

Metal Bulletin's 8th Central and Eastern European Steel Conference

Central / Eastern Europe Automotive Steel Opportunities

Warsaw Marriott Hotel, 26-28 September 2005



Mike Walsh, Managing Consultant
Hatch Associates - London

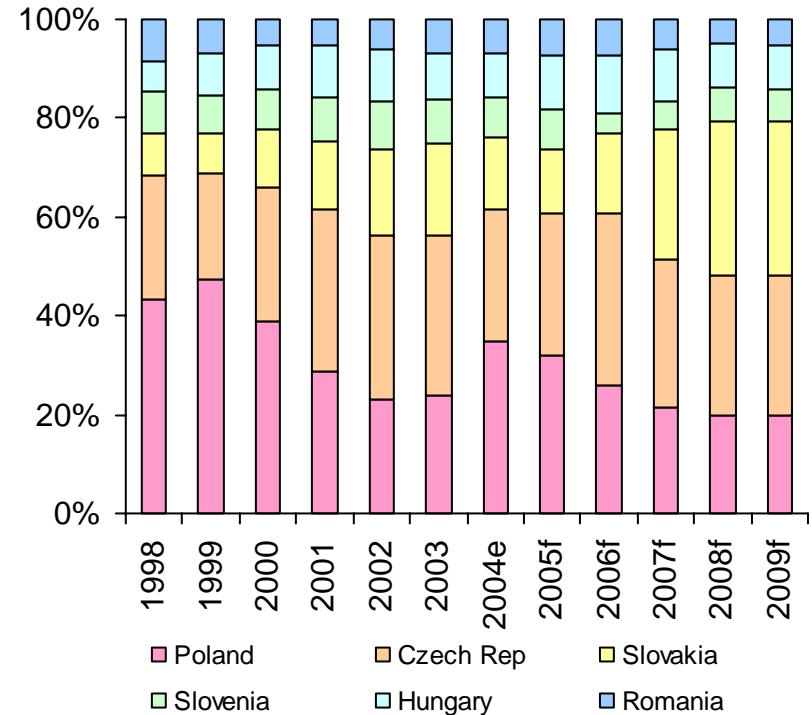
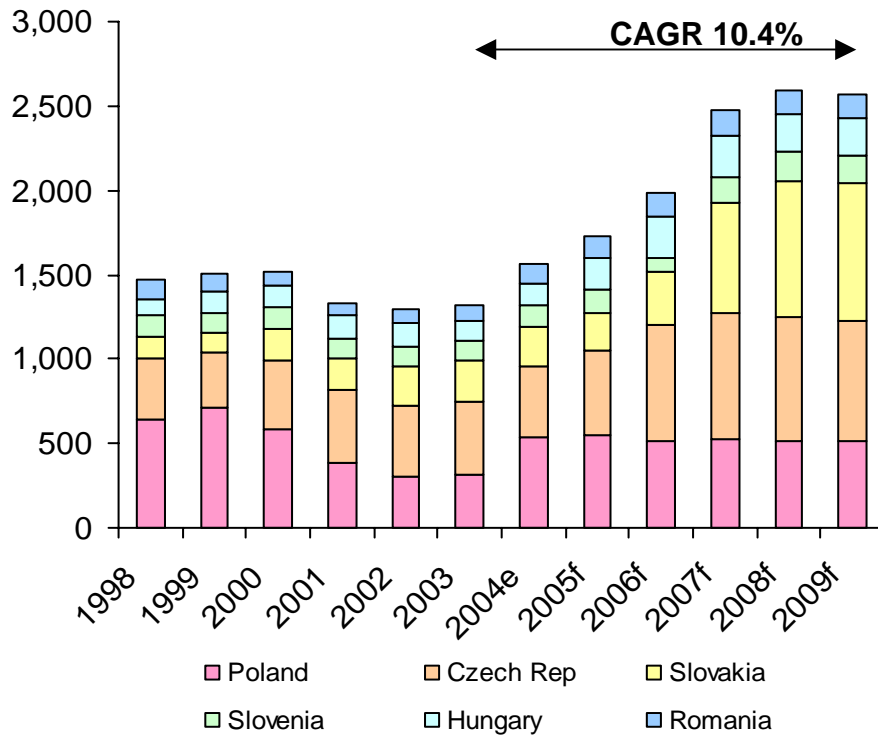
Hatch Beddows

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- **The Eastern European automotive sector**
- Steel supply and processing to the European automotive sector
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- Summary of opportunities

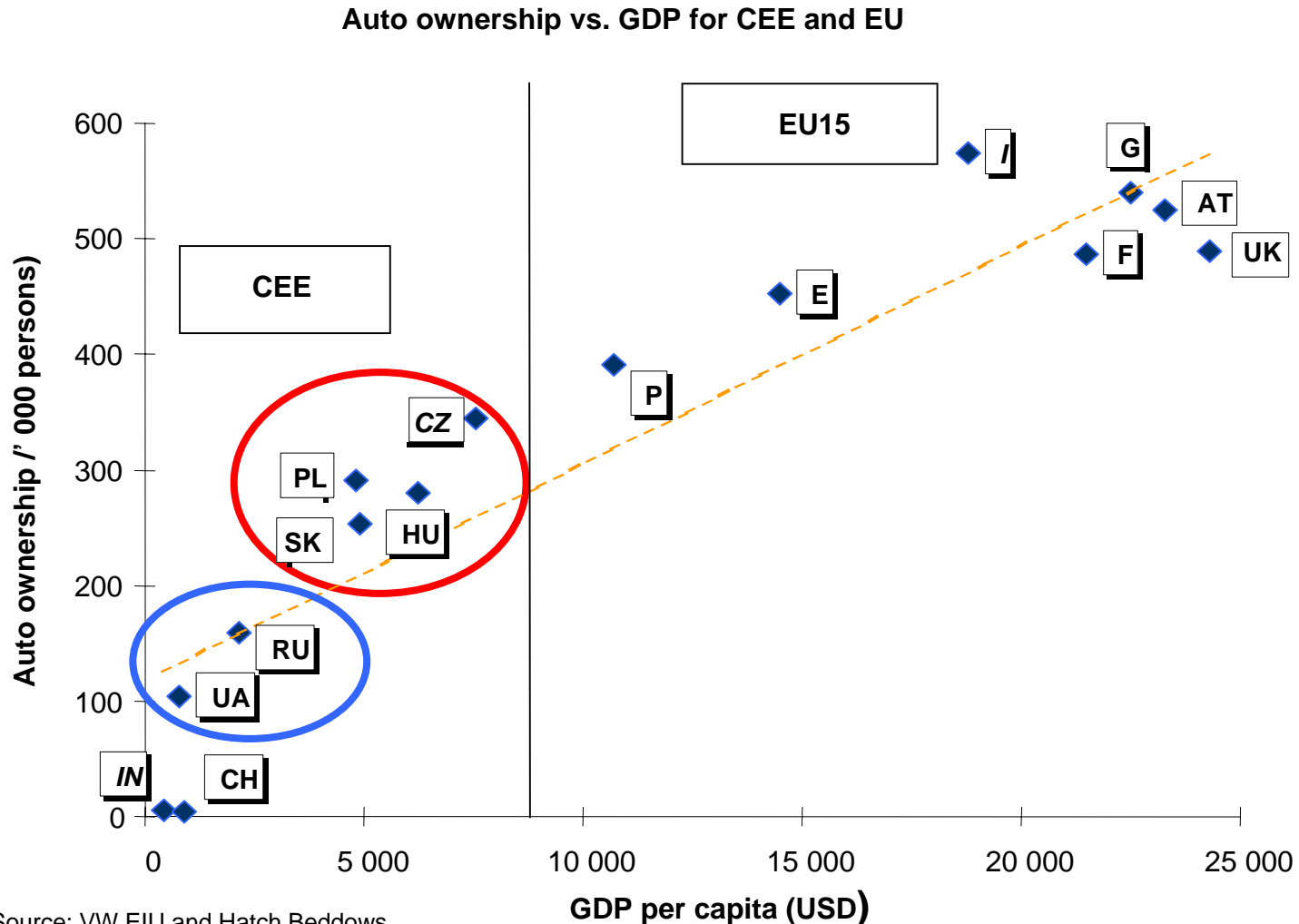
Central European automotive growth is a well documented story that has essentially run its course through 2010, with the possible exception of 1 – 2 new plants

