

FTAs and the crisis in the European car industry

A free trade position on the car crisis and the Economic Integration Agreement (EU-Japan FTA)

Hosuk Lee-Makiyama

Director, European Centre for International Political Economy (ECIPE)

INTRODUCTION

Negotiating FTAs in a time of crisis¹

THE ECONOMIC CRISIS in the EU is beginning to affect all areas of policymaking. EU trade policy is no exception. The current strategy relies on concluding comprehensive bilateral free trade agreements (FTAs) with Asian and emerging economies, and has so far delivered the landmark agreement with Korea. However, the EU and its Member States find themselves increasingly unable to pursue FTA negotiations with large economies that would have a real impact on growth and jobs. The need to tap into markets outside the Single Market is urgent in the wake of the recession and the euro crisis.²

FTAs with big markets cannot be pursued with the expectation that the EU would win in every sector. Unlike the small and mid-sized economies that make up the current FTA candidates, large economies are almost on equal footing with the Single Market. The US, China, Japan and India engage in their own regional and bilateral negotiations and successfully leverage their market size for concessions. However, the attractiveness of the EU as a FTA partner is dented by the meagre growth projections.

SUMMARY

The crisis-struck EU finds it increasingly difficult to engage in trade negotiations with large-sized economies that would have a meaningful impact on growth. Some parts of the European car industry are opposing a FTA with Japan due to defensive interests following the crisis in EU car manufacturing. But such a position is misguided: The crisis in the car industry has its roots in long-term decline in innovation, competitiveness and focus

on low-profit segments. The crisis was neither caused or worsened by foreign imports, whose drop in sales was disproportionate to cars made in the EU. State interventions and subsidies were also counterproductive, and the value-added in some EU Member States are now lagging behind countries like Brazil. These developments have practically split the European car industry into two – while the majority are competitive and

successful exporters, a small part (representing less than 0.3% of the economic value-added in the EU) is affected by permanent overcapacities. Meanwhile, benefits from market access to large-sized economies, export efficiencies, technology and supply chain improvements, all contribute towards revitalising growth in EU car manufacturing, as well as other sectors.

All forms of market liberalisation encourage competition that award competitive actors. Consequently, free trade leads to increased exports, investments and access to better technology. Despite these two-sided gains, the crisis-struck EU is increasingly unable to make the necessary trade-offs between competitive exporters and sunset firms. Nowhere is this dilemma as obvious as in the negotiations with Japan (and to some extent with India) – and the interests of the crisis-ridden car industry in the EU is at the centre of these discussions.

Are free trade agreements threatening the car industry?

THE EU-JAPAN FTA (known as the Economic Integration Agreement, or the EIA) would be the largest bilateral accord ever attempted in history, between the largest and fourth largest economies in the world, covering almost one third of global GDP. While Japan does not apply tariffs to car imports, the EU has resisted dismantling its tariff protection on cars and components against Asian exporting economies. Simultaneously, the EU continuously asks other countries to replace their safety standards with those applied in the EU and demands India to cut its excessive tariffs of 100% on cars made in the EU. Demands for both market access and protectionism are rarely successful in negotiations, and lead inevitably to a breakdown of negotiations.

As EU car exports are rising while over-capacities and record losses continue to plague the car industry, it is clear that competitiveness in some parts is thriving, while it is declining in others. Recent investments in the EU by the US, Japanese and Korean manufacturers also show that the debate needs to distinguish cars made in the EU by foreign-owned brands (using workers and suppliers from the EU) from cars imported from abroad. By contrast, some ‘European’ brands may be of European heritage, while the cars may be manufactured abroad. Road vehicle manufacturing in its entirety (including trucks and busses) accounts for less than 3% of the economic value produced in the EU, and a small fraction with protectionist agendas continues to punch above its weight in the debate. For example, the EU-Korea FTA was temporarily blocked over fears of increased car imports and a veto by Italy.

This study will show that only a portion of these problems can be attributed to the credit crunch of 2008. More worryingly, the crisis of the past decade has unearthed several long-term and deeply rooted structural problems in European car manufacturing including declining relative productivity, returns from innovation and slow transition to high value-adding production. However, the policy responses by EU Member States have not focused on forward-looking strategies but rather maintained the status quo through bailouts and beggar-thy-neighbour policies against other EU Member States. Activist industrial policies and import restrictions are insufficient to strengthen competitiveness in the global market place, and even counterproductive. Finally, there are few convincing economic arguments that restricting imports actually contributes to restructuring the industry, or the struggling brands considered deserving of a special standing above profitable European manufacturers or other export sectors.

THE STRUCTURAL PROBLEMS OF THE EUROPEAN CAR MARKET

Industrial policy insufficient to remedy the problems

THE NEW EU-WIDE crisis response, the so-called EU2020 Strategy, aims to ease the social tensions arising from unemployment and Europe’s relative decline. It promises smart, sustainable and inclusive growth, while few actual measures or sectoral priorities are identified in the plan. This flaw is shared with its predecessor, the Lisbon Agenda, which envisaged that the EU would be world’s most competitive economic region by 2010, as it is clearly not. As the competence and funds remain largely with the Member States, EU2020 offers little hope of creating actual growth or global competitiveness.

The EU and the Member States were poorly prepared to face its biggest challenge on the automobile market since the

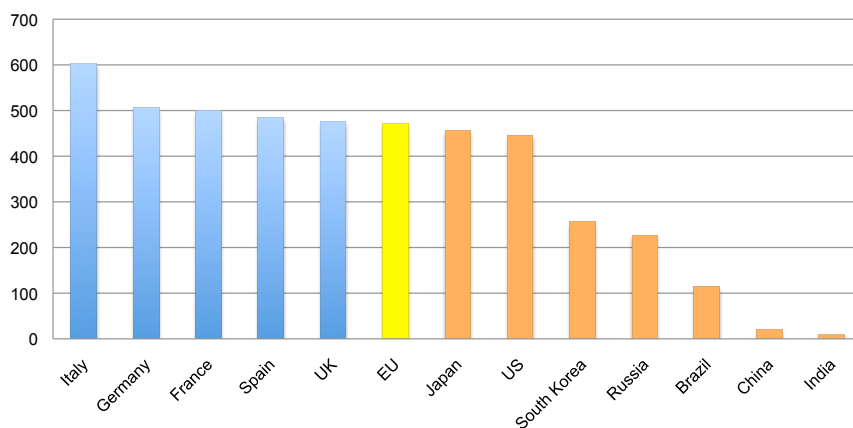
1970s. The Member State interventions were of unprecedented scale although bailouts and outright nationalisations were politically unthinkable just a few years ago. Some EU Member States have been engaged in ‘beggar-thy-neighbour’ policies, implying that the car manufacturers were obliged to repatriate their production from other EU Member States in exchange for state aid. Meanwhile, some brands, including Volvo, MG, Jaguar and Land Rover have found their new futures with resourceful owners in China or India.³

History shows that bailouts and nationalisation do very little to help ailing industries. The woes of the British car industry during the 1970s were only worsened through interventions. When the inevitable restructuring was postponed, it had a detrimental impact on saving jobs. Similarly, today’s crisis is not due to a temporary slump in sales but the result of long-term structural problems. Sales in Europe are still not recovering and have declined by more than 15% since 2007.⁴

Lack of demand at home

THE EXPLANATION FOR falling demand is evident from the high level of car ownership in the EU compared to the rest of the world (table 1). Sales consist of replacement rather than new sales, and the potential for increased sales are simply capped by demographics and meagre projections for income growth.

