

incu
INTERNATIONAL NETWORK OF CUSTOMS UNIVERSITIES



WORLD CUSTOMS ORGANIZATION



*World
Customs
Journal*

March/April 2015
Volume 9, Number 1

ISSN: 1834-6707 (Print)
1834-6715 (Online)

World Customs Journal

March/April 2015
Volume 9, Number 1



WORLD CUSTOMS ORGANIZATION

incu
INTERNATIONAL NETWORK OF CUSTOMS UNIVERSITIES

World Customs Journal

Published by the Centre for Customs and Excise Studies (CCES), Charles Sturt University, Australia and the University of Münster, Germany in association with the International Network of Customs Universities (INCU) and the World Customs Organization (WCO).

The *World Customs Journal* is a peer-reviewed journal which provides a forum for customs professionals, academics, industry researchers, and research students to contribute items of interest and share research and experiences to enhance its readers' understanding of all aspects of the roles and responsibilities of Customs. The Journal is published electronically and in print twice a year. The website is at: www.worldcustomsjournal.org.

Guidelines for Contributors are included at the end of each issue. More detailed guidance about style is available on the Journal's website.

Correspondence and all items submitted for publication should be sent in Microsoft Word or RTF, as email attachments, to the Editor-in-Chief: editor@worldcustomsjournal.org.

ISSN: 1834-6707 (Print) 1834-6715 (Online)

Volume 9, Number 1

Published March/April 2015

© 2015 CCES, Charles Sturt University, Australia and University of Münster, Germany

INCU (www.incu.org) is an association that provides the WCO and other organisations with a single point of contact with universities and research institutes that are active in the field of customs research, education and training.

Copyright. All rights reserved. Permission to use the content of the *World Customs Journal* must be obtained from the copyright owner. Please apply to the Editor-in-Chief.

Disclaimer. The views expressed in the *World Customs Journal* are those of individual contributors and are not necessarily those of the Editorial Board, INCU, the WCO or its individual membership, or the publishers.

Contents

Editorial	v
SECTION 1 – ACADEMIC CONTRIBUTIONS	
Barriers to customs entry at the time of disaster in developing countries: mitigating the delay of life-saving materials	
<i>Rebecca Turner</i>	3
Automotive excise taxation: what reforms are needed to best utilise the ASEAN Economic Community?	
<i>Rob Preece</i>	15
New European Regulation 608/2013 concerning combating counterfeit goods	
<i>Sandra Rinnert</i>	37
Rules of origin and the use of free trade agreements: a literature review	
<i>Jisoo Yi</i>	43
Who benefits most from AEO certification? An Austrian perspective	
<i>Hans-Joachim Schramm</i>	59
SECTION 2 – PRACTITIONER CONTRIBUTIONS	
China Customs’ reform: approaches to improving the professionalism of customs clearing agents to enhance trade facilitation	
<i>Libing Wei</i>	71
Preliminary insights from the Philippine Bureau of Customs imports database	
<i>Ronald U Mendoza and Aladdin Ko</i>	83
The use of CIF Incoterms in Indonesia’s import declarations	
<i>Budi Nugroho</i>	91
Is infrastructure upgrading an antidote for smuggling? Evidence from Beitbridge Border Post, Zimbabwe	
<i>Watson Munyanyi</i>	103
Strategy to internationalise China’s customs management education system	
<i>Tong Hua</i>	109
SECTION 3 – SPECIAL REPORT	
INCU 10th Anniversary Timeline and Milestones	117
SECTION 4 – REFERENCE MATERIAL	
Guidelines for Contributors	123
Editorial Board	124

Editorial



In 2015 we celebrate a significant milestone in the development of Customs as a recognised area of academic pursuit – the tenth anniversary of the International Network of Customs Universities (INCU).

Since its inception ten years ago, the principal objective of the INCU has been to raise the academic standing of the customs profession. During the intervening period, the INCU has worked closely with universities, academics, the World Customs Organization (WCO), World Trade Organization (WTO) and other international organisations to provide opportunities for debating matters of mutual interest to customs administrations, academia and the private sector.

The INCU has emerged as an extremely relevant network, and remains at the forefront of academic research and development in its field. This includes its active involvement in the most significant work impacting on the customs profession that has been undertaken in recent times, that is, the agreement reached by WTO members on the global trade facilitation agenda, to which it has been an active contributor since 2007. In recognition of its tenth anniversary, a number of the significant milestones achieved by the INCU are recognised in Section 3 of this edition of the *World Customs Journal*.

Also presented in this edition are further studies in the field of excise, a review of the new European Union (EU) regulation on trade in counterfeit goods, a number of informative practitioner contributions, and a timely examination of the critical role played by customs authorities in disaster recovery situations. This article, by Rebecca Turner, is of particular relevance in the wake of the recent tragedy in Nepal.

On behalf of the editorial committee, I would like to congratulate the INCU on its tenth anniversary. I trust that our readers will continue to benefit from its achievements, including its flagship publication, the *World Customs Journal*, as we collectively progress our endeavours in customs academic research and development.

A handwritten signature in blue ink, appearing to read 'D. Widdowson', with a stylized flourish at the end.

David Widdowson
Editor-in-Chief



Section 1

Academic Contributions

Barriers to customs entry at the time of disaster in developing countries: mitigating the delay of life-saving materials

Rebecca Turner¹

Abstract

When a disaster strikes and a request for international assistance is received, an increasing number of actors respond to the needs of the affected population, and one of the first governmental entities that they meet when they arrive in the disaster-stricken country is the customs administration. Unfortunately, very few customs administrations are adequately prepared for the possibility that they may, one day, receive a huge number of incoming flights in a short period of time. Furthermore, over-regulation leads to unnecessary bureaucratic bottlenecks, which slow the entry and distribution of relief. Aid providers are frustrated by unnecessary delays and higher costs. Unprepared customs administrations suffer countless administrative headaches. This research focuses on the causes for delay in the movement of life-saving materials through Customs and the associated barriers. The article includes a comprehensive qualitative analysis drawing from the literature and informant interviews and is coupled with a System Dynamics model. After reviewing the system inefficiencies discovered, recommendations for the way forward are made.

1. Introduction

With a greater onset of disasters both natural and man-made, there is a dire need for efficient and effective international response to disasters where countries have requested international assistance. Delivering the right response and relief consignments is extremely important and time plays a major role in how many lives can be saved. If the international response is calculated, resourced, and backed by donors, but does not reach the affected persons in time, lives may be lost and the effort rendered ineffective. The delay of life-saving materials, therefore, is of critical importance in the humanitarian supply chain.

The first governmental entities met upon arrival at the disaster-stricken country are the immigration and customs administrations. Unfortunately, very few customs administrations are adequately prepared for the possibility that they may, one day, receive a huge number of incoming flights in a short period of time. In addition, over-regulation leads to unnecessary bureaucratic bottlenecks which slow the entry and distribution of relief. Aid providers are then frustrated by unnecessary delays and higher costs. Unprepared customs administrations suffer countless administrative headaches. The complaint that relief consignments face delay at the Customs point of entry at the time of the disaster has risen to the forefront as a major inhibitor to serving beneficiaries. ‘Stories of relief shipments delayed at customs processing points for months after they would have been useful are well known, says Elyse Mosquini of the International Federation of Red Cross and Red Crescent Societies (IFRC)’ (UNOCHA 2012, p. 2). However, most complaints only state that there was a delay without getting to the root of this problem. Take, for example, a publication on Early Warning and Early Action in West and Central Africa prepared

by the IFRC in 2008. In a section debating challenges and lessons learned about preparedness and response in the case of floods in Togo, the IFRC noted, ‘some kits were available from the Lagos office and arrived at Lome within 24 hours. However, other NFIs like blankets and mats had to be purchased in Ghana, and took three days before reaching Lome, due to border crossings’ (IFRC 2008, p. 18). The complaint of a delay at the border crossing is mentioned as a challenge but there is no further mention in the publication whereby the cause of the delay is addressed.

In the major tsunami in Indonesia on 26 December 2004, there were countless complaints of shipped relief consignments never reaching the beneficiaries. Most complaints were that it was an overwhelming response for a customs administration which had very little capacity. A freight forwarder involved in the response diagnosed the delays or goods never reaching beneficiaries as the amount of unsolicited goods sent without a local consignee. The processing of the unsolicited goods delayed those goods that did have the proper paperwork with a local consignee.

Guidelines to Specific Annex J, Chapter 5, Relief Consignments, of the Revised Kyoto Convention states, ‘the effectiveness of humanitarian assistance is dependent to a large extent on the speed with which it can be furnished. It is therefore, imperative that Customs administrations be as facilitative as possible and be prepared to rapidly clear goods that, as a result of catastrophic events, are being forwarded as aid’ (World Customs Organization 2000, p. 3). This makes the case that if there are stalls or delays with customs administrations for any reason, the humanitarian response may not be as effective as it could be if the customs approval process flowed smoothly. There are also experts, such as Kuenhe + Nagel who pose the view that ‘it is easier to blame local authorities [for inefficiencies] and has become the norm’ (personal communication, March 2013) as a criticism for looking only to the local customs entities for improvements.

Bekele Geleta, Secretary General of the IFRC, claims that regulatory mechanisms like customs clearance can be seen as impediments in the aftermath of a disaster rather than tools to enhance the effectiveness of a response, and to assert that well-designed systems and processes are critical to meet the needs of beneficiaries and can be used to swiftly direct international assistance to where it is most needed and ensure quality and accountability are maintained in the process (IFRC 2011, p. 3).

Delays in Customs are symptomatic of problems within the context of the entire international system and implications of such delays should be explored beyond solely the capacity of the local authorities. Oftentimes, the cause of delay is not the fault of customs administrations, but rather lies with the international organisations (IOs) sending humanitarian assistance without the proper paperwork.

Therefore, the intent of this article is to investigate the barriers causing the delay of life-saving materials and relief consignments being processed through the customs point of entry at the time of a disaster in developing countries. This should, in turn, provide grounds for making recommendations that are not unilateral or partial but rather, open room for dialogue and discussion.

2. Investigating the barriers to entry

The most salient causal explanations behind customs delays from varying parties involved – donor governments, local governments, aid agencies, private logistics companies, international non-governmental organisations (INGOs), and IOs – were determined after a literature analysis and qualitative research.

To build on the literature and primary research for more informative analysis, the variables within the system were formed into a Causal Loop Diagram, a methodology from System Dynamics, so that they could be analysed for insight and feedback from these interactions to account for nonlinearities. In studying the interactions, inefficiencies can be more easily determined. Causal loop diagrams, ‘concise and visual, reveal the interconnections [between variables] both obvious and hidden. They can be used

to capture the mental models of individuals and capture hypothesis about dynamic behavior' (Morecroft 2007, p. 51). According to Morecroft, 'each link [in the causal loop diagram] is assigned a polarity, either positive or negative. A positive "+" link means that if the cause increases then the effect increases too. A negative "-" link means that if the cause increases then the effect decreases' (Morecroft 2007, pp. 39-40). The System Dynamics precedent for use in supply chains to determine inefficiencies within a context of multiple disaggregated parts could be useful in the same type of application for determining the delays in customs procedures as part of a much larger supply chain in international disaster response.

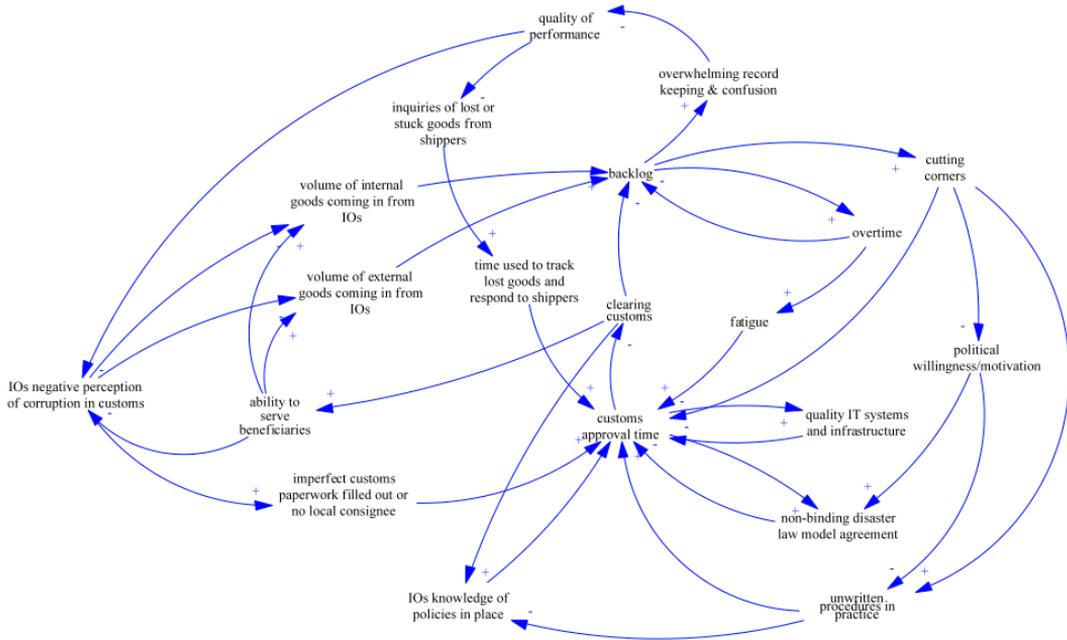
In this way, the unilateral, causal explanations of customs inefficiencies that were difficult to make sense of as isolated variables, in that they were indicative of only one symptom of a much larger issue, became easier to rationalise in a nonlinear, dynamic system because they are interrelated with other causes. Critical variables for investigation include:

- Time used to track lost goods and respond to shippers
- Clearing customs
- Customs approval time
- Backlog
- Overtime
- Fatigue
- Cutting corners
- Overwhelming recordkeeping and confusion
- Quality of performance
- Inquiries of lost or delayed goods from shippers
- Political willingness/motivation
- Unwritten procedures in practice
- Quality IT systems and infrastructure
- Non-binding disaster law model agreement
- IOs' and INGOs' knowledge of policies in place
- Volume of external and internal goods coming in from IOs
- Ability to serve beneficiaries
- Imperfect customs paperwork filled out or no local consignee
- IOs' negative perception of corruption in Customs

2.1 Backlog, overtime, and fatigue

One reinforcing dynamic in Figure 1 that causes the customs approval process to slow is the backlog of incoming relief consignments and the effects that backlog has on local customs officials. Backlog is defined in this case as the amount of relief consignments coming into the customs point of entry that are waiting to begin the customs approval process. When the backlog grows large, customs officials work more overtime hours to process the backlog. When overtime hours worked increase, the backlog decreases causing the balancing loop. But when customs officials implement this corrective action, another effect, fatigue, is caused, which then reinforces the initial action that they were trying to correct. When officials work 24/7 during the immediate aftermath of a disaster, fatigue sets in. The absolute number of goods cleared in 24 hours after the disaster may increase over the non-disaster rate, however, as officials become more fatigued, the approval process per consignment takes more time. This means that fewer goods are cleared per week during the disaster and the backlog is not reduced as quickly as when officials were working without fatigue.

Figure 1: Causal loop diagram



Source: Turner 2013.

2.2 Political willingness, motivation, and unwritten procedures in practice

When customs officials remove unnecessary document checks and paperwork from the approval process, they may come to question the importance of these procedures. The more corners cut without repercussion, the more a sense of futility causes workers to become less motivated. This is especially true when workers see their superiors enjoying higher salaries and delegating the work. Take, for example, the Pakistani customs administration where, ‘the salaries of low-ranking customs employees make it impossible for them to maintain reasonable standards. At higher levels in the customs hierarchy, however, salaries are more than comfortable and senior Pakistani officers [enjoy] ostentatious living and extravagant expenditures have become the norm’ (Hors 2001, p. 19).

Unwritten procedures can stem from lack of motivation to write, implement and disseminate procedures and/or a political unwillingness to change the disaster importation laws for humanitarian relief consignments. The ‘Regional Seminar on the Role of Customs in Natural Disaster Relief Santo Domingo Seminar Report’ confirms ‘the political willingness of the countries is required to make changes to the existing legislation in order to incorporate the principles presented in the international agreements’ (WCO/OCHA/IFRC 2012b, p. 12). But, when there are more unwritten procedures in actual practice, the approval process time increases. At the ‘Role of Customs in Natural Disaster Relief Seminar’ in Bangkok, regional organisers included the World Customs Organization (WCO), United Nations (UN), and IFRC, and participants, government ministries and customs officials cited difficulties such as a lack of communication and coordination between Customs and the National Disaster Management Authority (NDMA), the fact that customs procedures are not always in line with international obligations, and a general lack of enforcement of the relevant rules and procedures (WCO 2012, p. 4). Those same challenges were mentioned at the regional seminar in Santo Domingo where participants emphasised ‘the lack of special procedures during emergencies, the lack of communication between donors and the government, and the lack of clarity and procedures when it comes to disasters’ (WCO/OCHA/IFRC 2012b, pp. 4-5).

2.3 IOs' and INGOs' awareness of customs procedures in place

If unwritten procedures are implemented without proper communication, the IOs and humanitarian actors are unaware of the necessary protocols they should follow when sending a relief consignment including all of the correct, requested paperwork, certificates, and registration with the shipped consignment. Consequently, the customs approval time can increase.

Another challenge for IOs' awareness of customs procedures relies on whether or not the customs agencies post updated regulations or required documents on their website. If procedures were previously posted online, they do not often state the specific changes to procedures and protocols for emergency situations or the import regulations for relief consignments. This adds to the time it takes to approve consignments coming through Customs and is, thereby, a reinforcing action in the loop leading to higher backlog. According to an interviewee of the Red Cross, customs delays 'depend on the status of the Agency, INGO or other foreign institution in the Country [if they already have a presence in-country] and the knowledge of the international humanitarian organisations [responding to the crisis and importing aid]'.