CEE auto production/kunits



Source: JDPower, AutoNews and Hatch Beddows

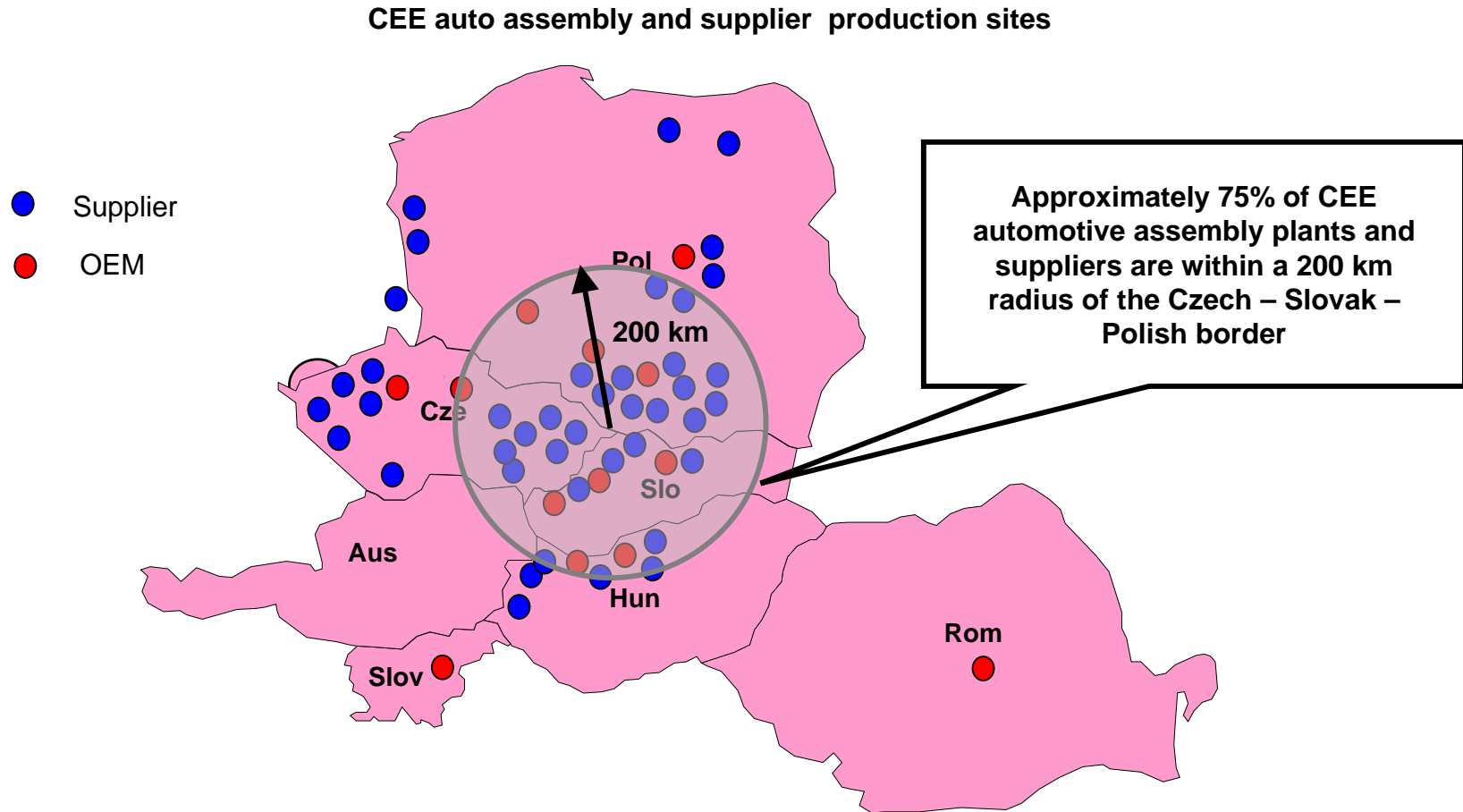
The main reason for the growth of automotive production into the region is the ability to exploit higher growth potential than in mature Western markets. Low cost manufacturing is also a factor



Source: VW, EIU and Hatch Beddows

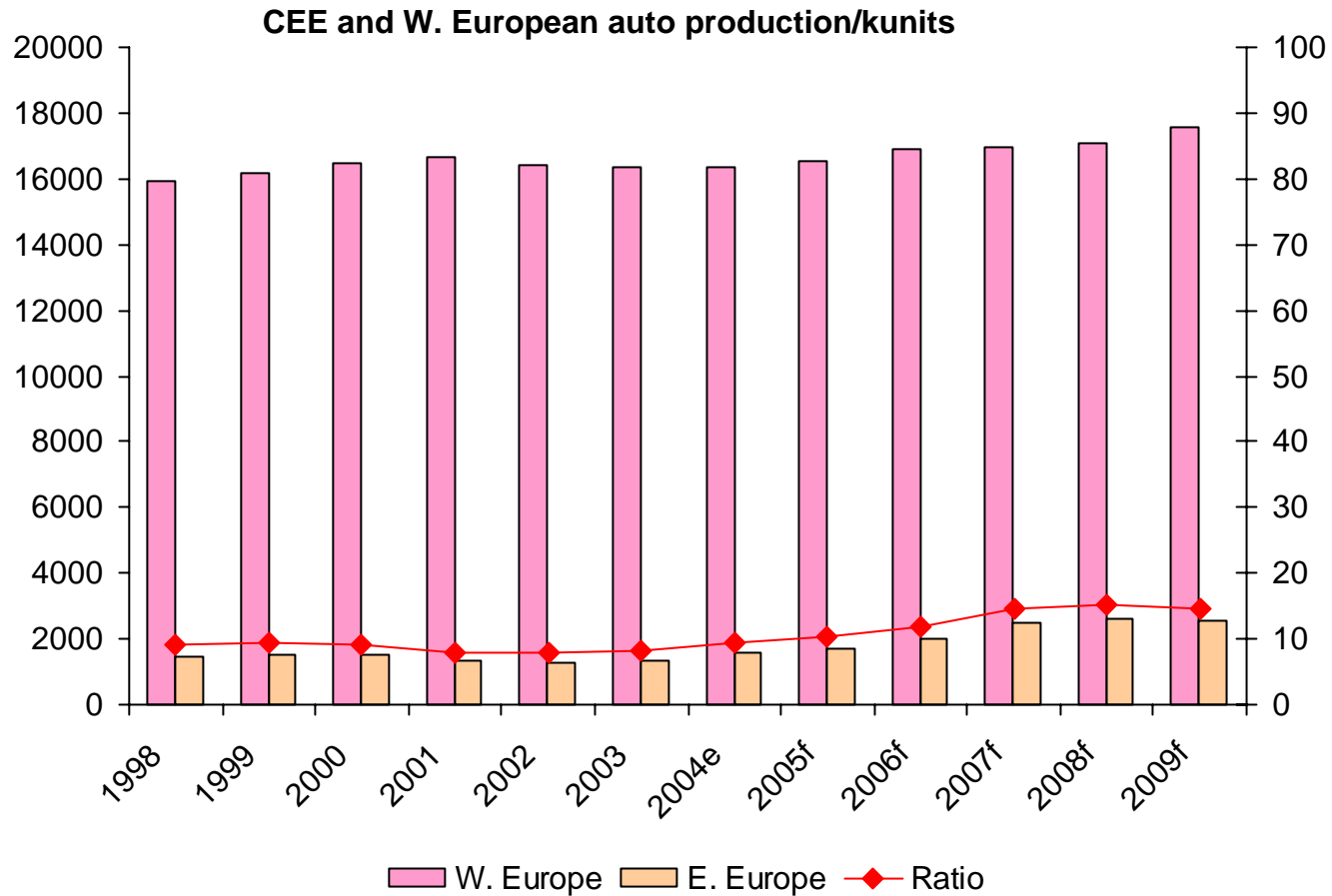
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The Central European automotive sector has clustered on the Czech – Slovak – Polish border within reasonable reach of W. European suppliers



Source: University of Michigan and Hatch Beddows

Central Europe is a great automotive growth story but don't write off W. European altogether - Central Europe will still only be responsible for less than 15% of total European production in 2009



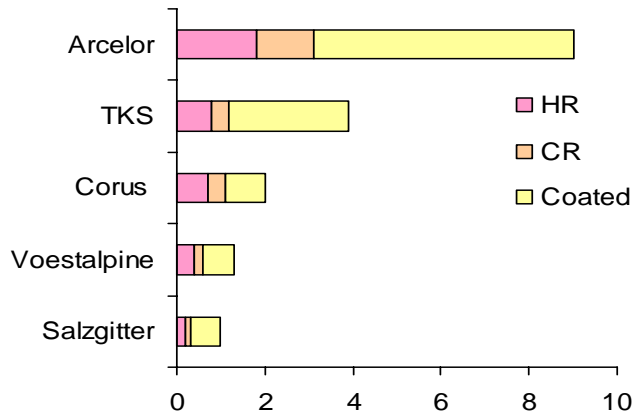
Source: JDPower, AutoNews and Hatch Beddows

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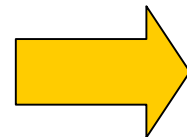
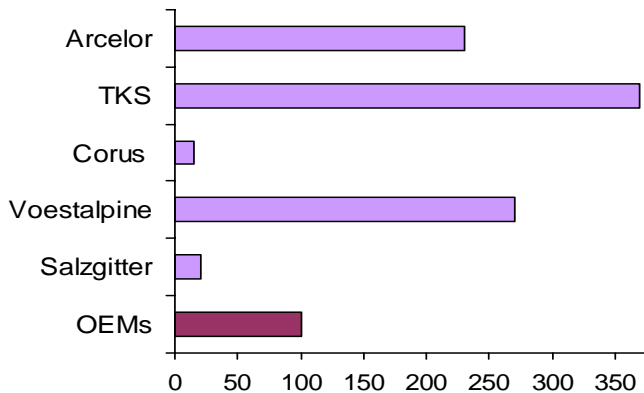
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Steel supply to the fragmented European automotive industry is now consolidated - though USSK and Mittal Steel are intending to enter the mix

