

The WTO Trade Facilitation Agreement: Milestone, Mirage, or Mistake?

Bernard Hoekman (EUI and CEPR)*

DRAFT

September 15, 2014

* Email: Bernard.Hoekman@eui.eu. Prepared for a Columbia University/John Hopkins University conference on the world trade system, Washington DC, October 1-2, 2014. An early version of this paper was presented at the 2nd biannual trade conference on Challenges to the World Trade System, Stanford Center for International Development, April 2014. I am grateful to Kyle Bagwell, Gary Hufbauer, Anne Krueger, Patrick Low, Petros Mavroidis and Kamal Saggi for helpful comments and suggestions.

Introduction

At the Bali Ministerial meeting in December 2013 WTO members successfully concluded the first multilateral agreement since the WTO was established in 1994. The Agreement on Trade Facilitation (TFA) continues the trend that was initiated in the Uruguay Round for negotiated disciplines to center on so-called “positive integration” – agreement to pursue specific practices and approaches to a policy area as opposed to agreement to refrain from using certain policies (e.g., quotas, export subsidies) or commitments not to exceed a negotiated level of protection for a product (e.g., tariff bindings).

The TFA is noteworthy in a number of ways beyond being the first agreement on new rules to have been negotiated under WTO auspices.

- It is part of a small package of decisions centering on matters of interest to developing country WTO members that was “harvested” from the broader set of issues on the table in the Doha Development Agenda (DDA) negotiations.
- While it has universal WTO membership it embodies an extensive à la carte approach to determining the coverage and reach of its disciplines.
- It goes beyond setting trade policy disciplines, calling for joint action by donor countries, development assistance providers and developing country WTO members to assist the latter to implement some provisions of the agreement.
- It incorporates a mechanism for experts to assess whether and why a country is not able to implement commitments as opposed to simply defining rules of the game and leaving it to eventual dispute settlement to enforce implementation.
- Despite having been agreed by consensus at the 9th WTO Ministerial conference, it continues the pattern established during the Doha Round of not meeting deadlines set by Ministers. The Bali Ministerial declaration called for a Protocol of Amendment incorporating the TFA into the WTO to be adopted before July 31, 2014. India, supported by several other WTO Members, blocked such adoption at the WTO General Council meeting held at the end of July 2014.

The TFA is the result of a major effort by WTO Members to craft an agreement that extends WTO rules in a way that addresses the concerns of developing nations regarding implementation costs and capacity constraints. It may be the shape of things to come for multilateral cooperation on trade policy matters. It may also constitute the end of efforts to conclude universal agreements under WTO auspices on regulatory policies. Very different views can be and have been expressed regarding the TFA by trade policy analysts and observers, both in terms of the substance of its provisions and in terms of the implications of the Indian refusal to agree to the TFA Protocol in July

2014. The narrative coming from the WTO Secretariat and most governments is that the TFA is a major milestone for the WTO, showing that negotiators are able to craft new rules and disciplines that apply to all countries while at the same time recognizing and addressing differences in implementation capacity (e.g., Neufeld, 2014).

In contrast, some argue that the TFA is a mistake because it moves the WTO away from binding, enforceable commitments and further involves the WTO Secretariat into the realm of development assistance, in which it has little capacity and no comparative advantage (Finger, 2014). Others regard the TFA as a “mirage,” arguing that it will do little if anything to improve economic outcomes at the national level or deal with negative cross-border spillovers – which is (supposed to be) the major rationale for international agreements. There are different flavors of this argument. One commonly expressed version is that “internal imbalances” in the provisions of the agreement, especially neglect of export competitiveness constraints, will result in an asymmetric distribution of benefits in favor of high-income countries and/or large multinationals and will worsen the balance of trade in developing countries (e.g., South Centre, 2011, 2013). Another line of argument is that the case for trade facilitation is grossly overblown by proponents and that the net benefits for developing countries are very uncertain and that the TFA may divert attention away from higher rate of return policy interventions in developing countries (e.g., Capaldo, 2013). Another, very different, flavor of the mirage argument is that putting trade facilitation on the table in the WTO created perverse incentives to refrain or delay from taking action to reduce national trade costs in a misguided effort to use trade facilitation as a negotiating chips, with potentially significant opportunity costs (Finger, 2008).

A basic motivation for large multilateral trade rounds that span many countries and subjects is that this helps to agree on a set of policy disciplines by permitting issue linkages (Sebenius, 1983). A large negotiating set expands the potential for issue linkage, allowing losses in one area to be more than offset by gains in another area. In the case of the DDA a package deal has not been feasible to construct so far, leading to calls for smaller “self-balancing” packages that are Pareto-improving in the sense that they benefit many if not all countries without making any nation worse off. However, proposals to move away from the Single Undertaking – “nothing is agreed until everything is agreed” – have been opposed by many WTO Members because of worries that this would lead to a situation where issues of most importance to them would be left off the table.

The TFA is interesting in this regard because it illustrates both the potential and the challenge of agreeing on Pareto-sanctioned deals that address substantive policy matters on a stand-alone basis in the WTO. One reason it took 10+ years to negotiate the TFA is because a lot of learning was required regarding why trade facilitation matters for income growth and economic

development, what constitutes good practices, and what kinds of disciplines would benefit all WTO Members. This learning took time, but occurred with the support and active engagement of an epistemic community comprising the international Customs community, trade facilitation practitioners in international development agencies and research analysts.¹ But this was not sufficient. Even after all countries had agreed to a deal that was Pareto-improving for all countries on a stand-alone basis (a constraint that was satisfied in part through inclusion of specific commitments linking implementation of disciplines by developing nations to the provision of technical and financial assistance), some countries still sought to link adoption of the TFA to progress on other issues.

The TFA was negotiated in Bali as part of a small “development package” of ten decisions that mostly addressed matters of concern to developing countries (WTO, 2013). These included an understanding on tariff-rate quota administration (for agricultural products), a call for WTO members to put in place preferential rules of origin for least-developed countries (LDCs); a decision on operationalization of the LDC services waiver (calling for preferential treatment of LDC services exports); more extensive monitoring of duty-free and quota-free (DFQF) market access initiatives for LDCs; and the establishment of a Monitoring Mechanism to review the implementation of the many provisions in the WTO calling for special and differential treatment of developing countries. One prominent Bali decision concerned public stockholding programs for food security purposes, in which it was agreed to revisit the provisions of the WTO Agreement on Agriculture pertaining to the maximum allowed subsidy for domestic production.

This decision reflected Indian concerns that its food stock-holding program threatened to exceed the maximum permitted production subsidy under current WTO rules (10 percent of the value of domestic production), thus opening up the country to potential dispute settlement action.² WTO Members agreed in Bali to a four-year “peace clause” for developing country public food stock-holding programs for food security purposes as long as certain transparency-related reporting requirements were met, and committed themselves to negotiating a permanent solution on this matter before the 2017 WTO Ministerial conference. In July 2014 India blocked adoption of the protocol that would have incorporated the TFA into the WTO because of purported concerns that WTO members had not made enough progress in discussing the agricultural support question in the

¹ See Haas (1992) for a discussion of the role of epistemic communities in the pursuit of international cooperation.

² The Indian government buys food staples from domestic farmers at guaranteed prices. The resulting public stockholdings are used to supply consumers with food staples at below market prices in the pursuit of food security objectives.

6-month period following the Bali conference. At the time of writing it is unclear what will happen to the TFA.

The issue linkage that was required to get to yes in Bali on the TFA puts into question the feasibility of (incentive to negotiate) stand-alone agreements in the WTO on subjects where countries in principle can agree to a set of tradeoffs *within* a given policy area. The July 2014 decision by India adds to doubts regarding the scope for new stand-alone deals in the WTO. There are ongoing negotiations on other issues among subsets of WTO members – e.g., to expand the coverage of the Information Technology Agreement and the negotiations on a trade in services agreement (TiSA). These are plurilateral in nature. An increasing number of observers and analysts have called for greater effort by policymakers to conclude plurilateral agreements given that it often will not be possible or desirable to negotiate one-size-fit-all rules of the game given the heterogeneity of the WTO's membership.³ The TFA model seems to offer an alternative to plurilateral agreements, encompassing a set of rules that apply to all WTO members while allowing for extensive differentiation in terms of timing of implementation and the enforceability of specific disciplines.

The TFA illustrates the role of epistemic communities can play in getting governments to agree to a set of substantive norms in a technical area. But developments in the lead up to, and the aftermath of, Bali make clear that pursuit of universal, stand-alone, “self-balancing” agreements is a difficult path for cooperation in the WTO. The TFA experience is particularly pertinent in this regard because the subject matter it addresses does not lend itself well to issue linkage dynamics. Trade facilitation predominantly benefits firms and consumers in the country that takes measures to lower trade costs. In contrast to tariffs or subsidies that benefit domestic industries and that can shift the terms of trade in a nation's favor, a neglect of trade facilitation simply raises costs for all industries, domestic as well as foreign. The absence of terms of trade effects should imply that the negotiating value associated with withholding agreement on trade facilitation is limited—nobody should be willing to “pay” much (i.e., make concessions in other areas like agriculture) to get a deal done. Nonetheless, many developing countries tried to pursue issue linkage tactics in the trade facilitation talks because they wanted other things that mattered more to them. This is rational in the context of the mercantilist dynamics that drive WTO negotiations, but was not very effective because trade facilitation is a “win-win” issue in that the policy reforms involved benefit consumers and importers as well as exporters. This allowed the TFA to be negotiated as a stand-alone agreement. But the end game played by India reveals that issue-linkage incentives are strong and can result in the blocking of

³ See Hoekman and Mavroidis (2013) for discussion and references to the literature.

an agreement that all WTO Members regard as Pareto-improving. One consequence may be that looking forward the focus will be (even) more on pursuit of cooperation on regulatory policies that affect trade on a plurilateral basis as opposed to a multilateral one.

