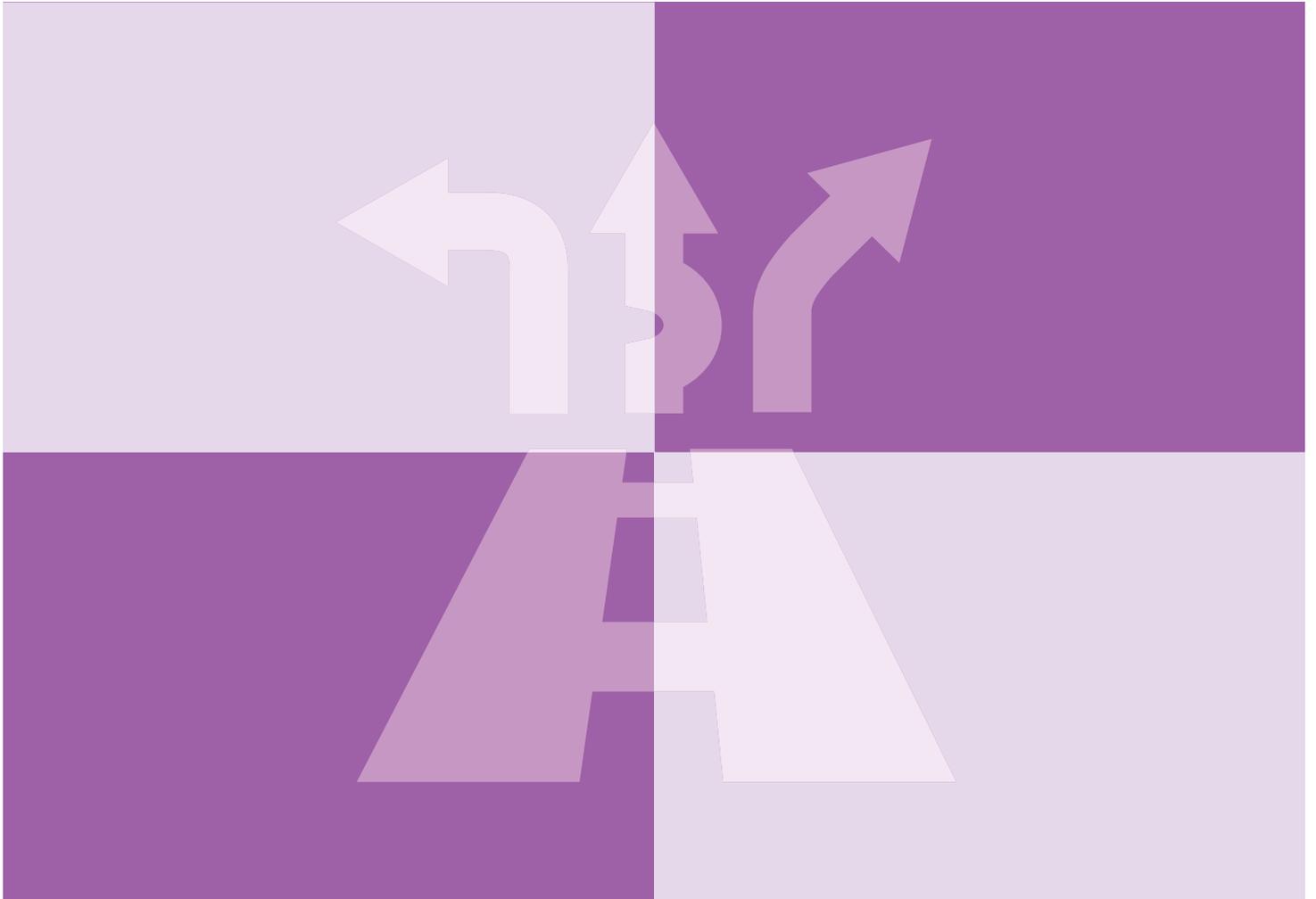


Enabling Trade: Enabling Automotive Trade

In collaboration with Bain & Company

January 2014



The Context of Enabling Trade: From Valuation to Action

The World Economic Forum's Enabling Trade initiative works to reduce practical barriers to trade. The initiative's 2013 report, *Enabling Trade: Valuing Growth Opportunities*, indicated that reducing supply chain barriers could increase the world's gross domestic product (GDP) by over US\$ 2.5 trillion. Building on the momentum of this finding, the 2014 report looks at how to accelerate reform. It concentrates on sectoral, regional and functional areas where the positive impacts of supply chain facilitation could be greatest, or where momentum for change is building. The four sections comprising the report are:

- Enabling Trade: From Farm to Fork
- Enabling Automotive Trade
- Enabling Trade in the Pacific Alliance
- Enabling Smart Borders

Each section is designed to be stand-alone, but the reader is nonetheless invited to become familiar with the broader Enabling Trade initiative.

