ECIPE PRESENTATION » 13. 07. 2012

FREE TRADE IN THE AUTOMOBILE SECTOR

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» The European car crisis and EU FTAs Two unrelated issues

Contracting/refocusing industry

- » High share of exports (4%)
- » But small share of EU value-added, employment
- ... yet our biggest trade surplus by category
 - » Sustainable surplus?
 - Emerging industry entering into sector
 - » One of our most important market access interests
- ... yet our biggest liability in trade negotiations
 - » Demand for both market access / subsidies & protection
 - » Difficulty to strike large-scale FTAs
 - » Attempts to veto EU-Korea; disproportionate influence on EUMS behaviour in TPC
- ...issues unrelated to openness of the European car sector

TABLE 8: EU EXPORTS BY SECTOR, GOODS AND SERVICES





Number of Employees

Source: Eurostat 2008

» The prospects of the EU automotive industry – Restructuring in short term inevitable

Short to medium term: Refocusing

- » Saturated demand / low replacement rate, low income elasticity, capital constraints
- » Overcapacities ~ 30% (equivalent to 2 mn units) to breakeven point
 - 3~4% addressed by 2011 chiefly by foreign brands
- » EU market not big to accommodate all 'mass' producers / strategies
 - Volume production dependency
 - → Low margins; 85% small car sales FR, IT & ES
 - Susceptible to raw material fluctuations
 - → Rises for PSA & Renault (€600-700 mn) equiv to entire annual profits

Response by industrial policy and protectionism, largely inefficient

- » Demand-side measures / Subsidies
 - Estimate of scrapping scheme 7.9 bn , (equiv 4.44 mn units)
 - Leading to more overcapacities, incentives towards lower margins
- » Import substitution cannot reverse the trend
 - Foreign brands taking the largest hit of contraction (only Koreans defying the trend)







» There is not one but two car industries in the EU (1) High-margin exporters; (2) Low margin volume producers

Vast difference in efficiencies

- » (1) Economies of scale in production, export focus
- » (2) Labour productivity
 - Some with slow or non-existent progress on value-added
 - Overtaken by emerging economies
 - Not in phase with rises in labour costs



TABLE 3: PRODUCTION OF PASSENGER CARS PER ASSEMBLY PLANT; SHARE OF P

Production per plant Extra-EU export per plant

Labour Productivity Index Wages and Salary Value added per employee 2000 2007 2000 2007 2000 - 2008 France 28 621 55 461 71 918 104 092 -6.3% Germany 26 580 43 707 53 094 133 822 35.7% 21 298 41 205 99 747 Italy 39 895 -2.2% 24 3 26 44 881 52 613 14.4% Spain 106 628 UK 39 253 51 243 147 442 68 947 35.2%* US 51 338 62 0 20 189 997 280 262 63.7% Japan 66 423 60 558 241 975 290 149 32.1%* Korea 26 963 54 867 142 385 250 952 47.6% Brazil 16 0 42 25 653 53 577 120 299 (-1)2 798 6 0 59 28 671 47 542 China -

TABLE 4: PRE-CRISIS CHANGES IN WAGES, VALUE ADDED (2000-2007) AND LABOUR PRODUCTIVITY (INDEX CHANGE 2000-2008) IN THE CAR INDUSTRY

Source: ACEA, UN ComTrade, 2011

* Motor vehicle data unavailable, and transport equipment classification used Source: UNIDO; OECD; own calculations



» There is not one but two car industries in the EU (3) Low returns on R&D

Vast difference in efficiencies

- » (3) R&D
 - Low expenditure / staffing leading to few innovations (patents)
 - Commercialisation Producer incentivised towards green growth high risk, long-term
 - Profitable product development needed on short-term

TABLE 5: R&D PERSONNEL AND SPENDING (2008) BY THE CAR INDUSTRY; NUMBER OF WIPO PATENTS REGISTERED (2003~2007) IN THE TRANSPORT VEHICLES CATEGORY

	R&D personnel Full- time equivalent (2008)	Business R&D expenditure US\$ PPP (2008)	WIPO patents (2003-2007)
Germany	89,400	18,601	55,296
France	30,911	1,802	19,126
Italy	8,832	1,418	4,190
Spain	2,603	360	2,060
ик	10,982	1,664	5,788
US	83,100	16,034	46,991
Japan	87,626	19,658	106,368
Korea	23,053	4,381	30,307
China ¹⁸	16,5475	6,764	9,119
Turkey	2,882	802	N/A

TABLE 6: ANNUAL GROWTH IN R&D SPENDING AND VALUE-ADDED (2000~2008) IN THE CAR INDUSTRY



Source: OECD STAN

» Two parallel long-term prospects Division not necessarily by region or manufacturer

Overcapacities relatively focused to few countries & manufacturers

- » Downward-spiral arising from focus on lowerend segments
 - Towards increasing volumes, further higher risk of overcapacities
 - Need for diversification of portfolio (upscale, small cars differentiation) adapted for exports
- Also increasingly simplified and modular cars production methods makes further reductions inevitable in volume manufacturing

Vast majority thriving, filing record profits

- Export driven strategies, focus on margins and profitable segments
- » Large and premium cars still growing faster (9.2%) than small/mid-sized segments (5.9%) due to demand from emerging industries
 - Skoda (Octavia > Fabia)
 - ▸ Citroen DS, Peugeot RCZ –17% of PSA sales

The car industries in EUMS plagued by overcapacities represent 0.3% of European value-added