Regional representation from Customs at the 'Regional Seminar on the Role of Customs in Natural Disaster Relief' cited additional difficulties that present problems for their administrations as the lack of awareness that 'only NGOs [non-governmental organisations] registered in the country receive the legal facilities [like tax exemption], [sometimes NGOs send] poor quality donations, and NGOs taking advantage of disaster situations to operate in an unlawful manner' (WCO/OCHA/IFRC 2012, pp. 4-5), that is, not filling out proper importation documentation.

On some occasions, the IOs' lack of awareness, whether their fault or not, becomes a burden on the affected country's government because they send poor quality donations, take advantage of the disaster situation to further their own objectives, send the improper assistance, or simply do not adhere to procedures in place at the time of importing relief consignments or relief personnel and equipment. Ms Wasti, from Pakistan Customs Collectorate, cited the key customs challenges as 'a lack of awareness among donors of customs formalities and procedures, inadequate documentation provided to support the importation of relief goods by donors and assisting agencies, and a lack of capacity of Pakistan Customs to process large-scale relief consignments in an emergency' (WCO 2012, p. 6). NGOs can sometimes behave in an ad hoc fashion and operate as they wish, circumventing local policies.

2.4 Consignments clearing Customs

There is additional feedback that affects IOs' knowledge of policies in place which comes from relief consignments that have successfully cleared Customs. When the first relief consignments are cleared, the customs clearing process also becomes clearer in terms of the organisation's knowledge of proper protocols for shipping to *country x* at the time of a disaster. The spread of this knowledge amongst humanitarian actors thereby decreases the customs approval time because there are less relief consignments sent by new organisations that are unaware of the policies in place. This responsibility is executed by the Log Cluster which, following the disaster, posts best practice for importing into *country x* to spread to other partner and affiliated organisations.

Another reinforcing action that affects approval time is the quality of infrastructure and/or IT systems that are in place following a disaster.

2.5 Quality of infrastructure

An interviewee from IFRC Panama cites the delays as being dependent on the type of disaster and the infrastructure that may have been damaged during the disaster. He noted Haiti as being a difficult case for customs and import processing because the 'entire Haitian system [infrastructure] collapsed, and the airport was not functioning' (personal communication, May 2013). Some of the customs officials had even lost their lives.

One can certainly see the correlation between the quality of infrastructure in place and a longer customs approval time. The freight forwarder expert who was coordinating response to Haiti stated, ‘freight forwarders operating in the Haiti earthquake were effective in that they moved their shipments to Santo Domingo, Dominican Republic, where there was proper infrastructure in place to handle the amount of goods coming in’ (personal communication, March 2013). This is consistent with the IFRC interviewee’s claim that the infrastructure was an obstacle to customs processes in Haiti whereby the Dominican Republic had infrastructure in place that was able to help process the incoming relief consignments and was willing to collaborate to receive the shipment of humanitarian aid for Haiti as a free transit country (Apolinario 2012).

2.6 Quality of IT systems

Further to the consideration of physical infrastructure in place, IT equipment and automated processes also affect customs approval time. According to the work of the UN Conference on Trade and Development (UNCTAD) on the Automated System for Customs Data (ASYCUDA) project taking place in more than 90 countries internationally, automating customs legislation and processes in place can cut down the time it takes to approve consignments immensely. In a recent case, the approval time, in peace time, was cut from two months to two and a half hours (personal communication, August 2013).

The expert at Kuenhe + Nagel poses that ‘less than 50% of the delays are a result of [unsophisticated] IT systems or a lack thereof, inefficient policies, or a lack of trained customs officials’ (personal communication, March 2013). While this reinforcing behaviour affecting delay may be one causal hypothesis of the problem, it does not explain the entire problem nor does it encompass all system inefficiencies.

2.7 Recordkeeping, quality of performance, inquiry of lost or delayed goods, and time to track lost or delayed goods

With consideration for Customs’ responsibility to protect public health and safety by controlling imports, the quality of customs performance will be measured by the number of safe and non-illegal goods to be cleared through Customs and successfully reach the affected population, intended users, or beneficiaries.

If there is a small number of goods clearing Customs because of a long approval time and an increasing backlog, recordkeeping becomes overwhelming and more confusion ensues. When there is overwhelming recordkeeping and increased levels of confusion, the quality of performance decreases. When there are less goods being received by the beneficiaries, the number of inquiries from those senders whose goods are lost or delayed increases. Increases in inquiries result in more time spent tracking lost or delayed goods and responding to shippers. This becomes a reinforcing behaviour because when more time is used to respond to lost or delayed goods and the recordkeeping process is overwhelmed, the customs approval time of new shipments arriving will increase. An expert from World Vision noticed that ‘local officials could do a better job of documenting the process, the approval, and how to implement’ (personal communication, April 2013).

2.8 IOs’ negative perception of Customs, incoming volume of goods from IOs, imperfect paperwork

If the quality of performance declines, the IOs’ negative perception of Customs increases as can be seen in Figure 1.

Without being informed as to why the goods were delayed, lost or rejected during the customs approval process, the organisations that do not see their goods reaching the beneficiaries assume that they must have been stolen, which further reinforces their negative perception of customs efficiency. While

opportunistic or desperate behaviour may sometimes be the case for goods that do not reach the intended user, this is often not the reason that relief consignments do not reach the beneficiary. Goods that are typically rejected or more closely scrutinised at the time of disaster are those that can greatly impact the market. Generally, according to freight forwarder, Kuenhe + Nagel, transit cargo that could potentially end up in the market and affect prices and hurt the local market is rejected: 'For example, anti-retroviral drugs (RIVs) being sent to Zimbabwe for 4.8 million people required an actual import permit' (personal communication, March 2013). In other countries where the same relief organisation imports RIVs, the organisation may not have previously been required to obtain an import permit, so the permit, in this case, was specific to Zimbabwe. In another case, 'nearly USD1.8 million of polio vaccinations went to waste because they were not kept at the correct temperatures at the airport in Kabul' (personal communication, March 2013). This does not indicate corruption but may be misperceived if high volumes of vaccines intended for those in need go to waste. The organisation may not have known that obtaining clearances and organising special conditions was required on the front end because it was specific to the country of import.

If there is a negative perceived notion of dealings within a customs agency, some organisations do not ship relief consignments as they would to countries where this negative perception or the presence does not exist. Whether consciously or by accident, sending goods without the proper paperwork, or no local consignee, will increase the time it takes for Customs to inspect and approve the consignment.

This will reinforce the organisation's negative perception that customs officials are not working correctly when, in all likelihood, the goods could have been rejected because there was no local consignee or they are still sitting in a customs warehouse because they came without the proper paperwork. This would affect that organisation's perception of Customs. Without a local consignee, the goods, even if cleared and approved through the customs declaration, may sit at customs, because **no one picks them up for distribution**. This can easily translate into negative perception on the side of the international community when, in fact, it can be something as simple as the sender not having a local consignee.

2.9 Non-binding customs model agreement

Where there is a non-binding disaster law agreement on 'Customs Facilitation in Humanitarian Assistance' in place between the country and the UN, the country is a signatory to the WCO's Resolution of the Customs Co-operation Council on the Role of Customs in Natural Disaster Relief, the country has incorporated the International Disaster Response Laws (IDRL) Guidelines' specific provisions into their national legislation, or the country has ratified the Specific Annex J to the Revised Kyoto Convention, or the UN General Assembly Resolution 46/182, they have expressed the political willingness to implement simplified procedures in customs processing at the time of a disaster. This means encouraging the expeditious movement of relief consignments through Customs at a tax and duty exempt rate for humanitarian organisations and IOs. If one of these legal instruments has not yet been domestically incorporated because of a lack of political will or motivation, the time for customs approval remains high. According to Ms Virginie Bohl of the UN Office for the Coordination of Humanitarian Affairs (OCHA), all nine countries that have signed the Agreement on Customs Facilitation in Humanitarian Assistance have seen improvements in their ability to respond to disasters.

According to Mr Soontorncharoenwong from the Legal Bureau Office at the Thai Customs Department, the main challenge for the current system is the lack of regulations pertaining specifically to the clearance of relief items after disasters, outlining that the current framework in Thailand does not recognise disaster relief consignments as a specific type of consignment for which to expedite the customs clearance processes. 'The issue was highlighted after the 2011 floods in Thailand where organisations not recognised as governmental organisations or public charity organisations were not exempted from paying customs duties on donated relief goods' (WCO/OCHA/IFRC 2012a, p. 6). Thai Customs are currently working to amend the decree and make it more inclusive by adding a category, which waives

any ‘economic export prohibitions or restrictions on the importation of relief consignments, disaster relief personnel and their possessions’ (WCO/OCHA/IFRC 2012a, p. 6) because they see the relationship between implementing disaster law and/or emergency protocols and the ability to effectively respond to a disaster. The customs sections of the IDRL Guidelines ‘work with the national society of a country on analysis, recommendation and then implementation to simplify procedures with concern for the types of goods and equipment that should be exempt at the time of a disaster because these governmental bodies [are sometimes] not even in operation for quite some time after the disaster strikes’ (personal communication, May 2013).

3. Summary and recommendations

It may not come as a surprise that many humanitarian aid organisations that ship emergency goods are focusing their customs-clearing efforts on ad hoc policy negotiation through strategic relationships, changing legislation, and signing agreements, which will simplify procedures, improve capacity building, enhance training of local customs officials, and advocate the need for automating customs IT systems. These all are corrective actions that can create the balancing loops shown in Figure 1. Balancing loops can slow, arrest, or even reverse the reinforcing dynamics that work to increase delays and the time to approve shipments for clearance. However, there are also other ‘small wins’ that can be implemented locally.

The following comments relate, broadly, to the considerations above of the barriers to goods entering a disaster area, and point to the fact that to mitigate delays many aspects are interrelated.

- 3.1** One way to ensure productivity of local customs officials is to manage the amount of overtime that customs officials are allowed to work. While it is necessary for customs facilities to be open and in operation 24/7 during a disaster, working schedules need to be crafted to balance the workload amongst workers to ensure they are not experiencing the effects of fatigue that come with working too many overtime hours. In the case that work schedules cannot accommodate a 24/7 operation period, increasing the amount of effective workers by adding capacity can address the effect of fatigue on productivity. When workers are fatigued, productivity declines. When productivity declines, the time required for processing the backlog increases.
- 3.2** Another local policy action to reduce backlog is to organise human resource allocation and define working instructions dynamically between those who work on processing new consignments and those who process consignments that are under review and require additional paperwork, taxes to be paid, additional approvals, or clarification. By reviewing and dynamically adjusting human resource allocation, workers can decrease the time it takes to review, inspect, and get approval for relief consignments.
- 3.3** Minimising the time to verify paperwork and obtain ministry approvals will positively affect customs delay. Accelerating approvals and minimising verifications can be accomplished by improving and streamlining communications with all ministries involved, as well as by advancing the current communication media used to inform senders of imperfect paperwork or necessary taxes through an updated web-based platform, for example. Another way to reduce approval time is simply to require less paperwork. Conducting a review of necessary documents to streamline fields within those documents, and stamps and signatures required, will have a balancing effect on the reinforcing dynamics. This will, in turn, create overwhelming recordkeeping and confusion from multiple inquiries, which increases the time needed to track and respond. A positive example of this was the One-Stop-Shop instituted in all the Collection Districts of the Bureau of Customs by the Government of the Philippines where they posted the procedures for the expedited release of foreign donations in times of calamities on their website with links to it on Twitter to improve customs facilities in the Typhoon Yolanda response.

- 3.4** Another, more ambitious approach that local customs authorities can put in place is to automate the system of operation. UNCTAD's ASYCUDA software module is being implemented in more than 90 developing countries to automate and simplify country legislation for importation, to update IT infrastructure, and to provide a web-based system for importers so that trade can be more easily managed. UNOCHA has recently started a new initiative to partner with UNCTAD's team to create a new tool that will serve as a default module in the software system for times of disaster to simplify procedures, enhance inspection processes, and facilitate the relationship between customs entities, thereby improving the processing time. The program electronically notifies the ministries involved of the shipments to arrive that will need approval immediately after the sender enters the data and, at the same time, allows the ministries to make approvals online. If IOs that usually import relief consignments at times of disaster access the country's ASYCUDA website, they will be able to complete all necessary forms online and Customs will be notified of the shipment before it arrives so it can be approved in advance. Therefore, automation can offer phenomenal gains for reducing customs delay.
- 3.5** One way to address the lack of awareness for importation requirements is to encourage information sharing and awareness campaigns between customs agencies and IOs so that there is less room for miscommunication and errors in paperwork. UNOCHA provides a tool that aims to compile relevant customs data for emergency relief senders in an online directory, and the effectiveness of the information stored in the tool's database becomes a question of greater participation, information sharing, and awareness of the tool itself. Also, the Regional Seminars on the Role of Customs in Natural Disaster Relief that UNOCHA, the WCO, and the IFRC organise are critical for information sharing and to facilitate communication and awareness for member states to be aware of the instruments available to them, how they are used, and how they can improve the way that they work if adopted.
- 3.6** The IFRC and UNOCHA seek to inform and train customs officials on the critical value behind having a set of simplified, written procedures at the time of a disaster and the importance of working overtime. This means that IFRC and UNOCHA surmise the inefficiency and delay to be due, largely in part, to local customs officials' willingness to take additional measures to simplify processes at the time of a disaster. Additionally, they encourage capacity building of the local customs administrations by OCHA introducing the Customs Agreement, which aims to simplify existing procedures, to require fewer documents during times of disaster, and to make relief consignments and relief personnel equipment prioritised and tax exempt. This recommendation is corroborated by a comment from a regional seminar participant in the Bangkok, Thailand seminar who said, 'It would be worth having representations from Customs, NDMA and the Red Cross/Red Crescent from the same countries at one table to work through issues together' (WCO/OCHA/IFRC 2012a), thereby encouraging greater communication and awareness of policies in place.
- 3.7** Even if customs authorities have not implemented a specific set of emergency protocols or passed disaster legislation, IOs and governments sending relief materials should work through the local capacity rather than try to circumvent it because, according to an expert in freight forwarding 'it helps the country to build more capacity in their institutions if organisations go through the processes and the local structures deemed by [the actual] law and policies in place' (personal communication, March 2013). It is through adherence to actual law and policy in place that the challenges and inefficiencies become known and the argument for change has evidentiary backing.
- 3.8** Lastly, customs authorities can work to better motivate their employees by providing improved job security, better wages, and/or additional training. With a more motivated workforce, inefficiencies caused by a lack of motivation, such as cutting corners, can be reduced.

4. Conclusions

Any number or combination of these recommendations can help mitigate customs delays at the time of disaster by disrupting the reinforcing behaviours of the current system.

Approaching this problem of customs delays by looking at the system in its entirety and not just one individual actor within the system improves understanding of what variables are at the root of the problem in clearing relief consignments during times of disaster.

Describing the problem using unidirectional hypotheses as explanations of the problem is no longer sufficient. Remembering that customs delays can have an impact on the number of lives saved in the immediate aftermath of a disaster, the importance of reducing delays should not be dismissed.

The representative of the IDRL program stated that ‘Given these recent efforts, this problem is starting to get more international attention and be seen as an issue of relevance and importance to disaster response’ (personal communication, May 2013). Fortunately, this issue is gaining traction internationally so that ad hoc procedures and ‘fixes that fail’ can be put to rest. When all stakeholders increase dialogue, the chances of being on the same page and finding positive resolution to the difficult challenges of customs delays in international disaster response efforts improve.

In this world, multiple interests will always compete and cause systems to be imperfect, but hope must remain that in raising awareness, sharing information, implementing corrective actions where possible, and working together in a cohesive way will allow for the people affected and made vulnerable by disasters to be the common denominator at the forefront of organisational decisions and operations during an emergency response.

References

- Adinolfi, G 2012, *International disaster response law*, Chapter 22, ‘Customs obstacles to relief consignments under International Disaster Response Law’, Asser Press, The Hague, p. 534.
- Albin, S 1997, ‘Building a system dynamics model – Part 1: Conceptualization’, MIT, Massachusetts, viewed 15 September 2013, <http://clexchange.org/ftp/documents/Roadmaps/RM8/D-4597.pdf>, pp. 8, 12.
- Apolinario, ER 2012, *El Rol de la Aduana en el Terremoto de Haiti*, Aduanas Republica Dominicana, Santo Domingo.
- Cooper, CA & Massell, BF 1965, ‘Toward a general theory of customs unions for developing countries’, *Journal of Political Economy*, vol. 73, no. 5, University of Chicago Press, Santa Monica, viewed 17 September 2013, www.jstor.org/stable/1829134.
- Djankov, S, Freund, C & Pham, CS 2006, ‘Trading on time’, World Bank, viewed 5 September 2013, www.3t-co.com/articles/trade/3tco-trading_on_time_full_report.pdf, p. 14.
- Henningsson, S & Bjørn-Andersen, N 2009, ‘Exporting e-Customs to developing countries: a semiotic perspective’, Paper 7, GlobDev, viewed 15 August 2013, <http://aisel.aisnet.org/globdev2009/7>.
- Hors, I 2001, ‘Fighting corruption in customs administration: what can we learn from recent experiences?’, OECD Development Centre, OECD, viewed 18 September 2013, www.oecd-ilibrary.org/docserver/download/51gsjhvj79kl.pdf?expires=1380912458&id=id&accname=guest&checksum=DD7134D5D35F3EF77DAB5F2D009C0DDE, pp. 14, 19.
- International Federation of Red Cross and Red Crescent Societies (IFRC) 2008, ‘Early warning, early action: an evaluation of IFRC West and Central Africa Zone flood preparedness and response’, IFRC, Dakar, p. 18.