The plan of the paper is as follows. Section 2 discusses the rationale for negotiating on trade facilitation. Section 3 reviews the extant literature on the (potential) benefits and costs of trade facilitation and the state of knowledge available to negotiators and policymakers more generally regarding what to negotiate/focus on. Section 4 describes the main elements of TFA, highlighting a number of relevant aspects for the questions of interest in this paper—the role of epistemic communities and issue linkage. Section 5 reflects on some of the factors that arose during the negotiations and that affected the eventual outcome. Section 6 discusses possible implications of the TFA experience for multilateral cooperation in the WTO looking forward. Section 7 concludes.

2. Preparing the ground: why negotiate on trade facilitation?

Over the last 30 years governments around the globe have greatly reduced tariffs and removed quantitative restrictions on imports. Today the international flow of goods, services and knowledge is mainly constrained by real trade costs that reflect the business environment and domestic policies of a regulatory nature that act to segment markets. Recent analyses of the magnitude of international trade costs conclude that such costs remain very high. They reflect a mix of discriminatory policies that inhibit the entry and operation of foreign firms that provide intermediate services – a major component of total operating costs for firms – and regulatory policies that apply equally to local and foreign firms and products. The latter increase costs more for foreign than domestic suppliers simply because regulations differ across countries, but more important is that the policies raise costs across the board and thus the price of goods and services for buyers, whether firms or households (Hoekman, 2014).

Achieving a significant reduction in trade costs is a complex, multi-dimensional challenge. Trade liberalization has an important role to play, as traditional trade barriers are often still significant (Milner, 2013), but much of the agenda revolves around administrative practices and procedures. Trade costs result from a variety of factors. Some of these are difficult or impossible to change – e.g., geography. Thus, a small island state located in the middle of the Pacific Ocean or land-locked countries in Africa, Asia or Latin America will have higher trade costs than countries (or regions) that have access to nearby ports or are located close to large and dynamic economic agglomerations. But a large share of observed trade costs reflects policies or factors that can be affected by policy. Examples are border clearance procedures, the quality of transport and communications infrastructure, differences in product standards, and the degree of competition

that prevails on services markets. Frequently one cause of higher trade costs is a multiplicity of regulatory norms and related enforcement requirements that are pursued independently by different government agencies. International trade costs are further increased as a result of differences in regulatory requirements and redundant provisions that repeat what other authorities have already done.

According to the World Bank *Doing Business* report, on average it takes three times as many days, nearly twice as many documents and six times as many signatures to trade in many African countries than in high income economies (Djankov et al. 2010). Every extra day it takes in Africa to get a consignment to its destination is equivalent to a 1.5% additional tax (Freund and Rocha, 2011). Without action to reduce transport costs from remote areas, increase connectivity and facilitate the movement of goods, services and people across borders, specialization opportunities cannot be fully exploited, if at all, and the potential gains from trade will not be maximized. Poor roads and ports, poorly performing customs, weaknesses in border management, inadequate regulatory capacity, and limited access to finance and poor business services are all sources of trade costs.

At the WTO, trade facilitation refers primarily to the reform of border management processes so as to make import and export transactions more transparent, predictable and efficient. In other fora, such as the Asia Pacific Economic Cooperation (APEC), trade facilitation refers to a broader set of measures that may have an impact on trade costs, including policies that affect the efficiency of transport and logistics services. This second meaning encompasses the WTO focus but goes much beyond it. An even broader view of trade facilitation is to include any measure that promotes trade. For example, the International Finance Corporation regards programs that expand access to trade finance as a trade facilitation activity. From an economic perspective trade facilitation might be defined as encompassing measures that reduce the difference between domestic farm or factory gate prices and the price obtained in a foreign market (i.e., the difference between the export and import price).

Extensive empirical evidence suggests that trade facilitation can give a significant boost to bilateral trade, support diversification along the extensive margin of trade, and increase aggregate welfare. Although most of the economic literature in this area focuses on quantifying the magnitude and impacts of trade costs, research has also considered the effects of trade facilitation. Trade facilitation is invariably found to benefit both locals and foreigners, although the distribution of the gains is a function of market structure, the type of products concerned, etc. But independent of the distribution of benefits, in the aggregate policy reforms that reduce trade costs will be of the win-win variety. There will be losers – import-competing industries, customs officials and those who

benefit from complexity and burdensome procedures (e.g., customs brokers) will all lose rents – but overall both sides of the border should benefit.

Indeed, for most economists trade facilitation is a “no-brainer” and the puzzle is why a country should need to engage in an international trade agreement to take on commitments to reduce trade costs. The economic literature has identified several possible motivations for trade agreements, including the internalization of terms-of-trade spillovers (Bagwell and Staiger, 1999); as a mechanism to address credibility problems (a commitment device—Maggi and Rodriguez-Clare, 1998); and to overcome domestic political economy constraints that prevent a government from pursuing welfare-increasing reforms (Bhagwati, 1988; Hillman and Ursprung, 1988; Ethier, 2007). Trade facilitation is difficult to fit into the terms-of-trade and commitment explanations for trade agreements because policies that increase real trade costs will have adverse effects on the nation’s terms of trade: increasing import prices and lowering profits on export sales.

A lack of trade facilitation is detrimental to trading partners that export to the country in question. While foreigners therefore will benefit from national trade facilitation efforts, a lack of trade facilitation simply increases the prices of imports and exports, raising prices for domestic firms and consumers and reducing the profitability of exports (for a given world price the exporter gets a smaller share if it has to incur red tape costs and plan for delays). Not taking action to facilitate trade implies a deterioration in the terms of trade. Moreover, high trade costs will lock a country out of participation in the supply chain trade that is accounting for an ever increasing share of world trade, without generating benefits for local producers as often there will not be local demand for the specialized inputs that would otherwise be imported as part of supply chain trade production. The puzzle is that a government can unilaterally take actions that will improve its terms of trade – without in the process creating an adverse impact on its trading partners. While the foreign country will benefit, this is not at the expense of the home country. This suggests that the TFA is not motivated by the types terms-of-trade spillover case that have become the staple of the economic literature on the rationale for trade agreements.⁴

Instead, the TFA is an example of an agreement that reflects domestic political economy and international coordination/collective action considerations. The political economy drivers revolve

⁴ These arguments also imply that the TFA cannot be an example of governments seeking to address a credibility problem by committing to specific disciplines in a trade agreement. Commitment theories are premised on there being a terms-of-trade effect as foreigners must have an incentive and the ability to enforce an agreement – they must be able to credibly threaten to withdraw “concessions” they have made. As there is no quid pro quo concession of the traditional type when it comes to trade facilitation – foreign countries have no incentive to start throwing rocks in their own harbor again to enforce a trade facilitation agreement – enforcement must involve other instruments.

around the rents that accrue to government officials that are in charge of Customs and other border agencies, with the TFA negotiations providing a mechanism to mobilize importers, exporters and groups in favor of better economic governance around an agenda to enhance the efficiency of border management. The pursuit of concerted action by trading partners increases the gains and thus the incentives of traders to support trade facilitation reforms. The TFA can also be seen as an effort to help solve a coordination problem that is created by countries pursuing different approaches and/or imposing redundant costs on business and traders in the pursuit of very similar objectives. As discussed below, one dimension of this coordination problem is to address asymmetric implementation costs and capacity through technical and financial assistance that is earmarked to offset such costs and address capacity weaknesses.⁵

Before proceeding, it is useful to address two common claims that are made regarding the TFA talks that are incorrect. First, many analysts have argued that trade facilitation is a national matter and that there is therefore no need to negotiate it. While much can be done unilaterally, in many areas international cooperation is needed to maximize gains/reduce trade costs. This is most obviously the case for landlocked countries that depend on what neighbors do to facilitate trade. But more generally, given the redundancy in documentary requirements, information demanded, inspections undertaken, etc., there is significant scope to reduce overall trade costs through concerted action, i.e., international cooperation to adopt common approaches towards customs and related matters.

Second, trade facilitation is often equated with trade liberalization by advocates of activist industrial/trade policy interventions and objected to on the grounds that it will lower protection for domestic industries. While a lack of trade facilitation will increase domestic prices and thus benefit domestic import-substituting industries, the two areas of policy are quite distinct. Trade facilitation involves removing policies that generate excess costs. A country that makes active use of trade policy to protect national industries should also have an interest in trade facilitation as it will reduce the cost of whatever volume of imports it deems desirable. Using measures that raise the cost of trade is a very costly way of pursuing a protectionist policy—much better to directly support a desired domestic activity. Trade facilitation does not imply a country cannot use specific policies to support domestic industries. Arguments that trade facilitation is disguised liberalization are not compelling. Yes, trade facilitation will increase competitive pressures but if the policy goal is

⁵ Such side-payments are provided by high-income countries. As the transfers are time bound and linked to implementation they cannot be used as an enforcement mechanism for sustained application of the TFA's disciplines over time. Once implemented, enforcement is left to the standard WTO mechanisms, including greater transparency for domestic consumers, the operation of the TFA Committee, and so forth.

protection increasing trade costs is a very inefficient instrument to pursue it. Other, less costly and more transparent instruments should (and can) be used instead.

3. What to negotiate? Assessing the impacts of trade facilitation

Trade costs drive a wedge between export and import prices. As a result of this wedge, producers export less than they would in a world with lower trade costs, and consumers purchase less of each traded product, as well as a narrower range of products, than they otherwise would. Trade facilitation reduces the size of the wedge and tends to increase producer surplus in exporting countries, and consumer surplus in importing countries. The big difference with standard trade liberalization – removal of tariffs or quotas – is that the equivalent of tariff revenue or quota rents is much smaller in the context of a lack of trade facilitation, as much of the difference in international and domestic price is not captured by customs officials or domestic industries but instead constitutes waste ('red tape' costs).