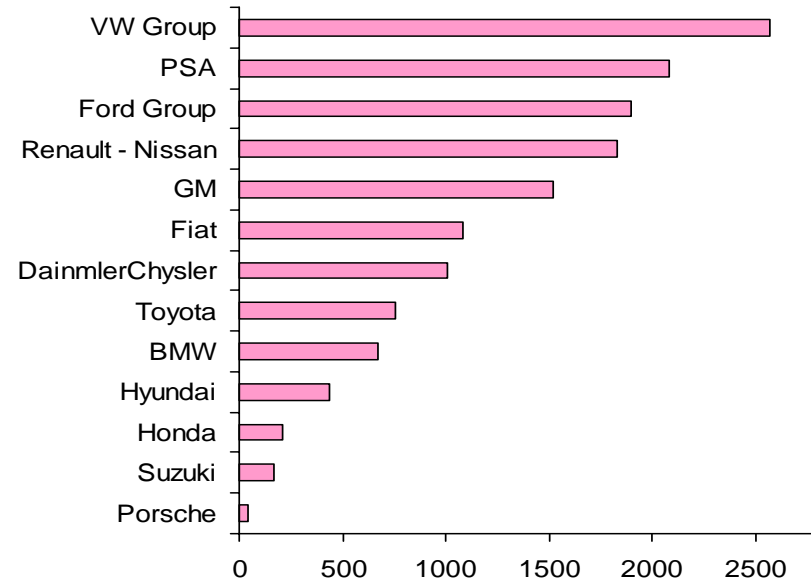
European automotive shipments/mt



European TWB shipments/kt

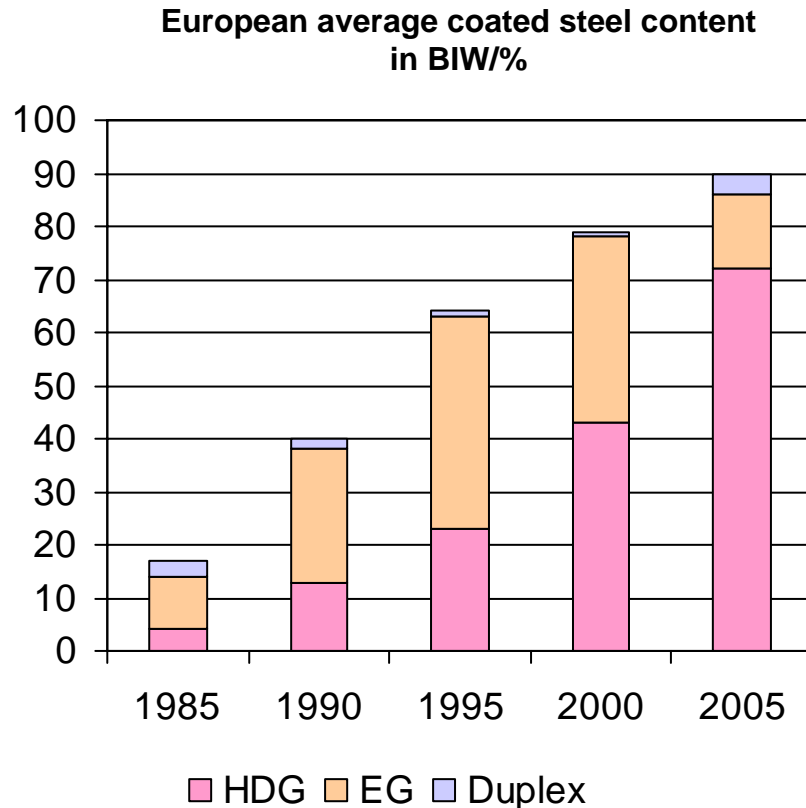


European automotive group production/kunits



Source: Companies, industry and Hatch Beddows

The last 20 years has seen the almost complete conversion of BIW pressings to coated steel – in addition HDG now dominates coating technology over EG

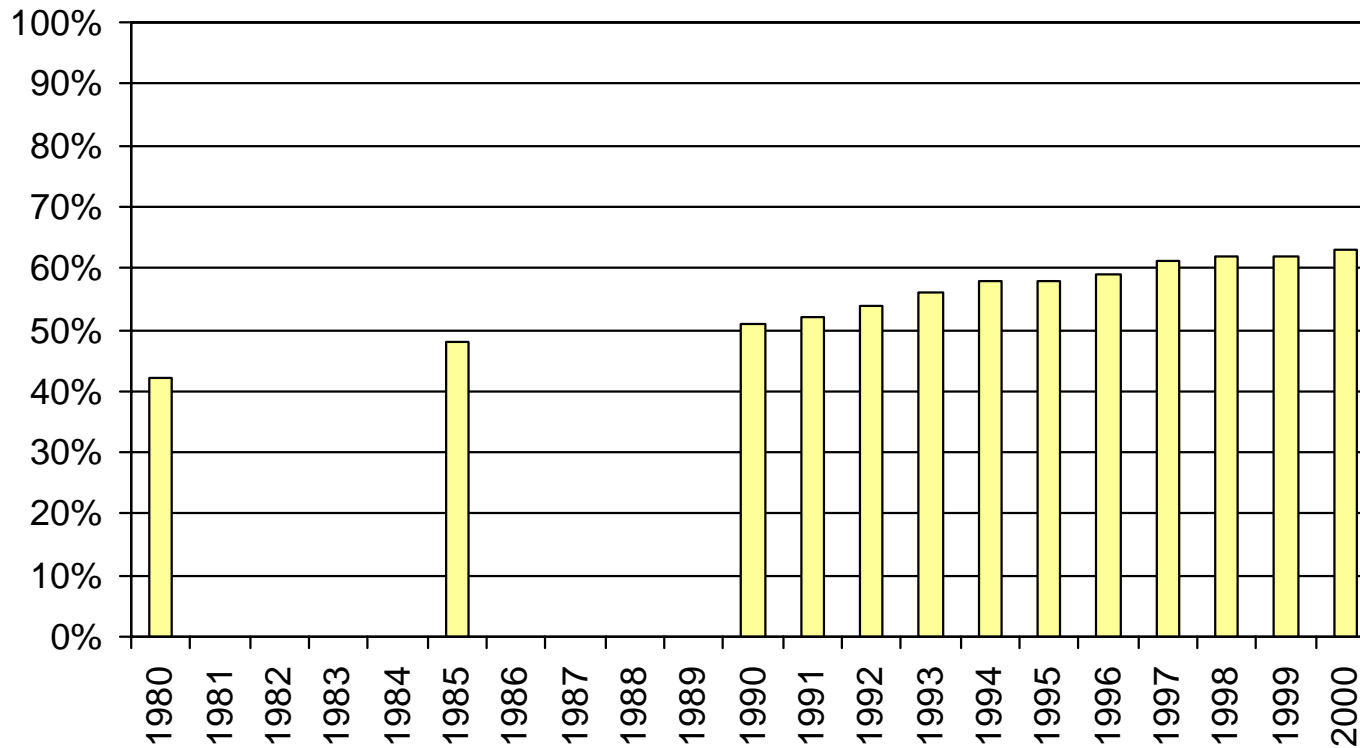


- European trends show:
 - electrogalvanised demand diminishing
 - hot dip products (Zn, Zn/Fe) increasing
 - specific preferences (minority) persist: e.g. Opel – Zn/Ni, DC – duplex
- Extremes still exist e.g. Ford Fiesta 69% coated, BMW Mini 91% coated
- Further penetration of coated BIW pressings towards 100% is not expected - only slight creep is forecast as new models are developed

Source: Arcelor, BMW, industry and Hatch Beddows

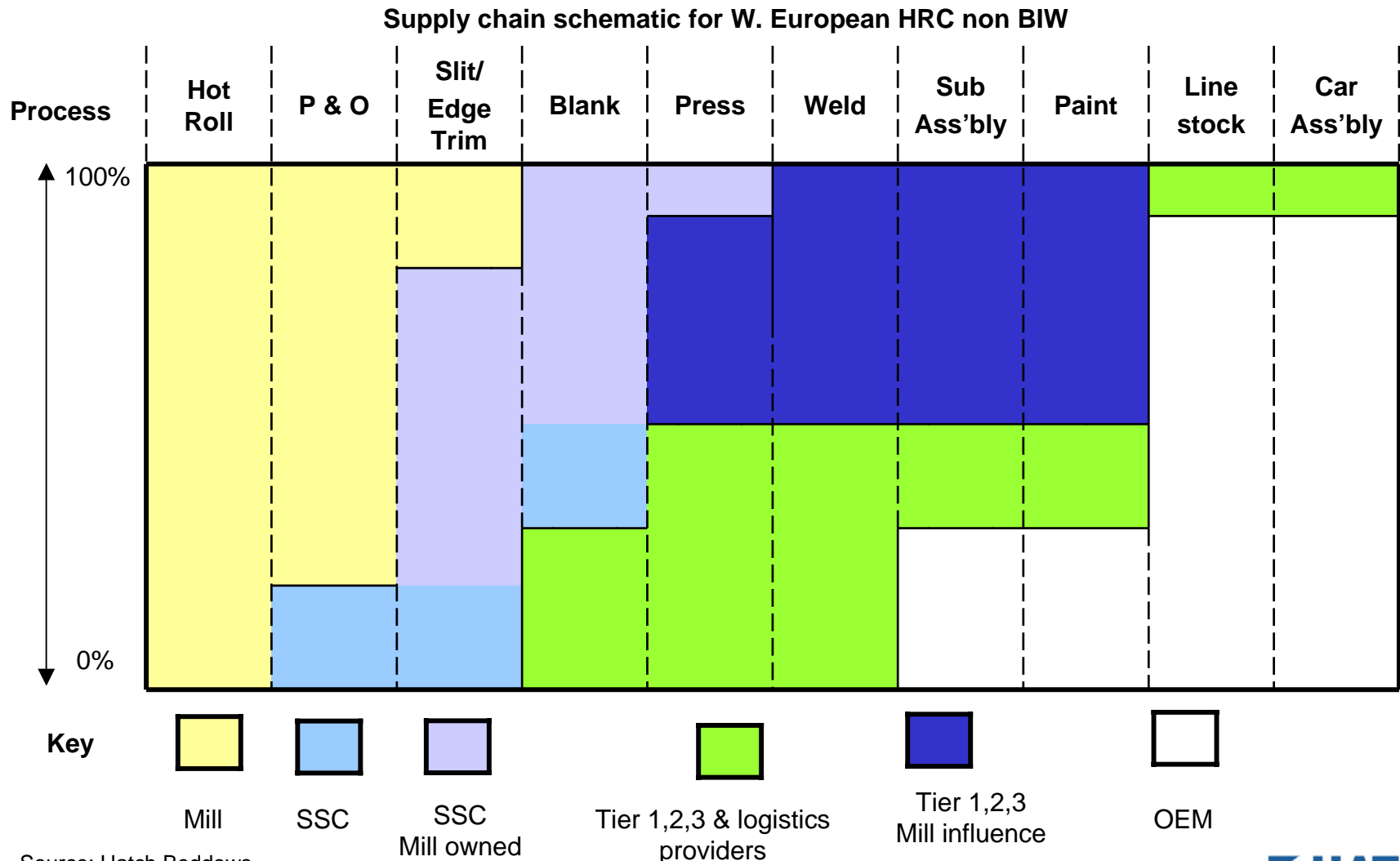
The European steel distribution industry has seen steady growth in market penetration and has perhaps reached optimal maturity