Published by World Economic Forum,
Geneva, Switzerland, 2014

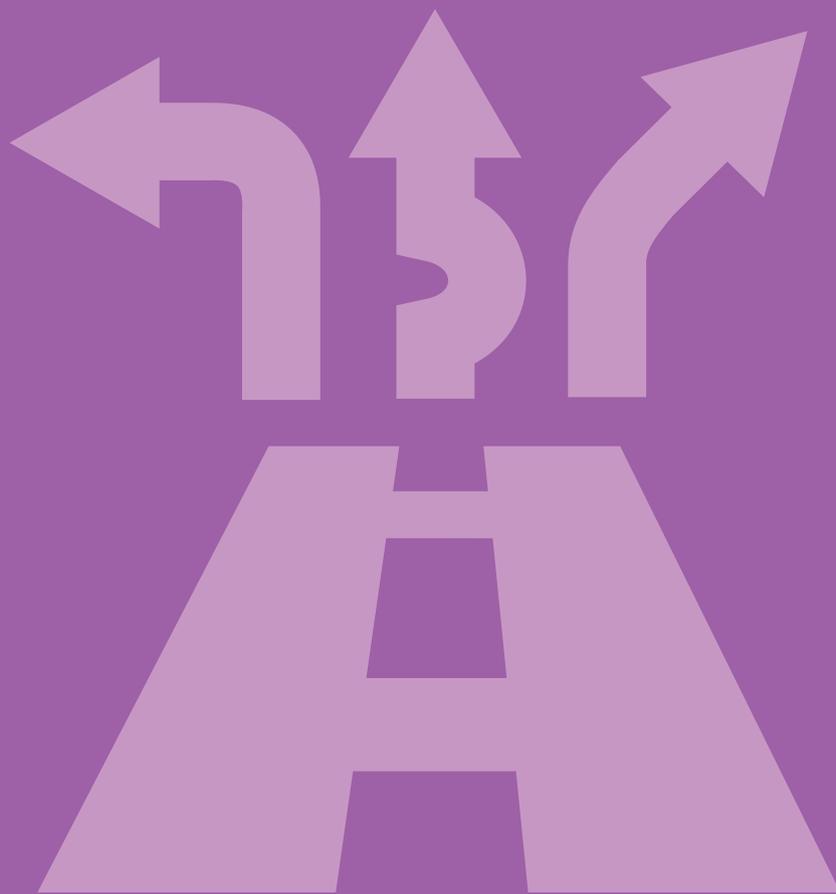
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Enabling Trade: Enabling Automotive Trade



1. Introduction

The automobile is perhaps the most emotive, high-value mass-consumption good. Economies of scale dictate consolidation in production, but the size and weight of the product encourages regionalized rather than global production for all but the most high-value parts or vehicles.

While relatively few nations have been able to establish domestically-grown, globally competitive car manufacturers, almost all are eager for the prized skilled-labour jobs that automobile production plants provide. The companies seeking barrier reductions in foreign markets are often the same as those looking to maintain barriers for their local production. Unsurprisingly, the automotive sector has frequently been at the centre of trade disputes.

Most frequently, this trade tension is expressed through tariffs, non-tariff import-related fees and taxes, and local content requirements. At times, these three traditional barriers have been used for political or symbolic reasons rather than economic ones. In late 2011, the People's Republic of China (China) increased tariffs¹ on SUVs and medium- and large-sized cars from the United States (US). A generation earlier, in response to French and West German tariffs on US chicken imports, the US launched the legendary "Chicken Tax"² in 1963, a 25% tariff on potato starch, dextrin, brandy and light trucks. Frequent and short-term changes to these barriers keep auto manufacturers from having long-term and sustainable strategic plans for their businesses. For example, in October 2012 the Brazilian government introduced the Inovar-Auto incentive programme which, as a means of encouraging local production, gives a 30% tax deduction to manufacturers that use locally manufactured content. However, the new programme was announced with insufficient lead time (only three months), and foreign automakers were forced to scramble to comply. Moreover, countries have very different local content rules, creating additional complexity and administrative expense for automakers.

Those three barriers still represent substantial costs to the industry – US\$ 50 billion³ per year in tariff costs alone, according to work carried out by the World Economic Forum and Bain & Company. Clearly, efforts at reducing these three barriers can and should continue. However, progress has been seen as well. Through the work of the World Trade Organization (WTO) and other organizations, the automotive industry and global consumers have benefitted from a long-term reduction in automotive tariffs.