TABLE 1: CAR DENSITY IN THE WORLD (OWNERSHIP PER 1,000 INHABITANTS)



Source: ACEA, 2008

Sales had peaked already before the crisis and the credit crunch was an adjustment that merely sped up the decline towards a new equilibrium. Consumer demand was also depressed by stricter lending rules that affected a majority of car purchases since these credits were in many cases sub-prime loans.⁵ As the EU and Eurozone growth projections still look bleak almost four years later, this is clearly not a passing problem. Even if consumer demand recovers in the EU, the income elasticity (the speed demand grows in relation to the rest of the economy) for the car market is remarkably low – at factor 0.4 – meaning car sales will recover at less than half the rate of the EU economy on average.⁶ European consumers no longer buy cars to the same extent due to demographics and lifestyle changes that are difficult to address in economic policy.

Market interventions destroy profits

Besides producer subsidies, consumer incentives were also introduced on several markets to artificially uphold consumer demand. Such incentives included scrappage schemes and cash rebates to encourage purchases of fuel-efficient vehicles, and more than €5 bn was paid out in Germany alone.⁷

While these measures temporarily upheld sales in terms of number of cars sold, they had little effects on revenue and profit. The majority of fuel-efficient cars are low-priced, no-frills cars with slim profit margins, typically €500 per car

(or about 2%), even when they are subsidised by €1,000~2,500.⁸ Encouraging consumers to buy cheaper cars was counterproductive to restoring profits. For example, operating profits of the Volkswagen Group were slashed to one-third while the scrapping schemes were in place, just to increase fourfold when it was abolished.⁹ Cheaper, small-sized cars cannibalise sales of larger and more profitable cars that are often equally fuel-efficient thanks to new technologies. Despite what is commonly assumed, undistorted consumer preferences still favour larger cars: Global growth projections for large and premium segments are 9.2% which are significantly higher than the 5.9% projected for small and medium cars.¹⁰ This also applies to European brands for which the bigger sizes often outsell the smaller ones.¹¹

Overcapacities in Europe concentrated in France, Italy and Spain

THE CAR INDUSTRY was not only affected by lower demand but also the rising cost of several important input goods such as steel and metals. The rising material costs have further narrowed the profit margins on car production: Raw material costs rose by €600~700 million for companies like PSA and Renault, a figure that is equivalent to their entire annual profit for 2009.¹² The worst affected markets were France, Spain and Italy where almost 85% of the cars sold are small- and medium-sized cars which already have lower margins.¹³ The brands originating from these countries (e.g. PSA, Renault and Fiat) had already concentrated heavily on increasing volume to uphold profits, making them more susceptible to redundant capacities in case of a sudden drop in demand.¹⁴

Overcapacity problems are currently rampant in Europe. The capacity utilisation rate (sales orders compared to the production capacity) in the EU had rapidly fallen by 30% to as low as 65% by 2009 (table 2).¹⁵ To illustrate the scale of the problem, a decline of 5% is enough to eradicate the average profits in the industry while a 20% drop would force them to restructure.¹⁶ Producers responded by engaging in price-cutting to protect their market shares, resulting in a vicious circle leading to even lower profits.

TABLE 2: CAPACITY UTILISATION RATE IN VARIOUS EU MEMBER STATES IN 2009

Member State	Manufacturers	Capacity Utilisation (2009)
Germany	BMW, Daimler, VW, GM (Opel), Ford	80%
Hungary	VW	78%
Poland	Fiat, GM, Toyota	74%
Czech Republic	VW, Toyota-PSA, Hyundai-Kia	70%
Spain	PSA, Renault, VW, GM	69%
UK	BMW, Jaguar & Land Rover, Toyota	64%
Italy	Fiat	57%
France	PSA, Renault, Toyota	53%

Source: IHS Global Insight; ACEA

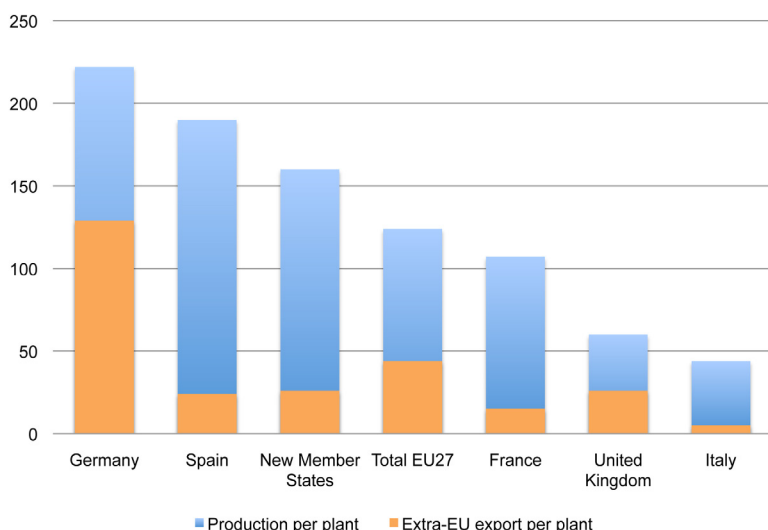
However, these overcapacities have proven difficult to address. Politicians facing elections are inclined to avoid unemployment in the short term rather than look for long-term solutions. As a result, only 1.7% of the capacities have been cut back by European brands (with another 1.8% implemented by foreign-owned brands) almost four years after the crisis began,¹⁷ while further reductions will be needed due to a simplified, modular manufacturing process and fewer parts being assembled.

Variation amongst the EU Member States in production, value-added and innovation

THERE ARE OTHER factors that differentiate car manufacturing in EU Member States, and it is again important to note that these differences in efficiencies exist between *economies* and not necessarily between *brands* (which simply relocate their production):

1) *Economies of scale* – As table 3 shows, production tends to be centralised on a few, larger, assembly plants in Germany, Spain and the new member states (NMS) of Central and Eastern Europe (CEECs), where European and foreign brands have invested in modern and cost-efficient plants. These outperform production in France and Italy where production is dispersed between several smaller, older and often less cost-efficient plants. Germany and the UK are also better safeguarded against the demand contraction in the EU through a substantively higher share of non-EU exports.

TABLE 3: PRODUCTION OF PASSENGER CARS PER ASSEMBLY PLANT; SHARE OF PRODUCTION EXPORTED OUTSIDE EU, 2010



Source: ACEA, UN ComTrade, 2011

2) *Labour productivity* – While the wages of the workers in the EU have risen fast (table 4), the economic value of their output (expressed in value-added per employee,) did not. Value-added in the EU started at a remarkably low level (just half of the value created by workers in Korea and a quarter of that in the US and Japan). The value-added in Spain, Italy and France have even fallen behind developing countries like Brazil.

"The value-added in Spain, Italy and France have even fallen behind developing countries like Brazil."

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

	Wages and Salary		Value added per employee		Labour Productivity Index
	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%
Italy	21 298	39 895	41 205	99 747	-2.2%
Spain	24 326	44 881	52 613	106 628	14.4%
UK	39 253	68 947	51 243	147 442	35.2%*
US	51 338	62 020	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	16 042	25 653	53 577	120 299	-
China	2 798	6 059	28 671	47 542	-

* Motor vehicle data unavailable, and transport equipment classification used

Source: UNIDO; OECD; own calculations

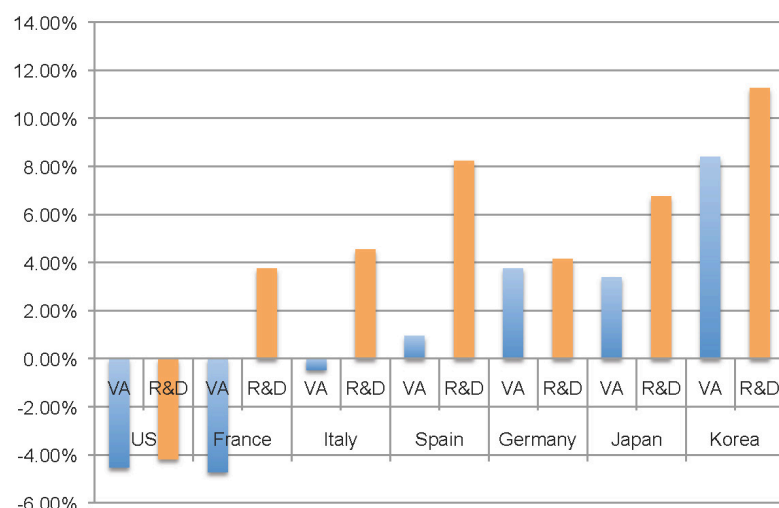
3) *Innovation* – EU Member States allocate different amounts of resources to innovation and get different returns from it. The quality of research and development (R&D) in the EU car industry has been on a relative decline vis-à-vis other OECD countries. The emerging economies are also catching up (table 5) while Asian car manufacturers like Honda or Toyota regularly top European Patent Office (EPO) filings.

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
UK	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

Furthermore, German firms spend six times more on R&D than France and Italy put together, and manage to get relatively good returns (circa 4%) with reasonable annual increases on R&D budget. In contrast, innovation in France and Italy cannot reverse the value destruction that is taking place in their car industries (table 6):

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



Source: OECD STAN

A part of the explanation behind the low return of investments on R&D is the focus on ‘green’ technologies in the European car industry. Although such R&D may be good for society in the long run, green technologies combine high risks and uncertain returns. Non-EU countries have diversified their research also into areas with immediate returns, especially as the share of electronics and IT applications is expected to reach 50% of the value of an average car by 2020.¹⁹ Furthermore, R&D on existing technologies still pays off – conventional combustion engines will continue to dominate the market for the foreseeable future²⁰, while there is still demand for diesel engines on major European

markets.²¹ European policy on R&D funding contributes to this misallocation where car manufacturers are betting their futures on long-term projects, while the time to transition into new market realities is short.

The result – the ‘two Europes’ of car manufacturing

GIVEN THE FACTORS above, European car manufacturing was clearly split into two camps – some economies were dominated by firms who chose the strategy of maximising margins, while others maximised volumes, even when they lacked the infrastructure to do so. The crisis has further divided the two, and the market has ruthlessly rewarded the former along with production in the CEECs. However, a lack of competitiveness and value-added is not always due to high wages that are out of step with profitability and low-profit production – market differentiation is an important factor, as proven by the success in new market niches such as the super-mini category of Fiat 500, Mini Cooper, Smart cars or Peugeot 106/Citroën C1 (a joint-venture developed with Toyota) produced at the modern facilities located in the Czech Republic.

"Trying to save all of the jobs in the short term diminishes the chances of saving them in the long term, as bailouts make them even less efficient"

State aid, consumer incentives and repatriation (from modern plants to less efficient ones) did not solve these problems, but worsened them. Trying to save all of the jobs in the short term diminishes the chances of saving them in the long term, as bailouts make them even less efficient. Such efforts steal resources and market shares from healthy parts of the European industry, and spills over into isolationist sentiments in EU trade policy and threaten Europe's growth.

ARE DEFENSIVE INTERESTS ON CARS PROPORTIONATE AND VALID?

The crisis reflected in EU trade policy

MOST POLICYMAKERS HAVE learned their lesson from the 1930s when tariff protectionism prolonged and deepened the Great Depression. Several emerging economies may have introduced protectionist crisis-related measures, while most developed countries have refrained from serious, outright, protectionist restrictions on trade.

But governments are increasingly sensitive to populist calls to defend their local car industries and manufacturing jobs at home. There is a genuine and legitimate worry about the slow transition towards higher value-added in the EU, while the emerging markets are rapidly catching up. The euro crisis and austerity measures imposed restrictions on the national current account that makes indebted countries uneasy about trade deficits. The result has been a new positive disposition towards mercantilism and a view that exports are simply good and imports bad.²²

Such mercantilist sentiments have a bearing on the EU's ability to conclude bilateral FTA negotiations. The EU demands ambitious removal of trade barriers on cars and the adoption of road and safety standards set by the UN Economic Commission of Europe (UNECE) as national laws by their trading partners. At the same time, the less competitive portion of the industry is hesitant about FTAs that benefit foreign competitors. It is questionable whether such contradictory positions can be defended simultaneously.

'Foreign' cars are still made in Europe

THE DISCUSSIONS ON FTAs have raised the question of the impact of foreign imports under current market conditions. Despite global competition, imports from non-EU countries are still relatively rare on the Single Market, with more than 85% of all cars still being manufactured in the EU. The vast majority of foreign brands produce their cars in Europe, using European workers and subcontractors. Therefore, the single largest exporter to the EU, Japan, has only 5% of the market, while the US has less than 3%.

The EU tariffs on cars at 10% (6.5% for developing countries) may seem modest, but is sufficient to restrict imports. As the profit margins on the European market is usually lower, the tariffs turn potential profits from exporting to the Single Market into losses, as manufacturers are unable to raise their prices.

