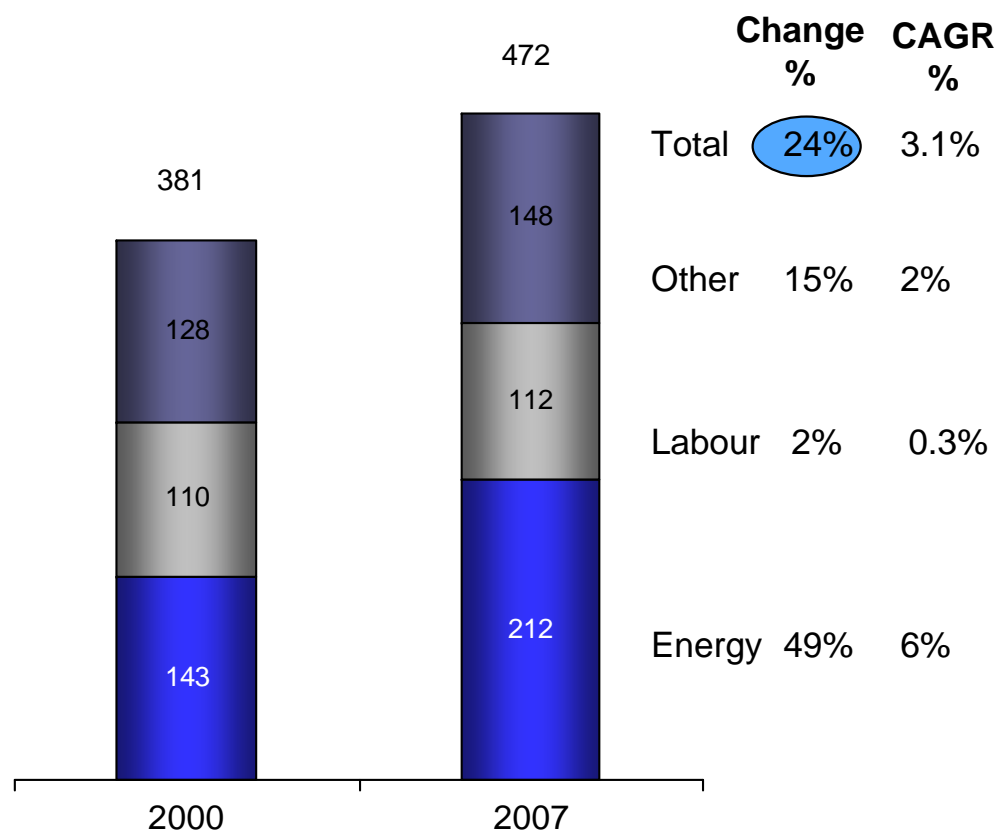
# Many zinc price forecasts typically revert to long term historical levels... but what might they be missing?

**Zinc Price Forecasts**  
(US\$ / tonne, 1996 – 2012F)



# Cash conversion costs have risen by about 24% since 2000

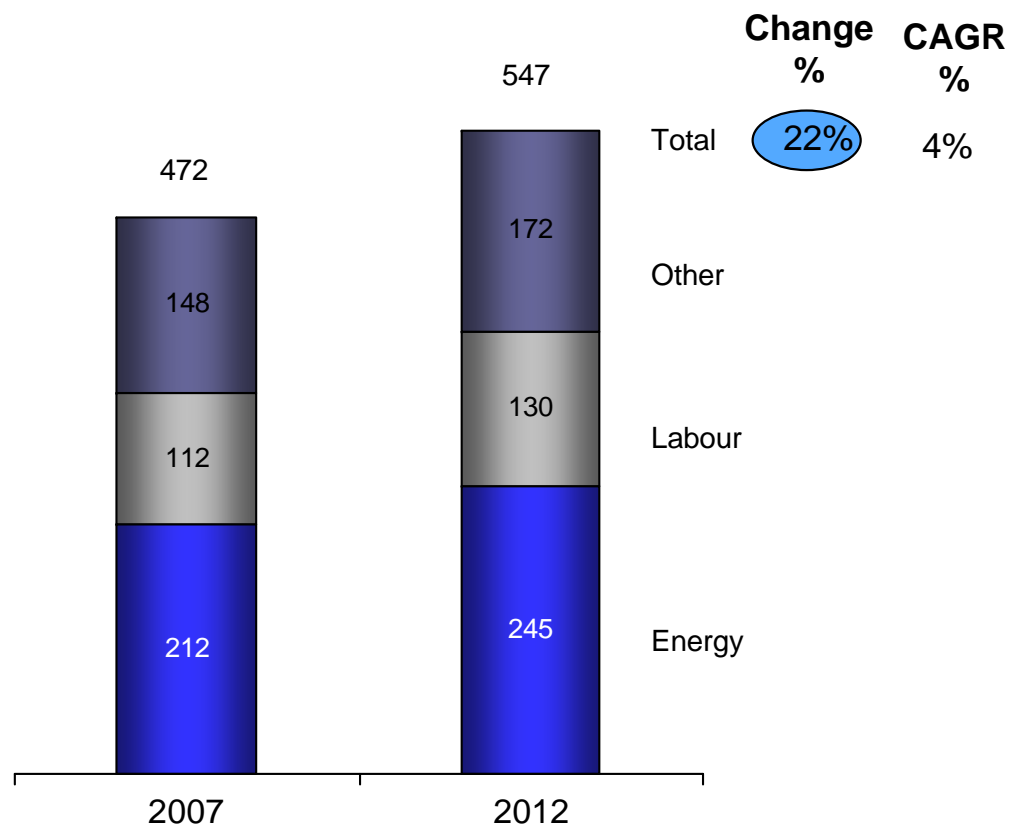
**Average smelter cash conversion costs<sup>1</sup>**  
**(US\$ / tonne, 2000 & 2007)**