Attention is now turning to other barriers that act as significant impediments to trade. Much less visible than highly publicized tariffs, these barriers extract their own high cost from consumers, producers and often governments.

The purpose of this report is to address those barriers that are prioritized by the industry, and to propose recommendations for action to major stakeholder groups. At the invitation of the director-general of the WTO, chief executive officers and other executives from the automotive and supply chain industries assembled their views on current priorities for improving automotive trade. The case studies below illustrate the key barriers identified and highlight the potential impact of removing them.

2. Approach

To develop a short list of the key non-tariff barriers considered as the most salient obstacles to free trade, the World Economic Forum gathered a broad panel of corporate partners (automotive industry players and experts). The panel included not only car manufacturers, but also automotive parts producers and logistics players with a key focus on automotive trade.

Through a number of interviews, a list of the most important barriers to the panellists was created. Corporate partners were then asked to rank them along two main dimensions:

1. The incremental costs or lost revenues to the global automotive industry generated by each of those barriers
2. The feasibility of solutions to these barriers being successfully implemented by governments or businesses

Barriers have been prioritized according to this assessment. To estimate their economic impact, the authors conducted an indicative quantitative analysis. Some barriers could be quantified at the global level, others at the regional or country level.

3. Key Findings

Six key supply chain barriers were identified from the panellists' input:⁴

- Excessive border-crossing times and processes

Border delays and burdensome requirements can extend beyond a customs administration to include lack of coordination between border agencies and lack of compliance with import-export standards.

- Re-export barriers: Non-deductibility of import tariffs on re-exported parts and pooled equipment

Duty drawbacks allow exporters to obtain a refund of the customs duties, taxes and fees paid on the merchandise they import, if that merchandise is subsequently exported. The main objective is to lower the cost of imported inputs and, consequently, to increase the exporting firms' competitiveness, eventually returning benefits to end customers by providing vehicles at lower cost. However, some countries do not permit or easily facilitate the duty drawback system. For example, governments sometimes restrict or create disincentives (e.g. tariffs and conditions such as bonding) to pooling and reusing containers and pallets, resulting in inefficient, less sustainable and more costly supply chains.

- Unnecessary differences in regulatory standards between countries

Despite having broadly similar intentions, nations mandate widely differing motor vehicle safety standards, and environmental and technical norms. This imposes costly and lengthy technical adaptations on carmakers, and prevents them from selling standardized vehicles around the world.

- Lengthy dispute settlements encouraging short-term violations

The lengthy WTO dispute settlement process results in some countries purposely violating the organization's rules to temporarily take advantage of financial gains during the settlement process.

- Lack of visibility and transparency on trade and investment

Identifying local regulations on non-tariff barriers is a lengthy and manual process; it highlights the lack of a single, global automated tool, available to importers and exporters that could help them identify the most up-to-date non-tariff barriers at country level. Similar frustrations exist on the investment side, as importers and exporters struggle to deal with a confusing variety of government agencies involved in the trade- and investment-facilitation process.

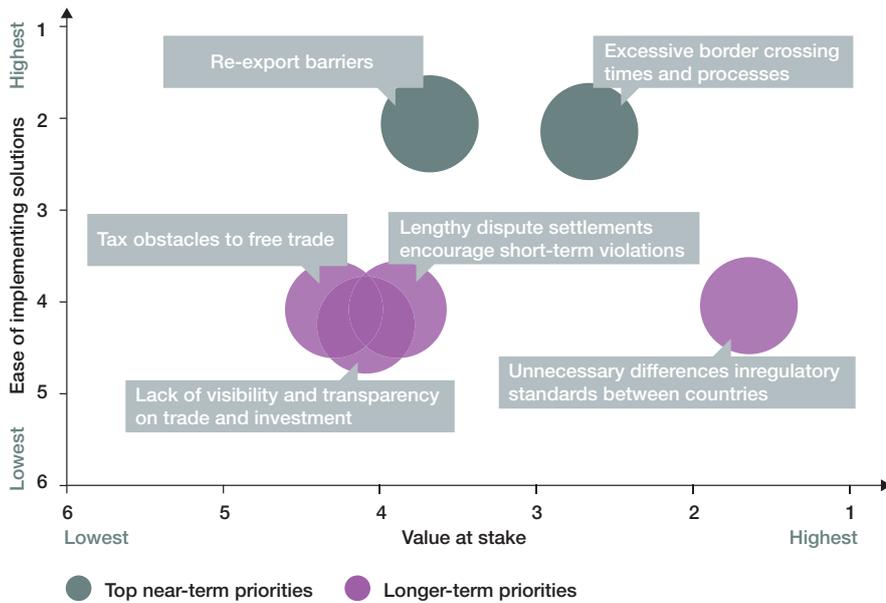
- Tax obstacles to free trade

Even within large free trade areas such as the European Union (EU), local tax obstacles to trade persist. In some cases, physical goods are transferred between nations simply for tax purposes.

