

Metal Bulletin

Global and European steel market supply, demand and trade

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Mike Walsh, Director, London

Hatch Beddows



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- US\$85 BN of projects now under management in 80 countries

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- Quality
- Innovation
- Sustainable development
- Effective risk management

We deliver unprecedented and sustained results for our clients

Hatch Beddows is the leading strategy consulting service specialising in the global steel and related industries

- Hatch Beddows has unrivalled experience in the global iron, steel and related industries. We combine creativity, intellectual rigour and in-depth industry knowledge supported by Hatch's global reach and resources – 8100 high skilled people in 80 countries worldwide
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 - Corporate development and restructuring
 - Competitive analysis and marketplace positioning
 - New product and market development
 - Investment analysis
 - Market analysis
 - Business planning

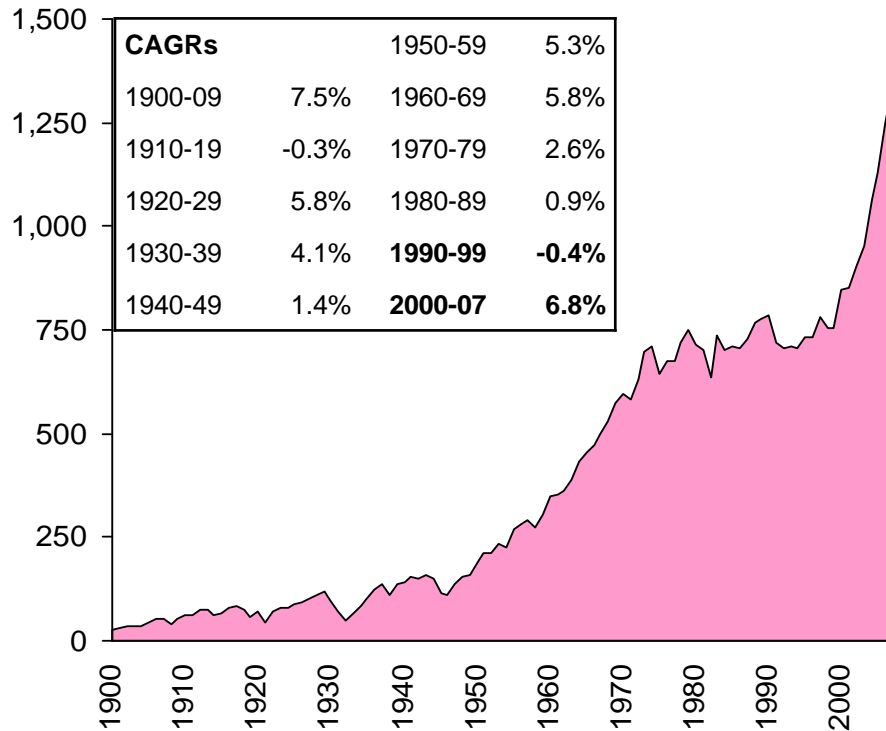
Hatch Beddows brings together a unique combination of commercial and technical knowledge and expertise to provide unparalleled benefits for its clients

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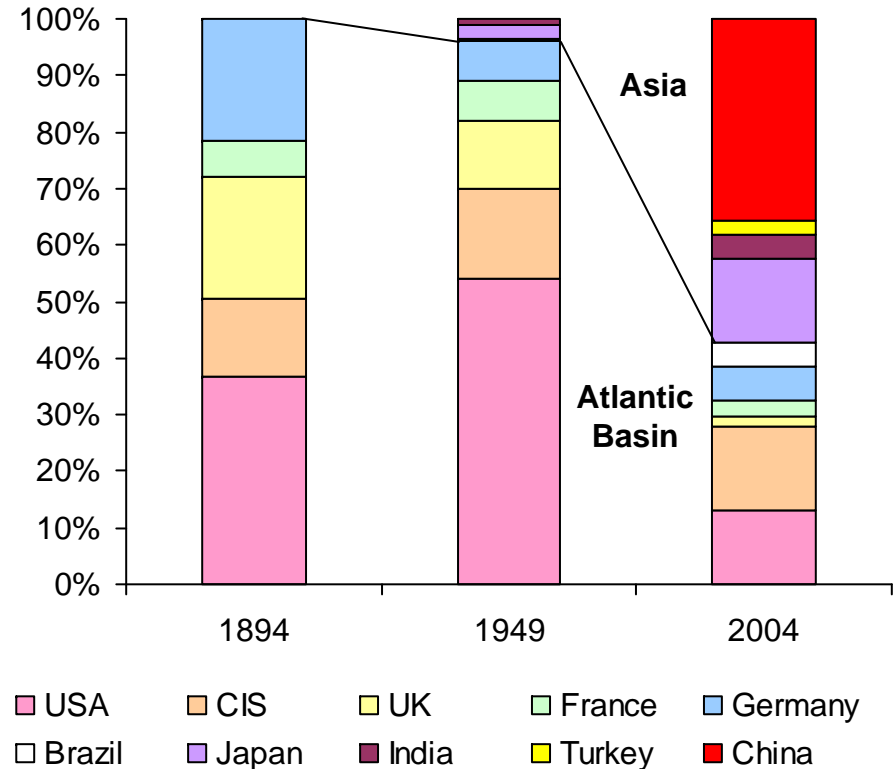
- **Global steel market**
- Global trade
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Growth in global steel production is back to normal but the locations for production are changing massively – steel is now an Asian business

