Time is distance...and time is money

Reducing delays at the border and in transit can have a dramatic impact on reducing import and export costs, thereby improving competitiveness (Engman, 2005). In 2006, it took, an average 116 days to move an export container from the factory in Bangui (Central African Republic) to the nearest port and fulfil all the customs, administrative, and port requirements to load the cargo onto a ship. As Djankov et al. (2010) point out, roughly the same process took 71 days from Ouagadougou, Burkina Faso, 87 days from N’djamena, Chad, 93 days from Almaty, Kazakhstan, and 105 days from Baghdad, Iraq. This is in stark contrast to the 5 days it took from ship a container from Copenhagen, 6 days from Berlin, 16 days from Port Louis, Mauritius, or 20 days from Shanghai, Kuala Lumpur or Santiago de Chile.

While the number of days has been falling, in Africa, exporter and importers require 50% more time to market exports than in East Asia (Figure 1). These delays compound the existing disadvantages of the [15] countries that are landlocked and are home to 40% of the people living in sub-Saharan Africa. They are already far from markets, and so crossing multiple borders with heavy delays simply drives up costs.

![Diagram: Only by lower costs of trading can countries grow by increasing market share.

Legend:
- Sub-Saharan Africa: 35.6
- South Asia: 32.5
- Eastern Europe & Central Asia: 29.3
- Middle East & North Africa: 24.8
- East Asia & Pacific: 24.5
- Latin America & Caribbean: 22.2
- OECD: 9.8


Each additional day of delay in shipping reduces trade by 1 percent — and adds about 1% to landed costs of exports. Equivalent to 70 km.
Time equals money. Hummels (2001) calculated that a one day border delay drives up costs on average by about 0.8% around the world. Building on this work – and based on a study of 126 countries using a gravity model – Djankov et al. (2010) found that each day in transit had the effect of reducing trade volumes on average by slightly more than 1%. They were able to capture the effects of administrative delays by using the proxy of the number of signatures required to export or import. These delays had the equivalent effect of adding 70 kilometres to the distance between the plant and the final market. The situation was more serious for exporters of perishable agricultural products because delays increased wastage. For these exporters, every additional day of delay reduced exports on average by 6%.

The implications of these findings for trade of developing countries were profound. For example, if Uganda were to reduce its factory-to-ship time from 58 days to 27 (the median for the sample), exports would be expected to increase 31 percent if the averages were to hold. In effect, Uganda would bring itself 2200 km closer to its main trading partners—two-thirds the distance from Kampala to Cairo. Similarly, if the Central African Republic reduced its factory-to-ship time from 116 days to 27, exports would nearly double. “The same effect could be achieved if the Central African Republic cut 6200 km from its distance to the main markets—greater than the distance from Bangui to London” (Djankov et al. 2006: 4-5).

**Measuring (potential) results: The Doha Agenda**

Trade facilitation has figured prominently in the Doha Development Agenda. As a consequence several authors provide rough estimates of the potential gains worldwide from trade facilitation. For example, Decreux and Fontagné (2006) put the gains from the Doha Agenda at about USD99 billion, nearly twice the USD57 billion they estimate from the market access agenda. Similarly, Adler, et al. (2010), extrapolate from the estimated benefits calculated by Wilson et al. (2005) to conclude that
world reforms to customs, port efficiency, and electronic processing would add some USD385 billion to world trade.¹

Hoekman et al. (2009) conclude with characteristic caution:

…even if the focus is limited to reductions in applied levels of trade restrictions, taking into account likely exclusions for sensitive and special products, the associated trade expansion and real income gains are non-trivial – in the USD60 to USD160 billion range. They also illustrate that the non-market access parts of the DDA are very important. Quantifying these is extremely difficult, but the estimates of potential gains from improved trade facilitation illustrate that there is significant scope to generate more trade over and above what is on the table in narrow market terms, especially for many developing countries.

The magnitude of these estimations – imprecise as they necessarily are – illustrates the important links back to the aid for trade agenda launched in Hong Kong.

Measuring actual results: Empirical analysis

The majority of econometric empirical studies on the topic of trade facilitation conclude that improvements in trade facilitation measures are associated with increases in trade flows. This is because reforming customs to increase efficiency, reducing transactions at the border, eliminating bureaucratic interventions that create opportunities for corruption, and adopting procedures to speed goods across borders can lower trade costs for importers and exporters alike. Helble et al. (2009) undertake an analysis of these potential benefits, using gravity estimates from cross-country regressions, with a focus on aid for trade. In particular, they compare the effects of trade development assistance (productive capacity building), trade policy assistance, and infrastructure assistance on bilateral trade flows. They conclude that aid for trade targeted at trade policy and regulatory reform projects produces a high rate of return.

Portugal and Wilson (2008) applied a variant of this same methodology to an analysis of African trade performance, where trade costs are generally higher than in other regions. Using gravity-model estimates, the authors compute ad valorem equivalents of improvements in trade indicators. They conclude that the gains for African exporters from cutting trade costs to twice Mauritius’ level would have a greater positive impact on trade flows than substantial tariff cuts. Similarly, reducing logistics costs in Ethiopia to twice Mauritius’ costs would be roughly equivalent to a 7.6% cut in the tariffs faced by Ethiopian exporters in all their foreign markets.

¹ Not coincidentally, this is nearly the same estimate as the World Bank’s Global Economic Prospects 2004 contained before trade facilitation was actually accepted for negotiation – not surprisingly because it also used preliminary work of Wilson, Mann, and Otsuki. (see World Bank, 2003: 194).
What do the case stories tell us?

Some case stories had elements that warranted their association with the trade facilitation theme. Most case stories classified under trade facilitation recounted experiences in sub-Saharan Africa:

Figure 1 Trade Facilitation by Regional Distribution

In terms of income distribution, they mostly came from low-income countries (although more than half regarded regional/global agglomerations with heterogeneous income classifications)

Figure 2 Trade Facilitation by Income Group
Also, most were submitted in the most part by beneficiary governments or regional economic partnerships:

![Figure 3 Trade Facilitation by Author](image)

The 48 case stories under the trade facilitation theme describe a wide variety of efforts to lower cross-border trading costs. These take several forms: (i) integrated trade facilitation programmes spanning strategy and investments, sometime with a regional focus; (ii) customs and logistics reform efforts; and (iii) corridor-focused programmes. Three projects typify the several case stories in the larger collection, and illustrate ways trade facilitation can lead to enhanced trade. These include projects from Montserrat, East Africa, and Zambia-Zimbabwe.

**Integrated trade facilitation programmes**

Some projects combined investments in infrastructure and accelerated customs procedures with regional integration programmes. The Mesoamerica Project, for example, sought to improve the ease with which goods moved within Central America. The project, begun in 2008 by the IADB, entailed investments in road infrastructure that by 2015 are projected to cut average freight travel times from 8 days to 2.25 days; in accelerated customs procedures forecast to reduce average border crossing time from 60 minutes to 8; in the creation of a regional electricity grid projected to produce generating-costs savings of 20%; and in telecommunications service integration. The project has modest accomplishments to date, including the completion of survey work on the quality of roads, initial implementation planning for key measures, and the completion of 90% of the backbone fibre optic cable for the region. While the overall project is generally on schedule, continued high-level official involvement is necessary to ensure its timely completion [Latin America, 120].

Mexico offers an example of linking the "export side" of trade facilitation with a more efficient "import side", as well as with improvements in domestic business regulations. A central component
of Mexico’s “National Agenda for Competitiveness” is the goal of improving import efficiency by reducing and simplifying tariffs. Between 2008 and 2010, Mexico unilaterally reduced its average industrial tariffs from 10.4% to 5.3%. By 2013, it expects that 63% of its tariff lines will be duty free, reducing its average industrial tariff to just 4.3%. All of these changes allowed Mexico to move from 74 to 22 in the World Economic Forum’s rankings for market openness. At the same time, the trade-distorting variance of tariffs will drop by a quarter in standard deviation, from 9.0% to 6.6% by 2013.

On the export side, the Mexico eliminated several export requirements and established an "electronic single window" to simplify access to required filings. In addition, an electronic application process has been adopted to accelerate business registrations. Mexico also conducted a “Base 0” regulatory review and eliminated 12,234 internal regulations and 1,358 bureaucratic steps for businesses. This combination of regulatory improvements is projected to save Mexican businesses and citizens USD 3.9 billion over a six year period [Mexico, 114].

Other countries also adopted integrated programmes to promote trade across borders. The Lao PDR did so under the auspices of the Trade Development Facility and the Enhanced Integrated Framework, with the help the AusAID, the World Bank, Swiss Government and the EU. This initiative has resulted in coherent action plans in four subsectors to promote trade. It has also trained more than 1000 officials and launched the Lao Trade Research Digest [Lao, 155]. In the Caribbean, CARICOM established, with DFID support, the CARTFund programme to spur Caribbean integration and to implement EPA-inspired reforms. Established in 2009, CARTFund is still in its infancy, but regional demand appears to be outstripping supply [Caribbean, 25; Caribbean 153]. Similarly Nigeria’s “Strategic Trade Facilitation Action Plan” has succeeded in creating a forum within which stakeholders can discuss deepening regional integration in ECOWAS and efforts to “embrace accelerated trade liberalisation at our own pace” [Nigeria, 7]. The Regional Strategy for UEMOA has also spearheaded a wide range of activities to promote trade, ranging from streamlined border crossings and customs procedures, to harmonised tax policies and investments in capacity building [West Africa, 266]. Surinam’s "Improving Trade Facilitation Environment" project brings together efforts to expand the main port and cargo handling facilities, to improve customs procedures through risk management, and to identify future infrastructure investments and institutional improvements (including installation of ASYCUDA World). An important achievement of this work to date, aside from shrinking time to trade, has been Suriname’s success in raising awareness about the importance of reducing trade costs [Suriname, 94].

**Customs reform and logistics management projects**

More than a dozen case stories told of government efforts to improve customs and logistics. These included, for example, programs in Africa [15], Central America [122], Ecuador [43], Ethiopia [166], Haiti [246], Macedonia [189], Mongolia [260], Montserrat [5], Mongolia [6], Suriname [94], Tunisia [130], and Uganda [239]. In Southern Africa, for example, SADC is sponsoring the reform of a region-wide tariff system and customs administration as it moves toward a full customs union. The project includes work on the legal and institutional framework, the common external tariff, a three year training strategy to build capacity, and the organisation of Business Partnership Forums. These efforts, sponsored by the EU, are still in their initial phases [Southern Africa, 15].

Cameroon launched major customs reforms in 2007 and 2010, with the support of the World Customs Organisation, the French Development Agency and the World Bank. The customs agency,
responsible for a large share of total government revenues, adopted a series of quantified indicators in 2008 as part of a broader reform program ultimately aimed at introducing performance contracts. This provided for monthly reviews of some 30 indicators of 11 customs offices around the country – monitoring and assessing, among other things, imports, customs officers’ performance (mostly in terms of processing delays), “officers at risk”, and anti-corruption enforcement. To ensure follow-up, a second round of indicators, designed in co-operation with customs officials, was adopted in 2010. The results were dramatic: time between broker registration and officer assessment fell on average by 75% in two offices as compared with only 38% in a “control group” office. The number of declarations processed rose by 20 to 30%. Time savings averaged 10-14 hours. And revenues per container increased 11.7% in 2010 compared with 2009. These and other performance data form part of the evaluation of inspectors’ annual performance, and contribute to good officers being promoted and others being transferred [Cameroon, 164]. In Burundi, tax-revenues also increased by a quarter between 2009 and 2010 after the implementation of the Burundi Revenue Office2[Burundi, 211].

The World Bank’s export development project in Tunisia has also borne fruit. The USD 50 million project created a market access fund, a pre-shipment export finance guarantee facility, improved logistics management, and a customs procedures efficiency project. The market access fund offers co-financing for firms and professional associations to spur investment in market research, to finance the acquisition of equipment, and to sponsor workshops, and to provide matching capital for selected projects. The customs and logistics components were estimated to reduce cargo delays by about two-thirds – from an average of 10.1 days in 2003-2004 to 3.3 days in 2010. The project also aims to improve technical standards and intellectual property rules to meet WTO requirements. Overall, the project had increased exports by more than USD 400 million by May 2010, more than one third of which represented new exports to new markets. According to the case story, increased employment resulting from the project amounted to some 50 000 full time and 50 000 part-time jobs for the firms involved [Tunisia, 130].

**Corridor projects and efforts to speed border crossings**

Programs that treat trade facilitation, not simply as a border issue, but as an integrated policy challenge involving the whole of a transport corridor and multiple facets of trade are increasingly common. For example, the Greater Mekong Sub-region undertook to enhance trade by constructing bridges and roads in conjunction with its Cross Border Transport Agreement (CBTA). One objective was to promote foreign investment. Although politically complicated, the project eventually led to an agreement in 2006 among Vietnam Lao, and Thailand that each country would license 500 trucks to operate without restrictive cabotage provisions along the newly created East-West corridor. The savings, both in terms of lower transport costs and reduced trans-shipment times are expected to have a major impact on the region’s development [Southeast Asia, 163].