Figure 1 visualizes and ranks the panellists' assessment of the financial impact and ease of implementation of these six barriers.

The analysis of this ranking highlights two main clusters of barriers:

Figure 1: Assessment Results of Six Barriers in the Prioritization Matrix⁵



Source: World Economic Forum; Bain & Company

I. Top near-term priorities

The authors propose that the WTO spend initial energies on addressing the two most important near-term priorities, given their relatively high value-at-stake and potential ease of implementation:

- Excessive border-crossing times and processes
- Re-export barriers: non-deductibility of import tariffs on re-exported parts and pooled equipment

The recent agreement reached at the WTO Ministerial Conference in Bali, Indonesia is an important first step in improving border management. This issue is particularly important in emerging economies, a major focus of growth and investment for automotive manufacturers. Ensuring fast implementation of the agreement, while drawing on promised support and private-sector expertise, will be crucial.

Duty drawbacks still remain an issue in many recently completed Free Trade Agreements (FTAs). For example, the FTA between the EU and the Republic of Korea (Korea) became effective July 2011, and helped both sides to mutually agree on eliminating or reducing import tariffs. However, duty drawbacks in the automotive industry were not included in the deal. If a Korean carmaker wants to export its vehicles to the EU – vehicles assembled in Korea with imported parts from China – it is still required to pay

import duties levied on those Chinese automotive parts. Likewise, local auto associations and manufacturers which aim to protect the market from foreign players will continue to lobby the government to keep the current restrictions valid.

II. Longer-term priorities

According to panellists, the next cluster of barriers present either lower value-at-stake or greater difficulty of implementation:

- Unnecessary differences in regulatory standards between countries
- Lengthy dispute settlements encouraging short-term violations
- Lack of visibility and transparency on trade and investment
- Tax obstacles to free trade

The regulatory-standards issue stands out among this cluster due to its higher value-at-stake. It is indeed one of the key points on the agenda of the EU/US FTA negotiations. For the past few years, many of the major automotive-industry players have been calling for a mutual recognition of safety standards to reduce cost burdens from development of customized models for each market. However, because the regulatory institutions in Europe and the US are different, achieving alignment may be even more complicated than negotiating solely on tariffs.

4. Recommendations

Panellists surveyed for this report indicated that automotive companies need to be much more engaged in tackling joint trade priorities. The following were highlighted as areas where the WTO can add value by taking a leadership role.

Firstly, the WTO should review the local trade requirements and investment incentives used by its members; by focusing on the extent to which these elements distort trade, it can develop and suggest ways of improving visibility and reducing those distortions. Different processes and standards for foreign direct investment (FDI), as set by various state governments or different ministries, slow the process of opening new plants. And in many emerging markets, the transparency and reliability of local trade authorities still requires strengthening. Often, companies entering a new market encounter unforeseen difficulties. These markets struggle to enact universal standards and to create a more predictable and welcoming environment for business. A central authority is needed to provide guidance and set norms. The WTO is ideally placed to fulfil this role.

As a second area, the WTO should support bilateral dialogue to address issues such as different safety and/or environmental standards (e.g. standards between the EU and US). While FTAs can help drive this bilateral dialogue, the WTO should ensure that negotiations are goal-oriented.

Lastly, the WTO could act as a forum for discussions among its members and the automotive sector to identify existing practices and problems encountered in border management and duty drawback systems. Such consultations should lead to the development of best practices in these areas, among other outcomes. This kind of service is especially vital for emerging markets.

Of course, the governments of major automotive markets must retain a key role. In particular, the US and EU have created billions of dollars in extra costs for automotive companies in these markets due to different standards for manufacturing and selling vehicles and automotive parts. Similar yet different safety standards in the US and EU markets burden automakers without benefiting consumers. Coordinating these standards will lead to tremendous cost savings for manufacturers by reducing production lines for lights, door locks, brakes and steering systems, among others.

In the future, harmonizing different regulations will have an even greater impact on the automotive industry. In 15 to 30 years, traditional carbon-dioxide-emitting vehicles may have been largely replaced by a new generation of alternative fuel vehicles such as plug-ins and fuel cells. Battery and vehicle recycling will require consistent environmental standards across markets – standards that should be considered and established well in advance of when needed. Bilateral negotiations and dialogue on this issue should begin now, before differing standards become entrenched and create new barriers between markets.