- In simple terms this has meant the cash conversion cost for **one tonne** of zinc has **increased** by approximately **US\$90**
  - However, forecast prices for zinc (reverting to long term averages) do not seem to account for this underlying cost increase

# And cash conversion costs are expected to continue rising in the future

**Average smelter cash conversion costs - conservative scenario  
(US\$ / tonne, 2007 & 2012 example)**

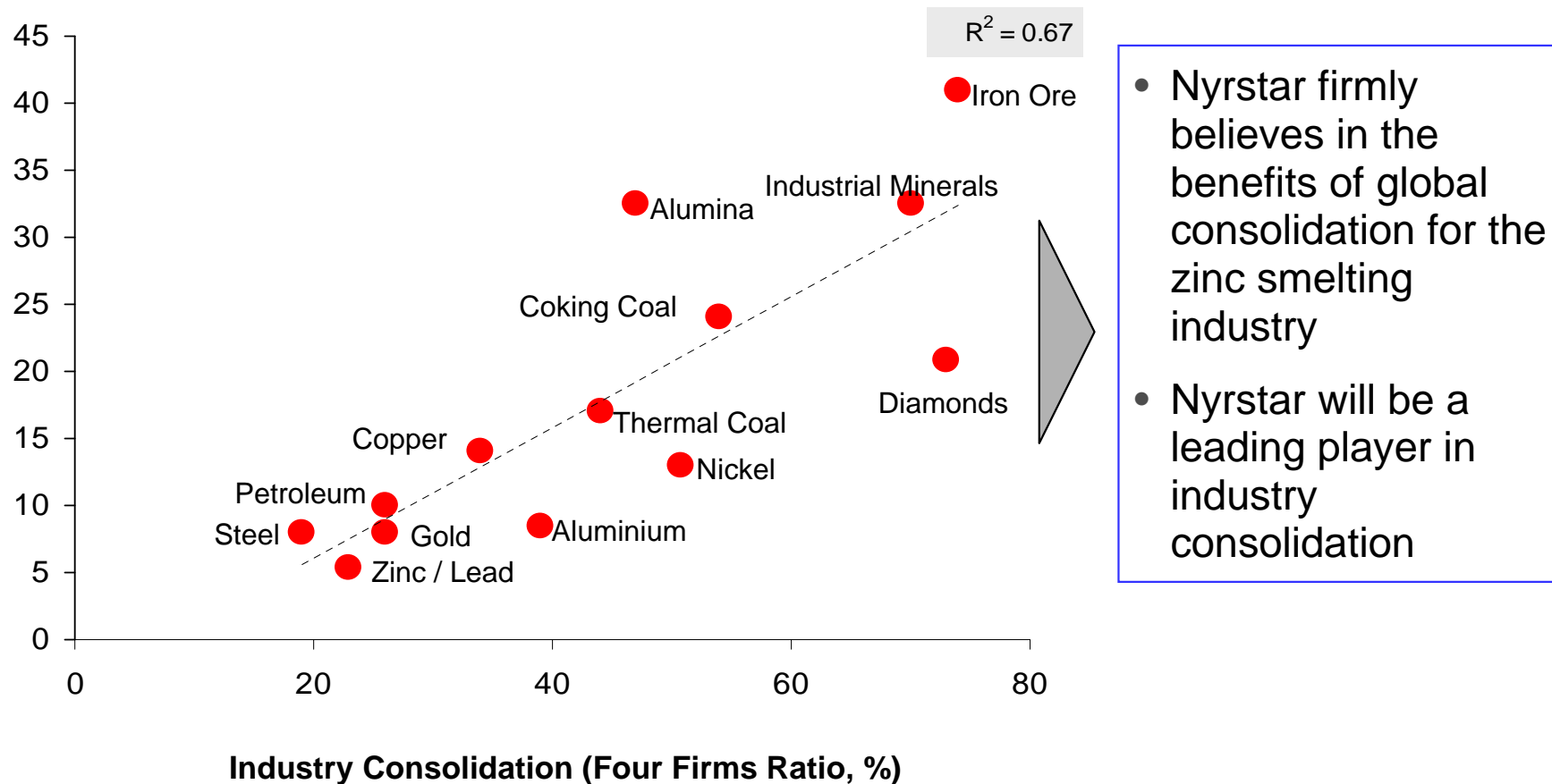


- Assumes that all costs just **increase at 4% (CPI)**
- This adds **US\$75** in costs for production of 1 tonne of zinc

**Rising costs will influence future zinc prices**

# ... and provide the basis for securing the investment necessary in future zinc supplies

## Sector Returns vs. Global Consolidation (ROE% vs. CR4 Score, Average for 1995, 2000, 2005)



Note: Four Firms Ratio consists of the market share, as a percentage, of the four largest firms in the industry

Source: Citigroup analysis - March 2008



Questions