

EU-Japan Free Trade Agreement Impact Assessment on the Automotive Industry Summary report



October 22nd, 2012

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1. EU – Japan FTA Impact assessment
2. Accumulation of FTAs risk assessment
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Background

Japan and the European Union are considering opening formal negotiations on a broad Free Trade Agreement (FTA). As both regions have a strong automotive footprint, it is important to determine the impact of such an FTA on this vital part of the economy.

To put the impact on the EU automotive sector (automobile, parts and engines) in context, it should be noted that in 2011, the EU generated a trade surplus of € 114.1 billion for automotive products with the rest of the world, while the EU total trade balance in goods revealed a € 152.8 billion deficit. Being a net exporter, the EU automotive industry is by nature interested in FTAs.

However, looking at trade with Japan, the picture is inverse, as the EU imported almost twice the value of automotive products from Japan (€ 12.3 billion, or 18.4% of all imported goods) as it exported to Japan (€ 6.7 billion), leaving the EU automotive sector with a € 5.6 billion deficit towards its Japanese trading partner (source: Eurostat).

The EU automotive market is characterized by its high level of competition. Pressure especially on volume market manufacturers is high due to rising manufacturing costs, severe price competition and more stringent regulatory requirements. In addition, the economic crisis in the EU has caused sales volumes to drop in many Member State markets. These developments have contributed to growing losses which threaten the sustainability of the business of the volume market manufacturers. Moreover, social constraints impede the ability of volume market manufacturers to tackle the resulting structural overcapacity issues in the EU. This issue is also prevalent in Japan.

EU car manufacturers have tried to penetrate the Japanese market for decades without significant success and their market share has stagnated at 4% despite their continued efforts.

Moreover, the European Automobile Manufacturers' Association (ACEA) believes that the preparatory 'scoping exercise' for this Free Trade Agreement has been insufficient and does not create the right conditions for launching bilateral negotiations. The 'automotive roadmap' - one of the outputs of the scoping exercise - is too vaguely-worded and lacks clarity in terms of the precise methods to be used to dismantle non-tariff barriers and the timelines for this to happen.

In this context, the ACEA, on behalf of its members, mandated Deloitte to assess the potential impact of such an FTA on the EU (27 Member States) and the Japanese automotive industry.

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Executive Summary

On the basis of appropriate supporting material and arguments, we have concluded that, while efforts to promote an EU-Japan FTA would confer considerable economic benefits on the Japanese automotive industry, an FTA would be economically disadvantageous for EU automotive manufacturers.

- EU-Japan automotive trade shows a structural surplus in Japan's favour, which an FTA would only exacerbate.
- Japanese car manufacturers would benefit financially, boosting their competitiveness to the detriment of the EU industry. The elimination of the EU tariffs would represent an average benefit of € 1.2 billion per year for Japanese car manufacturers⁽¹⁾. This would have meant, in 2011, a saving on average of € 1,500 per imported vehicle, which would *ceteris paribus* drastically improve the profitability of vehicles made in Japan, therefore promoting their sales on the EU market, at the expense of EU produced vehicles. In a realistic scenario⁽²⁾ we expect a direct decline in automotive employment of 34,500 to 72,760 ⁽²⁾ jobs in the EU as a result of an FTA. Additionally, and independent of an FTA, the impact would be multiplied by nearly 3 if the €/¥ exchange rate level comes back to its past levels (a weaker Yen).
- Only premium manufacturers would derive some limited gains from improved market access in Japan. Due to the cost of Japanese market access, premium vehicles constitute the majority of EU produced cars sold in this country. Overall, the positive impact of an FTA on EU manufactured passenger cars is minimal. This is due to a declining Japanese automotive market (driven by demographics) and the hypothetical dismantling of non tariff barriers. The effect of the FTA on the commercial vehicle industry will be none or slightly positive. The marginal increase of exports from the EU to Japan will not offset additional exports from Japan to the EU.
- The simultaneous accumulation of unbalanced FTAs⁽³⁾ with countries (Korea, Japan, India, ...) with protected automobile industries will put the EU automotive industry under severe pressure. Such FTAs have a multiplier effect on the impact of each subsequent FTA. The share of imported vehicles could increase from 17.4 % today to 23% in the future⁽⁴⁾. If those conditions hold we expect 92,000 to 193,000 ⁽⁵⁾ jobs are put at risk.

(1) Average of the past 5 years

(2) See page 17

(3) An 'unbalanced FTA' refers to one that does not give equal benefits to the contracting parties, or disproportional advantages to one of them. Full definition see page 24

(4) All vehicle imports 2.67 million units on a total market of 15.35 million in 2011 gives 17.4%. Share in PC market is slightly higher at 17.6%. Minimal 5.5%point increase expected. See pages 25-27.

(5) See pages 25-28

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Study Highlights

EU-Japan automotive trade shows a structural surplus in Japan's favour (€ 5.6 billion), which an FTA would only exacerbate.

- Although the EU market is mature, opportunities remain for Japanese importers: the import penetration rate is high (imports represent an average of 18.8% of new motor vehicles sales in the EU⁽¹⁾⁽²⁾, i.e. 3 million units a year); and projections still show pockets of growth thanks to the potential growth of new Member States.
- In contrast, Japan is not a strategic market for most European car manufacturers: it ranks last amongst the OECD countries in terms of import penetration⁽³⁾ (imports represent an average of 4.8% of new motor vehicle sales in Japan, i.e. below 238 thousand units a year); and the market will continuously shrink due to the demographic evolution.
- EU exports to the Japanese market are limited due to:
 - Current regulatory non-tariff barriers: because of its unique certification environment, foreign car manufacturers face extra development costs to increase sales in the Japanese market. To have a low impact, these fixed costs need to be absorbed by a high volume. It is therefore not economically viable to export price sensitive models to Japan.
 - 'Kei' car concept: a segment composed by mini-sized vehicles enjoys preferential treatment in terms of tax, insurance, motorway tolls and parking registration. More than one third of the market falls in this category and only Japanese car manufacturers produce such cars.
 - Costs associated with the development of an effective distribution and service network.
 - Cultural barriers.
- Even with a balanced FTA, which would provide an equal level of market access and full reciprocity, a negative impact on the EU Automotive industry is to be expected.

(1) Average of the past 5 years

(2) The intra-EU penetration rate was 86% in 2011 and 83% in 2010

(3) As a reference point please find import penetration rates for OECD markets with one-million or more sales (UK 86% ; Canada 77% ; Spain 73% ; Italy 66% ; Mexico 57% ; Germany 56% ; France 44% ; USA 41% ; Korea 5%) The average import penetration rate for this group of OECD countries is over 40%. Japan at 4.8% is far below the average.

Study Highlights

Japanese car manufacturers would benefit financially, boosting their competitiveness to the serious detriment of the EU industry:

- The elimination of import duties on Japanese automotive products exported to the EU represent a saving – for Japanese car manufacturers – of € 1.2 billion per year (based on the average of the past 6 years). As an example, in 2011, if the import duties had been abolished, this would have amounted to a direct benefit of almost € 1,500 per imported vehicle.
- The Japanese automotive industry is characterized by structural overcapacity. An FTA between the EU and Japan would increase Japanese exports and thereby alleviate the overcapacity in Japan at the expense of the EU.
- A realistic scenario⁽¹⁾ predicts that Japanese exports to the EU could increase by 443,000 units [p.a.] in 2020 as a consequence of the FTA.