How large are these costs? And to what extent could they be reduced by trade facilitation measures? What are good practices in this regard? What specific practices would have the biggest benefit-cost ratio? How much can be achieved through unilateral action? How much more could be realized through international cooperation and concerted action? When is cooperation a necessary condition for achieving trade facilitation gains? Who benefits from measures to facilitate trade? Are the benefits equally distributed between countries? What about distributional effects within countries? These were the types of questions confronting negotiators and more generally, economic policymakers. Much knowledge already existed in the Customs and border management community on good practices through work done by the World Customs Organization (WCO). Much knowledge also existed in specialized units in international organizations such as the World Bank, regional development banks and UNCTAD, which have extensive experience in the design and implementation of trade facilitation projects. Less was known however about the relative impact of different forms of trade facilitation and their distributional effects. Negotiators could draw on a policy research literature that analyzes trade costs, but it was only during the course of the TFA negotiations that research focused specifically on the effects of trade facilitation. Prior to the launch of the TFA talks, economic research in this area was sparse and primarily motivated by economic development concerns, with a focus on what national governments could do to enhance the competitiveness of domestic firms and industries. An important contribution of the epistemic community that emerged around trade facilitation was to provide objective professional expertise and advice on good practices and areas in which cooperation would benefit everyone (see e.g., McLinden et al. 2010).

Estimating the benefits of trade facilitation writ large

Economic analysis of trade facilitation has tended to involve empirical assessments of the magnitude of prevailing trade costs and their impacts on bilateral trade flows at a disaggregated product level.⁶ Empirical estimates of trade costs have also been incorporated into multi-country computable general equilibrium models that focus on industry-level and economy-wide impacts. The more recent empirical literature has relied heavily on the World Bank's *Doing Business* database for indicators of trade facilitation costs (the "trading across borders" indicators). A representative example is Djankov Freund and Pham (2010), who use export time as reported in the database as an indicator of national trade facilitation performance. This measure includes the time needed for document preparation, internal transport, passage through customs and other border agencies, and port and terminal handling. They find that the time to export measure is a statistically significant determinant of bilateral trade flows, with each day's delay associated with a reduction in bilateral trade of at least one percent. In the case of Africa, Freund and Rocha (2011) find the number is 1.5 percent.

Research of this type has been undertaken by numerous authors all of whom arrive at similar conclusions: a lack of trade facilitation reflected in observed (differences in) trade costs matters importantly as a determinant of overall trade performance. For example, Wilson, Mann and Otsuki (2003, 2005) use a gravity model to estimate the effects of four "trade cost" variables – measures of port efficiency, customs clearance, the regulatory environment, and telecommunications infrastructure and connectivity – across 75 countries to estimate the bilateral trade impacts for manufactured goods from improving country-level performance in these areas to the average in the sample. On average, their port efficiency variable – which includes both harbors and airports – accounts for more than half of the trade costs imposed by policies in their four areas. Iwanow and Kirkpatrick (2007, 2009) undertake a similar analysis, estimating a gravity model augmented with trade facilitation, regulatory quality and infrastructure indicators to assess the impact of trade facilitation and other trade-related constraints on export performance. They find that a 10 percent improvement in trade facilitation would yield an increase in exports of about 5 percent, whereas identical percentage improvements in the regulatory environment and in quality of infrastructure would result in increases of 9–11 and 8 percent, respectively. Persson (2008) finds that reducing delays at borders in an exporting country by one day relative to the sample average

⁶ The empirical literature is extensive and includes Djankov et al. (2010), Freund and Rocha (2011), Hoekman and Nicita (2010, 2011), Hoekstra (2013), Iwanow and Kirkpatrick (2007, 2009), Martinez-Zarzoso and Marquez-Ramos (2008), Nordas et al. (2006), Persson (2008, 2013), Portugal-Perez and Wilson (2012), Saslavsky and Shepherd (2014), Shepherd (2013), Spence and Karingi (2011), and Wilson, Mann and Otsuki (2003, 2005). See Maur and Wilson (2011) for a compilation of relevant research in this area.

would increase exports by 1 percent; and similar decline in an importing country would increase imports by 0.5 percent. Spence and Karingi (2011) show that trade facilitation in Africa, defined as improvements in the types of indicators used in the literature, increases total-factor productivity and exports, but that the quality and quantity of physical infrastructure also matters importantly. Dennis and Shepherd (2011) conclude that improving trade facilitation helps promote export diversification by making it easier for countries to expand exports along the extensive margin –new products or existing products to new markets. They find that a 10 percent reduction in the costs associated with the aspects of trade facilitation considered by Djankov et al. (2010) is associated with a 3 percent increase in the number of products exported.

A common conclusion from these papers is that trade facilitation can contribute to improved export performance, but that improvements in the quality of the regulatory environment more generally and basic transport and communications infrastructure (“connectivity”) are equally or more important, in supporting export growth. Thus, trade facilitation narrowly defined may not result in a significant improvement in export performance. Another common feature of this research is that it does not provide guidance on how specifically observed trade costs can be reduced and what types of interventions would have the biggest cost reduction payoff.

The foregoing types of studies are partial equilibrium in nature. They do not consider economy-wide welfare effects or impacts on real income (GDP). These can be assessed using computable general equilibrium models. Research using such models generally finds that the income gains from trade facilitation can be large. Francois et al. (2005) conclude that the national income effects from improved trade facilitation can be 2 or 3 times greater than what would result from removing all tariffs on manufactured goods. WEF (2013) argues that the ratio can be on the order of five or more, with a concerted effort to raise national trade facilitation performance to halfway global best practice estimated to increase global GDP by almost 5 percent.⁷

Hufbauer and Schott (2013), based on a review of extant literature, both empirical and CGE, conclude that significant improvements in trade facilitation could increase exports of developing countries by approximately US\$570 billion and exports of developed countries by US\$475 billion—for a total of over \$1 trillion world export gains. As total world trade in 2013 was some 22 trillion, this implies a 5% increase in global trade. This is not particularly large in percentage growth terms and is comparable to the estimated trade impact of removing remaining import tariffs (WEF, 2013). What is distinct about trade facilitation relative to trade liberalization (tariff reduction/removal) is that the real income gain associated with the former is much higher than what would be generated

⁷ Other papers assessing the effects of trade facilitation using CGE models include Decreux and Fontagne(2014) and Zaki (2014).

by the latter. WEF (2013), for example, concludes that global income gains from concerted action to reduce trade costs would be 3 to 6 times higher, depending on how ambitious the trade facilitation effort is.

A common feature of the research done on this subject from the perspective of relevance for negotiators is that it focuses on the costs and benefits of *national* trade facilitation measures. There is little research that focuses specifically on the magnitude of the gains from concerted, coordinated action by two or more governments. Practitioners have identified many areas where such cooperation is a necessary condition for realizing trade facilitation gains – e.g., joint border posts; joint investment in infrastructure to ensure IT systems can “talk” to each other; sharing of data; adoption of common classification and risk management systems; adoption of common administrative documents, etc. But negotiators did not have access to research that would help them identify where international cooperation would have the highest net benefit. This reflects both the difficulty confronting researchers to do such analysis and the focus of the suppliers of technical and other assistance, which is generally country-specific and not geared towards supporting international cooperation or global projects.

Mapping specific measures to trade cost reductions

While the economic analyses provide a strong basis for focusing policy attention on trade facilitation, this literature was less helpful in identifying what specific trade facilitation measures would have the biggest benefits. International organizations such as the WCO and the World Bank provided expert knowledge on good practices and cross-country experience with trade facilitation projects in developing countries, and provided information on what they deemed to be priorities.⁸ A common theme of the reports, briefings and presentations by trade facilitation and Customs experts was that the measures being proposed and considered in the TFA talks constituted good practices – i.e., they had been validated in practice and were endorsed by expert practitioners – but that identification of what needed to be done to most effectively facilitate trade required country-level analysis and diagnostics, and that priorities were endogenous – a function of many other factors (World Bank, 2006). However, as discussed in Finger (2008), the expert community did generally agree on what types of measures deserved to be prioritized in terms of likely impact on trade costs

⁸ Finger (2008) summarizes compilations of professional assessments and expert opinion on what types of interventions would have the greatest positive impacts. This generally ranked measures to adopt and use of international standards, to ensure transparency, including online publication of trade regulations and procedures, risk management systems, and advance rulings on tariff classification as being among the priority measures to focus on. See also Duval (2006), Maur (2011), Grainger and McLinden (2013) and McLinden et al. (2010).

and which of these would give rise to relatively low as opposed to high implementation costs – both financial and in terms of administrative complexity.

Extensive diagnostic work was undertaken by the World Bank, the WCO, and UN bodies to assess the “gap” between the status quo in a country and what would need to be done to implement a given set of potential TFA disciplines, including informed guesstimates of the cost of closing the gaps (i.e., implementation costs associated with a TFA). This generally suggested that implementation costs of a TFA would be relatively small – with estimates on the order of US\$7-11 million for a sample of representative developing countries (McLinden, 2011; OECD, 2012, World Bank, 2012).⁹ However, this detailed, technical work made no promises that implementation would generate gains of the order of magnitude suggested by the empirical research literature discussed above. The main focus of the various specialized international organizations was to provide information on best practice, lessons of experience, and tools to assess priorities and guide reforms.¹⁰ Specialized staff from international organizations echoed the findings of the empirical research that while trade facilitation measures of the type discussed in the TFA talks would contribute to better trade performance and generate welfare gains, improvements in the quality of the regulatory environment more generally and transport, logistics and communications services were equally or more important – and that these were areas not covered by the TFA. An important example was a need to improve the provision of services (e.g., Borchert et al., 2012 and 2014; Francois and Hoekman, 2010). A major focus of the trade facilitation diagnostics and projects undertaken by development agencies tended to be on transport logistics, both infrastructure and services, areas not covered by the TFA talks.

⁹ Surveys of professionals suggested that a major cost component associated with implementing trade facilitation measures is not related to regulatory reform, training or equipment costs, but is political – the required engagement at political level is often substantial given the rents that may be associated with the status quo (Duval, 2006).