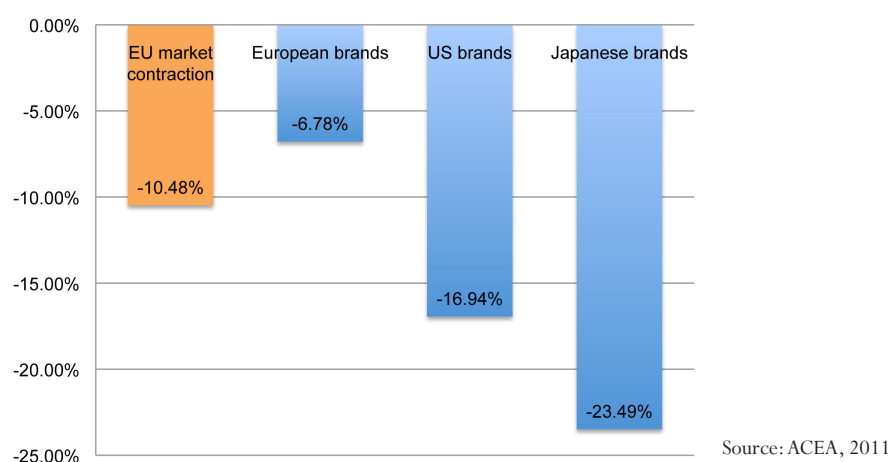
But foreign brands assemble cars locally primarily due to reasons other than tariffs. First, there are vast differences in preferences that lead to specific product types being designed and developed for each region: What is mostly referred to as an Asian or American car, is more often as European as a Renault or Fiat – Korean and Japanese manufacturers have invested billions of euro in new capacities, which would take several decades to recuperate in minuscule savings on tariffs. Japanese brands even source 80% of their components in the EU.²³

However, stronger economic incentives than tariffs keep manufacturing in the EU – the sheer bulk of cars have natural prohibitive effects on cross-border trade as they rely on time consuming and costly means of transport. Also, the impact of currency volatility exceeds the one from tariffs, and the Indian rupee, Korean won and Japanese yen have fluctuated more than 10% against the euro in the past three years. The inevitable trajectory of the euro and appreciation of the yen suggests that Japanese brands must continue to hedge the risk by placing their cost-intensive production in the EU, paid in local currency.

Foreign brands and imports lost their market share in the crisis

PREVIOUS SECTIONS ESTABLISHED that domestic problems exacerbated the car crisis – not cheap imports as is evident from the low share of non-EU imports. Foreign brands took a heavier toll while brands originating from the EU actually gained from the crisis by flushing out foreign brands (imports and EU-made alike) and captured a larger share of the market.²⁴ The lion's share of the drop was taken by Japanese and US brands (table 7).

TABLE 7: BIGGEST DROPS IN EU CAR SALES (NEW CARS REGISTRATIONS, 2008/Q1~2011/Q1)



Previous studies (Ecorys, 2009; Copenhagen Economics, 2009) also suggest that imports from Japan would double if EU tariffs were removed.²⁵ These predictions are made with econometric models that do not take into consideration brand loyalty or impact of car types (all sizes and price segments are grouped together with components, trucks, busses and utility vehicles). Furthermore, these types of studies do not take into account the Japanese manufacturing capacities already placed in the EU, or that changes in euro/yen exchange rates and relative prices have already offset any price impact from tariffs. Even under these assumptions, the increase predicted by Ecorys leads only to a rise by 15% above 2007 pre-crisis levels in imports from Japan.²⁶

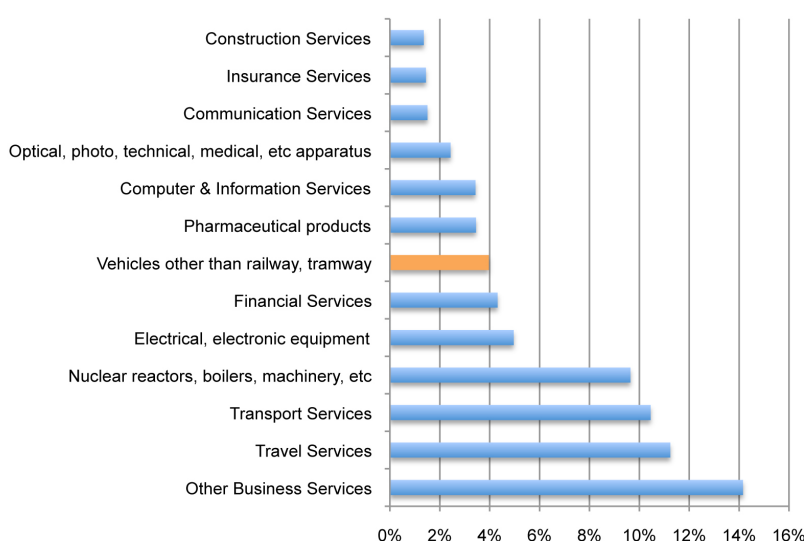
The limited impact from car imports is also evident from the EU-Korea FTA. Since its ratification, imports of entire cars from Korea follow the general long-term trend for Korean imports while both component imports and exports have increased by up to 85%.²⁷ Similar effects are to be expected from an FTA with Japan, where foremost components and high-margin cars can be profitably shipped into the EU.

How much of the economy do the protectionist interests represent?

As EUROPEAN BRANDS gained market share thanks to the crisis, and foreign branded cars are still manufactured in the EU – is there an economic rationale for putting the defensive interests of the car industry above other sectors?

All motor vehicles (including trucks, cars and utility vehicles) together account for 4% of EU exports. It is far from the biggest exporting sector of the services-dominated and diversified EU trade. Nevertheless, cars are an important sectoral area in parity with other prominent sectors like pharmaceuticals or financial services (table 8).

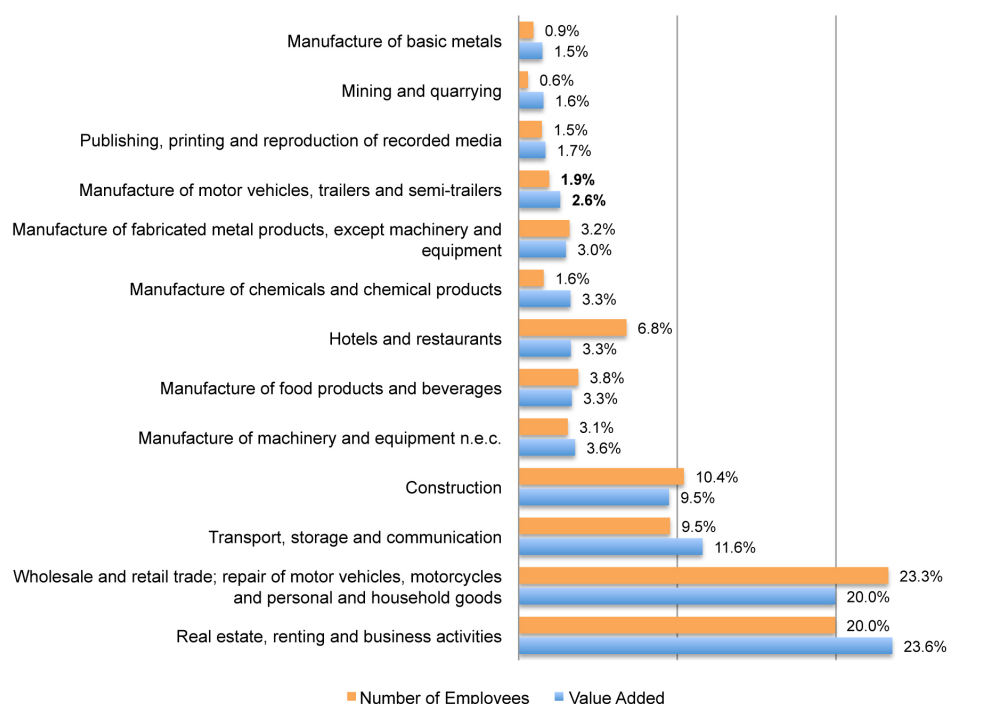
TABLE 8: EU EXPORTS BY SECTOR, GOODS AND SERVICES



Source: OECD; UN ComTrade, 2011

While the importance of the car industry as a whole is inarguable. However, the economic relevance of defensive considerations relative to the gains in other sectors is a different matter. The actual economic contributions in value-added and employment are markedly less, around 2~3%. This is in level with the publishing industry and metal works in the EU (table 9). However, only a small part of this comes from passenger cars made in the economies affected by overcapacities – approximately less than 0.3% of the total EU value-added.²⁸

TABLE 9: EU EMPLOYMENT AND VALUE-ADDED IN INDUSTRY & SERVICES SECTORS (2008)



Source: Eurostat 2008

More importantly, the EU runs a considerable trade surplus on passenger cars and exports 3.5 times more than it imports, and gains more than three euro for every euro it pays for imports.²⁹ There is little doubt that there is only one way forward for the European car industry: open up, look abroad and tap into overseas markets.