Percentage of European steel handled through distribution



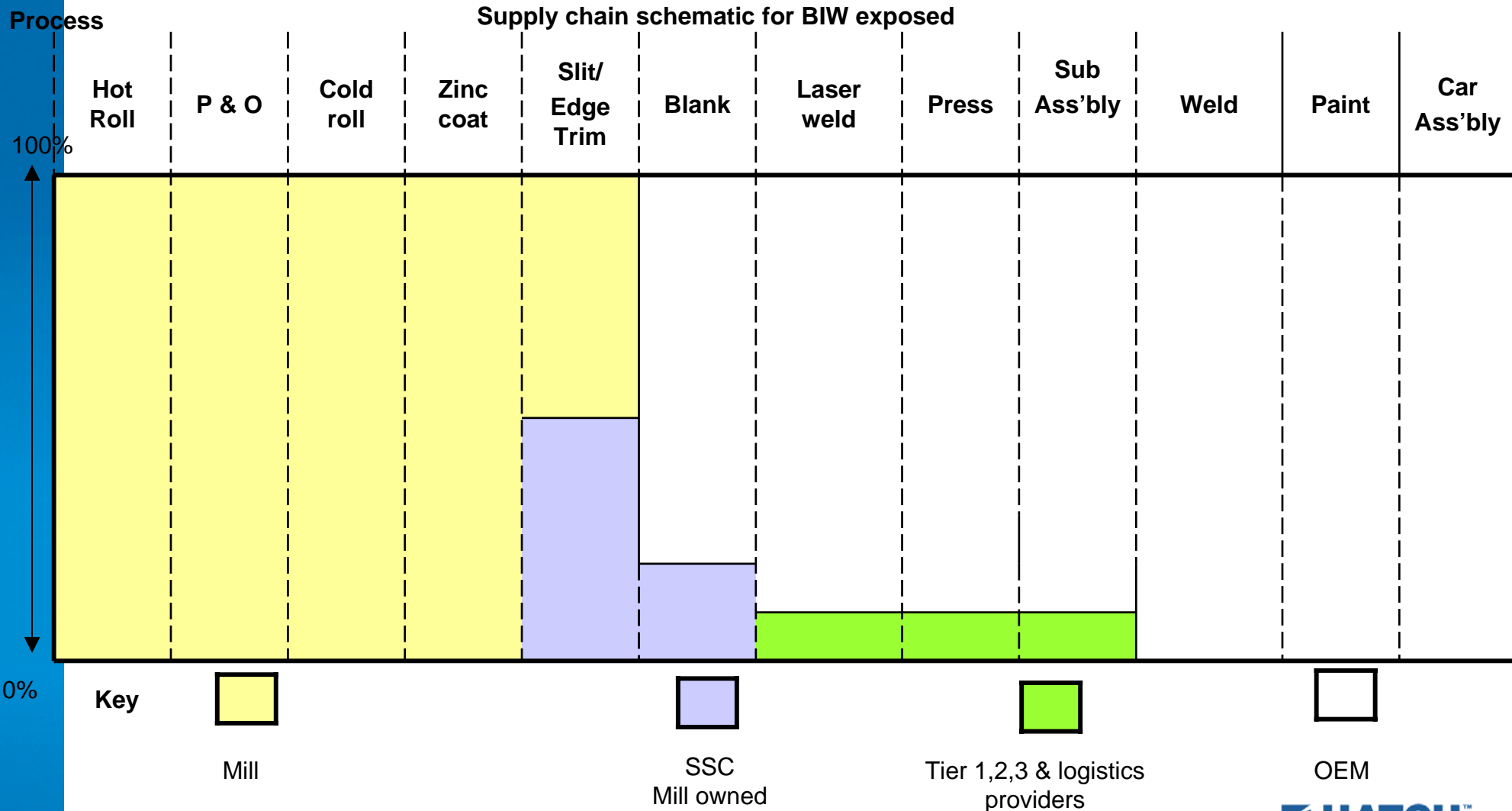
Source: Corus, Eurometal and Hatch Beddows analysis

The auto steel value supply chain is complex but mature with the pressing process largely decoupled from the steel mills – however, coil preparation and blanking is very much controlled by mills and their related SSCs



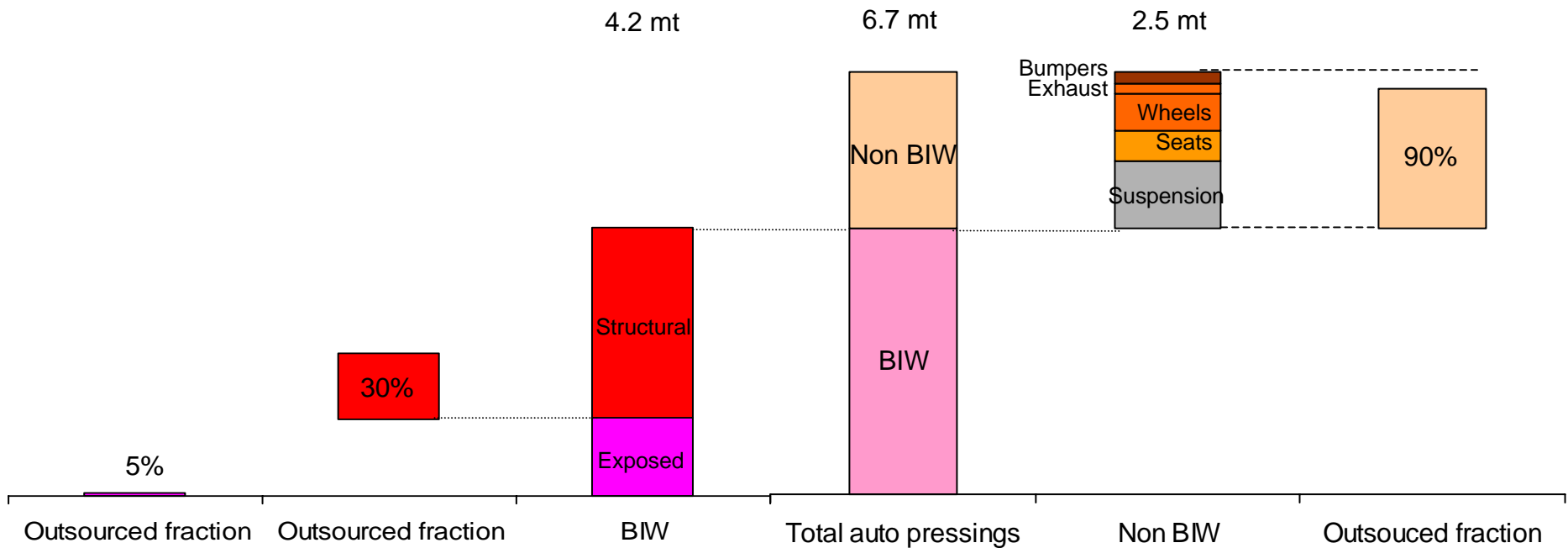
Source: Hatch Beddows

In contrast , exposed BIW is an extreme case where OEMs dominate blanking through assembly processes – in what is again a relatively mature supply chain



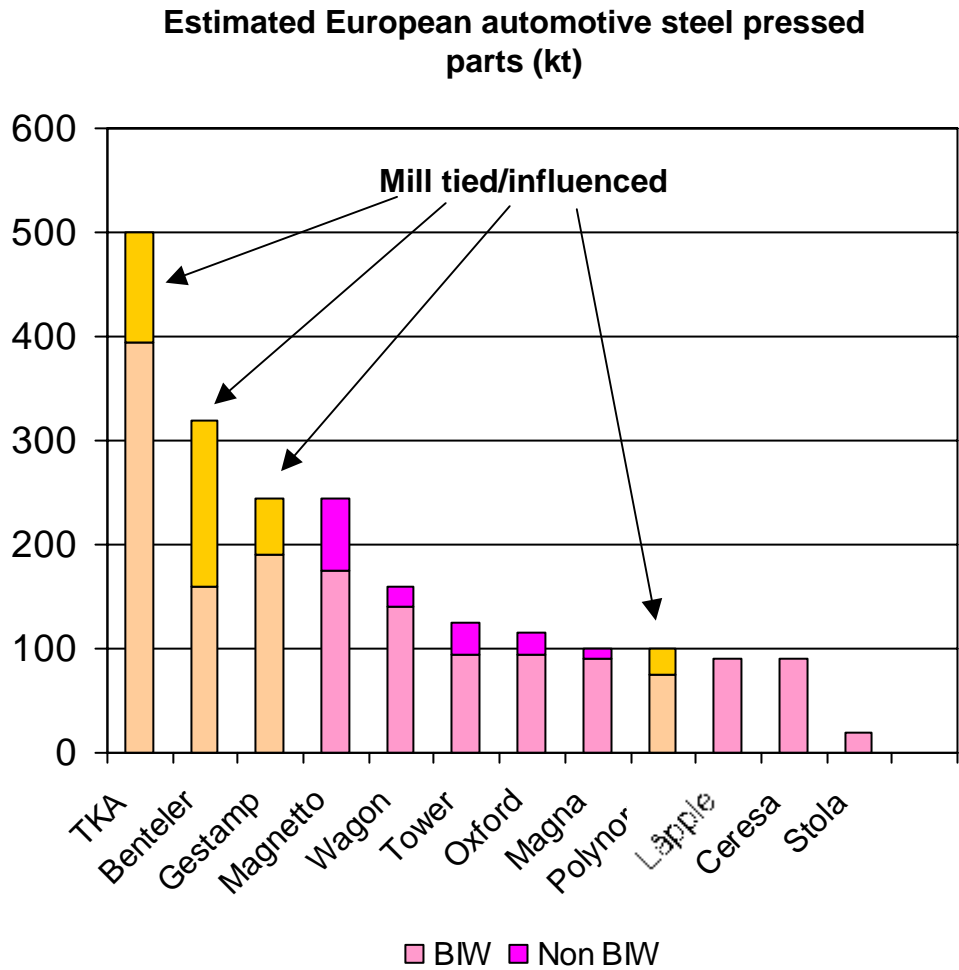
Just over half of all W. European automotive pressings are performed in-house

W. European BIW outsourcing intensity (2004)/mt



Source: Industry and Hatch Beddows

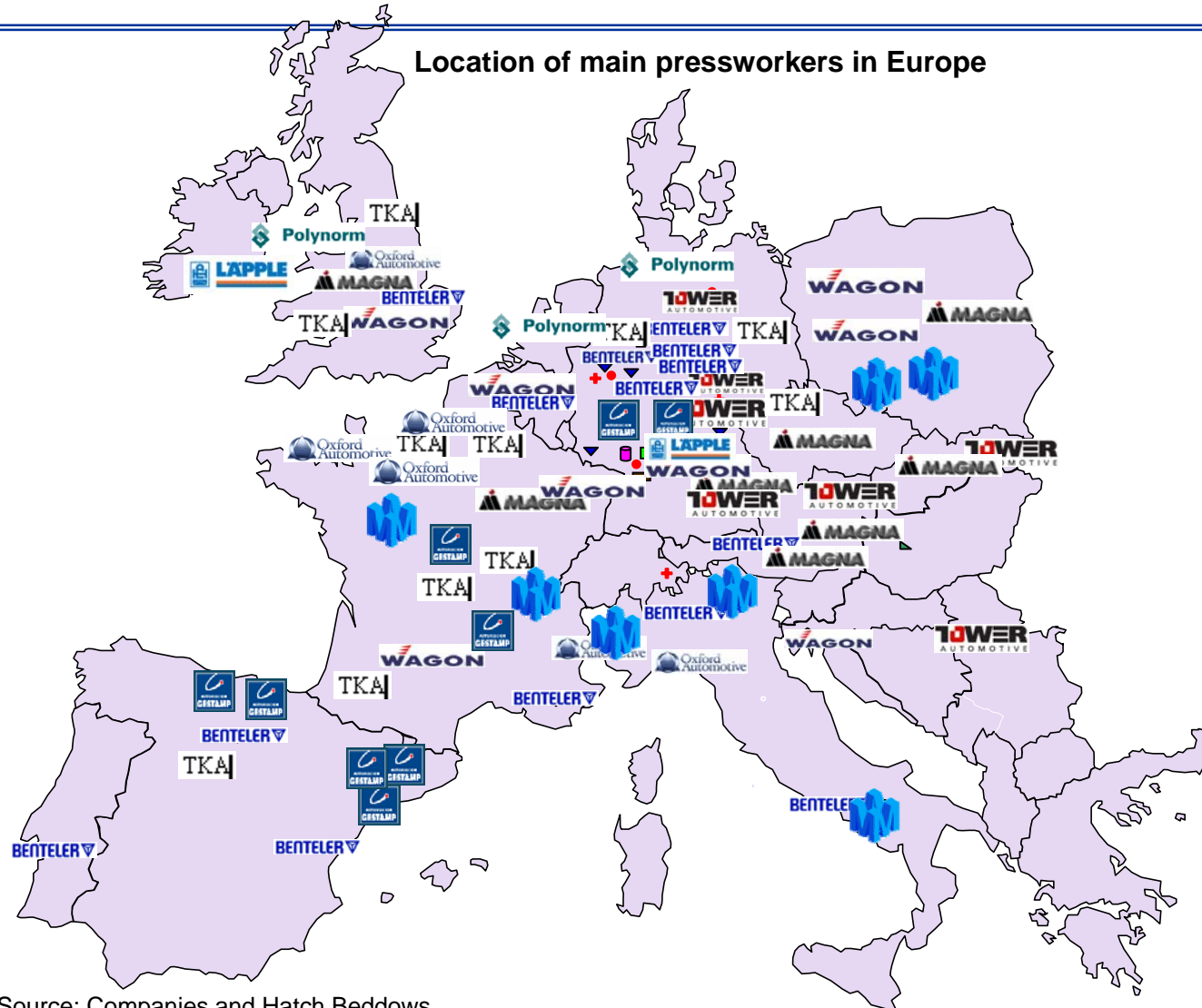
Outsourced pressing of automotive steel is performed by a fragmented Tier 1 and Tier 2 industry



- There are an estimated 1,000 pressworkers in Europe supplying the auto industry
- Europe is anomalous in having major Tier 1 players connected to steel companies
 - However, it should in no way infer that such Tier 1 companies are “steel companies”, they are all **automotive** companies

Source: Companies, Industry and Hatch Beddows

Such Tier 1 pressworkers are all multi site operating across several countries, including central Europe, in order to supply key global accounts

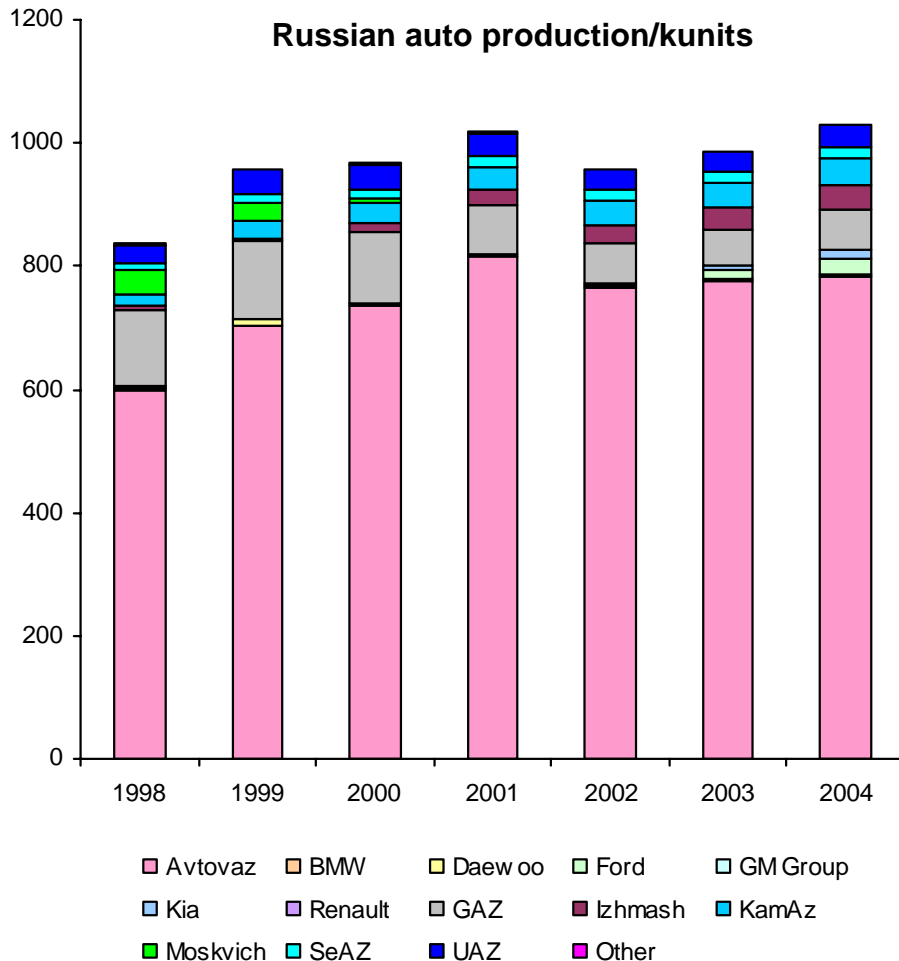


Source: Companies and Hatch Beddows

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Russian automotive production stands at around 1 m units and is still dominated by the Russian producer AvtoVaz



- The Russian automotive industry has a strong domestic production scene coupled to a high growth and potentially large foreign transplant element
- Russian tariff regimes, as it enters the WTO, on parts, CBUs and used cars will play a larger role than normal in determining the role of FDI production
- Major upgrades to Russian models regarding Euro III/IV levels (emissions, crashworthiness etc.) will be necessary in next 5 years