¹⁰ Significant resources and effort was devoted to this. To provide just an example of the type of material that generated by Annex D and other organizations on the nuts and bolts of trade facilitation, what follows is a snapshot of the first page of a list of reports and toolkits posted on the website of the Global Facilitation Partnership for Transport and Trade (<http://www.gfptt.org/documents>): The New Frontier of Competitiveness in Developing Countries - Implementing Trade Facilitation; Trade Facilitation and Paperless Trade Implementation: 2013/14 Asia-Pacific Update; Developing a Trade Information Portal; Border Management Modernization; Trade and Transport Facilitation Assessment: A Practical Toolkit for Country Implementation; Risk-Based Compliance Management. Making it Work in Border Management Agencies; Preparation of a National Single Window, a Blueprint for Implementation; Trade and Transport Corridor Management Toolkit; Post Clearance Audit: Reference and Implementation Guide; Collaborative Border Management: A New Approach to an Old Problem; Freedom of Transit: UNCTAD Trust Fund for Trade Facilitation Negotiations Technical Note 8, rev. 2; Paperless Trade in International Supply Chains: Enhancing Efficiency and Security; Behind the Border Trade Facilitation in Asia-Pacific: Cost of Trade, Credit Information, Contract Enforcement and Regulatory Coherence; Trade Facilitation Opportunities for Landlocked and Transit Developing Countries.

The OECD was the only organization to attempt to map what was on the table in the TFA to estimates of trade costs and potential trade cost reductions, thus giving a sense of where the potential benefits were the highest. Moïsé and Sorescu (2013), based on a comprehensive dataset of trade facilitation indicators compiled by Moïsé, Orliac and Minor (2012), estimated that implementing the various elements of what was emerging in the TFA talks would lower developing country trade costs by around 14 percent. They assess the impact of 16 trade facilitation indicators corresponding to the main policy areas under negotiation. The policy areas that were predicted to have the greatest impact on trade volumes and trade costs were the availability of trade-related information, simplification and harmonization of documents, streamlining of procedures and the use of automated processes. The combined effect of improvements in these areas was estimated to generate a 14.5 percent reduction in total trade costs for low income countries, 15.5 percent for lower middle income countries and 13.2 percent for upper middle income countries.¹¹

The cost side of the equation

Most of the economic literature on trade facilitation assumes that reforms are costless. This is clearly unrealistic and reduces the usefulness of the policy research literature from a policymaking/negotiating perspective. The response to this issue was threefold: (i) to explicitly consider the costs of trade facilitation; (ii) to refer to expert opinion and data on actual trade facilitation projects undertaken by countries to assess how high implementation costs were likely to be; and (iii) to limit analysis of potential impacts of trade facilitation to measures that do not involve major investments – i.e., to exclude infrastructure-related investments. All of these approaches indicated that the benefit-cost ratio of trade facilitation was always positive and often high. Buys et al. (2010), for example, find that improved road connectivity in Sub-Saharan Africa could expand overland trade by up to \$250bn over 15 years. Using detailed World Bank data on road projects, they estimate that the initial investment cost required would be of the order of \$20bn, with an additional \$1bn annually for maintenance. Thus, the costs of this type of trade facilitation would be offset by the associated trade gains. Similarly, Mirza (2009) concludes that increasing Sub-Saharan Africa's logistics performance by 1 percent would involve an up-front investment of some \$18bn, but that this would generate a welfare gain of some \$70bn. More detailed, micro-econometric studies of the impact of projects to facilitate trade also found that the return on investment was high and that

¹¹ Updated estimates published in OECD (2014) to take into account the outcome of the Bali negotiations were 14.1%, 15.1% and 12.9% for the three country groups, respectively. The highest impacts for low-income countries would stem from a reduction in documentary requirements; automation, and improved information availability (3%, 2.4% and 1.7% respectively). In contrast the top three impacts for upper middle-income countries would come from fewer procedures, automation and measures pertaining to advance rulings (2.8%, 2.3% and 1.3%).

benefits were substantially greater than costs (e.g., Cali and te Velde, 2011; Königer et al. 2011; Portugal-Perez and Wilson, 2012; Helble et al., 2012; Hoekstra, 2013).

4. The Bali Trade Facilitation Agreement

The WTO has no provisions dealing explicitly with trade facilitation. Instead, it has specific Articles dealing with aspects of the customs clearance process: Art. V GATT on the treatment of goods in transit; Art. VII GATT on valuation of goods and the Uruguay Round Agreement on Customs Valuation; Art. VIII GATT on fees and formalities; Art. X GATT requiring transparency of national trade regulations; the Agreement on Pre-Shipment Inspection (PSI),¹² and the Agreement on Rules of Origin.¹³ The Agreement on Trade Facilitation follows the precedent of the Agreement on Customs Valuation and other agreements (e.g., on antidumping and on subsidies and countervailing measures) by extending disciplines on matters addressed by one of more specific GATT articles—in this case GATT Arts. V, VIII and X.

The genesis of trade facilitation discussions in the WTO was concern by the global business community that inefficient border management procedures and controls were becoming an increasingly important impediment to global sourcing and international production sharing. WTO members put trade facilitation on the agenda at the Singapore Ministerial Meeting in 1996 and called upon the Council for Trade in Goods to conduct exploratory research into the costs of crossing borders and the effects on traders and consumers.¹⁴ The points of concern were categorized into five broad areas: documentation requirements; official procedures; automation and use of information technology; transparency and consistency; and modernization of border-crossing administration (Hoekman and Kosteck, 2009). While there was a general agreement on the importance of trade facilitation, developing countries were not very enthusiastic about launching negotiations on the subject in the WTO. Part of the concern related to potential implementation costs. Governments argued that they did not have the resources to modernize customs procedures and were reluctant to take on additional legal obligations that might increase their exposure to WTO disputes.

¹² As the name suggests, PSI consists of inspection of goods by specialized firms before they are shipped to the country of importation.

¹³ This agreement aims to foster the harmonization of the rules used by WTO Members for their nondiscriminatory (MFN) trade, i.e., it excludes rules that apply in the context of preferential trade agreements. Notwithstanding almost 20 years of discussion in a Technical Committee (serviced by the WCO, which acts as the secretariat for the committee) tasked with pursuing a harmonization work program, the WTO Committee on Rules of Origin has yet to agree on a common set of non-preferential rules of origin.

¹⁴ See Eglin (2008) and Neufeld (2014) for discussions by WTO secretariat members that were involved in the genesis, design and process of TFA negotiations at different points in time.

Developed countries sought the establishment of binding norms in the WTO; many developing nations preferred to identify voluntary guidelines or an accord focused on capacity-building, rather than negotiate legally-binding commitments. After years of exploratory discussions, and a failure to agree to negotiations on trade facilitation at the 2003 WTO ministerial conference in Cancun, WTO members eventually launched talks on trade facilitation in July 2004, on the basis of modalities contained in Annex D of the 2004 WTO General Council Decision on moving forward on the DDA – the so-called “July package” (WTO, 2004). Governments agreed that negotiations would “aim to clarify and improve relevant aspects of” GATT Article V (Freedom of Transit), Article VIII (Fees and Formalities connected with Importation and Exportation), and Article X (Publication and Administration of Trade Regulations) “with a view to further expediting the movement, release and clearance of goods, including goods in transit...[and] enhancing technical assistance and support for capacity building in this area.”

Much of Annex D addresses the implementation cost-related concerns of developing countries. Separate articles specify that “the extent and timing of entering into commitments shall be related to the implementation capacities of developing and least-developed Members” (Art. 2); that “Members would not be obliged to undertake investments in infrastructure projects beyond their means” (Art. 2); that as “an integral part of the negotiations, Members shall seek to identify their trade facilitation needs and priorities ... and shall also address the concerns of developing and least-developed countries related to the cost implications of proposed measures” (Art. 4). Articles 8 and 9 call on international organizations (with specific mention of the IMF, OECD, UNCTAD, WCO and the World Bank – the so-called Annex D organizations) to undertake a collaborative effort to make technical assistance and capacity building in this area more effective and operational, and to ensure better coherence, and that due account be taken of the relevant work of the WCO and other relevant organizations in this area.

Art. 6 Annex D encapsulates the key challenge confronting negotiators in designing the TFA:

“Support and assistance shall also be provided to help developing and least-developed countries implement the commitments resulting from the negotiations. ...In this context, it is recognized that negotiations could lead to commitments whose implementation would require support for infrastructure development on the part of some Members. In these limited cases, developed country Members will make every effort to ensure support and assistance directly related to the nature and scope of the commitments in order to allow implementation. It is understood, however, that in cases where the required support for such infrastructure is not forthcoming, and where a developing or least-developed Member continues to lack the necessary capacity, implementation will not be required. While every effort will be made to ensure the necessary support and assistance, it is understood that the commitments of developed countries to provide such support are not open-ended.”

The contours of a possible deal had become clear by 2008. This included an emerging consensus that a single and binding agreement was needed and that a plurilateral approach with disciplines applying only to signatories was not desirable. It was expected that all WTO members would sign an agreement, with specific commitments detailed in an implementation plan (with varying timelines) based on three specific categories of commitments: those taking effect immediately; those requiring a transition period; and those requiring both additional time and technical assistance before entering into force. Examples of what might be embodied in an agreement included establishment of an enquiry point for information on trade regulations; a requirement to provide advance rulings on tariff classification and valuation; creation of a formal border agency “cooperation mechanism” for the exchange of information among members; limits on inspection of goods in transit; and elimination of proscribed transit routes (WTO, 2008; Eglin, 2008). Much of this ended up being embodied in the TFA that was agreed in Bali in 2013.

The TFA has three parts. Section I lays out substantive disciplines, Section II specifies special and differential treatment provisions and defines the approach taken to determining the coverage of disciplines for developing countries, and Section III deals with institutional arrangements (WTO, 2014).