BENEFITS OF THE EIA AND OTHER LARGE-SCALE FTAS FOR THE CAR INDUSTRY

Estimating the market access gains

EUROPEAN CAR PRODUCERS already make up over 90% of Japan's imports – a dominance that will be further improved by an FTA. Prior studies on the possible effects from the EIA (Ecorys, 2009; Copenhagen Economics, 2009) report vastly different results on EU export gains. As previously mentioned, econometric studies are unable to capture the dynamic effects from trade liberalisation. In addition, the existing studies were also produced before the negotiations have even been announced and rely on assumptions about negotiation outcomes, where they differ significantly.

In all trade today, divergences in rules, standards and regulations – or non-tariff barriers (NTBs) – are far bigger trade barriers than tariffs. This is particularly true in the case of Japan, as it simply does not put any tariffs on car imports. Enhancing EU exports comes down to improving product acceptance and access for supporting services that surround selling, distributing and marketing passenger cars. This is why the Ecorys report (2009) had such a minuscule or even negative impact on EU car exports and sector output: the study merely looks at the non-existent tariffs while it neglects regulatory issues. In contrast, the study by Copenhagen Economics prepared for the European Commission (2009) estimates that European exports of cars could increase up to 84%. Such growth figures are not unrealistic – studies made of the EU-Korea FTA (based on actual negotiation outcomes) stipulated that European exports could increase up to 400% (albeit from low levels),³⁰ which is actually in line with the growth of EU exports in the past decade.³¹

In considering priorities for market access, it is important to note that car exports are dependent on several supporting services and contributing factors for further growth. Table 10 shows that popular European cars are sold at a 90% mark-up in Japan compared to European listed prices. Yet, the higher purchase price for European cars have less impact on total cost of ownership for a Japanese consumer than the higher costs of services (such as repairs, servicing and insurances) compared to buying a model from a Japanese brand: Warranties (which is an indication of dealership costs for repairs and maintenance) are 100% higher than Japanese brands. The availability of parts and accessories, diagnostic equipment and technical expertise all contributes to higher prices for imported brands – resulting in a total cost of ownership for European cars that is more than 30% higher:

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

	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

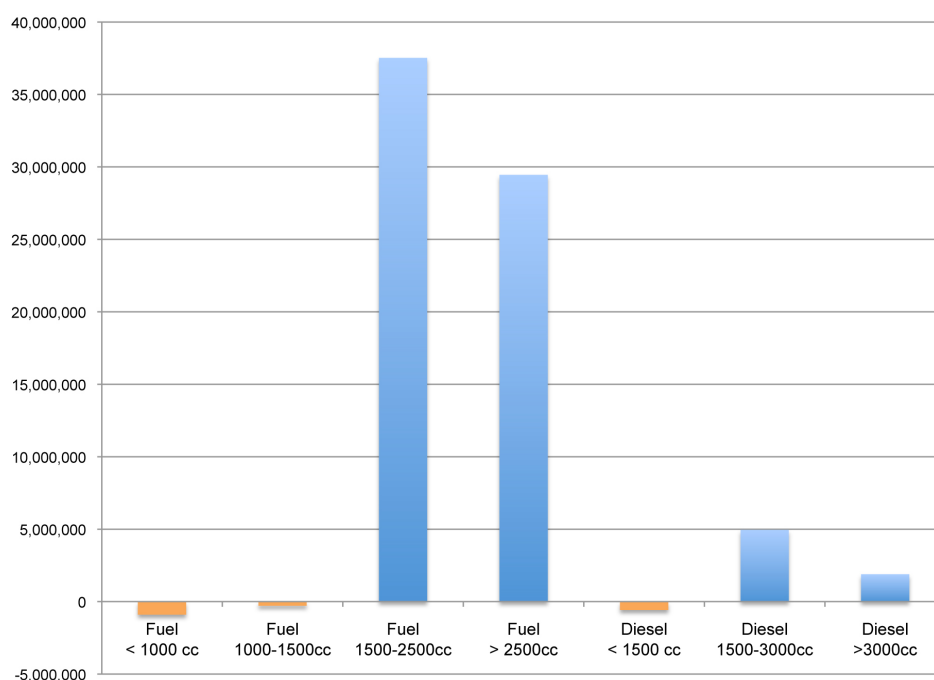
Increased exports require specialisation

ARGUABLY, EU EXPORTS are playing an away game in the Far East, on markets with slightly different consumer preferences, and against some of the most efficient car builders in the world. But Europe is still exporting cars – and in huge numbers. In fact, the EU's largest trade surplus with the world is on cars. The exceptional surplus comes from the unique expertise on premium and large-sized cars, while the trade balance on smaller sizes is relatively in balance (table 11).

"In fact, the EU's largest trade surplus with the world is on cars"

Exports are the result of specialisation that leads to comparative advantages and deeper specialisation, leading to even more exports. Consequently, the biggest European exporter of cars (Germany) is also the car manufacturer with the highest degree of specialisation rate:³⁶ Germany either succeeds very well in exporting a particular car segment or segment, or does not export them at all. Similarly, other EU countries have found niches where they are successful on fiercely competitive markets such as Japan. In fact, the European car industry has been more successful exporting to Japan than to the rest of the world (table 12):

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



Source: UN ComTrade, 2011

- Cars represent a bigger share of EU exports to Japan than EU exports to the rest of the world. Germany and Italy are exporting twice as many cars to Japan;
- All exports are concentrated on mid- and large-sized cars. France exports almost four times more to Japan in the category 1500~2500 cc; Italy and Spain export 5 and 18 times more respectively in the segment above 3000 cc;
- No EU Member States succeed in shipping and selling EU-made light, low-profit cars to Japan;
- Different EU Member States have specialised in different components. For example, France exports gear-boxes; Italy safety exports belts; and Germany concentrates on brakes and clutches.

TABLE12: SHARES OF CERTAIN GOODS IN EU EXPORTS TO JAPAN

(Relative to their share to rest of the world, i.e. 1.55 indicates that the share of exports of that good are 55% higher to Japan than exports to other countries)

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

Car parts	EU27	Germany	France	Italy	Spain	UK
8706 Chassis fitted for engines	0.10	0.13	0.01	0.00	0.66	0.30
8707 Bodies for special motor vehicles	0.03	0.01	0.01	0.19	0.00	1.18
8708 Parts & access for motor vehicles	0.90	0.73	0.63	0.62	1.30	1.54
--- 870810 Bumpers	1.34	2.21	0.21	0.80	0.00	0.80
--- 870821 Safety belts	0.15	0.23	0.14	1.34	0.00	2.16
--- 870829 Parts & fitting for other	0.43	0.60	0.16	0.11	0.01	2.50
--- 870839 Brakes and servo-brakes	0.91	1.44	0.43	0.96	0.27	0.27
--- 870840 Gear boxes	1.22	0.54	1.56	0.34	0.69	1.13
--- 870850 Drive axles with differential	0.35	0.52	0.03	0.15	0.01	0.12
--- 870870 Road wheels	0.43	0.83	0.14	0.53	0.00	0.43
--- 870880 Suspension shock absorbers	1.49	1.06	0.03	0.06	0.03	1.27
--- 870891 Radiators	0.41	0.26	0.52	0.53	1.47	1.08
--- 870892 Mufflers and exhaust pipes	0.28	0.37	0.83	0.19	0.45	0.13
--- 870893 Clutches	1.14	1.56	0.36	0.84	0.00	0.89
--- 870894 Steering wheels, columns	0.80	0.30	0.32	0.88	0.06	0.22
--- 870899 Others	1.19	0.50	0.64	0.70	2.52	2.81

Source: Own calculations; UN ComTrade, 2011

Improving European R&D and supply chain disadvantages

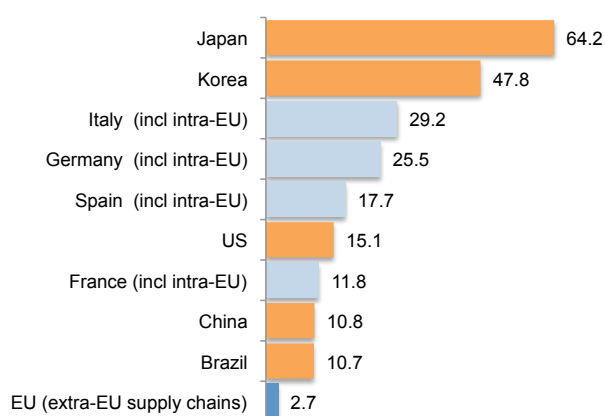
THE PAST FIFTEEN years have seen the rise of global production networks (GPN) whereby a range of goods are manufactured by using components from all over the world and in incremental steps in several different economies, making the best use of each of their specialisations. For example, various parts going into a smartphone have crossed national borders a hundred times before it is finalised for delivery.³⁷ The effects on trade, innovation and human development have been one of the most transformative in centuries, which was enabled by proliferation of simple FTAs focusing on tariff reduction.

The car industry is no exception – an average car consists of 30,000 parts where 75~85% are provided by subcontractors. Just to name a few examples, modern cars require advanced machinery equipment, petrochemicals, composite materials, electronics, communication equipment, software, textiles, battery technology and optics. It is unlikely that such variety is best sourced from one country (or even one region) alone. However, the level of EU supply chain fragmentation is relatively low. Only 40% of car components are imported from another country, and the majority from other EU Member States.³⁸ The EU is falling behind in taking advantage of global supply chains outside the EU,³⁹ which is also evident from the trade statistics (table 13).

This is at least partially explained by EU tariffs on car components and manufacturing equipment.⁴⁰ Tariffs have more prohibitive effects on car supply chains due to the low margins and the vast number of technologies and components that are involved. This puts the EU in a disadvantaged position rather than protecting EU components and machinery manufacturers since the R&D efficiency in the EU on average is lower, and better technologies are available from subcontractors abroad. Subcontractors and original equipment manufacturers (OEMs) also support FTAs as a way to improve production flexibility,⁴¹ which leads to market access abroad.

TABLE 13: SUPPLY-CHAIN GLOBALISATION IN CAR MANUFACTURING

(where 0 is no use of globalised supply chain and 100 is full use)

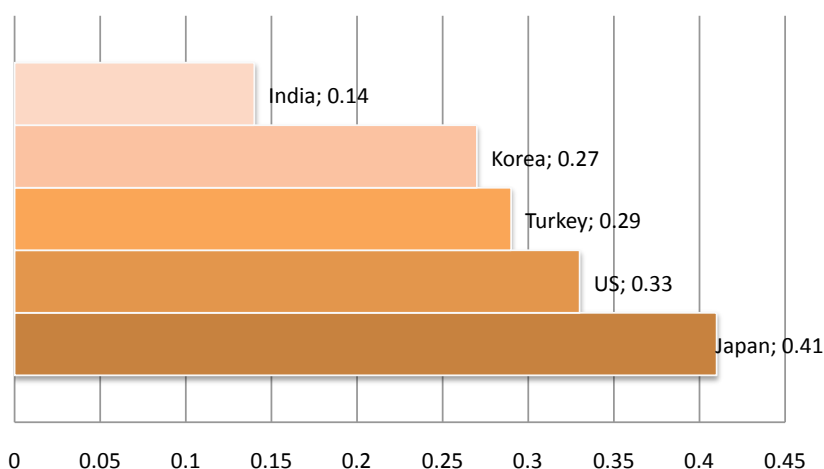


Source: Own calculations (based on OECD intra-industry trade index, UN ComTrade 2011)

A tariff on imports is also effectively a tax on European exports since there is a strong link between the level of imports and export competitiveness: EU Member States with a higher share of imports are also more competitive exporters (table 14), as those who source more efficiently have access to better technologies. The correlation with exports is particularly high on imports of components from high value-adding economies, such as Japan and the US, rather than low-cost economies like India.

The EU car industry in its current condition seems to benefit more from international cooperation. Although some premium brands like Volvo, Land Rover, Jaguar and MG were acquired by capital rich (but R&D poor) actors from emerging markets, the EU is falling behind on M&A activities compared to Asia and North America since the crisis began to unfold.⁴² While joint ventures are commonplace in the industry – e.g. between PSA and Toyota, and outright cross-ownership between Renault and Nissan, or Fiat and Chrysler – none of the jobs and the capacities in the EU have been bought outright.

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



Source: Own calculations

CONCLUSIONS: AVOIDING ISOLATION IN DECLINE

UNDER SHRINKING DEMAND and rising costs, it is clear that future growth lies in overseas markets but only the value-adding and innovative car builders can export and survive. European industry leaders have acknowledged that consolidation is now ‘unavoidable as they battle with chronic overcapacity and mounting financial losses in a weakening market’.⁴³ The situation may even grow worse as ‘the industry still has between 20% and 30% more production capacity in Europe than it actually needs’.⁴⁴

Believing that limiting imports will give the European brands a chance to recover is an illusion, and there are several fundamental flaws in this proposition:

- First, these problems are not temporary but rooted in systemic problems and saturated demand. The European car market will not rebound even if the general economy does;
- Second, productivity and innovation had been declining for more than a decade in places affected by over-capacities; Meanwhile, efficiently run European brands are making record profits and stealing their market share – not imports;
- Third, the problems in the affected areas are too deep, while the market share held by imported cars are too insignificant to matter. Only market integration with large-sized economies like Japan can impact sector growth, investments and supply-chain efficiencies;
- Finally, rewarding inefficient production and limiting competition is going to rapidly erode the EU’s ability to export, upon which their survival depends;

An FTA without any losers means there is no restructuring taking place – and no new capital, innovation, efficiencies being brought in – and fewer jobs are being saved. Consequently, a crisis-struck EU has more incentive to open up, not less. Britain learned that domestic ownership and full employment in car making is not the manifestation of national

industrial pride, and managed to revive its fledgling car industry. Other EU countries are coming to terms with this reality some 30 years later. In Sweden, arguably one of world's most state-activist countries, a broad political coalition has decided to leave Saab to its own devices, whether it sinks or swims.

