Metal Bulletin

The new European steel industry - East meets west

10th Central and Eastern European Steel Conference

18 – 20 September 2007

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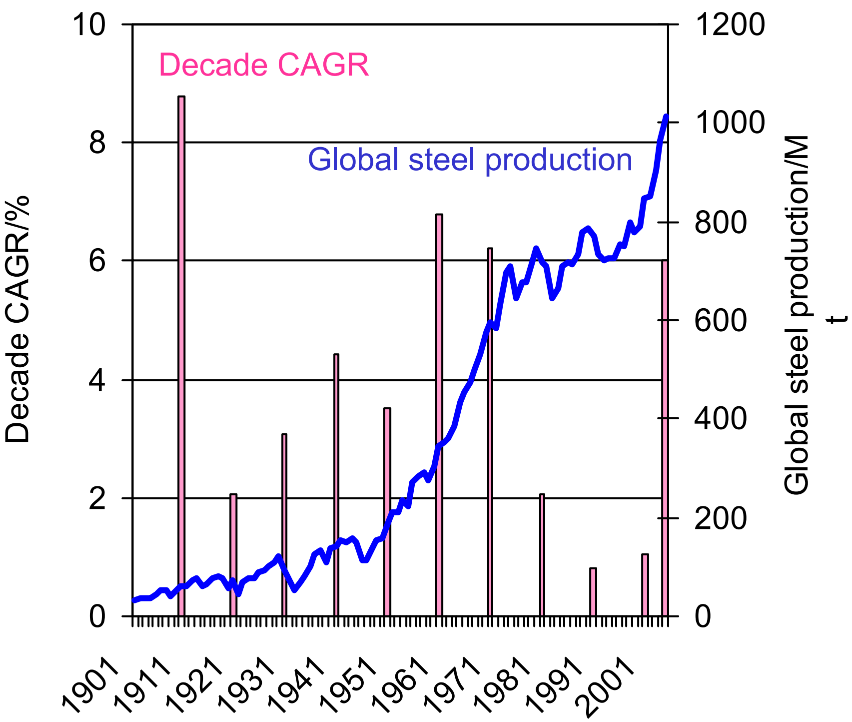
Hatch Beddows

Contents

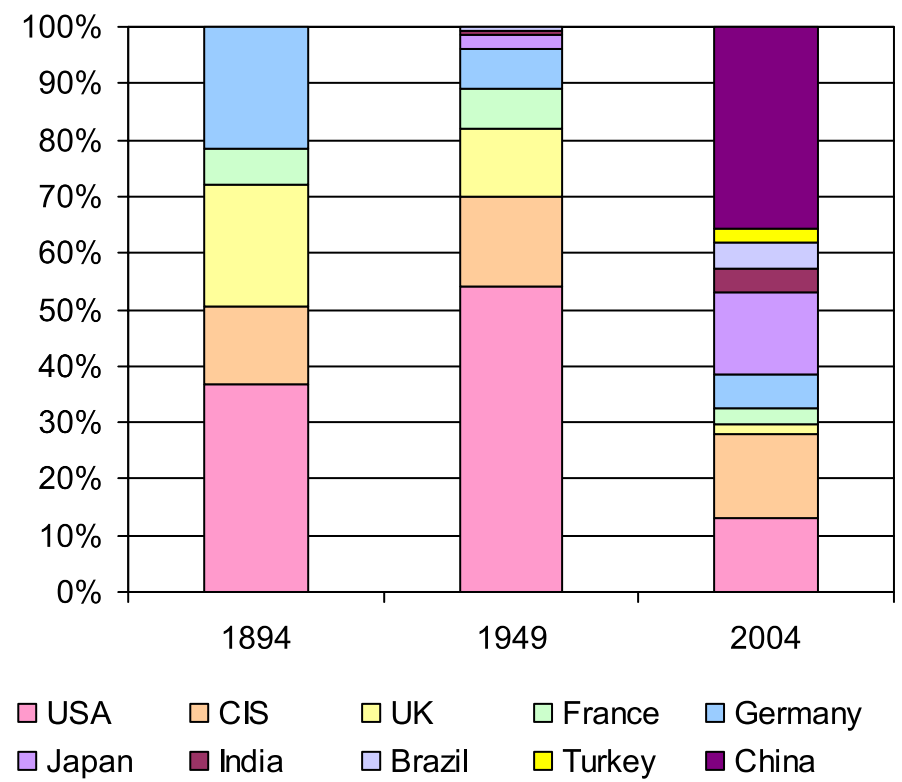
- **Global steel and trends**
- Central European markets
- The threat to Europe from the East
- How Europe is responding

Growth in global steel production is back to normal but the locations for production are changing massively – steel is now an Asian business

Global steel production and growth rates



Steel production by region



Source: IISI, Zimmerman and Hatch Beddows

The potential for long-term growth in steel demand is substantial; our model points to >900Mtpa of additional demand in the next 20 years, mainly in Asia

Long-term forecasts of steel demand growth by region[1]

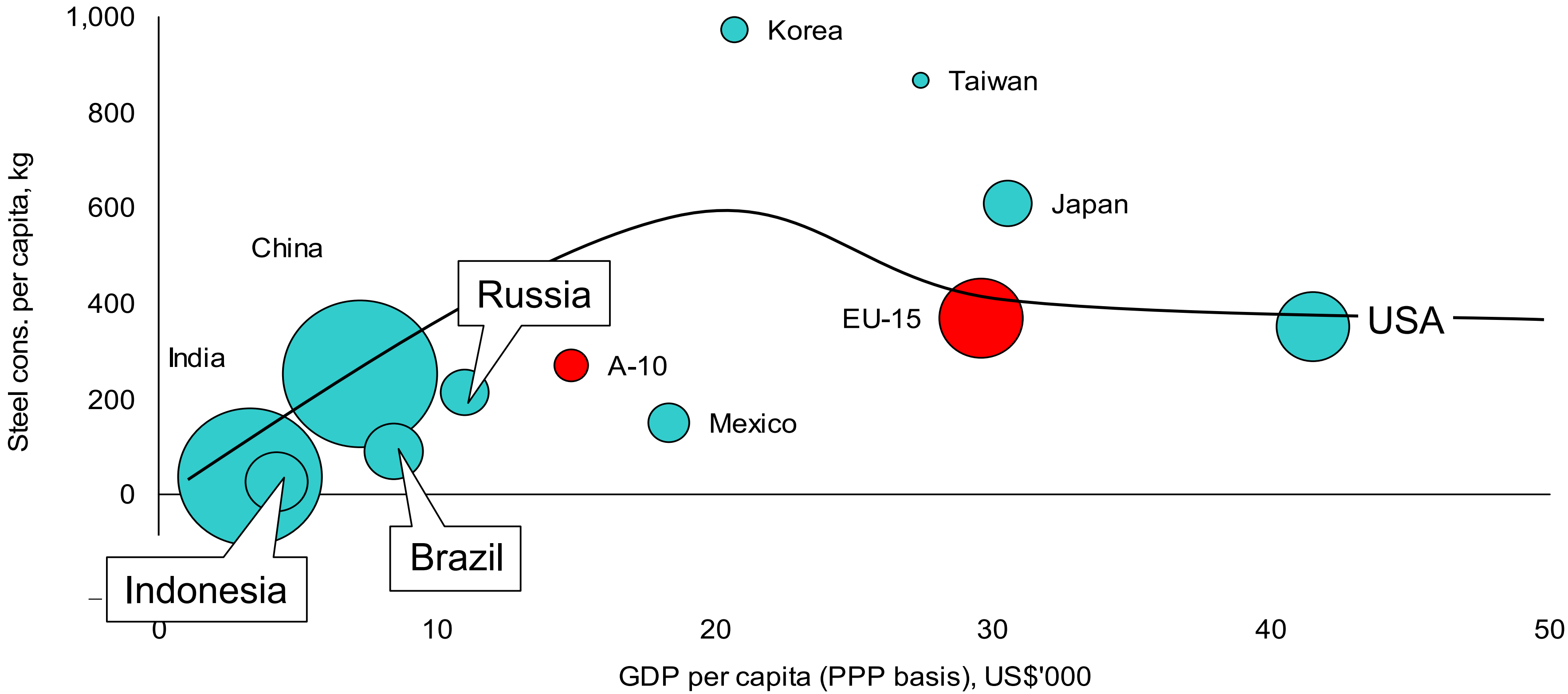
Region	2006	LT CAGR[1]	~2026F	Key differences
North America	143	2.0%	211	
South America	34	3.4%	67	
Europe	173	0.5%	192	
CIS	53	2.4%	86	
China	351	3.4%	684	**333**
India	44	8.7%	233	**189**
Japan	164	-0.7%	143	
Other Asia	67	5.4%	192	**125**
Rest of world	107	3.8%	228	
World total	1,135	3.0%	2,036	**901**

Note: 1. Finished steel consumption. Rest of world data are calculated as residuals

Source: IMF, IISI, ISSB, WSD and Hatch Beddows

…largely driven by massive consumption, now and in the future, of half of the world's population

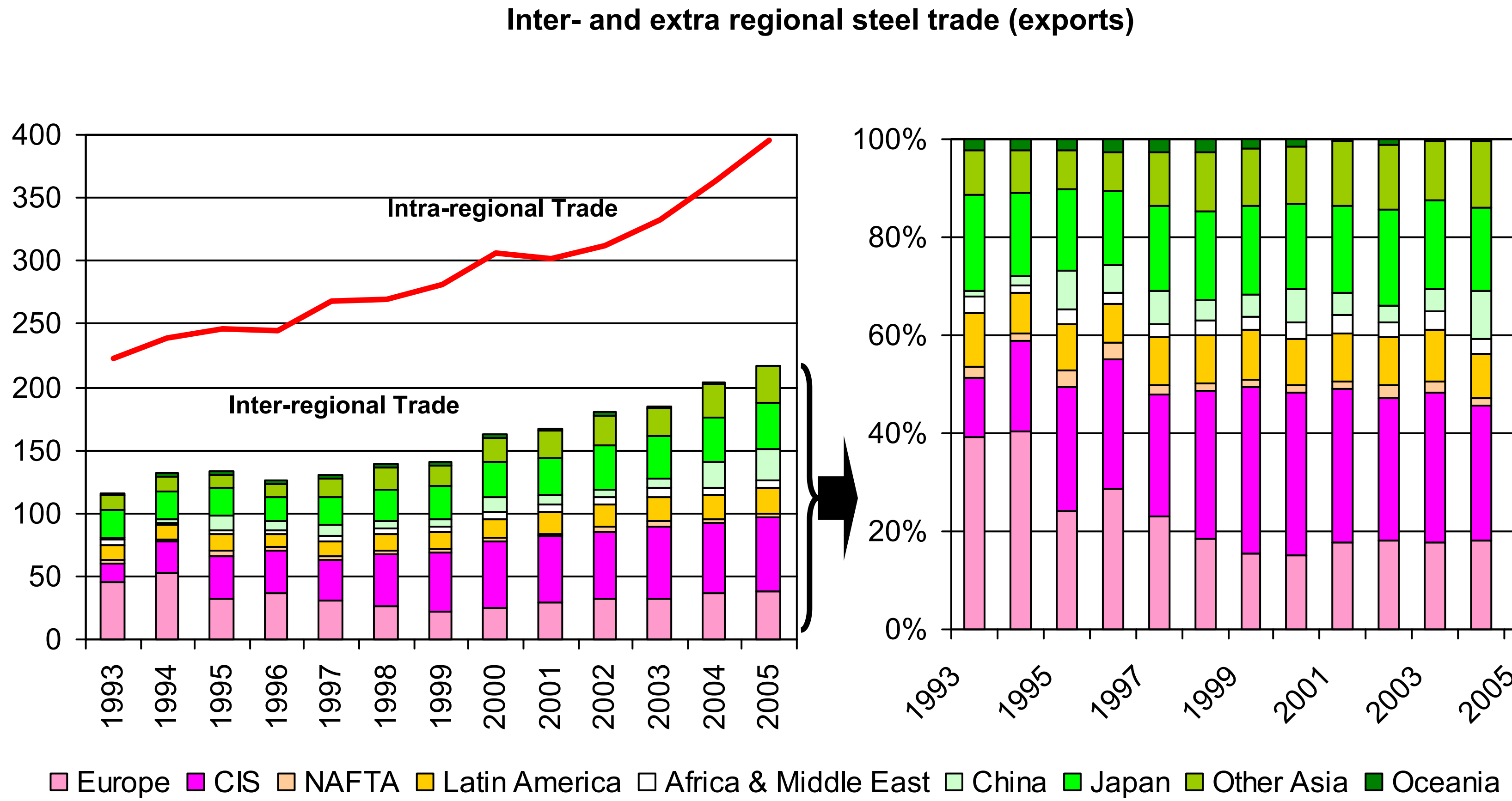
Steel consumption and income per capita 2006