Substantive provisions: Section I of the TFA

The first part of the TFA includes articles on:¹⁵

1. *Publication of information.* A requirement to publish regulations on trade procedures, taxes, fees, etc.; and best endeavors language on using the internet (portals; websites) and creating national enquiry points
2. *Opportunity to comment.* Best endeavors commitment to provide opportunities to comment on proposed new regulations relating to movement, release, clearance etc. of goods.
3. *Advance rulings.* Binding commitment to provide traders with advance rulings on a timely basis when requested to do so regarding tariff classification and origin criteria; a best endeavor’s commitment to do the same for the criteria used to determine valuation, exemptions, and quotas, including tariff quotas.
4. *Appeal or review of decisions.* Binding commitment on the right to either administrative and/or judicial review of decisions on a nondiscriminatory basis on Customs matters; best endeavors commitment to offer the same for decisions of other border management agencies.
5. *Other measures to enhance impartiality, nondiscrimination and transparency.* Commitment regarding procedures to be followed when implementing enhanced sanitary and phytosanitary-related border controls (binding).
6. *Fees and charges.* Requirements on transparency (publication) and permitted level of fees and charges (to be cost based) and the basis/process for imposition of penalties (binding).

¹⁵ What follows is a selective summary. Figures refer to the corresponding article number of the TFA.

7. *Release and clearance of goods.* This article includes provisions calling for:

- pre-arrival processing (binding);
- use of electronic payment (best endeavors);
- procedures allowing for separation of release of goods from final determination of payment liability (binding);
- adoption and use of risk management systems for clearance control (best endeavors); adoption/use of post-clearance audits (binding);
- measurement and publication of average release times (best endeavors);
- providing at least three of seven possible types of additional facilitation measures for “authorized operators” – with eligibility to be determined on the basis of satisfying published criteria relating to risk and track record of compliance (binding);
- putting in place procedures allowing for expedited release of air cargo shipments and specifying the types of criteria that may be used to condition eligibility for expedited release (binding); and
- requirements pertaining to the release of perishable goods (binding).

8. *Border agency cooperation.* Call for cooperation between adjacent border posts (e.g., alignment of working times, procedures, common facilities, etc.) and exchange of information/data when requested (best endeavors).

10. *Formalities associated with cross-border movement of goods, including transit:*

- commitment to review and assess extant procedures from a trade facilitation perspective and to adopt the least trade restrictive measure to achieve underlying policy objectives;
- acceptance of copies of documents already provided (mix of binding and best endeavor);
- use of international standards (best endeavor);
- establishment of “Single Window” systems (one-stop shops) (best endeavors);
- ban on mandatory PSI for classification/valuation (binding);
- ban on the mandatory use customs brokers (binding); and
- provisions on treatment of rejected goods and use of temporary admission programs for inward and outward processing of goods (binding).

11. *Freedom of transit.* Commitment not to impose non-transport-related fees or to seek voluntary restraints (binding); various disciplines on inspection and guarantee schemes (mostly binding).

12. *Customs cooperation.* Provisions calling for sharing of information on best practice and on cooperation between customs agencies to exchange information on consignments (best endeavors).

23. *Institutional arrangements (Section III, TFA).* The agreement calls for the establishment of a Committee on Trade Facilitation in the WTO, with a mandate inter alia to maintain “close contact” with other international organizations in the field of trade facilitation such as the WCO (the only agency mentioned by name), and for the establishment of national trade facilitation committees in each WTO Member to facilitate the required domestic coordination and implementation of the TFA.

A number of these substantive disciplines build on work done in the WCO—in particular provisions on appeal and review (Art. 4 TFA) and release and clearance of goods (Art. 7 TFA) (ITC, 2013). In the 1990s, WCO members negotiated a revision of the 1974 International Convention on the Simplification and Harmonization of Customs Procedures. An updated and completely revamped

Kyoto Convention establishing 'international standards and facilitative customs procedures for the twenty-first century' was completed in 1999 (WCO, 2002). This comprises a set of principles and detailed annexes that lay out standards and recommended best practices for customs procedures and related administrative practices, including risk assessment, electronic data interchange, use of ex-post, audit-based systems of control, import and export procedures, transit arrangements, and bonded warehousing. As of September 2014, 95 countries had signed the Revised Kyoto Convention, out of a total of 178 WCO member countries. Implementation of the TFA will imply that some areas covered by the Kyoto convention will over time extend to larger number of nations.

As is described in the above summary, some of the TFA provisions are binding in the sense of not being qualified or conditioned, and thus can be enforced through the WTO dispute settlement system. Others are of a best endeavors nature. Many of the latter either address matters that will require investment in soft and hard infrastructure, or that are sensitive (e.g., Customs cooperation and exchange of information, something on which there were and are concerns by developed countries and not just developing economies). Binding commitments tend to pertain to matters relating to transparency, fees and procedures that are imposed or applied by customs authorities. The activities of other government agencies at the border, if addressed at all, tend to be of a best endeavors nature.

Several provisions in the TFA are of interest from a political economy perspective, including the ban on the use of preshipment inspection (PSI) for classification and valuation purposes and the provision precluding mandatory use of customs brokers. These provisions are noteworthy because the companies involved in providing the associated services are direct losers from the TFA. The bans reflect a drive by both traders and Customs authorities. Customs brokers provide valuable services to customers, but not all firms need their services. Mandatory use of customs brokers imposes an effective tax on companies that have the capacity to deal with customs compliance requirements at a lower cost than what they are required to pay a customs broker. PSI programs involve governments outsourcing Customs activities to private companies, often as part of an effort to reduce corruption and tax avoidance by traders, whether through over-invoicing or under-invoicing of imports. Not surprisingly, the Customs community is not supportive of such programs as they imply they are not doing their job; traders often oppose PSI because they perceive it as imposing too much of a burden.

An Agreement on Preshipment Inspection was negotiated in the Uruguay Round and incorporated into the WTO in 1995 as a result of concerns by exporters regarding the methods used by inspection firms. The agreement requires countries that use PSI to ensure that this is done in an objective, transparent and nondiscriminatory manner, and that verification of contract prices satisfy

certain methodological criteria. Research on the impact of PSI programs has found that they can make a significant improvement in customs clearance times but that they can also be costly – companies may charge the government on the order of 1 percent of the value of goods imported (Low, 1995). Evaluations of PSI programs suggest they can be effective mechanisms to improve tariff revenue collection. Yang (2008) finds that PSI programs are associated with increases in tariff revenue collection and on average the increase in revenues exceeds the costs of operating the PSI programs by a factor of 2 or more. The prevailing view of the Customs community and many traders, however, was that PSI may be helpful in the short-term to deal with corruption and tax avoidance, but that in the longer-run what is required is serious customs reform and institutional strengthening to allow a government to manage the process itself (Hoekman and Kostecki, 2009). The Customs community used the TFA as an opportunity to reassert their exclusive responsibility to determine the classification and valuation of goods for tariff revenue collection purposes, while traders used it to avoid having to pay customs brokers for services they did not need or desire.¹⁶

Special and Differential Treatment: Section II TFA

Section I of the TFA contains a mix of binding disciplines and best endeavors commitments. These all apply to developed countries once the TFA enters into force. This is not the case for developing countries and the LDCs. Section II deals with the implementation concerns of developing countries by allowing them to determine unilaterally when they will apply the various provisions in Section I. Implementation is divided into three categories: (A) provisions that will be applied unconditionally upon entry into force of the TFA (or after one year in case of a LDC); (B) provisions that will apply after a transition period that will be determined by each country itself; and (C) provisions that will apply after an *indicative* transition period *and* acquisition of the necessary implementation capacity through assistance and capacity-building. One year after that they are to notify definitive dates for implementation of category B commitments and to report on the arrangements made to obtain the assistance needed to implement category C commitments. LDCs have an extra year to undertake these actions.

There are no limits on the length of implementation periods that can be notified – the presumption is that countries will undertake a good faith effort to determine how much time they will realistically need and will not engage in games. There are detailed provisions on procedures to be followed if a country needs an extension of the transition period because it does not think it can implement a provision by the definitive date it specified in its schedule, including reporting the

¹⁶ It is suggestive that the ban on PSI for purposes of classification and origin concerns activities that are in the ambit of Customs, and that other TFA articles relating to these activities (transparency, review, appeal etc.) are binding and thus can be contested through the DSU.

reasons for this and whether it is because of the need for additional assistance or not having received the assistance needed.¹⁷ If a country continues to notify implementation difficulties after transition periods have expired, the TFA Committee is called to establish an Expert Group of five independent trade facilitation professionals to examine the situation and make recommendations. No recourse can be made to the DSU until the recommendation the Expert Group has been considered. In any event, there are long grace periods for dispute settlement: Category A provisions cannot be contested within 2 (6) years of the entry into force of the TFA for developing countries (LDCs); in addition, LDCs have an 8 year grace period following implementation of their Category B and C provisions. There is no grace period regarding Category B and C provisions of developing countries (Art. 20 TFA).

Donors are to provide assistance, either bilaterally or through international organizations, on mutually agreed terms. In the case of LDCs, there is best endeavors call for such aid to be additional – donors are to endeavor to provide aid in a way that does not compromise existing developmental priorities (Art. 21). A long list of principles are specified that aid should conform to, including taking into account existing programs of support and the importance of coordination between donors and use of existing in-country donor coordination mechanisms. Donors are also required to report annually on assistance provided; international organizations will be invited to do the same by the TFA Committee. In addition there is a call for the Committee to hold at least one annual session dedicated to review and discuss problems regarding implementation, review delivery of assistance, and share experiences obtained – i.e., to engage in a process of deliberation and learning.

Thus, the response to implementation concerns was to permit each country to determine its own (open-ended) transitional periods and to identify which provisions require assistance and capacity building support. No mention is made of “infrastructure” as a potential necessary element of implementing the agreement as in the 2004 Annex D modalities; assistance is simply linked to ‘implementation’. There is no binding (enforceable) commitment on any Member to provide assistance, nor any language specifying whether assistance can have “strings”. Instances where a lack of assistance gives rise to implementation problems are to be resolved through a process of identifying willing donors and alternative sources of aid.

¹⁷ To help address the possibility of some countries “falling through the cracks” as a result of coordination problems the WTO set up a Trade Facilitation Agreement Facility in 2014. The aims of the facility are to enhance the WTO’s technical assistance programs, support coordination between donors and recipients, and provide a source of funding for countries that are not able to access assistance through other channels for TFA implementation. It will do so by providing up to US\$30,000 for project proposal preparation (to submit to a donor agency for funding) and up to US\$200,000 for “soft infrastructure” projects if a country cannot find a donor to fund it (examples of potential projects include payment of consulting services for modernization of customs laws, in-country workshops, and training of officials). See http://www.wto.org/english/news_e/news14_e/fac_22jul14_e.htm.

5. Reflections on process and outcome

The TFA illustrates that new rule-making is feasible in the WTO. For that reason alone it is an important agreement, as looking forward it is clear that it is in the rule-making area that the WTO will confront increasing demands. The TFA is also noteworthy by being a stand-alone, self-balancing deal: all WTO Members signed off on it because they perceived its substantive provisions to be in their interest, given that implementation costs are addressed along the lines foreseen.

Negotiations on the TFA took a decade. While this constitutes good performance compared to the other areas of the DDA, it is clearly a very long time, especially given the fact that the contours of the TFA were pretty clear already in 2008, and the basic principle of linkage between implementation by developing countries and assistance from developed nations had already been established in the 2004 negotiation modalities. At least four factors help explain the slow progress and the shape of the eventual agreement.

First, the overall difficulty of moving the DDA negotiations forward was an important factor. Trade facilitation was often singled out by WTO negotiators as one area where there was a constructive atmosphere in which good progress was being made, but the deadlock that prevailed for long periods of time on the DDA market access agenda meant that there was less pressure on negotiators on trade facilitation to agree on a text in a more timely fashion. At the same time the deadlock itself is partly explained by a desire on the part of some countries to extract a “payment” for agreement on trade facilitation. This is part and parcel of the modus operandi of the WTO (making the outcome of a trade round a ‘single undertaking’). While there is arguably little negotiating leverage associated with trade facilitation for the reasons discussed in Section 2, countries nonetheless sought to pursue issue linkage. Ultimately linkage incentives led to India’s refusal to adopt the TFA protocol, but that was simply another – albeit extraordinary – instance of a strategy that had been pursued throughout the negotiations by a number of countries, not just India.

Second, trade facilitation is a technical area, and much learning was required by trade officials who are not necessarily aware of what is involved in putting in place risk management systems, what is implied by a “single window” for border management and customs clearance, etc. A very substantial effort was undertaken by the WTO and Annex D organizations to provide information and educate not just negotiators but stakeholders more generally. This was arguably effective in that the initial skepticism on the part of many developing countries regarding trade facilitation was overcome, and negotiations proceeded relatively smoothly without major fundamental substantive differences of the type that characterized negotiations on intellectual

property rights in the Uruguay Round, to give one example. However, the very length of the negotiations meant that there was regular turnover of negotiators and that in turn meant a need for repeated learning and training to bring a new set of officials up to speed on the substance of the many technical issues that were on the table. This was a factor that affected developing countries in particular but it also affected the “supply side” – sustaining the engagement and support of specialized agencies and trade facilitation professionals in a process that lasts many years without a clear prospect of coming to a resolution is difficult, especially for development-focused organizations where performance is assessed on the basis of the impacts of projects and activities in which resources are invested.

Third, and related to the foregoing, a constant feature of the negotiations from day one was not just whether in principle poor countries would benefit from whatever was agreed but whether they would be able to implement an agreement so as to realize the benefits. The issues here were to figure out what effective implementation would take, and how to obtain a credible commitment from developed countries that they would provide the resources needed for implementation to the countries that needed assistance, and that developing countries would not be subject to disputes and the threat of retaliation for not having been able to implement TFA disciplines. As discussed above, this issue ended up having a major impact on the structure of the TFA, with the adoption of an à la carte approach to defining the coverage of developing country commitments.

Trade facilitation will require resources to implement, and negotiators confronted substantial uncertainty as to what would be involved in implementing TFA provisions in their countries. This uncertainty created a problem for developed country providers of assistance as well, as they did not want to be confronted with open-ended financial commitments. Nor were they willing to create a fund with earmarked resources to support trade facilitation—in large part so as not to create a precedent that would increase the incentives for countries to take a “pay me for reform” position in future negotiations, but also reflecting a desire to abide by the Paris Declaration on Aid Effectiveness, which commits donor countries to align support with the priorities established by developing countries in their national development strategies when allocating assistance (country ownership and alignment principles).

The approach that was taken in the TFA leaves it to developing country governments to identify what to do and in that sense is consistent with the aid effectiveness principles. It is important to note however that the TFA does not have language regarding the “conditionality” that might be imposed by donors – the implicit presumption is that assistance will be grant-based. In practice this is unlikely to be the case as grant-based development aid is increasingly earmarked for the poorest countries. Middle income countries – whether large countries such as India and Brazil

(assuming they make category C commitments) or small island economies such as Barbados or Mauritius – may not be eligible for grant based assistance. Throughout the negotiations and after the Bali meeting the international organizations made clear that they stood ready to support developing countries, but what conditions would apply to assistance were often left ambiguous. Thus, a joint statement issued by the ITC, OECD, UNCTAD, the UN Regional Economic Commissions, the World Bank and the WCO on July 22, 2014 says nothing about this (Joint Statement, 2014). As far as its own support is concerned the World Bank, for example, has made it clear that assistance for TFA implementation through its Trade Facilitation Support Program “will prioritize (1) International Development Association-eligible, low-income, and fragile and conflict affected countries; and (2) middle-income countries that act as gateways to LDCs and/or whose performance significantly impact on the performance of regional LDCs as well as those that are willing to co-finance technical assistance activities” (World Bank, 2014).¹⁸

It remains an open question whether in the aggregate sufficient assistance will be forthcoming. Donors consistently argued that they could be trusted to deliver the amounts needed and international agencies repeatedly made commitments that they would be there to assist countries if requested to do so. Recall that expert assessments suggested that TFA implementation costs would be in the range of US\$7-11 million for a representative sample of developing countries, ignoring investments in hard infrastructure (e.g., roads, bridges, warehouses, laboratories, etc.). If we assume a rather conservative US\$10 million and assume further that most developing country WTO Members request assistance we are talking about at least US\$ \$1 billion.

This is not a huge amount, especially considering that costs will be spread over several years and that some developing countries may not make Category C commitments. But this amount is a lot larger than what the various grant facilities that have been set up by different international organizations add up to. For example, the World Bank Trade Facilitation Support Program was launched with an initial funding commitment of just US\$30 million. In practice the resources needed to pursue trade facilitation more broadly will be much greater than \$10 million per country. Given the high rates of return to trade facilitation discussed in Section 3 this is money well spent, but a reliance on grants only is unlikely to be sufficient. Countries should instead plan to tap available resources under general development assistance programs and the support that is available from the multilateral development banks.

Effective delivery of aid for trade facilitation will be a key determinant of the success of the TFA. To maximize the development/real income impacts, this must go beyond the TFA provisions

¹⁸ Six donors have committed to contributing US\$30 million to this facility, with the World Bank partnering with the IMF, IDB, UNCTAD, the WCO and the WTO in delivering assistance.

narrowly defined, whether binding or best-endeavors, as the research literature and country experience makes very clear that lowering trade costs involves action on a broader front (e.g., logistics, transport service sector, etc.). This implies that much depends on the extent to which the process of implementation of the TFA will be integrated into national development trade strategies, and the extent to which the TFA Committee and the various facilities that are established to provide support take a broader perspective. If the TFA helps countries to focus on the broader trade facilitation agenda in the process of implementing the agreement, it can become an important focal point for deliberation and reform and add value to what development organizations are already doing. Even if this is not achieved, the TFA adds value by focusing attention on a number of areas where cooperation between countries will be beneficial (i.e., is a necessary condition for gains). If the TFA serves as a coordination device – between agencies within countries, across countries, and between providers of assistance – it will generate the greatest benefits for members. This is of course not assured by any means. The burden of coordination rests on the countries concerned, and is conditional on the ability of governments to identify priorities for action and how the various TFA provisions “fit” into the broader national (and regional) trade facilitation agenda.

Finally, negotiators were not just seeking to ensure that the TFA would be Pareto-improving in a self-balancing sense – i.e., ensuring that the substantive rules constituted good practices for trade development and that implementation constraints would be addressed – but were also concerned about the distribution of the overall gains from trade facilitation. An illustration of this concern was the argument that global value chains (GVCs) tend to be dominated by large “lead” firms that are headquartered in developed nations. One possibility is that all firms in the value chain gain from better trade facilitation, because they all benefit from lower costs and overall turnover expands. Another possibility is that the gains from trade cost reductions are mostly appropriated by lead firms because they have market power and/or suppliers are locked into dealing with specific lead firms (Mayer and Milberg, 2013). Monopoly power of providers of inputs and/or monopsony power of end buyers can lower domestic farm/factory gate prices and/or may result in retail prices that are higher than they would be if there was greater competition.

A key issue then is whether firms have market power and if it is used to extract rents. There is very little empirical evidence on this issue. Hoekman and Shepherd (2013) analyze available firm-level data for a large number of developing countries to assess the effects of observed changes in average trade time costs and find that firms of all sizes benefit from improved trade facilitation – all firms export more in response to reductions in the time required to export goods. While suggestive, this does not address the question of how trade facilitation benefits are distributed, which requires

information on profits (rents) as opposed to trade volumes. This is an area where more research would have been helpful.

6. Possible Implications for cooperation looking forward

What does the TFA suggest for future cooperation under the umbrella of the WTO? Three aspects of the TFA experience appear particularly relevant to this question: (i) the feasibility/desirability of universal membership agreements as opposed to plurilateral cooperation; (ii) the use of hard law versus “softer” forms of cooperation and linkage to aid for trade; and (iii) the “coherence” of the activities of the WTO internally and with those of other international organizations. All three of these issues are interrelated.

More universal membership, self-balancing agreements?

The TFA is noteworthy from a systemic perspective because it demonstrates that the WTO membership is capable of negotiating new rules of the game that apply to all countries *and* devising mechanisms to assist those members that need it to implement what all have agreed are good practices. This is an important precedent. There has been much discussion in the literature about the need for the institution to do a better job in recognizing the diversity across its membership *and* the need to do more to address a plethora of policies that may create negative international spillovers. Numerous voices have suggested that greater consideration be given to the pursuit of plurilateral cooperation under the umbrella of the WTO (e.g., Hoekman and Mavroidis, 2013). During the period when the DDA deadlock prevented movement on trade facilitation suggestions were made that a plurilateral agreement could be an alternative (e.g., Finger, 2008).

A plurilateral agreement might have allowed a tighter agreement to be concluded, with less in the way of best endeavors language. However, it may well have been the case that much of what is best endeavors in the TFA would have stayed that way in a plurilateral as the large OECD nations did not see eye-to-eye on a number of provisions that ended being best endeavors – e.g., the article on customs cooperation. It will be interesting in this regard to see what will be done in those areas in the TTIP. There is much to be said for having multilateral agreement on a set of good practices, even if many cannot immediately implement them and the uncertainty that is associated with the supply of assistance and the extent to which best endeavors commitments will be implemented.

The real question is the extent to which WTO Members are willing to pursue Pareto-improving deals on a stand-alone basis. This is a question that affects both plurilaterals and efforts to conclude universally applicable agreements and is very much a function of both the feasibility of constructing a Pareto-enhancing deal and the willingness of countries to abstain from efforts to link

agreement to areas that lie outside the ambit of whatever is the focus of a deal. The TFA illustrates that issue linkage incentives can be expected to be strong in the context of the WTO and may be a binding constraint on the pursuit and successful conclusion of stand-alone agreements. This constraint applies also to the plurilateral track. For example, a potential response to a continuing situation where the Indian government's concerns regarding existing food support policy disciplines cannot be addressed is for the majority of WTO Members to pursue the TFA on a plurilateral basis. However, making the TFA an official plurilateral WTO agreement will require consensus, and it seems clear that no such consensus will obtain. As discussed at greater length in Hoekman and Mavroidis (2013) and Hoekman (2014) for the plurilateral option to become more feasible in the WTO the consensus constraint needs to be addressed. If it cannot be addressed the result is likely to be ever more preferential trade agreements and a greater focus to pursue issue-specific cooperation on areas such as trade facilitation *outside* the WTO framework.¹⁹

Best endeavors vs. binding commitments and linkage to aid for trade

An interesting feature of the TFA is the mix of binding (enforceable) provisions and best endeavors language. An implication is that there is less emphasis on "hard law" than in other WTO agreements and more of a focus on cooperation aimed at achieving a set of good practices that all governments support. Examples are not just the emphasis on aid for trade facilitation (Category C provisions) but also the provisions for early warning/notification of problems; the use of an Expert Group to assess notified implementation capacity problems once transition periods have expired, and use of the TFA Committee as a forum for the exchange of experiences and deliberation. Clearly the DSU is (will be) applicable to all binding provisions over time, and some of the best endeavors provisions with conditional language such as "to the extent practicable" or "to the extent possible" may be enforceable in that a country could ask a panel to assess whether implementation by the country concerned has become practicable and possible. But it is clear that the TFA is an agreement where different channels are foreseen to support continued cooperation. As already noted, not all best endeavors provisions reflect a difference in view between developed and developing countries. In some of the relevant areas – e.g., cooperation between Customs agencies – implementation may require building trust and experience over time and not lend itself to binding commitments/hard law.

¹⁹ There is little to prevent countries from pursuing implementation of the TFA on a plurilateral basis with the support of the Annex D organizations as opposed the WTO secretariat. This would imply the loss of access to the DSU, but as the *de jure* or *de facto* grace periods for disputes are long this is not an immediate constraint. In the longer term, other mechanisms exist that could be used by countries if they want to – e.g., by bolstering the dispute resolution system of the WCO or by using the arbitration services of ICSID.

How to assess whether the rather large number of best-endeavors commitments and linkages to aid for trade is a better (more effective and efficient) approach to putting in place good policies and practices than a more straightforward set of binding disciplines is impossible ex ante. The extent to which the TFA will help countries around the world improve the operation and governance of national border management systems and reduce uncertainty and trade costs for traders will depend on what countries decide to do – what they will commit to, how long transitional implementation periods will last, and the extent to which assistance providers are successful in helping countries to implement the agreement. In many areas of regulation that have impacts on trade costs and that may lead to de facto discrimination and negative spillovers it may be impossible for governments to agree on hard (binding) cooperation. What is needed is agreement on principles and processes to foster greater communication and exchange of information, agreement to identify redundant or duplicative procedures, and to work together in the development of new norms. The many best endeavor provisions in the TFA have been criticized as being non-enforceable, but in practice may work more effectively to lower trade costs for traders over time.²⁰

The same is true of the approach that was taken to link implementation to assistance. Finger (2014) argues the TFA is a repeat of what negotiators have done in the past under the GATT/WTO: to create the appearance of legal obligations for developing countries but at the same time to avoid substantive disciplines. This is because the TFA's substantive provisions are not made legally binding by developing countries accepting technical assistance and capacity building support. If developing countries obtain assistance but end up not complying with TFA provisions, there is no mechanism in the agreement to force governments to return the equivalent of the resources that were provided for implementation assistance. Conversely, if a country makes commitments conditional on receiving assistance, there is no mechanism to force developed countries to provide the required resources. While in such cases there is no threat of dispute settlement and enforcement there is also non-implementation. This is all true but the issue ultimately is an empirical one: will it work? The proof of the pudding is in the eating—if the TFA is incorporated into the WTO we will learn whether such concerns are valid.

Coherence

The TFA deals with a rather narrow set of policies that revolve around border clearance processes and transit regimes. As discussed previously, the trade facilitation agenda goes far beyond the subjects dealt with by the TFA, which is constrained by the Doha ministerial mandate to issues

²⁰ A rough count suggests that the TFA has about twice as many best endeavors provisions than the agreements on customs valuation and import licensing.

captured by GATT Articles V, VIII and X. Other relevant GATT disciplines – for example, on customs valuation, pre-shipment inspection, and product standards – also have a direct bearing on the costs associated with getting goods across borders. The same is true of the GATS – which offers the opportunity to make specific commitments on important logistics-related services such as transport, distribution, warehousing, etc. The TFA will not do anything to improve services-related policies that impact on trade costs. Indeed, a number of the policy areas that matter for trade facilitation are not on the WTO table at all – such as competition policy or restrictions on foreign investment in logistics and distribution services. If there is one message that consistently comes from the research literature on trade costs, competitiveness and trade facilitation, it is that a broad view of the trade facilitation agenda at the national, regional and multilateral levels is needed.

This raises the question whether it is efficient to have so many different WTO agreements that have a bearing on trade facilitation outcomes being managed by different Committees and serviced by different parts of the WTO Secretariat. As argued in Hoekman (2014) the fragmentation of agreements and the approaches taken towards different policy areas that all impact on trade costs and the operation of supply chains can lead to a focus on the trees instead of the forest. From the perspective of international business and consumers around the world, more attention arguably is needed within the WTO – and more generally in the design and implementation of trade agreements – to address the potential “silo problem” that may result in neglecting policies that have important impacts on trade costs. Fostering regular communication and interactions between the various groups and committees dealing with different dimensions of trade facilitation will help identify gaps and possible overlaps that are important from a trade cost reduction perspective. Mechanisms that focus on the ‘whole of the supply chain’ and that bring in the business community in identifying impacts of the different agreements and assessing progress made in facilitating trade would help to ensure coherence and effectiveness.

7. Conclusion

[To be completed]

References

- Bagwell, K. and R. Staiger. 1999. "An Economic Theory of GATT," *American Economic Review* 89(1): 215-248.
- Bhagwati, J. 1988. *Protectionism*. Boston: MIT Press.
- Borchert, I., B. Gootiiz, A. Grover and A. Mattoo, 2012. "Landlocked or Policy Locked? How Services Trade Protection Deepens Economic Isolation," World Bank Policy Research Working Paper 5942.
- Borchert, I., B. Gootiiz and A. Mattoo, 2014. "Policy Barriers to International Trade in Services: Evidence from a New Database," *World Bank Economic Review*, 28(1): 162-88.
- Busse, M., R. Hoekstra and J. Königer, 2012. "The Impact of Aid for Trade Facilitation on the Costs of Trading," *Kyklos*, 65(2): 143-63.
- Buys, P., U. Deichmann, and D. Wheeler. 2010. "Road Network Upgrading and Overland Trade Expansion in Sub-Saharan Africa." *Journal of African Economies*, 19(3): 299-432.
- Calì, M. and D. te Velde, 2011. "Does Aid for Trade Really Improve Trade Performance?" *World Development*, 39(5): 725-40.
- Capaldo, J. 2013. "The Uncertain Gains from Trade Facilitation," Tufts University, Global Development and Environment Institute Policy Brief 13-02.
- Decreux, Y. and L. Fontagné. 2014. "What next for the DDA? Quantifying the role of negotiating modalities," Paris School of Economics, mimeo.
- Dennis, A., and B. Shepherd. 2011. "Trade Facilitation and Export Diversification." *The World Economy*, 34(1): 101-122.
- Djankov, S., C. Freund and C. Pham, 2010. "Trading on Time," *The Review of Economics and Statistics*, 92(1): 166-73.
- Duval, Y. 2006. "Cost and Benefits of Implementing Trade Facilitation Measures under Negotiations at the WTO: an Exploratory Survey," Asia-Pacific Research and Training Network on Trade Working Paper No. 3, January.
- Eglin, R. 2008. "The Doha Round Negotiations on Trade Facilitation," in R. Lawrence et al. *Global Enabling Trade Report 2008*. Geneva: World Economic Forum.
- Ethier, W. 2007. "The Theory of Trade Policy and Trade Agreements: A Critique," *European Journal of Political Economy* 23:605-23.
- Finger, J. M. 2008. "Trade Facilitation: The Role of a WTO Agreement," ECIPE working paper.
- Finger, J.M. 2014. "The WTO Trade Facilitation Agreement: Form without substance again?" at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2489038.
- Francois, J., and B. Hoekman, 2010. "Services Trade and Policy," *Journal of Economic Literature*, 48(3): 642-92.
- Francois, J., H. Van Meijl and F. Van Tongeren. 2005. "Trade Liberalization in the Doha Development Round." *Economic Policy*, 20(42): 349-391.
- Freund, C. and N. Rocha, 2011. "What constrains Africa's exports?," *World Bank Economic Review*, 25 (3): 361-86.
- Grainger, A. and G. McLinden. 2013. "Trade Facilitation and Development," in A. Lukauskas, R. Stern and G. Zanini (eds.), *Handbook of Trade Policy for Development*. Oxford University Press.
- Haas, P. 1992. "Introduction: Epistemic Communities and International Policy Coordination," *International Organization* 46(1): 1-35.
- Helble, M., C. Mann and J. Wilson. 2012. "Aid for Trade Facilitation," *Review of World Economics*, 148(2): 357-76.
- Hillman, A. and H. Ursprung, 1988. "Domestic Politics, Foreign Interests, and International Trade Policy," *American Economic Review*, 78(4): 719-45.
- Hoekman, B. 2014. *Supply Chains, Mega-Regionals and Multilateralism: A Road Map for the WTO*. London: CEPR Press.
- Hoekman, B. and M. Kosteci, 2009, *The Political Economy of the World Trading System*, 3rd ed. Oxford: Oxford University Press.