"a crisis-struck EU has more incentive to open up, not less"

The European policymakers are facing a difficult choice between protecting a sector in crisis and the need to deliver growth. These objectives cannot co-exist within a single policy response. As captains of a ship in the middle of a perfect storm, they need to take sober decisions for the welfare of all passengers – consumers, workers and producers alike. Protectionist interests serve less than 0.3% of European value creation – those who have fallen behind developing economies like Brazil. Increased competition and large-scale FTAs with economies like Japan are not a call to abandon ship on EU manufacturing. Quite the contrary. Global Europe and free trade agreements can save all that can be saved of the Europe's car industry – and safely sail this ship ashore.

ENDNOTES

1. The author would like to thank Professor Patrick Messerlin (GEM/Sciences Po) for his thoughtful comments, and Michal Krol (ECIPE Research Associate) for his able research assistance
2. Messerlin, Patrick, 'The EU Preferential Trade Agreements: Defining Priorities for a Debt-Ridden, Growth-Thirsty EU', GEM/Sciences Po, 2012
3. Ford sold Jaguar and Land Rover to Tata in 2008 while Volvo was sold to Geely Automobile; MG was sold by BMW to Nanjing Automobile in 2005.
4. ACEA Statistics, 2011 [online] http://www.acea.be/index.php/news/news_detail/passenger_cars_registrations_drop_6.4_in_december_-1.7_in_2011
5. PwC, 'Non-prime auto underwriting: Evolving for a market change', 2010
6. Haugh, David, Mourougane, Annabelle, Chatal, Olivier, 'Automobile Industry in and beyond the crisis', OECD, Working Paper 745, 2010
7. IHS Global Insight, [online] <http://www.ihs.com/products/global-insight/industry-economic-report.aspx?id=1065928703>
8. Own calculations; VW Group, Annual Report, 2010; Renault Group, Annual Report, 2010
9. VW Group, Annual Report, 2010
10. Estimates by PwC, [online] http://www.pwc.com/en_GX/gx/press-room/2011/autofacts-forecast-2011-global-automotive-assembly.jhtml
11. According to manufacturers' annual reports, Passat dominates global Volkswagen sales; Skoda Octavia outsells the smaller Fabia; Audi's top model is the A4, ahead of smaller A3; Citroen DS and Peugeot RCZ captures 17% of the sales of the holding parent PSA; premium models of BMW and Mercedes outsell their cheaper compacts or hatchbacks even in numbers, thanks to narrowing price difference and improved fuel-efficiencies in larger cars.
12. Reuters, 'Peugeot, Nissan Smarting after Japan Quake', [online] <http://www.reuters.com/article/2011/07/27/us-nissan-idU-STRE76Q1A520110727>
13. ACEA, ACEA Economic Report, 2011
14. ACEA, [online] http://www.acea.be/images/uploads/files/20101008_Segments_by_Country_2006-201008.pdf
15. European Commission, 'European Industry In a Changing World: Updated sectoral overview 2009', July 2009
16. UBS calculations, [online] quoted by European Parliament, 'Impact of Financial and Economic on European Industries: Compilation of Briefing Papers' IP/A/ITRE/RT/2009-04, March 2009
17. The Financial Times, 'Car plants in Europe cut back on output', October 17th, 2011

18. China's data on 'Transport Equipment' sector (2009), Expenditure converted from RMB (1US\$ = 6.8 RMB)
19. Deloitte, 'A new era Accelerating towards 2020 – an automotive industry transformed, 2009'
20. ACEA, ACEA Economic Report, 2011
21. Ibid.
22. Erixon, Fredrik, 'The Case Against Europe's 2020 Agenda', ECIPE Policy Brief No.01/2010
23. JAMA, 'Common Challenges, Common Future, Japanese Auto Manufacturers Contribute to the Competitiveness of Europe's Motor Industry', November 2011
24. Erixon, Fredrik, Lee-Makiyama, Hosuk, 'Stepping into Asia's Growth Markets', ECIPE Policy Brief No. 03/2010
25. Ecorys, The impact of Free Trade Agreements in the OECD, 2009; Copenhagen Economics, Assessment of barriers to trade and investment between the EU and Japan, 2010
26. Increase estimated by Ecorys 2009; Volumes based on UN ComTrade 2007/2010
27. Eurostat, 2010 and 2011
28. Own calculations based on value-added in France and Italy (DM341), Eurostat, 2011
29. UN ComTrade, 2011
30. CEPPI/ATLASS, The Economic Impact of the Free Trade Agreement (FTA) between the European Union and Korea, 2010
31. Erixon, Lee-Makiyama, 2010
32. Volkswagen Japan, [online] <http://www.volkswagen.co.jp/dealer/index2.html>
33. Peugeot Japan, [online] <http://content.peugeot.co.jp/extend/>
34. Fiat Japan, [online] http://www.fiat-auto.co.jp/service_warranty.html
35. Nissan Japan, [online] <http://www.nissan.co.jp/SERVICE/SHAKEN/OSUSUME/GOODPLUS/index.html>
36. EU Cluster Observatory, 2010 [online] <http://www.clusterobservatory.eu/index.html>
37. Trade Policy Study Group, 'A Modern Trade Policy for the European Union', ECIPE, 2010
38. Deloitte, 'A new era Accelerating towards 2020 – an automotive industry transformed', 2009
39. Prema, Nobuaki, 2007 p.97 in Kierzkowski, 'New Global Auto Industry? China and World Economy', pp.63 – 82, 19(1), 2011
40. See for example Sweden – 'Made in Sweden?' 2010, National Board of Trade:Automobile Sector has the highest share of export in manufacturing (11%), but it accounts also for the highest usage of dutiable input products at the same year (30%).
41. Deloitte, 'A new era Accelerating towards 2020 – an automotive industry transformed', 2009
42. IMAP Automotive and Components Global Report, 2010
43. The Financial Times, 'Carmakers must merge, says Fiat chief', January 11th, 2012
44. Ford's Europe chief Stephen Odell quoted on Wall Street Journal blog [online] <http://blogs.wsj.com/source/2011/11/11/overcapacity-still-looms-in-european-car-industry/>

BIBLIOGRAPHY

ACEA Economic Report, 2010 and 2011. Available at: http://www.acea.be/collection/industry_and_economy_economic_report/ [Accessed 5th February 2012]

Athukorala, Premachandra, Yamashita, Nobuaki, 'Production fragmentation in manufacturing trade: The role of East Asia in cross-border production networks', Working Papers Series No.003, 2007, Nihon University, Tokyo

Center for Automotive Research (CAR), 'The U.S. Automotive Market and Industry in 2025', June 2011. Available at: <http://www.cargroup.org/pdfs/ami.pdf> [Accessed 5th February 2012]

Copenhagen Economics, Assessment of barriers to trade and investment between the EU and Japan, 2010. Available at: <http://www.copenhageneconomics.com/Publications/Trade---Internal-Market.aspx> [Accessed 5th February 2012]

Deloitte, 'A new era: Accelerating towards 2020 – an automotive industry transformed', September 2009. Available at: http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/A%20New%20Era_Online_final.pdf [Accessed 5th February 2012]

Ecorys, The impact of Free Trade Agreements in the OECD, 2009. Available at: <http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2010/03/08/report-the-impact-of-free-trade-agreements-in-the-oecd-the-impact-of-an-eu-us-fta-eu-japan-fta-and-eu-australia-new-zealand-fta.html> [Accessed 5th February 2012]

Erixon, Fredrik, Lee-Makiyama, Hosuk, 'Stepping into Asia's Growth Markets', ECIPE Policy Brief No.3/2010

European Commission, 'European Industry in a Changing World Updated sectoral overview 2009', Staff Working Document, July 2009

European Parliament, Policy Department, Economic and Scientific Policy, 'Impact of Financial and Economic on European Industries: Compilation of Briefing Papers' IP/A/ITRE/RT/2009-04, March 2009

Haugh, David, Mourougane, Annabelle, Chatal Olivier, 'The Automobile Industry in and Beyond the Crisis'. OECD Working Paper 745, January 2010

IMAP, 'Automotive and Components Global Report – 2010', 2010. Available at: http://www.imap.com/imap/media/resources/AutoIndustryReport_WEB_0E7D3D1839347.pdf [Accessed 5th February 2012]

JAMA, 'Common Challenges, Common Future, Japanese Auto Manufacturers Contribute to the Competitiveness of Europe's Motor Industry', November 2011. Available at: http://www.jama-english.jp/europe/auto/2007/jautomkrs_in_europe_2007.pdf [Accessed 5th February 2012]

Kierzkowski, Henryk, 'New Global Auto Industry?', China and World Economy, 19 (1), 2011

Messerlin, Patrick, 'The EU Preferential Trade Agreements: Defining Priorities for a Debt-Ridden, Growth-Thirsty EU', GEM/Sciences Po, 2012

National Board of Trade of Sweden, 'Made in Sweden? A new perspective on the relationship between Sweden's Export and Imports', March 2011. Available at: <http://www.kommers.se/upload/Analysarkiv/Publikationer/Report%20Made%20in%20Sweden.pdf> [Accessed 5th February 2012]

KPMG Automotive, 'Global Auto Executive Survey 2010: Industry Concerns and Expectation to 2014'. Available at: <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/Global-Auto-Executive-Survey-2010-O-200912.pdf> [Accessed 5th February 2012]

PwC, 'Non-prime auto underwriting: Evolving for a changing market', July 2010. Available at: http://www.pwc.com/en_GX/gx/automotive/financing/pdf/non-prime-auto-underwriting.pdf [Accessed 5th February 2012]

Trade Policy Study Group, 'A Modern Trade Policy for the European Union: A Report to the New European Commission and Parliament from the EU Trade Policy Study Group', January 2010. Available at: <http://www.ecipe.org/tpsg/A%20Modern%20Trade%20Policy%20for%20The%20European%20Union.pdf> [Accessed 5th February 2012]

Tresor Economics, 'French and Germany export specialization: similarity of divergence', No. 68, December 2009

Annual reports of VW Group, PSA Group, Renault Group, 2010

LATEST PUBLICATIONS:

What is Driving the Rise in Health Care Expenditures? An Inquiry into the Nature and Causes of the Cost Disease

[ECIPE Working Paper No. 05/2011](#)

By Erik van der Marel, Fredrik Erixon

Future-Proofing World Trade in Technology: Turning the WTO IT Agreement (ITA) into the International Digital Economy Agreement (IDEA)

[ECIPE Working Paper No. 04/2011](#)

By Hosuk Lee-Makiyama

Chasing Paper Tigers – Need for caution and priorities in EU countervailing duties (CVDs)

[ECIPE Policy Brief No. 01/2011](#)

By Hosuk Lee-Makiyama

Digital Authoritarianism: Human Rights, Geopolitics and Commerce

[ECIPE Occasional Paper No. 5/2011](#)

By Fredrik Erixon, Hosuk Lee-Makiyama

Indian Trade Policy After the Crisis

[ECIPE Occasional Paper No. 4/2011](#)

By Razeen Sally

The Crisis and the Global Economy: A Shifting World Order?

[ECIPE Occasional Paper No. 3/2011](#)

By Razeen Sally

Is the Renminbi Undervalued? The Myths of China's Trade Surplus and Global Imbalances

[ECIPE Working Paper No. 2/2011](#)

By Sylvain Plasschaert

Chinese Trade Policy After (Almost) Ten Years in the WTO: A Post-Crisis Stocktake

[ECIPE Occasional Paper No. 2/2011](#)

By Razeen Sally

Value For Money: Getting Europe's Trade and IPR Policy Right

[ECIPE Occasional Paper No. 1/2011](#)

By Fredrik Erixon

A Guide to CAP Reform Politics: Issues, Positions and Dynamics

[ECIPE Working Paper No. 3/2011](#)

By Valentin Zahrnt

Food Security and the EU's Common Agricultural Policy: Facts Against Fears

[ECIPE Working Paper No. 1/2011](#)

By Valentin Zahrnt

Securing Korea's Prosperity in the Next Century: An analysis of the Korea-EU Free Trade Agreement

[ECIPE Occasional Paper No. 4/2010](#)

By Fredrik Erixon, Hosuk Lee-Makiyama

Ukraine After the Crisis: Recovery and Reform, not Revolution or Russification

[ECIPE Policy Brief No. 04/2010](#)

By Fredrik Erixon

Baltic Economic Reforms: A Crisis Review of Baltic Economic Policy

[ECIPE Working Paper No. 4/2010](#)

By Fredrik Erixon

Stepping into Asia's Growth Markets: Dispelling Myths about the EU-Korea Free Trade Agreement

[ECIPE Policy Brief No. 03/2010](#)

By Fredrik Erixon, Hosuk Lee-Makiyama

Vested and Invested Interests: The Role of Investment Protection in EU-Russia Relations

[ECIPE Policy Brief No. 02/2010](#)

By Fredrik Erixon, Iana Dreyer

The European Centre for International Political Economy (ECIPE) is an independent and non-profit policy research think tank dedicated to trade policy and other international economic policy issues of importance to Europe. ECIPE is rooted in the classical tradition of free trade and an open world economic order. ECIPE's intention is to subject international economic policy, particularly in Europe, to rigorous scrutiny of costs

and benefits, and to present conclusions in a concise, readily accessible form to the European public. We aim to foster a "culture of evaluation" – largely lacking in Europe – so that better public awareness and understanding of complex issues in concrete situations can lead to intelligent discussion and improved policies. That will be ECIPE's contribution to a thriving Europe in a world open to trade and cross-border exchange.

www.ecipe.org

Phone +32 (0)2 289 1350 Fax +32 (0)2 289 1359 info@ecipe.org Rue Belliard 4-6, 1040 Brussels, Belgium