



DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT A ECONOMIC AND SCIENTIFIC POLICY



Economic and Monetary Affairs

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Industry, Research and Energy

Internal Market and Consumer Protection





DIRECTORATE GENERAL FOR INTERNAL POLICIES POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

The Transatlantic Trade and investment Partnership (TTIP): Challenges and Opportunities for the Internal Market and Consumer Protection in the Area of Motor Vehicles

STUDY

Abstract

The expected effects of TTIP on the European automotive industry will be significant, but depend strongly on the scope of trade liberalisation. In the field of motor vehicles TTIP should go far beyond the degree of trade liberalization reached in previous trade agreements between the EU and other countries. Tariffs should be eliminated and also non-tariff barriers (NTBs) reduced. Regulatory cooperation to reduce NTBs is promising particularly in the automotive industry. Beside harmonisation, international standards and cooperation on new technologies, another promising approach is mutually recognition of aspects of regulation based on sound evidence of the equivalence of outcomes. However, the challenge is twofold: identifying unnecessarily trade distorting NTBs while at the same time respecting EU regulatory sovereignty, democratic legitimacy, and the high level of EU standards in passenger and environmental safety.

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LIST OF ABBREVIATIONS

ACEA	European Automobile Manufacturers' Association
AALA	American Automobile Labelling Act
AAPC	American Automotive Policy Council
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CETA	Comprehensive Economic and Trade Agreement
CLEPA	European Association of Automotive Suppliers
CMVSR	Canadian Motor Vehicle Safety Regulation
СО	Carbon Monoxide
CO2	Carbon Dioxide
CRS	Contressional Research Service
EC	European Communities
E85	Gasoline containing 85% ethanol
EPA	US Enfironmental Protection Agency
EPCA	Energy Policy and Conservation Act
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GHG	Greenhouse Gases
НС	Hydrocarbons
NEDC	New European Driving Cycle
NHTSA	National Highway Traffic Safety Administration
NOx	Nitrogen Oxides
NTB	Non-tariff Barrier to trade

OPEC Organization of the Petroleum Exporting Countries

PM Particular matter

SAFER Vehicle and Traffic Safety Centre at the Chalmers University of Technology

SEA Single European Act

SITC Standard International Trade Classification

SME Small and Medium Enterprises

TTIP Transatlantic Trade and Investment Partnership

UMTRI University of Michigan Transportation Research Institute

UN GTR United Nations General Technical Regulation

UNECE United Nations Economic Comission for Europe

VDA German Association of the Automotive Industry

WP 29 Working Party 29

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WTO World Trade Organization

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EXECUTIVE SUMMARY

Background

The expected effect of TTIP on the European automotive industry is significant. It depends strongly on the scope of trade liberalisation which can be achieved during the negotiations. Once concluded, TTIP will cover more than one third of global automotive trade. In the field of motor vehicles TTIP should go far beyond the degree of trade liberalization reached in previous trade agreements between the EU and other countries. The scope of the negotiations should be to eliminate tariffs and non-tariff barriers. However, the challenge is to achieve trade liberalization while respecting EU sovereignty and without sacrificing vehicle safety or environmental standards. This is possible based on sound evidence about the equivalence of the outcome of different EU and US regulation e.g. in terms of passenger and environmental safety.

Table 1: Main Results

1. FOCUS OF THE STUDY

The study analyses the main challenges and opportunities concerning trade with motor vehicles and parts that should be considered during the negotiation between the EU and the US. The first part offers an overview of the effect of two recently concluded free trade agreements (FTAs), the EU-Korea FTA and the FTA with Canada. In the second part the focus turns to EU-US trade barriers and the potential for regulatory cooperation in the automotive industry

2. THE EFFECT OF RECENT FTA ON THE AUTOMOTIVE INDUSTRY

EU-Korea FTA

The scope of tariff elimination in the EU-Korea FTA goes beyond anything the EU had agreed in previous agreements. The Agreement also breaks new ground in a range of other measures, such as addressing NTBs, protection of intellectual property rights as well as provisions on dispute settlement and sustainable development. However, the reduction of NTBs lies by far behind the expectations of the studies of the potential effect of the FTA. Moreover, certain discontent with the implementation of the FTA has been articulated, for example regarding Korea's commitment to maintain the list of UNECE standards that will be treated as equivalent to Korean standards. EU automotive exports have exhibited a positive trend in recent years. However, it remains questionable whether the extent of this positive trend is attributable to the FTA.

EU-Canada FTA (CETA)

Tariffs on automotive imports would be eliminated within 7 years, depending on the classification of the motor vehicle. Canada has incorporated a number of UNECE technical regulations into the Canadian Motor Vehicle Safety Regulation prior to the implementation of CETA. Only a few other UNECE Regulations will be accepted by Canada as a result of CETA. Therefore, the degree of elimination of NTBs is rather limited. The Rules of Origin negotiated in CETA are rather lax (for passenger vehicles 50 percent domestic content, rising to 55 percent after 7 years). Moreover, an annual quota allows Canada to export 100.000 vehicles per year tariff-free to the EU with domestic content of only 20 percent in order to account for the high content of US products used in the Canadian automotive industry.

3. Opportunities and challenges of TTIP

TTIP offers important opportunities and challenges for the automotive sector if one considers the current barriers to transatlantic trade of motor vehicles. Average tariff rates for automotive products are relatively, but can be as high as 25 percent for some product groups. From a mercantilist perspective, the EU should seize the opportunity to use the relatively high EU tariff on passenger cars (10% vis-à-vis 2.5% in the US) as a bargaining chip to induce the US to substantially lower its NTBs or to cooperate more on international standards.

Non-tariff barriers (NTBs) in the sector, such as technical regulations and standards as well as procedures for testing and conformity assessment, represent a tariff equivalent of about 26% on both sides of the Atlantic. Thus, as several studies show, the main benefits of TTIP can be reaped by reducing unnecessarily trade distorting regulatory technical barriers to trade (TBTs). However, the identification of these TBTs is a very challenging and time consuming task and should take place only when regulatory outcomes are sufficiently similar.

Overall, there are important similarities but also significant differences regarding safety and environmental standards between the EU and the US. Regarding safety standards, while safety outcomes appear relatively similar, the US has a system of self-certification while the EU relies on compulsory government approval. For environmental standards, the US does rely on government approvals, but several other important regulatory features and the level of emission standards are different. So this could pose a challenge to the level of EU standards and the competitiveness of EU firms. Nevertheless, the automotive sector lends itself particularly for reducing NTBs for three main reasons: required safety outcomes are relatively similar, US regulation is less decentralized than in other sectors, and the main business organisations on both sides of the Atlantic strongly support cooperation.

Several approaches to proposed by the EU Commission and EU and US automotive business organisations to reduce NTBs due to unnecessary regulation are discussed. First harmonization of existing TBTs and more reliance on existing international standards. Second, cooperation on the development of common future standards for new technologies, and third, mutual recognition of certain existing TBTs where regulatory outcomes are sufficiently equivalent. These challenging tasks are planned to take place even after the conclusion in the framework of a "living agreement" and under the auspices of a Regulatory Cooperation Body (RCB). This approach appears reasonable. However, reducing NTBs and particularly the mutual recognition of equivalent TBTs must not compromise the level of existing passenger and environmental safety, the EU's precautionary principle or the democratic legitimacy of EU regulation.

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1. INTRODUCTION: THE EU AUTOMOTIVE INDUSTRY AND ITS TRADE RELATIONS WITH THE US

KEY FINDINGS

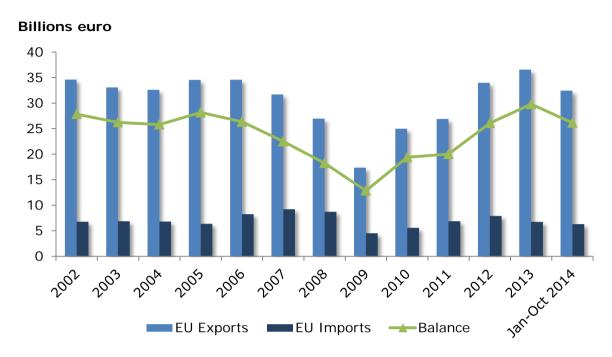
The EU automotive industry is the second largest manufacturer of motor vehicles worldwide and generates directly or indirectly millions of jobs across the EU. 35 percent of EU production of motor vehicles takes place in Germany and more than 20 percent in the new EU member states. 4 out of 10 motor vehicles made in the EU are produced for export. The US represents by far the largest market for EU automotive exports. A significant stimulus for transatlantic trade of motor vehicles and parts can be created by eliminating tariffs and non-tariff barriers to trade within a comprehensive free trade agreement. The challenge in the negotiations consists of using the opportunity to achieve deep trade liberalisation while respecting EU sovereignty and without sacrificing vehicle safety or environmental standards.

The automotive sector is of strategic importance for EU manufacturing. The EU is the second largest manufacturer of motor vehicles worldwide (after China). According to the International Organization of Motor Vehicle Manufacturers (OICA), more than 16 million vehicles were produced in the EU member states in 2013. 35 percent of total EU production of motor vehicles in 2013 took place in Germany, followed by Spain (13 percent), France (11 percent), UK (10 percent) and the Czech Republic (7 percent). More than 20 percent of EU motor vehicle production can be ascribed to the new EU member states from Central and Eastern Europe. According to the 2013 EU Industrial R&D Investment Scoreboard, the automobile sector is the EU's largest investor in Research and Development. Data provided by ACEA show that 2.2 million people work directly in the automobile industry (ACEA, 2014). Taking into account other supporting industries such as components suppliers, sales of motor vehicles, after sales services, construction of roads and motorways etc., the number of jobs generated by the automotive industry EU wide is much higher. According to the European Association of Automotive Suppliers about 5 million people are employed by their members - mainly enterprises in manufacturing motor vehicle parts, systems and components. Employment in the automobile industry has increased substantially in the new EU member states in recent years. In the Czech Republic, Poland and Romania more than 130.000 people are now employed by enterprises in the automobile industry. The number of persons employed increased by almost 30 percent between 2005 and 2013 in Poland and Romania. The European automotive industry is dominated by large enterprises with strong international activities (Ecorys, 2009). However, numerous small and medium enterprises (SME) are also active as component supplier or producers of parts and accessories.

4 out of 10 motor vehicles made in the EU are produced for export. The EU automotive industry generated a large trade surplus in recent years. The US represents by far the largest market for EU automobile exporters (followed by China, Russia and Turkey). Almost 1 million motor vehicles (or every seventh motor vehicle produced for the world market) were exported in 2013 to the US market (ACEA, 2014). About 220,000 motor vehicles were imported from the US in 2013. Figure 1 shows the development of the trade flows between the EU and the US in the recent past.