The Bali agreement demonstrated again the significant role of the WTO as a forum for international trade negotiation. Trade wars involving different national and regional economies always result from conflicts of interest. Clearly, addressing these conflicts is challenging and will not always result in concrete agreements. However, as we observed from the Bali deal, a practical, operations-focused approach to negotiations can create a platform for the WTO to act.

5. Conclusion

As recently as a few decades ago, improving automotive trade opportunities meant reducing tariffs and removing explicit bans. It was a relatively straightforward but contentious process, mainly involving ministers of trade.

While there is still work to be done in this area, enabling trade today requires addressing a host of less explicit, often unintentional barriers to trade by involving a range of players, many of whom might not see themselves as linked to trade issues. Mutual recognition of automotive standards between the US and EU, for example, would require not only trade ministers, but also transport, safety and environmental regulators from both sides of the Atlantic to come to the bargaining table.

Not unrelated to the partial success of tariff reduction, the automotive industry itself has transformed into a more global value chain. The ease of importing goods is a crucial contributor to success in exports, and efficient border crossings can mean the difference between winning or missing out on major investments.

The industry's global nature is beginning to translate into a more unified industry voice for streamlining supply chains and reducing trade frictions. While local workforce demands for protection are still heard, the consensus is growing to at least debate the issues openly, unencumbered by tangential barriers and restrictions.



6. Case Studies

I. Excessive border-crossing times and processes

Time is money. Import and export delays represent significant costs for export-intensive industries such as automobile production and automotive equipment manufacturing. According to the chief financial officer of a European original equipment manufacturer (OEM), “time is the enemy in automotive. The value of one day of working capital in the automotive industry is very large.”

Customs clearance and border-crossing times vary widely across countries and, indeed, within them. Document checking, physical inspection, poor infrastructure, obsolete equipment and poorly trained staff are among the common causes of delay.

According to the analysis conducted by the World Economic Forum and Bain & Company, based on World Bank data on time required to import and export⁶, roughly US\$ 6 billion⁷ is spent by the automotive industry on inventory-carrying costs for border crossing. By bringing all countries halfway to best practice, around US\$ 2 billion could be cut from those costs.

Automotive Co., a global automotive manufacturer, provides an illustration of losses due to customs clearance and border-crossing delays in Russia.

Reasons for delays include:

- Almost every truck is reweighed at the customs terminal and even minor deviations from declared weights lead to delays. For example, pallets shipped wet from Western Europe require reweighing when dry at the Russian border.
- Imports require a contract with the internal or external supplier in three languages, along with mandatory translation of technical documents into Russian.
- The trade description of goods for customs clearance are much more detailed than in other major markets, and product codes do not entirely match international standards.

The “Enabling Trade: Enabling Smart Borders” section of the Enabling Trade: From Valuation to Action report offers best practices for implementing solutions to improve border-crossing tools and processes.

II. Re-export barriers: Non-deductibility of import tariffs on re-exported parts and equipment pooling

Duty drawback regimes are a generally accepted means of lowering input costs; the regimes allow exporters to obtain a refund of customs fees paid on imported components that are subsequently exported.

The manufacturing process of the Renault Logan⁸, for example, is carefully designed to minimize costs at each stage, allowing the production of an affordable car for various emerging markets. Renault uses a global hub in Romania to source parts, while assembly occurs in plants in Romania, Morocco, Russia and other countries, reducing exposure to high finished-vehicle import tariffs. Duty drawbacks are an essential component of this approach.

However, even where an entire vehicle platform is carefully designed to fit country-specific drawback regulations and processes, the administration is often problematic. OEMs are hindered from taking advantage of duty drawback due to costly application procedures, long delays, a lack of transparency and significant uncertainty about eventual refunds.

Equipment pooling presents unique challenges in the duty drawback process. The use of pooled equipment, notably pallets, crating and packaging, is widespread in the automotive industry. As components move along tiers of suppliers, manufacturers rent pooled equipment rather than disposing of containers or sending them empty back up the chain. Typically, the lessor ensures that equipment is well-maintained and available where needed. The flow of pooled assets is thus efficiently managed among many companies with similar needs.

Equipment pooling systems can have economic and environmental advantages as material is circulated and reused efficiently. However, border agencies do not always offer workable means for such equipment loops to cross international borders.

A typical solution, such as that proposed by US Customs and Border Protection, is to designate these materials as instruments of international traffic, effectively exempt from import duties. Similarly, aircraft, trucks and other vehicles are not repeatedly subjected to import charges on each leg of a regular route.

However, the Customs Convention on Containers and the Istanbul Convention both restrict their definitions of containers to units larger than one cubic metre. As many automotive components are shipped in smaller containers, it would be valuable to expand trade facilitation benefits to this equipment.

More generally, requirements to post bonds on temporarily imported containers are probably unnecessary for today's supply chains. To ensure pooled equipment is indeed re-exported, border agencies generally require that it is registered, and either duties or a bond are paid, with reimbursement upon re-export. Two difficulties result:

- Uncertainty arises as to how the dutiable value of reusable packaging should be assessed (e.g. rental fees over the duration of a contract, depreciated book value).
- Packaging materials are sometimes only eligible for duty refunds when re-exported by the importing entity. Rather than repeatedly paying cumulated import duties, manufacturers bear the expense of recollecting and shipping out empty containers.

Through quantification work conducted by the authors, the cost of this wasteful returns process alone (for a fairly small and peripheral part of the automotive value chain) is estimated at about US\$ 40 million in India alone⁹.

III. Unnecessary differences in regulatory standards between countries

Differences in regulatory standards have long hampered efforts to develop models for sale worldwide. Harmonization efforts have existed for decades, yet homologation for different markets remains a costly process, deterring trade in automotive parts and in new and used vehicles.

Substantial differences in standards between economies at very different levels of development are perhaps to be expected. However, small variations in standards between similar economies become barriers to trade out of proportion to their stated purpose.

The European Commission estimates that unnecessary standards barriers equate to a tariff of 10-20%¹⁰, even for large markets. Based on analysis conducted by the authors of this report, this implies an additional annual cost of US\$ 3 billion-6 billion¹¹ on EU car exports to the US.

The Fiat 500 model¹² illustrates the magnitude of inconsistencies in safety and regulatory standards. The Italian manufacturer decided to market this Fiat model in the US after commercial success in Europe. In a process overseen by Fiat engineers, despite a very similar appearance to the European model, the US-market Fiat was significantly retrofitted and re-engineered. Among other almost imperceptible modifications was the need to re-engineer the front and rear fascias, as European number plates are wider and shorter than the US standard. Engineers had to increase the size of the windshield wipers to meet US guidelines. Side lights are compulsory in the US, and additional protections are needed for passengers who may not be wearing seat belts. The overall homologation process can take up to 18 months.¹³

It is advised to first strive for mutual recognition of automotive-safety norms between the EU and the US, and then for harmonized environmental standards. The ideal scenario is a global safety standard. Regulatory compatibility is a key component of the Transatlantic Trade & Investment Partnership negotiations, yet there is considerable scepticism about the likelihood of coming to agreement across a wide set of complex issues. The approach of mutual recognition – recognizing that regulators have similar safety concerns – is perhaps more promising. This has been applied successfully across a broad range of issues within the EU.

After reaching agreement on the mutual recognition of safety standards, regulators should start working towards harmonized environmental regulations. This would imply both reconciling regulations around existing topics (e.g. carbon dioxide and particulates output) and getting “ahead of the curve” to create shared, future environmental legislation for the automotive industry (e.g. electric-vehicle battery recyclability).

IV. Lengthy dispute settlements encouraging short-term violations

The WTO's Dispute Settlement Body allows a member country to protest a policy measure adopted by another member that is considered to be a breach of WTO agreements.

The procedure for settling disputes follows a detailed and structured set of milestones. The duration of the process varies, but according to the WTO, if a case runs its full course to a first ruling, it should normally not take more than 12-15 months even if the case is appealed. However, the agreed time limits are flexible and disputes can, in fact, take longer to be settled.

The perception within the automotive industry is that dispute settlement has become excessively lengthy, given the large economic and commercial impact of disputed measures. Multiple industry players assert that this provides an incentive to manipulate the system by temporarily breaching WTO agreements.

A current dispute (DS 462), filed in July 2013, has a number of nations opposing the Russian Federation on whether its newly introduced recycling fee discriminates against imported vehicles. The fee varies from US\$ 700 to 7,000¹⁴, and is estimated to have created up to US\$ 1.3 billion¹⁵ in cost, according to the authors' analysis. At issue is whether importers are disadvantaged by the provision for local producers to collect and dismantle vehicles themselves rather than face the levy.

V. Lack of visibility and transparency on trade and investment

In the area of trade, many OEMs and parts suppliers are hampered by a lack of visibility on non-tariff barriers, and feel that the investment side of the trade equation suffers from a lack of transparency. The automotive sector has been an important provider of FDI, with countries and regions having competed fiercely to host this investment. This competitiveness has undoubtedly resulted in improvements in the business environment, with benefits seen in employment, fiscal revenue and skills transfer.