- Hoekman, B. and P. Mavroidis. 2013. "WTO à la Carte or WTO Menu du Jour: Assessing the Case for Plurilateral Agreements," Robert Schuman Centre for Advanced Studies Working Paper 2013/58, European University Institute.
- Hoekman, B. and A. Nicita. 2010. "Assessing the Doha Round: Market Access, Transactions Costs and Aid for Trade Facilitation." *Journal of International Trade & Economic Development*, 19(1): 65-80.
- Hoekman, B. and A. Nicita. 2011. "Trade Policy, Trade Costs and Developing Country Trade." *World Development*, 39(12): 2069-79.
- Hoekman, B. and B. Shepherd. 2013. "Who Profits from Trade Facilitation Initiatives?," CEPR Discussion Paper 9490.
- Hoekstra, Ruth. 2013. "Boosting Manufacturing Firms' Exports? The Role of Trade Facilitation in Africa," Ruhr Universität Bochum, IIE working paper 197.
- Hufbauer, G. and J. Schott, 2013, "Payoff from the World Trade Agenda 2013", ICC Research Foundation report. Washington DC: Peterson Institute for International Economics.
- Hummels, D. 2007. "Transportation Costs and International Trade in the Second Era of Globalization," *Journal of Economic Perspectives*, 21 (3), 131-54.
- Hummels, D. and G. Schaur. 2013. "Time as a Trade Barrier," *American Economic Review*, 103(7): 2935-59.
- ITC. 2013. *WTO Trade Facilitation Agreement: A Business Guide for Developing Countries*. Geneva: ITC.
- Iwanow, T. and C. Kirkpatrick, 2007, "Trade facilitation, regulatory quality and export performance," *Journal of International Development*, 19: 735-75.
- Iwanow, T. and C. Kirkpatrick, 2009, "Trade Facilitation and Manufactured Exports: Is Africa Different?" *World Development*, 37(6): 1039-50.
- Joint Statement. 2014. "Coordinated Assistance for Implementation of the WTO Trade Facilitation Agreement," July 22. At: <http://www.oecd.org/regreform/facilitation/trade-facilitation-agreement-2014.htm>
- Königer, J., M. Busse and R. Hoekstra. 2011. "The Impact of Aid for Trade Facilitation on the Costs of Trading," *Kyklos*, 65(2): 143-63.
- Low, P. 1995. *Preshipment Inspection Services*, World Bank Discussion Paper 278.
- Maggi, G. and A. Rodríguez-Clare, 1998. "A Political-Economy Theory of Trade Agreements," *American Economic Review*, 97(4): 1374-1406.
- Martinez-Zarzoso, I. and L. Marquez-Ramos. 2008. "The Effect of Trade Facilitation on Sectoral Trade." *The B.E. Journal of Economic Analysis & Policy*, 8(1): 42.
- Maur, J.C. 2011, "Trade Facilitation," in J.P. Chauffour and J.C. Maur (eds.), *Preferential Trade Agreements – Policies for Development: A Handbook*, Washington, D.C: The World Bank.
- Maur, J.C. and J. Wilson (eds.), 2011, *Trade Costs and Facilitation. Open Trade and Economic Development*, Cheltenham: Edward Elgar.
- Mayer, F. and W. Milberg. 2013. "Aid for Trade in a World of Global Value Chains: Chain Power, The Distribution of Rents, and Implications for the Form of Aid," Duke University working paper.
- McLinden, G. 2011. "World Bank Gap Assessment Study," Symposium on Practical Experience of Implementing Trade Facilitation Reforms. At: http://www.wto.org/english/tratop_e/tradfa_e/case_studies_e/wb_pres_e.ppt.
- McLinden, G., E. Fanta, D. Widdowson and T. Doyle (eds.), 2010. *Border Management Modernization*. Washington DC: World Bank.
- Milner, C. 2013. "Declining Protection in Developing Countries: Fact or Fiction?," *The World Economy*, 36(6): 689-700.
- Moisé, E., and S. Sorescu. 2013. "Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade." Trade Policy Paper 144, OECD.
- Moisé, E., T. Orliac, and P. Minor, 2012. "Trade Facilitation Indicators: The Impact on Trade Costs." Trade Policy Paper 118, OECD.

- Neufeld, N. 2014. "The Long and Winding Road: How WTO Members Finally Reached a Trade Facilitation Agreement," WTO ERSD Working Paper 2014-06.
- Nordås, H., E. Pinali and M. Grosso. 2006. "Logistics and Time as a Trade Barrier," OECD, mimeo.
- OECD. 2012. *The Costs and Challenges of Trade Facilitation Measures*. Paris: OECD.
- OECD. 2014. "The WTO Trade Facilitation Agreement – Potential Impact on Trade Costs," Trade and Agriculture Directorate (February).
- Persson, M. 2008, "Trade Facilitation and the EU-ACP Economic Partnership Agreements," *Journal of Economic Integration*, 23(3): 518-546
- Persson, M. 2013. "Trade facilitation and the extensive margin," *Journal of International Trade & Economic Development*, 22(5): 658-93.
- Portugal-Perez, A. and J. Wilson, 2012. "Export Performance and Trade Facilitation Reform: Hard and Soft Infrastructure," *World Development*, 40(7): 1295-1307.
- Saslavsky, D., and B. Shepherd. 2014. "Facilitating International Production Networks: The Role of Trade Logistics," *Journal of International Trade & Economic Development* 23(7): 979-99.
- Sebenius, J. 1983, "Negotiation Arithmetic: Adding and Subtracting Issues and Parties," *International Organization*, 37(2): 281-316.
- Shepherd, B. 2013. "Trade Times, Importing, and Exporting: Firm-Level Evidence." *Applied Economics Letters*, 20(9): 879-883.
- South Centre. 2011. "Trade Facilitation State of Play and Implications of an 'Early Harvest' for Developing Countries." Geneva: South Centre (May).
- South Centre. 2013. "WTO Negotiations on Trade Facilitation: Development Perspectives," at <http://www.southcentre.int/south-centre-report-15-november-2013/>
- Spence, M. and S. Karingi. 2011. "Impact of Trade Facilitation Mechanisms on Export Competitiveness in Africa," ATPC working paper 85.
- Wilson, J., C. Mann and T. Otsuki, 2003. "Trade Facilitation and Economic Development: A New Approach to Quantifying the Impact," *World Bank Economic Review*, 17(3): 367-89.
- Wilson, J., C. Mann, and T. Otsuki, 2005. "Assessing the Benefits of Trade Facilitation: A Global Perspective." *The World Economy*, 28(6): 841-71.
- World Bank. 2006. "Needs, Priorities and Costs Associated with Technical Assistance and Capacity Building for Implementation of a WTO Trade Facilitation Agreement: A Comparative Study Based on Six Developing Countries," At: http://siteresources.worldbank.org/INTTLF/Resources/Needs_and_Priorities.pdf.
- World Bank. 2012. "Implementing a New WTO Agreement on Trade Facilitation—Likely Costs and Challenges," Customs and Border Management Practice Group, July.
- World Bank. 2014. "Trade Facilitation Support Program," At: http://www.worldbank.org/content/dam/Worldbank/Highlights%20&%20Features/WesternEurope/Geneva/2014/06/TFSP_Factsheet_FINAL.pdf
- WCO. 2002. *International Convention on the Simplification and Harmonization of Customs Procedures* (as amended) (Revised Kyoto Convention). Brussels: WCO.
- World Economic Forum. 2013. *Enabling Trade: Valuing Growth Opportunities*. At: http://www3.weforum.org/docs/WEF_SCT_EnablingTrade_Report_2013.pdf.
- WTO. 2004, "Doha Work Programme: Decision Adopted by the General Council" August, WT/L/579.
- WTO. 2008. "WTO Negotiations on Trade Facilitation: Compilation of Members Textual Proposals," TN/TF/W/43/Rev.14, March 12
- WTO. 2013. "Bali Ministerial Declaration and Decisions," At: http://wto.org/english/thewto_e/minist_e/mc9_e/bali_texts_combined_e.pdf
- WTO. 2014. "Agreement on Trade Facilitation," WT/L/931.
- Yang, D. 2008. "Integrity for Hire: An Analysis of a Widespread Customs Reform," *Journal of Law and Economics*, 51(1): 25-57.
- Zaki, C. 2014. "An empirical assessment of the trade facilitation initiative: econometric evidence and global economic effects," *World Trade Review*, 13(1): 103-30.