Figure 1: Motor vehicles trade between the EU and US

SITC, rev. 3 - Division 78 - Road vehicles



Source: Eurostat

More than three quarters of EU automotive exports to the US are passenger cars (data for 2013, SITC 781). Parts and accessories account for 18 percent. Regarding EU imports, motor cars make up about 66 percent of automotive imports, whereas 22 percent were parts and accessories. 54 percent of imports of road vehicles are attributable to Germany and 70 percent of EU road vehicles exports originate in the German automotive industry.

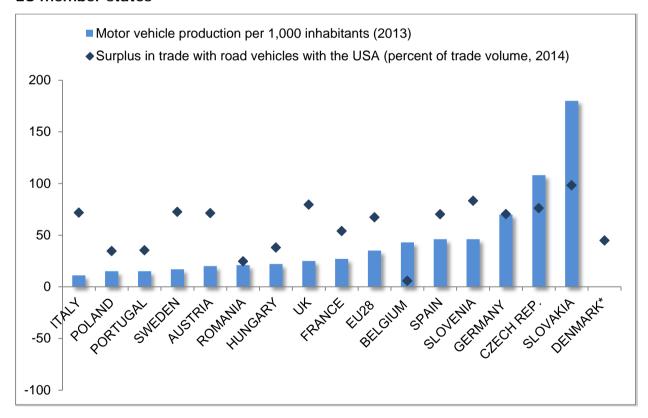
EU manufacturers often pursue a two pillar strategy – exports as well as local production abroad - whereby the share has shifted towards local production recently. According to data provided by the German Association of the Automotive Industry (VDA), exports of German automotive manufacturers increased by 20 percent between 2004 and 2014; growth of local production in the US however increased by about 230 percent in the same time period. There are many potential reasons to relocate production, such as proximity to the market, after-sales service, costs reduction, currency risks etc. Transatlantic trade is often associated with significant additional costs that render the final product much more expensive. Transportation costs, costs associated with exchange rate risks, but also tariff and non-tariff trade barriers are important reasons to relocate production to other countries. Especially non-tariff barriers are often considered as a cost-pushing factor. General Motors showed, for instance, that the costs for adjusting the Opel Adam to the US product standards lie in the tens of millions. The purpose of the Transatlantic Trade and Investment Partnership (TTIP) is to address those trade related costs which arise from

¹ Focus, Dec 8, 2014.

tariffs and non-tariff barriers such as different product standards, testing methods, classifications, product labelling.²

In many aspects, the negotiations on TTIP are unique in the history of free trade agreements. First, two global players with strong offensive and defensive positions are negotiating. TTIP accounts for more than one third of global automotive sales. Second, because of the significance of the EU and the US within the global automotive industry, TTIP negotiators have a chance to speed up the process of multilateral trade liberalisation by establishing global automotive standards and by allowing for the participation of third parties. And third, the efforts of the negotiators are particularly focused on the removal of NTBs. Of course, tariff elimination is of high importance as well, but both Parties agree that the scope of TTIP should go far beyond tariff elimination. Today, NTBs are much higher than tariffs (see figures for the tariff equivalents of NTBs below) and TTIP is on solid ground in addressing NTBs alongside the elimination of tariffs. However, since NTBs often result from different product based regulation for e.g. consumer or environmental safety, a potential conflict arises between the objectives of trade liberalisation and regulatory autonomy in the field of consumer protection. Therefore, the challenge is to achieve deep trade liberalisation while respecting EU sovereignty and not sacrificing vehicle safety or environmental standards. This is only possible if mutual recognition of equivalence of regulatory acts is based on solid evidence that the respective regulation achieves sufficiently similar outcomes.

Figure 2: The role of the USA as trading partner for the automotive industry in EU member states



Source: Eurostat, ACEA

Value-Added taxes and excise duties represent, contrary to the factors listed above, no trade barriers, since they apply to local producers as well. Therefore, they are not a topic of negotiations on FTA and are excluded from the present analysis.

Although Germany accounts for most of the EU-US trade with road vehicles, there are also other EU member states for which the expected gains from TTIP should be substantial. In Figure 2, the role of the USA as trading partner as well as the significance of the automotive industry are shown based on trade and production data. The trade gains are expected to be high in relative terms (i.e. as a share of GDP) for instance in Slovakia, since the Slovak automotive industry produces the highest number of motor vehicles per 1,000 inhabitants among all EU member states. Furthermore, Slovakia is also the EU member state with the highest surplus in road vehicles trade with the USA (measured as a share in trade volume). Further countries (besides Germany) in which studies suggest there will be highly positive effects are Czech Republic, Slovenia and Spain.

The present study analyses the main challenges and opportunities concerning trade in motor vehicles and parts in the negotiations between the EU and the United States. The first part offers an overview of the effect of two recently concluded free trade agreements (FTAs), the EU-Korea FTA and the FTA with Canada. In the second part the focus turns to the EU-US trade barriers and the potential for regulatory cooperation in the automotive industry. The last section contains some concluding remarks as well as an overview of the estimated effects of TTIP on the automotive industry.

2. THE EFFECT OF RECENT FTAS ON THE AUTOMOTIVE INDUSTRY

KEY FINDINGS

In the context of TTIP negotiations, the FTA with Korea as well as the recently concluded Comprehensive Economic and Trade Agreement (CETA) with Canada are of particular interest, because the scope of these FTAs goes significantly beyond the reduction of tariffs. For example, the automotive annex of the EU-Korea FTA prescribes that UNECE core safety standards for automobiles should be considered as equivalent to Korean domestic standards. There is some doubt however, about Korea's commitment to implement this part of the agreement as expected. Further critical elements of the agreement are relatively lax rules of origin as well as a duty drawback mechanism. Following the FTA, the development of net exports of EU automotive products to Korea has been positive, but it is not clear whether the decreased EU trade deficit is due to the FTA or a range of other favourable factors. In CETA, the scope of elimination of NTBs in the automotive sector appears to be relatively limited. Moreover, CETA also includes very lax rules of origin in order to account for the high integration of the Canadian and the US automotive industries. It is too early to say what the effect of this FTA will be. TTIP should go far beyond the level achieved in CETA or the EU-Korea FTA in eliminating NTBs in the sector.

Free Trade Agreements (FTAs) are a conventional instrument in trade policy. According to WTO data, 398 regional trade agreements were in force at the beginning of 2015 and many others are being negotiated. The United States has FTAs with 20 countries worldwide and is currently negotiating the TTIP with the EU and the Trans Pacific Partnership (TPP) with 11 countries from the Asian-Pacific region. The EU has many FTAs including for example, the EU-Chile Association Agreement, the EU-Korea Free Trade Agreement, etc. The trade agreements concluded thus far differ widely with regard to the extent of trade liberalization. For TTIP, the FTA with Korea and the recently concluded Comprehensive Economic and Trade Agreement (CETA) with Canada are of particular interest. The scope of these goes far beyond the tariff reduction to include the elimination of non-tariff barriers (NTBs) as well as elements of regulatory cooperation. This section provides a brief assessment of these two FTAs and the degree of trade liberalization attained.

EU-Korea Free Trade Agreement

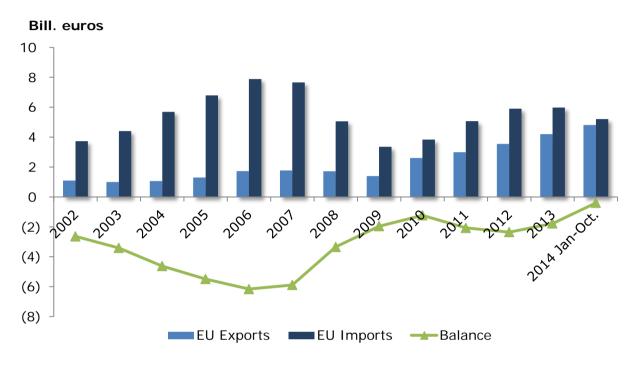
The EU concluded a far-reaching FTA with the Republic of Korea in 2009. The scope of tariff elimination in the EU-Korea FTA goes beyond anything the EU had agreed in previous agreements (LSE / Consortium Partners, 2010). The Agreement also breaks new ground in a range of other measures such as addressing NTBs and protection of intellectual property rights as well as provisions on dispute settlement and sustainable development.

The interests of the EU automotive industry in the negotiations with Korea were mainly defensive (LSE / Consortium Partners, 2010). In the 2000s the EU recorded huge trade deficits in automobiles with Korea (see Figure 2). The trade deficit decreased in recent years mainly due to Korean FDI in Slovakia and the Czech Republic. However, the EU had also offensive interests in opening the Korean market has been basically closed to imports for a long time. NTBs explain why before the turn of the century only 0.26 percent of domestic sales in Korea were attributable to foreign automotive producers. The tariff

equivalent of NTBs in the Korean car market has been estimated at between 22 and 59 percent (CEPII/ATLAS, 2010, p. 99). Most studies of the effect of the EU-Korea FTA confirmed the EU's more defensive interest, in that they came to the conclusion that Korean motor vehicle exports to the EU would grow (much) more in absolute terms than EU exports to Korea. Thus the overall effect on output and employment in the EU automotive industry was predicted to be negative.

Figure 3: Motor vehicles trade with Korea

SITC, rev. 3 - Division 78 - Road vehicles



Source: Eurostat

The EU-Korea FTA entered into force in 2011. It foresees an elimination of tariffs on 98.7 percent of trade within 5 years (Pollet-Fort/Hwee, 2011). For sensitive sectors, where Korean producers are especially competitive – and this is particularly the case for passenger cars with small sized engines – the EU tariffs will only be liberalized in year 5 of the agreement (Table 2). The high relevance of NTBs in the Republic of Korea was given particular attention and a special annex is devoted to the automotive industry (Annex 2-C of the FTA, see Box 1). According to the FTA, UNECE core safety standards for automotives have been considered as equivalent to Korean domestic standards from the entry into force of the agreement. Furthermore, Korea should recognize certain EU environmental standards (Euro 6 standards) and align further 29 standards with UNECE standards within 5 years.

However, the reduction of NTBs has fallen far short of the various studies of the potential effects of the FTA, and a certain discontentment with the implementation of the FTA has been articulated. According to ACEA, certificates and markings based on UN regulations have not been fully recognized by the authorities in South Korea and there are a range of additional certification procedures notwithstanding the FTA. There is also doubt about Korea's commitment to maintain the list of UNECE standards that will be treated as equivalent to Korean standards. In terms of the content of the agreement, ACEA viewed

the reduction of EU tariffs as being too quick and criticized the relaxation of rules of origin for motor vehicles from 40% to 45% foreign content (LSE / Consortium Partners, 2010).

A further integral part of the EU-Korea FTA is the inclusion of a duty drawback mechanism which allows an exporter to receive a rebate of any customs duties paid on the imports of parts used the final exported product (Cooper et al., 2011). The following example illustrates the possible impact of the drawback mechanism. Chinese radios assembled in Korean cars can enter the EU duty-free when South Korean car manufacturers reclaim the duties paid when the vehicle is shipped to the EU (Cooper et al., 2011). EU companies, on the contrary, pay a 14 percent tariff when importing the same radios directly from China. To avoid the sharp increase of foreign content in the imported products, the Parties included a provision that allows a Party to permanently cap refundable tariffs at 5 percent should there be a "notable increase" in foreign sourcing.

Table 2: Tariff reduction commitments and time frame for implementation under the EU-Korea FTA

	European Union	Republic of Korea
Passenger Cars		
Tariff rate prior to FTA	10%	8%
Time frame	Elimination over 3 to 5 years depending on engine size	Elimination over 3 to 5 years depending on engine size
Electric Vehicles / Plug-in Hybrid Vehicles*		
Tariff rate prior to FTA	10%	8%
Time frame	Elimination over 5 years	Elimination over 5 years
Trucks		
Tariff rate prior to FTA	22%	10%
Time frame	Eliminated over 3 to 5 years depending on truck size	Eliminated immediately or over 3 to 5 years depending on truck size

^{*} Not all hybrid vehicles are covered by this category.

Source: Congressional Research Service (CRS), modified according to Cooper et al., 2011.

The EU-Korea FTA also includes provisions on emissions standards and the establishment of a working group on motor vehicles and parts to serve as an early warning system for potential trade barriers related to testing and certification standards and the implementation of future requirements related to motor vehicles (Cooper et al., 2011).

The overall effects of the EU-Korea FTA in the years 2011-2013 were by and large positive. However, it should be recalled that many measures are still to be implemented. Nevertheless, driven by strong growth in EU exports and a small decline in Korean exports to the EU the overall trade deficit declined substantially, from \in 11.2 billion in 2010 to \in 3.7 billion in 2011 (Woolcock, 2013). In the automotive sector, the picture looks better for EU producers than predicted during the negotiations. The EU trade deficit increased in 2011

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For pre-estimates of the impact of the EU-Korea FTA see e.g. Copenhagen Economics / Francois (2007).

and 2012, though the predicted large increase in Korean exports to the EU has not yet happened (Figure 2). There is a range of possible explanations for this development. First, estimates of the expected effect of the EU-Korea FTA did not take into account the increasing amount of Korean FDI into the European Union, which substitutes for Korean exports (See Box 2 in the Annex). The factories in Slovakia and the Czech Republic were planned to have a capacity of 600,000 cars per year (Credit Suisse, 2009), which roughly corresponds to the number of cars imported from Korea in the year 2007 (ACEA, 2014). Second, the number of new passenger car registrations in the EU has declined since 2007 due to the economic downturn in many EU member states and the global economic uncertainty. Third, the Korean currency has appreciated significantly since 2009. At the beginning of February 2015 the value of the Euro was more than 30 percent lower in terms of South Korean Won than in March 2009. The appreciation of the Korean currency against the Euro is of course favorable for exports from Eurozone countries and unfavorable for Korean exports to these countries. And finally, many liberalization measures have only recently come into effect. It remains to be seen if the positive trend in EU exports is attributable to the FTA. The largest increase in the exports of EU motor vehicles was observed in 2010 before the FTA came into force (see Figure 2). The positive trend in EU automotive exports might rather be explained by rising consumer demand for European premium cars and the revival from the economic turmoil (ACEA, 2015). definitive conclusion on the impact of the EU-Korea FTA on the European automotive industry is, therefore, still not possible.

Box 1: NTBs in the EU-Korea FTA

Use of International Standards

- For core safety standards, UNECE Regulations are considered as equivalent to Korean standards as of the entry into force of the Agreement.
- For a further 29 standards, Korea will align its regulations to UNECE regulations over a five-year period.
- For those standards not subject to equivalence or harmonisation, Korea will ensure they are applied in such a way as to avoid market access problems.
- Products for which compliance with UNECE Regulations is proved by means of a UNECE type approval certificates are deemed to comply with those domestic standards aligned with the respective UNECE Regulations.

Emissions

- Korea will accept EU on-board diagnostic (OBD) devices conforming to Euro 6 standards as compliant with Korean standards. Cars fitted with OBDs conforming to Euro 5 standards will be accepted within a transitional quota, until all EU cars exported to Korea are fitted with Euro 6 OBDs.
- Korea will allow EU producers flexibility in complying with its emission standards by providing for specific emission levels for sales below certain thresholds. This flexibility will be provided from the year the FTA enters into force.

Products with new technologies

• Korea will accept products incorporating new technologies on its market, unless they are proven to create a significant risk to health, safety or the environment.

Convergence of future requirements

- Any new standards adopted by Korea should be based on UNECE Regulations.
- Existing requirements diverging from UNECE will be reviewed every three years to assess the reasons for divergence.
- In areas where there are no UNECE Regulations, the parties will examine possibilities for cooperation to develop international standards or achieve convergence in their respective requirements.

Most-favoured nation (MFN) clause

• If Korea decides to give more favourable treatment on internal taxation or emission regulations to any third country products, it will extend this treatment also to EU products.

Duty drawback mechanism

• Exporters are allowed to receive a rebate of any customs duties paid on imports that are integrated into the exported product

Source: modified according to the European Commission, 2011.

Nevertheless, in 2013 and 2014, EU road vehicles exports (including parts) continued to grow and the deficit in the trade balance declined substantially from € 2.4 billion in 2012 to € 1.8 billion in 2013 (Figure 2). Preliminary data for the months January-October 2014 show that this trend continued in 2014 and the trade deficit shrank to € 0.4 billion for the first ten months of 2014.

EU-Canada Free Trade Agreement CETA

The interests of the EU automotive industry in the negotiations with Canada are a bit different from those with Korea and more like the EU interests in TTIP. Contrary to the case of South Korea, the EU automotive industry recorded a trade surplus with Canada amounting to € 3.7 billion in 2013 (Figure 3). 12 percent of total goods exports can be attributed to road vehicles (SITC 78). The value of exported road vehicles (SITC 78) has doubled since 2002, whereas the imports of road vehicles remained relatively static. Motor cars (SITC 781) accounted for 78 percent of automotive exports to Canada in 2013. Imports from Canada in SITC 78 are made up of 35 percent motor cars (SITC 781) and 55 percent of car parts and accessories (SITC 784).

Currently, Canada has a 6.1 percent tariff on imports of finished vehicles from the EU and no tariffs on automotive parts (Stanford, 2014). The tariff rates are higher in the EU – 10 percent for passenger cars and up to 5 percent for parts and accessories (see Table 3 below). Trade in motor vehicles between the EU and Canada is further hampered by a wide range of NTBs, which have tariff rate equivalents are much higher than the tariff rates. As is the case in the US (see below), Canada uses a system of self-certification and generally harmonizes standards, such as vehicle emissions standards, with US federal standards as much as possible. Thus, from a mercantilist perspective, the EU has defensive interest on tariffs and more offensive interests in lowering of NTBs in Canada.

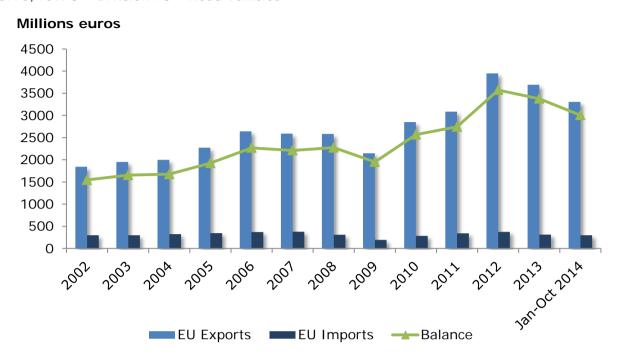
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http://dieselnet.com/standards/ca/ [11.02.2015].

Figure 4: Motor vehicles trade with Canada

SITC, rev. 3 - Division 78 - Road vehicles



Source: Eurostat

Under CETA, each Party shall reduce or eliminate customs duties on goods originating in either Party in accordance with Annex X-5 of the agreement. Rules of Origin are specified in Chapter X (Article 5 (1), see Box 3 in the Annex). Industrial tariff lines will be gradually eliminated to cover more than 99 percent of lines (Tradejustice, 2015). Duties on motor cars will be eliminated on a linear basis over 7 years (see Box 3 in the Annex). Duties on motor vehicles for the transport of more than 10 persons will be eliminated over 5 years and duties on vehicles for the transport of goods over 3 years.

The following Rules of Origin provisions were concluded in CETA. For the case of passenger cars the domestic content threshold is set at 50 percent, rising to 55 percent after 7 years. For other vehicles, the threshold is set at 55 percent. However, because of the high US content in Canadian exports, the EU has agreed to an annual quota of 100.000 vehicles per year tariff-free to the EU market with domestic content of only 20 percent, measured by net cost. The quote is more than 10 times higher than the current exports of Canada to the EU (Stanford, 2014). This special provision will not be applicable in case the EU and the US reach a free trade agreement, but would be replaced by an integrated content threshold requiring 60 percent of value-added in a qualifying product be produced within the combined Canada-US production area (Stanford, 2014). The annual quota Canada can be seen as an exception due to the very high degree of integration of the Canadian and the US automotive industries. Therefore, it is doubtful that CETA the Rules of Origin could be seen as an appropriate foundation for future FTAs.

On NTBs Article V (1) of the Annex on Motor Vehicles Regulations provides the prior Canada incorporation of a limited number of technical regulations contained in UN Regulations into the Canadian Motor Vehicle Safety Regulation (CMVSR). So the progress in eliminating NTBs in CETA is rather limited.