- International Federation of Red Cross and Red Crescent Societies (IFRC) 2011, *Introduction to the guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance*, IFRC, Geneva.
- Morecroft, J 2007, *Strategic modelling and business dynamics: a feedback systems approach*, Chapter 2, 'Introduction to feedback systems thinking', John Wiley & Sons, West Sussex, pp. 39-40, 51.
- Sterman, J 2000, *Business dynamics*, McGrawHill, Boston.
- Sterman, J 2002, *System dynamics: systems thinking and modeling for a complex world*, MIT, Cambridge, MA.
- United Nations Conference on Trade and Development (UNCTAD) 2005, 'Linking economies, Issue Number 13: Computerizing customs procedures: removing a hurdle to economic development', viewed 9 August 2013, United Nations, Geneva, http://unctad.org/en/Docs/iaosmisc200519_en.pdf, pp. 1-3.
- United Nations Conference on Trade and Development (UNCTAD) 'Automated System for Customs Data' (ASYCUDA), viewed 15 August 2013, www.asycuda.org/.
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) 2012, *IRIN*: 'Global: why international disaster law matters', Bangkok, United Nations, viewed 3 September 2013, www.irinnews.org/report/94648/global-why-international-disaster-law-matters.
- World Customs Organization (WCO) 2000, *Kyoto Convention*, Specific Annex J, Chapter 5, 'Guidelines on Relief Consignments', WCO, Brussels.
- World Customs Organization/Office for the Coordination of Humanitarian Affairs (WCO/OCHA) 2013, 'Model agreement on customs facilitation in humanitarian assistance', OCHA, Geneva.
- World Customs Organization/Office for the Coordination of Humanitarian Affairs/International Federation of Red Cross and Red Crescent Societies (WCO/OCHA/IFRC) 2012a, 'Regional seminar on the role of Customs in natural disaster relief', Bangkok Seminar Report, OCHA, Bangkok.
- World Customs Organization/Office for the Coordination of Humanitarian Affairs/International Federation of Red Cross and Red Crescent Societies (WCO/OCHA/IFRC) 2012b, 'Regional seminar on the role of Customs in natural disaster relief', Santo Domingo Seminar Report, OCHA, Santo Domingo.
- World Food Programme (WFP) – Logistics Cluster 2013, 'Customs and humanitarian aid: role of Customs', WFP, Rome, <http://log.logcluster.org/mobile/response/customs/index.html>.

Note

- 1 The author acknowledges the key contribution to this paper by Ms Virginie Bohl, United Nations Office for the Coordination of Humanitarian Affairs, and Dr Jim Hines.

Rebecca Turner



Rebecca Turner currently writes for the Humanitarian Practice Network and has previously written for submission to the Cambridge University Press on a publication with the Centers for Disease Control and Prevention on Humanitarian Logistics during Complex Humanitarian Emergencies. She has been working as a Project Manager in Bogota, Colombia and previously as a Logistics Project Coordinator for the Emergency Response & Recovery Branch at the Centers for Disease Control in Haiti. Rebecca is currently an Adjunct Professor of Logistics at Emory University and previously received a Masters in Logistics and Management at Università della Svizzera Italiana in Lugano, Switzerland. Prior to receiving her Masters degree, Rebecca was an intern with the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) in Geneva.

Automotive excise taxation: what reforms are needed to best utilise the ASEAN Economic Community?

Rob Preece

Abstract

This paper draws attention to reforms which, if implemented, would utilise the opportunity represented by the ASEAN Economic Community (AEC) 2015 in, for example, the automobile industry in the ASEAN region. A range of policy areas are identified where coordination by ASEAN members would strengthen the region's position to become a leading global automobile producer. In addition to examining vehicle types and their relative CO₂ emission levels and fuel efficiency, examples of the types of excise tax that is applied in the European Union (EU), South Africa, Cyprus, and Thailand are used to highlight areas that could be addressed, leading to a series of reforms that would enhance the opportunity to achieve this global role. In conclusion, the paper brings together the policy issues discussed and provides a possible standardised automobile excise structure which policymakers could consider.

1. Introduction

The ASEAN Economic Community (AEC) 2015 represents a significant opportunity for ASEAN¹ members to coordinate across a range of policy areas with the intention of building a leading automobile production region which is highly competitive globally. Today the ASEAN region is producing less than 4% of the world's passenger motor vehicles and less than 2% of commercial vehicles,² therefore significant potential exists to grow this figure and share in the wealth it creates. Excise taxation is applied to motor vehicles in all 10 ASEAN member countries and so is an important tax within the region. Several members manufacture motor vehicles, and the sector has become a major contributor to the economies of these countries whilst all members can and do form part of the distribution of these regionally produced vehicles. This paper looks at those relevant policies around excise taxation with a focus on passenger motor vehicles which will need coordinating to help the region attain this aspiration of becoming a leading global automobile producer. Motorcycles, auto rickshaws, and the like, are outside the scope of this study.

2. Regional opportunities, not competition in the automobile sector

The challenge for the existing and emerging automobile producing members of ASEAN is to move away from creating 'specialised' categories of motor vehicles, or creating special classification criteria for which substantial excise tax discounts will be applied that are not available for 'like' vehicles. This creation of 'national favourites' often leads to 'competition' between ASEAN members at a time when the region has an opportunity to work together to increase wealth.

Discounting excise rates to support ‘national favourites’ has other negative consequences including:

- the potential losses of excise revenue from reduced excise rates on favoured categories
- deterrence to potential overseas investment
- inefficiencies in production to meet ‘special criteria’
- distortion of markets, including over-supply, where special criteria may include minimum production levels.

In some cases, the establishment of ‘favourite’ categories within an excise system can effectively result in the creation of ‘non-tariff’ barriers to international trade. Whilst possibly seen as a ‘populist’ system in individual countries, the overall effect can be negative as trading partners ‘retaliate’ with similar non-tariff barriers or hold back on investment opportunities. Non-tariff barrier elimination has rightly been seen as an important element of the ‘free flow of goods’ component of the AEC 2015.

The challenge now is to view ASEAN in the same way as the AEC Blueprint views ASEAN, that is, as a ‘single market’ and ‘single production base’. An automobile manufacturer needs to see that they have a potential market of over 600 million customers, and have access to a supply chain for parts and labour which covers all 10 countries so that vehicles are built with the best ‘value for money’ options.

Should the visions of the AEC Blueprint emerge, all 10 ASEAN countries will benefit with all countries contributing to the growth of the ASEAN automobile sector and sharing in the wealth that it creates, and with customers having a larger range of affordable and locally produced vehicles from which to select. A strong regional automobile sector will then no doubt start attracting the attention of international investors leading to the increased development of new technologies which will further ensure the ongoing strength of the sector.

To achieve this, the region needs to start looking at a level of coordination of excise taxes, with these taxes often equalling more than the production value of the automobile itself,³ and so play a large role in both investment decisions and in consumer purchases. Further, there are benefits in any move to begin ‘standardising’ the product categories across the region so that at least these individual categories are recognisable across all 10 countries. This would mean that there are, in effect, ‘like’ categories with standard definitions and classification criteria, not unlike that which has been achieved in other regional projects such as the ASEAN Harmonised Tariff Nomenclature (AHTN) which offers international traders in the region a standard set of classifications and definitions.

3. Considerations for automobile excises in terms of products, tax structures and tax bases

The underlying principle of good tax policy is that taxes should be neutral or, in other words, the tax rate, tax base and tax structure should not impact markedly on investment, production or consumption. It certainly should not be used to ‘target’ or to ‘favour’ one particular industry, one particular product, or one particular taxpayer over another. However, in certain circumstances there can be justification to levy ‘special’ taxes or discriminatory taxes such as excise, to correct negative externalities associated with the consumption of certain goods. Automobiles do create a number of negative externalities and therefore can be justified on several grounds, including:

- Cost of operating public roads which is seen as an ‘economic charge’ on road users and would extend to addressing revenues required for road building as well as ongoing operations such as traffic lights, road signage, rescue and recovery, etc.⁴
- Costs of maintaining roads from damage caused during normal road usage.
- Emissions of CO₂ contributing to negative environmental impacts such as immediate air quality in urban areas and the broader impacts associated with climate change.

- Traffic congestion from the growing number of automobiles on the road and the increased volumes of trips being made by those vehicles particularly at certain peak periods. This is particularly the case where road infrastructure is unable to support the volume of vehicles. There are also connections with other environmental costs as emissions from idling vehicles are double those from moving vehicles.⁵ There is also an economic cost from the increased time taken for workers and businesses to move people and goods via road in terms of ‘travel cost’, ‘additional business operating costs’ and ‘lost productivity’.⁶

Notwithstanding these externality factors, the simple fact of raising revenue also remains an important aspect in automobile tax policy, particularly in developing economies. In such cases, owning a motor vehicle is seen as a ‘luxury’ and the excise tax system is used to capture this concept and will figure in policy considerations. It is important to note that rising living standards are seeing an increase in car ownership, as middle class populations increase and cars also become more affordable.

However, policy considerations will not be confined to revenue and the correction of negative externalities, particularly where the country concerned is an automobile manufacturer. In this case, it is usual for the automobile industry to contribute substantially to that country’s GDP and as such be of significant economic benefit.⁷ The automobile sector covers an entire supply chain adding value from ‘upstream’ industries such as mining and metals, rubber, plastics, glass, etc., through to ‘downstream’ industries such as distribution including to retail, service and repairs, marketing, finance, insurance, rentals and fuel products, and is not limited to component production and vehicle assembly. Value is added at each point of the automobile supply chain, employing many people across the economy.

Just as important to the economy is the development of new technologies and other intellectual property (IP). The value that this creates can be significant and ensures the long term position of the automobile sector, and can create potentially large export income opportunities for the country. In addition, some of the next technology or IP created in the industry can be utilised in other industries (for example, CO₂ emission reductions), further expanding the value of this sector.

In this context, excise policy considerations should be focused on designing a simple, fair and transparent tax system that provides the certainty and equity that facilitates investment decisions and allows for a sustainable flow of revenue for the government from a strong and viable industry that is contributing to the whole economy.

4. Determining and defining the products and tax bases

The best place to start an examination of how to determine and define automobile product categories and their tax bases is to look at how the industry views the products it trades and the important distinctions between these categories which will then apply throughout the remainder of this paper.

4.1 Automobile trade terminology

In the trade setting, the automobile industry looks at products in terms of being:

- CBU (Completely Built Up) – or in a state of finished assembly and ready for distribution and sale, or
- CKD (Completely Knocked Down) – or comprising components which when assembled will be a finished unit ready for sale. In other words, a ‘kit’ which in some cases provides for more cost efficient transportation such as in shipping containers, and further often facilitates tax advantages at the destination from reduced import values declared at Customs, or from incentives for undertaking some local value-add processes, or
- SKD (Semi Knocked Down) – similar to CKD but the kit is not completely knocked down to individual parts, that is, some assembly has occurred or remains, and less assembly is required at the destination.

In terms of CBU, CKD and SKD, the differentiation applies primarily to customs and import classification and tariff policy, with CBU classifications often attracting higher rates of import duty than imported kits, to reflect the economic benefits of the local value-add which will take place when the kits are assembled for delivery into the market.

It is important to establish that for excise tax policy, CBU and knocked-down kits should be attracting the same excise duties as is the final product being taxed. However, given most of the regions' automobile excises are fully *ad valorem* and that import valuations are mostly⁸ based on a customs CIF valuation and customs duty sum, there is a connection between import and excise tax policies in this context to consider. However, given the following section is focused on excise taxation, discussion will be at the CBU level, unless otherwise indicated.

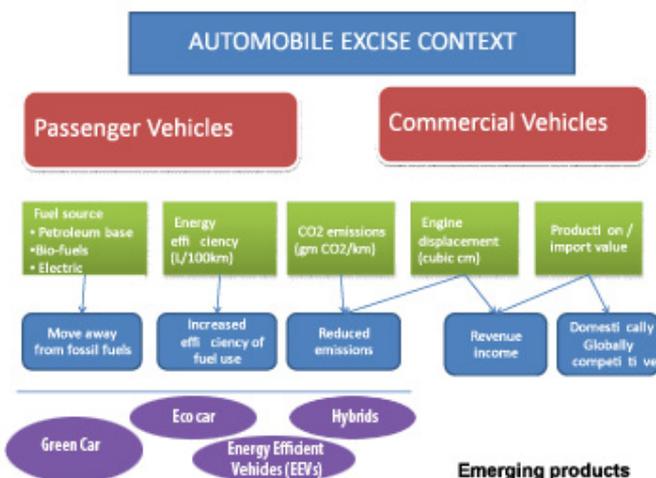
For the purposes of this paper, and consistent with the automobile market, automobile products will be divided into two broad categories: 'Passenger Motor Vehicles', and 'Commercial Motor Vehicles'. This section will also look at the main product categories falling within each of these broader categories and propose a number of definitions taken from the literature which best reflect the specifications of the product contained within each.

This is seen as an important issue as excise taxation in the region does often lack clear definitions of automobile categories and products, and where definitions are available there are often differences that make cross-border analysis difficult. The concept of moving to adopt 'standard' definitions, along with other initiatives in place such as the AHTN, would further facilitate trade in excisable goods in the region.

This paper now looks at and further aligns much of the current and emerging policy considerations in automobile excise taxation and the future direction of these, and highlights a number of new products being established in response to these emerging policies.

A snapshot of the context behind the thinking in this paper is found in Figure 1 which looks at some of the main drivers of excise taxation and their objectives, as well as the emerging products which result from developments in the automobile sector. The paper then considers the key product categories of the market and discusses how these categories are defined in the sources studied. Discussion of likely product categorisation and definitions follows before the main drivers of automobile excise taxation are addressed.

Figure 1: Outline of automobile excise: areas to categorise, standardise and define



Source: Author.

4.2 Broadly defining product categories

To broadly define product categories in the regional automotive industries, a number of sources have been utilised and combined to provide the most comprehensive and ‘useful’ definitions for use in local policy development.⁹ However, for clarification, at this point there is a need to define, at the ‘high level’, ‘motor vehicle’ for which the following is proposed:¹⁰

‘Motor vehicle’ is any power-driven vehicle which is normally used for carrying persons or goods by road, or for driving on the road, or vehicles used for the carriage of persons or goods.

Starting with two broad product categories ‘passenger motor vehicles’ and ‘commercial motor vehicles’ to reflect the different purposes of the vehicles (and possible different tax policy treatments) a number of sub-product categories have been identified within both passenger and commercial vehicles. Table 1 captures this output.

Table 1: Standard high level automobile definitions for excise policy development

Broad Product Category	Definition	Sub-Product Category	Definition
Passenger Motor Vehicles	Motor cars and other motor vehicles principally designed for the carriage of persons (less than 10), including the driver	Passenger Cars	Road motor vehicle, other than a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver)
		Sports Utility Vehicles (SUV)	Includes vehicles designed as off-road vehicles with four-wheel drive capability (or two-wheel where other specifications of this definition are met), high ground clearance and a wagon body type, seating up to nine people (including the driver)
		Passenger Pick-up Vehicles (PPV)	Pick-up vehicles designed with an extended or dual cab for the carriage of no more than nine people (including the driver)
		Other	Reserved
Commercial Motor Vehicles	Motor vehicles principally designed for the carriage of goods, or persons (10 or more) including the driver, or for special purposes	Pick-up Vehicles	Any vehicle which contains both a passenger compartment designed for the carriage of less than four persons and open cargo bed for the carriage of goods
		Van	Any vehicle with a closed cargo bay designed for carriage of goods with no more than two axles
		Bus	A vehicle designed for the carriage of 10 or more persons (including the driver)
		Truck	A vehicle with a power unit and either a permanently fixed or detachable cargo carrying capability with two or more axles
		Truck tractor	A non-cargo carrying vehicle designed to tow trailers and other devices
		Special purpose	Including vehicles with specific purposes such as fire-fighting, ambulances, spraying, concrete mixing, mounted cranes, etc.

Source: Author

4.3 Excise-related specifications in classifying automobiles

An issue relating to definitions that the region needs to manage is that of recent trends of restructuring of automobile excise tariffs to reflect certain government policies in relation to areas such as energy, environment, and investment. The result is that new or additional product items and sub-items are being added to existing automotive tax categories, creating excise duty rate differentials to give effect to these policies.¹¹

This section discusses these policy considerations and the impact they have on excise policy so that recommendations can be made in relation to appropriate tax bases and the need to refine or create standard definitions for emerging products. What is important to note is the often high level of ‘cross-over’ between these policy areas, including:

- energy policy (including energy security) and the need for alternative and renewable fuel sources
- fuel efficiency in vehicles
- reducing emissions into the atmosphere from motor vehicles
- engine displacement which is often seen as a proxy for several key externalities.

4.3.1 Energy policy considerations

A country’s energy policy may have several components including, for example, the need to address energy consumption in the context of finite fossil fuels and the issues of reducing reliance on those fuels as a long term energy source. This can be achieved in several ways, for example, by:

- increasing the fuel efficiency in the design of new vehicles
- increasing the use of alternative fuels including renewables
- encouraging the continued development of alternative energy sources such as electric cars, use of hydrogen fuel cells, gaseous fuels such as LNG, or CNG.

In terms of fuel efficiency, there is a full discussion in section 4.3.2 as to its potential role in automobile excise tax policy considerations. However, it is worth noting that fuel efficiency is an area that is becoming increasingly subject to government regulation, and thus excise tax policy needs in this case to be consistent with and supportive of those regulations, otherwise the drive towards more fuel efficient technologies is best left out of the excise systems and left to regulation that incentivises industry and consumers to reduce their emissions intensity.

The area of developing new technologies for alternative fuel sources is considered in several places throughout this paper. Currently, the drivers here are around manufacturers having the right environment in which to invest in designing and developing the new technologies that will produce consumer-accepted (including affordable) vehicles which can capture a market share to ensure ongoing viability. As a result, vehicles of alternative fuel source technology are generally not subject to excise taxes, or where they are, they are given significant discounted rates.¹²

The other outcomes from greater fuel efficiency and greater use of alternative fuels and fuel sources relate to the environment. This is a positive and desirable outcome, and again is dealt with more fully in the discussions below relating to emissions.

Therefore, the question to address in this section is whether ‘fuel type’ is an appropriate means by which to classify automobiles for excise taxation policy purposes. A study of the literature on this area finds that classification by fuel type is not a common attribute of automobile excise systems, although it is seen currently in the region in Thailand.