Improving the North-South Corridor in Africa remains a high priority of governments and donors; three separate case stories describe the improvements to the Chirundu Border Post [Zimbabwe, 107; Zambia, 171; Southern Africa, 140]. According to one account, the journey along the corridor

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2 With the support from the Belgian government, United Kingdom Department for International Development (DFID), German Technical Cooperation (GTZ), International Monetary Fund, Rwanda Revenue Authority and World Bank
used to entail “one-third driving and two thirds waiting” at the border [Southern Africa, 140]. But the creation of a one-stop border post has greatly expedited movement through a common control zone, improved work-flow efficiencies, and supplied the equipment needed to undertake pre-clearance of persons, vehicles and goods. The COMESA Secretariat has provided the institutional "home" and offices for the project, and the relevant ministries of trade and commerce has provided essential political and policy leadership – vital because the project required legal reforms, redesigning and revamping procedures on both sides of the border, new infrastructure, and new investments in information and communications technologies. Partner donors, including the Japanese government, DFID and the World Bank, provided resources for critical components. The benefits have been tangible: clearance times for buses and autos have been reduced by one half; and clearance times for commercial trucks have been reduced from 5 days on average to less than 24 hours, and with "fast lane" trucks cleared in under 5 hours. The positive spin-offs have been significant. Rapid, automated and standardised clearance procedures have reduced the illicit payments that multiple agencies previously charged for clearance procedures, while the reductions in border delays has reduced the sex trade as well as the spread of sexually transmitted diseases, such as HIV-AIDS.

The goal of the East Africa Trade and Transport Facilitation Project is to stimulate trade within the East African Community. This USD 260 million World Bank-funded project, in coordination with companion projects financed by the EU, the AfDB, JICA, and DFID, is designed to improve traffic flow through the Northern Corridor, linking the Kenyan port of Mombasa, through Nairobi, to Kampala, Uganda, Kigali, Rwanda, the DRC, and South Sudan. Investments in more efficient border procedures have reduced delays from three days to three hours. Transit times from Mombasa to Kampala have dropped from 15 days to five days. Average waiting times in the Mombasa port have fallen from 19 to 13 days. This means that the average truck can make three trips per month along the corridor rather than the previous 1.5 trips, improving truck utilisation and reducing costs. Since this also means that export crops such as tea, are in transit for shorter periods, thus reducing financing costs. These savings translate into higher incomes for farmers through earnings on a greater volume of exports [East Africa, 129].

Despite the compelling logic of one-stop border posts, in practice these projects are far more difficult to orchestrate and implement than the name would suggest. As shown above, complex political, procedural, and institutional changes are often required to advance the project; and these changes often threaten interest groups profiting from the status quo. Moreover, one-stop border posts usually require a level of inter-governmental coordination that can be politically challenging because it involves multiple levels of bureaucracy on both sides of the border. The difficulties involved in attempting to improve the Beitbridge Border Post separating South Africa and Zimbabwe — including lengthy delays in signing the MOUs — highlights the need for effective and high-level intergovernmental coordination [Southern Africa, 267]. The ways that normal coordination challenges can be magnified when working at the sub-regional level and across many countries was revealed in the start-up issues confronting the COMESA-EAC-SADC tripartite trade facilitation effort in East and Southern Africa [Africa, 145].

The ECOWAS Commission and the USAID West Africa Trade Hub submitted a joint case study on the ECOWAS Trade Liberalization Scheme (ETLS) – an effort to identify where problems are arising in the national implementation of regional protocols. Visa-free movement of persons has been a success,
but less progress has been made in the free movement of goods and transport. Difficulties cited include incompatible national legislation, differing vehicle standards, varying inspection requirements and divergent axle load limits. The result is a complex web of conflicting national rules that makes compliance with the regional protocols impossible. This situation also creates opportunities for “irregular practices”. The case story also suggests that companies which benefit from informal trade barriers (e.g., continuing tariff restrictions or non-tariff barriers, such as seasonal bans), as well as the agencies that collect revenue (both formally and informally), may not favour ETLS implementation. Quarterly surveys of the private-sector conducted by the Observatoire des Pratiques Anormales highlight the negative impact that continuing restrictions and irregular practices have on trade in the West African region [West Africa, 42].

Finally, two case stories report on studies using cross-country data and econometrics to examine the link between aid for trade and trade costs. UNECA draws attention to a forthcoming study by Stephen Karingi and V. Leyaro will show that an increase in aid for trade is associated both with greater export diversification and lower transportation costs [Africa, 104]. Similarly, the Commonwealth Secretariat points to several studies that demonstrated the significant effects of aid for trade, including one study which argued that doubling aid-for-trade increases is associated with a 5% decrease in the cost of importing [Global, 34].
References