Note: Size of bubbles is proportional to size of population in each country or region

Source: IISI, IMF, UN and Hatch Beddows

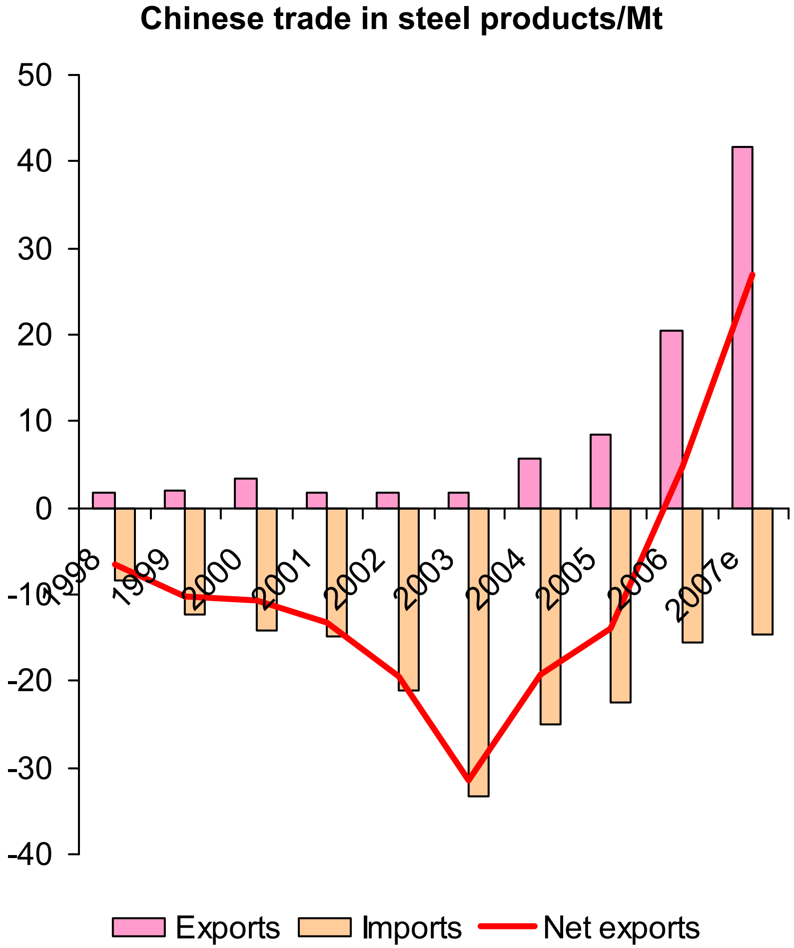
About 400 Mt of steel now crosses a border and over 200 Mt is consumed outside of its region of production – CIS and Asia also dominate trade

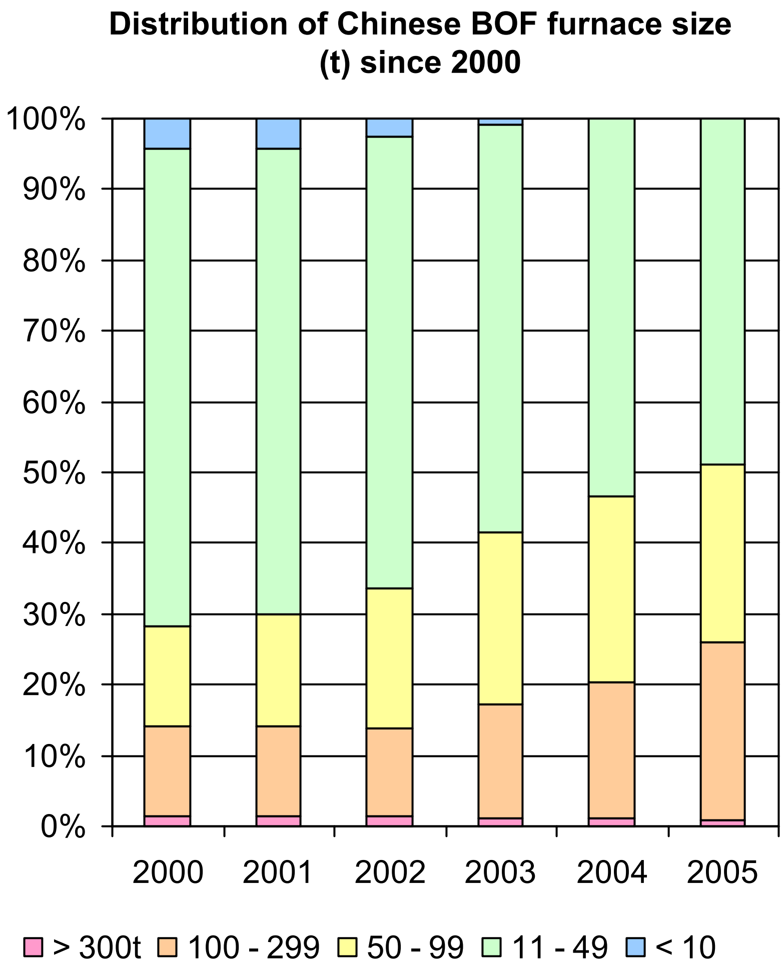


Note: Trade covers the IISI broad definition of steel products and covers exports only (imports theoretically match)

Source: IISI, ISSB and Hatch Beddows

A major question is of course - is the growth of Chinese exports in evermore technologically advanced products a structural change?

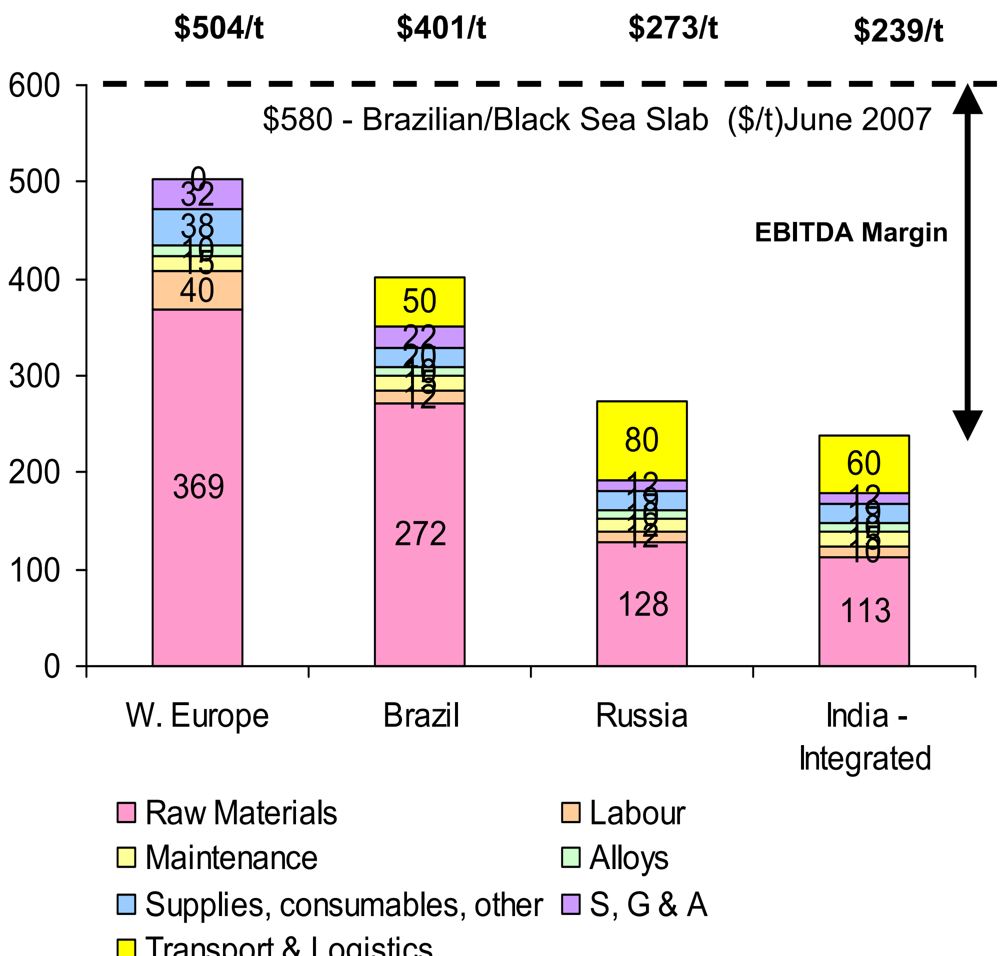


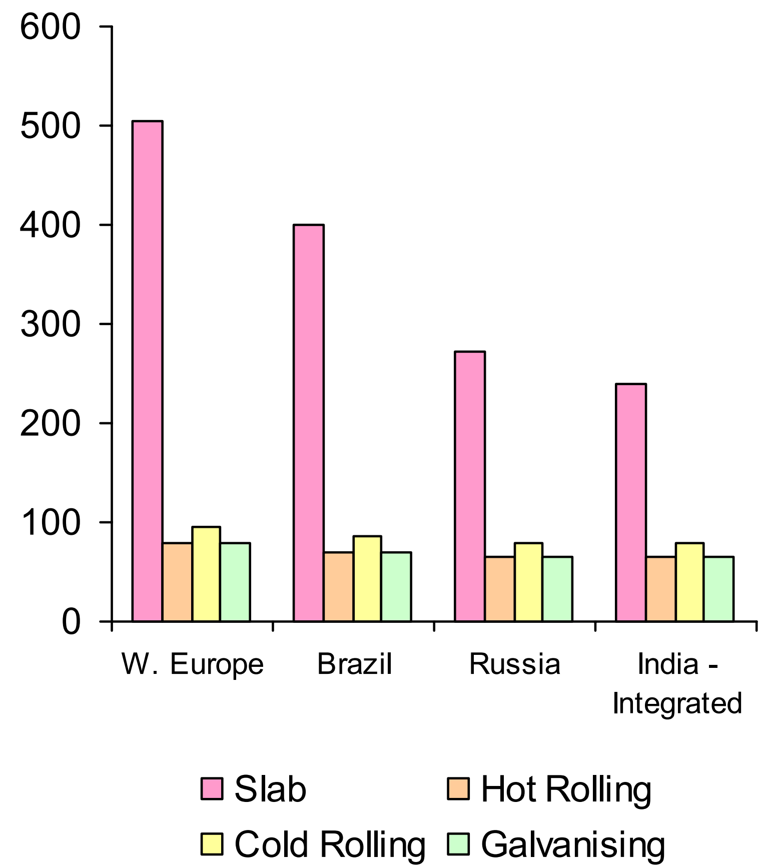


Source: CISA, ISSB and Hatch Beddows

The global cost base now reveals the fundamental European problem

Cash costs ($/t) for slab, hot and cold rolling and galvanising for W. Europe and other selected low cost regions

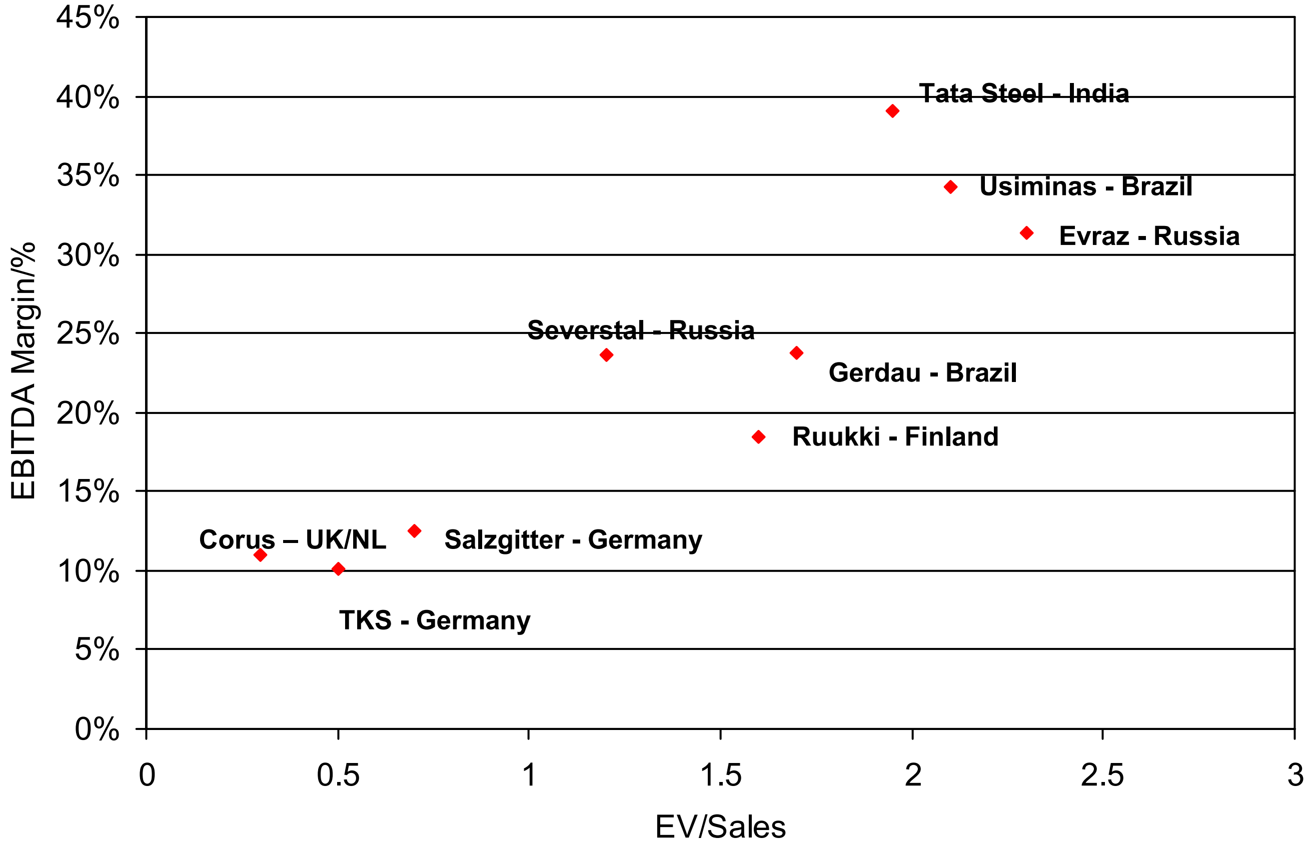




Source:Tex, SBB, McCloskey and Hatch Beddows

…which also shows up elsewhere!! Can European steelmakers ever resist?

Overall EBITDA margin vs. enterprise value/sales multiplier for EU and low cost steel producers based on latest reported results i.e. 2006/2007



Note: Note: Enterprise Value ("EV") calculated as Market Capitalisation + Net Debt

Corus Group and Tata Steel before their merger

Source:Bloomberg and Hatch Beddows

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Contents

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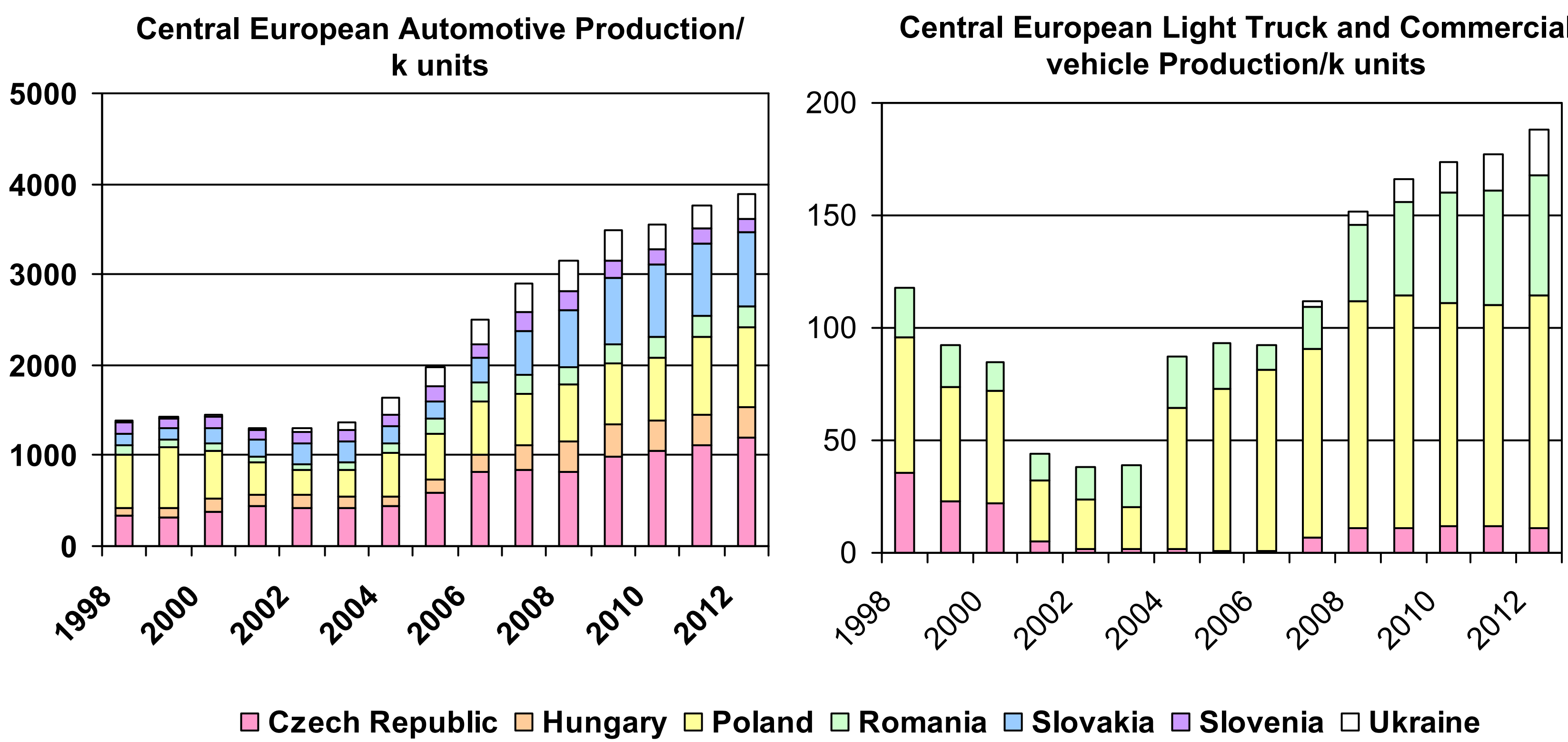
Central European does provide some exciting growth opportunities for steel – automotive growth is complementary to the industry in Western Europe



CAGR/%	1998 - 2012	2002-2012	2007-2012	2007 -2017
Passenger Cars	7.7	11.0	6.0	5.4
Light Commercial Vehicles	3.3	14.0	12.0	9.6

Source: JDPower, AutoNews and Hatch Beddows

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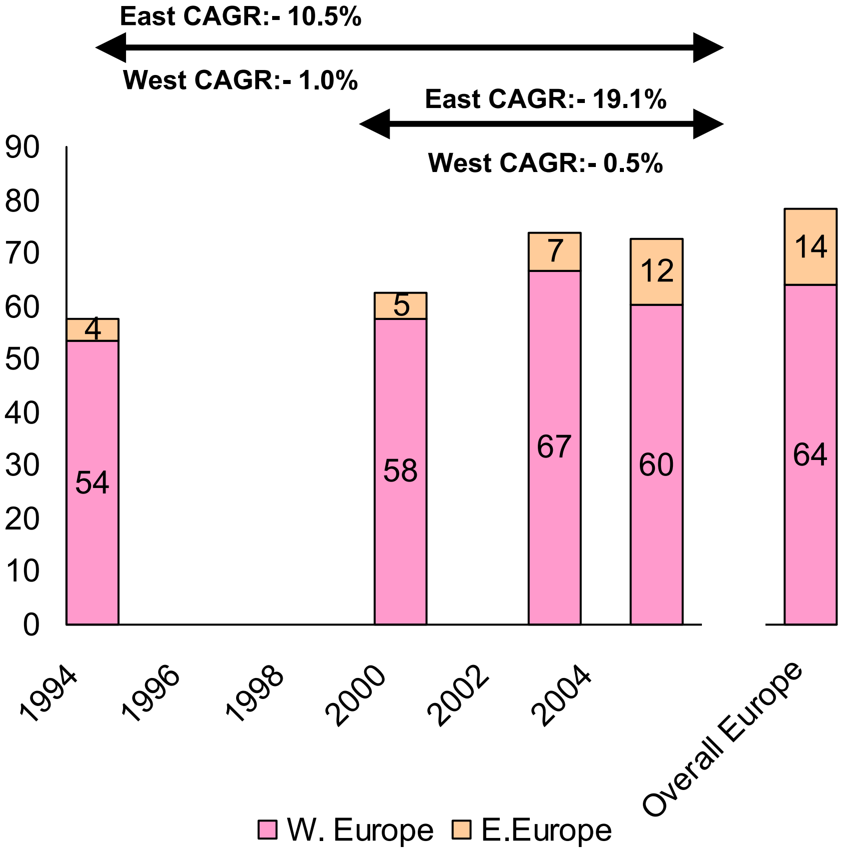
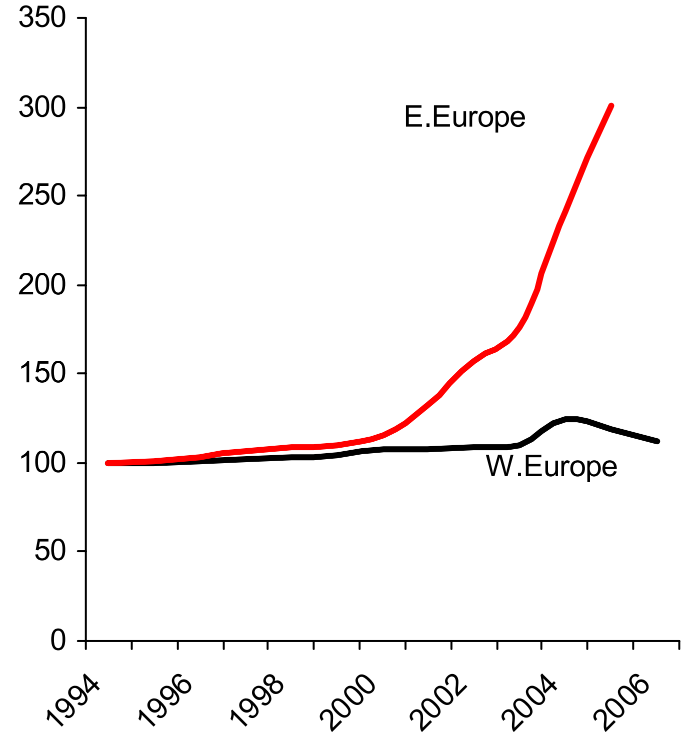
...whereas , domestic appliance production is more substitutional – Central European plants have effectively replaced Western plants

European (Central and West) appliance production/M units



Indexed comparison of European appliance production



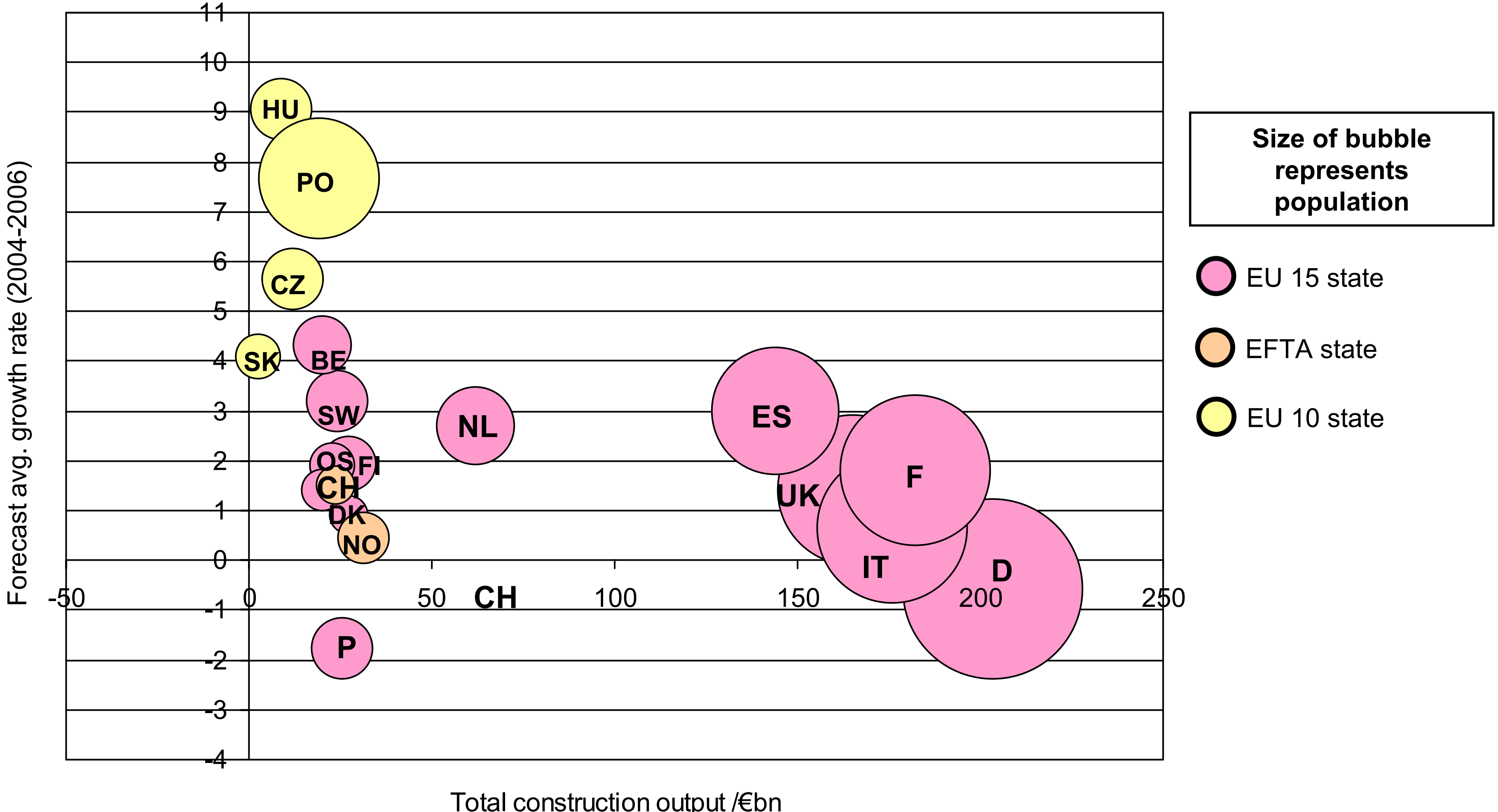
(*) Western Europe includes France, Germany, Italy, Spain, Sweden and UK

Central Europe includes Poland, Slovenia, Czech, Hungary

Source: Appliance Magazine and Hatch Beddows,

Construction is the major driver, in particular, infrastructure and commercial

European construction output by country (€bn) and forecast CAGR (2006-2012)



Source: EIU, Euroconstruct and Hatch Beddows

Contents

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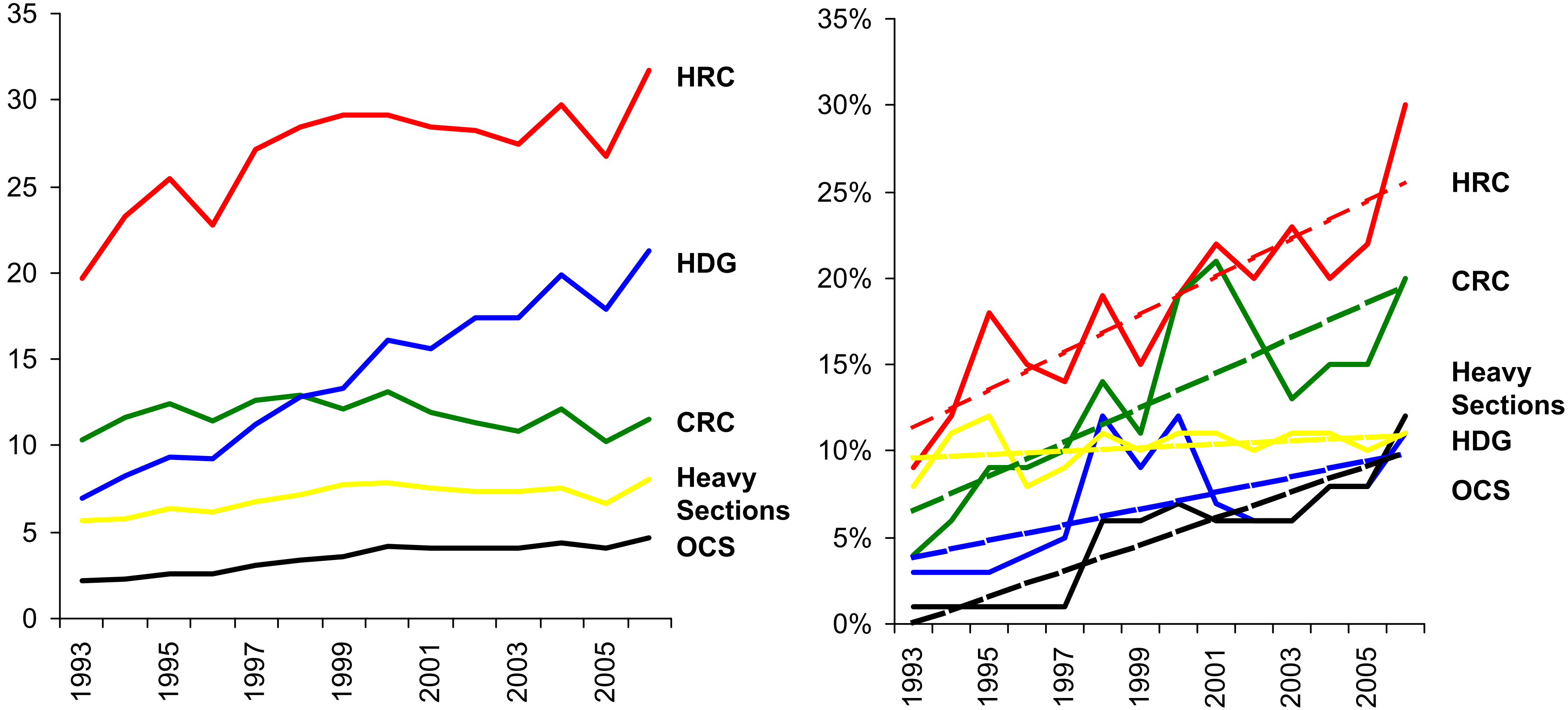
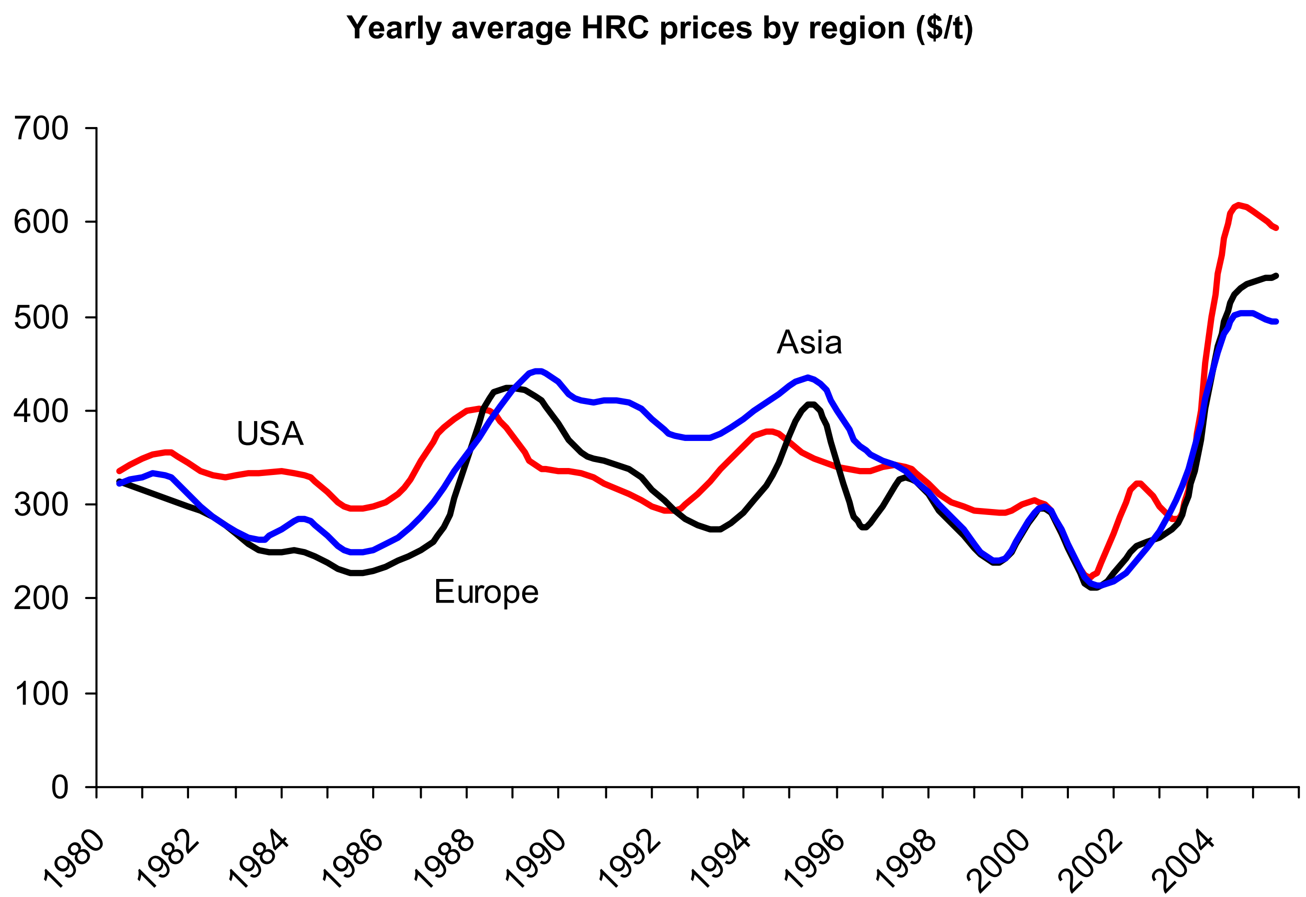
All European flat steel markets, no matter how sophisticated, now face evermore market 3rd country penetration

Selected European steel markets (Mt) and their import penetration (%)



Source: ISSB, Eurofer and Hatch Beddows

Such penetration is driven by regional pricing arbitrage – but only if the consuming regions can use the product in question

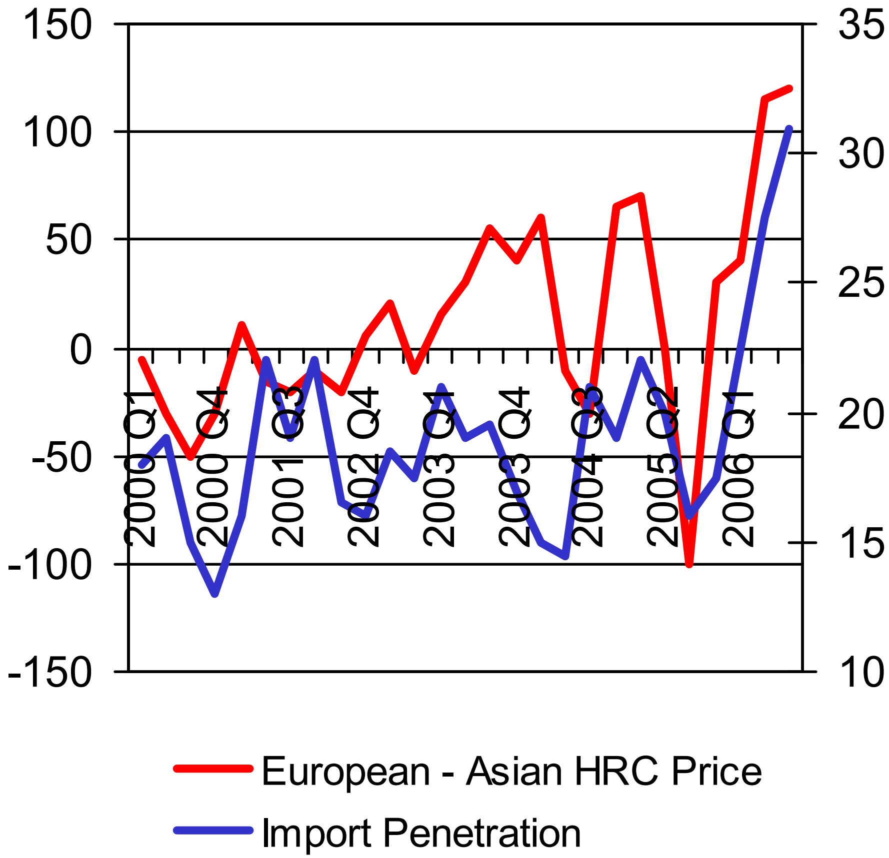


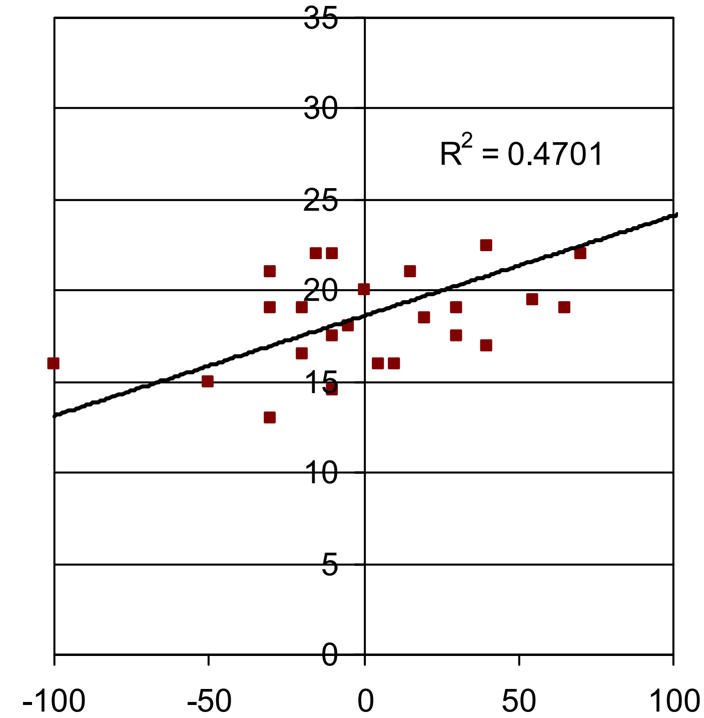
Note: USA: Midwest prices, fob mill. Europe: North European prices, ex-works. Asia: East Asian imports, c&f port.

Source: MB, SBB and Hatch Beddows

Regional price differences based on each regional supply – demand balance are correlated to import penetration – a €50 price differential can drive a 5% change in import penetration

Correlation of European HRC market penetration (RH axis %) and European – Asian price differences shifted by one quarter (LH axis €/t)





Source: SBB, Eurofer and Hatch Beddows

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Contents

- Global steel and trends
- Central European markets
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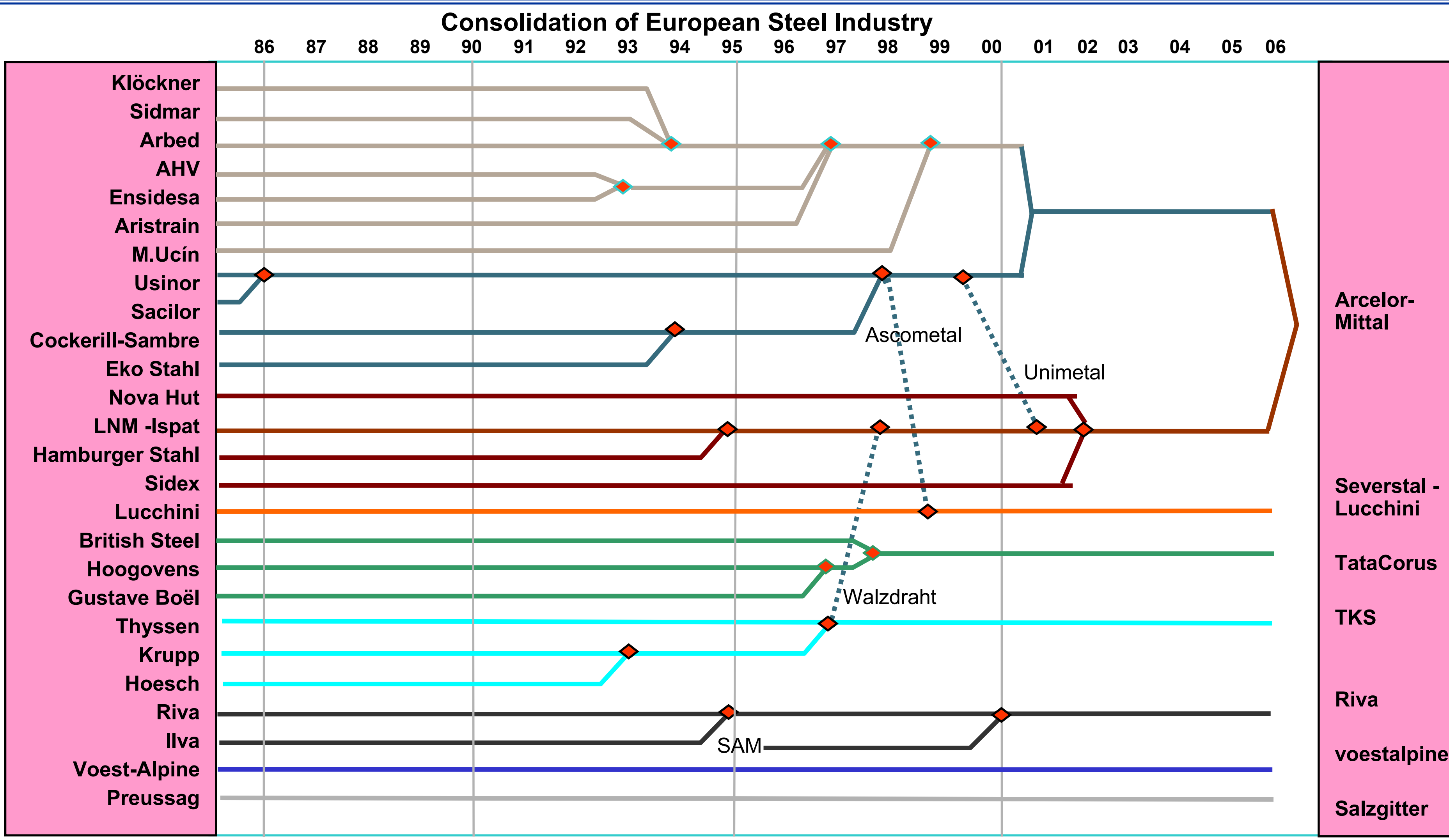
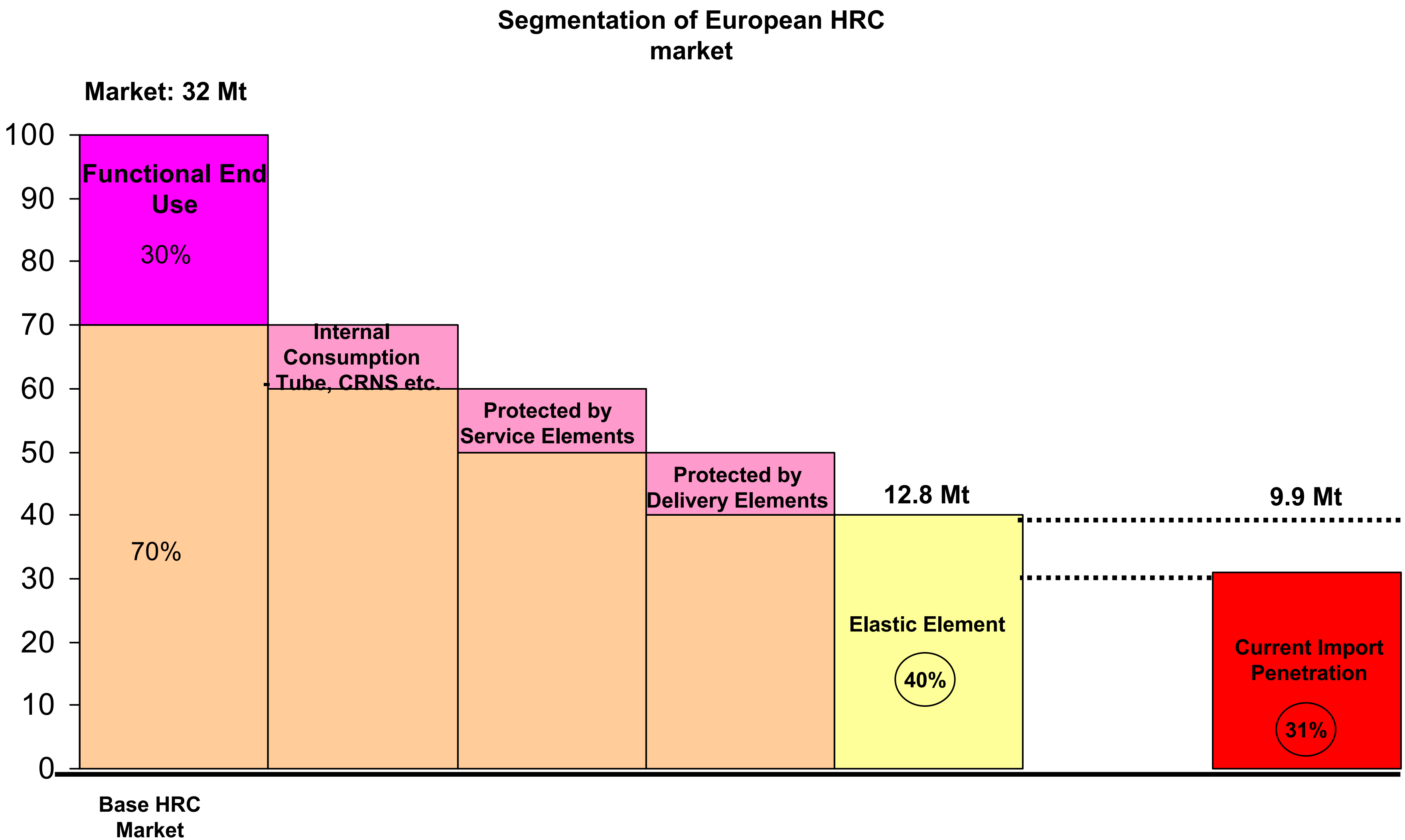
Pricing discipline through an undisputed multi-regional leader will greatly help



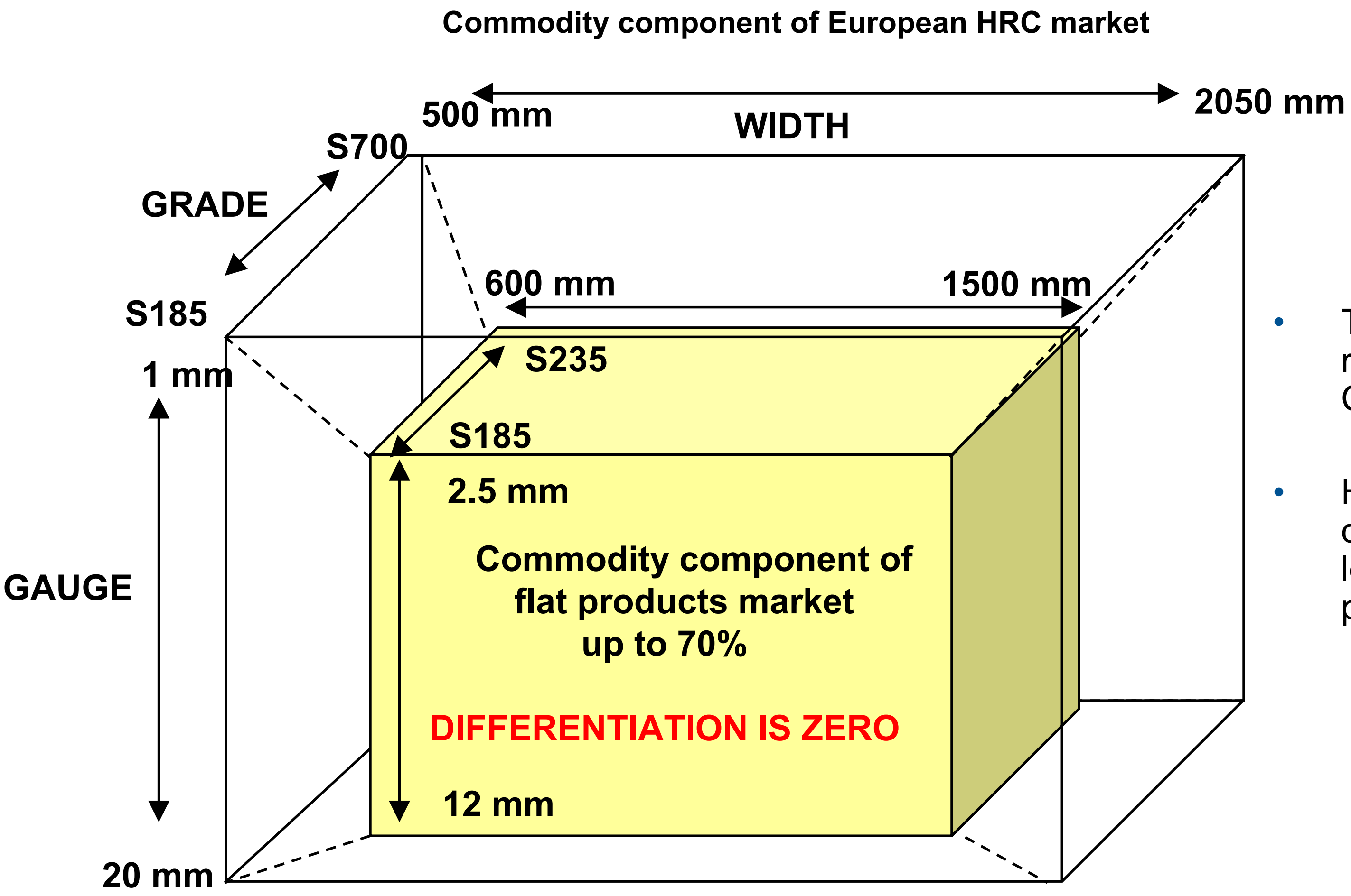
Source: ArcelorMittal, Eurometal and Hatch Beddows

The significant non commodity steel fraction coupled to enhanced service and supply chain also provides protection



Source: Hatch Beddows

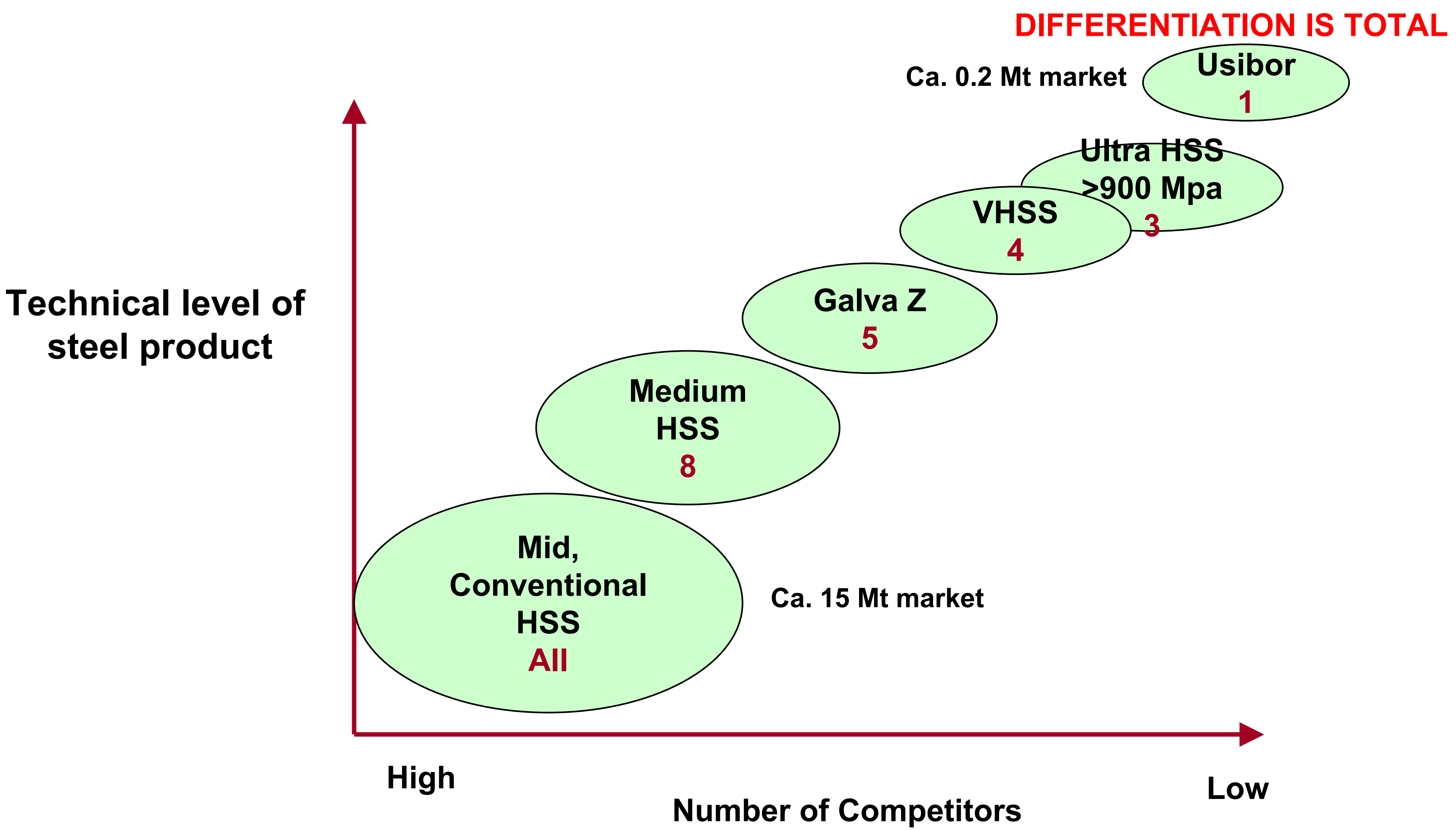
Commodity steels are the core product range of the industry – that is the nature of BOS and mill economics



- This is also representative for CRC and HDG
- However the commodity element is lower for these products

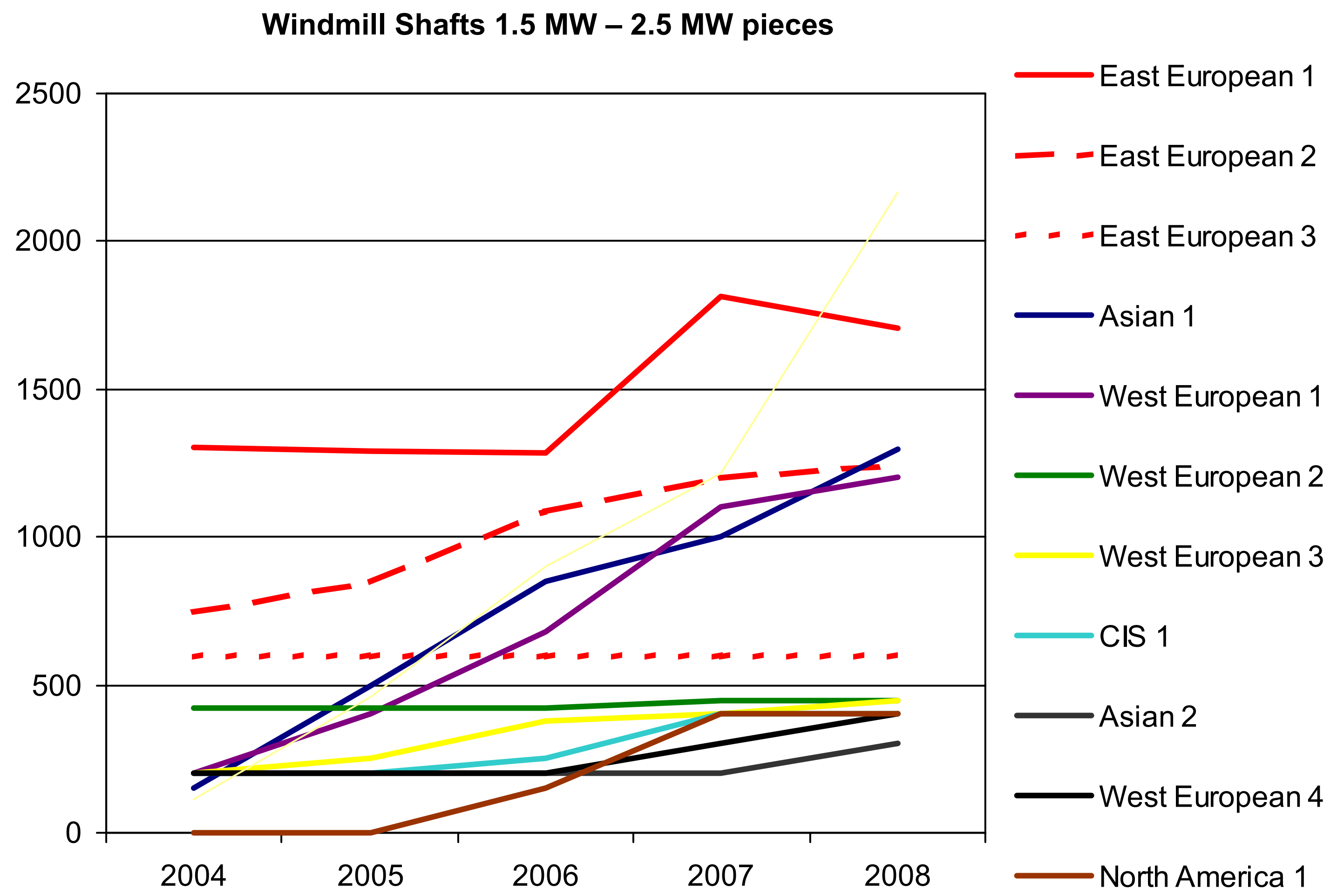
Source: Hatch Beddows

However, Europe still leads in functional steel development, but will the development be fast enough?



Source: ArcelorMittal and Hatch Beddows

As a real but albeit small example, Central Europe leads the world in highly engineered steel windmill shafts



Source: Client and Hatch Beddows

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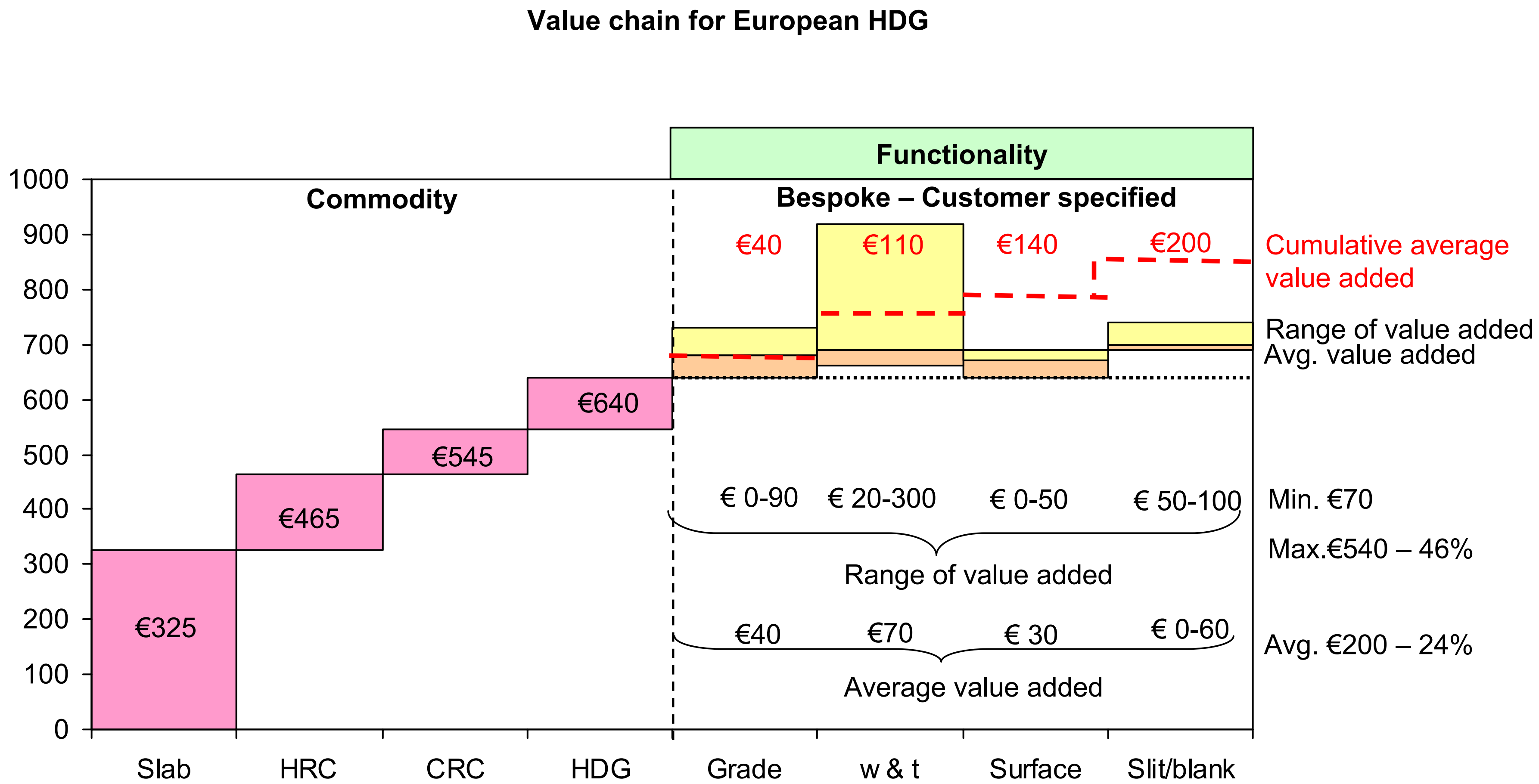
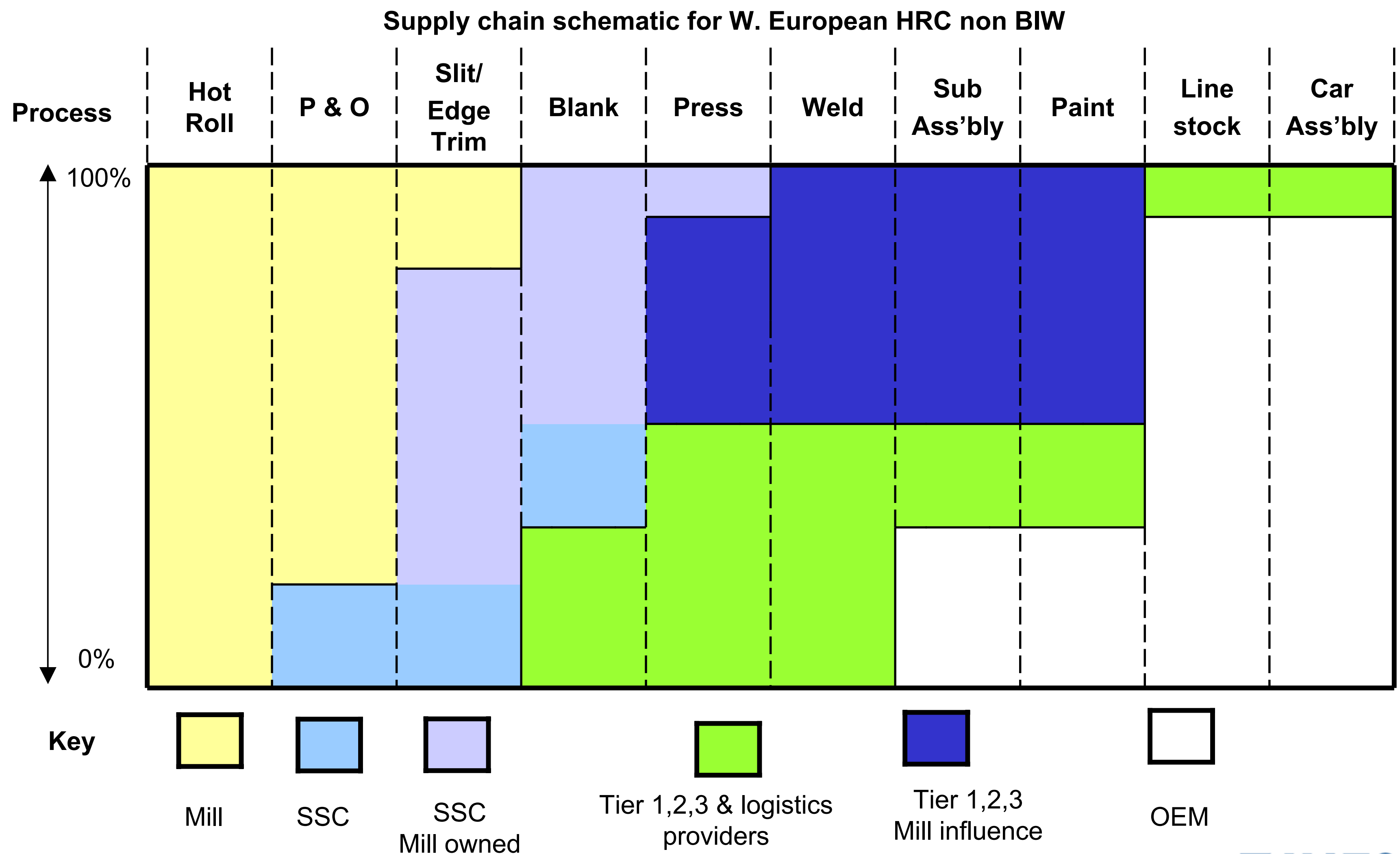
Even within commodity products, the European market presents value adding opportunities based on good commercial operating practice