The European Union (EU), apart from Cyprus, does not use automobile excise taxation. Energy use and environmental-based objectives, including those encouraging the use of alternative fuels, are instead delivered through energy taxation and road use taxation policies, that is, through fuel taxation and through

initial and annual vehicle registrations levies. It should be noted that the EU is trying to eliminate initial vehicle registrations in favour of ‘circulation’ or annual taxes to avoid market distortions from member states having different registration levies and open borders.

An example of a circulation tax is the United Kingdom’s ‘Vehicle Excise Duty’ (VED)¹³ system which classifies vehicles primarily by their CO₂ emissions, then applies a rate depending on whether the vehicle uses petrol/diesel or ‘alternative fuels’. However, it should be noted that VED is actually an annual road tax despite being levied on the vehicle owner and despite the tax being called an ‘excise’.

The other approach is ‘non-tax’ through standards and regulation as is used in the United States (US). Through its *Energy Independence & Security Act 2007*, the US government has extended a current fuel efficiency level target, due to expire in 2016 to 2025. The result is forecast to almost double current fuel efficiency requirements by 2025 with an aspiration for motorists to be using 2 million barrels of oil less per day, and in turn significantly reducing dependence on oil imports.¹⁴

As with the US and the EU above, this paper does not see a strong need to create excise structures, or to complicate existing excise structures by incorporating product categories or sub-categories according to specific fuel types. Fuel tax policy and regulation may be more appropriate places to capture these energy security and energy supply issues. Environmental issues can also be captured through fuel taxation and regulation but may also have a place in automobile taxation and this aspect will be discussed in detail below.

Alternatively, those same policy issues surrounding energy and environmental outcomes may also be considered separately in terms of automobile initial registration and/or annual circulation taxes, however, both of these types of taxes are currently outside the scope of this paper which is excise tax-focused.

4.3.2 Fuel efficiency

An emerging area of automobile excise policy is the importance of developing a higher level of fuel efficiency in vehicles, which in turn is seen as being related to the other key policy area around CO₂ emissions. In a growing number of countries, there are moves to go beyond the use of excise taxation as a fiscal instrument but to also look at regulation in respect to standards for fuel efficiency (and CO₂ emissions) for new vehicles.¹⁵

‘Fuel efficiency’ relates to a vehicle’s consumption of fuel and is generally measured as litres per 100 kilometres. At this point, no formal universal standard or benchmark exists to define a ‘fuel-efficient’ vehicle and this is set in local legislation based upon local policy objectives. Moreover, minimising fuel consumption is an ongoing aspiration for manufacturers in a market with a growing demand for fuel-efficient vehicles.

The standard of ‘fuel efficiency’ is also changing with governments often revising downwards the litres to be consumed per set distances. As outlined above, the US will almost halve the current fuel consumption requirements rising from the current 29 miles per gallon, to 35.5 miles per gallon by 2017 and eventually, to 54.5 miles per gallon by 2025. To illustrate the differences in approaches and standards, Figure 2 highlights a number of examples of locally set ‘fuel efficiency’ definitions.

The main reasons that ‘fuel efficiency’ would be used by excise tax policymakers is to reduce energy use and dependence on imports of energy, and to achieve environmentally positive outcomes from reduced burning of fuels.

Use of energy efficiency in automobile excise taxation is not common and where it does occur it is used with other criteria to effectively create a ‘sub-category’ or ‘special product’. Where it is used, ‘energy efficiency’ is a measure by which a reduction or discount is applied to a ‘benchmark’ excise tax rate.

Figure 2: What is fuel efficient? The different approaches

<p>Australia (Simple):</p> <ul style="list-style-type: none">• Increased tax-free threshold if fuel consumption does not exceed 7 litres per 100 km¹⁶ <p>European Union (Fuel type):¹⁷</p> <ul style="list-style-type: none">• Petrol – 2015 target of 5.6 litres per 100 km (2021 target of 4.1 litres/100 km)• Diesel – 2015 target of 4.9 litres per 100 km (2021 target of 3.6 litres/100 km) <p>Malaysia (Curb weight – Kilograms):¹⁸</p> <ul style="list-style-type: none">• Up to 800 – 4.5 litres per 100 km• 801-1,000 – 5.0 litres per 100 km• 1,001-1,250 – 6.0 litres per 100 km• 1,251-1,400 – 6.5 litres per 100 km• 1,401-1,550 – 7.0 litres per 100 km• 1,551-1,800 – 9.5 litres per 100 km• 1,801-2,050 – 11.0 litres per 100 km• 2,051-2,350 – 11.5 litres per 100 km• 2,351-2500 – 12.0 litres per 100 km

As shown in Figure 2, Australia’s Luxury Car Tax regime provides a higher tax-free threshold for fuel efficient cars, with the minimum value threshold for those vehicles set at values that are 20% higher than for other luxury cars. Another example is from Cyprus, which is the only member state of the EU to have an automobile excise tax. The Cyprus automobile excise system comprises a ‘base excise’ dependent upon model, engine displacement and CO₂ emissions. In addition to the base component, reductions in excise can be obtained for secondhand vehicles and/or those vehicles deemed to have high levels of fuel efficiency.¹⁹

Fuel efficiency is not seen as an appropriate basis on which to structure an automobile excise tax system. Where it is a key policy objective of the government, fuel efficiency can be used as a criterion to access certain incentives within that excise system. However, if fuel efficiency is part of the excise classification criteria, it becomes essential that fuel efficiency be measured in an open and transparent manner and applied equally to all vehicles and vehicle manufacturers. This is an important excise administrative issue and applies equally to the testing of CO₂ emissions and likely, at the same time. This is discussed in more detail in section 4.4.

4.3.3 Emissions-based approaches

The literature in relation to CO₂ emissions from vehicles shows it to be a priority area, with leadership coming from the EU and the US. There is a trend towards automobile excise taxation adopting the level of CO₂ emissions as part of the classification criteria or tax design. As found with fuel efficiency however, shifts towards CO₂ emission reductions are primarily a result of regulations and standards being applied to manufacturers (although in some cases this has been or will be supported by certain tax measures).

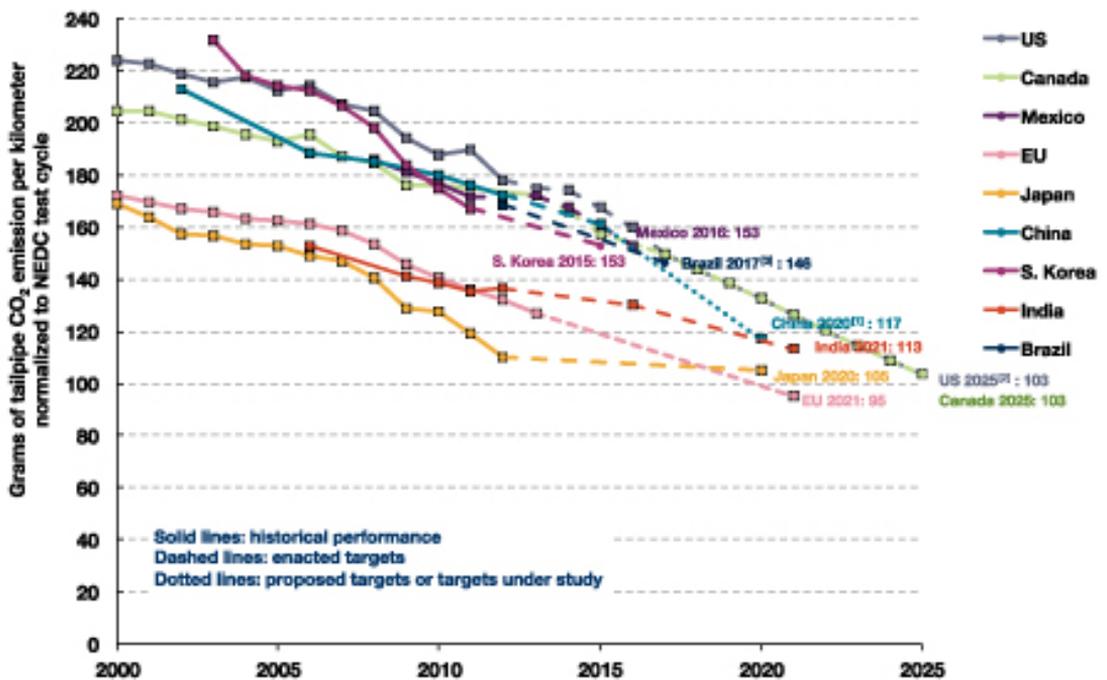
CO₂ emissions are principally measured in grams per kilometre (g/km), although the actual measurement process has often led to some debate as there are several testing methodologies and processes which have been adopted by different countries. In the context of regionally coordinated taxation, it will be important to adopt an appropriate standard CO₂ emissions test. The issue of testing of CO₂ emissions on new vehicle products for tax (and regulatory) purposes will be examined in greater detail below, with discussion focusing on the United Nations Economic Commission for Europe (UN/ECE) standards which have a greater global usage.

CO₂ standard emissions are based on a ‘fleet-wide’ survey of new vehicle products rather than individual cars or models, recognising that a manufacturer will have a mix of products to offer for different markets and that in the mix of products – depending on size, weight and displacement – different products will have different emission levels. This is an issue in the use of CO₂ as an excise base, as manufacturers look to meet CO₂ emission standards on a ‘fleet-wide’ basis rather than individual models. As such, different policy approaches can bring environment and tax policies into conflict. Target CO₂ emission standards will also generally be set slightly higher for commercial vehicles over passenger vehicles.

In terms of regulation, there are positive outcomes being observed already in the major economies with current and future emissions levels in new vehicles being driven down through this regulatory approach. Currently, Japan has the lowest emission standards at 110 g/km with plans to reach 105 g/km by 2020, whilst the EU currently at 130 g/km plans to be the lowest reaching 95 g/km by 2021. Presently, the US emissions standards sit at approximately 156 g/km falling to 103 g/km by 2025.²⁰

Figure 3 shows the current standards for levels of CO₂ emissions in new vehicle fleets, as reported by the International Council for Clean Transportation.²¹ The analysis includes major economies around the world and the future direction of these standard levels into the 2020s. At the time of writing, most CO₂ emissions levels in the study below appear to sit between 160 and 180 g/km.

Figure 3: Reducing CO₂ emissions in new vehicles²²



[1] China's target reflects gasoline vehicles only. The target may be higher after new energy vehicles are considered.

[2] US fuel economy standards set by NHTSA reflecting tailpipe GHG emission (i.e. exclude low-GWP refrigerant credits).

[3] Gasoline in Brazil contains 22% of ethanol (E22), all data in the chart have been converted to gasoline (E00) equivalent

[4] Supporting data can be found at: <http://www.theicct.org/info/tools/global-passenger-vehicle-standards>.

In this context, it is important to look at how the excise system is designed to support these standards and be consistent with government environment policies when looking at excise tax design. There are several ways to deliver this; however, the main priorities are to avoid building complexity into the automobile excise tax structure and equally, to avoid creating tax structures which discriminate against particular manufacturers or discriminate against importers of like products produced domestically. This section looks at several options.

One option is to build CO₂ emission tiers for each of the various product categories. This approach has been utilised more in terms of initial and annual registration taxes, rather than excise taxes – again in the EU where excise taxation for automobiles is rarely used by member states but the community has a strong desire to reduce CO₂ emissions. This discussion will return to the EU below, where such CO₂ emission tiers are utilised in several member states in conjunction with a ‘fee-bate’ approach.

In terms of creating CO₂-based tiers, from 1 January 2016, Thailand will adopt this approach for vehicles under engine displacements of 3,000 cc (3,250 cc for PPV). As can be seen from Table 2, the various product categories each have a set of CO₂-based emissions tiers, although the tiers are set at different levels for each product type.

Table 2: Thailand: new automobile excise structure from 1 January 2016

Vehicle type	Category (CO₂ emissions)
Passenger cars not more than 10 seats	≤ 100 g/km
	101 - 150 g/km
	151 - 200 g/km
	> 200 g/km
	> 3,000 cc
Space-cap Pick-up	Cab type: Rate differs for Double, Space, or Single
	≤ 200 g/km
	> 200 g/km
Passenger Pick-up Vehicle (PPV)	≤ 200 g/km
	> 200 g/km
Space-cap Pick-up & PPV	> 3,250 cc
Eco cars	< 100 g/km
	101 – 120 g/km
Electric vehicle/fuel cell/hybrid	≤ 3,000 cc
	> 3,000 cc
OEM Natural Gas Vehicle (NGV)	≤ 3,000 cc
	> 3,000 cc

Source: Excise Department, Ministry of Finance, Thailand.

In Table 2, the new Thai automobile excise system, the following points should be noted:

- the CO₂ emissions range bands for commercial vehicles are higher than for passenger vehicles (reflecting larger engines needed for commercial uses)
- CO₂ emission bands for ‘eco’ cars are lower than for other passenger vehicles (to capture discounted rates) and non/low CO₂ emission vehicles remain taxed on engine displacement
- CO₂ emissions are based on individual models, not on ‘fleet-wide’ averages as CO₂ emission standards are based. As such, this approach has the potential to create ‘winners’ and ‘losers’ in terms of models in the market. This risk needs to be managed to ensure this does not occur.

These are typical policy issues needing to be addressed if moving towards a CO₂ emissions-based excise, as well as the ‘certification’ of CO₂ emissions for tax purposes which is discussed in section 4.4.

Another approach to recognising CO₂ emission levels is to use ‘surcharges’ in existing or new automobile excise tax design. By ‘surcharging’, a ‘base’ excise rate applies to which an additional amount of duty is calculated when emissions exceed a policy target level.

This type of approach is currently seen in South Africa, and to some limited extent in the aforementioned Cyprus automobile excise system.²³ The Cypriot excise tariff is a little different, in which there are two categories of vehicle based on the HS codes. Passenger vehicles and light commercial vehicles are exempt from paying excise if CO₂ emissions are below 120 g/km. Once above this threshold, vehicles are levied by increasing ‘base excise’ and increasing surcharge rates according to a table of emissions tiers. The other category is ‘other commercial vehicle’ which pays a flat rate of EUR 0.26 per cc. Also to note is that Cyprus has a fully specific rate excise system for automobiles, levied by a monetary amount per unit (vehicle), rather than as a percentage of the value of unit (*ad valorem* system).

To highlight this type of approach, Table 3 outlines these examples from South Africa and for passenger vehicles/light commercial vehicles in Cyprus.

Table 3: South Africa and Cyprus: emissions-based ‘surcharge’

South Africa	Cyprus (Passenger/Light Commercial)
<p><i>Ad valorem</i> excise according to engine displacement²⁴</p> <p>Plus</p> <p>‘Environmental levy’ set at a specific rate per gram of CO₂ exceeding:</p> <ul style="list-style-type: none"> • 120 g/km = R90 per gram of CO₂ emissions exceeding 120 g/km; and • 175 g/km = R125 per gram of CO₂ emissions exceeding 175/km²⁵ 	<p>(a) For vehicles with carbon dioxide (CO₂) emissions (combined cycle) less than or equal to 120 g/km:</p> <ul style="list-style-type: none"> • ‘Zero’ <p>(b) For vehicles with carbon dioxide (CO₂) emissions (combined cycle) exceeding 120 g/km but not exceeding 150 g/km:</p> <ul style="list-style-type: none"> • EUR 25 per g/km of carbon dioxide (CO₂) emissions over 120 g/km <p>(c) For vehicles with carbon dioxide (CO₂) emissions (combined cycle) exceeding 150 g/km but not exceeding 180 g/km:</p> <ul style="list-style-type: none"> • EUR 750 plus EUR 50 per g/km of carbon dioxide (CO₂) emissions over 150 g/km <p>(d) For vehicles with carbon dioxide (CO₂) emissions (combined cycle) exceeding 180 g/km:</p> <ul style="list-style-type: none"> • EUR 2,250 plus EUR 400 per g/km of carbon dioxide (CO₂) emissions

Source: South African Revenue Service, Ministry of Finance, South Africa and Customs & Excise Department of Cyprus, Ministry of Finance, Cyprus.

Finally, building on from this CO₂ emissions-based ‘surcharging’ method, is an approach sometimes referred to as ‘fee-bates’. The term, according to the United Nations Environment Program (UNEP), is based on the fiscal measures of levying ‘fees’ on inefficient vehicles and ‘rebates’ on efficient vehicles based on a policy ‘pivot point’. This determines the crossover between efficient and inefficient vehicles in terms of CO₂ emissions and fuel economy.²⁶ ‘Fee-bates’ can be seen today in the EU, China and Canada and can be applied either as a form of subsidy to manufacturers or to initial (and annual) vehicle registration taxes. Where applied as forms of subsidies to manufacturers, the ‘fee’ can also be considered a ‘negative rebate’ with manufacturers required to contribute a tax or levy for inefficient vehicles produced.

However, whilst the ‘fee-bate’ concept is not applied directly in an excise tax system (and in the case of China operates with the excise system), the principles could equally apply and could be legitimately considered in excise tax design. ‘Target’ or ‘standard’ CO₂ emission levels can be set and then additional tax burdens can be added to those vehicles which exceed the standard CO₂ emission level. Conversely, the excise tax burden can reduce for those vehicles that are below the standard emission level. The excise tax rate increases, linked to CO₂ emission levels, can be exponentially applied if so desired. Furthermore, excise rates can all reduce exponentially for lower emitting vehicles to further incentivise through the excise system. In such cases, effective excise rates increase significantly the higher the CO₂ emissions levels are, or decrease significantly the lower they are.

Figure 4 provides two examples of ‘fee-bating’ within a tax setting. These include the registration tax in Denmark, and a bonus/penalty payment on new car sales in France. In effect, the approach impacts the retail price for new cars and therefore consumer demand. The objective is to shift that demand towards lower emission (and fuel-efficient) vehicles. As such, these examples are not dissimilar to the effect of excise taxation, which is also widely used internationally to impact price and therefore influence consumption.