However, companies still report significant complexity in setting up and managing investments. Typically, a multiplicity of government agencies makes it difficult to find the relevant interlocutors. A single point of contact can significantly help to coordinate the issuing of licences and removal of bottlenecks when establishing new business.

Competition for FDI can drive states or regional governments to offer substantial financial incentives. While of course welcomed by investors, it is important to establish agreed national and international frameworks for these incentives. Subsequent reassessment of their legitimacy is clearly harmful to current investors, while instability deters future investment.

A frequently cited example is the fiscal war¹⁶ that broke out among Brazilian states vying to host production plants of European car manufacturers, as the constitutionality of agreed incentives was subsequently questioned. As the head of strategy of one of the European OEMs notes, "I'm not sure that the manufacturers were any better served by this sort of disjointed competition between regions within a nation for manufacturing plants. I feel like each OEM received vastly different information and commitments depending on [the] national or regional authority with which they were consulting."

Both importers and exporters fear finding themselves confronted by a jungle of unforeseen hidden costs. According to the head of one national automotive trade association, "availability of information on non-tariff barriers is very limited and not centrally available." The issue is all the more acute for smaller exporters or those from low-income nations, who suffer from a lack of resources to keep up to date with their evolution.

Various public sources have undertaken efforts to track and publicize these barriers. However, automotive-industry players, confronted by a growing number of overlapping and sometimes inaccurate databases, are confused. While multiple private agencies also work to compile the latest information for importers and exporters, the industry clearly feels that obtaining a reliable picture remains a significant challenge.

VI. Tax obstacles to free trade

Even within apparent free trade zones such as the EU, tax policies can create significant barriers to the efficient movement of goods along supply chains. Variations in value added tax (VAT) provide a prominent example (Figure 2).

CarCo is a global car manufacturer with a strong foothold in Europe, operating several plants in Country A within the EU and supplying other EU countries from these plants. The exported vehicles are transported by train and/or truck. To reduce inventory, handling and transport costs, manufacturers would prefer to store finished vehicles at the plant before distributing directly to dealerships.

However, VAT structures require that vehicles are first sent to storage facilities within each country, then invoiced prior to dispatch to dealerships. According to quantification work conducted by the World Economic Forum and Bain & Company, the additional costs created by this otherwise unnecessary stage are estimated to add around US\$ 50 to a vehicle's price, or a total of about US\$ 600 million¹⁷ across the EU. As CarCo's chief financial officer points out, "The physical distance from the factory to a dealer in the domestic country may be longer, in fact, than the distance to a dealer in country B, yet I'm not able to have the car funded and in my balance sheet until it clears the other side of the border, a border within the EU nation. This is just wasteful."

Figure 2: Example of Tax Obstacles for Free Trade



Endnotes

1. http://www.nytimes.com/2011/12/15/business/global/china-imposes-new-tariffs-on-some-vehicles-from-the-us.html?pagewanted=all&_r=0.
2. <http://thegraph.com/2011/02/is-donald-trump-a-chicken/>.
3. To come up with the total value of import duties, the authors listed up the 18 largest economies were listed up by value, which represent 81% of the global economy, pulled the value of dutiable items, and estimated value from duty collections based on the WTO database (<http://tariffanalysis.wto.org/?ui=1>). The total value of dutiable imports for 18 countries in 2011 was estimated US\$ 515 billion; among that, 50 billion was collected as import duties.
4. Initially nine barriers were identified by the panel, with two issue pairs among the nine eventually being combined ("Restrictions on reuse of imported containers" was included as a subset of "non-deductibility of import tariffs on re-exported parts", "Uncoordinated government agencies within nations" and "no automated central database to do cross-border business" were merged and renamed as "lack of visibility and transparency on trade and investment). As well, the barrier "data export restrictions" was tabled for the moment, due to the ongoing data protection dispute between the EU and the US. Thus the final list of barriers to be addressed stands at six.
5. The survey was conducted in October 2013 and answered by 12 respondents from relevant corporations.
6. Doing Business 2013 Report – the World Bank and International Finance Corporation.
7. The assumption is that the total cost in going through border-crossing processes is calculated by multiplying the cost of time to import/export by the value of annual automotive trade by the average daily cost of capital for the automotive industry. See the formula below for further details:



Applying this assumption, summing the total cost of border crossing for the automotive industry from 180 countries gave US\$ 6 billion as the global cost for handling automotive exports and imports at borders in 2011.