TABLE 11: EU TRADE BALANCE ON CARS (2011), IN THOUSANDS USD

» Impact from FTAs

Market dynamics, increased competition

Learning from EU-Korea FTA

- » Tariffs has gone down by 1.7% for <1500 cc; 3.0% for >1500cc
 - EurKWON = 4% in last 365d
 - ▶ EurJPY = -14% in last 365d
- » 66% increase (period to period) cannot be explained by tariffs
 - New product launches (particularly Hyundai)
 - Approximately 45% of exports are non-Korean owned brands (General Motors)
 - Relatively consistent with previous growth from low levels in the FU
 - Growth towards non-EU markets typically 80~85% (China, Canada, US)
- » Volkswagen taking market shares from PSA, Fiat, Renault

Business case for localised production

- » Korean and Japanese brands with high level of localised production (60-70%)
 - Korean (3 bn invested); Japan 9 bn
 - 10 yr write-off equivalent to 750 Eur per car (on top of Yen) appreciation; rising production costs and shrinking margins)
 - JAMA claims 80% local supply



Sales market share change July 10'-Mar 11' /

» FTAs & supply-chain fragmentation Fixing misallocation at home

- Operational efficiency and fragmented production
 - » About ³⁄₄ of parts provided by subcontractors
 - » Increasing share of ICT goods and services
- Extra-EU supply-chains contained within the Single Market
 - » About 40% inside same EUMS
 - » 'Stuck' with least efficient R&D
 - » High correlation amongst EUMS between components imports and export competitiveness (RCA)
 - Import duties effectively working as export tax
- FTAs to increase production flexibility as well as cost-efficiency in production and R&D
 - » Many cross-ownerships but little outright M&A between top 3 economies
 - » Capital rich and R&D poor industry partners



Source: Own calculations (based on OECD intra-industry trade index, UN ComTrade 2011)



TABLE 14: CORRELATION BETWEEN EU EXPORT COMPETITIVENESS AND IMPORTS OF COMPONENTS (2011)

» Complications of EU-Japan FTA Market barriers in Japan

Low import penetration in both Korea & Japan

» 6% in Korea; 3% in Japan

Regulatory divergences with Japan, slightly different case than Korea

- » 'Moral upper-hand'
 - Remaining UNECE standards, mainly environmental issues; mutual recognition?
- » Largely horisontal NTBs
 - Distribution & incentives towards replacement rather than fiscal issues

Pricing – the 'economic distance'

- » On average 90% mark up of small cars
 - Also total cost of ownership from services, parts, insurances
 - Exports divided into too many brands for localised production

Addressing NTBs?

- Address horisontal/non-discriminatory NTBs that provide market access – some opposed by EU manufacturers
- » Some NTBs do not open up new sales

	Volkswagen Polo 1.4 gasoline	Citroen C3 1.6 gasoline	Fiat 500 1.2 gasoline	Nissan Micra (MaChi) 1.2 gasoline	
Purchase costs					
Purchase price at dealership, incl. 5% acquisition tax	2,100,000	2,000,000	1,900,000	1,400,000	
Consumption tax	Up to 5%	Up to 5%	Up to 5%	Up to 5%	
Mandatory inspection, every two years ("shaken")	1,195,000	1,315,000	1,230,000	905,000	
Tonnage tax	125,000	125,000	100,000	100,000	
Car tax Based on capacity	350,000	350,000	300,000	300,000	
Compulsory liability insurance ("kyosei hoken")	300,000	300,000	250,000	250,000	
Repair & servicing (after guarantee)	420,000	540,000	580,000	256,000	
Voluntarily insurance (*jibaiseki hoken*)	1,110,000	1,070,000	1,220,000	1,000,000	
Gasoline	11 km / L	11 km / L	14 km / L	14 km / L	
Parking	0-20,000	0-20,000	0-20,000	0-20,000	
Total cost of ownership (10 years)	4,600,000	4.585,000	4,480,000	3,455,000	

Source: manufacturers' own information; AIU; own calculations

TABLE 10: TOTAL COST OF OWNERSHIP OF SELECTED EUROPEAN CARS IN JAPAN (IN YEN, 10 YEARS)

» Globalising the European car industry

Problems in the car industry are not temporary

- » Systemic problems, saturated demand, unlikely to rebound once the EU economy grows
- » The EU car manufacturing
 - Along the lines of innovation & efficiency / product category
- » Gains from import substitution minuscule compared to gains in other sectors
 - 0.3% blocking the rest EU ability to conclude FTAs depend on cross-sector trade offs

Trade policy for rewarding inefficient production?

- » Industry survival depend on ability to export, efficiency
- » FTAs with trade-off NTBs for tariffs
- » Open trade is 'save what can be saved'

Motor vehicles	EU27	Germany	France	Italy	Spain	UK
8703 Passenger cars	1.55	2.12	0.70	2.11	0.10	1.19
870321 Fuel <1000	0.35	0.18	0.74	0.73	0.00	0.65
870322 Fuel 1000-1500	1.21	3.42	0.01	1.74	0.01	0.73
870323 Fuel 1500-2500	3.25	3.67	3.74	1.37	0.00	2.03
870324 Fuel > 2500	3.38	3.14	0.21	5.74	18.41	1.56
870331 Diesel <1500	0.02	0.01	0.00	0.17	0.00	0.01
870332 Diesel 1500-3000	0.06	0.08	0.11	0.01	0.00	0.03
870333 Diesel >3000	0.78	1.04	0.03	0.03	0.23	0.01
870390 Other Vehicles	0.50	1.68	0.08	0.17	0.00	2.24
8704 transportation vehicles	0.02	0.04	0.00	0.00	0.00	0.02
8705 Special purpose vehicles	1.62	2.29	0.02	0.33	0.00	0.00
8711 Motorcycles	1.63	2.72	0.03	2.12	0.51	1.44