Source: JDPower, AutoNews and Hatch Beddows

SWOT analysis for the Russian automotive industry

STRENGTHS

- Strong national manufacturers, with AvtoVAZ turning out about 700,000 vehicles in 2004, claiming a market share of 65%
- The recent recovery from a poor 2002 has been sustained for both national and foreign carmakers

OPPORTUNITIES

- An influx of foreign manufacturers creates opportunities for JVs and technology sharing
- Russia's close proximity to Russia could lead to increased co-operation, as Chinese imported vehicles into Russia rose 19 fold in 2004
- Increased vehicle production is likely to attract component manufacturers

WEAKNESSES

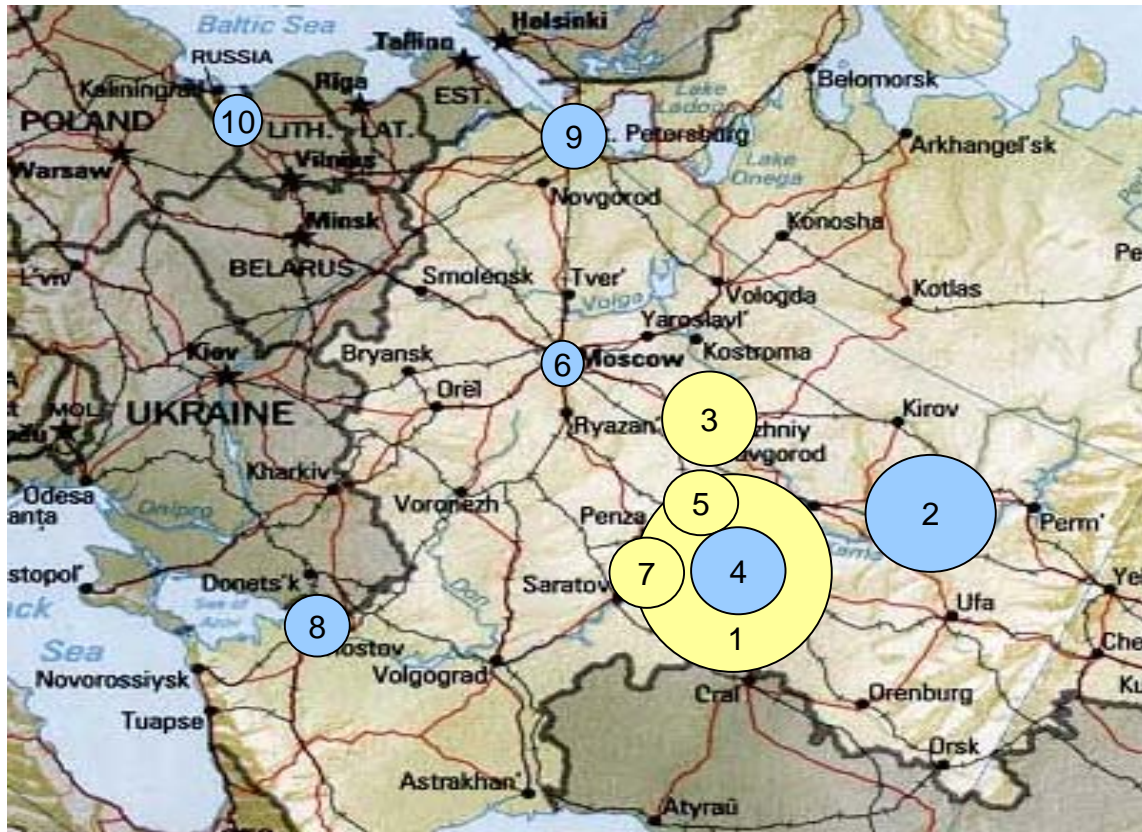
- Risky environment acts as a deterrent to would be FDI
- Too much reliance on a niche segment of society for higher value cars

THREATS

- Political instability thwarting further FDI
- Other countries in CEE such as Slovakia and the Czech Republic establishing themselves as regional production centres

Source: BMI and Hatch Beddows

Russian auto production is clustered around the Togliatti area. Apart from GM Avtovaz, the transplants are dispersed around European Russia



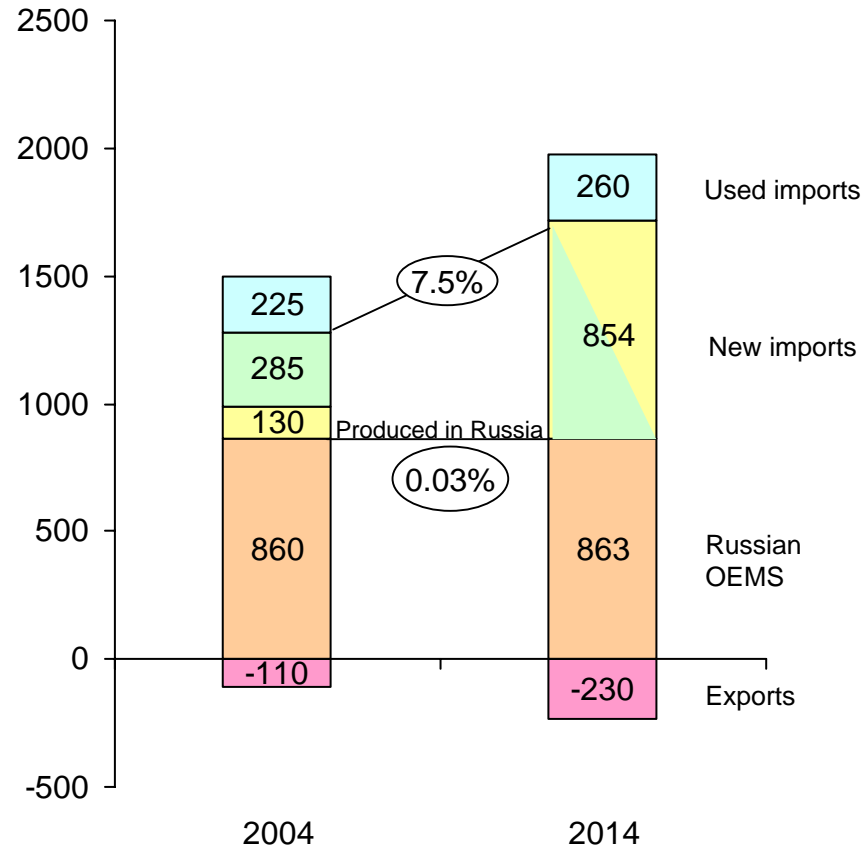
Map Number	Company
1	AvtoVAZ
2	IZH-Avto
3	GAZ
4	GM –AvtoVAZ
5	KamAz
6	Avtoframos
7	UAZ
8	TagAZ
9	Ford
10	Avtotor
Russian	
Foreign transplant	

Size of circle indicates unit production

Source: BMI and Hatch Beddows

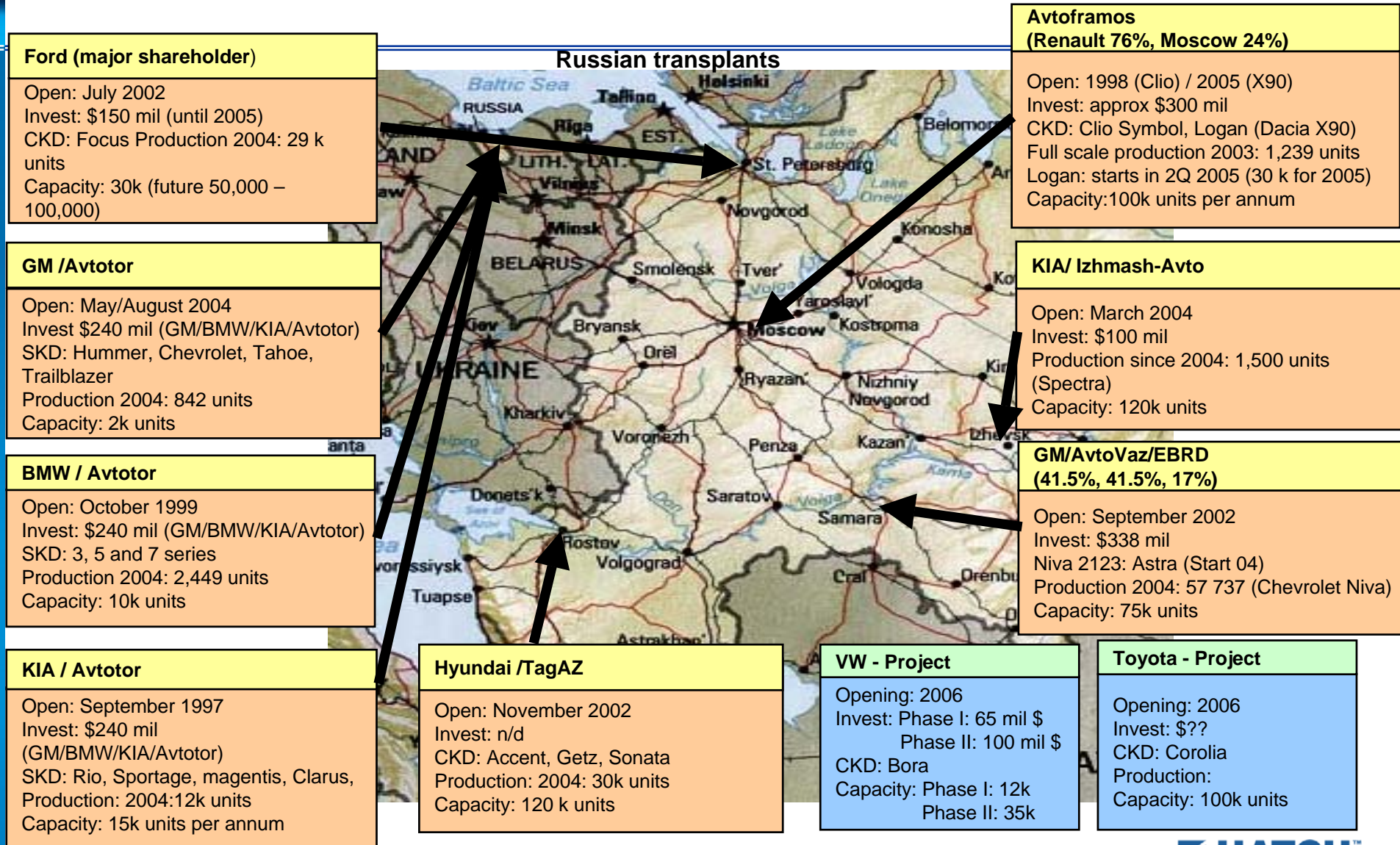
Russian OEM production is large but is forecast to be flat – all growth in the Russian auto market is expected to come from foreign production and imports