To come up with potential savings, the Time to Import/Export World Bank Index that indicates the current time to import or export goods at borders was taken as a basis. A new target time was set for each country by bringing them half way to the best practices – i.e. Singapore and Denmark. Then, the potential savings were calculated by multiplying the cost of extra days vs target time to import/export by the value of annual automotive imports/exports (from Trade map of International Trade Centre, based on UN COMTRADE data per country) by the average automotive daily cost of capital (Average Automotive Industry WACC after corporate taxes =7.6% from KPMG "Cost of capital study 2011/2012"). Accumulated savings for 180 countries was thus calculated as approximately US\$ 2 billion.

8. Renault's Logan Car: Managing Customs Duties For A Global Product – Stanford Graduate School of Business, April 2008.
9. Given the information provided by one of the Forum's automotive partners, the current duty drawback policy (which only allows re-importable packages to be returned by the same exporting entity in India) creates 8 euros (approximately US\$ 11) of additional return and shipping costs per vehicle a year. Assuming that about 4 million vehicles are produced in India every year, (<http://oica.net/wp-content/uploads/all-vehicles-2010-provisional.pdf>), the cost of this policy is US\$ 43 million per year.
10. <http://www.automotivelogisticsmagazine.com/intelligence/2eu-us-free-trade-deal-aims-to-harmonise-standards>.
11. The total value of EU automotive exports in the US is estimated to be 25 billion euros (<http://www.bbc.co.uk/news/business-21439945>). Given 10-20% of the import tariff on those automotive vehicles imported to the US from the EU, additional import duties levied to European car makers are estimated to be around 2.5-5 billion euros (US\$ 3.2-6.5 billion).

Formula:



12. Subtle Changes for Fiat 500 in US – Jeffrey Archer in Autotrader.com, March 2011.
13. How do you turn a Fiat into a Chrysler? – Rick Kranz in Automotive News, May 2009.
14. Accession of Russia to the WTO Practical Developments – Baker McKenzie, January 2013.

15. This recycling has yielded an estimated US\$ 1 to 2.5 billion in fiscal revenues for Russian authorities since its implementation. This estimate has been calculated by applying a base rate and an upgraded rate (twice as much as the base rate) on the total volume of imported cars since the tax became effective in September 2012. The base rate has been officially stated as 20,000 rubles for small cars and 150,000 for light trucks. Depending on the engine capacity, vehicle weight, and seat capacity, the maximum fee (for dump trucks weighing over 350 tons) may reach 6,000,000 rubles (approximately 148,000 euros) per vehicle. According to Autostat Analytic Agency reports (<http://eng.autostat.ru/>), the number of imported passenger cars in 2012 was about 1 million and the number for imported trucks was about 115 thousand. By multiplying the number of imported vehicles for passenger and trucks by required recycling fee per vehicle, the base case gives US\$ 0.7 billion as the total cost for recycling and the high case US\$ 1.3 billion.
16. Incentives-based Competition for Foreign Direct Investment: The Case of Brazil – OECD Working Papers on International Investment, March 2003.
17. The cost of the tax barriers is estimated at 35 euros per vehicle according to one of the Forum's automotive partners. Therefore, the cost saving opportunity for the automotive partner at the European level was estimated by combining the unit cost with the market share of the automotive partner in the EU market. Extrapolating this for all car makers manufacturing in the EU region gives an estimate of US\$ 0.6 billion per year.

Acknowledgements

Enabling Trade: From Valuation to Action is the result of collaboration among many individuals, institutions and firms. The authors are very grateful to all the firms we interviewed for their valuable contributions, as well as those who reviewed materials. We would like to specifically thank A.P. Moller-Maersk, Flour Mills of Nigeria, Unilever and CHEP for their support in developing the agricultural case studies, and the Inter-American Development Bank for its leadership on the “Enabling Trade in the Pacific Alliance” section.

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- Brazilian Ministry of Development, Industry and Foreign Trade (MDIC)
- China Association of Automobile Manufacturers
- CHEP, a Brambles Ltd company
- Deutsche Post DHL
- Flour Mills of Nigeria Plc
- Food and Agriculture Organization of the United Nations
- Hyundai Motor Company
- International Food Policy Research Institute
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- Renault-Nissan Alliance
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- Syngenta AG
- Unilever Plc
- Tenneco Inc.
- The Inter-American Development Bank
- The World Bank
- Transport Intelligence
- United Parcel Service, Inc. (UPS)
- Verband der Automobilindustrie
- Wal-Mart Stores, Inc.
- World Customs Organization
- World Economic Forum’s New Vision for Agriculture
- World Trade Organization

Consultative group

Finally, the authors would like to thank all the companies that generously provided interviews for the various case studies.



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