In CETA the Parties agreed to engage in technical consultations with a view to determining whether further UN technical regulations should also be incorporated into CMVSR. This is the first time that a North American country has recognized equivalence with a number of UNECE standards (Tradejustice, 2015). Furthermore, the Parties agreed to cooperate in the development of new technical regulations or related standards. They commit to meet at least annually and share information regarding domestic and international programmes and agendas, to contribute jointly to encouraging and promoting greater international harmonization of technical requirements, to share and discuss research and development plans, to conduct joint analyses, etc. In case of the successful conclusion of TTIP, the Parties agree to determine whether the harmonization achieved by that agreement should also be implemented between the EU and Canada.

Contrary to the FTA with Korea, CETA sets a restriction on duty drawbacks, which will enter into force with a time lag of three years (Article 6 (1) and (3), see Box 3 in the Annex).

It is of course too early to see the effects of CETA, which is still to be ratified. Studies of the expected effects of CETA show largely positive results for the EU automotive industry. According to the EU-Canada Joint Study published in 2008, EU automotive exports to Canada would grow by 631 million euros (at 2007 prices), while Canada's automotive exports to the EU would grow by 255 million euros (European Commission/Government of Canada, 2008). The Canadian Center for Policy Alternatives estimates that Canadian exports to the EU would grow by 116 million USD, while the EU's automotive exports to Canada would grow by 1.9 billion USD (Stanford, 2010).

The most recent analysis was conducted by the Ifo Institute in Munich after the CETA text was released (Aichele/Felbermayr, 2014). This model predicts an increase of value added in GTAP sector 38 (Motor vehicles and parts) and 39 (Transport equipment, n.e.c.) for the EU27 by 1.5 percent due to CETA. Using the Ifo model the conclusion of CETA and TTIP would generate increased value added in the EU automotive industry of 7.3 percent. The authors show that German automotive exports to (imports from) Canada would be almost 8 (11) times higher with CETA and the German trade surplus in this sector would increase sevenfold.

The results of these quantitative analyses should not be taken as exact forecasts since they rely on a range of assumptions and different methodologies. However, the analyses of the potential effects of CETA confirm the offensive interests of the EU in the negotiations with Canada. On the one hand, as with EU-US motor vehicles trade, the tariff elimination is asymmetric with the EU having to cope with a greater reduction in tariffs. On the other hand, the removal of NTBs, for example through the recognition of UNECE standards by Canada, is positive for the EU industry even if only a few UNECE regulations have been accepted by Canada as a result of CETA. The total effect on the European automotive industry should still be positive.

These results were not presented in the study but were obtained upon request.

⁶ The focus of the analysis by Aichele and Felbermayr (2014) is on the effect of CETA on Germany and the respective numbers for the EU are not presented.

3. OPPORTUNITIES AND CHALLENGES OF TTIP

KEY FINDINGS

This third section identifies important opportunities and challenges of TTIP for the automotive sector based on an overview of current barriers to transatlantic trade of motor vehicles. Tariff rates for automotive products are relatively low on average. However, for some product groups they can be as high as 25 percent. From a mercantilist point of view the EU should seize the opportunity to use the relatively high EU tariff on passenger cars (10% vis-à-vis 2.5% in the US) as a bargaining chip to induce the US to substantially lower its NTBs or to cooperate more on international standards.

Non-tariff barriers (NTBs), such as technical regulations and standards as well as procedures for testing and conformity assessment, account on average tariff equivalent of about 26% on both sides of the Atlantic in the automotive sector. Thus, the main benefits of TTIP can be reaped by reducing unnecessarily trade distorting regulatory technical barriers to trade (TBTs). However, the identification of these TBTs is a very challenging and time consuming task and should take place only when regulatory outcomes are sufficiently similar.

Overall, there are important similarities but also significant differences regarding safety and environmental standards between the EU and the US. While safety outcomes appear relatively similar, the US has a system of self-certification while the EU relies on compulsory government approval. For environmental standards, the US does rely on government approvals, but several other important regulatory features and the level of emission standards are different. This could pose a challenge to the level of EU standards and the competitiveness of EU firms. Nevertheless, the automotive sector lends itself particularly well for the reduction of NTBs for three main reasons: the safety outcomes are relatively similar, the regulatory structure in the US is less decentralized than in other sectors, and the main business organisations on both sides of the Atlantic strongly support this effort.

Several approaches to the reduction of unnecessary regulations proposed by the European Commission and automobile business organisations are discussed. These are: first, harmonization of existing TBTs and more reliance on existing international standards; second, cooperation on new technologies and on the development of common new future standards; and third, mutual recognition of certain existing TBTs where regulatory outcomes are sufficiently equivalent. These approaches would be followed after the conclusion in the framework of a "living agreement" and under the auspices of a Regulatory Cooperation Body (RCB). This approach appears reasonable. However, reducing NTBs and particularly the mutual recognition of equivalent TBTs must not compromise the level of existing passenger and environmental safety, the EU's precautionary principle or democratic legitimacy.

There are similarities and differences between the TTIP negotiations and other free trade negotiations. For example, EU interests are relatively similar to those presented in the previous section with regard to the FTA with Canada. The large EU surplus in the automotive trade with the US means the EU has mainly offensive interests. In line with EU general interests in the TTIP negotiations there should be a high degree of trade liberalization while defending the right to regulate and the precautionary principle on which

EU regulations are founded. The following provides a brief overview of respective opportunities and challenges in TTIP guided by the nature of the various trade barriers.

3.1. Tariffs

a. Facts and figures

The asymmetry in the tariff rates between the EU and the US is more pronounced than in CETA. Although average tariff rates for manufactures are relatively low in the EU and US there is a range of products where double digit tariff rates still impede exports and imports. According to WTO data, average tariff rates for transport equipment amount to 3.1 percent in the United States and 4.1 percent in the EU (simple averages). However, for particular products in this group, tariff rates can be as high as 25 percent in the US and 22 percent in the EU (see Table 3). Importantly, for passenger cars the EU tariff rate is 10 percent but only 2.5 percent in the US. This divergence is highly relevant, as trade in passenger cars accounts for three quarters of transatlantic trade in the automotive industry (see Section 1). In addition, the EU also has higher tariffs for buses, while the US tariffs on light trucks and pick-ups are considerable higher than in the EU. Several opportunities and challenges can be derived from these facts.

b. Opportunities and challenges

Tariffs are additional costs that hamper international trade and raise consumer prices of the goods concerned. The elimination of tariffs is thus an opportunity to increase welfare and to provide consumers with a larger variety of products. Moreover, tariff free trade will raise competition and thus the incentives for innovation. The low average tariff rate in automotive trade between the EU and the US could be seen as diminishing this general argument for tariff elimination. However, as transatlantic trade is so immense, the savings potential for companies and consumers from eliminating tariffs is still very sizeable. The German Association of the Automotive Industry (VDA) has estimated that the additional costs due to tariff payments amount to about €1 Billion for the members of the association. This estimate is based on the total bilateral volume of trade with motor vehicles and parts between Germany and the United States.

Table 3: Tariff rates for products of the automotive industry

	Tariff rate in percent		EU-US automotive trade	
			(Millions of euros)	
	EU	US	EU exports	EU imports
Passenger Cars	10	2.5	29,426	4,901
Light Trucks / Pick-ups	10	25	208	34
Commercial Vehicles	22	25	35	3
Busses	16	2	214	1
Parts	2-5	0-2.5	7,298	1,842

Source: German Association of the Automotive Industry (VDA).

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⁷ It should be born in mind that additional trade barriers related to tariffs such as, for example, restrictive rules of origin or opaque methods for custom valuation can also restrict trade.

High tariffs also hamper the sourcing of intermediate automotive goods from abroad. In this respect, tariff elimination is also in their general interest.

From a mercantilist perspective, the divergence of tariff rates raises particular challenges and opportunities of TTIP. While this applies to all product groups, the following part will concentrate (due to required brevity) on the tariff differences regarding passenger cars due to the overwhelming trade relevance of this product group. An important opportunity certainly lies in using the high EU tariff rate as a bargaining chip to get US liberalization in other relevant topics (e.g. regulatory cooperation or acceptance of international standards). The EU Commission should seize this opportunity in the negotiations. At the same time, there is challenge in the fact, that tariff protection of the EU passenger car market will be substantially reduced and that less competitive firms will face a significant adjustment burden. However, this argument can be qualified when taking a broad and longer term economic perspective on free trade.

In today's modern trade world, things have also changed from the perspective of automotive firms. The high degree of integration of EU and US car industries is more or less unique and deserves particular consideration within the TTIP negotiations. Transatlantic trade takes place mainly on an intra-industrial level in the automotive industry and particularly with regard to passenger cars. What is more, a very large share of trade in motor vehicles, parts and passenger cars is *within* large companies like General Motors, Ford etc. For multinational firms, mercantilist thinking is outdated as they suffer from high tariffs within their international production networks. Thus, the associations of car manufacturers in the EU and US do not appear to be in the role of (mercantilist) rivals during trade negotiations, but act in concert to achieve an ambitious degree of trade liberalization. In

Moreover, the elimination of tariffs (and also of non-tariff barriers) is an opportunity to further foster trade in parts and components (and inward and outward processing trade). For example, EU suppliers of parts to automotive firms will have enhanced possibilities to sell into the US market. EU firms that source intermediate inputs in the US or that employ the strategies of offshoring and outward processing with the US will also benefit from a reduction of trade barriers. Again, in today's modern world of increasingly complex and interconnected global value chains, mercantilist thinking appears more and more outdated.

3.2. Non-tariff barriers and regulatory divergence

3.2.1. General aspects

a. Facts and figures

Besides tariffs, there is a range of non-tariff barriers (NTBs) that impede transatlantic trade in general. NTBs are largely due to technical barriers to trade (TBTs), i.e. technical regulations and standards as well as procedures for testing and conformity assessment. In many cases the different norms and procedures result from the historical development of

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The authors are not aware of an academic quantification of the required adjustment in the subsector of passenger cars.

Felbermayr et al., 2013, show using US Census data for the trade flows in the automotive industry that 38.8 percent of German exports to the US and 80.1 percent of German imports from the US in this industry refer to intra-firm trade.

The associations even launched a joint position on TTIP (see below) and demonstrate together the gains which would arise from TTIP.

two independent regulatory regimes (Canis/Lattanzio, 2014). ¹¹ While in the EU a rather centralized system of technical regulations and standards prevails, the US system is more decentralized and dispersed. This renders regulatory cooperation and the reduction of NTBs generally rather challenging.

Also in the automotive sector, until the 1960s and 1970s state level regulation prevailed in the United States. Since then Congress has delegated regulation of motor vehicles to federal agencies, providing for less dispersion, but with specific direction has been only occasionally provided through legislation. For standards a multidimensional system nevertheless still prevails in the US with competition between many different standards and a multitude of standard setters. In Europe, on the contrary, while technical regulations in the automotive industry had formerly been under the auspices of member state governments, they have over time been largely taken over and harmonized across the EU.

NTBs take the form of EU firms having to incur additional costs to adapt their automotive products to US requirements (as otherwise exporting would be impossible) or to pay for additional testing and conformity assessments. Ecorys (2009) estimated that NTBs in the automotive industry are equivalent to an ad valorem tariff of approximately 26 percent (25.5 percent in the EU and 26.8 in the US). 12

At first glance then the offensive and defensive interests of the EU in the TTIP negotiations appear to be relatively balanced. However, judging from the (not very fruitful) past attempts at regulatory cooperation since the 1990s and eventually in the Transatlantic Economic Council (TEC), the EU's offensive interest in reducing NTBs appears to have been somewhat stronger than that of the US.

A positive outcome from the existing forms of (rudimentary) regulatory cooperation, such as the TEC, is the transatlantic cooperation on hydrogen and electric cars. One objective here consists of developing common standards for some important elements of the innovative cars and also for the necessary infrastructure. EU and US regulators and standard setters have cooperated in this process and agreed to set up testing laboratories on both sides of the Atlantic that will work together on safety and performance requirements for electric vehicles and batteries (European Commission, 2013). Furthermore, regulators are also working on common transatlantic standards for the plugs, sockets and other elements needed to charge electric cars.

b. Opportunities and challenges

Reducing NTBs in TTIP negotiations involves important opportunities and challenges. Generally speaking the main opportunity lies in the reduction of costs for EU and US firms in transatlantic trade. This is especially relevant for SMEs as regulatory differences are a particular technical and legal impediment for smaller companies.

It has to be borne in mind, however, that not all NTBs can and should be dismantled. This is true for example, if regulatory divergences result from differences in consumer preferences or from regional or geographical peculiarities in the EU and the US. Ecorys (2009) estimates (based on a survey of experts and econometrics) that it should be possible to deal with approximately 42-48 percent of regulatory divergences between the EU and the US in the automotive industry. This can be done when preferences and general conditions are sufficiently similar and when differences in the regulatory systems lead to similar outcomes regarding passenger or environmental safety.

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Some of the different regulations reflect to a certain extent past efforts to protect vehicle industries against competition from abroad (Canis / Lattanzio, 2014).

¹² It would be very cumbersome to differentiate which of the many and complex NTBs mainly affect consumers and which mainly manufacturers and cannot be achieved here for reasons of brevity.

Several highly important challenges arise regarding the reduction of NTBs. These are particularly relevant for TTIP, which be breaking new ground in regulatory cooperation.

- Reducing NTBs and regulatory cooperation must not compromise the level of existing passenger and environmental safety, the EU's precautionary principle or democratic legitimacy.
- It is a very cumbersome task to identify the respective fields where the detail of regulations and standards differ but still produce similar levels of passenger or environmental safety.
- It is also challenging to tackle the divergence within the US regulations and standards making where many actors, regulatory bodies and private standard setters contribute to a complex and sometimes not very transparent system in many sectors. As regulation in the automotive sector is relatively centralized on the federal level, this industry lends itself particularly for regulatory cooperation. However, the dispersed US system of standard setting bodies remains a significant challenge.

3.2.2. Safety regulations and standards

The main categories of regulation and standards relevant for regulatory cooperation between the US and the EU fall into two groups: safety and environmental standards (with the two subcategories of emissions limits and fuel economy). Following Canis and Lattanzio (2014) a brief overview of the different regulatory norms in the EU and the US is provided in this and the next subsection.

a. Facts and figures

In the EU, safety of motor vehicles is attested via government approval. Since 1970, the Whole Vehicle Type Approval System has been used in the EU. It prescribes that production samples of new model of motor vehicle must be approved by national governmental authorities before the vehicle enters the market. The EU system of regulations is mandatory and applies to a whole vehicle. In 2007 the EU revised the system of EC type-approval for motor vehicles. With the new Directive the System was extended to all categories of motor vehicles as well as systems, components and separate technical units designed and constructed for such vehicles. Once formal approval of new models is obtained, car manufacturers issue a "certificate of conformity" for each vehicle produced and can place the vehicle for sale throughout the EU. EC type-approval procedures are compulsory and have replaced the national approval procedures with which they co-existed until 2008.

Besides these compulsory EU directives, European vehicle regulation also includes standards promulgated through the United National Economic Commission for Europe (UNECE) with optional implementation by member states. Work in UNECE has evolved over time: 17

• In 1952, the United Nations established the Working Party 29 (WP29) on the construction of Vehicles with the objective to "initiate and pursue actions aimed at the worldwide harmonization or development of technical regulations for vehicles".

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¹³ Directive 2007/46/EC.

http://europa.eu/legislation_summaries/internal_market/single_market_for_goods/motor_vehicles/ motor_vehicles_technical_harmonisation/n26100_en.htm [02.02.2015].

Yet another important part of the EU safety regulation is represented by the EURO-NCAP safety rating system which is now backed by the European Commission and several EU governments.

See UNECE website, http://www.unece.org/leginstr/trans.html [02.02.2015] and http://www.unece.org/leginstr/trans.html [02.02.2015].

- In 1958, WP29 administered an agreement aiming at the establishment of uniform standards for vehicles and their components relating to safety, environment, energy and anti-theft requirements. Signatories to the Agreement commit to mutual recognition of approvals for vehicle components.
- In 1995 the 1958 agreement was revised to promote the participation of non-European countries thus becoming a *global agreement* in this field. 139 Regulations have been adopted since the Agreement entered into force in 1959. The Regulations provide for equal safety standards (and also environmental protection and energy saving criteria) for manufacturers in 51 Contracting Parties, including the European Union, Japan, Republic of Korea etc.
- A 1998 Agreement runs parallel to the 1958 Agreement. It established a process of development of UN Global Technical Regulations (UN GTRs) for vehicles and their components. ¹⁸ Under the 1998 Agreement no mutual recognition of approvals or certification by the Contracting Parties is required. GTRs are published in a UN Global Registry and the Contracting Parties implement them using their own regulatory process. By May 2013, 15 UN GTRs have been established.

In the US, the National Highway Traffic Safety Administration (NHTSA) has issued dozens of safety standards, and it maintains an extensive database on vehicle crashes. However, NHTSA neither approves the compliance of motor vehicles or parts with its standards nor collects information about the compliance from manufacturers. Rather, manufacturers should "certify to the distributor or dealer at delivery that the vehicle or equipment complies with applicable motor vehicle safety standards". ¹⁹

Regarding approach of international UNECE standards, the United States did not sign the 1995 agreement, since it denied the recognition of standards generated outside the US. However, it signed the 1998 Agreement with less binding rules, but progress in adopting more international standards has been rather disappointing.

b. Opportunities and challenges

Concerning passenger safety of motor vehicles, significant opportunities are offered by TTIP, because outcomes of the different regulatory systems are regarded relatively similar in general. Thus, the scope for regulatory cooperation should be relatively broad.

However, important challenges lie in the following aspects:

- A solution has to be found to deal with the major difference between the system of self-certification in the US and the compulsory government approval system in the FII
- The use of international standards is the best option from an economic point of view in order to minimize compliance costs and effects of trade diversion. The question arises, however, how the US can be induced to rely more on this international approach.
- Identifying regulations and standards which lead to similar passenger safety outcomes is very cumbersome due to the high number and complexity of relevant TBTs.

¹⁸ Ibid.

¹⁹ P.L. 89-563, 49 U.S.C. §30115.

Table 4: Comparison of Major US and EU Motor Vehicle Regulatory Differences

Table 4. Comparison of Major 03 and E0 Moto	or vernicle Regulat	or y Differences
	European Union	United States*
Self-certification for safety regulations	-	√
Type approval for safety regulations	√	-
Government labs used for all testing	√	-
Type approval for emissions	√	√
Mutual recognition of regulations by other countries	√	-
Fuel economy standard (kilometer/liter) ^a	-	14.5 (in 2016);
		16.5 (in 2020)
Emission standards for		
pollutants (grams/kilometer)		
Nitrogen oxides (NOx)	0.06/0.08 ^b	0.04
Non-methane organic gases	0.07/0.09 ^b	0.06
Carbon monoxide (CO)	1.0/0.5 ^b	2.6
Greenhouse gases (CO ₂) ^c		
In 2016	130	155 ^d
In 2020	95	132 ^d
Form of vehicle emission testing	New European Drive Cycle	Federal Test Procedure

^{*} Emission standards in California have been traditionally more stringent than the EPA requirements, but their structure is similar to that of the legislation at federal level. For further information see dieselnet.com.

Source: Modified according to Canis / Lattanzio, 2014.

3.2.3. Environmental regulation and standards (on emissions and fuel economy)

a. Facts and figures

In the European Union, auto *emissions regulations* were harmonized in 1987 under the Single European Act (SEA). EU member states are allowed to enact measures more stringent than the common EU standards. Current emissions standards ("Euro 6") cover Carbon monoxide CO, nitrogen oxides (NOx), particulate matter (PM) and hydrocarbons (HC) emissions.

Several additional features are worth mentioning in brief:

- Reference values are different for gasoline and diesel vehicles.
- Compliance with emissions standards is tested within the New European Driving Cycle (NEDC) chassis dynamometer procedure.
- The conformity attestation with EU emission targets is required only when the vehicle is produced and not afterwards.

^a The CAFE/GHG system is highly complex. The numbers presented by Canis and Lattanzio, 2014, are based on projected sales of vehicles in different size classes. Standards are size-based, and the vehicles fleet encompasses large, medium, and small cars and light trucks. Therefore, the numbers may vary depending on the assumed sales mix.

^b Gasoline/diesel standards.

 $^{^{\}text{\scriptsize C}}$ In the US, other emissions are also regulated in terms of \scriptsize CO_2 equivalents.

^d Combined cars and trucks.

• Testing procedures include distance, duration and speed of testing as well as other factors such as warm-up period of the vehicle.

The EU does not set explicit *fuel economy standards*. Instead, since the late 1990s it sets CO_2 emission standards. In 2009 these standards were reduced to 130 g/km to be reached by 2015 with a long-term target of 95 g/km by 2020. 20 CO_2 emissions are measured with the NEDC test cycle and the limits are set according to the mass of vehicle using a fleet-average limit value curve.

In the US, *emission standards* are established by the US Environmental Protection Agency (EPA) based on the Clean Air Act (CAA). Current EPA emissions standards for motor vehicles regulate CO, NOx, PM, and HC emissions (see Table 4). The same emission standards apply to all vehicles irrespectively of the fuel their engine uses.²¹ Motor vehicles must undergo certification process in accordance with the CAA and the EPA regulations in order to be sold within the United States. Contrary to car safety, the compliance with emissions standards cannot be attested by self-certification. Conformity with EPA standards is to be verified by testing procedures specified by EPA, such as the Federal Test Procedure. Tests are based on the Urban Dynamometer Driving Schedule,²² which reflects typical driving patterns. Today, the EPA uses a three-tiered compliance testing procedure for light-duty vehicles: (1) pre-production evaluation; (2) production evaluation; (3) final clearance, which should verify that vehicles continue to meet the standards after several years of use.

In the US, explicit standards for fuel economy are established by Congress and administered by NHTSA (besides safety standards). The first fuel efficiency standards (Corporate Average Fuel Economy, CAFE) were introduced with the Energy Policy and Conservation Act (EPCA) of 1975. In 2009, a federal program was initiated to implement new light duty vehicle fuel efficiency standards for greenhouse gas (GHG) emission standards. The standards call for fleet-average passenger car and light truck GHG emissions of no more than 163 grams per mile (101 grams per kilometer) by 2025. CAFE and GHG emission certification is performed using fuel economy and emission data provided by manufacturers after two laboratory test cycles.

Comparison of the EU and the US environmental regulation systems displays *significant* differences:

- Reference values in the EU are different for gasoline and diesel vehicles, contrary to US standards.
- Conformity attestation with EU emission values is required only when the vehicle is produced.
- The test cycles differ in terms of speed, duration, distance as well as other factors such as warm-up period of the vehicle.
- Fuel efficiency is explicitly regulated in the US and GHG emission standards are to be met in addition. In the EU, there is no direct regulation of vehicle fuel efficiency. The regulation of CO₂, however, pushes manufacturers to achieve high values regarding fuel efficiency.
- All GHG emissions from vehicles (e.g. CO₂, NOx, CH4) are regulated in terms of CO₂ equivalents in the US.

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²⁰ Furthermore, the standards include special incentives for motor vehicles with low CO2 emissions and for vehicles running on a mixture of 85% ethanol (E85).

California is the only state with own emission regulations. Emission standards in California have been traditionally more stringent than the EPA requirements, but their structure is similar to that of the legislation at federal level. The CAA allows other states a choice between federal emission standards or California requirements.

²² The Urban Dynamometer Driving Schedule is defined in 40 E.F.R. §86 App. I.

• CO₂ emissions standards are defined in the EU in relationship to the mass of a vehicle, whereas in the US the footprint of the vehicle is used as denominator. Also, the underlying definitions of vehicle categories and weight classes are different in the US and the EU.

In terms of stringency, EU emission reference values are lower (the standards are more stringent) than in the United States for CO and CO_2 , but higher (the standards are less stringent) for NOx and Non-methane organic gases (Table 4). Canis and Lattanzio, 2014, show that, in general, EU standards lead to a greater emission reduction than the explicit regulation of fuel efficiency in the US. Further comparison of emission standards is challenging since the standards differ in structure, form and testing methods.

b. Opportunities and challenges

There is an opportunity in environmental regulation because the a approval systems are more similar than for safety norms as the US does not rely on self-certification. The possibility of moving to globally harmonised testing cycles could also be a fruitful approach to reducing NTBs.

However, the large differences in the approach and detail of environmental regulation shown above raises the question of whether the condition of sufficient similarity of outcomes is met to enable broad based regulatory cooperation. This is also and particularly true for the divergence in stringency of emission standards. As shown in Table 4, EU emission standards are more stringent as regards CO and CO₂. In this respect the EU should avoid a lowering of standards or competitive disadvantages for EU firms in their home market.

3.3. Potential approaches to the reduction of NTBs and regulatory cooperation

This section identifies the main approaches best suited to take advantage of the opportunities and to adequately tackle the challenge of reducing NTBs and enhancing regulatory cooperation. Before discussing several promising avenues to reach these aims the general positions of the main players are first briefly portrayed.

The EU Commission and the TTIP negotiators recognized the very substantial efficiency gains and cost-savings that would result from addressing regulatory divergences in US and EU regulations of motor vehicles in their initial position presented in May 2014. Moreover, in February 2015, the Commission published its draft textual proposal for a TTIP chapter on regulatory cooperation. Regarding cooperation on motor vehicles, the EU's aim is to "achieve more compatibility between motor vehicles regulations without lowering standards on either side". ²³

Remarkably the European Automobile Manufacturers' Association (ACEA) and the American Automotive Policy Council (AAPC) presented a joint position on the negotiations on TTIP as early as 2013.²⁴ Both see TTIP as "an opportunity to break down regulatory barriers in the auto sector, while respecting US and EU sovereignty and without sacrificing vehicle safety

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The Commission presented the initial EU position on motor vehicles in May 2014. http://trade.ec.europa.eu/doclib/docs/2014/may/tradoc_152467.pdf [03.02.2015]. The draft proposal for a TTIP chapter on regulatory cooperation which was published in Februar 2015 can be found here: http://trade.ec.europa.eu/doclib/html/153121.htm [03.23.2015]

This joint position was corroborated by the Alliance of Automobile Manufacturers (Alliance) in a letter to Ambassador Marantis from May 2013 http://www.autoalliance.org/index.cfm?objectid=AA962DF0-BD6D-11E2-B62D000C296BA163 [03.02.2015]. The Alliance is the leading advocacy group for the automotive industry in the United States, and represents 77 percent of annual new car and light truck sales in the US. In the course of negotiations the joint position of ACEA, AAPC and the Alliance has evolved continuously.

or environmental performance". ²⁵ Furthermore, they proposed a new approach to existing as well as new regulations on which the next sections draw. The efforts of the EU and the US to liberalize transatlantic trade are also welcomed by the European Association of Automotive Suppliers (CLEPA). During the Stakeholder event of the 8th Round of TTIP Negotiations CLEPA representatives stressed the positive effects to be expected from TTIP and urged on behalf of the motor vehicle suppliers in the US and Europe, a renewed effort on the TTIP negotiations this year with a view to finalizing the agreement before the end of 2016 (CLEPA, 2015).

In the following, a brief overview is provided of the main approaches discussed for regulatory cooperation on motor vehicles. This section also draws on existing proposals of the main players mentioned above.

3.3.1. Convergence (harmonization or adoption of international standards)

The first main option for convergence of regulatory approaches takes the form of harmonization of existing TBTs. This far-reaching form of cooperation might be successful in a rather limited number of instances, but surely not across the board. Both the EU and the US have highly developed regulatory systems that have been established over decades and where regulation and standard setting bodies will not easily embark on a complete change of the systems.

Somewhat more promising for existing TBTs appears to be the greater reliance on international UNECE standards, as proposed by the EU Commission. Accordingly, the hope is that enhanced EU-US cooperation in the framework of the UNECE 1998 Agreement would lead to the adoption of common Global Technical Regulations in the near future. This approach is considered essential to put the EU and the US in a position as potential setters of global standards in the automotive industry. However, it remains to be seen whether the EU will be able to induce the US to turn away from its traditional reluctance to adopt international standards. The chances of achieving this objective might be enhanced, if the EU could make effective use of its bargaining chips, such as relatively high EU tariffs on passenger cars.

3.3.2. Cooperation on new technlogies

While harmonization of *existing* regulation and standards will remain limited at best, harmonization or the development of common approaches and international standards for *new* regulation looks more promising. In the field of new technologies such as hydrogen and electric vehicles, test-cycle on emissions and advanced safety technologies EU-US cooperation is already a reality. TTIP should lead to a further enhanced joint EU-US regulatory harmonization process in the automotive sector that promotes the development and adoption of common new regulations in the future, as suggested by both the EU Commission and the automobile associations. Again, this approach is intended to strengthen the roles of the EU and the US as worldwide setters of auto standards.

3.3.3. Mutual recognition of equivalent regulations and standards

An additional fairly promising approach to regulatory cooperation is the mutual recognition of (equivalent) existing technical regulations, if they assure similar levels of safety or environmental protection. The EU Commission is explicitly seeking the recognition of motor vehicles (and their parts and components, including tyres) manufactured in compliance with the technical requirements of one party as complying with the technical requirements

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https://www.uschamber.com/sites/default/files/legacy/grc/AAPC-ACEA%20Joint%20Presentation%20at%20Regulatory%20Cooperation%20Forum%20April%2011,%202013% 20FINAL%20PDF.pdf [03.02.2015].

of the other. The Commission has little doubt that for motor vehicles "the levels of safety required by both sides are broadly comparable". ²⁶ The automotive industry on both sides of the Atlantic also supports this approach and expects that most benefits in the regulatory chapter would stem from the mutual recognition of equivalence of existing EU and US regulations.

However, it is a highly complex task to determine specifically where sufficient equivalence in outcomes applies. So a very thorough analysis of the respective approaches is required.

First, concrete regulatory fields for possible mutual recognition have to be identified. With this aim, the Alliance presented a priority list of safety and environmental regulations where mutual recognition appears appropriate and beneficial.²⁷ The list was compiled by ACEA and AAPC and includes 28 safety regulations (e.g. on lighting, anti-theft systems, seatbelt anchorages etc.) and 5 environmental regulations (e.g. on radio frequency interference, measuring of engine power etc.). This list has been favourably received by the European Commission.

Second, a reliable methodological approach has to be developed that enables regulators to assess whether the regulations of one party are equivalent (in terms of e.g. level safety and environmental protection) to those of the other. To achieve this aim, the associations of automotive producers on both sides of the Atlantic ordered a report focusing on ways to determine the equivalence of regulatory outcomes. The report is being conducted in a joint project by the University of Michigan Transportation Research Institute (UMTRI) and the Vehicle and Traffic Safety Centre (SAFER) at the Chalmers University of Technology in Sweden. According to information provided by SAFER, first results are to be expected in March 2015 at the earliest.

Third, in order to make the analysis of equivalence less cumbersome, the representatives of the automotive industry call for a performance and *cluster based approach* for the different aspects of vehicle safety instead of a line by line comparison of the multitude of individual regulations and standards. For example, various regulations and standards relevant for the safety cluster vision (e.g. front lights, window screen) would be assessed together in terms of their combined effects on the level of safety.

However, even with these preparations the determination of equivalence remains a highly complex task that will take time. Thus, the EU Commission envisages a staged approach: following substantial results when the negotiations of the agreement are concluded, a further agenda for regulatory convergence should be defined with possibly concrete timelines. This would give TTIP the status of a "living agreement" in regulatory cooperation.

In its draft textual proposal for a chapter on regulatory cooperation published in early February 2015, the EU Commission sets out its general approach in this respect. It involves a horizontal approach across sectors, provisions for cooperation on sectors, and the creation of a Regulatory Cooperation Board (RCB), where regulators from the EU and the US would regularly meet. The RCB should in the Commission's view become the forum to coordinate, structure and render effective regulatory cooperation. However, the RCB would not have the legal power to adopt legal acts and the EU Commission plans to ensure the involvement and consultation of all stakeholders interested and concerned in the work of the RCB. These provisions are very important preconditions to render the EU Commission's approach to regulatory cooperation democratically legitimate. It should also be ensured

http://trade.ec.europa.eu/doclib/docs/2014/may/tradoc 152467.pdf [03.02.2015] Where equivalence of regulatory outcome can be confirmed, "the relevant regulations of the other TTIP partner would have the same legal effect as compliance with domestic regulations".

²⁷ http://www.autoalliance.org/index.cfm?objectid=AA962DF0-BD6D-11E2-B62D000C296BA163 [24.03.2015].

that any "living agreement" provides for a high standard of transparency and sufficient influence of the European Parliament and other legislators.

Importantly, the RCB (or its sub-bodies dealing with different sectors) would also provide the forum for identifying equivalence (as a precondition for mutual recognition) and to cooperate on future regulations and standards. Here the challenge is it is to ensure that EU safety and environmental standards are not eroded by accepting US products in the EU market. The process of determining equivalence therefore needs to be set up in such a way that it guarantees transparency, democratic legitimacy and stakeholder involvement.

Finally, should mutual recognition be agreed, a solution has to be found for conformity assessment particularly for safety regulations of motor vehicles where the US system of self-certification is incompatible with the EU's approach of government approval. To solve this problem the EU Commission has brought up the idea that EU authorities test US vehicles destined for the EU market using US regulations and US testing methods (and vice versa).

4. CONCLUSION: ESTIMATED EFFECTS OF TTIP IN THE AUTOMOTIVE INDUSTRY

KEY FINDINGS

This last section provides some concluding remarks as well as an overview of the expected effects of TTIP on the automotive industry. It offers a brief overview of the results of two studies, Francois (2013) and Felbermayr et al. (2013a) regarding the potential effect of TTIP on output and trade with motor vehicles. One of the main conclusions of these studies, whose results have to interpreted with caution, is that the bulk of the welfare gains in TTIP will stem from the reduction of NTBs. Moreover, the results suggest that for motor vehicles and parts the EU's interests in the TTIP negotiations are mainly offensive.

The aim should therefore that TTIP goes beyond the scope of trade liberalization reached in previous trade agreements between the EU and other countries. However, trade liberalization should only be achieved while respecting EU regulatory sovereignty and without sacrificing vehicle safety or environmental standards.

In summary, the analysis presented in this study shows that it is of particular interest for the EU to achieve an ambitious TTIP incorporating the commitment of the parties to promote regulatory convergence without sacrificing vehicle safety or environmental performance. Tariffs in the trade of motor vehicles and parts should be eliminated. However, the trade liberalization should go well beyond tariff elimination. The expected effects on trade and production depend significantly on the extent to which NTBs can be reduced or eliminated. NTBs are estimated to amount to an ad-valorem tariff equivalent of about 26 percent in the trade of motor vehicles and parts between the EU and the United States. As mentioned above, there is a range of NTBs that should not be eliminated, since they are due to differences in consumer tastes or driving habits and are thus justified. Furthermore, some NTBs are due to differences in regulations that result in different levels of product safety or environmental protection. Nevertheless, there appears to be a substantial range of NTBs that could be mutually recognised or harmonised since they result from differences in the regulatory systems but lead to similar regulatory outcomes in terms of safety or environmental protection. The identification of those NTBs is the challenge.

The elimination of these NTBs would bring substantial trade and welfare gains as shown for instance by Francois et al. (2013):

- EU exports to the US would increase by 13.7 percent after ten years even if only 98 percent of tariffs are eliminated. US exports to EU member states would rise by 109.5 percent. The total effect on EU output in the automotive industry would be negative at -0.65 percent, whereas US output would increase by 1.76 percent.
- If on the contrary the negotiators succeed in reaching an ambitious agreement, in which 25 percent of NTBs can be eliminated (and 50 percent of procurement NTBs), then the effect on EU automotive output would be positive and significant. The output of EU automotive industry would be 1.54 percent higher in ten years than without TTIP. Total extra-EU exports of motor vehicles would increase by 42 percent or 95 billion euros. The increase in extra-EU imports would be 43 percent or 79 billion euros. EU exports to the US would increase by 148.7 percent and imports from the US would be by 346.8 percent higher than in the baseline scenario.

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The largest trade effects in the automotive industry are expected in Germany, since more than half of current motor vehicles trade between the EU and the US is due to German manufacturers. Felbermayr et al. (2013a) have analysed the potential effect of TTIP on the German economy. They find that output in German automotive industry would increase by 1.2 percent or 4.3 billion Euros due to TTIP.

The comparison of both scenarios reveals that the overall interests of the EU in the TTIP negotiations on motor vehicles and parts are mainly offensive. The magnitude and even the sign of the total effect depend on the degree of trade liberalisation that can be achieved.

Still the results of these quantitative studies should be seen with caution. The estimates rely on a wide range of assumptions, many of which are often debatable. Still, economic theory suggests that trade liberalization should lead to positive welfare effects and the size of these effects depends on the degree of trade liberalization.

The effect of TTIP on the trade flows between the EU and other countries depends on the positive impulses that TTIP can generate for the EU economy. Overall, a trade diversion must be expected, especially as regards trade within the internal market. But it is not possible to estimate the amount precisely: the effect will be less negative and even positive if an ambitious TTIP boosts the economic development in the EU member states.

The expected gains from TTIP, though, go far beyond the expected direct economic effects. Especially the regulatory cooperation and the commitment to develop joint product standards in the field of motor vehicles and parts have the potential to strengthen the position of the EU and the US as producers of automotive products worldwide.

It should be stressed that a multilateral agreement would be a first best alternative. However, since trade negotiations within the WTO have been struggling and the US is not willing to join the UNECE 1958 agreement, it would be a great achievement if regulatory cooperation can be reached at least at the bilateral level. Regulatory cooperation and the elimination of NTBs should go far beyond the level achieved in prior EU FTAs like the one with South Korea or CETA with Canada. At the same time, priority should still be given to retaining the high level of passenger safety and environmental standards prevailing currently in the EU.

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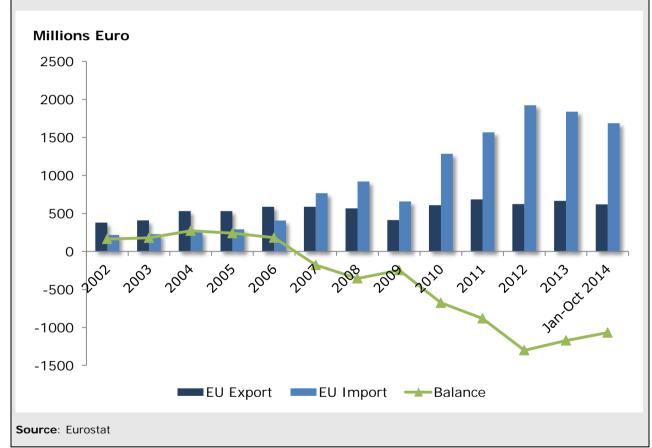
ANNEX

Box 2: Korean FDI in Slovakia and the Czech Republic

The factories in Slovakia and the Czech Republic were planned to have a capacity of 600,000 cars per year (Credit Suisse, 2009), which roughly corresponds to the number of cars imported from Korea in the year 2007 (ACEA, 2014). In the first half of 2012 about half of the motor vehicles sold by Hyundai and KIA in Europe were produced in the EU plants in Nosovice in the Czech Republic and Zilina in Slovakia (Hyundai Motor Group data, 2012, in Woolcock, 2013). Therefore, the expected effect on car imports from South Korea is negative, therefore reducing the trade deficit. However, the production sites in Slovakia and the Czech Republic still import large amounts of parts and accessories from Korea (Figure 4).

Figure 5: Trade in parts and accessories for motor vehicles with Korea

SITC, rev. 3 – Division 784 – Parts and accessories of motor vehicles of groups 722, 781, 782 and 783



Box 3: Wording of important CETA Articles directly related to automotive

2. INITIAL PROVISIONS AND GENERAL DEFINITIONS

Article 5: Reduction and Elimination of Customs Duties on Imports

- 1. Each Party shall reduce or eliminate customs duties on goods originating in either Party in accordance with Annex X-5 and the Schedules set out therein (hereinafter referred to as "the Schedules"). For the purposes of this Chapter, "originating" means originating in either Party under the rules of origin set out in Chapter X (Rules of Origin and Origin Procedures).
- 2. For each good, the base rate of customs duties, to which the successive reductions are to be applied under paragraph 1, shall be that specified in Annex X-5.

Article 6: Restriction on Duty drawback, duty Deferral and Duty Suspension Programs

- 1. Subject to paragraph 2, a Party may not refund, defer or suspend a customs duty paid or payable on a good that is non-originating imported into its territory on the express condition that the good, or an identical, equivalent or similar substitute, is used as a material in the production of another good that is subsequently exported to the territory of the other Party under preferential tariff treatment pursuant to this Agreement.
- 3. Paragraph 1 does not apply until 3 years after the date of entry into force of this Agreement.

3: NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

Annex X.5: Tariff Elimination

- 1. Except as otherwise provided in this Annex, the Parties shall eliminate all customs duties on originating goods, of Chapters 1 through 97 of the Harmonized System that provide for an MFN rate of customs duty, imported from the other Party upon the date of entry into force of this Agreement.
- 2. For originating goods from the other Party set out in each Party's Schedule attached to this Annex, the following staging categories apply to the elimination of customs duties by each Party pursuant to Article 5 (1):
- (a) duties on originating goods provided for in the items in staging category A in a Party's Schedule shall be duty-free on the date this Agreement enters into force;
- (b) duties on originating goods provided for in the items in staging category B in a Party's Schedule shall be removed in 4 equal stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year 4;
- (c) duties on originating goods provided for in the items in staging category C in a Party's Schedule shall be removed in 6 equal stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year 6; and
- (d) duties on originating goods provided for in the items in staging category D in a Party's Schedule shall be removed in 8 equal stages beginning on the date this Agreement enters into force, and such goods shall be duty-free, effective January 1 of year 8;
- → See below, EU TARIFF OFFER

4: RULES OF ORIGIN and ORIGIN PROCEDURES PROTOCOL

SECTION B: RULES OF ORIGIN

Article 2: General requirements

- 1. For the purposes of this Agreement, a product is originating in the Party where the last production took place if, in the territory of a Party or in the territory of both of the Parties in accordance with Article 3, it:
- (a) has been wholly obtained within the meaning of Article 4;
- (b) has been produced exclusively from originating materials; or,
- (c) has undergone sufficient production within the meaning of Article 5.

Article 5: Sufficient production

- 1. For the purposes of Article 2, products which are not wholly obtained are considered to have undergone sufficient production when the conditions set out in Annex 1 (Product-Specific Rules of Origin) are fulfilled.
- → See below, PRODUCT SPECIFIC RULES OF ORIGIN

ANNEX: COOPERATION IN THE FIELD OF MOTOR VEHICLE REGULATIONS

Noting the cooperation between Canada and the European Commission in the area of science and technology;

Affirming the joint commitment to improving vehicle safety and environmental performance, and to the harmonization efforts conducted under the framework of the 1998 Global Agreement administered by the World Forum for the Harmonization of Vehicle Regulations (WP.29) of the United Nations' Economic Commission for Europe;

Noting the commitment of the Parties to enhance their efforts in the area of regulatory cooperation, as formulated under the Canada – EU Comprehensive Economic and Trade Agreement's [technical barriers to trade and] regulatory cooperation chapter[s];

Recognizing the right of each Party to determine their desired level of health, safety, environment, and consumer protection;

Desiring to enhance cooperation and increase the efficient use of resources in matters relating to motor vehicle technical regulations, without compromising each Party's ability to carry out its responsibilities;

The Parties agree as follows:

Article I: Purpose

The purpose of this [text] is to strengthen cooperation and communication, including the exchange of information on motor vehicle safety and environmental performance research activities linked to the development of new technical regulations or related standards, to promote the application and recognition of Global Technical Regulations under the framework of the 1998 Global Agreement administered by the WP.29 and possible future harmonization, between the Parties, concerning improvements and other developments in the areas of motor vehicle technical regulations or related standards.

Article II: Areas of Cooperation

The Parties shall endeavor to share information and cooperate on activities that may fall under the following areas:

- 1. Development and establishment of technical regulations or related standards;
- 2. Post-implementation reviews of technical regulations or related standards;
- 3. Development and dissemination of information for consumer use related to motor vehicle regulations or related standards;
- 4. Exchange of research, information and results linked to the development of new vehicle safety regulations or related standards, and advanced emission reduction and electric vehicle technologies; and
- 5. Exchange of available information on the identification of safety-related or emission-related defects and non-compliances with technical regulations.

Article III: Forms of Cooperation

The Parties intend to maintain an open and continuing dialogue in the area of motor vehicle technical regulations or related standards. To this end, the Parties shall endeavour to:

- 1. Meet at least annually (including meetings held on the margins of WP.29 Sessions), by virtue of video-conferences or, if directly, on an alternating basis in Canada and the European Union;
- 2. Share information regarding domestic and international programs and agendas, including planning of research programs linked to the development of new regulations or related standards:
- 3. Contribute jointly to encouraging and promoting greater international harmonization of technical requirements through multilateral fora, such as 1998 Agreement Concerning the Establishment of Global Technical Regulations as administered by WP.29, including through cooperation in the planning of initiatives in support of such activities;
- 4. Share and discuss research and development plans in the areas of motor vehicle safety and environmental technical regulations or related standards;
- 5. Conduct joint analyses, develop methodologies and approaches, as mutually beneficial, practical and convenient, to assist and facilitate in the development of motor vehicle technical regulations or related standards;
- 6. Develop additional provisions for cooperation.

Article IV: Technical Regulations

The Parties note the importance of the Technical Barriers to Trade (TBT) Chapter to facilitating trade in automobiles between the Parties and, in particular, reaffirm their obligations set out in Article X.4 of that Chapter with respect to technical regulations for motor vehicles and their parts.

Article V: Canadian Incorporation of UN Regulations

- 1. The Parties acknowledge that Canada has incorporated, with the adaptations that it considered necessary, a number of technical regulations contained in UN Regulations into the Canadian Motor Vehicle Safety Regulations, as listed in Table I.
- 2. Canada maintains its right to modify, at any given time, its law, including by amending or revising which UN Regulations, or the manner in which or the extent to which such Regulations are incorporated into its law. Before introducing such changes, it will inform the European Union and be ready to provide information on the rationale for these changes. It will maintain the recognition of the relevant UN Regulations, unless doing so would provide for a lower level of safety as compared with the amendments introduced or compromise North American integration.

3. The Parties shall engage in technical consultations with a view to determining, no later than 3 years after the entry into force of the Agreement, whether the technical regulations contained in the UN Regulations listed in Table II should also be incorporated into the Canadian Motor Vehicle Safety Regulations, with any adaptations Canada considers necessary. These technical regulations should be incorporated, unless doing so would provide for a lower level of safety as compared with the Canadian regulations or compromise North American integration.

The Parties shall also engage in further technical consultations to determine whether any other technical regulations should be considered for inclusion in Table II at a later stage.

- 4. Canada shall establish and maintain a list of technical regulations contained in UN Regulations that are incorporated into the Canadian Motor Vehicle Safety Regulations. Canada shall make that list publicly available.
- 5. With the objective of promoting regulatory convergence, the Parties shall exchange information, to the extent practicable, on their respective technical regulations related to motor vehicle safety.

Article VI: Positive Consideration of Other Party's Technical Regulations

When developing new technical regulations for motor vehicles and their parts, or when modifying existing ones, a Party shall consider the technical regulations of the other Party, including those established under the framework of UNECE WP.29. A Party shall provide, at the request of the other Party, an explanation on the extent to which it considered the technical regulations of that other Party when it developed its new technical regulations.

Article VII: Revision Clause: Cooperation with the United States of America

The Parties note their mutual interest in cooperation with the United States of America in the field of motor vehicle technical regulations. If the European Union and the United States conclude an agreement or an arrangement dealing with the harmonization of their respective technical regulations related to motor vehicles, the Parties shall cooperate with a view to determining whether the harmonization achieved by that agreement or arrangement should be implemented between the European Union and Canada.

EU TARIFF OFFER (shortened summary of important items)

Tariff item	Base Rate	Staging category
Motor vehicles for the transport of >=10 persons, diesel, cylinder capacity > 2.500 cm3	16	С
Motor vehicles for the transport of >=10 persons, diesel, cylinder capacity <= 2.500 cm3	10	С
Motor vehicles for the transport of >=10 persons, cylinder capacity > 2.800 cm3	16	С
Motor vehicles for the transport of >=10 persons, cylinder capacity <= 2.800 cm3	10	С
Motor vehicles for the transport of >=10 persons, no internal combustion piston engine	10	С
Motor cars, cylinder capacity <= 1.000 cm3 (87032110)	10	С
Motor cars with electric motors (87039010)	10	С

Motor cars and other vehicles for the transport of persons with engines other than spark-ignition internal reciprocating piston engine or electric motors (87039090)	10	С
Other motor cars and caravans	10	D
Motor vehicles for the transport of goods, diesel, cylinder capacity > 2.500 cm3	22	В
Motor vehicles for the transport of goods, diesel, cylinder capacity <= 2.500 cm3	10	В
Motor vehicles for the transport of highly radioactive materials	3.5	В
Motor vehicles for the transport of goods, spark-ignition internal engine, cylinder capacity > 2.800 cm3	22	В
Motor vehicles for the transport of goods, spark-ignition internal engine, cylinder capacity <= 2.800 cm3	10	В

PRODUCT SPECIFIC RULES OF ORIGIN

Sufficient production

Chapter 87: Vehicles other than Railway or Tramway Rolling-Stock, and Parts and Accessories thereof

87.01, 87.02, 87.04, 87.05 Production in which the value of all non-originating materials used does not exceed **45 per cent** of the ex-works price or transaction value of the product.

(Footnote 69: The Parties agree to apply cumulation with the United States according to the following provisions: Provided that there is an FTA in force between both Parties and the United States consistent with the Parties' WTO obligations and the Parties reach agreement on all the applicable conditions, any material of Chapter 84, 85, 87 or 94 of the Harmonized System used in the production of this product in Canada or the EU will be considered as originating. Without prejudice to the outcome of the free trade negotiations between the EU and the United States, the discussions on the applicable conditions will include consultations to ensure consistency between the calculation method agreed between the EU and the United States and the method applicable under this Agreement for this product, if necessary. Accordingly the above rule of origin will cease to apply one year following the entry into application of such cumulation and the following rule of origin shall apply instead: Production in which the value of all non-originating materials used does not exceed 40 % of the ex-works price or transaction value of the product.)

87.03 (mainly passenger cars) Production in which the value of all non-originating materials used does not exceed **50 per cent** of the ex-works price or transaction value of the product.

(Footnote 70: This rule of origin will cease to apply seven years after the entry into force of this Agreement. The following rule of origin shall apply instead: Production in which the value of all non-originating materials used does not exceed 45 % of the ex-works price or transaction value of the product. Notwithstanding the foregoing, and subject to any applicable conditions agreed upon by the Parties, the following rule of origin shall apply when the cumulation provided for in Appendix 1: (Origin Quotas and Alternatives to Annex 1) of Section D – Vehicles, Note 1 enters into application: Production in which the value of all non-originating materials used does not exceed 40 % of the ex-works price or

transaction value of the product.)

[...]

Section D - Vehicles

Table D.1 – Annual Quota Allocation for Vehicles Exported from Canada to the EU

- [...] Production in which the value of all non-originating materials used does not exceed:
 - (a) 70 per cent of the transaction value or ex-works price of the product, or
 - (b) 80 per cent of the net cost of the product

Annual quota: 100,000 [units]

- [...] Provided that there is an FTA in force between both Parties and the United States [...] any material of Chapter 84, 85, 87 or 94 of the harmonized System used in the production of a product of 8703.21 through 8703.90 of the harmonized System in Canada or the EU will be considered as originating.
- [...] Accordingly Table D.1 will cease to apply one year following the entry into application of such cumulation.
- [...] If 7 years after entry into force of the Agreement, cumulation with the US has not yet entered into force, both Parties shall meet to review these provisions if one Party requests so.

NOTES

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