A severe impact on the EU automotive industry:

- EU volume market manufacturers, faced over the last decade with a price war, rising manufacturing costs, more stringent regulatory requirements and a decline in sales volumes, have experienced growing losses which threaten the sustainability of their business. This would be exacerbated by unbalanced FTAs.
- In a realistic scenario,⁽¹⁾ we expect a direct decline in automotive employment of 34,500 – 72,760⁽²⁾ jobs in the EU as a result of an EU-Japan FTA only.
- Considering market realities and the past performance of European brands in the Japanese market, we estimate that implementation of an EU-Japan FTA would, at best, raise the European share of the Japanese passenger car market in 2020 by a maximum of only 7,800 units.
- Although a similar imbalance can be observed in the commercial vehicle market, they are less significant than for passenger cars. Commercial vehicles represent a small portion (2.5% on average) of the motor vehicle trade flow from Japan to the EU, which is almost inexistent from the EU to Japan.
- An unbalanced FTA would severely hurt European parts suppliers, as it would remain difficult for them to enter the Japanese market.

(1) Realistic scenario assumes a moderate market growth and a 4% baseline.

(2) The FTA impact gives additional Japanese imports of + 443k units, reported to total EU production (2020 – own estimates) it represents 2.7%.

Assumption is that every incremental Japanese import is at the expense of EU production. Assuming 443k units = a share of 2.7% represents 34,500 – 72,760 jobs. Ratio is in line with European car manufacturer's employment versus production evolution.

Study Highlights

The consequences of an accumulation of unbalanced FTAs:

- The global automotive market is growing, yet growth is concentrated in emerging markets, which are not likely to absorb the excess production capacity currently available in mature markets because of existing high barriers to trade (import duties and non tariff barriers). Due to the rather closed nature of most emerging markets, EU volume market manufacturers need to localize production to penetrate them.
- Additionally, the shift in production to expanding markets and positive policies to promote local production will have a negative impact on EU employment of EU based suppliers.
- An accumulation of unbalanced FTAs could lead to a significant increase in automotive imports to the EU, therefore putting European production at risk⁽¹⁾
 - Mid term consequences for the EU of an EU- South Korea (in place) FTA
 - Imports increase 2.9%→6% of total EU sales
 - EU production decrease -2.8%
 - Mid term consequences for the EU of an EU-Japan (under study) FTA
 - Imports increase 4.9%→6,7% of total EU sales
 - EU production decrease -2.5%
 - Mid term consequences for the EU of an EU-India (pending) FTA
 - Imports increase 1.5%→3% of total EU sales
 - EU production decrease -1.8%
- In response to the changing global environment, car manufacturers from the EU and Japan are already collaborating closely to meet these challenges. These ongoing relationships are dictated by the industrial logic of a globalised industry and do not require an FTA to exist.
- However FTAs should help iron out uneven trade flows. The automotive industry is interested in balanced FTAs with emerging countries since they present opportunities for growth (India if zero for zero, ASEAN, MERCOSUR,... even if the FTA is challenging).

(1) See pages 25-28. Please note that only for Japan the export potential was assessed in detail – see page 17. For South-Korea actual export figures are presented on slide 25. Also as the current market penetration is low in the Indian market for EU made vehicles, EU manufacturers believe a zero for zero FTA with India would offer significant opportunities for increasing their exports to that market.

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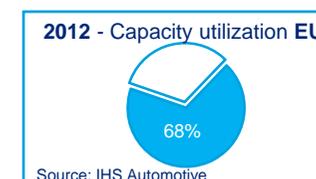


Context – Auto market trends

European Union Automotive Market: a critical context

A. The EU auto market is expected to recover only gradually

The EU car market will gradually recover, although the **economic outlook creates uncertainty**.
The **EU remains a market of opportunities for imports**, especially if they benefit from zero duties.



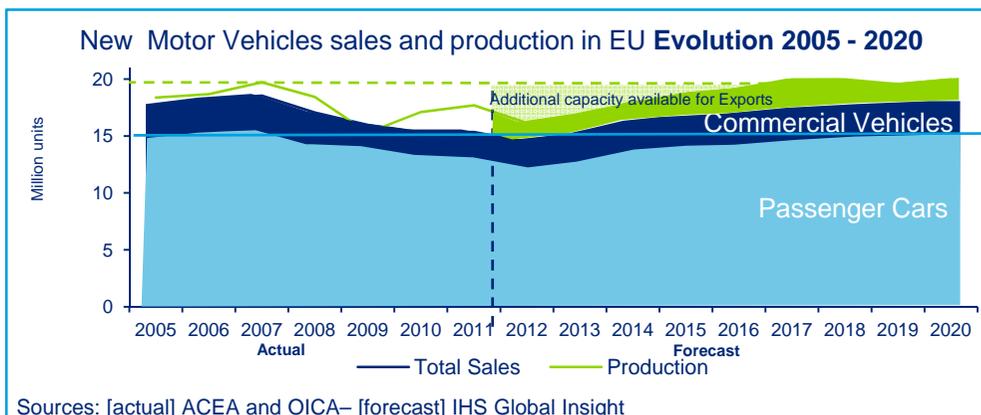
B. Overcapacity is unevenly distributed

- 1) Overcapacity is structural for a majority of car manufacturers
- 2) The increased competition supported by unbalanced FTAs will directly affect EU automobile manufacturers
- 3) The only opportunity that an FTA could bring will be for premium EU automobile manufacturers, as their customer base is less price sensitive

Increased competition from imports will exacerbate the current critical situation some car manufacturers are facing.

C. The EU market is already open to imports (average 17,6% in terms of import penetration), mainly from Japan and South Korea

- 1) Current market trends (hybrid, SUVs,...) **favour those segments where Japanese importers are strong**
- 2) Japanese brands in the EU currently import 40% of their sales volume; up to 50% by 2020 (Source: IHS Global Insight)



Production origin of Japanese brand cars sold in the EU

| | 2012 | 2020 |
|-------|------|------|
| EU 27 | 60% | 50% |
| Japan | 26% | 29% |
| Other | 14% | 21% |

Source: IHS



Context – Auto market trends

Japanese Automotive Market: fewer and fewer customers, constant production

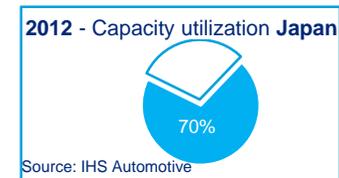
A. The demographic evolution of Japan predicts a declining market

- 1) The total and working population will decrease respectively by 4.4 million and 7.7 million by 2020, and by 16.5 million and 18 million by 2035 (respectively -13% and -22% versus today). (Source: The Japanese Journal of Population)
- 2) The burden of Japan's automobile taxes on vehicle owners is heavy, up to 50 times greater than those imposed by automobile taxes in Europe and the U.S. (Source: JAMA), which reinforces the prediction of an ever shrinking market.

The number of potential car buyers in Japan will continue to decrease.

B. Japanese production will remain stable

- 1) The Japanese automotive industry is characterized by structural overcapacity.
- 2) An FTA with the EU would help Japan to export excess capacity
 - ✓2.1 million additional units could be available for export in 2020.
 - ✓Japan is committed to keeping a significant level of production at home.

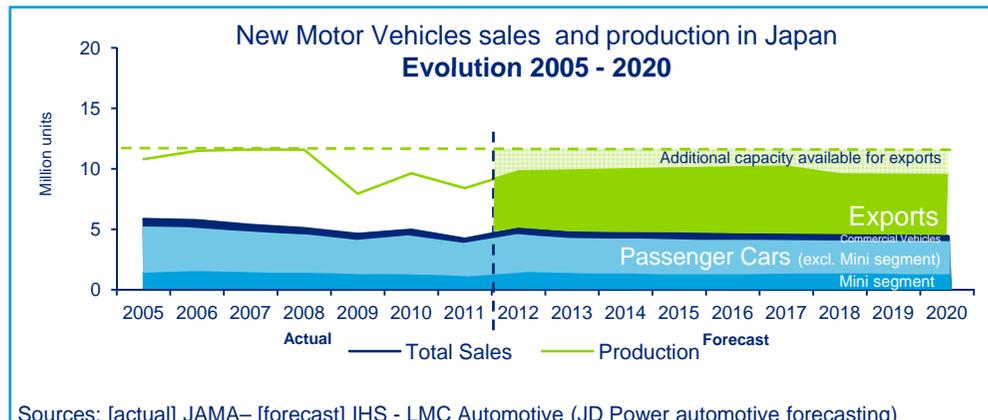


Japan will use its excess production capacity to export to open markets like the EU.

C. Japanese auto market potential for car importers is very limited (average 5.8% in terms of import penetration)

- 1) Because of the Kei car tax regime, one third of the Japanese market is closed to foreign brands.
- 2) Japanese brands market share (+/- 95%) is stable; and their domination will not diminish.

The market segment in which foreign brands can compete will decrease by 10% by 2020, with or without an FTA. After 2020, the market will keep on declining because of demographics.



“President Akio Toyoda took the helm at Japan's auto industry group Thursday with a promise to keep production and jobs at home to help along the country's recovery from last year's disaster.”
Automotive News (May 2012)

“But in the longer-run, [...] automakers all face serious challenges in Japan — a market that has been stagnant for years, and where younger people are losing interest in driving.”
Automotive News (May 2012)



Context – EU-Japan auto trade

Imbalanced potential

A. A pre-existing imbalance

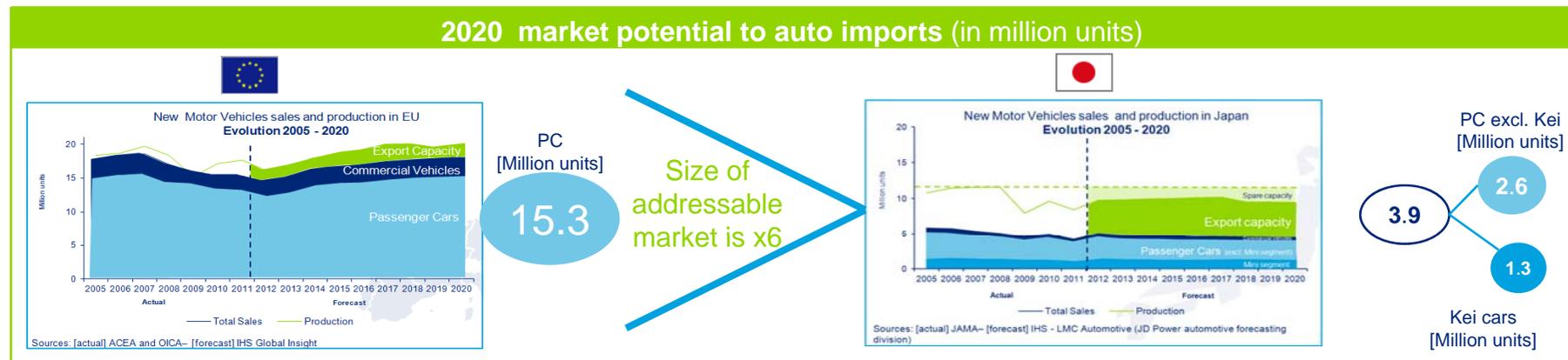
Japan enjoys a structural surplus in its trade balance in the automotive industry with the EU.

EU exports mainly **premium** vehicles to Japan, whereas **Japanese exports to the EU** are essentially for the **volume market**.

| Average 2006 - 2011 | EU → JP | Volume (units) | JP → EU | Volume (units) | EU → JP | Value (€) | JP → EU | Value (€) |
|---------------------|---------|----------------|---------|----------------|---------|---------------|---------|-----------------------|
| Passenger cars | | 164,439 | | 755,292 | | 3,875,333,333 | | 9,603,666,667 |
| Commercial Vehicles | | 216 | | 19,807 | | 7,068,600 | | 234,531,158 |
| Parts and engines | | NR | | NR | | 1,587,729,314 | | 4,647,972,449 |
| Total | | 164,655 | | 775,099 | | 5,470,131,247 | | 14,486,170,274 |
| Balance (€) | | | | | | | | -9,016,039,027 |

B. And unbalanced future market potential

Because of the long-term evolution of the Japanese market (shrinking and ageing) and the proven difficulty to access it, most car manufacturers **do not consider Japan to be a market with high potential**. Hence, **Japan is not an attractive FTA partner for the EU automotive sector**.





Context – Japanese exports to the EU

Current barriers to trade

The dismantling of EU customs duties

Represents an average **saving of € 1.2 billion per year for Japanese car manufacturers** and would have meant in 2011 on average a saving of **€1,500 for every Japanese unit imported**

|  | Tariff | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Total Motor Vehicles (units) | | 992,202 | 988,503 | 894,308 | 704,493 | 613,126 | 457,967 |
| Passenger Cars duties (Mio €) | 10% | 1,222.5 | 1,203.1 | 1,081.8 | 837.7 | 751.9 | 665.2 |
| Trucks duties (Mio €) | 22% | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.3 |
| LCV's duties (Mio €) | 10% or 22% | 30.3 | 30.2 | 40.8 | 23.7 | 15.3 | 14.9 |
| Bus duties (Mio €) | 16% | 336.9 | 605.3 | 461.4 | 231.3 | 158.3 | 215.8 |
| Customs duty per unit (€) | | 1,262 | 1,245 | 1,248 | 1,217 | 1,251 | 1,484 |
| Parts & Engines duties* (Mio €) | 4% (av.) | 186.5 | 198.4 | 198.3 | 134.5 | 192.5 | 215.5 |
| Total Customs duty revenue (Mio €) | | 1,440.2 | 1,432.8 | 1,321.6 | 996.6 | 960.3 | 896.0 |

Source: based on Eurostat data

*HS codes 8512, 8511, 8708, 8707, 870600, 8407

A combination of elements explains the noticeable reduction of Japanese exports to the EU:

- ✓The impact of the 2008 financial crisis on the EU market (negative market evolution of -4.3% on average every year, reducing the potential for imports).
- ✓A continuous appreciation of the Yen versus the Euro: the Japanese currency has strengthened by an annual average of 8.1%, increasing the cost of Japanese units and reducing their profit.
- ✓Natural disasters: the March 2011 earthquake, followed by the nuclear crisis in Japan, combined with the flooding in Thailand (where a significant amount of vehicle components were sourced) have led to a significant loss of the production intended for the EU.

Context – Japanese exports to EU

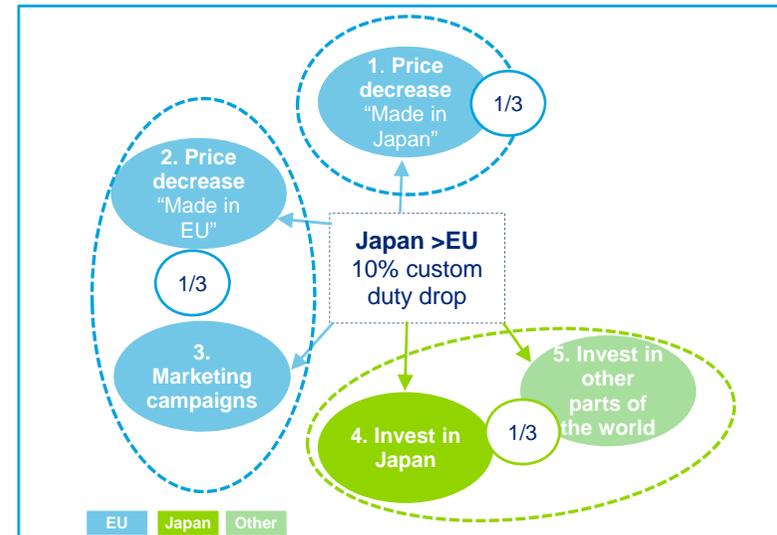
The effect of a dismantling tariffs on Passenger Cars

A. The dismantling of customs duty will lead to different actions by Japanese car manufacturers

Japanese car manufacturers will gain competitiveness with an EU-Japan FTA, which will allow them to take a combination of actions:

- 1) Reposition “made in Japan” models
- 2) Reposition “made in EU” models
- 3) Invest in Sales & Marketing campaigns / R&D in Europe
- 4) Invest in Japan (R&D)
- 5) Invest in other parts of the world (in manufacturing)

In a context where growth markets are locking their doors to imports, there is no doubt that a boost of exports to the EU will be seen as an Interesting opportunity.



The example shows a projection of benefits per Japanese PC manufacturers. Based on price sensitivity analysis, we conclude that about 1/3rd of the funds will be used to lower the price on ‘Made in Japan’ cars in order to reposition them in certain segments and markets⁽¹⁾.

| Japanese Brands | A. | | B. | | C. | | A.xB. | | Action 1 Potential price repositioning of made in Japan cars (average) | Possible investment in Europe? | Actions 2 and 3: Possible investment in Europe in k€ | Actions 4 and 5 Possible investment in Japan or Rest of the world in k€ |
|-----------------------|--|---|--|---|---|--|--|-------------------|---|--------------------------------|---|--|
| | Volume of brand in total Japanese brands sold in EU* | Share of brand in total Japanese brands sold in EU* | Share of imported vehicles from Japan per brand* | Share of locally procured vehicles (in EU)* | Share of imported vehicles from Japan in total Japanese brand volume* | Potential gain from custom duty drop in k€, per brand and per year** | Potential left after repositioning of made in Japan cars | | | | | |
| TOYOTA ⁽¹⁾ | 944.187 | 39% | 28% | 62% | 11% | k€ 339.652 | -3,2% | k€ 230.963 | Yes | k€ 343.182 | k€ 336.818 | |
| HONDA | 276.131 | 11% | 14% | 83% | 2% | k€ 49.507 | | k€ 33.665 | Yes | | | |
| MAZDA | 245.440 | 10% | 98% | 0% | 10% | k€ 309.829 | | k€ 210.683 | No | | | |
| NISSAN | 466.610 | 19% | 8% | 86% | 2% | k€ 47.515 | | k€ 32.310 | Yes | | | |
| SUBARU | 44.106 | 2% | 98% | 0% | 2% | k€ 55.664 | | k€ 37.851 | No | | | |
| SUZUKI | 270.655 | 11% | 19% | 77% | 2% | k€ 68.006 | | k€ 46.244 | Yes | | | |
| MIITSUBISHI | 156.717 | 7% | 64% | 35% | 4% | k€ 129.828 | | k€ 88.283 | No | | | |
| Total | 2.403.846 | 100% | 32% | 61% | 32% | k€ 1.000.000 | k€ 320.000 | k€ 680.000 | | | | |

(1): Toyota Group, incl. Daihatsu and Lexus
 * 2007 - 2010 average figures - Source: IHS, own estimations
 ** Baseline: 1 billion Euros custom duty income

Context – Japanese exports to EU

Exchange rate fluctuation could exacerbate the impact of an FTA on the EU automotive industry

✓ Although this element is independent of a Free Trade Agreement, we wish to highlight the **importance of the currency exchange rates on the competitiveness and profitability of Japanese car manufacturers.**

✓ A **depreciation of the currently strong Yen versus the Euro to past levels**, on top of a tariff reduction, **could encourage Japanese car manufacturers to produce more in Japan to supply the EU**, at the expense of EU production.

✓ If the Yen depreciates against the Euro to past levels, a ‘Made in Japan’ car could cease to be unprofitable and become a high profit maker for export, incentivizing Japanese car manufacturers to export **more cars from Japan.**

✓ As an illustration below we show 3 scenarios:

- With the current exchange rate, a Japanese car can be sold at loss (-1,121 €/vehicle),
- If the exchange rate were to go back to 2010 levels, profitability would increase dramatically (to +1,213 €/vehicle),
- A return to 2008 levels would boost it even more (+3,546 €/vehicle).

... And all of this without the potential gain of a 10% duty drop.

In contrast to the uncertainty of currency fluctuations, the dismantling of duties would be a more definitive move. Both could motivate Japanese car manufacturers to review their production strategies in the long run.

| Impact of yen fluctuation on profitability of Japanese exports | | |
|--|-------------|---------------|
| Note: [Average rate 2002-2012: 131] | | |
| Profitability of a car at €/ Yen exchange rate at 100 | | |
| | Without FTA | |
| Retailer selling price (€) | € | 25.000 |
| Margin, tax & distribution (€) | € | 10.833 |
| Custom Duty (€) | € | 1.288 |
| Ex Factory price (€) | € | 12.879 |
| Exchange rate €/ Yen | | 100 |
| Ex Factory (Yen) | ¥ | 1.287.926 |
| Production cost (Yen) | ¥ | 1.400.000 |
| Profit (€) | € | -1.121 |
| [Average rate 2012 YTD: 103.7] | | |

| Profitability of a car at €/ Yen exchange rate at 120 | | |
|---|-------------|--------------|
| | Without FTA | |
| Retailer selling price (€) | € | 25.000 |
| Margin, tax & distribution (€) | € | 10.833 |
| Custom Duty (€) | € | 1.288 |
| Ex Factory price (€) | € | 12.879 |
| Exchange rate €/ Yen | | 120 |
| Ex Factory (Yen) | ¥ | 1.545.512 |
| Production cost (Yen) | ¥ | 1.400.000 |
| Profit (€) | € | 1.213 |
| [Average rate 2010: 116.2] | | |

| Profitability of a car at €/ Yen exchange rate at 150 | | |
|---|-------------|--------------|
| | Without FTA | |
| Retailer selling price (€) | € | 25.000 |
| Margin, tax & distribution (€) | € | 10.833 |
| Custom Duty (€) | € | 1.288 |
| Ex Factory price (€) | € | 12.879 |
| Exchange rate €/ Yen | | 150 |
| Ex Factory (Yen) | ¥ | 1.931.890 |
| Production cost (Yen) | ¥ | 1.400.000 |
| Profit (€) | € | 3.546 |
| [Average rate 2008: 152.4] Deloitte analysis | | |

FTA Impact assessment – Japanese exports to EU

Simulation of the evolution of Japanese exports to EU due to FTA – Scenarios

The study identified a number of scenarios (optimistic, moderate, moderate +(incl. Exchange rate effect), realistic and realistic + (including exchange rate effect))⁽¹⁾simulating the possible evolution of Japanese exports to the EU following an FTA.

As an illustration we briefly show the methodology underlying the scenario considered most realistic (purely focussing on the effect of an FTA, without exchange rate effect that would only exacerbate the impact).

| Methodology | Scenario 4 (realistic) |
|--|---|
| EU sales annual growth 2013 – 2020 forecast | +1.4% Sources: manufacturers interviews (motor vehicle market follows GDP growth rate) |
| Baseline 2020 Japanese car manufacturers penetration | Share of Japanese imports in total EU sales: 4.0% ⁽²⁾ |
| Yen / Euro exchange-rate | 2012 rate - stable |
| Approaches | <ul style="list-style-type: none"> ✓ All motor vehicles considered ✓ Simulations on different baselines ✓ Progressive evolution of Japanese imports share to the record levels registered in the early 2000's (i.e. 6.7%) ✓ Apply employment ratios for new and highly productive manufacturing site ("high productivity") ✓ Apply employment ratios taking into account current market conditions, older infrastructure, lower capacity utilisation ("mainstream productivity") ⁽³⁾ ✓ Compare to the "no FTA" situation |

(1) Details of the developed scenarios are available in the full report

(2) 4.0% represents the rolling 3 year average, clearly below the historical performance due to the financial crisis, Yen appreciation versus Euro and the natural disasters that struck Japan severely in 2011. The full report also contains a simulation with a 3% (most recent data – 2011) and 5.4% baseline (representing the 10 year average (2001 – 2010)) of Japanese imports share

(3) One would counter-argument that this is only a temporary situation given the current overcapacity. Although this will most likely lead to a restructuring of the oldest and least productive sites in the short run, the launch of new models and improved production techniques will force manufacturers to keep cutting edge production sites in order to be competitive also in 2020 and beyond.

FTA Impact assessment – Japan - EU motor vehicle trade

Simulation of the evolution of Japan – EU motor vehicle trade

Japanese manufacturers would benefit from an FTA. This would have a **negative effect** on the **EU auto industry**

| Motor Vehicles volume exported (in units rounded) | Scenario 4 (realistic) | | | | | |
|---|---------------------------|------------|--|---|---|---|
| | 2020 w/o FTA | 2020 w FTA | Incremental units imported in the EU from Japan due to FTA | | Impact on EU employment (high productivity) | Impact on EU employment (mainstream productivity) |
|  Average FTA impact (Japanese evolve import share from 3 year rolling average of 4% baseline to 6.7%) | 645,000 | 1,088,000 | +443,000 ⁽¹⁾ | → | -34,500 ⁽²⁾ | -72,760 ⁽³⁾ |
|  Average ⁽⁴⁾ 2006 – 2011 = 164,400 units | 156,300 | 164,100 | 7,800 | → | N/A | N/A |

(1) The impact gives additional Japanese imports of + 443k units, reported to total EU production (2020 – own estimates) it represents 2.7%. Assumption is that every incremental Japanese import is at the expense of EU production.

(2) Assuming 443k units = 6.900 direct jobs (in factory) and 27.600 indirect jobs, a share of 2.7% represents 34,500 jobs. This number can increase to 72,760 jobs for mainstream productivity plants. Ratio is in line with European car manufacturers employment versus production evolution.

(3) The impact is spread over different car manufacturers so leads to a reduction in capacity utilization. For those plants already applying methods like reduced (4/5) working regimes, technical unemployment programs, voluntary departure incentives, etc. this additional pressure could just be tilting them towards plant closure.

(4) Sources: Eurostat – Japanese customs statistics. In contrast the EU imported on average 755,300 units in that same period.



Context – European exports to Japan

Current barriers to trade

A. A difficult market to access

- 1) It is undisputable that the Japanese market is extremely difficult to access for foreign manufacturers⁽¹⁾
 - ✓ Since 2006, only four foreign imported models have managed to sell more than 10,000 units yearly in Japan
 - ✓ Since 2005, only one foreign imported model has been able to sell more than 20,000 units a year in Japan

B. Non tariff barriers

- 1) Because of its unique **certification** environment, foreign car manufacturers face extra development costs to increase sales in the Japanese market.
 - ✓ To have a low impact, these fixed costs need to be absorbed by a high volume (i.e. more than 25,000 units)
 - ✓ As a consequence, it is not economically viable to export price sensitive models to Japan
 - ✓ The harmonisation of technical standards and certification procedures would encourage some European car manufacturers to deploy more resources to develop their business in Japan. This will require prohibitive marketing investments.
- 2) The **Kei car** segment is composed of mini sized vehicles, which enjoy preferential treatment in terms of tax, insurance, motorway tolls and parking registration
 - ✓ Its share in the Japanese market keeps on increasing and today represents one third of the Japanese passenger car market. In cities and rural districts between 100,000 and 300,000 inhabitants 70% of Japanese households own a Kei car⁽²⁾.
 - ✓ Because of their specifications, it will make no business sense for foreign car manufacturers to build Kei cars for the Japanese market. One would expect these to be sustainable and clean cars because of their size, yet they do not even equal the performance / eco-friendliness of the small compact segment.
 - ✓ As a consequence, foreign manufacturers are in effect locked out of one third of the Japanese passenger car market.

18 (1) Confirmed by the Copenhagen Economics survey

(2) Source: Jama - "Trends in Mini-vehicle Use in Japan: Results of JAMA's Fiscal 2009 Survey", April 8, 2010, <http://www.jama-English.jp/release/release/2010/100408-3.html>



Context – European exports to Japan

Current barriers to trade

- 3) Establishing an effective **distribution & service** network is extremely expensive and European car manufacturers face an extra non tariff barrier (NTB) with the Zoning regulations for maintenance workshops. Specific measures to revise the **zoning regime** for maintenance workshops to facilitate the development of an effective distribution network should be agreed on before the start of EU-Japan FTA negotiations.

All of these NTBs are reinforced by intangible cultural obstacles inherent to the sale of foreign products into the Japanese market.

C. EU → Japan exports evolution

- 1) Considering market reality and past performance of European brands on the Japanese market, we estimated that, at best, the dismantling of NTBs could smooth the progress of European imports and increase by a maximum of +0.2pt the EU passenger car market share.
- 2) This corresponds to 7,800 additional EU produced units sent to Japan by 2020; which is negligible considering the 160,000 additional imports that the EU would receive.
- 3) The effect on the commercial vehicle market is slightly positive.

FTA Impact assessment – Japan - EU trade

Impact assessment – Commercial Vehicles

A. The Commercial Vehicle industry has different dynamics compared to the Passenger Car industry

As a consequence, the expected impact of an FTA would be significantly different

B. Commercial Vehicle trade flows: EU - Japan

There is very little trade flow between EU and Japan for Commercial Vehicles; however the current exchange remains highly favourable to Japan

| | | Barriers | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------------|------------------|------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | Trucks Value (€) | NTB's | 9,104,480 | 2,891,920 | 2,459,700 | 1,953,310 | 4,657,730 | 5,880,040 |
| | Trucks Units | | 56 | 55 | 45 | 40 | 101 | 64 |
| | LCVs Value (€) | NTB's | 172,140 | 533,510 | 294,590 | 250,340 | 349,490 | 451,630 |
| | LCVs Units | | 13 | 27 | 23 | 19 | 15 | 19 |
| | Buses Value (€) | NTB's | 2,089,060 | 2,499,360 | 492,940 | 3,708,150 | 2,639,540 | 1,983,670 |
| | Buses Units | | 288 | 210 | 20 | 21 | 13 | 265 |
| | Trucks Value (€) | 22% | 2,205,930 | 2,338,870 | 1,660,860 | 2,435,880 | 2,045,230 | 1,162,600 |
| | Trucks Units | | 148 | 174 | 137 | 89 | 79 | 45 |
| | LCVs Value (€) | 10% or 22% | 296,755,740 | 270,835,270 | 334,239,120 | 192,964,950 | 147,913,370 | 140,073,010 |
| | LCVs Units | | 29.484 | 22.137 | 26.580 | 15.032 | 14.147 | 10.216 |
| | Buses Value (€) | 16% | 2,105,810 | 3,783,400 | 2,883,630 | 1,445,330 | 989,360 | 1,348,590 |
| | Buses Units | | 84 | 233 | 98 | 56 | 32 | 74 |
| Total CV Japan>EU - value | | | 301,067,480 | 276,95,540 | 338,783,610 | 196,846,160 | 150,947,960 | 142,584,200 |
| Total CV EU>Japan - value | | | 11,365,680 | 5,924,790 | 3,247,230 | 5,911,800 | 7,646,760 | 8,315,340 |
| Trade Balance for EU | | | -289,701,800 | -271,032,750 | -335,536,380 | -190,934,360 | -143,301,200 | -134,268,860 |

Source: Eurostat

C. Tariff elimination means extra savings for Japanese car manufacturers

Japanese Commercial Vehicle manufacturers would save up to 50 million Euros on a yearly basis



FTA Impact assessment – Japan - EU trade

Impact assessment – Parts & Engines

A. Trade balance between EU and Japan is structurally more favourable for Japan

| | Average 2006 - 2011 |
|---|---------------------|
| Parts Japan>EU - value (€) | 3,963,460,527 |
| Parts EU>Japan - value (€) | 1,181,565,156 |
| Engines Japan>EU - value (€) | 684,511,922 |
| Total Engines EU>Japan -value (€) | 406,164,159 |
| Spare part + Engines JP > EU – value (€) | 4,647,972,449 |
| Spare part + Engines EU > Japan – value (€) | 1,587,729,314 |
| Trade Balance for the EU (€) | -3,060,243,134 |

Source: Eurostat

B. An FTA between Japan and the EU

Will not have a direct benefit for EU suppliers: entering the Japanese market will remain difficult for European players.

Japanese car manufacturers are the main importers of Japanese parts and engines to the EU market.

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Context – Auto market globalization

The growth in the global automotive market is mainly driven by emerging markets, which will do everything possible to keep the benefits linked to this growth local

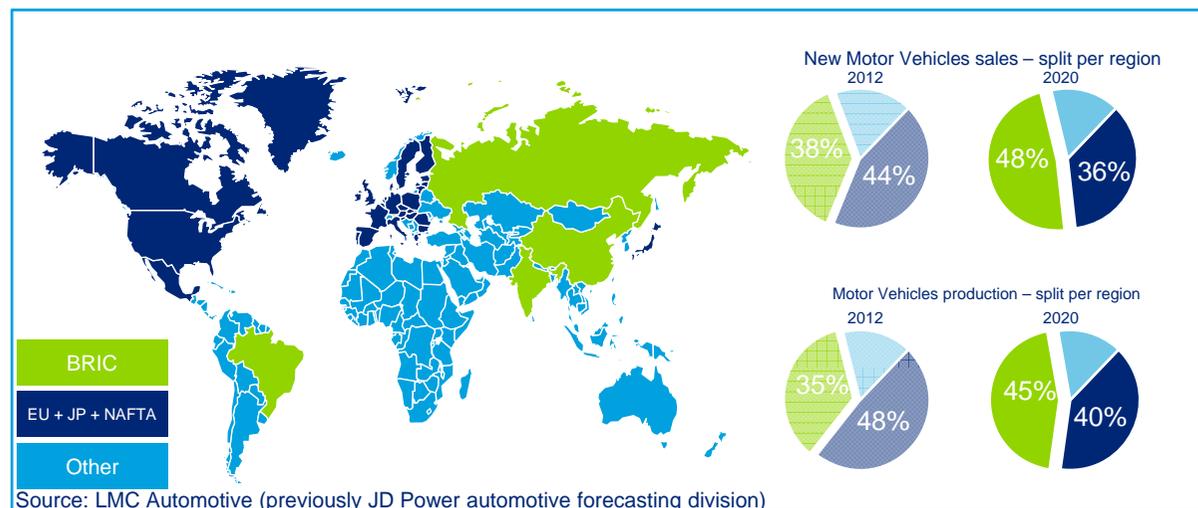
A. The focus is shifting from mature markets to emerging countries

- 1) Mature markets are reaching saturation, while emerging countries present the best potential
- 2) However some emerging countries:
 - ✓ Promote local production
 - ✓ Have protectionist behaviours towards imports
 - ✓ Already face local production overcapacity

Unbalanced FTAs with emerging and other markets are not likely to consume the excess production capacity currently available in mature markets. Only balanced FTAs can improve the overall situation of the industry.

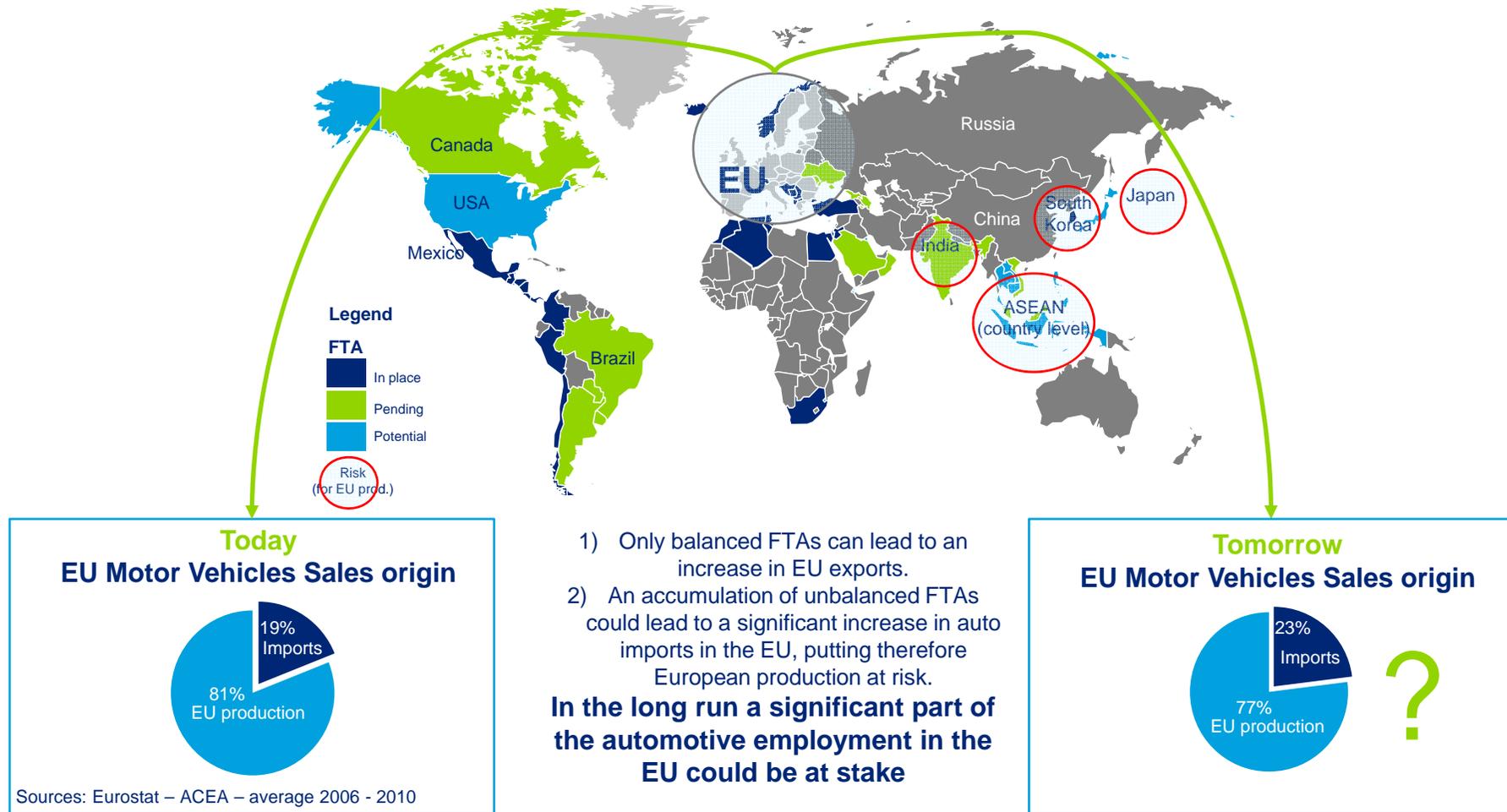
EU volume market manufacturers need to localize production to penetrate these markets.

B. In this context, it is crucial to assess the relevance of Free Trade Agreements and the impact that an accumulation could have on the EU



Accumulation of FTAs risk assessment

Accumulation of unbalanced FTAs⁽¹⁾ would boost imports in the EU, but bring limited gains to EU production



(1) With an unbalanced FTA is meant, one that does not give equal benefits to the contracting parties, or disproportional advantages to one of them. For the automotive industry, an unbalanced FTA is an agreement that does not create level playing field in terms of market access. An unbalanced FTA is an agreement that does not meet with the following principles;

- EU automobile import duties are 10% , the Commission negotiates comprehensive FTA with the elimination of tariffs on most goods. There must be full reciprocity on the elimination of automotive tariffs (zero for zero principle).
- An FTA must provide for the full elimination of existing NTBs and prevent the erection of new NTBs.
- An FTA must be comprehensive and reciprocal and allow, notably for the EU automotive industry, the free movement of goods and on investments, investment protection, access to public procurement and the benefit of an efficient IPR protection.

Accumulation of FTAs risk assessment

Accumulation of FTAs: South Korea – an FTA in force

| <p>1) EU - South Korea FTA Mid term consequences for the EU</p> | <p>→Gain for South Korean manufacturers of up to € 800 million a year due to customs duty drop →Imports increase (2.9%→6% of total EU sales) →EU production decrease (-2.8%) →EU employment risk: -38,750 – 81,500 jobs ⁽¹⁾</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------------|---------------|---------------|-------------|------|-------------|----------|----------|---------|---------|---------|-----|----------|----------|--------|--------|--------|-----|---------|----------|---------------|---------------|---------------|-----|---------|----------|-------------|---------------|---------------|-----|--|
| <p>South Korea (in place)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>South Korean car manufacturers perspective</p> | <p>✓Strong and already established with dealer network already in place ✓Technologically advanced and able to supply EU demand</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>→EU is a strategic market for South Korea</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Production evolution - 2020 versus 2010</p> | <p>+17.4%</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Domestic sales evolution - 2020 versus 2010</p> | <p>+9.2%</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>→South Korea needs export markets</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Imports – actual (As a % of total EU sales Average 2006 - 2010)</p> | <table border="1"> <thead> <tr> <th></th> <th></th> <th>2009</th> <th>2010</th> <th>2011</th> <th>% chg'11/10</th> </tr> </thead> <tbody> <tr> <td>in units</td> <td>KR to EU</td> <td>351.142</td> <td>294.058</td> <td>383.940</td> <td>31%</td> </tr> <tr> <td>in units</td> <td>EU to KR</td> <td>32.659</td> <td>64.141</td> <td>75.124</td> <td>17%</td> </tr> <tr> <td>in euro</td> <td>KR to EU</td> <td>2.609.554.030</td> <td>2.449.394.200</td> <td>3.416.840.910</td> <td>39%</td> </tr> <tr> <td>in euro</td> <td>EU to KR</td> <td>805.101.880</td> <td>1.681.573.360</td> <td>1.954.318.980</td> <td>16%</td> </tr> </tbody> </table> | | | 2009 | 2010 | 2011 | % chg'11/10 | in units | KR to EU | 351.142 | 294.058 | 383.940 | 31% | in units | EU to KR | 32.659 | 64.141 | 75.124 | 17% | in euro | KR to EU | 2.609.554.030 | 2.449.394.200 | 3.416.840.910 | 39% | in euro | EU to KR | 805.101.880 | 1.681.573.360 | 1.954.318.980 | 16% | <p>2.9%</p>  |
| | | 2009 | 2010 | 2011 | % chg'11/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| in units | KR to EU | 351.142 | 294.058 | 383.940 | 31% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| in units | EU to KR | 32.659 | 64.141 | 75.124 | 17% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| in euro | KR to EU | 2.609.554.030 | 2.449.394.200 | 3.416.840.910 | 39% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| in euro | EU to KR | 805.101.880 | 1.681.573.360 | 1.954.318.980 | 16% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Imports – possible evolution Beyond 2020 (with FTA)</p> | <p>6%</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>→Exports to EU boosted ...at the expense of EU production</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>EU car manufacturers perspective</p> | <p>✓Market presenting small import penetration rate (5%) ✓Difficult market access due to strong intangible cultural element and new non tariff barriers in place ✓South Korea is not a strategic market for most EU car manufacturers ✓Gains for EU car manufacturers would be limited to premium brands</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

25 (1) Assumption is that every incremental import is at the expense of EU production. A share of 3.1% represents 38,750 – 81,500 jobs. Ratio is in line with European car manufacturer's employment versus production evolution.

Accumulation of FTAs risk assessment

Accumulation of FTAs: Japan – similar case, double effect

| | | |
|---|--|-----|
| 2) EU – Japan FTA Mid term consequences for the EU | →Gain for Japanese manufacturers of up to € 1.2 billion a year due to customs duty drop →Imports increase (4%→6.7% of total EU sales) →EU production decrease (-2.5%) →EU employment risk: -34,500 – 72,760 jobs ⁽¹⁾ | |
| | Japan (under study) | |
| Japanese car manufacturers perspective | ✓Strong and already established with dealer network already in place ✓Technologically advanced and able to supply EU demand | |
| →EU is a strategic market for South Korea | | |
| Production evolution - 2020 versus 2010 | -1.6% | |
| Domestic sales evolution - 2020 versus 2010 | -10.3% | |
| →Japan needs export markets | | |
| Imports – actual (As a % of total EU sales Rolling Average 2009 - 2011) | The impact of an EU-Japan FTA (p17) shows an additional 443,000 units by 2020. This represents a 2.7% share of a market which by 2020 will grow to 16.1 million units in a realistic scenario. | 4 % |
| Imports – possible evolution Beyond 2020 (with FTA) | 6.7% | |
| →Exports to EU boosted ...at the expense of EU production | | |
| EU car manufacturers perspective | ✓Market presenting the small import penetration rate amongst OECD countries (4.8%) ✓Difficult market access due to strong intangible cultural element and existing non tariff barriers in place ✓Japan is not a strategic market for most EU car manufacturers ✓Minimal gains for EU car manufacturers would be limited to premium brands | |

26 (1) Assumption is that every incremental import is at the expense of EU production. A share of 2.7% represents 34,500 – 72,760 jobs. Ratio is in line with European car manufacturer's employment versus production evolution.

Accumulation of FTAs risk assessment

Accumulation of FTAs: India – the sourcing solution?

| | | | | | | |
|---|--|------|------|------|------|------|
| 3) EU - India FTA Mid term consequences for the EU | →Gain for Indian manufacturers of up to 300 million Euros a year due to customs duty drop ⁽¹⁾ →Imports increase (1,5%→3% of total EU sales) →EU production decrease (-1,8%) →EU employment risk: additional -18,750 – 39,400 jobs⁽²⁾ | | | | | |
| | India (pending) | | | | | |
| Indian automotive industry | ✓Automobile industry is of great importance for India ✓Government predicts that the sector will provide an additional 25 million jobs by 2016 | | | | | |
| Indian production – exports to the EU (mainly Korean / Japanese transplants) | ✓EU imports (from India) are gradually increasing | | | | | |
| | →India becomes a strategic production place | | | | | |
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Share of Indian imports in total EU sales | 0.3% | 0.7% | 0.6% | 1.7% | 1.5% | 1.5% |
| | →EU imports (from India) are increasing at a fast pace | | | | | |
| Imports – actual (As a % of total EU sales Average 2010 - 2011) | 1.5% | | | | | |
| Imports – possible evolution Beyond 2020 (with FTA) | 3% | | | | | |
| | →EU imports boosted ...at the expense of EU production | | | | | |
| Indian market - EU car manufacturers perspective | ✓No market access unless producing locally: India is willing to protect automotive industry ✓Skewed income distribution and low interest of European cars by middle class in the short term ✓Only if a balanced FTA can be achieved is there an opportunity for the EU | | | | | |

(1) In 2011 the EU imported for €1.5 billion worth of automotive goods from India at an average €7,000 per unit. Until 2014 a preferential 6.5% custom duty is applied for Indian products. Afterwards – depending on the FTA a rate of 10% could be applied. Taking into account the expected increase both in units imported and average value per unit this represents a benefit of €300 million.

27 (2) Assumption is that every incremental import is at the expense of EU production. A share of 1.5% represent 18,750 – 39,400 jobs. Ratio is in line with European © 2012 Deloitte Belgium car manufacturer’s employment versus production evolution. NOTE: EU export potential not analyzed as the outcome of the negotiation is too uncertain.

Accumulation of FTAs risk assessment

Accumulation of FTAs: ASEAN countries

| | | | |
|--|---|------------------|-----------------|
| <p>4) EU - ASEAN countries FTAs Consequences for the EU</p> | <p>→ Gains for EU production would be limited</p> | | |
| <p>ASEAN – Characteristics <i>(Thailand – Malaysia – Indonesia: 90% of auto production – 86% of auto sales)</i></p> | <p>Thailand</p> | <p>Indonesia</p> | <p>Malaysia</p> |
| | <p>1) Market opportunities: ✓ Car ownership to rise from 16 to 40 million by 2015 (10% yearly growth rate)</p> <p>2) Home to protected production, expected to grow: ✓ Auto production to climb above 6 million units by 2020 (ASEAN) ✓ Countries with their own facilities seek to protect their local industry (up to 80% tariff) ✓ A bigger focus on trucks (incl. Pick-Ups) (46% of prod., 36% of sales⁽¹⁾)</p> <p>3) Dominated by Japanese manufacturers ✓ Japanese car manufacturers building manufacturing facilities and international platform (e.g. IMV) to supply the world ✓ Japanese car manufacturers benefit from FTAs with the respective countries</p> | | |
| | <p>→ Penetrating the market requires manufacturing locally</p> | | |
| <p>ASEAN market - EU car manufacturers perspective</p> | <p>✓ Current needs in ASEAN countries cannot be supplied by Made in Europe production</p> | | |

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Conclusion

The EU-Japan FTA will reinforce the trade imbalance in the auto industry, in favour of Japan

An EU-Japan FTA would mainly bring economic benefits to Japanese car manufacturers, whilst the EU automotive industry as a whole would not benefit.

- EU-Japan automotive trade shows a structural surplus in Japan's favour, which an FTA would only exacerbate.
- Japanese car manufacturers would benefit financially, boosting their competitiveness to the serious detriment of the EU industry. The elimination of the EU tariff would represent an average benefit of €1,500 per imported vehicle.
- Only premium manufacturers would derive some limited gains from improved market access in Japan. These exports will not offset EU additional imports due to the projected decline in the Japanese market.
- The simultaneous accumulation of unbalanced FTAs with countries (Korea, Japan, India, ...) with protected automobile industries will put the EU automotive industry under severe pressure. Such FTAs have a multiplier effect on the impact of each subsequent FTA. The share of imported vehicles could increase from 17.4 % today to 23% in the future. If those conditions hold, we expect 92,000 to 193,000 jobs to be put at risk.

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Study Approach

This Summary Report contains an overview of the elements and arguments we explored during our study and provides a summary of the key findings. The methodology, all supporting arguments and a detailed explanation of the insights gathered and conclusions drawn from the study are contained in our Full Report “A Free Trade Agreement between the EU and Japan - Implications for the automotive industry”.

The full report consists of 2 distinct building blocks.

- First, a macro economic section introduces the impact assessment of an FTA on the EU and Japanese automotive industry. We explain the general trends that will shape the automotive industry of both regions, in a global framework, to gauge the context of an FTA. Next we analyse macro economic trends and free trade theory to put the EU–Japan FTA into perspective. This part includes a detailed examination of the current barriers to trade encountered on both sides for the respective trading partners. It concludes with simulations of FTA implementation scenarios looking at the implications and consequences for the automotive industry from a cost/benefit perspective.
- Secondly, we examine the effects of the accumulation of FTAs with other regions of the world on the automotive industry.

Techniques applied throughout the study include desk research, advanced analytics, econometrics and price modelling (for building the implementation scenarios), interviews and work group sessions, including input from the Deloitte Global Automotive network and practice leadership.



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