Global steel production and growth rates

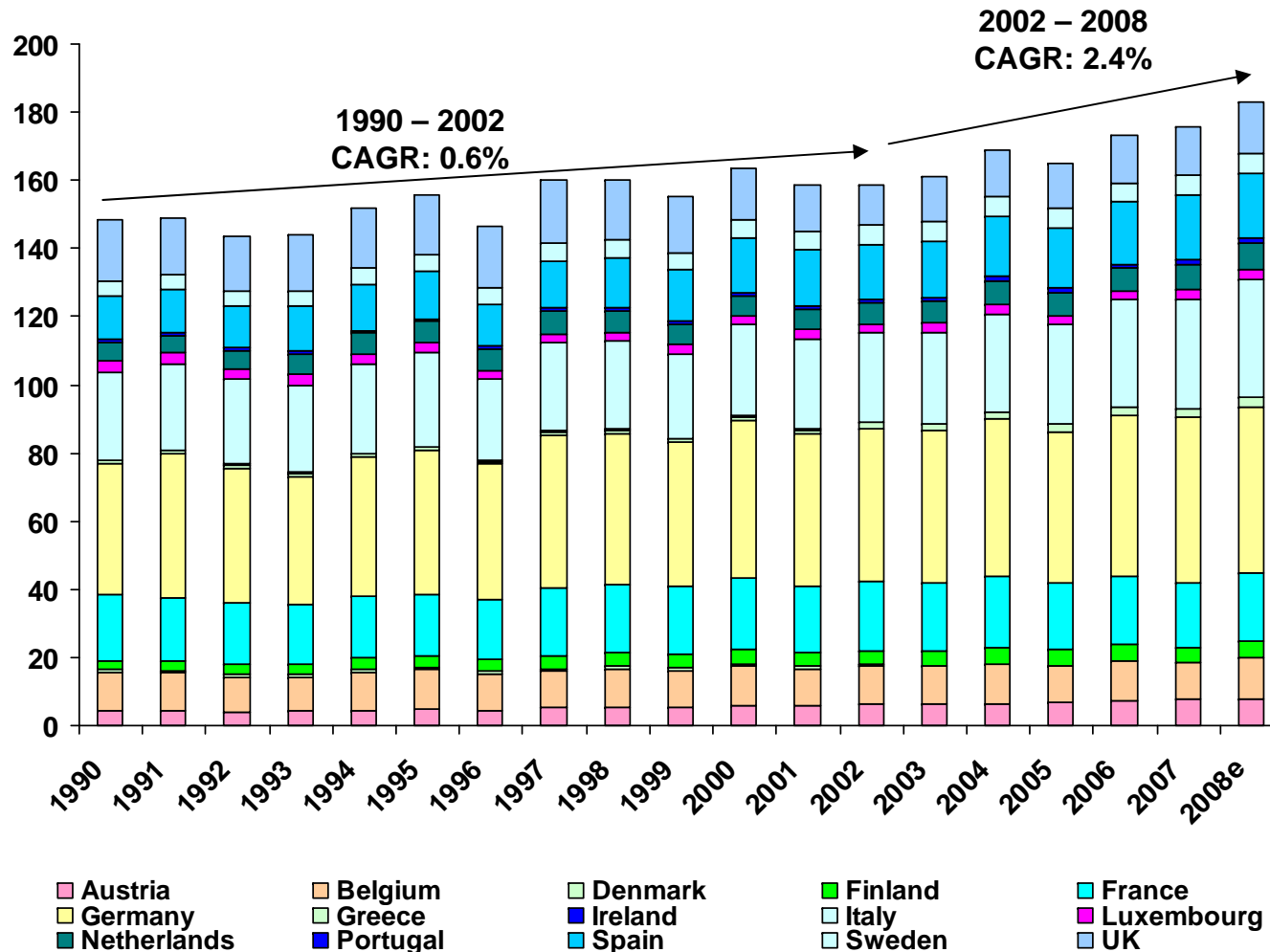


Steel production by region

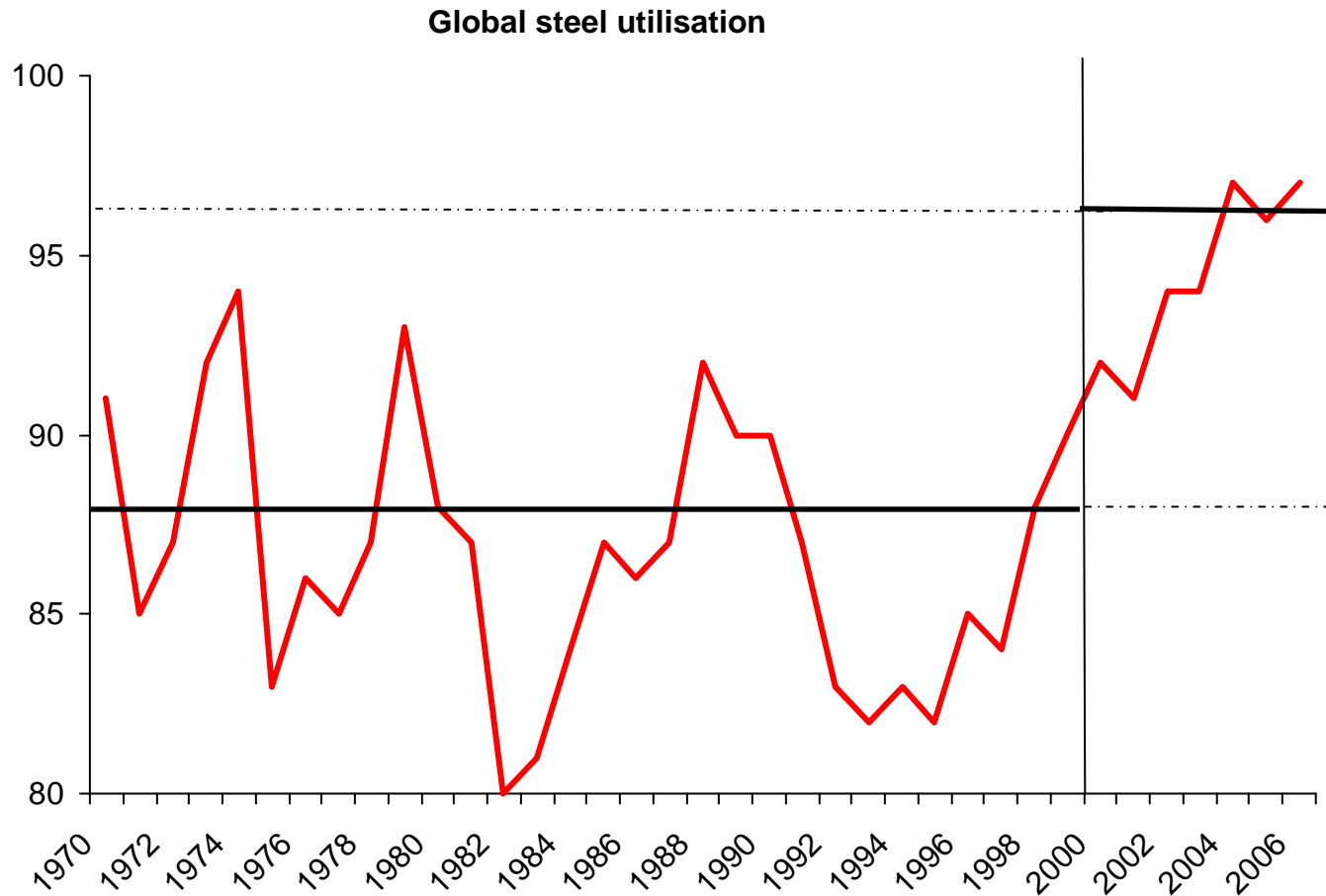


Even West European production growth has been four times higher in the last five years than the previous decade

Crude steel production in West Europe (Mt)



It is therefore no surprise that steel production utilisation is now higher than 95%



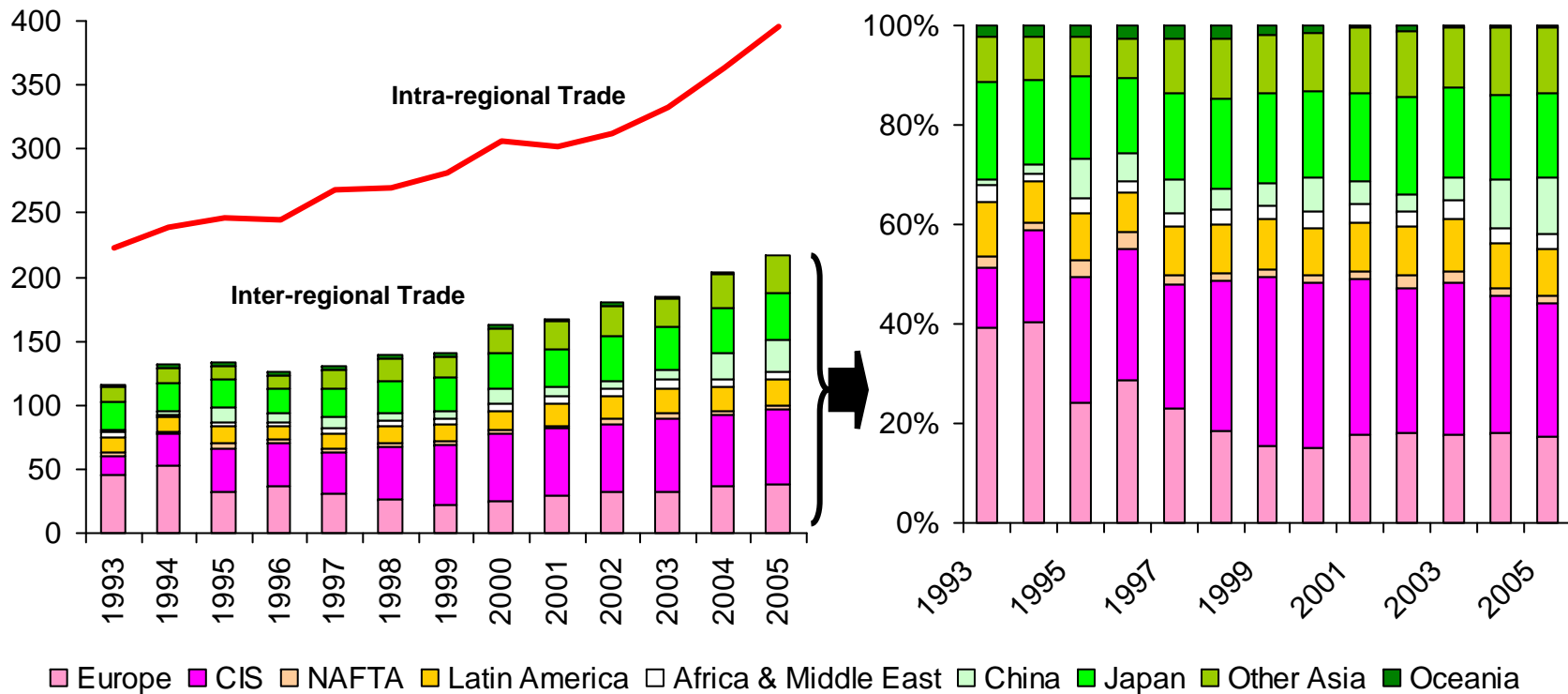
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GLOBAL AND EUROPEAN STEEL MARKET SUPPLY, DEMAND AND TRADE - GLOBAL TRADE

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

Inter- and extra regional steel trade (exports)



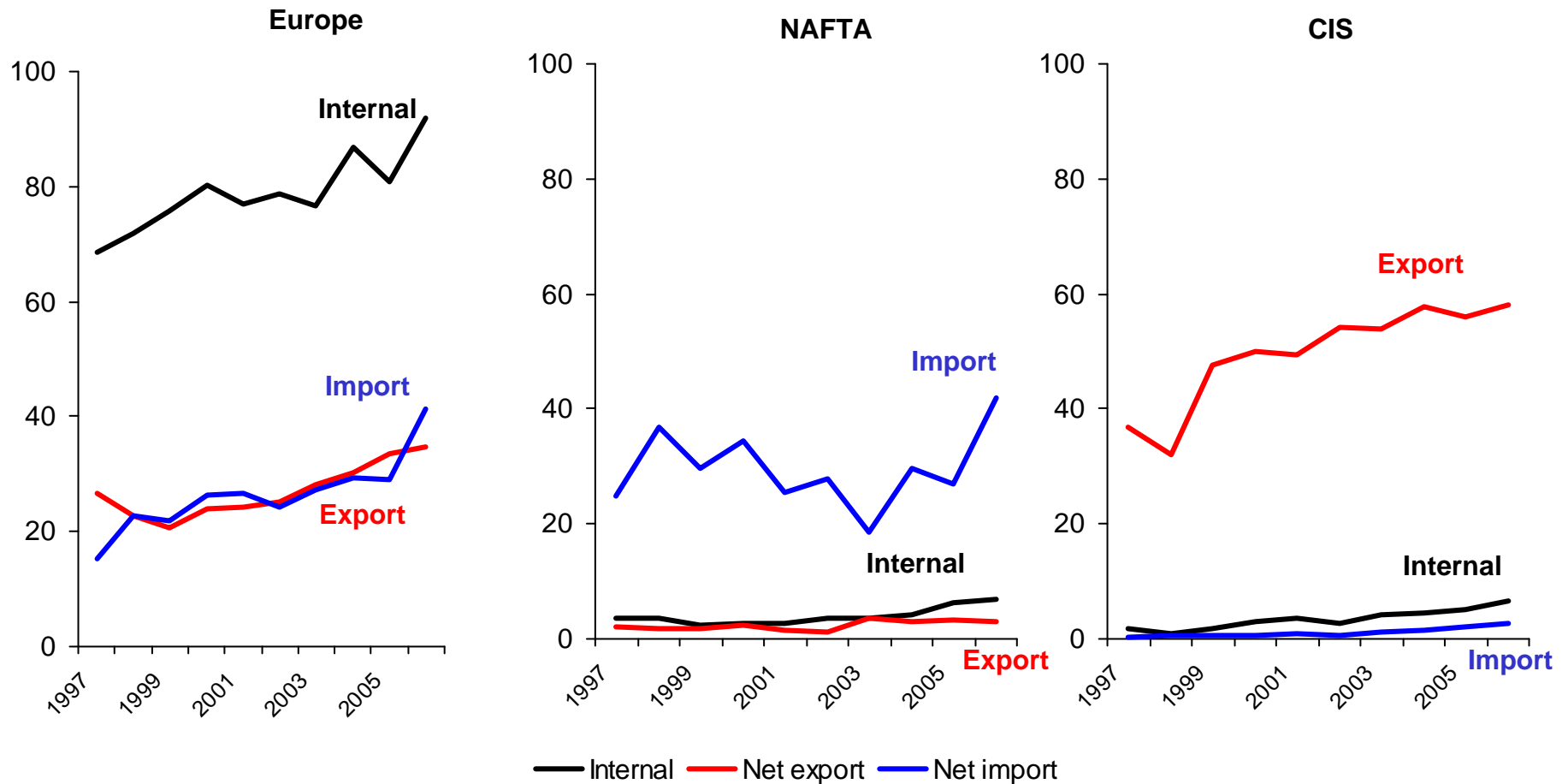
Note: Trade covers the IISI broad definition of steel products and covers exports only (imports theoretically match)