Forecast Russian market breakdown/M units



Source: Daimler Chrysler, Global Insight, ASM Holding and Hatch Beddows

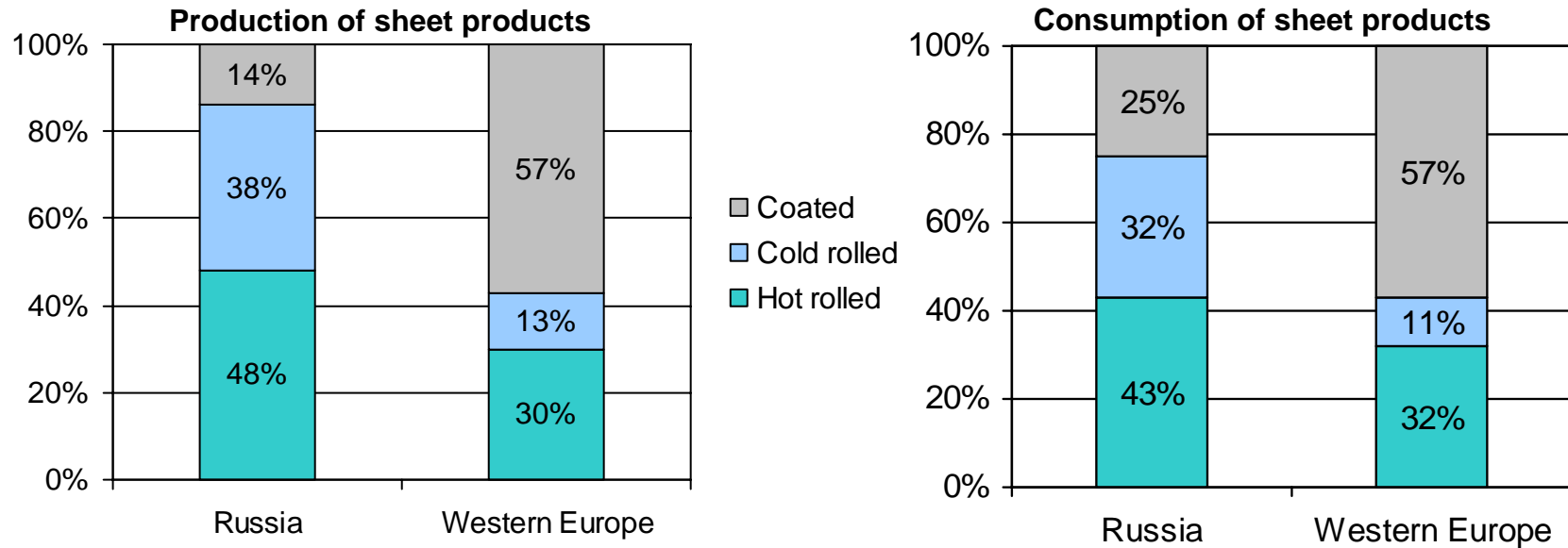
Russian transplants are not only disparate but all currently rely on CKD/SKD kits



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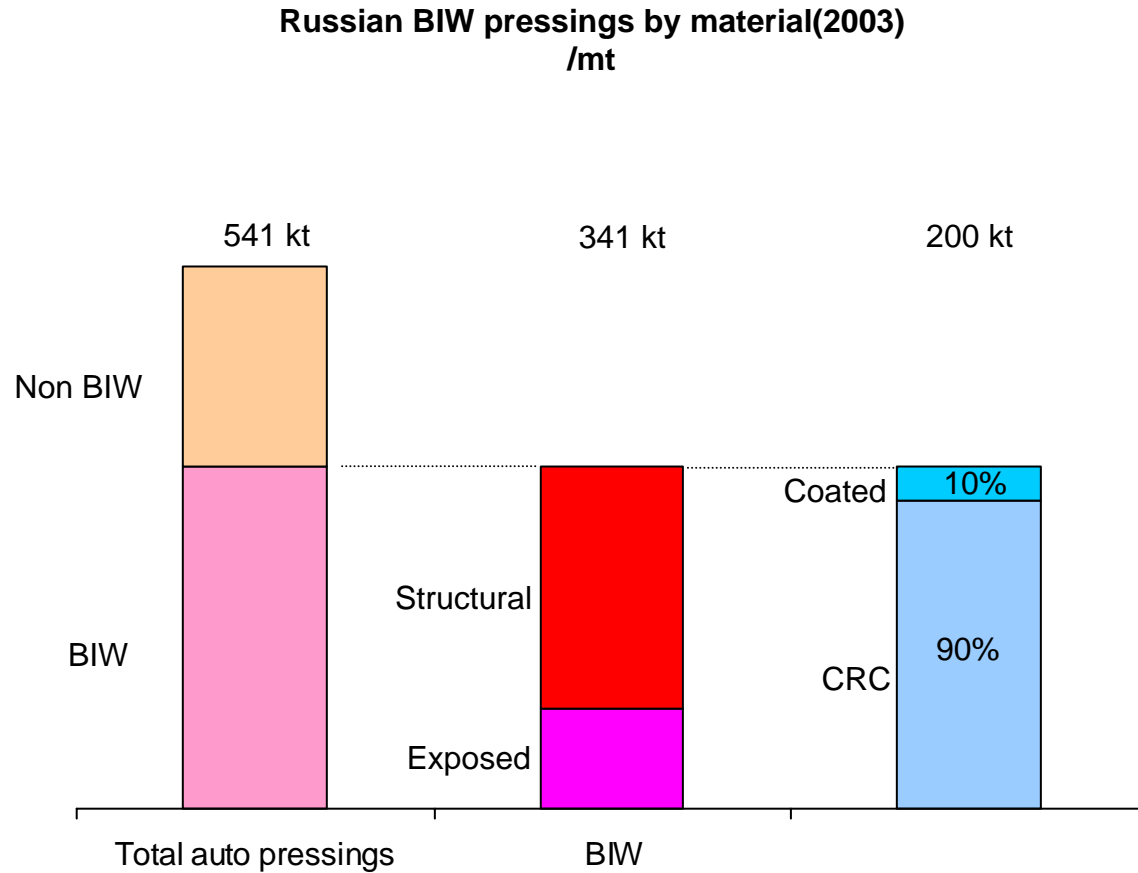
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Russian steel supply and demand is much more biased to lower value products than in Western Europe



- As the industry modernises, Russian producers will continue migrating into more technically challenging and higher-quality products, such as downstream flat products. This migration will be driven largely by consumer demand
- Russia has some key advantages which bode well for further migration of production down the value chain:
 - Demand for steel products has been growing, generating cash for capital improvement projects
 - Heightened GDP per capita ratios are providing more disposable income, driving demand for consumer goods
 - The pace of foreign direct investment in Russia is increasing, bringing with it higher quality standards

For example, Russian automotive material is still dominated by CRC

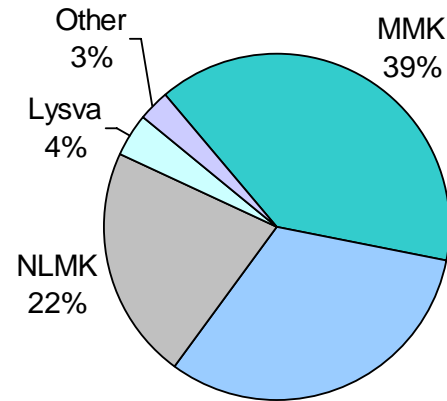


- The CRC/HDG split is almost opposite that of W. Europe

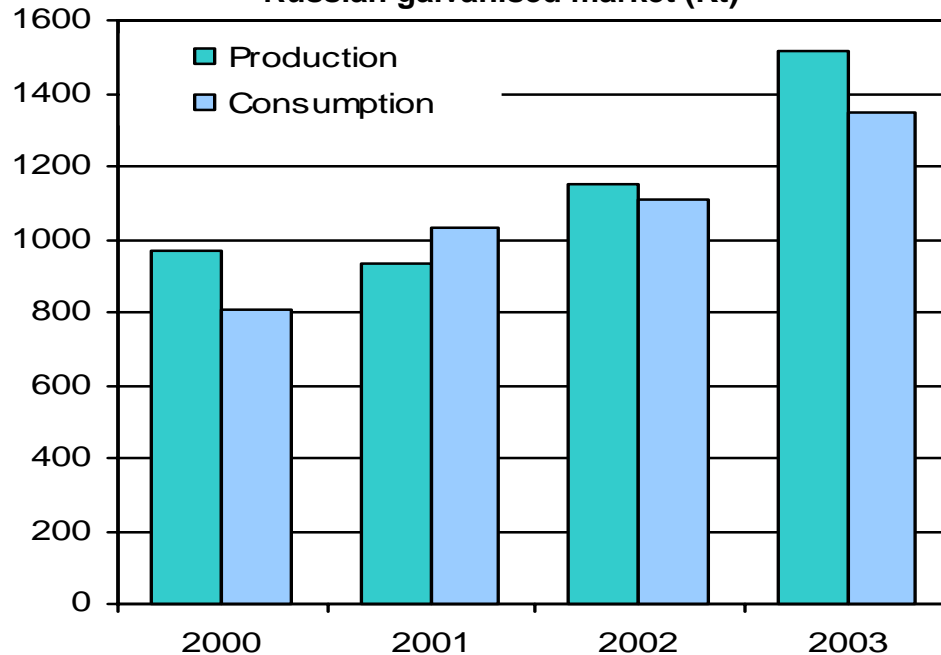
Russian production of galvanised is dominated by the “Big 3” but is mainly of non auto quality