Source: Companies and Hatch Beddows

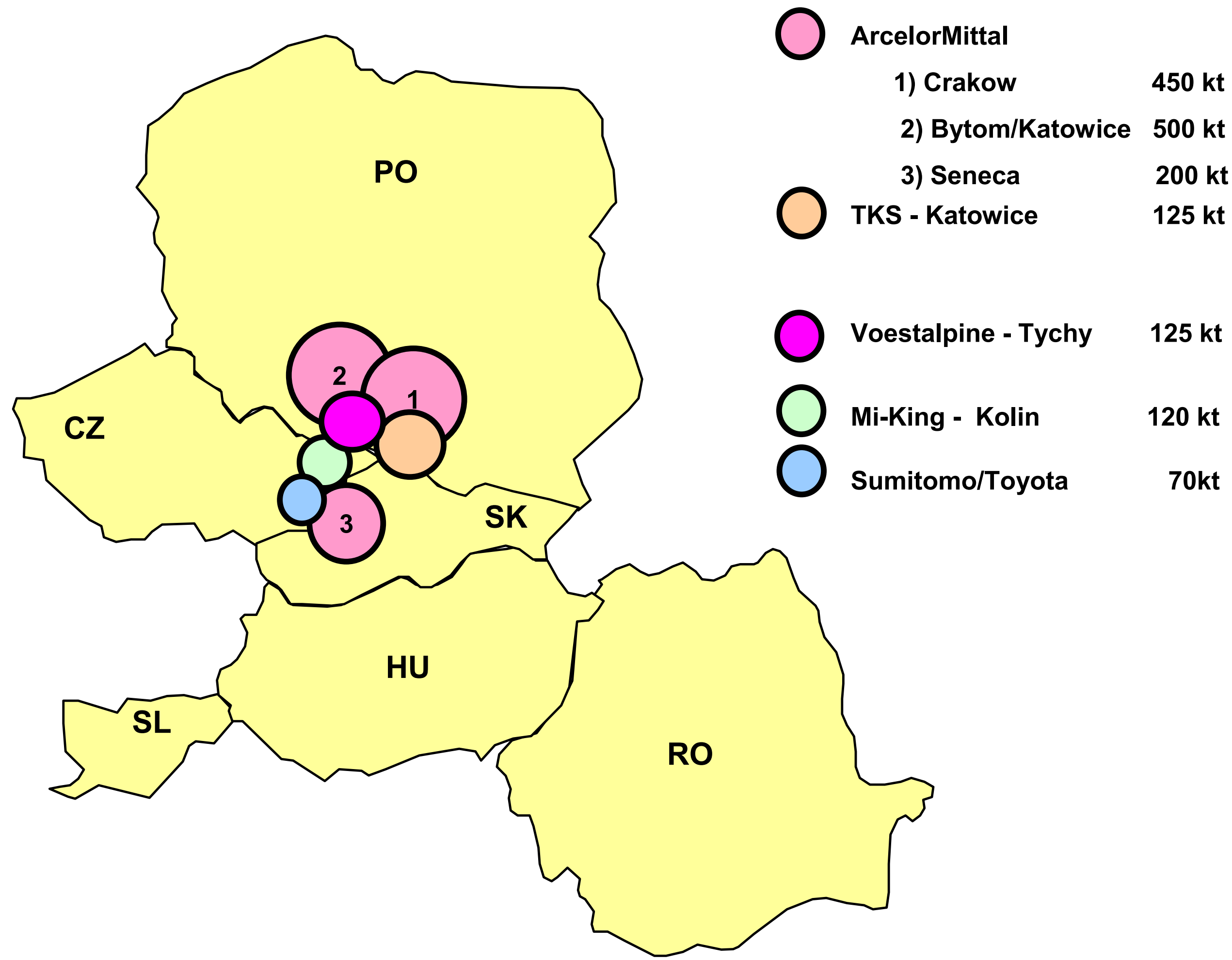
Europe also operates within very sophisticated supply chains that tend to specify European steel and its associated services



Source: Hatch Beddows

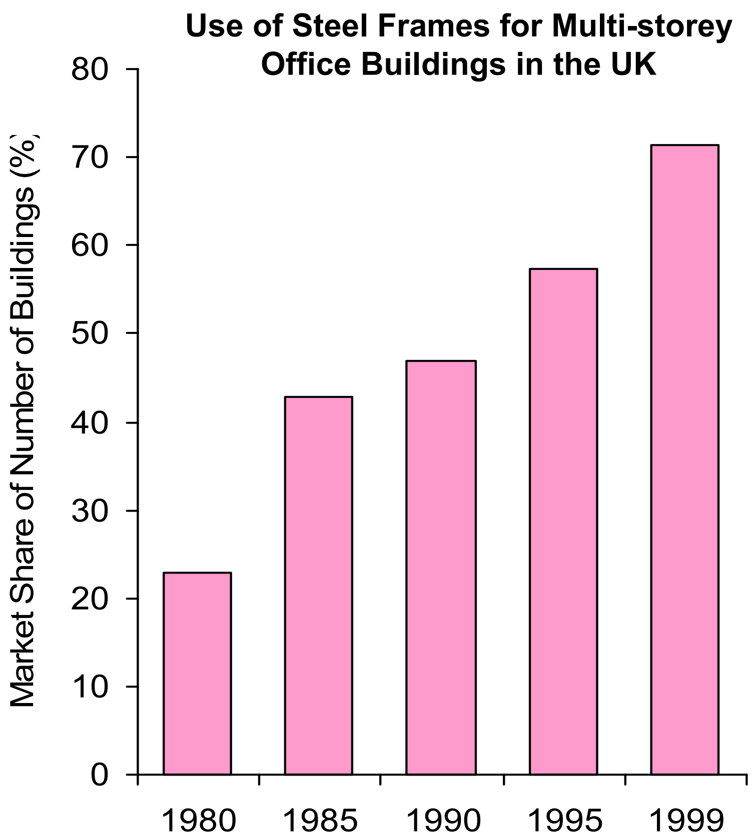
Perhaps the last remaining strategic difference between the W. and Central European steel industries is being closed with the creation of a dedicated SSC sector to serve the clustered transplants with steel from W and C. mills

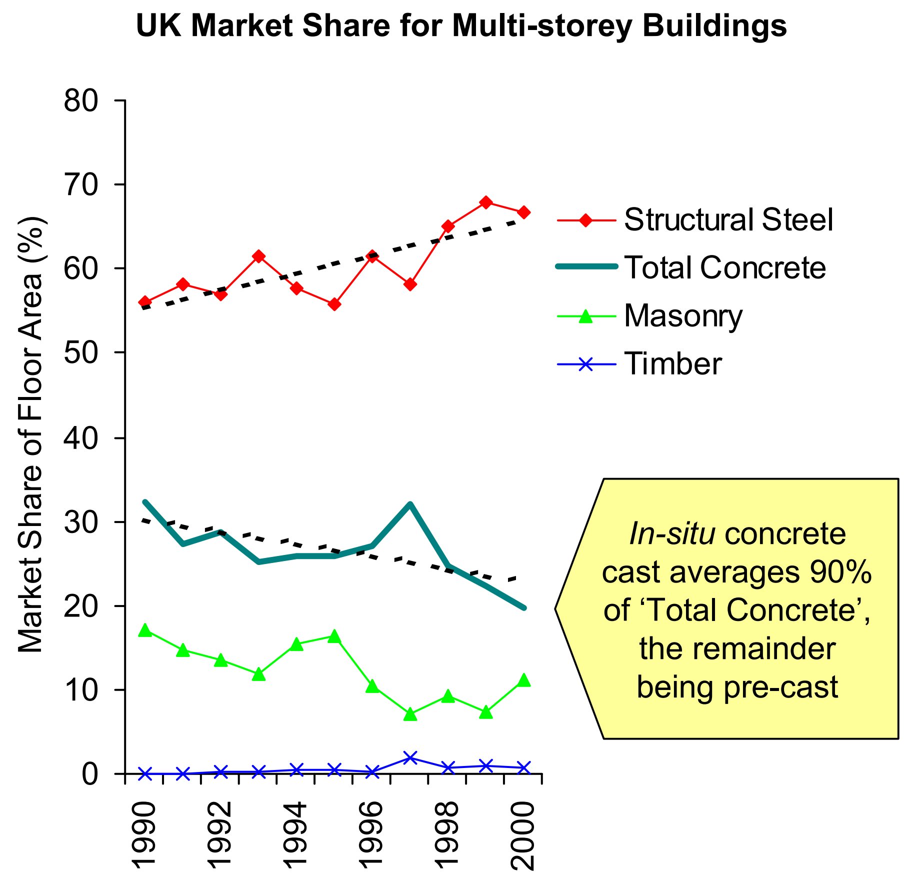
Location of Central European SSCs



Source: MB, Companies and Hatch Beddows

Working with the supply chain makes all the difference - a UK marketing initiative across the construction supply chain by BS/Corus markedly displaced reinforced concrete as the preferred material in commercial buildings





Source: Corus, Construction Markets and Hatch Beddows

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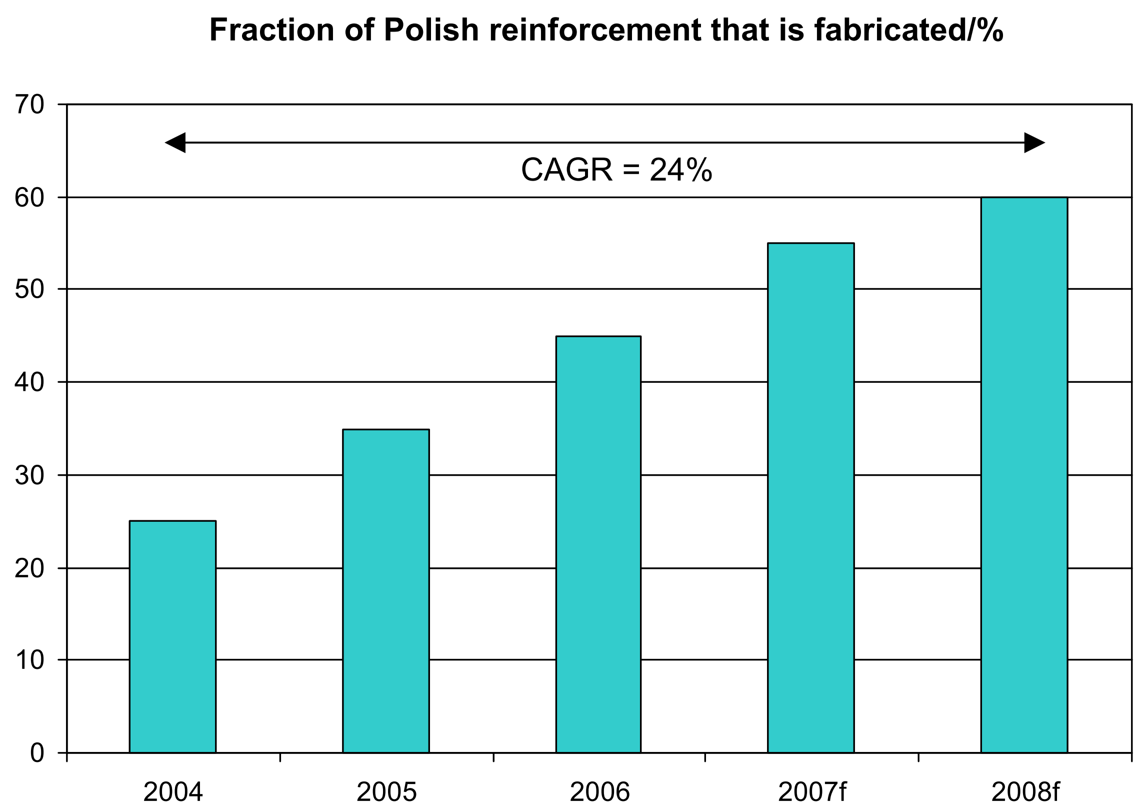
Likewise, the fraction of Polish reinforcement that is fabricated, rather than consumed *in-situ* is fast growing towards Western norms under the tutelage of market leaders like CMCZ and CELSA



- Current typical reinforcement fabricated fractions in mature economies such as Spain and UK are ~ 70%
- More sophisticated and efficient construction methods demand:-
  - more non-standard elements and
  - lower concrete cover, hence more rebar fabrication

Source: Hatch Beddows

In summary

- The steel industry is no longer Atlantic Basin based, it is Asian in nature, where most growth is anticipated
- Trade in steel – inter and intra regional - continues to grow and steel can find a home anywhere in the world far easier than ever before
- A new global cost base has created scope for massive EBITDA variation
- All European flat steel markets, no matter how sophisticated, now face evermore market 3rd country penetration
- How can Europe protect its markets?
  - Maintain leadership in steel functionality
  - Maintain leadership in service provision
  - Maintain leadership in commercial marketing
  - Maintain support for established and sophisticated supply chains

QUESTIONS

Thank you

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