Source: IISI, ISSB and Hatch Beddows

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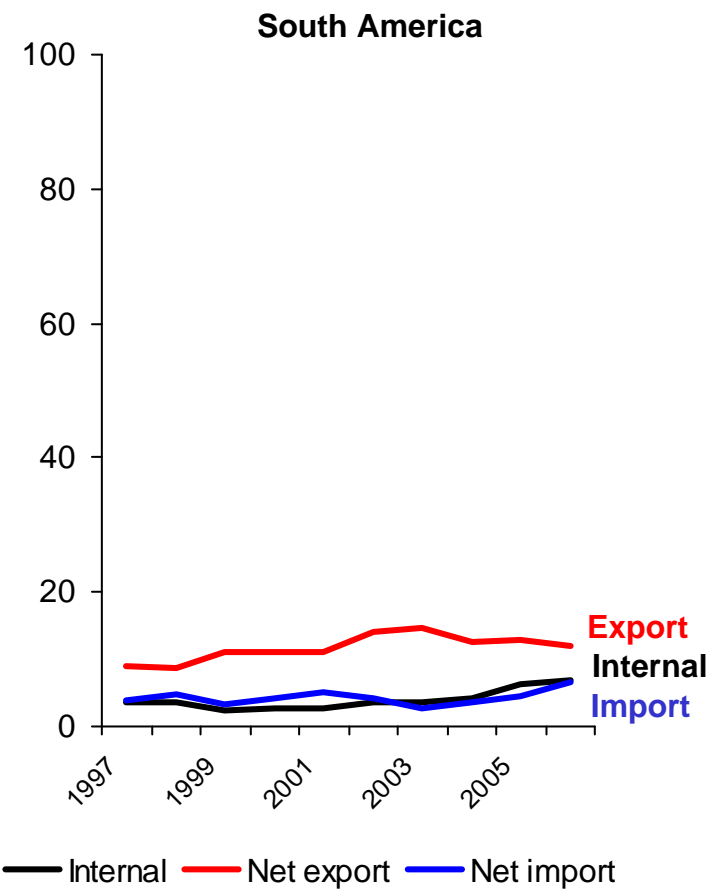
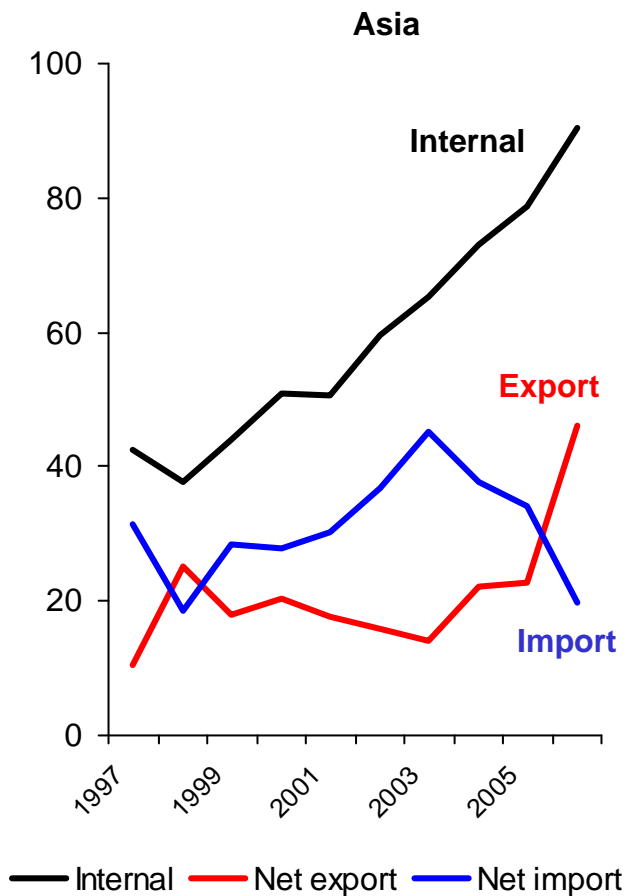
Europe is now a net importer of steel products although internal trade continues to grow at a clip – NAFTA and CIS remain fundamentally structural importers and exporters

Regional internal trade, net exports and net imports/Mt



Asia, including China, is by far the most complex steel market though South America remains the same as ever

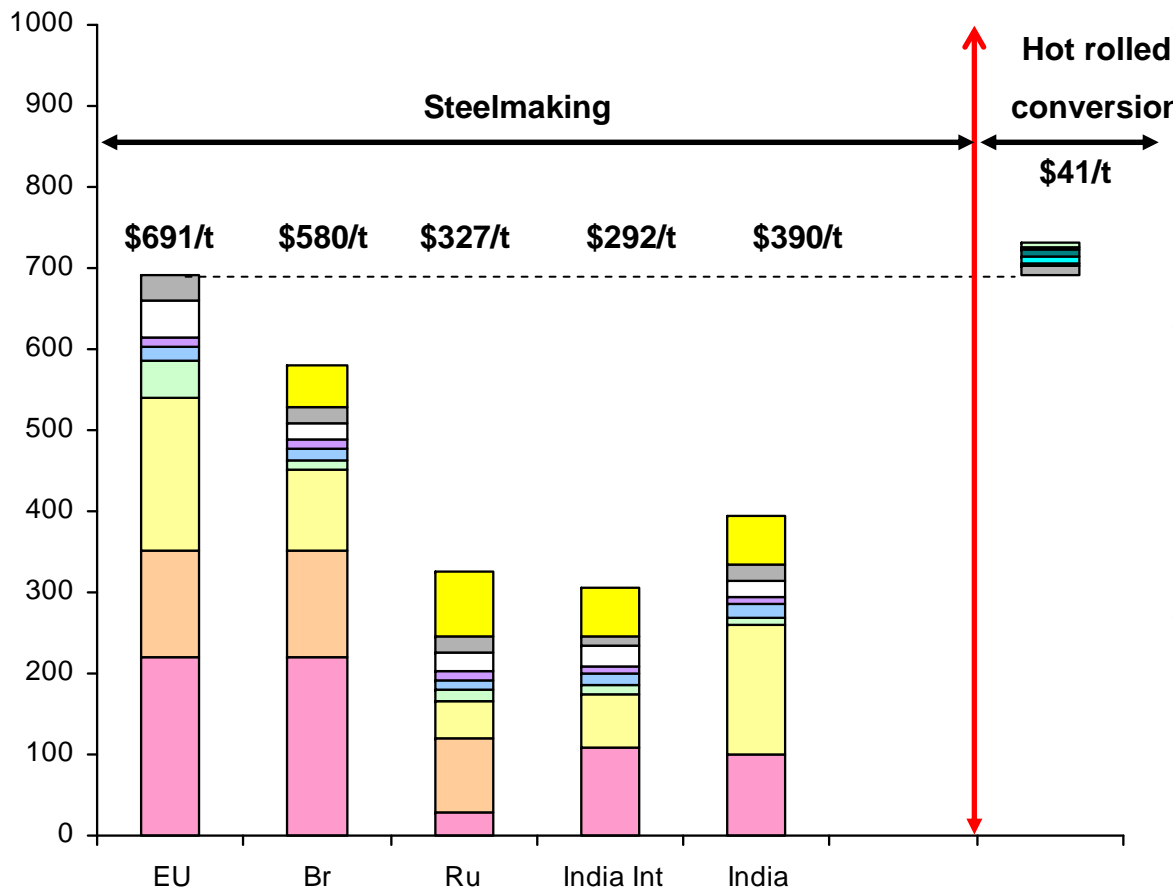
Internal, net exports and net import trade/Mt



Trade flow is down to cost at the steelmaking level i.e raw materials and regional price arbitrage

Landed slab cash costs 2009 and hot rolling conversion (\$/t)

Strategic advantages:-



Brazil

- Iron ore: FOB market prices (\$130/t), only CSN has significant iron ore rights
- Coal/coke: No different than W. Europe (\$300/t)
- Freight costs at \$50/t

Russia

- Iron ore: Almost total self sufficiency on integrated Russian resources – ROM costs plus transport cost which can be a factor
- Coal: As above though distance plays greater part

India

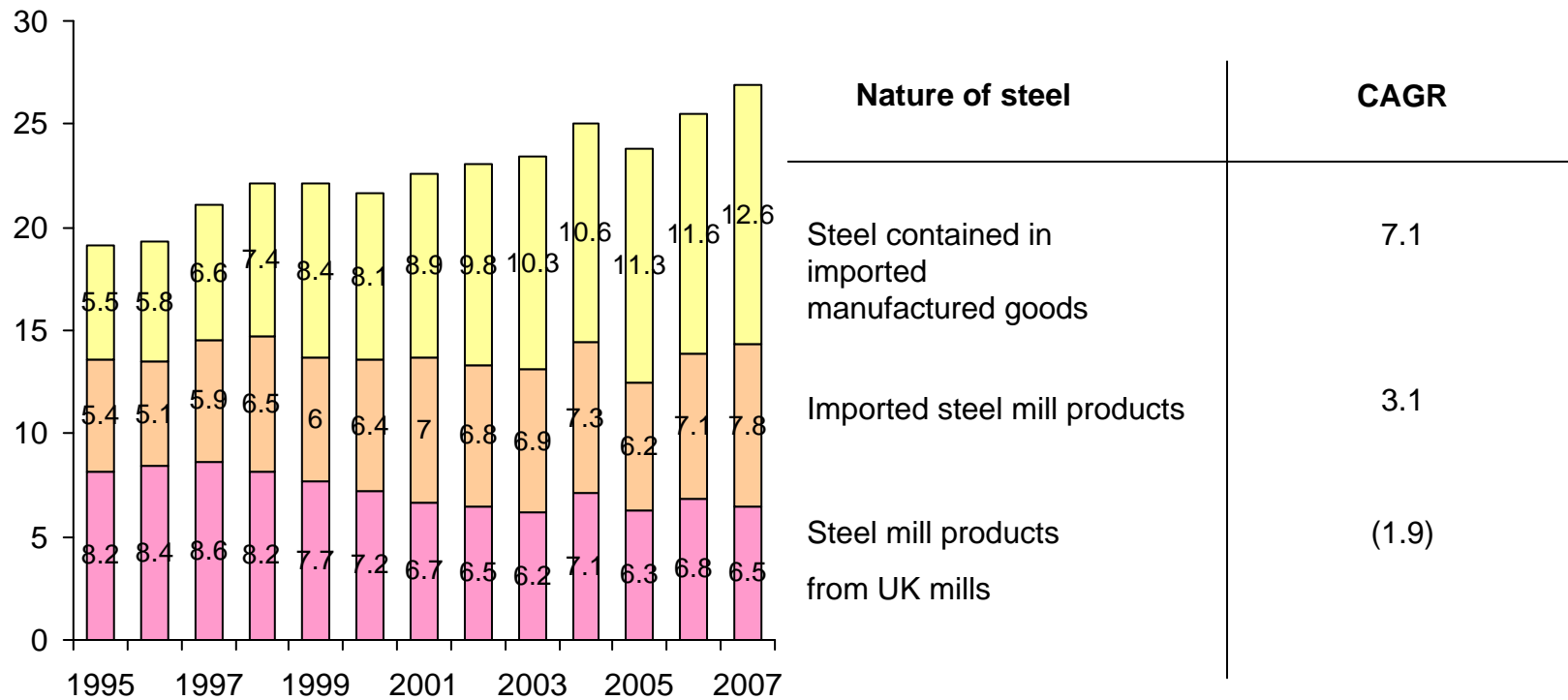
- Iron ore: ownership only currently exists with SAIL and Tata. Others purchase at FOB market price, though acquisition from state may become option in future
- Coal/coke: Most use 50:50 Indian supply at FOB market price and CFR market price as per W. Europe

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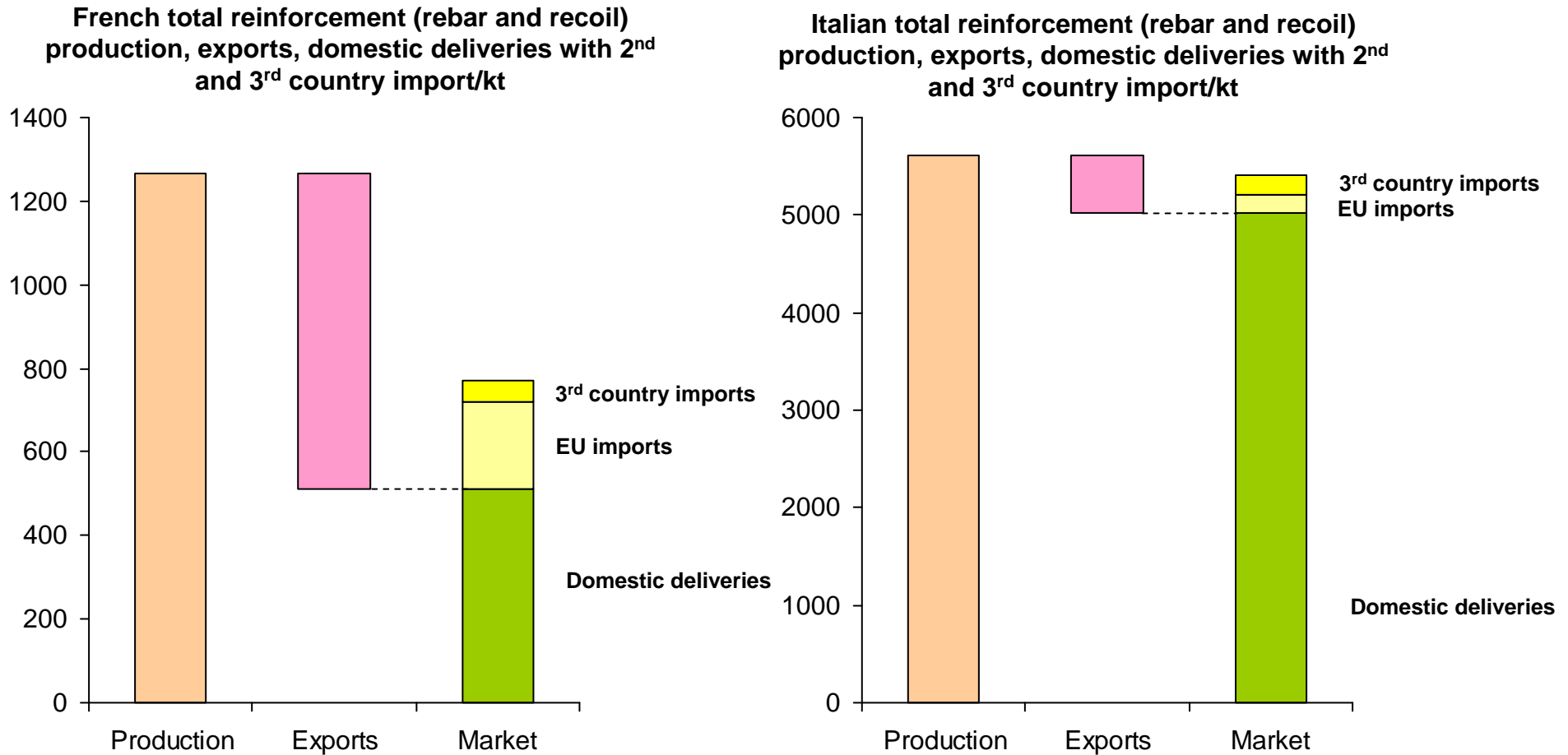
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Europe is still a region of nation states that can each behave in very different ways - an example - the UK is a service industry leader and it shows!

TOTAL steel market in the UK/Mt



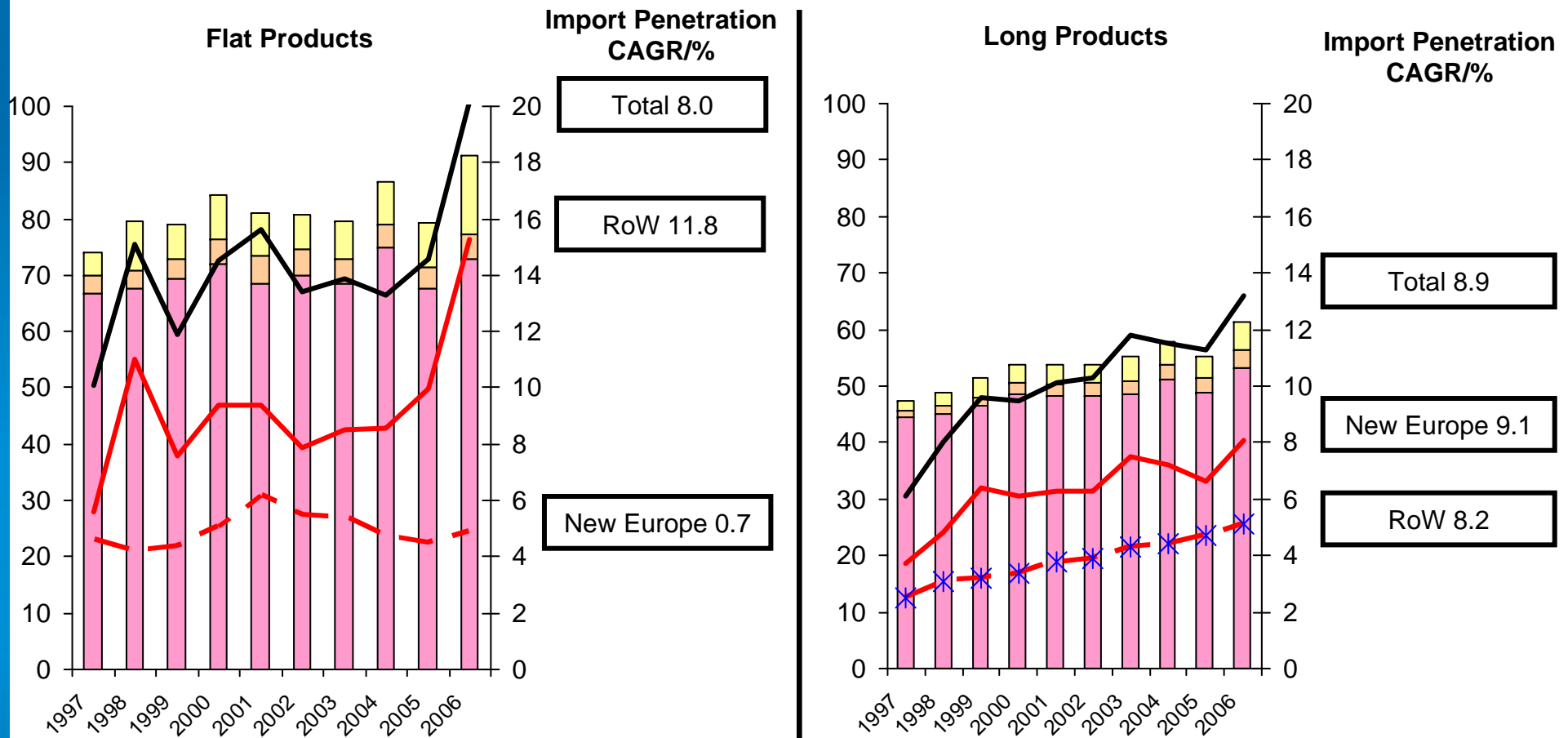
Another example of the variety of European national markets, the French and Italian rebar and recoil markets are structured completely differently – in fact the Italian reinforcement market is almost impenetrable to imports



Source: Eurofer, ISSB and Hatch Beddows analysis

Nonetheless West Europe and East Europe are very much a single market with respect to flat products and it is the RoW that continues to grow its influence – with respect to long products the CEE and RoW import scenario is more balanced

EU 15 Domestic Deliveries, New Europe and RoW Imports and Penetrations

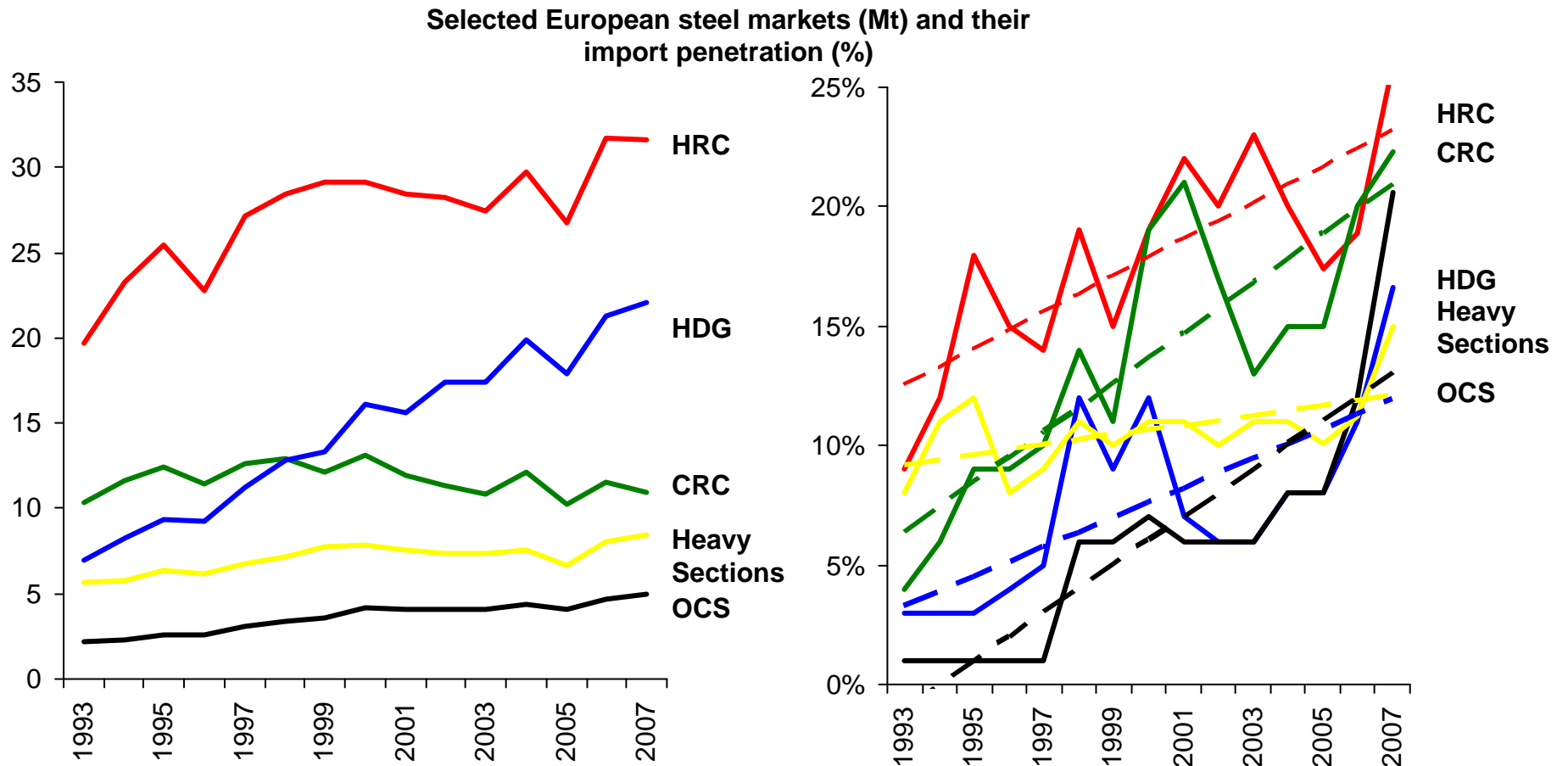


Domestic Deliveries New Europe RoW

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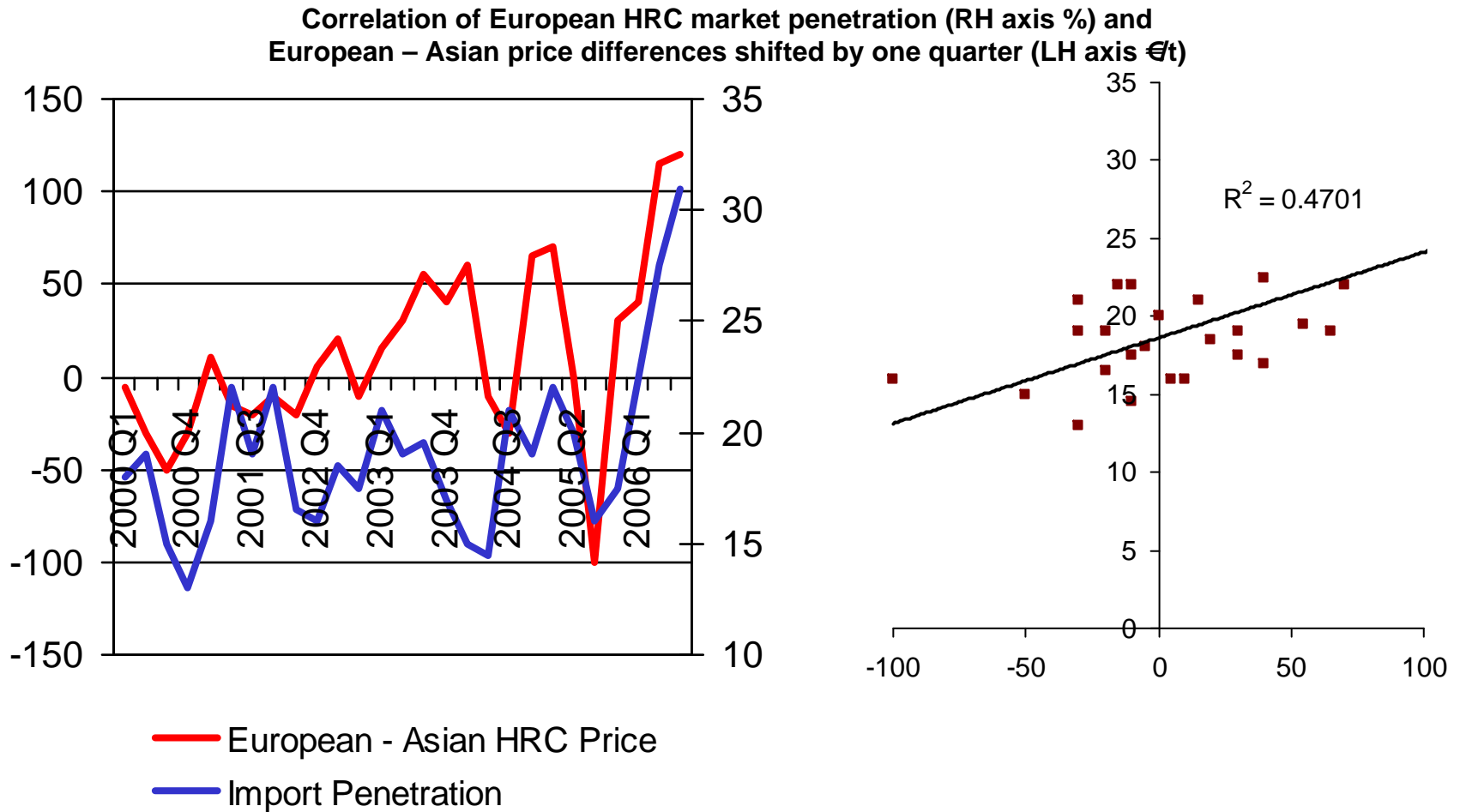
Source: ISSB and Hatch Beddows

All European flat steel markets, no matter how sophisticated, now face evermore market 3rd country penetration – is there a limit?

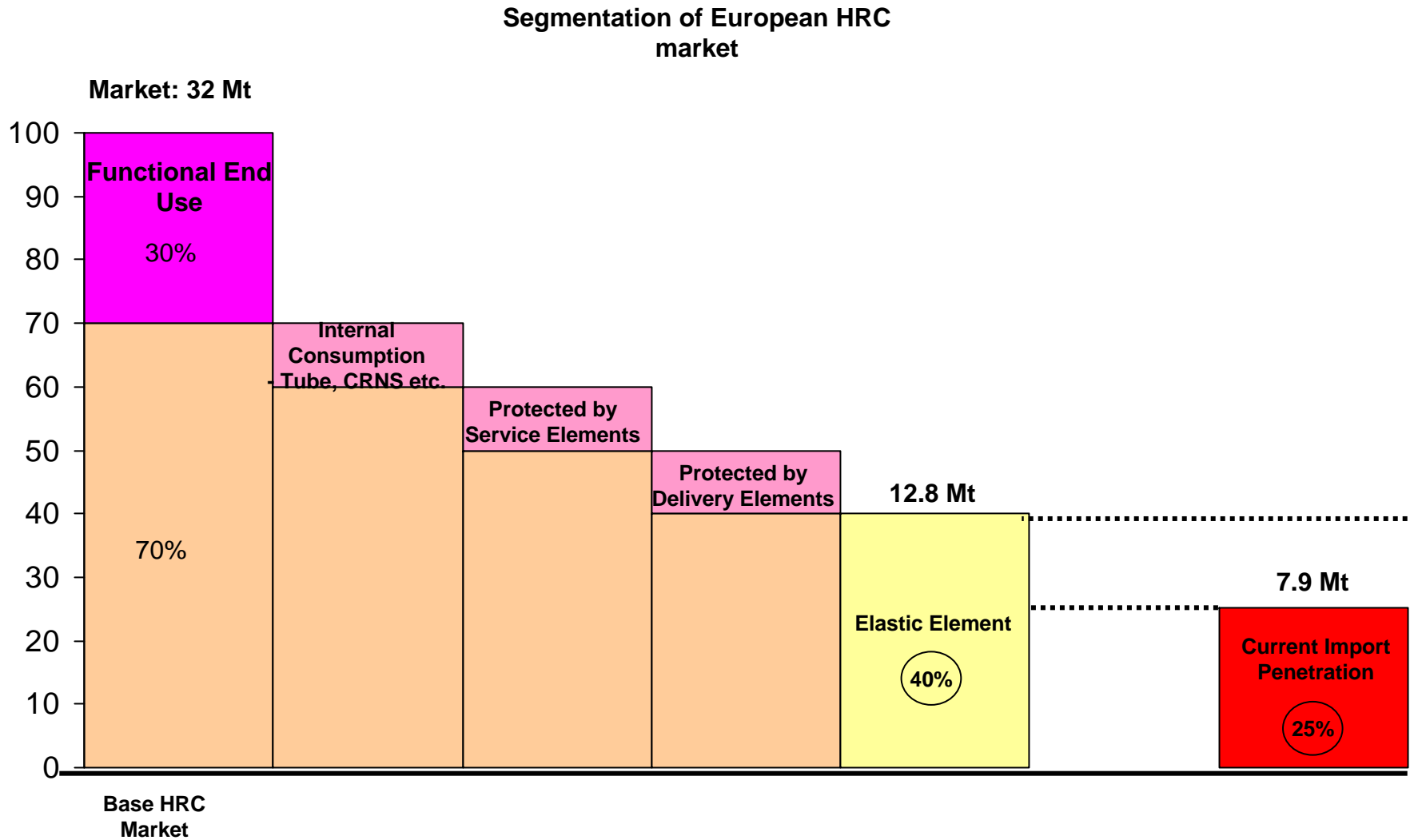


GLOBAL AND EUROPEAN STEEL MARKET SUPPLY, DEMAND AND TRADE – ESTABLISHED EUROPE

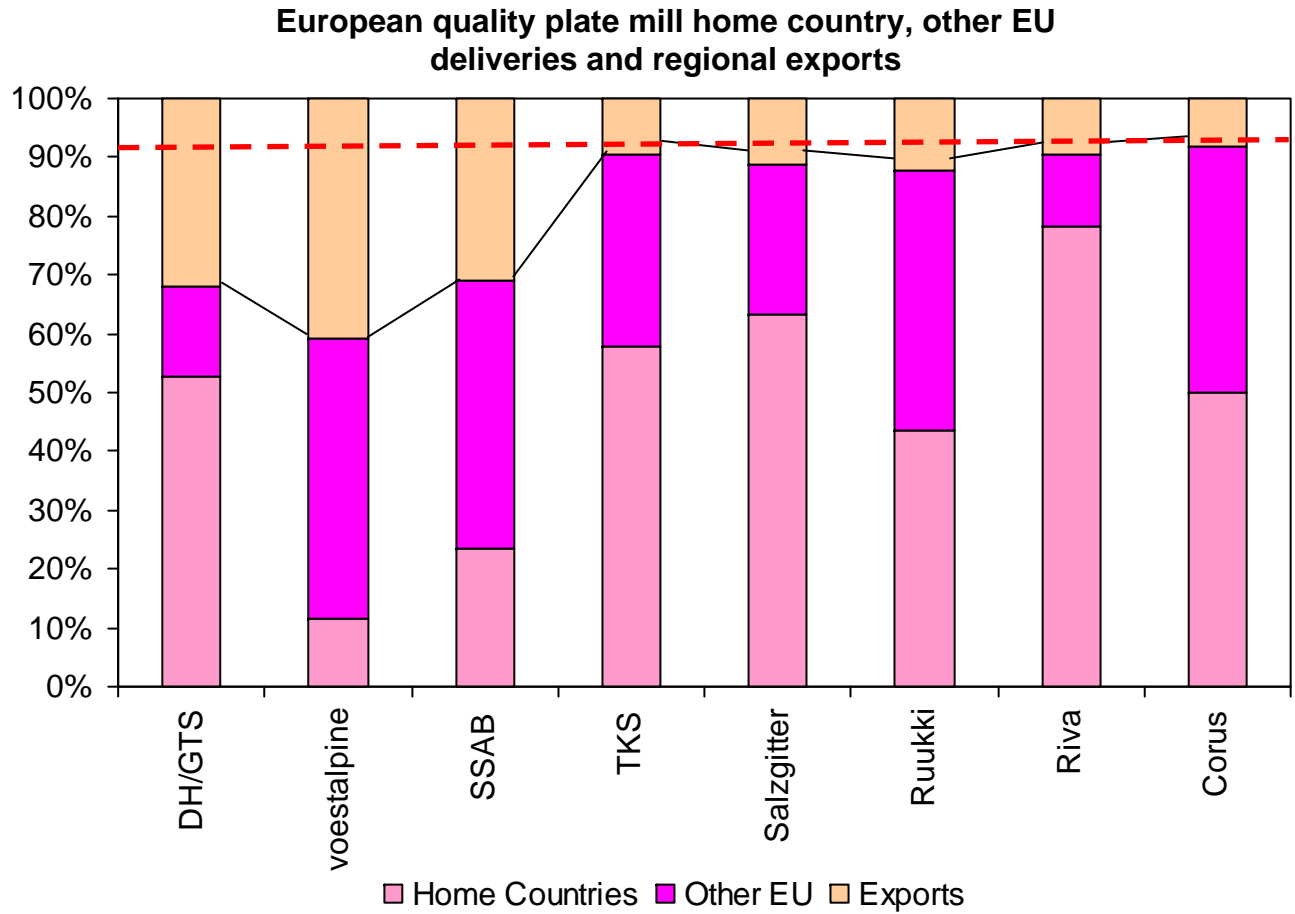
Regional price differences based on each regional supply – demand balance are correlated to import penetration – a €50 price differential can drive a 5% change in import penetration:- €50 is very significant for 2 different reasons!!



The significant non commodity or functional steel fraction coupled to enhanced service and supply chain provides protection to imports



European commodity plate producers deliver 90% of their product to the local market, whereas the three quality European plate mills DH/GTS, voestalpine and SSAB all ship over 30% of their deliveries outside of W. Europe



* Note:- Home countries:- DH/GTS: France/Gemany, voestalpine: Germany/Austria, SSAB: Sweden, TKS/Salzgitter: Germany, Ruukki: Finland, Sweden and Denmark, Riva: Italy and Corus: UK

Source:- Eurofer and Hatch Beddows

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Eastern Europe is very complex – five markets – five countries with only their borders in common

Current Black Sea strip product mills



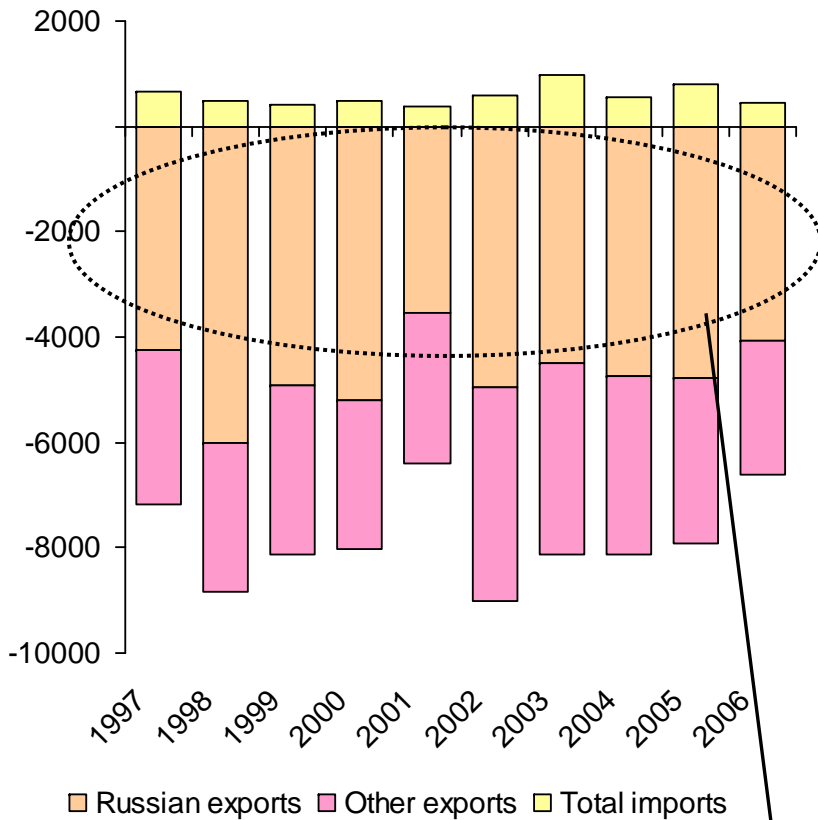
The total Black Sea strip products market is currently 26.7 Mt with Russia and Turkey accounting for over 80% - the total market has grown at a CAGR of 5.85% over the last 10 years

Black Sea Market by Selected Product (Mt) and 10 year CAGR (%)

Country	HRC		CRC		HDG		OCS		Total Market/Mt (Fraction/%)
	Market/Mt	CAGR/%	Market/Mt	CAGR/%	Market/Mt	CAGR/%	Market/Mt	CAGR/%	
Bulgaria	0.27	2.7	0.09	1.6	0.06	6.9	0.01	43.0	0.45 (1.67)
Romania	0.74	(3.5)	0.14	(5.9)	0.23	4.7	0.07	51.9	1.29 (4.84)
Turkey	4.55	7.6	1.32	0.6	1.21	18.22	0.11	26.5	7.30 (27.29)
Ukraine	2.08	(3.6)	0.49	(2.2)	0.32	15.8	0.12	42.4	3.05 (11.40)
Russia	7.97	6.55	3.15	16.14	1.99	9.95	0.87	57.0	14.65 (54.81)
Total	15.61	3.9	5.19	6.3	3.81	11.9	1.18	48.4	26.74 (100)

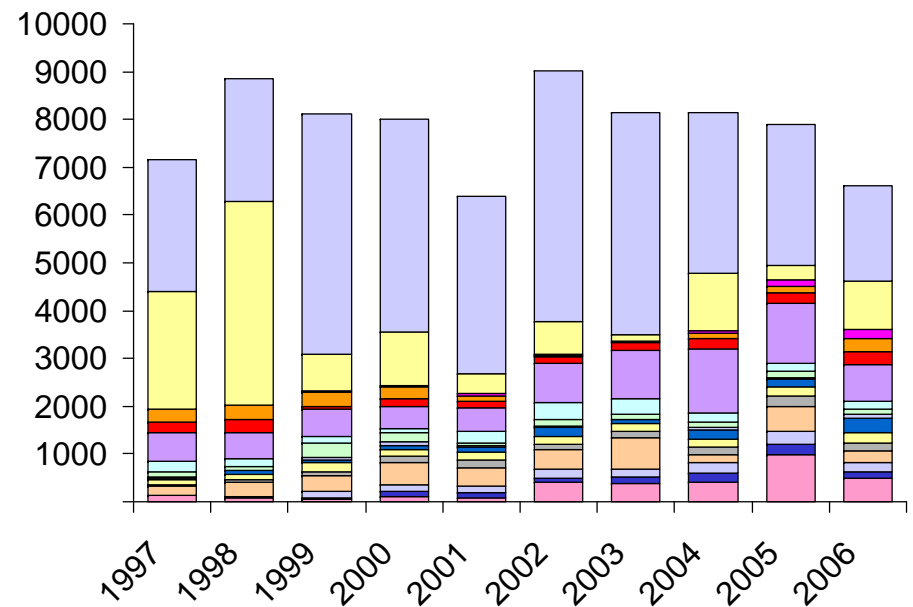
Steel supply is not an issue - NET trade for the five Black Sea countries shows the region to be a NET HRC exporter of over 6 Mt with Russia accounting for two thirds

Net HRC imports/exports for the five Black Sea countries (kt)



Russia dominates net exports from the region

Net HRC exports by destination for the five Black Sea countries (kt)

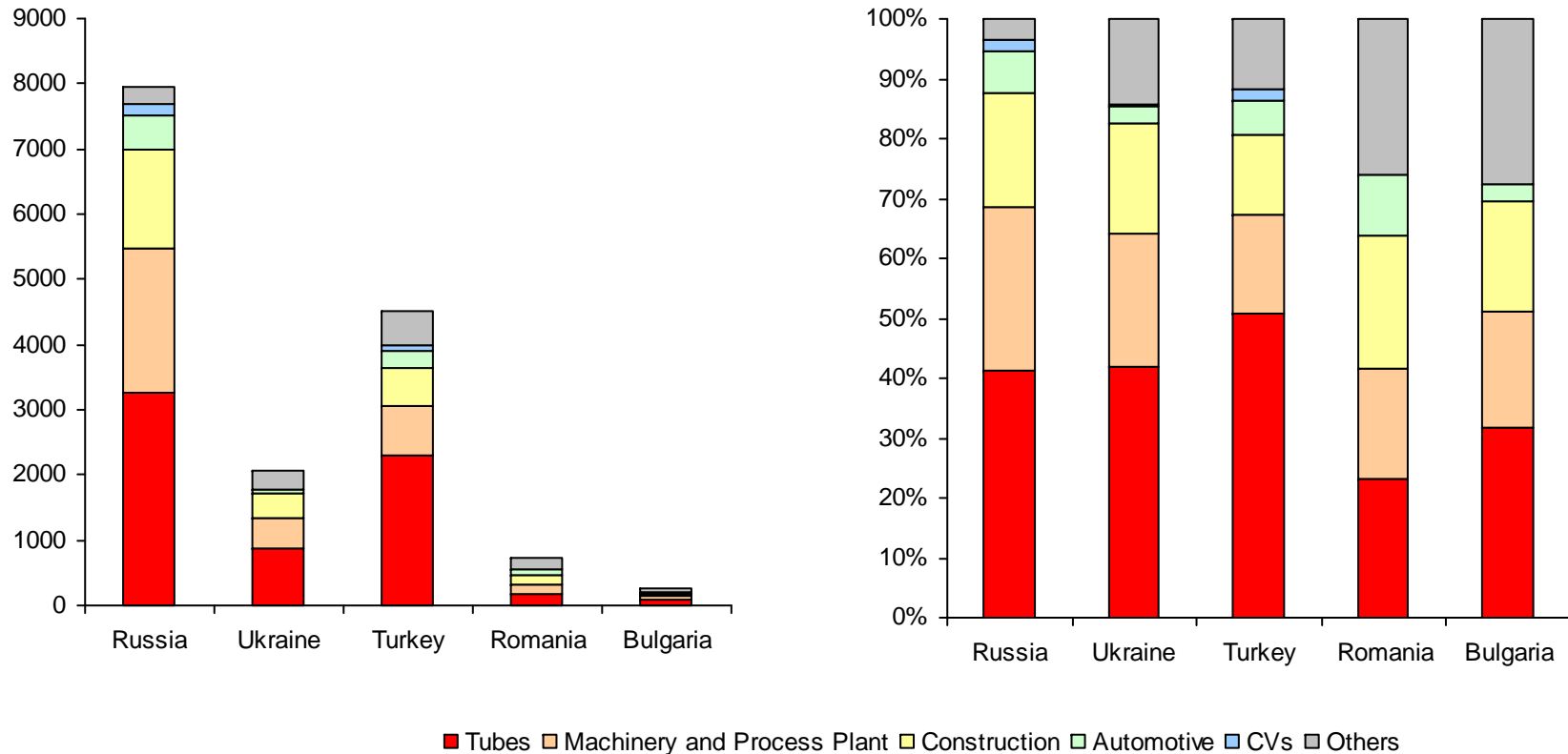


- INDIA
- PAKISTAN
- UTD ARAB EMIRATES
- IRAN
- SYRIA
- ISRAEL
- MOROCCO
- EGYPT
- SAUDI ARABIA
- SPAIN
- ITALY
- GREECE
- GERMANY
- POLAND
- U S A
- Others

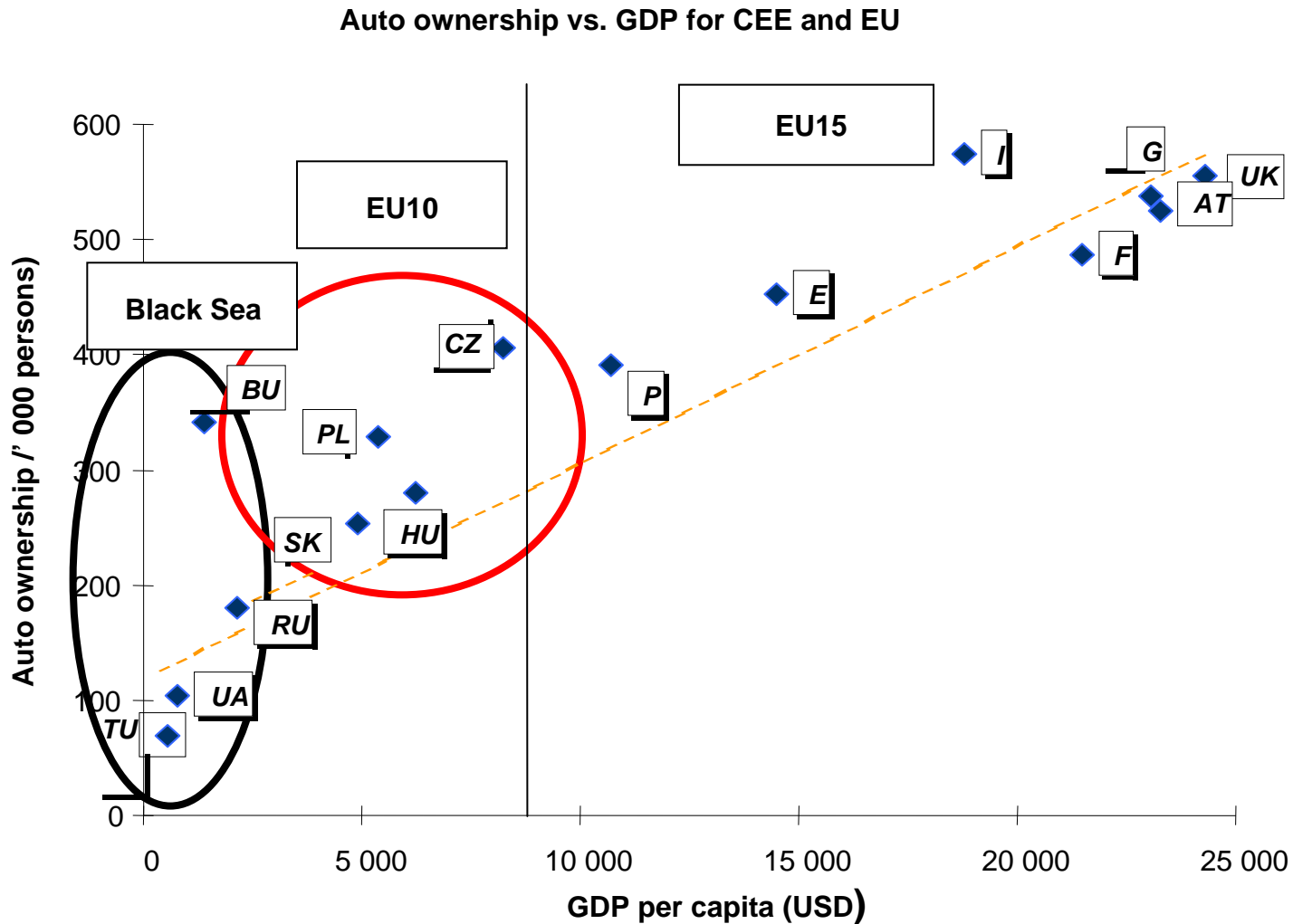
Source: ISSB, Hatch Beddows

The Black Sea has one particular sector anomaly – it is a global focus for tube production which is especially the case for Russia, Ukraine and Turkey

Black Sea sector consumption of HRC by country/kt



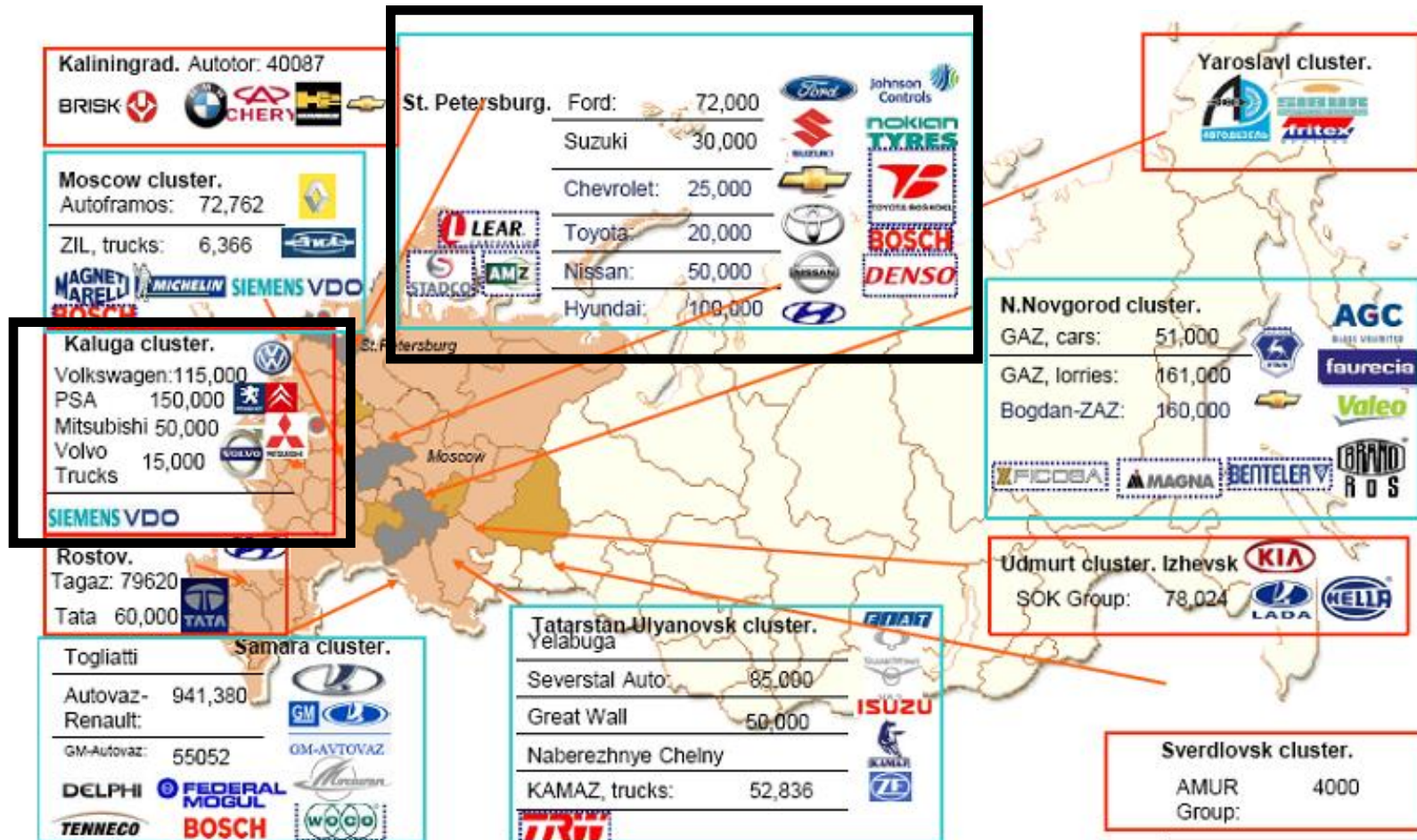
The desire for consumer goods is burning even brighter in the East and Western manufacturers are looking to profit



Source: EIU, AutoNews and Hatch Beddows

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Medium term Russian automotive growth is astonishing - 1.2 M units are expected to come on stream at the two Russian OEM clusters in St. Petersburg and Kaluga alone by 2012

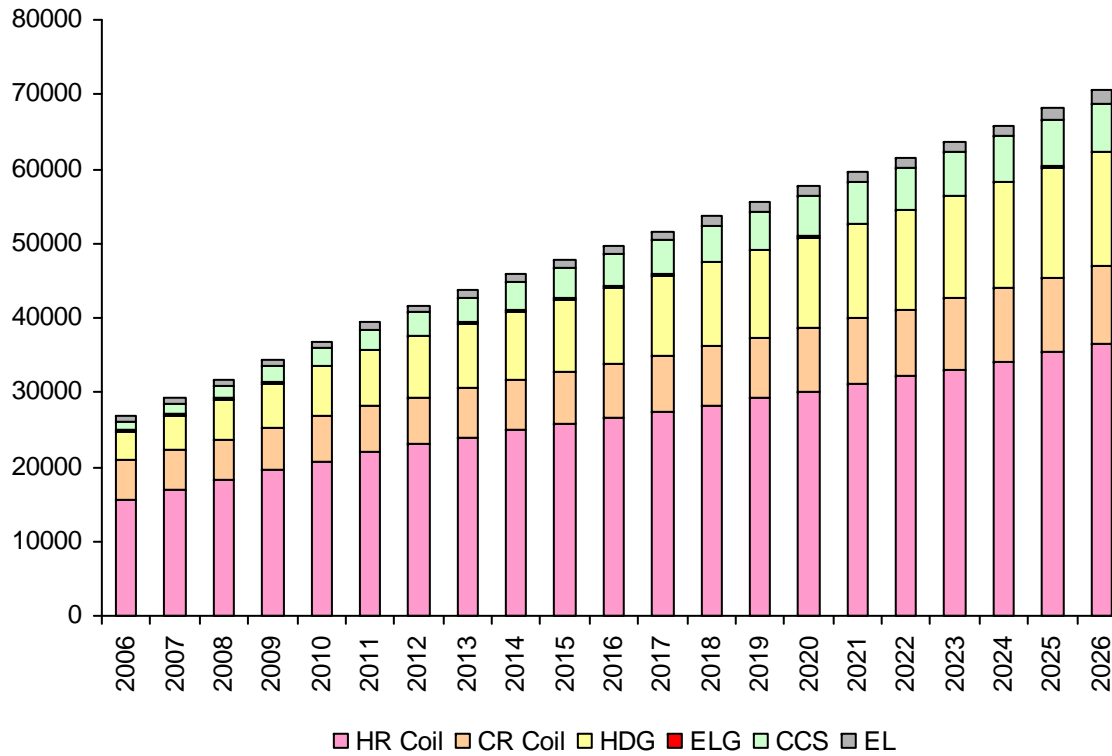


Consumption of Black Sea strip products is forecast to almost triple by 2026

Black Sea sector consumption forecast of total strip products/kt

Product Fraction 2006/%

- HRC: 58
- CRC: 20
- HDG: 14
- ELG: 1
- OCS: 4
- EL: 3



Product Fraction 2026/%

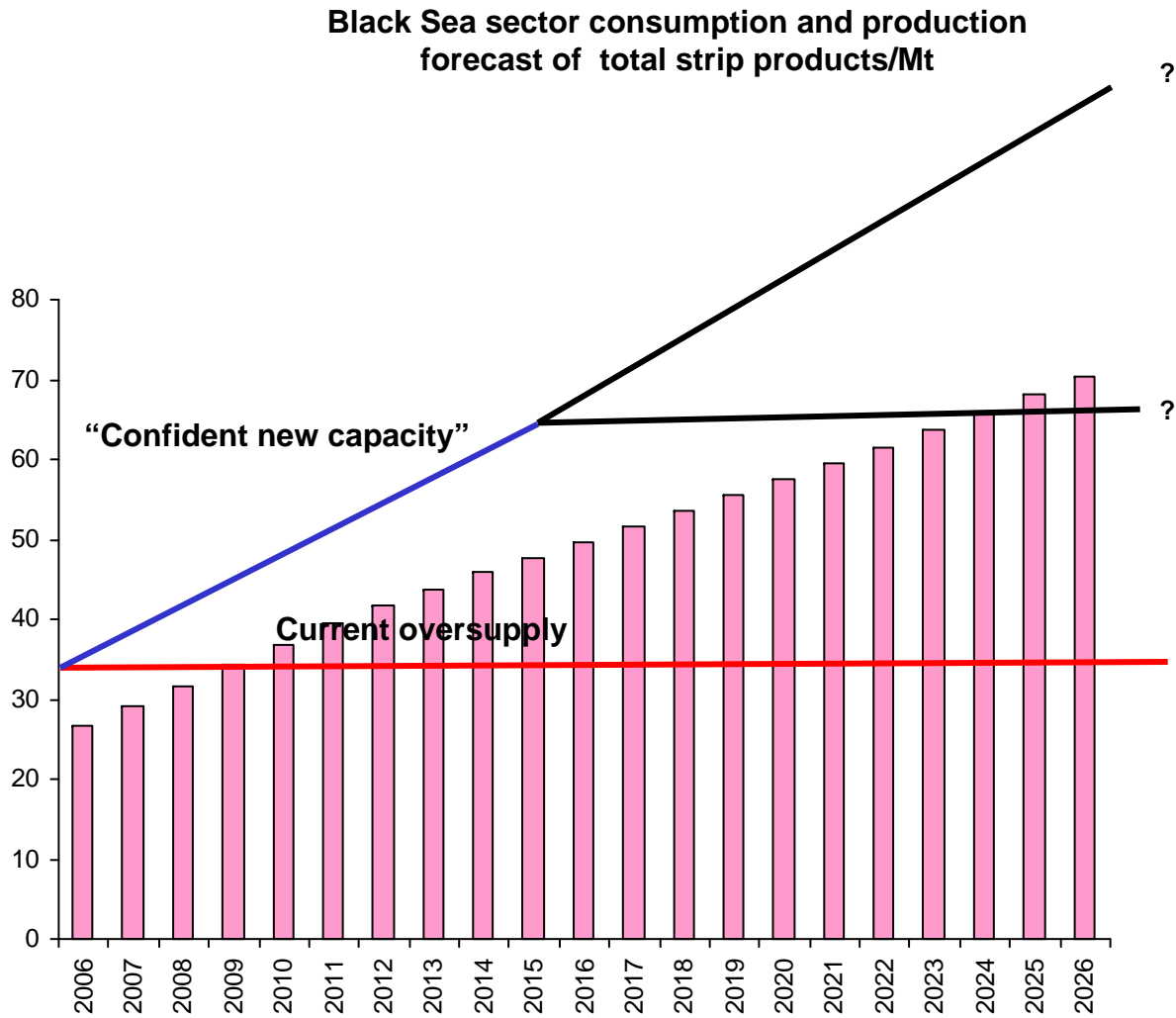
- HRC: 52
- CRC: 15
- HDG: 22
- ELG: 0
- OCS: 9
- EL: 2

In the next five years, the Black Sea region is expected to develop almost a further 30 Mt of HRC production

Additional production capacity in the Black Sea region till 2013

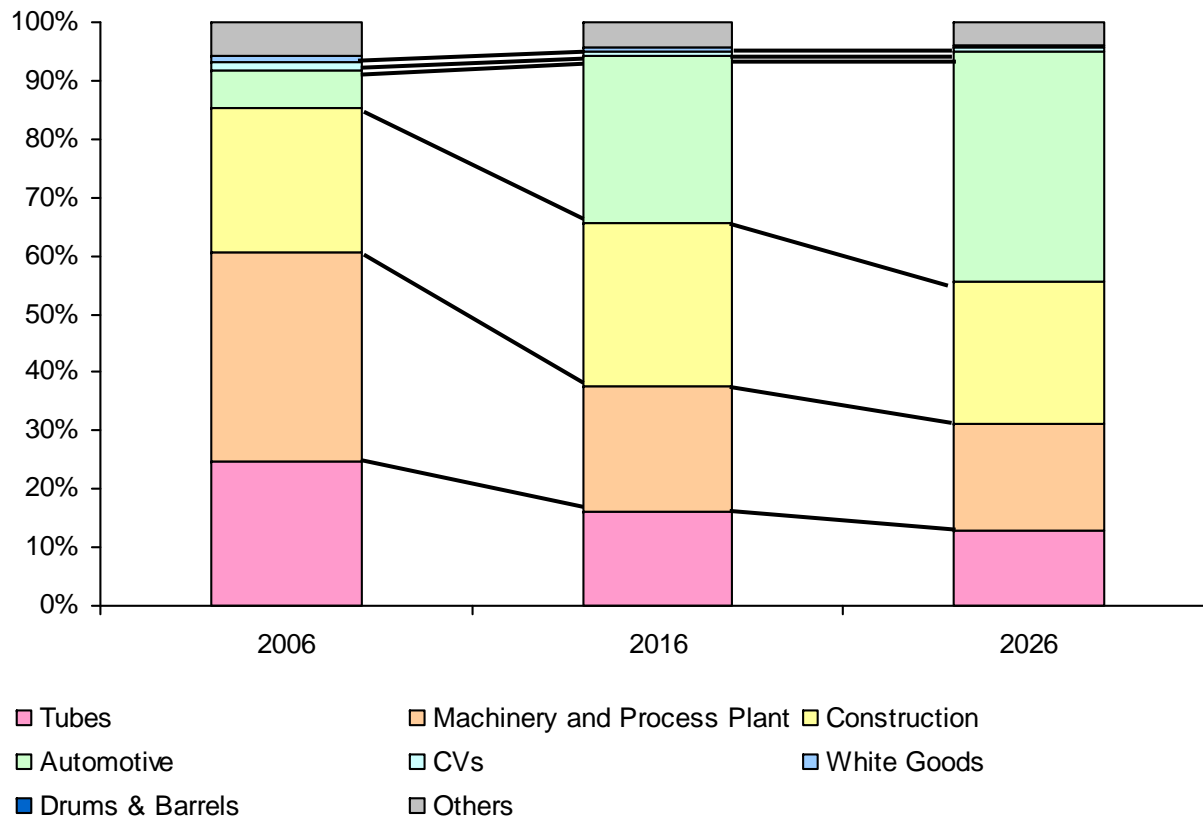
	HRC	CRC	HDG
Turkey			
Erdemir/Isdemir	3,500		
MMK Atakas	2,300	750	900
ArcelorMittal Borusan	4,800		500
Kibar	2,000		400
Colakoglu	3,000		
Ukraine			
Azovstal	5,500		
Kriviy Rih	4,500		
Russia			
Vyksa	1,250		
MMK		2,100	900
NLMK			300
CEE			
Galati	1,300		
Dunaferr	763	145	366
Total	28,913	2,995	3,366

The region therefore looks set to be oversupplied



However, who will supply the rapidly developing quality steel sector?

Black Sea total sector consumption forecast – quality steel

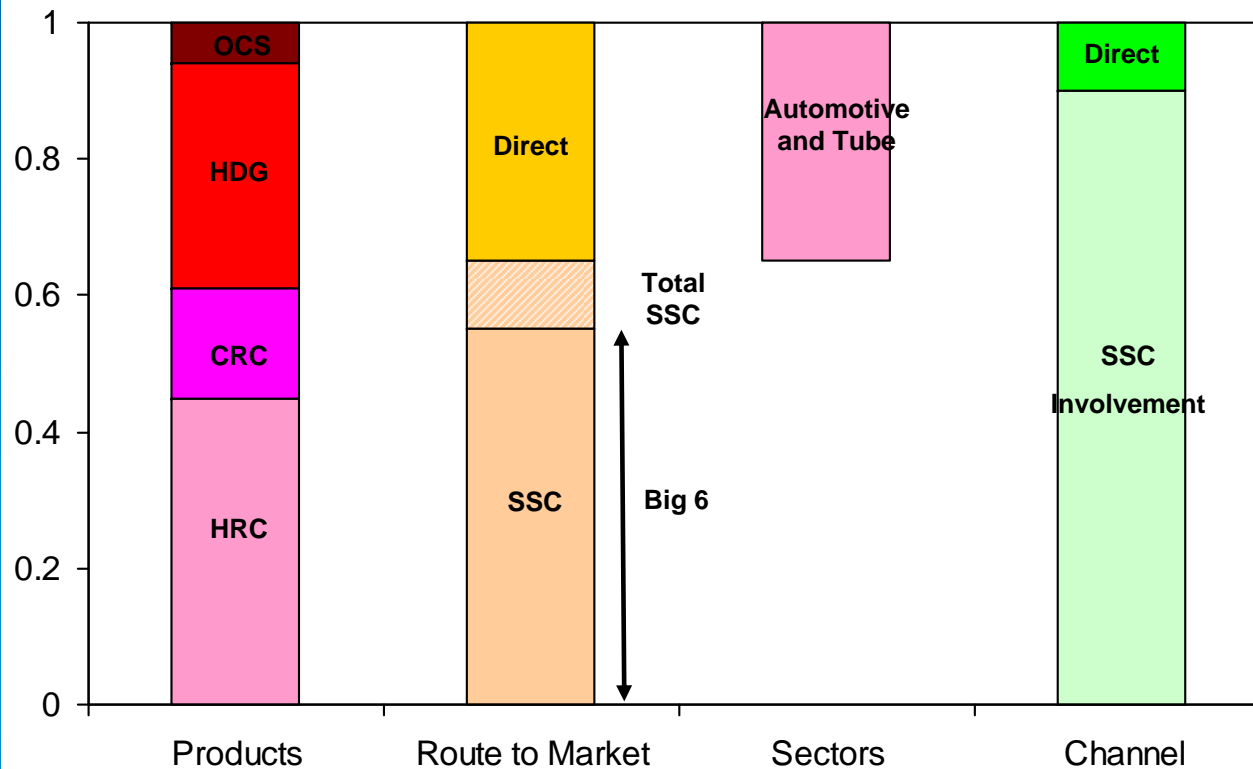


Who will distribute and process this steel? - The global tier 1 companies seem somewhat reluctant to develop in Russia and the Black Sea as do the Western SSCs

Brand	Main Product Range	Brazil	China	India	Mexico	Poland	Russia
Borg Warner	Powertrain Components	●	●	●	●	●	
Bosch	Automotive Equipment	●	●	●	●	●	●
Cummins	Engines	●	●	●	●	●	
Delphi	Integrated Systems and Modules	●	●	●	●	●	●
Eaton	Fluid Power and Electrical Systems	●	●	●	●	●	
Faurecia	Modules for Light Vehicles	●	●	●	●	●	●
Johnson Controls	Setas, Interior Trim, Batteries	●	●	●	●		●
Hella	Lighting Electronic	●	●	●	●	●	
Lear	Automotive Interior Solutions	●	●	●	●	●	●
Tenneco	Exhaust Systems	●	●	●	●	●	●
Valeo	Engines and Engines Parts	●	●	●	●	●	
Visteon	Modules and Components	●			●	●	

Under similar circumstances Spain developed a very efficient supply chain for its domestic appliance and automotive industries – do companies like Gestamp have the key role to play in the region?

Routes to Market for the Spanish Market



- The Spanish Big 6 directly handle about 55% of the Spanish flat products market
- The entire Spanish distribution comprising many other very small stockists and service centres handle about 65% of the Spanish flat products market

In summary

- 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
- Europe is now a net importer of steel products although internal trade continues to grow at a clip – NAFTA and CIS remain fundamentally structural importers and exporters
- Trade flow is down to cost at the steelmaking level i.e raw materials and regional price arbitrage
- All European flat steel markets, no matter how sophisticated, now face evermore market 3rd country penetration – is there a limit?
- The total Black Sea strip products market is currently 26.7 Mt with Russia and Turkey accounting for over 80% - the total market has grown at a CAGR of 5.85% over the last 10 years
- Consumption of Black Sea strip products is forecast to almost triple by 2026 though the region therefore looks set to be oversupplied
- Who will distribute and process this steel?

Thank you

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