- From current levels of around 1.3-1.4 Mtpa, Russian consumption of galvanised products is expected to reach 2 Mt in 2010 and 2.8 Mt in 2015 as industry usage of coated steels grows

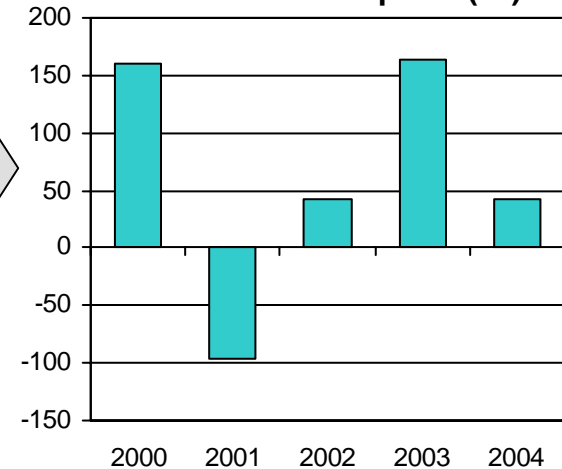
Russian galvanised output by company



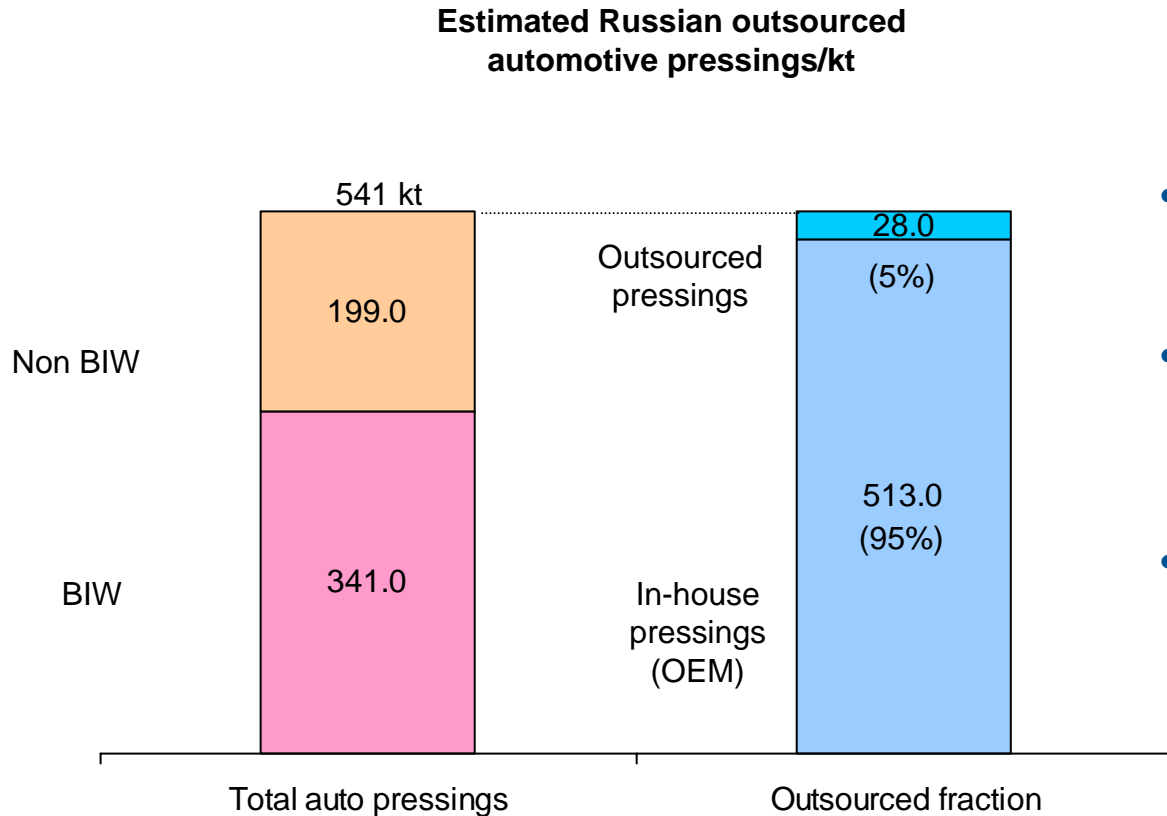
Russian galvanised market (Kt)



Galvanised net exports (Kt)



There is no steel blank supply in Russia and only marginal pressing companies provide a very small fraction of pressings to the OEMs



- There is no SSC/blanking industry in Russia
- No Tier 1s are known to operate in Russia, be they Russian or foreign
- Nearly all coil is supplied as wide unprocessed material to the OEM press shop

Source: Industry and Hatch Beddows

Furthermore, the global tier 1 companies are only just starting to appear in Russia – apart from Faurecia, there are no body/chassis steel processors yet based in the region

Brand	Main Product Range	Brazil	China	India	Mexico	Poland	Russia	Thailand
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 ●			●	●			

The Russian market for automotive HDG is small but growing rapidly on the back of three major projects

- The Russian market for automotive HDG is small but growing rapidly:
 - Total consumption of galvanised steel in Russia is about 1.0-1.2 Mtpa. Of this, only about 10% (about 100 ktpa) is automotive HDG. The remainder is galvanised steel for construction applications
 - Russian consumption of automotive HDG is growing rapidly for two reasons:
 1. Existing Russian automotive producers are converting some cold rolled steel components to HDG
 2. New joint venture automotive producers in Russia are expected to use a high proportion of HDG
- The Russian market for automotive HDG is currently under-served by Russian producers:
 - The Russian producers of HDG – Severstal, Novolipetsk (NLMK), and Magnitogorsk (MMK) – are currently focused on the production of galvanised steel for construction applications
 - NLMK may be producing some automotive-quality HDG, but not enough to meet domestic demand. Russia's remaining requirement for quality HDG for automotive applications is likely imported
- In order to displace imports and supply the rapidly growing demand in Russia for automotive HDG, all three Russian HDG producers are planning, or in the process of installing, new HDG capacity:
 - Severstal is in the process of installing a new 400 ktpa HDG line in a joint venture with Arcelor ("Severgal"). The line will produce automotive quality HDG and will target both the Russian and export markets
 - MMK has plans to install a new 400 ktpa HDG line, similar to that of Severgal, which would target the high quality galvanised market in both Russia and export
 - NLMK plans to double its HDG capacity from 500 ktpa to 1 Mtpa, although much of this will provide feedstock for its colour-coating line which NLMK plans to increase in capacity from 140 ktpa to 600 ktpa

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Opportunities in Russian automotive

- The Central European automotive industry is almost done in terms of structural change – it is fast becoming part of the W. European industry and is:-
 - served by a consolidated well structured W. European based steel industry
 - utilising the most sophisticated materials in the entire automotive sector
 - that operates using a well developed SSC and downstream processing industry including Tier 1 and 2 companies
- The Russian automotive industry is similar in size to Eastern Europe and is on the cusp of equally high growth and fundamental change as:
 - Russian automotive FDI continues to flow, CKD/SKD plants convert to local manufacturing and local OEMs convert to Euro standards
 - Western material norms quickly evolve within a limited local supply base
 - A shift to a Western supply chain change that transfers non-core steel processing from the OEM to the Tier 1, SSCs and supply chain

The opportunities are wide and varied but exciting!!

Thank you!

Hatch Beddows

Mike Walsh

Hatch Beddows
9 Dartmouth Street
London, SW1H 9BL

Tel.: +44 20 7906 5122

Fax: +44 20 7233 1908

Mobile: +44 7747 010524

Email: MWalsh@hatch-europe.com

Website: www.hatch.ca

Hatch Consulting
310 East Ocean Center
A-24 JianGuo Men Wai Road
Chaoyang District, Beijing
P.R.China 100004

Hatch Consulting
2800 Speakman Drive
Mississauga, ON L5K 2R7
Canada

Hatch Consulting
Building 14 Harrowdene Office Park
Western Service Road
Woodmead 2128
South Africa

Hatch Beddows
9 Dartmouth Street
London, SW1H 9BL
UK

Hatch Consulting
1600 West Carson Street
Gateway View Plaza
Pittsburgh, PA 15219
USA

Hatch Consulting
33-1 Prospect Mira
Olympic Plaza
129110, Moscow