Figure 4: Use of ‘fee-bates’ in the European Union

Denmark – registration tax		
In addition to a (heavy) tax based on vehicle purchase price, a CO ₂ -based correction is applied.		
<i>Reductions in tax:</i> For petrol-powered cars the registration tax is reduced by DKK 4,000 for every kilometre that the car covers more than 16 km/litre fuel (equivalent to 145 g CO ₂ /km). For diesel-powered cars the registration tax is reduced by DKK 4,000 for every kilometre that the car covers more than 18 km/litre fuel (equivalent to 147.2 g CO ₂ /km).		
<i>Increases in tax:</i> For petrol-powered cars the registration tax is raised by DKK 1,000 for every kilometre that the car covers less than 16 km/litre fuel. For diesel-powered cars the registration tax is raised by DKK 1,000 for every kilometre that the car covers less than 18 km/litre fuel.		
France – bonus payment/penalty tax on new car sales		
Pays buyers of new cars a ‘bonus’ for low emission vehicles and applies a ‘penalty tax’ on higher emission vehicles as follows:		
Class of vehicle	CO₂ Emissions (g/km)	Rebate Euro
A+	Up to 60	5,000
A-	61-100	1,000
B	101-120	700
C+	121-130	200
C-	131-140	0
D	141-160	0
E+	161-165	-200
E-	166-200	-750
F	201-250	-1,600
G	>251	-2,600

Source: Author.

In terms of using CO₂ emissions as a criterion for taxation, several issues arise. First, as we saw above, CO₂ emissions policy is set on a ‘fleet-wide’ average and not for individual models. This results in greater tax burdens falling on certain manufacturers depending on their product mix. The second issue is with regard to the process of certifying the CO₂ emissions of the vehicle itself. Certification is increasingly required for environmental purposes, consumer information purposes and now also increasingly for tax

purposes. This requires alignment and consistency between those agencies who oversee environmental policy, oversee manufacturing standards (that is, issue vehicle type approval) and now, those who oversee excise taxes.

4.3.4 Displacement (as a proxy for ‘all’ policy objectives)

Engine displacement is the most common criterion to classify automobiles for excise duty purposes, and it is used to classify all imports of CBU, CKD and SKD vehicles. The primary benefit of this approach is that engine size can act as a proxy for many of the other negative externalities discussed above. If we look at these:

- *Energy policy.* Governments are increasingly conscious of the need to secure sufficient fuel reserves. This takes in many considerations such as greater fuel efficiency in new vehicles, greater use of alternative fuels, particularly renewables, and greater investment in alternative fuel sources such as electric vehicles. In conjunction with fuel use, it can generally be considered that there is a relationship between fuel use and displacement, with larger engine sizes generally consuming larger quantities of fuel. Thus larger engine sizes will attract higher effective excise rates.
- *Fuel efficiency.*²⁷ One of the primary factors governing fuel efficiency is engine size. Manufacturers have been continually improving fuel efficiency with initiatives such as new technology, new aerodynamic designs and weight reductions. Furthermore, the way a vehicle is driven contributes to fuel use, however engine size remains the main factor. Thus, again, larger engine sizes have generally attracted higher effective excise rates.
- *CO₂ emissions.* Again, manufacturers are continually improving emissions from new model vehicles, however, the level of CO₂ emissions still relates to the amount of fuel which is burnt and the larger engines consume larger quantities of fuel. As with fuel efficiency, engine size has played a part in seeing higher effective rates being applied to larger engine vehicles.
- In addition to fuel efficiency and emissions, another factor is that of ‘wear and tear’ on public roads which itself often relates to the weight of the vehicle. Larger engine vehicles will likely carry more weight than vehicles of a smaller engine size.

There is a clear trend in the automotive industry generally to improve fuel efficiency and reduce emissions. With this there is a correlation with greater numbers of new vehicle models having smaller but more efficient engines.²⁸ Some vehicle types may retain a large overall body size given their primary purpose or demand in the market for larger vehicles. However, even such larger vehicles are increasingly utilising smaller and more efficient engines.

The combination of the drive to improve fuel consumption, and reduce emissions, including through alternative fuels, has seen the emergence of new ‘sub-categories’ appearing in industry (and, in some cases, excise and other taxes) terminology. We are seeing examples of these in the ASEAN region, including:

- ‘Eco Car’ – Thailand
- ‘Electric Car’ – Thailand, Vietnam
- ‘Energy Efficient Vehicle’ – Malaysia
- ‘Low Cost Green Car’ – Indonesia.

The creation of these new sub-categories is generally linked to some form of favourable tax treatment (including excise) which in turn stimulates demand for these environmentally more friendly vehicles. The categories are also being used outside of excise taxation and for other forms of tax and investment incentives to attract the production of these new products locally.

Including some or all of these new sub-categories in an excise system risks adding to the complexity of the system through the need to add additional (and defined) items to existing taxable categories.

Complexity will arise when a vehicle is manufactured (or planned to be manufactured) or imported and can fit into several possible excise tariff items – with each likely to have different duty rates. In summary, excise tax policymakers need to be aware of the following risks:

- what criteria will be used to differentiate between say, a small car and an ‘eco car’
- how those criteria will be established
- whether all manufacturers and importers will be able to meet the criteria
- how the criteria will be confirmed, including testing issues (see section 4.4)
- what the ‘fall back’ position will be if criteria are not met.

This paper would generally support the region using the excise system to encourage the production of ‘greener cars’ and continue the trend of smaller and more efficient engine technology. As such, keeping within the key principles of simplicity and equity, engine displacement remains a good proxy for an excise tax structure with rate adjustments/discounts for vehicles which meet certain policy priority criteria. This will be further discussed below as part of a standardised approach to automobile excise structure.

4.4 Fuel efficiency and CO₂ emissions testing: issues for excise classification

Where a government has decided to utilise CO₂ emissions (and/or possibly fuel efficiency) as either part of the classification criteria or setting of the effective excise rate, measurement of CO₂ emissions and fuel efficiency becomes a critical part of the excise system. As stated above, a number of agencies may have an interest, and indeed regulations to administer, in relation to CO₂ emissions and fuel consumption. These types of interests may include:

- being part of the certification process to issue a ‘vehicle type approval’ which indicates that the vehicle has met the ‘standards’ (also known as ‘homologation’)
- production of a ‘label’ to be affixed to new vehicles for consumers to note fuel efficiency and CO₂ emissions
- determination of tax classification and tax payments.

In this context, it is important for the testing regime to be consistent and consistently applied against the following key principles:

- be based on a widely accepted international set of standards
- not designed to ‘favour’ a particular product, product type or manufacturer
- not designed to discriminate against imports and recognise the homologation processes of trading partners where applicable
- be an efficient process to minimise the costs to industry.

The main issues around the testing process, which cause some debate globally, can be summarised as follows:

- What test cycles (or simulated vehicle-running patterns) are to be measured for CO₂ emissions and fuel efficiency, or in other words, what combinations of urban stop/start, country cruising, idling, etc., should be used in the cycle?
- What testing methodologies and processes are to be used (for example, chassis dynamometer, tail pipe capture, start with cold engine, start with warm engine, etc.)?
- What happens if national laboratories cannot conduct accurate testing, for example, should manufacturers’ specifications be used, should automobile association data be used?

- Whether some testing requirements can be utilised to ‘favour’ certain vehicles, and/or discriminate against others to the point of creating ‘non-tariff’ trade barriers.

These questions have not been answered at a global level and no one true global standard for testing is in place. The UN/ECE has for some time had a ‘working group’ developing a set of global standards of vehicle regulations, including CO₂ emissions and fuel efficiency (and its testing) to facilitate international trade in vehicles.²⁹ These regulations cover CBU, CKD and SKD categories.

Non-European nations may be signatories to the regulations and, at present, some 58 countries are now signatories including Thailand and Malaysia from the ASEAN region. Furthermore, Japan and South Korea, both major automobile manufacturing countries with trade agreements with ASEAN, have also signed on. Significantly the US, Canada and China are major automobile producing nations which are not signatories and operate their own developed test standards.

Given the broad international acceptance of the UN/ECE’s regulations, adoption of these standards is seen as moving towards ‘best practice’ testing as opposed to trying to develop a coordinated testing regime between various agencies for national markets. This paper is not a technical document relating to CO₂ emissions and fuel efficiency test design, rather an automobile excise tax design resource.

Ministries of finance are unlikely to, and indeed should not, be involved in CO₂ emission and fuel efficiency testing design. Conversely, they should be advocating the relevant technical agencies to adopt internationally accepted best practices that are in line with best practice in tax design. These principles (outlined above) include equity, non-discrimination and ensuring minimal financial impact on industry/disruption to the economy. In short, excise tax policy in relation to certifying CO₂ emission levels for tax purposes should be linked to a widely accepted international standard as part of the classification process.

Therefore, as information for excise tax policymakers, Figure 5 is a ‘high level’ summary of the relevant UN/ECE Regulations 101 and 83.

Figure 5: UN/ECE Regulations: CO₂ emissions and fuel efficiency testing

<p>High Level Outline: CO₂ Emission Testing Extracted from Regulation No. 101 and Regulation No. 83 of the UN/ECE</p> <p>Regulation 101 For internal combustion engines</p> <ul style="list-style-type: none"> • CO₂ emissions measured as grams per kilometre (g/km) • Fuel consumption measured as litres per 100 kilometres (Natural gas metres cubed per 100 kilometres) • Test as per Annex 6, which for CO₂ emissions will be per Type I Test as defined in Annex 4 to Regulation No. 83. <p>Regulation 83 <u>Type I Test</u></p> <ul style="list-style-type: none"> • Urban cycle (representing city driving) x 4 • Extra-urban cycle (representing non-city driving) • Vehicles on dynamometer, emissions captured and measured • Vehicle type approval granted by testing authority • International standard identification of approval for UN/ECE signatories <p><u>Type II – Type VI Tests (not applicable)</u> Other emissions (that is, not CO₂)</p> <p><u>Conformity of Production (COP)</u></p> <ul style="list-style-type: none"> • Representative vehicle tested • Minimum 3 more cars chosen at random to ensure conformity across vehicle type • Can select more if sample cars outside a tolerance of emission levels and fuel consumption of representative vehicle
--

Source: Author.

5. What are the optimal taxation approaches to structure and tax base?

This part of the paper brings together the discussions above and adds the following discussion on the tax base, with a view to outlining a potential excise tax structure for consideration.

5.1 Tax bases in automobile taxation

Automobile excise taxes are primarily levied on an *ad valorem* basis, and given the nature of the product, *ad valorem* taxes remain the most appropriate tax base for automotive products.

In relation to specific or unitary tax rates, there are no real or equitable tax bases to use:

- *Per car* would be quite regressive and not recognise the differentials in externalities from larger vehicles
- *Per cylinder*, or *per cubic centimetre* does not recognise or incentivise any move towards technology which increases fuel efficiency and reduces emissions
- *Per g/km of CO₂ emissions* would leave no revenue from certain vehicles with very low or zero emissions.

As such, *ad valorem* taxation is seen as the most appropriate; however, some discussion is required with respect to the appropriate taxable value (tax base). Generally, excise taxes are levied on an ex-factory basis (or Cost + Insurance + Freight + Import duty for imports), and this is still seen as appropriate provided that certain areas are addressed in the taxable value.

These areas of discussion are the treatment of certain costs when establishing an ‘ex-factory’ value, and the confirmation of ex-factory values when the manufacturer sells to a related party distributor or retailer of the vehicle. These issues are further examined below.

One source to start looking at the issues of ‘ex-factory’ is that of customs laws on valuation. Such law is comprehensive and backed by global agreements and conventions which provide guidance on import valuations, including those between related parties. Customs laws and conventions can provide guidance to revenue authorities and taxpayers where their values are not clear – offering several possible methods to deduce the value.³⁰ However, one principle is clear in customs law, and that is that no customs agency should assign an arbitrary value over imported goods. This principle should carry over to excise valuation processes.

5.2 The ‘benchmark’ rate

When setting excise duty rates the first requirement is to determine a ‘benchmark’ rate which will then represent the starting point for all excise rates on products. The benchmark rate is the rate that the government wishes to levy on automobiles. Where government policy is to provide an exemption or preferential treatment to a particular product, the excise rate exemptions or discounts are made to the benchmark rate to set a ‘policy effect rate’ and are treated as ‘tax expenditures’ in recognition that some revenue has been forgone by that policy. In short, the benchmark rate should be set first then discounts made to that rate for policy considerations such as smaller engine displacement, lower CO₂ emissions, and/or greater fuel efficiency, etc.

In terms of setting this benchmark rate for automobiles, it is generally seen that commercial vehicles will have lower excise rates than passenger vehicles as this reflects the desire to reduce input costs for business. This, however, will be a policy decision for each country and will require that passenger vehicles do not become substitutes for commercial vehicles so that excise duties are avoided.

Other considerations then follow the priority objectives outlined above, as with general internal tax

policy considerations at the national level. For automobile excise taxation, these are seen as including (in no priority order):

- raising revenue
- reducing CO₂ emissions
- increasing fuel efficiency
- developing technologies to reduce CO₂ emissions and increase fuel efficiency
- attracting investment including technology development.

5.3 Aligning categories, definitions, and policies for excise tax design

In this part of the paper, the policy issue discussions above are brought together and captured in Table 4 which represents a starting point in capturing a standardised automobile excise structure for policymakers to consider, and applies to CBU, CKD and SKD products. The table represents:

- *Two product categories* – passenger and commercial vehicles, with associated differentiations via standard definitions
- *Four product sub-categories* within the passenger vehicle category and six within the commercial vehicle category differentiated via standard definitions
- Classification of individual vehicle models via engine displacement, aligned with HS codes (petrol displacement HS categories for passenger vehicles and diesel displacement HS categories for commercial vehicles)
- Excise duty based on *ad valorem* rates applied on an ex-factory basis (for domestically produced vehicles) or CIF + Customs Duty basis (for imports)
- Benchmark rate expressed as ‘A%’ with differential rates which decrease as engine displacement decreases (B%, C% and D%) for passenger vehicles
- Benchmark rate expressed as ‘E%’ with differential rates which decrease as engine displacement decreases (F%, G% and H%) for commercial vehicles
- Adjustments to excise duty rates to apply when one or more criteria are met as they relate to either CO₂ emissions, fuel consumption, or alternative fuel sources, including hybrid models utilising two fuel sources.

Table 4 attempts not to propose standards in terms of categories, definitions and adjustments, but rather to keep the structure and design relatively simple. Whilst not intended to be a recommendation for any country’s automobile excise tax system, it sets out a range of useful information. In terms of simplicity, the structure keeps away from creating new ‘designer’ products such as the ‘eco car’, the EEV, the LCGC, rather these types of products are classified by their specifications and local policies than set the adjusted rate. For example, an ‘eco car’ as defined in the Thai excise laws includes:

- engine size less than 1300 cc (<1400 cc diesel); and
- minimum of 5 L/100 km; and
- CO₂ emissions less than 120 g/km.

In this case, any product falling into 1a1) or 1a2) and which met the adjustment criteria would be subject to the policy rate for ‘eco cars’ as defined in Thailand.

Table 4: Possible standard automobile excise structure

Product Category	Product Sub-category	Classification By displacement measured in cubic centimetres (cc)	Excise Duty Ex-factory	Adjustments to Excise Duty Rates A, B, C & D	
1. Passenger Motor Vehicles Motor cars and other motor vehicles principally designed for the carriage of persons (less than 10), including the driver	1a. Passenger Cars Road motor vehicle, other than a motor cycle, intended for the carriage of passengers and designed to seat no more than nine persons (including the driver)	1a1) up to 1000 1a2) 1001 - 1500 1a3) 1501- 3000 1a4) above 3000	D% C% B% A%	Discounts to policy rate - For CO ₂ < g/km meet local policy target <u>And/or</u> - For Fuel < target L/100 km Discount to policy rate - For electric car Discount to policy rate - hybrid (2-fuel source)	
	1b. Sports Utility Vehicles (SUV) Includes vehicles designed as off-road vehicles with four wheel drive capability (or two wheel where other specifications of this definition are met), high ground clearance and a wagon body type, seating up to nine people (including the driver)	1b1) up to 1000 1b2) 1001 - 1500 1b3) 1501- 3000 1b4) above 3000	D% C% B% A%		Discount to policy rate - For fuel cell
	1c. Passenger Pick Up Vehicles (PPV) Pick-up vehicles designed with an extended or dual cab for the carriage of no more than nine people (including the driver)	1c1) up to 1000 1c2) 1001 - 1500 1c3) 1501- 3000 1c4) above 3000	D% C% B% A%		
	1d. Other	1d1) up to 1000 1d2) 1001 - 1500 1d3) 1501- 3000 1d4) above 3000	D% C% B% A%		

(Continued next page)

Product Category	Product Sub-category	Classification By displacement measured in cubic centimetres (cc)	Excise Duty Ex-factory	Adjustments to Excise Duty Rates A, B, C & D	
2. Commercial Motor Vehicles Motor vehicles principally designed for the carriage of goods, or persons (10 or more) including the driver, or special purposes	2a. Pick Up Vehicles Any vehicle which contains both a passenger compartment designed for the carriage of less than four persons and open cargo bed for the carriage of goods	2a1) up to 1000 2a2) 1001 – 1500 2a3) 1501- 3000 2a4) above 3000	H% G% F% E%	Discounts to policy rate - For CO ₂ < g/km meet local policy target <u>And/or</u> Discounts to policy rate - For Fuel < target L/100 km Discount to policy rate - For electric car Discount to policy rate - hybrid (2-fuel source)	
	2b. Van Any vehicle with a closed cargo bay designed for carriage of goods with no more than two axles	2b1) up to 1000 2b2) 1001 - 1500 2b3) 1501- 3000 2b4) above 3000	H% G% F% E%		Discount to policy rate - For fuel cell
	2c. Bus A vehicle designed for the carriage of 10 or more persons including the driver	2c1) up to 1000 2c2) 1001 - 1500 2c3) 1501- 3000 2c4) above 3000	H% G% F% E%		
	2d. Truck A vehicle with a power unit and either a permanently fixed or detachable cargo carrying capability with two or more axles	2d1) up to 1000 2d2) 1001 - 1500 2d3) 1501- 3000 2d4) above 3000	H% G% F% E%		
	2e. Truck tractor A non-cargo carrying vehicle designed to tow trailers and other devices	2e1) up to 1000 2e2) 1001 - 1500 2e3) 1501- 3000 2e4) above 3000	H% G% F% E%		
	2f. Special purpose Including vehicles with specific purposes such as fire-fighting, ambulances, spraying, concrete mixing, mounted cranes, etc.	2f1) up to 1000 2f2) 1001 - 1500 2f3) 1501- 3000 2f4) above 3000	H% G% F% E%		

Source: Author.

6. Conclusions

The AEC 2015 provides a unique opportunity to develop an industry with great potential into a truly global participant. The automobile industry has the infrastructure in place today with several countries producing automobiles with local and foreign investment. Using the AEC 2015, these producers should be viewing ASEAN as a single market to create a strong base from which to grow exports, and a single production base supplying and producing the components and assembling the vehicles to support this export drive.

Excise taxation with its important role in each member country of correcting negative externalities and raising revenue will need to be coordinated to achieve this. Barriers to the single market and production base through ‘national product champions’ and structures which often serve as non-tariff barriers, need to be broken down and product categories subject to excise need to be better aligned using standard or common definitions and classification criteria.

Recognising the future of the industry, the excise system can be appropriately used to incentivise new technology in reducing CO₂ emissions and increasing fuel efficiency, and opportunities could exist for that technology to be designed in the region provided automobile manufacturers, through coordinated excise systems, are able to sell into the whole ASEAN market.

References

- Anderson, S, Parry, I, Sallee, JM & Fischer, C 2010, ‘Automobile fuel economy standards: impacts, efficiency, and alternatives’, Discussion Paper, Resources for the Future, Washington, DC.
- Beltramello, A 2012, ‘Market development for green cars’, *OECD Green Growth Papers*, No. 2012/03, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5k95xtcmxltc-en>.
- Bigazzi, A & Figliozzi M 2013, ‘Marginal costs of freeway traffic congestion with on-road pollution exposure externality’, *Transportation Research A*, http://web.cecs.pdx.edu/~maf/Journals/2013_Marginal_costs_of_freeway_traffic_congestion_with_on-road_pollution_exposure_externality.pdf.
- Cnossen, S 2005, ‘Economics and politics of excise taxation’, *Tax Notes International*, The Netherlands, www.iticnet.org/file/document/watch/1628.
- David, P 2012, ‘Principles of taxation of road motor vehicles and their possibilities of application’, *ACTA Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, vol. LX, no. 2, pp. 483-92.
- European Union (EU) 2012, ‘Strengthening the single market by removing cross-border tax obstacles for passenger cars’, http://ec.europa.eu/taxation_customs/resources/documents/taxation/other_taxes/passenger_car/com_2012_756_en.pdf.
- International Council on Clean Transport 2012, ‘European CO₂ emission performance standards for passenger cars and light commercial vehicles’, Policy Update, 12 July, www.theicct.org/sites/default/files/publications/ICCT%20Policy%20Update%20EU%20PV%20CO2%20July2012final.pdf.
- Klink, G, Mathur, M, Kidambi, R & Sen, K 2013, ‘The contribution of the automobile industry to technology and value creation: how can the auto industry in India build momentum for growth’, A.T. Kearney, Inc., www.atkearney.com/documents/10192/2426917/The+Contribution+of+the+Automobile+Industry+to+Technology+and+Value+Creation.pdf/8a5f53b4-4bd2-42cc-8e2e-82a0872aa429.
- KPMG International 2012, ‘Global automotive executive summary 2012’, www.kpmg.com/AU/en/IssuesAndInsights/ArticlesPublications/global-automotive-executive-survey/Documents/global-auto-executive-survey-2012.pdf.
- KPMG International 2014, ‘Global automotive executive summary 2014’, www.kpmg.com/AU/en/IssuesAndInsights/ArticlesPublications/global-automotive-executive-survey/Documents/global-automotive-executive-survey-2014.pdf.

- Nel, R & Nienaber, G 2012, 'Tax design to reduce passenger vehicle CO₂ emissions', *Meditari Accountancy Research*, vol. 20, no. 1, pp. 39-51.
- Santos, G, Behrendt, H, Maconi, L, Shirvani, T & Teytelboym, A 2010, 'Part I: Externalities and economic policies in road transport', *Research in Transportation Economics*, vol. 28, no. 1, pp. 2-45.
- Tuttle, B 2011, 'Why small economy cars make economic sense for automakers', *TIME*, 22 July, <http://business.time.com/2011/07/22/why-small-economy-cars-make-economic-sense-for-automakers>.
- Tuttle, B 2012, 'Size matters: now automakers brag about how small their engines are', *TIME*, 23 April, <http://business.time.com/2012/04/23/size-matters-now-automakers-brag-about-how-small-their-engines-are/>.
- United Nations Environment Programme (UNEP): Global Fuel Economy Initiative (GFEI) n.d., 'Cleaner, more efficient vehicles', www.unep.org/transport/gfei/autotool/approaches/economic_instruments/fee_bate.asp.
- United Nations Economic Commission for Europe (UN/ECE) 2006, 'Regulation No 83 of the Economic Commission for Europe of the United Nations (UN/ECE) – Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements, Revision 3', *Official Journal of the European Union*, L 375, 27 December 2006.
- United Nations Economic Commission for Europe (UN/ECE) 2013, 'Regulation No. 101 – Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range, and of categories M1 and N1 vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range, Revision 2', *Official Journal of the European Union*, L 138, pp. 1-77.
- Weisbrod, G, Vary, D & Treyz, F 2003, 'Measuring the economic costs of urban traffic congestion to business', *Transportation Research Record: Journal of the Transportation Research Board*, no. 1839, pp. 98-106,

Notes

- 1 Brunei Darussalam, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, The Philippines, Singapore, Thailand, and Vietnam.
- 2 European Automobile Manufacturers' Association 2013, p. 39 (adjusted for Australia and Taiwan).
- 3 Indonesia (125%), Malaysia (105%) and Thailand (111% effective), for example, all have excise rates on vehicles with larger displacements which are more than 100% of ex-factory valuations.
- 4 Cnossen 2005, p. 598.
- 5 www.islington.gov.uk/services/parks-environment/sus_pollute/air_quality/Pages/Vehicle-air-pollution.aspx.
- 6 Weisbrod, Vary & Treyz 2003, p. 3.
- 7 See, for example, Thailand 12% (Board of Investment), Malaysia 3.2% (EXIM Bank), China and India 7% and globally approximately 3% (Klink, Mathur, Kidambi & Sen 2013, p. 3).
- 8 The Philippines valuation for excise is based on a net selling price (of either the manufacturer or importer) under RA 9224.
- 9 Including the World Customs Organization (WCO) Harmonised System (HS) notes, chapter 87; United States Code of Federal Regulations (CFR) 40 CFR, chapters 1 and 23 CFR Part 658.17; Australian Bureau of Statistics Catalogue 9314.0 'Sales of New Vehicles', January 2014; New South Wales Government (Australia) 'Categorisation of Motor Vehicles - Definitions'; and UN/ECE's 'Classification and Definition of Motor Vehicles'.
- 10 Asia Pacific Tax Forum 2013, ASEAN Excise Study Group Discussion Paper (unpub.).
- 11 See, for example, Thailand where rate differentials exist for vehicles less than 3000 cc that run on ethanol, electric batteries, fuel cells, natural gas, and hybrids as well as a category known as the 'eco car'. See also Vietnam which applies a rate of 50% of headline rate for vehicles running on biofuels, a rate of 70% of the headline rate for Hybrids, and discounts for electric vehicles dependent on passenger capacity.
- 12 See, for example, Thailand which applies 10% excise for electric and fuel cell vehicles rather than the benchmark 50%, and Vietnam which for electric vehicles applies rates between 10% and 25% rather than the benchmark rates of between 45% and 60%.

- 13 UK Driver and Vehicle Licensing Agency 'Vehicle Excise Duty' 2014, www.gov.uk/government/uploads/system/uploads/attachment_data/file/299797/V149__2014-15.pdf.
- 14 See www.whitehouse.gov/the-press-office/2012/08/28/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standard.
- 15 Anderson, Parry, Sallee & Fischer 2010.
- 16 Section 25.1 A New Tax System (Luxury Car Tax) 1999, Commonwealth of Australia.
- 17 See http://ec.europa.eu/clima/policies/transport/vehicles/cars/index_en.htm.
- 18 Malaysia National Automobile Policy (NAP) 2014.
- 19 Customs & Excise Department, Republic of Cyprus, www.mof.gov.cy/mof/Customs/customs.nsf/All/56C4D9A3AB5A5B0AC2257488003A6B03?OpenDocument.
- 20 Converted from grams per mile by multiplying by 0.625.
- 21 Vehicle fleets means an average CO₂ emission target across all makes and models of a manufacturer.
- 22 www.theicct.org/info-tools/global-passenger-vehicle-standards.
- 23 Excise is only applied to vehicles imported from outside the EU; those imported from inside the EU can claim excise duty relief (along with customs duty relief).
- 24 www.sars.gov.za/AllDocs/LegalDoclib/SCEA1964/LAPD-LPrim-Tariff-2012-06%20-%20Schedule%20No%201%20Part%202B.pdf.
- 25 www.sars.gov.za/AllDocs/LegalDoclib/SCEA1964/LAPD-LPrim-Tariff-2012-11%20-%20Schedule%20No%201%20Part%203D.pdf.
- 26 See www.unep.org/transport/gfei/autotool/approaches/economic_instruments/fee_bate.asp.
- 27 See www.carfuelconsumption.com/.
- 28 KPMG International 2012; Tuttle 2011; Tuttle 2012.
- 29 See www.unece.org/trans/main/welcwp29.html.
- 30 See Article VII of the GATT 1994, and WTO Customs Valuation Agreement.

Rob Preece



Rob Preece is a senior lecturer in excise studies with the Centre for Customs and Excise Studies (CCES), Charles Sturt University and is currently based in Bangkok, Thailand. He is the Convener of CCES's postgraduate Diploma in Excise Studies program and undertakes various research and training programs in the area of excise taxation. Rob is also an Adjunct Associate Professor at the University of Canberra. He undertakes capacity building, vocational training, policy development, and research on behalf of governments, private sector and academic partners. Rob holds a Master of International Customs Law and Administration, and has 28 years' experience in the areas of excise and customs law, including 15 years with the Australian Customs Service.

New European Regulation 608/2013 concerning combating counterfeit goods

Sandra Rinnert

Abstract

This paper identifies the changes that have occurred with the repeal of Anti-Counterfeiting Regulation (EC) 1383/2003 and the introduction of Regulation (EU) No. 608/2013 of the European Parliament and of the Council on 12 June 2013. A summary is provided of the impact of the new Regulation, taking into account customs enforcement of intellectual property rights (IPR), whether an IPR infringement has occurred, and clarification of the prerequisites for action by Customs. The paper identifies two essential areas that remain excluded from the Regulation's scope of application: parallel imports including overruns and travellers' personal luggage, and highlights the need for these areas to be addressed in future amendments to the Regulation.

1. Background

With Regulation (EU) No. 608/2013 of the European Parliament and of the Council of 12 June 2013 (published on 26 June 2013 in OJ EU No. L 181 p. 15), concerning customs enforcement of intellectual property rights (IPR), the old Anti-Counterfeiting Regulation (EC) 1383/2003 was repealed with effect from 1 January 2014. After a little more than one year of operation of the new Regulation, it is time for a summary of its impact.

Regarding its scope of application, the new Regulation expands the subject matter covered as it includes additional IPR. Also, it clarifies its nature as a procedural body of law whereas the material question, whether an IPR infringement has occurred, has to be answered by applying European and national IPR rules. Furthermore, the prerequisites for customs action have undergone some clarification. The so-called 'simplified destruction procedure' has been upgraded and is now a binding, strengthened procedure as a 'super-simplified destruction procedure' for goods in small consignments. However, two essential areas remain excluded from the Regulation's scope of application: parallel imports including overruns and travellers' personal luggage.

2. Expansion of scope of application

The scope of application of the new IPR enforcement Regulation extends Customs' authority to utility models, trade names, topography of semiconductor products and geographical indications beyond agricultural products (Art. 2). Although originally much discussed, trademarks acquired by use have not made their way into the Regulation, presumably because their existence is more difficult to prove by customs authorities.

The scope of application of the previous Anti-Counterfeiting Regulation was expanded continuously, thus this latest broadening of the area of action by customs authorities represents a logical advancement of this area of law. It is unfortunate, however, that parallel imports and travellers' personal luggage remain exempt from customs' action (see Art. 1 para. 5 (EU) 608/2013).

‘Parallel imports’ are goods that have been manufactured with the consent of the rights holder, but which are not meant to be distributed on the European market by covenant. **‘Overruns’** are also goods which are produced with the rights holder’s consent, but not in the given number (the so-called ‘night-shift production’). Hence, parallel imports and overruns are genuine goods and only become illegitimate based on a violation of contractual arrangements. The parallel importation of such goods may be prohibited based on national and European IPR laws but customs authorities may only take action based on national laws, not based on Regulation 608/2013. The reasoning behind this exemption from Regulation (EU) 608/2013 is that customs authorities shall not deal with genuine goods. However, this argument falls short as they do so based on national laws. It has long been proposed to align the European rules with national practices to avoid unnecessary misunderstandings on behalf of the entities seeking protection.

Furthermore, **travellers’ personal luggage** is also exempted from the Regulation’s scope of application as long as the goods are of a non-commercial nature and contained in travellers’ personal luggage (Art. 1 para. 4 (EU) 608/2013). This exemption serves the unhindered passenger traffic but poses a great source for the influx of counterfeit goods into the European Union (EU). In the past, the travellers-exemption only applied where the maximum amounts according to Art. 41 Council Regulation (EC) No. 1186/2009 were not exceeded (that is, the value of goods carried on, in air traffic, by an adult, to the value of EUR 430). However, this limitation used to be inconsistent with the respective IPR laws which only prohibit the importation of counterfeit goods for commercial purposes. As a consequence, this amendment is aligning the respective IPR and customs provisions. The goods in travellers’ luggage are to be understood as being for commercial purposes in cases where the circumstances indicate that the goods will be the subject of a future commercial transaction, that is, the number of goods (for example, five identical or similar counterfeit watches, five counterfeit shirts of similar size and colour, five identical or similar counterfeit fountain pens); the value of the goods in relation to their number (for example, the more expensive the goods, the lower the threshold for commercial importation); the availability of the goods on the European market (for example, the latest iPhone before its release in Europe, five units). Generally, the threshold of five identical or largely similar goods is agreed as indicating the commercial nature of the importation.

If the traveller has a business that relates to the goods imported with their personal luggage, for example, they have a toy store and are importing counterfeit Barbie-dolls, the commercial nature is obvious and the action falls into the scope of Regulation 608/2013. Consequently, the typical importation of one or two pieces of counterfeit handbags or boots for private purposes is not sanctioned by Regulation 608/2013.

Although such an exemption does not exist for postal traffic, the same rules apply on the basis of the respective IPR laws. Only the importation of goods of a commercial nature fall under the scope of the respective IPR laws (for example, Art. 9 Council Regulation (EC) No. 207/2009, granting the rights of a community trademark against actions in the ‘course of trade’, in Germany § 14 MarkenG, based on EC-Directive 89/104/EC harmonising the laws of the Member States in trademarks; § 11 German Patent Act allowing private use of a patented good for non-commercial purposes). In all other cases (that is, the typical importation for private use of handbags, boots, etc.), there is no commercial nature of the goods and hence the goods are not suspected of an IPR infringement according to Art. 17 Regulation (EU) 608/2013. The action is exempted due to its private nature.

3. The procedural nature of Regulation (EU) 608/2013

The new Regulation concerning Customs’ enforcement of IPR is of procedural not material nature concerning the assessment of IPR. In Art. 1 para. 6 and in the tenth recital in the preamble to Regulation (EU) 608/2013, it is made clear that a differentiation has to be made between, on the one hand,

the procedural rules for customs authorities and on the other hand, ascertaining the existence of an infringement of an IPR.

The background to these provisions is the European Court of Justice's (ECJ) rulings in re 'Nokia' (C-495/09) and 'Philips' (C-446/09). In these proceedings, the parties argued the so-called 'manufacturing doctrine'. This doctrine was based on Art. 6 para. 2b of the former Anti-counterfeiting Regulation (EC) 3295/94 and on the eighth recital in the preamble to Regulation (EC) 1383/03. According to the manufacturing doctrine, the infringement of an IPR according to Art. 2 of Regulation (EC) 1383/03 should be based on the assumption that the goods in question have been manufactured in the respective country of the customs jurisdiction.

The manufacturing doctrine – if the ECJ had not denied its validity in its holdings dated 12 December 2011 (C-446/09 Philips and C-495/09 Nokia) – would have meant a clearly material nature, expanding the infringement action 'manufacturing' to virtually any European country where the goods were detained by Customs.

Hence, it is most welcome that Regulation (EU) 608/2013 made a strong point regarding the solely procedural nature of its provisions, absolutely in line with the ECJ's decisions.

4. Clarity regarding the meaning of 'goods suspected of infringing an IPR'

One of the difficulties of the former Regulation (EC) 1383/03 was understanding in which cases goods were suspected of infringing an IPR. One broad and rights-holder friendly understanding (furthered by Dutch and United Kingdom customs authorities) detected suspected goods in case the mere possibility of an infringement was present. Other customs authorities requested an 'evident infringement' (in line with some national legislation, for example, in Germany).

It is evident that different approaches to the threshold of when a suspected good is present lead to diverging decisions depending on the jurisdiction in which the goods were detained.

The new Regulation (EU) 608/2013 provides in Art. 2 para. 7 that "goods suspected of infringing an intellectual property right" means goods with regard to which there are reasonable indications that, in the Member State where those goods are found, they are *prima facie* [...] the subject of an act infringing an intellectual property rights, in that Member State ...".

Hence, Art. 2 incorporates the latest ECJ's general advocates' holding in re Philips/Nokia, according to which there have to be reasonable indications of an IPR infringement.

5. Simplified procedure and super-simplified procedure for destruction of goods

With the former Regulation (EC) 1383/03, the European Legislator had provided the option for Member States to introduce the so-called 'simplified procedure' for the destruction of suspected goods (see Art. 17 of Reg. (EC) 1383/2003). This option was adopted by 15 Member States. The simplified procedure was a successful and effective measure to quickly solve the threat of infringing goods by destroying them on request of the rights holder in the event that the importer had not reacted to a destruction notice within ten days of its receipt. With the new Regulation (EU) 608/2013, this simplified destruction procedure was introduced as binding law for all of the EU's 28 Member States (see Art. 23 of Reg. (EU) 608/2013).

Furthermore, the new Regulation introduced an even more effective tool, the 'super-simplified procedure for the destruction of goods in small consignments' (Art. 26 of Reg. (EU) 608/2013). In the case of goods suspected of being counterfeit in small consignments (that is, a postal consignment which contains three

units or less or has a gross weight of less than two kilograms [see Art. 2 para. 19 Reg. (EU) 608/2013]), the simplified destruction procedure may generally (that is, without a special request by the rights holder) be applied by customs authorities where the importer does not react to a destruction notice within ten days of its receipt. The only requirement is for the rights holder to declare a general opt-in with the super-simplified procedure at the time of filing the application for customs measures. So the destruction decision is, in practice, left with customs authorities.

However, although the super-simplified procedure is generally regarded as an effective tool for combating the postal traffic as an ever-growing trade channel for counterfeit goods (70% in 2013), it has to be noted that only where there is a suspicion of infringement may such destruction take place. In all cases of the mere non-commercial importation of goods by post, the super-simplified procedure may not be applied. The non-commercial importation of counterfeit goods by no legal means represents an IPR infringement (and hence no suspicion!), as all the IP statutes require commercial action. As a consequence, for private imports the super-simplified procedure is not so effective after all.

It is planned with the new European Trademark Directive (see Proposal for a Regulation [...] amending the Directive to approximate the laws of the Member States in relation to trade marks of 27 March 2013, COM (2013) 162 final 2013/0089 (COD)), to introduce the rights holder's possibility to prohibit imports also in cases in which only the sender of the goods acts for commercial reasons (and not the importer himself). By such a legislative change all cases concerning the importation for private use (the typical boots and handbag cases) by postal traffic would fall within the scope of the Customs Regulation. Hence, such a change would eventually send the right signal to consumers that buying counterfeit goods for private use is harmful to society as it promotes a criminal business.

6. Transit cases

In the past decade, transit cases have received overwhelming attention by customs authorities, courts and regulators. Such cases are characterised by a set of facts in which there is no IPR infringement in the country of origin and destination, but there is an IPR infringement in the country where the transit takes place. According to the ECJ's holding in various proceedings beginning with the Diesel/Montex case (ECJ C-281/05, 9 Nov. 2006), customs measures concerning suspected goods in transit are only possible when in relation to such goods 'measures were taken that necessarily entail their being put on the market in that Member State of transit'. The reasoning behind this holding is the status of IPR laws which does not provide for a mere transit constituting an infringement of IPR.

As outlined above, the industry affected by such rather rigid but legally correct interpretation of the law has undertaken various argumentative approaches like the manufacturing doctrine (rejected by the ECJ in Nokia, C-495/09 and Philips, C-446/09, both dated 1 Dec. 2011) to have the European customs rules applied and detain goods in transit, although without success.

A very special case is still pending with the Dispute Settlement Body (DSB) of the World Trade Organization (WTO) concerning the transit of medicine which is generic in the countries of manufacture (India) and destination (Brazil), but which enjoys patent protection in the EU (see DSB 408 and 409) through which it was transported and seized by Dutch customs authorities.

Based on these milestone disputes covering the balancing of free trade principles with IPR protection, the issue of goods in transit was heavily disputed in the legislative process of Regulation (EU) 608/2013. However, no clear solution has been found. Measures against goods in transit are still possible in cases where there is a good suspected of infringing an IPR. In transit situations, the ECJ's standards of determining an infringement have to be applied.

Only with regard to medicines does recital 11 in the preamble to Regulation (EU) 608/2013 mention the transfer cases and obliges customs authorities, 'when assessing a risk of infringement of intellectual

property rights, [to] take account of any substantial likelihood of diversion of such medicines onto the market of the Union'. Hence, the prerequisites of determining a situation in which such goods are suspected of infringing IPR are more detailed than with 'normal' goods, for which 'reasonable indications' (see Art. 2 para. 7) are sufficient.

7. Summary

The European Legislator has built upon former Regulations enabling an effective combat against counterfeit goods.

The scope of application has been expanded to cover utility models, trade names, topography of semiconductor products and geographical indications beyond agricultural products. Unfortunately, parallel imports and related phenomena remained excluded from the Regulation's scope of application as well as imports of a non-commercial nature. With the latter, in passenger traffic, non-commercial imports are excluded from customs measures by means of the Regulation itself, mainly Art. 1 para. 5; in postal traffic, non-commercial imports are excluded by the respective IPR provisions.

The simplified destruction procedures have been expanded considerably: first, by being binding law in all Member States, and second, by functioning almost automatically in cases of small consignments for commercial use.

The issue of measures against goods in transit has not been legally solved; the current holdings of the ECJ will be applicable in the future. For medicines, a special provision has been included directing the customs authorities' discretion into a careful administering of medicine passing across the customs territory.

However, it is necessary to work further on aligning the respective customs and IP rules so that the applicable measures will be further harmonised and a common understanding of the exceptions to customs action become more evident.

Sandra Rinnert



Professor Dr Sandra Rinnert, LL.M. (Georgetown), Germany's Federal University of Administrative Sciences, Münster, lectures on matters of cross-border trade with a special focus on customs law and intellectual property. She also lectures on international intellectual property law at Heinrich-Heine-Universität Düsseldorf and at Westfälische-Wilhelms-Universität Münster.

Rules of origin and the use of free trade agreements: a literature review

Jisoo Yi¹

Abstract

One of the key reasons for countries to enter into bilateral or regional free trade agreements (FTAs) is to eliminate tariff and non-tariff barriers between or among them. Despite their proliferation, however, many companies elect not to utilise FTAs due to the regulatory burdens imposed by the core provisions of those agreements, that is, the rules of origin (RoO). Research on RoO, however, is in its infancy and very little has been done to assess their regulatory and administrative influence. The objective of this paper is to provide a brief overview of research conducted on RoO to introduce prospective researchers to the issues and research methodologies used. The paper briefly considers the broader historical context of the proliferation and the underutilisation of FTAs, including how RoO came to attract researchers' attention. It then examines studies on RoO and the aspects of RoO that have been the subject of research. An analysis of the different methodologies employed in related study areas follows. These studies suggest an obvious interconnection between the design and administration of RoO and the use of FTAs. In this respect, this paper proposes that a new framework of research will complement the existing work in helping us to understand the interconnection from an administrative perspective. In constituting this framework, it also suggests adopting the methodologies of trade facilitation studies or tax compliance studies.

1. Introduction

One of the key reasons countries enter into bilateral or regional free trade agreements (FTAs) is to eliminate tariff and non-tariff barriers between or among them. The number of FTAs has increased rapidly since the mid-1990s. As of January 2012, the World Trade Organization (WTO) reported that 319 FTAs were in force and a further 511 FTAs were under negotiation. However, despite this proliferation, many companies either underutilise FTAs or neglect entirely to use them. For example, the average utilisation ratio of the North American Free Trade Agreement (NAFTA) was around 64% in 2000, and in the case of the ASEAN FTA (AFTA), below 10% was utilised in 2002 (Baldwin 2006). Researchers have argued that the underutilisation of FTAs diminishes the impact of such agreements on worldwide free trade and, as a consequence, undermines the incentive for unaffiliated nations to form new agreements (Baldwin 2005).

The rules of origin (RoO)² are often identified as the primary reason why FTAs are underutilised. FTAs liberalise trade on the basis of a product's origin using RoO which designate a product's origin in order to determine its eligibility for preferential tariff rates (Brenton & Imagawa 2005). As FTAs continue to proliferate, these rules are becoming increasingly complex, much like a 'spaghetti bowl' in which tariffs and rules vary according to a product's origin (Bhagwati 1995, p. 4). Because of the costs

of administering and complying with such complex RoO companies often elect not to use FTAs. In addressing the underutilisation of FTAs, therefore, it is imperative to understand the detailed regulatory and administrative aspects of the RoO.

Research on RoO, however, is in its infancy. Studies on RoO in the early 1990s were undertaken primarily by researchers from political economic backgrounds and, consequently, the RoO were viewed mostly in terms of their being instruments of commercial policy (Falvey & Reed 1998; Krishna & Krueger 1995; Krueger 1993). Since then, studies have been conducted to explore the administrative impact of RoO but these have exclusively emphasised the trade policy aspects of RoO such as the trade-restricting legal criteria of the rules (Anson et al. 2003; Estevadeordal & Suominen 2008; Harris 2007; Piermartini & Budetta 2006). As a result, very little has been done in the way of assessing and measuring the regulatory and administrative influences of RoO.

The principal objective of this paper is to make available in a single source a brief overview of research conducted on RoO. This paper also includes literature on trade facilitation and taxation in order to explore other possible methodologies that could be applied to future research on the administration of RoO. In so doing, this work will introduce prospective researchers in this area to the issues and research methodologies used.

The paper focuses on studies that have been undertaken on RoO. The first section briefly considers the broader historical context of the proliferation and underutilisation of FTAs, including how RoO came to attract researchers' attention. The second section examines studies on RoO and is followed by a third section which focuses on aspects of RoO that have been the subject of research. An analysis of the different methodologies employed in related study areas are dealt with in section four. The concluding section summarises the major outcomes of these studies and anticipates the future direction of research and research design in this area.

2. Historical context: RoO and the underutilisation of FTAs

The primary focus of FTA studies has been on the debate over the desirability of FTAs as instruments of trade liberalisation (Panagariya 1999). Proponents of FTAs often assert that FTAs are intended to be 'WTO-plus' arrangements that seek freer trade among like-minded trading nations. Conversely, multilateralists contend that FTAs are a major departure from the Most-Favoured-Nation (MFN) principle of the *General Agreement on Tariffs and Trade* (GATT) and detract from true liberalisation (Krueger 1997, p. 10).

Bhagwati (1993) and Bhagwati and Panagariya (1996) describe the proliferation of FTAs as having occurred in two phases: initially, in the first regionalism in the 1960s and, subsequently, in the second post-1980s regionalism. Panagariya (1999) explains that until the European Community (EC) and the US started a race towards regionally-based trade liberalisation in the early 1980s, effective preferential trade agreements, including FTAs, were regarded as limited to the EC. Since then, the race between the two economic giants has initiated the proliferation of FTAs in Africa, Latin America, South and Central Asia, Central and Eastern Europe, and the Baltic Republics.

Bhagwati, Greenaway and Panagariya (1998) note that studies of the first regionalism have focused principally on analysing the immediate effect FTAs have on welfare, using the approaches established by Viner. Viner (1950) concluded that FTAs (or Customs Unions) are more trade-diverting than trade-creating and that, overall, they are harmful to the world's welfare. However, Lipsey (1960), Wonnacott and Lutz (1989) and Kemp and Wan (1976) who reworked the Vinerian approach suggest that for certain countries or in certain types of preferential arrangements, such as in Customs Unions, preferential arrangements can be welfare-enhancing.

Studies on the second regionalism focus on estimating whether the long-term consequences of FTAs should be considered ‘stumbling blocks’ or ‘building blocks’ towards multilateral trade liberalisation (Bhagwati 1993). Krishna (1998), Limão (2006), McLaren (2002) and Piermartini and Budetta (2006) contend that FTAs are a stumbling block in the way of multilateral trade liberalisation. They suggest that the sway of vested interests, the abuse of bargaining power, or the costs of adjusting the standards under FTAs might lock countries into regional preferential arrangements and thwart further progress into multilateral liberalisation. An opposing view is presented by Baldwin (1993) who suggests that the ‘spaghetti bowl’ of proliferating FTAs will ultimately contribute to multilateral liberalisation, and that this most likely will result in the rise of incompatible RoO within a fast-changing and fragmented production environment. The costs of complying with such rules, he contends, will motivate business to force governments to harmonise the rules based on the rules of already existing FTAs. Thus, he asserts that the currently proliferating FTAs can be building blocks for harmonisation and multilateral trade liberalisation.

Studies featuring both the ‘building-block’ and ‘stumbling-block’ views suggest that the underutilisation of FTAs is the primary hurdle in the realisation of freer trade. Baldwin (2005) contends that underutilisation reduces the incentives for non-members to enter into new FTAs and thereby delays the expansion of FTA membership. Bhagwati et al. (1998) and Panagariya (1999) argue that, as FTAs proliferate, the mechanism of FTAs in liberalising trade, which is based on the origin of product, will become more and more complex, à la the ‘spaghetti bowl’ (Bhagwati 1993). They explain that the spaghetti bowl of FTAs increases the cost of cutting trade barriers and thereby stymies the full realisation of freer trade under FTAs.

Interestingly, despite growing concern over the underutilisation of FTAs, studies on FTA usage are very limited in scope (Hayakawa, Kim & Lee 2012). Such studies typically exploit the utilisation ratio of FTAs. This ratio represents ‘the share of exports from the party countries to the other party countries that are actually granted the preferential tariff rate’ (Augier, Gasiorek & Lai Tong 2005, p. 576). However, the primary difficulty in studying the use of FTAs is that this ratio is not always available for every FTA (Manchin & Pelkmans-Balaoing 2007a). To assess utilisation, therefore, some researchers have used trade data or customs records (Athukorala & Kohpaiboon 2011; Hayakawa et al. 2012; Manchin & Pelkmans-Balaoing 2007a). Others have conducted firm-level surveys (Hiratsuka, Isono, Sato & Umezaki 2008; Kawai & Wignaraja 2009). For the most part, this research has been undertaken to study the underutilisation of Asian FTAs and the General System of Preference (GSP).

From the political economic context, Baldwin (2005) provides a general overview of the factors that have resulted in the underutilisation of FTAs in Asia. The high degree of inter-regional trade in parts and components characterises the manufacturing climate of Asian countries. Due to their high degree of inter-dependence, in the 1990s Asian countries acted unilaterally to cut tariffs on certain parts and components. This voluntary tariff cut has marginalised the attractiveness of preferential tariffs under the AFTA. Additionally, Baldwin suggests that the cost of complying with RoO further marginalised the AFTA by making utilising it less preferable. Manchin and Pelkmans-Balaoing (2007a) also suggest that the preference margin under the AFTA is not sufficient to cover the costs required to generate the preference. Furthermore, even if the AFTA’s RoO are generally very flexible, they are still very restrictive in terms of the local content ratio of the products that are manufactured in ASEAN countries.

Kawai and Wignaraja (2009), Katsuhide and Shujiro (2008), Athukorala and Kohpaiboon (2011), and Hayakawa et al. (2012) also suggest that insufficient information on FTAs, small preference margins, delays, and costs associated with the RoO are the most common reasons for the non-use of FTAs.

Studies on the utilisation of the GSP scheme suggest similar reasons for the low utilisation. Brenton and Manchin (2003), Francois, Hoekman and Manchin (2006), and Bureau, Chakir and Gallezot (2007) have investigated the utilisation of the GSP, and contend that the administrative burden of LDCs in proving the origin of products is the major hurdle for realising the full benefit of the preference. They

conclude, 'what matters is not just the level of border barriers but the rules that govern the way they are administered' (Brenton & Manchin 2003, p. 756). Appendix 1 summarises studies on underutilisation of the preferential tariffs mentioned in this section.

Although the evidence from the studies suggests various reasons for the underutilisation of FTAs, RoO are most often named as the primary factor responsible for this outcome. Such arguments have contributed to increased interest in RoO, both by independent researchers and governments. The degree of coverage has varied. Some political and economic aspects of RoO have received near comprehensive coverage while other administrative aspects are currently under-researched. This analysis will now turn to the scope and outcomes of studies that have been conducted on RoO.

3. The scope and outcomes of studies on RoO

Studies of RoO have been undertaken by researchers largely from political and economic backgrounds, and these typically support the 'building-block' view of FTAs (for example, Estevadeordal, Harris and Suominen 2007). Other researchers have noted that approaches to trade facilitation studies can be used to address certain administrative issues of RoO (Harris & Staples 2009; Izam 2003; James 2006; Messerlin & Zarrouk 2000). However, there has been no serious study utilising such approaches, and the administrative issues of RoO have received less attention from researchers than have the political issues.

Estevadeordal et al. (2007) summarise two key aspects of the RoO that were the subject of their research: restrictiveness and divergence. While 'restrictiveness' refers to the aspect of RoO that restrict trade under FTAs, 'divergence' denotes the divergent RoO that differ across FTAs and products within an FTA. Though few studies embrace other issues concerning RoO, most studies have been devoted to assessing these two aspects.

Where the research has been on the restrictiveness of RoO, studies emphasise the ways RoO function as discriminatory trade regimes and the influence they exert in this capacity. Vermulst (1992) and Krishna and Krueger (1995) state that RoO employ different methodological discriminations and that these have varying degrees of stringency. Ju and Krishna (1998) contend that restrictive RoO require firms to use ineffective members' input for the production of finished goods. Falvey and Reed (1998, p. 219) postulate the requirements of RoO as content protection, which means the 'constraints imposed on a foreign firm; that it use a certain proportion of domestic input in its total input in order to sell in the domestic market'. LaNasa III (1993) argues that countries and trade blocs are exploiting such RoO as new mechanisms to protect domestic industries and promote the relocation of manufacturing processes within the trade area. As Krueger (1993, p. 21) contends, RoO are found to extend protection to the exporters and producers of finished goods 'in avoiding competition from producers with access to cheaper intermediate goods' from non-party countries. Estevadeordal (1999) and Estevadeordal and Suominen (2004) argue that tariffs and the restrictiveness of RoO are the result of the same political economy. Thus, the greater the preference margin, the stricter the requirements imposed by RoO.

The complexity that results from the diversity of RoO has been examined frequently based on the estimated cost of complying with such rules (Anson et al., 2003; Anson et al. 2005; Carrère & De Melo 2004; Estevadeordal et al. 2007). Anson et al. (2003, p. 514) suggest that the compliance costs of RoO largely negate preferential access under FTAs, and that the compliance costs of RoO amount to 6% of a product's export value, which is higher than the average preferential margin of 4%. Carrère and De Melo (2004) argue that, to compensate for the production and compliance costs caused by the restrictiveness of RoO, about 10% of the preference margin would be needed for NAFTA. Cadot, Carrère, De Melo and Portugal-Pérez (2005) estimate that the border price of Mexican apparel product has risen 12% to compensate for the cost of complying with NAFTA's RoO. Cadot, Carrère, De Melo and Tumurchudur (2006) estimate the trade-weighted compliance costs at approximately 8.0% for the PanEuropean Union (PANEURO) and 6.8% for NAFTA.

The fundamental objective of RoO is often identified as the checking of free-riders who ‘seek to enjoy the benefits of the FTA without paying the costs associated with FTA membership’ (Boadu & Wise 1991). For this reason, researchers often suggest that the origin certification and verification procedures under the RoO be made integral to the administration of RoO. Izam (2003), Brenton and Imagawa (2005) and Estevadeordal et al. (2007) conclude that the procedures for exporters or producers to obtain the certificate often require expensive accounting and inventory systems. The administrative burden in this procedure, they warn, may result in inadequate administrative cooperation, faults, and fraud in the certification of origin process. Manchin and Pelkmans-Balaoing (2007b, p. 14) indicate that the costs and delays in obtaining certification and in proving conformity with their origin requirements depend largely on the stringency of the verification procedures. Harris and Staples (2009, p. 7) suggest that the primary dilemma in this regard is ‘balancing the rights and obligations of the producer and the importer’. While the producer has sufficient knowledge of the origin of their product, the importer is responsible for the payment of tariffs. Therefore, if the producer, either by fraud or by negligence, provides faulty origin details about their product, the importer is liable for non-paid tariffs and penalties. Boadu and Wise (1991), Cantin and Lowenfeld (1993) and Harris and Staples (2009) emphasise the fact that the administration of RoO often results in considerable uncertainty for companies, and this can occur under circumstances in which ‘procedures are unclear, customs officials lack capacity, or legal provisions are incomplete’ (Harris & Staples 2009, p. 7).

In summary, studies have found the restrictiveness, complexity (or divergence), compliance costs, and uncertainty arising from the administration of RoO to be factors that influence the full use of FTAs. A summary of the studies conducted on RoO mentioned in this section is contained in Appendix 2. For each aspect of RoO, different research methodologies have been devised that attempt to identify influences on the use of FTAs. The next section examines the methodologies that have been applied to the research of RoO.

4. Research methodologies

The quantitative paradigm has been utilised predominantly in studies of RoO. Political economic studies on RoO typically focus on the restrictiveness of RoO and their implications. In such studies, the gravity model is often utilised to predict bilateral trade flow under certain RoO restrictions. Augier et al. (2005) use the gravity model to assess the influence of the relaxation of RoO with a diagonal cumulation. Utilising dummy variables and synthetic indices, Estevadeordal and Suominen (2004) investigate the effects of RoO under PANEURO and the NAFTA using the gravity model. Also, Cadot, Estevadeordal and Eisenmann (2005) explore the influence of NAFTA’s RoO on Mexican market access to the US market.

In analysing the different levels of restrictiveness of RoO, many studies have adopted Estevadeordal’s (1999) Restrictiveness Index (RI). The RI provides observation rules for the legal texts of RoO using a seven-point scale, defining the rules with a rating of one as less strict than those with a rating of two. For example, a higher RI is applied to a rule requiring a change at the section level (2-digit HS Code) than a rule requiring a change at the heading level (4-digit HS Code). A rule requiring both a change at the tariff heading level (CTH) and a certain level of Regional Value Content (RVC) is classified at a higher RI than a rule requiring a simple tariff change rule. Estevadeordal and Suominen (2004) assessed the structure of RoO in selected FTAs in Europe, the Americas, and the Asia Pacific region using the RI. Augier et al. (2005) adopted this index in devising their gravity model. Using the index, Estevadeordal et al. (2007, pp. 22-3) analysed the restrictiveness and complexity of RoO of FTAs around the world.

In applying the indices, Estevadeordal et al. (2007, p. 22) explain the restrictiveness of RoO in these terms: ‘the capacity of RoO to affect economic decisions depends on the degree to which they restrict the options of economic actors and the size of the tariff preference to which compliance with these rules give access’. They emphasise that the restrictiveness observed through the indices may differ from the real

restrictiveness that firms face when utilising preferential tariffs. Rather, they note that ‘real’ or effective restrictiveness depends on the availability of efficient input supplies from the FTA member countries.

The complexity or divergence of RoO has often been assessed by estimating the compliance costs the RoO entail. Following Herin (1986), the costs are assessed by estimating the upper and lower bounds on the costs of RoO. In this approach, for sectors with utilisation rates close to 100%, the preference margin is assumed as the upper bound of compliance costs, while for sectors with zero utilisation rates, the preference margin is assumed to be the lower-bound of the costs. For sectors with a utilisation ratio between zero and 100%, the average rate of tariff preference for the remaining sectors is assumed to equate to the costs. Based on this approach and the RI, Anson et al. (2003) computed compliance costs of RoO. Carrère and De Melo (2004) attempted to apply the RI for measuring the production and the administrative costs resulting from RoO under NAFTA. In a similar vein, Cadot et al. (2005) analysed the effects of production costs on the price of final and intermediate goods. Cadot et al. (2006) compare trade-weighted compliance costs of PANEURO FTAs with those of NAFTA.

Though the administration of RoO has been discussed in a number of papers, only limited numbers of systematic methodologies have been applied to measure the specific issues related to this administration. Some studies have been conducted based on the case study method. Boadu and Wise (1991) investigated administrative problems associated with implementing RoO under the first three FTAs of the US. Cantin and Lowenfeld (1993) explored the disputes between Canada and the US in interpreting the value-added requirements for the Honda Civic under the Canada-US FTA. The Commission of the European Communities (2003) investigated the difficulties developing countries face in managing the administrative procedures of RoO under the EU’s GSP regime.

Some researchers suggest that trade facilitation studies can be attempted as an approach to future research on the administration of RoO (Hamanaka, Tafgar & Lazaro 2010; Harris & Staples 2009; Maur 2008). Trade facilitation studies have a wide scope in terms of subject area. Wilson, Mann and Otsuki (2005) explain that by observing actual practice, such as documentation or the logistics of goods, trade facilitation studies seek to relate actual practice to implications for reforms of the trade interface. Wilson, Mann and Otsuki (2003) stipulate that most trade facilitation studies have been conducted based on the computable general equilibrium (CGE) model and the gravity model, using data from already existing survey results. Especially in the study of customs administration, Wilson, Mann, Woo, Assanie and Choi (2002) have exploited ‘the Enabling Trade Index’ and ‘the Global Enabling Trade Report.’ However, the authors of the report, Doherty, Hanouz, Geiger, Lawrence and Herrera (2010) have recently argued that currently available measures in trade facilitation studies do not include any measure for RoO.

In the tradition of studying customs administration, tax studies have provided a useful framework. In tax studies, the complexity of customs administration is assessed based on tax compliance costs. Sandford, Godwin and Hardwick (1989) and Shekidele (1999) examined the compliance costs of excise duties in the UK and Tanzania, respectively. Based on compliance costs surveys, Eland (1995) examined the benefit of a Common Customs Tariff of duties that has been introduced with a Single European Market. Another aspect of customs administration that has been studied alongside the methodologies of the tax studies is the uncertainty caused in the context of customs administration. Bhagwati (1964) surveyed Turkish trade data to investigate the gap between export invoice price and import customs value to assess the issue of import control. Using quasi-experiment research, Yang (2008) explored customs reform in the Philippines to analyse the impact of enforcement on the evasion of customs duty. Using trade data from China and India respectively, Fisman and Wei (2004) and Mishra, Subramanian and Topalova (2008) surveyed the relationship between tariff rate and the evasion behaviour of traders. Studies such as these suggest that the framework of tax studies is generally applicable to the issues of customs administration.

To summarise, in studying RoO, research methodologies have been developed to explore the restrictiveness and the compliance costs of RoO. However, there is very little evidence that researchers

have considered other possible methodologies, such as the methodologies of trade facilitation studies or tax studies which has led to a paucity of studies on the administration of RoO.

5. Conclusions

The literature suggests that RoO result in restrictions, higher costs, and compliance burdens for companies using FTAs, and that the initial neglect of RoO and the underuse of FTAs still persists. Therefore, in designing RoO, there should be a clear recognition of the impact of the proposed design on the administration of RoO, as well as on the compliance burdens that are imposed on companies using FTAs. The greatest contribution that future research into the administration of RoO can make is to ensure that countries that formulate RoO are properly informed as to the compliance burden implications of their actions.

While the amount of research is increasing, the scope and the methodological approach of this research is still limited. In particular, the use of FTAs cannot be measured in many cases without available utilisation ratio data and measures for restrictiveness. Furthermore, the complexity of RoO is established by observing their legal text which may differ from the real restrictiveness and costs in actually using FTAs. In the absence of such data, only a few studies provide a useful reference for the administration of RoO.

Studies have suggested an interconnection among RoO design, administration, and the use of FTAs. In this respect, this literature review proposes that a new framework of research will complement the existing work in helping us to understand the interconnection from an administrative perspective. In constituting this framework, it is also suggested that adopting the methodologies of trade facilitation studies or tax compliance studies would be a worthwhile starting point. Importantly, this review suggests that research into RoO will enhance our knowledge on the cost side of FTAs.

Appendix 1: Summary of major studies of the use of FTAs

Table 1: Determinants of utilisation of preferential tariffs

Author	Preference scheme	Utilisation rates	Determinants of utilisation
Baldwin (2005)	AFTA	5%	Preference margin Compliance costs of RoO
Manchin & Pelkmans-Balaoing (2007a)	AFTA	5%	Preference margin Restrictiveness of RoO
Kawai & Wignaraja (2009)	FTAs in six Asian countries	-	Information on FTAs Preference margin Compliance cost of RoO
Katsuhide & Shujiro (2008)	Japan's FTAs	12.2% ~ 32.9%	Trade volume with FTA partners Compliance costs of RoO Information on FTAs Preference margin
Athukorala & Kohpaiboon (2011)	TAFTA	60 ~ 70%	Preference margin Restrictiveness of RoO Compliance costs of RoO
Hayakawa et al. (2012)	KAFTA	49.9%	Average export value Preference margin Restrictiveness of RoO
Brenton Manchin (2003)	Preference regime of the E.U.	45%	Restrictiveness of RoO Compliance costs of RoO
Francois et al. (2006)	Preference regime of OECD countries	-	Compliance costs of RoO
Bureau et al. (2007)	Preference regime of the E.U. and the U.S.	89%	Compliance costs of RoO Predictability of the regime

Appendix 2: Summary of major studies of rules of origin

Table 2: Influences of RoO

Author	Preference Scheme	Influences of RoO
Vermulst (1992)	Preferential / Non-preferential	Different methodological discrimination of RoO restricts the scope of eligible preferences under FTAs.
LaNasa III (1993)	NAFTA	RoO are often formulated to protect domestic industry and to promote relocation of manufacturing processes to within the trade area
Krueger (1993)	Preferential	RoO restrict efficient sourcing for inputs of production. This extends protection for exporters to protection for producers from the competition with producers who use cheaper third countries' inputs.
Lloyd (1993)	Preferential	All or nothing approach in determining the origin under FTAs can cause protective and trade diverting influences in the highly globalised production.
Krishna & Krueger (1995)	Preferential	Differences in percentage rules of RoO can exert a significant influence on the welfare and FDI.
LaNasa III (1996)	Preferential / Non-preferential	Overly restrictive RoO can engender uncertainty on firms' purchasing, investment, and manufacturing strategies.
Falvey & Reed (1998)	Preferential	RoO take the form of domestic content rules and influence on production.
Bhagwati et al. (1998)	Preferential	Arbitrary specification of content rules, and the complexity in computing the origin causes a myriad of problems in globalised production.

Table 3: Aspects of RoO influencing the use of FTAs

Aspects of RoO	Author	Measures applied	Findings
Restrictiveness of RoO	Ju & Krishna (1998)	Impact of restrictive RoO on the production costs and trade flows	Restrictive RoO undermine trade of both the finished goods and the inputs
	Estevadeordal (1999)	Differences in the restrictiveness of RoO under NAFTA	The greater the preferential margin, the stricter the requirements imposed by RoO.
	Estevadeordal & Suominen (2004)	The restrictiveness of RoO in FTAs in Europe, the Americas, and Asia Pacific	The restrictiveness of PANEURO RoO is less than the NAFTA rules, and FTAs in the Asia Pacific have the most generous RoO.
	Estevadeordal et al. (2007)	The restrictiveness and complexity of RoO in FTAs around the world	The restrictiveness within regimes and divergence across regimes increase transaction costs and uncertainty in international trade
Complexity and Costs of RoO	Anson et al. (2003)	Compliance costs estimated based on the utilisation ratio, the preference margin and the RI	Compliance costs of 6% of trade amount, which is higher than average preferential margin of 4%
	Carrère & De Melo (2004)	Compliance costs	Approximately 10% preference margin is required to compensate the compliance costs of the Mexican exporters
	Cadot et al. (2005)	The impact of compliance costs of RoO on the border price of textile and apparel products	The border price of Mexican products has risen 12% to compensate the compliance costs of RoO under NAFTA.
	Cadot (2006)	Compliance costs	Approximately, the compliance costs of PANEURO's RoO is 8.0% and that of NAFTA is 6.8% of trade amount

Aspects of RoO	Author	Measures applied	Findings
Uncertainty of RoO	Boadu & Wise (1991)	Case study: US-Israel FTA, US-Canada FTA, NAFTA	Considerable degree of freedom in interpreting the rules causes uncertainty in business sectors.
	Cantin & Lowenfeld (1993)	Case study: US-Canada FTA, NAFTA	Unclear rules or inconsistent interpretation of the rules cause uncertainty
	Commission of the European Communities (2003)	Case study: EU's GSP scheme	Ambiguity of the rules, strict audit, and resulting compliance costs cause uncertainty
	Harris & Staples (2009)	Case study: FTAs in the Latin America/Caribbean and Asia/Pacific	Unclear rules, inconsistent interpretation, the unclear division of the rights and obligations of the producer and the importer cause uncertainty

Table 4: Issues from the administration of RoO

Author	Key Administrative Procedures	Issues
Izam (2003)	Certificate of Origin	Selection of the issuing authorities
	Origin Verification	Unclear procedures for dispute settlement Effectiveness of verification visits, Administrative costs
Brenton & Imagawa (2005)	Certificate of Origin	Compliance costs
	Origin Verification	Administration costs in terms of labor requirements
Estevadeordal et al. (2007)	Certificate of Origin	Administration costs and compliance costs
Manchin & Pelkmans-Balaoing (2007b)	Origin Verification	Compliance costs Stringency of verification procedures
Harris & Staples (2009)	Certificate of Origin Origin Verification	Uncertainty as for the compliance with RoO that is caused due to the unclear division of the rights and the obligation of the producers and the importers

References

- Anson, J, Cadot, O, Estevadeordal, A, de Melo, J, Suwa-Eisenmann, A & Tumurchudur, B 2003, 'Assessing the costs of rules of origin in North-South PTAs with an application to NAFTA', Centre for Economic Policy Research Discussion Paper 2476.
- Anson, J, Cadot, O, Estevadeordal, A, de Melo, J, Suwa-Eisenmann, A & Tumurchudur, B 2005, 'Rules of origin in North-South preferential trading arrangements with an application to NAFTA', *Review of International Economics*, vol. 13, no. 3, pp. 501-17.
- Athukorala, P & Kohpaiboon, A 2011, 'Australia-Thailand trade: has the FTA made a difference?', Working Papers in Trade and Development, no. 2011/12, Australian National University, Canberra.
- Augier, P, Gasiorek, M & Lai Tong, C 2005, 'The impact of rules of origin on trade flows', *Economic Policy*, vol. 20, no. 43, pp. 567-624.
- Baldwin, R 1993, 'A domino theory of regionalism', NBER Working Paper No. 4465, National Bureau of Economic Research (NBER), Cambridge, MA.
- Baldwin, R 2005, 'Asian regionalism: promises and pitfalls', in CY Ahn, RE Baldwin & I Cheong (eds), *East Asian economic regionalism: feasibilities and challenges*, Springer, pp. 157-74.
- Baldwin, R 2006, 'Managing the noodle bowl: the fragility of East Asian regionalism', CEPR Discussion Paper No. 5561, Centre for Economic Policy Research, London, <http://www.cepr.org/pubs/dps/DP5561.asp>.
- Bhagwati, J 1964, 'On the underinvoicing of imports', *Bulletin of the Oxford University Institute of Economics & Statistics*, vol. 27, no. 4, pp. 389-97.
- Bhagwati, J 1993, 'Regionalism and multilateralism: an overview', in J de Melo & A Panagariya (eds), *New dimensions in regional integration*, Cambridge University Press, New York, NY, pp. 22-50.
- