Background Paper for the WCO Revenue Conference

(June 2014)

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Abstract

This paper aims to analyze the potential impact on Customs revenue that implementation of the WTO Trade Facilitation Agreement (TFA) entails. Taking into account elements for upward and downward revenue, this paper contends that TFA implementation is likely to have a positive impact on Customs revenue particularly through increased trade, higher trader compliance, and more recovery of revenue loss. Although several TFA measures could potentially precipitate a decrease in revenue, the impact of such measures could be negligible, or outweighed by the increase in revenue resulting from TFA implementation. It appears that additional revenue resulting from TFA implementation would be sustainable, and would have a positive impact on domestic revenue mobilisation especially in developing countries where Customs revenue accounts for a substantial portion of government tax revenue.

Key words

Customs Revenue, WTO Trade Facilitation Agreement

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Note

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1. Introduction

The WCO Revenue Conference will take place from 30 June to 1 July 2014 at the WCO Headquarters in Brussels. This is the second global conference on the topic of revenue organized by the WCO after the WCO Revenue Management Conference, which took place in December 2009. The 2009 Conference confirmed that revenue management was of the utmost interest and of importance to many Customs administrations, and suggested that the WCO should engage in this matter actively.1

The WCO has placed a high profile on revenue management matters in its strategic work programmes. The WCO has published information of revenue collected by Customs administrations on an annual basis since 2012.2 In addition, the WCO Revenue Package, aiming to ensure fair and efficient revenue collection by Customs administrations, has made significant progress since its launch in 2009.3 Following the implementation of new tools relevant to the control of Customs valuation, classification, preferential origin and post-clearance audit in 2012, work is continuing under the WCO Strategic Plan.

This Revenue Conference has multiple objectives; however, an overarching goal is to provide the Customs community with practical “food for thought” going forward. Additionally, the Conference will provide ample opportunities for dialogue on a range of revenue-related issues among Customs administrations, tax authorities, the private sector, and other stakeholders in responding to the ever-changing Customs environment.

One of the recent landmarks for the Customs community is the WTO Trade Facilitation Agreement (TFA) concluded in December 2013 as part of the WTO Doha Development Agenda (WTO, 2013a). The TFA is expected to take effect once accepted by two thirds of the WTO Members.4 It is a new binding agreement with approximately 50 measures, most of which are intended to improve Customs procedures and proceedings at and behind borders, as well as, to a lesser extent, other border procedures (Annex). Consequently, the effective implementation of the TFA is heavily contingent upon Customs (WCO, 2013a), and it is imperative that they be equipped with the knowledge regarding the potential impacts when implementing the TFA.

Many governments of developing countries particularly those least-developed countries (LDCs) where a substantial portion of their government tax revenue relies on Customs administrations seek more information on the potential revenue impact. One of the concerns expressed by the private sector was that the TFA would lead to “irreplaceable loss of tariff revenue” of developing countries (Third World Economics, 2013) while many researchers have contended that trade facilitation would improve revenue collection (WTO, 2013b). Moreover, some developing countries might fear that the cost of TFA implementation might negatively impact their public spending for priorities such as health care, education and poverty eradication (South Centre, 2014).

In response to the numerous debates in this realm, this Conference has established a panel discussion during Session 4 entitled Revenue and the WTO Agreement on Trade Facilitation. This paper thus aims to analyze the potential revenue impact of implementing the TFA based on the information publicly available in order to provide the participants of the panel discussion with background information.

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2 The WCO Annual Reports are available at: www.wcoomd.org
3 Further Information on the WCO Revenue Package is available at: www.wcoomd.org
4 The TFA will take effect for the Members that have accepted it upon acceptance by two thirds of the WTO Members, and thereafter for each other Member upon acceptance by it, in accordance with Article 10.3 of the Marrakesh Agreement (WTO, 2013a).
For convenience, this paper defines the term “Customs revenue” as the totality of duties and taxes collected by a Customs administration. An increase or decrease in Customs revenue can be attributed to a variety of factors beyond TFA implementation. The impact may also vary country by country as it depends on the degree to which respective counties have already implemented the measures compliant with the TFA, and to which they will implement the TFA measures in future. Furthermore, the impact may vary among countries where their revenue and tariff structure, regulatory framework and trade patterns are diversified. It is thus impossible to identify a sole causality or the degree of any impact on Customs revenue precisely.

To keep the background information and limitations above in mind, the second section identifies the potential elements for upward or downward Customs revenue that the TFA may entail. They are supported by case studies, where appropriate. The third section considers the impact of TFA implementation on domestic revenue mobilization, taking into account Customs revenue data collected during a survey to WCO Members. The fourth section entails conclusions based on this paper’s findings, and the fifth section presents key questions for the panel discussion of the Conference.

2. Customs revenue

2.1 Elements for upward revenue collection

*Increased cross-border merchandise trade*

Customs revenue will likely increase as cross-border merchandise trade expands given that tariff rates remain unchanged. Hufbauer and Schott (2013) estimated that the TFA could increase global imports by US$1 trillion. This study was often cited in subsequent speeches and documents (WTO, 2013b; 2013c; ITC, 2013; USTR, 2013) although it might overestimate the effect (Capaldo, 2013). Wilson, et al. (2005) suggested that global trade would grow by US$33 billion if “below-average” countries deliver improvements in the Customs environment “halfway” to average levels, and most of the trade increase would take place in the countries improving the Customs environment. At any rate, it can be reasonably expected that the TFA implementation will lead to more trade flows.

There are several distinct paths where TFA implementation will signify a consequent increase in trade. Firstly, trade expands when border procedures undergo an improvement with regard to transparency and predictability. Amongst the TFA measures, publication (Article 1.1), information available through internet (Article 1.2), enquiry points (Article 1.3), consultations (Article 2.2), advance rulings (Article 3), and procedures for appeal or review (Article 4), amongst others, are considered as such transparency or predictability-enhancing measures. Helble, et al. (2007) estimated that intra-APEC trade would increase by 7.5% if all APEC economies undergo an improvement in transparency up to the average level of the region. The business community has often contended that improving transparency and predictability is crucial to delivering real benefits to traders particularly small and medium-sized enterprises (SMEs) because they suffer from disproportionate burdens in completing Customs and other border formalities (ICC, 2012; ITC, 2014 and WCO PSCG, 2013).

Secondly, trade expands when direct costs involving border procedures are reduced. The TFA would achieve a reduction in direct costs with reduced formalities and documentation requirements (Article 10.1), acceptance of copies (Article 10.2), and single window (Article 10.3), amongst others. The OECD (2014) estimated that trade costs would be potentially reduced by 14.1% for low income countries; 15.1% for lower middle income countries; and 12.9% for upper middle income countries in cases where all WTO Members fully implement the TFA. The OECD (2009) also suggested that for every 1% reduction in
global trade costs would be a consequent increase in global trade volumes, thus increasing global incomes by up to US$40 billion.

Thirdly, trade expands when goods are promptly released from borders. Unnecessary border delays constitute an indirect cost for trade (OECD, 2009). If changes in border procedures reduce goods release times at a port by 50%, its port capacity would be theoretically doubled without any investment in port infrastructure (Raballand, et al., 2012). Djankov, et al. (2006) found that a saving of one-day in shipment times increased trade flows by more than 1%. Reducing times at borders by 5% in sub-Saharan Africa could lead to a 10% increase in intra-regional trade (European Commission, 2013). The TFA contains measures for such prompt release of goods at borders, for example, pre-arrival processing (Article 7.1), separation of release from final determination of Customs duties, taxes, fees and charges (Article 7.3), risk management (Article 7.4), de minimis for expedited shipments (Article 7.8), and border agency cooperation (Article 8).

**Higher trader compliance**

High levels of trader compliance are considered to ensure the effective collection of Customs revenue. Promoting trader compliance is regarded as a cornerstone of the modern approach that Customs has adopted towards the business community. Customs administrations are able to discharge their functions in a fair and efficient manner with decreased administrative cost, while traders receive benefits such as the prompt release of goods or frequency decrease in goods inspections (WCO PSCG, 2013). Authorized operator (Article 7.7), voluntary compliance to allow importers to self-correct without penalties (Article 12.1), penalty disciplines (Article 6.3), and business cooperation (Article 2.2) in the TFA, amongst others, are considered to have this kind of effect.

As a result of promoting trader compliance, for example, New Zealand Customs Services (2011) reported that 96% of import transactions were compliant without physical or documentary inspections in 2009. For Indian Customs, voluntary compliance of traders constitutes one of the core visions of the Administration (CBEC, 2008). While governments have made continuous efforts to improve transparency and predictability of border procedures, border procedures may remain complicated for traders particularly SMEs. In the TFA, thus, traders are given an option to use Customs brokers for border procedures on their behalf (Article 10.6), by which it is expected that the risk of unintentional errors or mistakes contrary to regulatory requirements is diminished.

**More recovery of revenue loss**

Customs revenue or receipts will increase through the detection of Customs fraud of goods crossing borders, such as under- or over-invoicing, smuggling, transit/transhipment fraud and origin fraud. There does not appear to be universal consensus regarding loss of Customs revenue at the global level. Nevertheless, efforts to identify Customs fraud by examining discrepancies in trade statistics between importing and exporting countries are underway. The World Bank (2013), in cooperation with the WCO, released a case study on mirror trade statistics in Cameroon. The Global Financial Integrity (2014) roughly estimated the possible annual Customs revenue loss owing to mis invoicing (under- and over-invoicing) in the range of 7.4-12.7% of government revenue in five countries (Tanzania, Kenya, Mozambique, Ghana and Uganda) in sub-Saharan Africa (Table 1).

Table 1: Tax Revenue Loss via Trade Mis invoicing in five countries in Sub-Saharan Africa

<table>
<thead>
<tr>
<th>Annual Tax Revenue Loss via Trade Mis invoicing</th>
<th>Tanzania</th>
<th>Kenya</th>
<th>Mozambique</th>
<th>Ghana</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>In US$ million, on average 2002-2011</td>
<td>248</td>
<td>435</td>
<td>187</td>
<td>386</td>
<td>243</td>
</tr>
<tr>
<td>As % of Total Government Revenue</td>
<td>7.4%</td>
<td>8.3%</td>
<td>10.4%</td>
<td>11.0%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

(source) The Global Financial Integrity (2014)
Joossens, et al. (2009) estimated that 11.6% of the global tobacco market was illicit, and that worldwide governments suffered illicit tobacco trade estimated at US$40.5 billion in lost revenue per year. US$31.3 billion in tax revenue could be recovered if the illicit tobacco trade was eliminated globally (Table 2). It is noted that the revenue loss fell disproportionately on low and middle income countries (i.e. US$22.9 million out of US$40.5 billion), therefore such countries would potentially gain more with the elimination (i.e. US$18.3 billion) than high income countries (i.e. US$13 billion).

Table 2: Revenue Generated and Lives Saved with Elimination of Global Illicit Tobacco Trade (in US$)

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>High Income Countries</th>
<th>Low and Middle Income Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Situation</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total illicit cigarette market (% of consumption)</td>
<td>11.6%</td>
<td>9.8%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Total illicit cigarette market (cigarettes per year)</td>
<td>657 billion</td>
<td>124 billion</td>
<td>533 billion</td>
</tr>
<tr>
<td>Total revenue lost to governments</td>
<td>$40.5 billion</td>
<td>$17.6 billion</td>
<td>$22.9 billion</td>
</tr>
<tr>
<td>Estimated deaths in 2030</td>
<td>8.3 million</td>
<td>1.5 million</td>
<td>6.8 million</td>
</tr>
<tr>
<td><strong>If This Illicit Trade Were Eliminated</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate gain in revenue</td>
<td>$31.3 billion</td>
<td>$13 billion</td>
<td>$18.3 billion</td>
</tr>
<tr>
<td>Lives saved in 2030 and annually thereafter</td>
<td>164,000</td>
<td>32,000</td>
<td>132,000</td>
</tr>
</tbody>
</table>


Amongst the measures that the TFA provides, post-clearance-audit (PCA, Article 7.5) is an example of the measures used to recover revenue loss. With PCA, for example, Japan Customs collected approximately US$300 million in the 2012 fiscal year, the equivalent of approximately 1% of its annual Customs revenue (Japan Customs, 2013). PCA, referred to as post-release verification in Canada, led to a fiscal injection of US$128 million in the fiscal year 2010 (CBSA, 2011). Taking into account the number of verification officers, each officer in Canada annually collected US$0.35 million on average through PCA (Table 3).

Table 3: Results of post-clearance audit in Canada (Fiscal year 2010)*

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td># of Verification Officers:</td>
<td>369</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Verifications completed:</td>
<td>3,143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value for Duty identified to be in error:</td>
<td>US$2.9 billion***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenue assessed (duties and taxes):</td>
<td>US$53 million***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage error rates in total value for duty by program:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tariff Classification:</td>
<td>18.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Origin:</td>
<td>6.44%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Valuation:</td>
<td>7.13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value for Duty of **Entry Adjustments processed:</td>
<td>US$17 billion***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duties and Taxes collected from <strong>Entry Adjustments processed:</strong></td>
<td>US$128 million***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* All figures are approximate and are a general representation of post-verification results for Canada. ** Entry Adjustments = corrections to import declarations, post-Verification *** US$ equivalent, calculated by an exchange rate to US$ as of 11 June 2014.

(source) Based on Table of CBSA (2011, p.5)

To cite another measure of recovering revenue loss, the TFA contains provisions for exchanges of information between Customs administrations (Article 12.2-12), whereby
importing Customs administrations could request information on goods when they are exported, including invoice values and exporters of goods, from exporting Customs administrations. This is considered effective when the importing Customs administration attempts to verify the accuracy of the information and identify undervaluation or other irregularities of the goods at the time of importation. Using an information exchange system on transit goods called RADDE\textsubscript{X} (Revenue Authorities Digital Data Exchange) between member states of the East African Community (EAC), for example, many fraud cases have been detected, one of which resulted in revenue recovery of as much as $US 89,000 (Yasui, 2011). The New Computerized Transit System (NCTS), a computerized transit system based on the exchange of electronic messages in Europe\textsuperscript{5} has proved that it has effectively prevented transit fraud (Yasui, 2013).

2.2 Elements for downward revenue collection

De-minimis

The introduction of a de-minimis system (Article 7.8.2d) likely decreases Customs revenue as the system entails exemptions of Customs duties for shipments with small values or duties. It should be noted that this is one of the measures provided for in the Revised Kyoto Convention (RKC), namely “National legislation shall specify a minimum value and/or a minimum amount of duties and taxes below which no duties and taxes will be collected.”\textsuperscript{6}

Revenue impact of introducing a de-minimis system depends on threshold value or dutiable amount for which no Customs duty is collected. The TFA allows its signatories to determine the threshold value or dutiable amount. The WCO Immediate Release Guidelines recommends SDR 50 (approximately US$78) as the threshold value of shipments.\textsuperscript{7} According to the provisions contained within certain regional trade agreements (RTAs), several countries including the United States, Republic of Korea, Columbia and Peru are committed to no Customs duties or taxes for the express shipments valued at US$200 or less (Yasui, 2014). Under the APEC framework, 10 APEC economies are politically committed to maintaining de-minimis thresholds for threshold values equivalent to US$100-350 respectively.\textsuperscript{8}

The CAPEC (2011) roughly estimated that a de-minimis threshold of US$200 would generate economic benefit of more than US$30 billion among the 21 APEC economies, of which cuts in government administrations accounted for 74% while savings in business compliance accounted for most of the rest. The study also found loss of Customs revenue to be very low, estimating that loss of tariff revenue amounted to less than 1% of the savings; and loss of VAT revenue amounted to 4% at most. The study contended that such a loss could be attributed to the fact that the potential revenue base has been substantially eroded by preferential tariff rates of RTAs as well as the existing de-minimis exemptions in the APEC economies.

Risk management

Risk management (Article 7.4) is another feature of modern Customs procedures, and considered as a prerequisite for many other measures including post-clearance audit or

\textsuperscript{5} The NCTS currently operates in the 28 EU member states, the 4 EFTA member states, Croatia and Turkey. Further information on the Common Transit System is available at: http://ec.europa.eu/taxation_customs/customs/procedural_aspects/transit/common_community/index_en.htm


\textsuperscript{7} US$ exchange rate for SDR (Special Drawing Right) 1 is 1.55292 as of 1 May 2014, available at www.imf.org

\textsuperscript{8} APEC (2011) and based on exchange rates to US$ as of 4 June 2014
pre-arrival processing (Yasui, 2014). The system enables Customs officers to focus its resources on high-risk consignments while facilitating low-risk consignments (WCO, 2012).

Considering it impossible “to be risk-free” at borders (New Zealand Customs Services, 2011, p.14), Customs administrations inevitably run the risk of overlooking undervaluation or other financial fraud leading to leakage of Customs revenue. The risk, however, may be significantly reduced through refining risk profiles and using various risk assessment techniques, etc. A system of 100% border inspection does not guarantee 100% compliance, and many Customs administrations have adopted a multi-layered approach in order to reduce the risk, for example, prior to arrival of goods, at borders and post release of goods from borders (Geourjon, et al., 2004).

Geourjon, et al. (2004) argued that 100% inspection would be ineffective considering the ample opportunities available for corruption. There is no unequivocal estimate on the degree to which such revenue leakage can be attributed to risk management systems. However, New Zealand Customs Services reported that Customs revenue was not jeopardized or levelled at least as a result of the introduction of effective risk management processes in the mid-1990s (Box1).

Box 1: Risk Management: New Zealand’s experience

Since 2000, the number of import and export transactions has increased significantly (for example from 1 million import entries in 2000, to 4 million in 2011). The need for change led to the Customs Modernization (CusMod) program of the 1990s. This large increase in transactions has largely been managed without any significant cost increases for Customs, largely because of the risk management systems introduced in the mid 1990s. These key measures enabled Customs to assess all transactions for risk, and to only intervene when required. Key measures that support the approach also included:

- Electronic clearance of customs declarations prior to the physical arrival of the goods;
- Advance rulings and review and appeal mechanisms;
- Deferred payment schemes;
- Published regulations and procedures, including on the Internet;
- Strengthening of client service and the working relationship with the trading community;
- Penalties and sanctions for non-compliance;
- Voluntary disclosure; and
- Post clearance audit mechanisms.

96% of import transactions are compliant and proceed without any intervention. Less than 5% of import transactions are subject to further compliance checks or inspection. This provides Government with the assurance that revenue is being collected efficiently and effectively, and that border risks are mitigated. Customs maintained efficient revenue collection processes. In the five years after introduction of CusMod, the amount of revenue collected by Customs increased as a result of the introduction of more effective risk management processes.
Prohibition of pre-shipment inspection

If one of the objectives of using pre-shipment inspection (PSI) services in relation to tariff classification and Customs valuation is enhancing revenue collection, its prohibition (Article 10.5) could cause a negative impact on Customs revenue. According to the WTO (2014a), 21 developing countries are using such services or similar services, most of which are located in west and central Africa.

The WCO has encouraged its Members availing of such services to terminate the contracts and to assume responsibility for the core Customs functions, or otherwise to consider such services as a short-term solution in exceptional circumstances such as post-conflict situations (WCO, 2014). The WCO is also advising its Members who are considering termination of such contracts to plan well in advance to ensure that they have the capacity to take on functions such as valuation control, so that there is no adverse effect on the revenue.

An increasing number of countries including Kenya and Nigeria have successfully taken ownership of these core functions and experienced an increase in revenue after their termination. In Kenya, it was reported that annual Customs revenue grew after its phase-out of PSI in 2001 from KSH 230 billion to KSH 300 billion within the first year of implementation, currently reaching KSH 750 billion (KRA, 2014). One of the lessons learned in Kenya was that the cost savings have enabled financing of Customs reforms. Although this may not be true in all cases, the underlying implication is that prohibition of PSI services in relation to tariff classification and Customs valuation does not always have a negative impact on Customs revenue.

Voluntary disclosure without penalties

The TFA encourages voluntary compliance which allows importers to self-correct without penalties (Article 12.1). This measure is supported by the ICC Customs Guidelines (ICC, 2012). Several countries including Australia, Canada, Japan, New Zealand, Singapore, and the United States have already implemented this measure (WCO, 2013b). If it is effectively used, Customs administrations will forgo monetary penalties due, where applicable. There does not appear to be quantitative estimation publically available regarding forgone monetary penalties accruing to voluntary disclosures.

On the other hand, voluntary disclosure could increase Customs revenue due to improved trader compliance, while decreasing administrative cost for investigation, post-clearance audit, or other enforcement actions (WCO, 2013b). In this case, loss in monetary penalties might be compensated by the additional revenue, although no quantitative estimation appears to be publically available.

Temporary admission of goods and inward/outward processing

Both temporary admission of goods (Article 10.9a) and inward/outward processing (Article 10.9b) entail partial or full exemption (or refund) of import Customs duties as well as other duties and taxes under certain conditions specified in national laws and regulations. If such procedures are effectively used, a subsequent decrease in Customs revenue is inevitable, although no quantitative estimation appears to be available publically.
2.3 Implications

Taking all of the aforementioned elements for upward and downward Customs revenue into account, Customs revenue after TFA implementation will most likely experience a boost particularly through increased trade, higher trader compliance, and more recovery of revenue loss. Although at least 6 TFA measures might lead to a decrease in Customs revenue, the impact of such measures would be negligible, or outweighed by the additional revenue resulting from TFA implementation.

Most TFA measures would likely have little impact unless they are actually utilized by traders, while the effects of several TFA measures could be obtained automatically after implementation (e.g. disciplines on fees and charges, and penalty disciplines) or without relying on traders (e.g. exchange information between Customs administrations). In cases where no advance ruling is issued after the introduction of an advance ruling system, for example, no effect can be expected despite the governments’ protestations that their country is TFA-compliant. Furthermore, importers were sometimes found to be keeping inbound cargo at borders, even if they proved capable of releasing the cargo earlier adhering to a number of measures in line with the TFA (See Box 2).

Box 2: Why cargo dwell time matters in trade

Over the last decade, international donors have assumed that controlling agencies such as customs are primarily responsible for long port delays, with infrastructure issues as the secondary cause. Data collected in a new study suggest that this assumption is incorrect in most ports in sub-Saharan Africa (SSA). Cargo dwell times (referred to as the time cargo (containers) spend within the port or its extension) in SSA ports are unusually long - more than two weeks on average, compared to under a week in large ports in Asia, Europe, and Latin America. Excluding Durban and Mombasa, average cargo dwell time in most ports in SSA is close to 20 days. Analysis demonstrates that cost-minimization and profit-maximization strategies may explain why behaviors that seem irrational, such as leaving cargo in the port, are in fact the best option for an importer.

Poor handling and operational dwell time generally account for no more than 2 days out of at least 15 days of dwell time on average in SSA. Most delays are due to transaction and storage time, resulting from controlling agencies’ performance and, more importantly, the strategies of importers and customs brokers. In SSA, importers often have strong incentives to use ports as storage areas. At the Douala port, for example, storage in the port is the cheapest option for an importer for up to 22 days (11 days beyond the container terminal’s free time). Firm surveys demonstrate that low logistics skills and cash constraints explain why most importers have no reason to reduce cargo dwell time; in most cases, it would increase their input costs. In addition, collusion of interests may reinforce rent-seeking behaviours among shippers, intermediaries, and controlling agencies. Some terminal operators earn large revenues from storage. Customs brokers do not fight to reduce dwell time because the inefficiency is charged to the importer and eventually to the consumer.

Prevaling market structure also helps explain the durability of certain patterns in cargo dwell time. Firm surveys show that companies may use long dwell times as a strategic tool to prevent competition, similar to a predatory pricing mechanism. Incumbent traders and importers, as well as customs agencies, terminal operators, and owners of warehouses benefit from long cargo dwell times (two to three weeks), which act as a strong barrier to entry for international traders and manufacturers. Delays at port also may be considered a means to sustain comfortable rent generation. Cargo dwell times in SSA show an abnormal dispersion, with evidence of discretionary behaviours that increase system inefficiencies and total logistics costs.

In Durban, two factors have helped improve dwell time: a strong, domestic private sector with interests in global trade, and a public sector willing to support it. A “penalty storage” fee has discouraged long-term storage at the port and has helped Durban maintain a dwell time of three to four days, comparable with ports in Europe and the lowest in SSA. Using Durban’s example and simulations of container movements in a port terminal, simulations suggest that a reduction of dwell time from one week to four days would more than double the capacity of the container terminal without any investment in physical extensions.


It appears therefore extremely important for governments in both developed and developing countries to ensure that the TFA is implemented in the best performance and
quality possible to ensure real benefits. Enacting laws and regulations compliant with the TFA will not be the end of the story. Governments need to work continuously to the implementation to ensure that they benefit from any positive effects on Customs revenue and other expected benefits.

To this end, governments should first encourage traders and other stakeholders to actually and effectively make use of TFA measures. Furthermore, they might be required to implement extra-measures beyond the TFA, including the establishment of user-friendly automated systems. The RKC provides hundreds of standards and recommendations to harmonize and simplify Customs procedures beyond the TFA. Furthermore, equipment and infrastructure as well as the quality of trade-related services should be improved simultaneously. Recognizing the importance of quality implementation beyond simple TFA implementation, it is advisable that Customs administrations use a common set of performance indicators to measure the effectiveness or the quality of implementation for respective TFA measures, and that they share the results each other as well as amongst their partners.

3. Domestic revenue mobilization

3.1 Customs revenue structure

Revenue collection remains an important mission of many Customs administrations around the globe, although the share of Customs import duties in terms of government tax revenue has declined as their import tariff rates dropped through multilateral, regional, bilateral and unilateral actions in many countries. Han (2014) revealed that nearly 70 percent of Customs administrations respondents to the survey perceived tax evasion as the first enforcement target.

According to a WCO questionnaire\(^9\), only 27 percent of the surveyed Customs administrations collected Customs import duties accounting for over 10 percent of government tax revenues (Figure 1a). In addition to Customs import duties, many Customs administrations collect other duties and taxes, including general consumption taxes (value-added-tax: VAT, etc.) or excise duties (tobacco tax, etc.) on imported goods. It is thus estimated that 86 percent of the surveyed Customs administrations collected over 10 percent of government tax revenue, and 55 percent of the surveyed Customs administrations collected over 30 percent of government tax revenue (Figure 1b).

In summary, the survey revealed that Customs revenue, defined as all duty and tax that a Customs administration collects, constitutes a substantial portion of government tax revenues in many countries. A Customs administration is therefore one of the principal authorities for government revenue receipts especially from the perspective of domestic revenue mobilization in many countries.

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\(^9\) The WCO annually collected information on Customs’ contribution to government tax revenue, and the latest version of the report contained the information of 135 Members in 2012 or the most recent statistics (WCO, 2013c).
Figure 1: Customs contribution to government tax revenue
(Number and share of Members)

(a) The share of Customs import duties in government tax revenue (x %)

(b) The share of Customs revenue in government tax revenue (y %)

(note) Both Figure 1(a) and (b) are based on responses received from 135 WCO Members in 2012 or the most recent years available. In Figure 1(b), Customs duty revenue is regarded as revenue collected by Customs if the latter is not available.

(source) WCO (2013c)

The WCO survey also revealed that 136 Customs administrations were charged with the collection of VAT or other general consumption tax on imported goods, 121 of which collected more revenue from taxes than Customs import duties (Figure 2). 57 Customs administrations collected such taxes five times more than Customs import duties. In addition, 136 Customs administrations collected excise duties such as tobacco tax, alcoholic tax and petroleum tax on imported goods, 63 of which collected more revenue from the duties than Customs import duties. On the export side, 59 Customs administrations collected export duties or taxes, only 4 of which collected more revenue from the export duties or taxes than Customs import duties.

Figure 2: Ratios (z) of general consumption tax on imported goods, excise duties/taxes on imported goods and duties/taxes on exported goods, divided by Customs import duties

(source) WCO (2013c)
3.2. Impact on domestic revenue mobilisation

The OECD (2013) estimated that the cost of introducing key trade facilitation measures would range from €3.5-19 million per country. The UNCTAD (2014) considered the cost for TFA implementation ranging from US$1-15 million per country. Similarly, the European Commission (2013) estimated the cost of TFA implementation to equate to roughly €1 million on average per country, based on empirical studies and excluding costs associated with equipment and staff.

The cost of implementation would be significantly increased if it were to include the cost for equipment and infrastructure such as automated systems and border facilities. Only a few TFA measures require the use of information and technology with “best endeavour” language, including measures regarding internet publication, electronic payment, pre-arrival processing and single window. Most TFA measures do not require equipment and infrastructure to be implemented, although some, such as risk management systems, could be readily implemented and operated with the appropriate equipment and infrastructure (OECD, 2013). For example, OECD (2013) estimated that the cost of introducing an electronic single window system roughly at €17 million in Mongolia, €7.8 million in Dominican Republic, €4.1 million in Colombia, €3 million in Burkina Faso, and €1 million in Lao PDR, and in cases where upgrades would be made to existing systems, the cost for human resources, equipment and training, etc. was evaluated at €0.35 million in Kenya and €0.96 million in Costa Rica.

In order to ensure sustainability, annual operating cost including staff salaries should also be covered appropriately after implementation. The OECD (2013) estimated the annual operating cost, either direct or indirect, for key trade facilitation measures to be as much as €2.5 million per country. For example, the operating costs for single window systems were estimated at approximately €0.63 million in Costa Rica and €0.03 million in Mongolia.

A number of donors have expressed their financial assistance to developing countries for TFA implementation. For example, the World Bank Group, in cooperation with other donors, has launched the Trade Facilitation Support Program (TFSP) to provide technical assistance for developing countries.10 The European Commission (2013) has pledged its financial support of €400 million over five years, up to €30 million of which would be dedicated to the most urgent measures for aligning legislation and procedures in developing countries with the TFA. The Swedish government announced its support for a new trade facilitation training facility in Arusha, Tanzania of approximately US$1.6 million for the period 2014-15 (WTO, 2013d).

Furthermore, the implementation and operating costs associated with implementation would be counterbalanced by the increased revenue accruing from TFA implementation in a relatively short period of time (OECD, 2013). This type of revenue source appears sustainable, compared with external financial assistance. As Customs revenue accounts for a substantial portion of government tax revenue in many developing countries, it would significantly enhance domestic revenue mobilization and could finance other priority areas if increased after TFA implementation.

3.3. Implications

From the perspective of domestic revenue mobilization, governments of developing countries particularly LDCs might be inclined to first pick and choose implementing revenue-enhancing and cost-efficient TFA measures in accordance with their rights under special and

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10 Further information on the TFSP is available at: www.tradefacilitationsupportprogram.org/
differential treatments embodied in the TFA. The TFA allows developing countries to notify TFA measures in Category B (implemented on a date after a transitional period of time following the entry into force of the TFA) or Category C (implemented after the acquisition of implementation capacity) when the TFA takes effect, and one year after the entry into force for LDCs (WTO, 2013a). Those measures that pose a potential threat to Customs revenue or require extra costs to ensure optimum implementation may fall into Category B or C. This would certainly be the case if countries prove unable to implement all TFA measures at once.

4. Conclusions

This paper contends that TFA implementation is likely to have a positive impact on Customs revenue particularly through increased trade, higher trader compliance, and more recovery of revenue loss. Although several measures contained within the TFA could potentially precipitate a decrease in revenue, the impact of such measures would be negligible, or outweighed by the increase in revenue resulting from TFA implementation. It appears that additional revenue resulting from TFA implementation would be sustainable, and would have a positive impact on domestic revenue mobilisation especially in developing countries where Customs revenue accounts for a substantial portion of government tax revenue.

Furthermore, this paper contains two particular implications. The first is that TFA measures should be effectively utilized by traders in order to gain real benefits. To this end, the quality of TFA implementation is extremely important, beyond simple implementation, and governments of both developed and developing countries should consider extra efforts or measures beyond the TFA, such as the establishment of user-friendly automated systems. In this regard, governments are advised to use a common set of performance indicators to measure the effectiveness or the quality of implementation of respective TFA measures, and to share the results each other as well as amongst their partners.

The second implication is that governments of developing countries and LDCs might tend to first pick and choose revenue-enhancing and cost-efficient TFA measures, while opting to implement others at a later stage, in accordance with their rights under special and differential treatments embodied in the TFA. Those measures that pose a potential threat to government revenue or require extra costs to ensure implementation with a good performance or quality might be considered for implementation at a later stage. This would certainly be the case if countries were unable to implement all TFA measures at once.

5. Key questions for discussion

1. Do you believe that TFA implementation will cause mostly positive or mostly negative impact on Customs revenue collection, and what are the reasons for your opinion?

2. What are your views on the following issues raised in the paper:
   a. To measure the revenue impact of TFA implementation, Customs administrations should use a common set of performance indicators; and
   b. Developing and least developed countries could first pick and choose to implement revenue-enhancing TFA measures and other measures such as the introduction of de-minimis and prohibition of pre-shipment inspection at a later stage, if they are unable to implement all TFA measures at once.

3. How would the business community positively contribute to Customs compliance and revenue collection through TFA implementation, for example by delivering high quality of data to Customs and enhancing voluntary trader compliance?
## Annex

### Articles of the WTO Agreement on Trade Facilitation and Authorities Concerned

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<td>(3-12. are related to exchange of information)</td>
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</table>

(source) WTO (2013a; and 2014b)


CAPEC (Conference of Asia Pacific Express Carriers), 2011, *De Minimis Thresholds in APEC*, 31 August 2011, available at: www.capec.org/publications.php#


KRA (Kenya Revenue Authority), 2014, presentation material by Ahago, Pamela at the WCO Workshop on Inspection Companies, Brussels 6-7 March 2014,


Raballand, Gaël; Refas, Salim; Beurant, Monica; and Isik, Gozde, 2012, *Why Cargo Dwell Time Matters in Trade*, Poverty Reduction and Economic Management (PREM) Network,


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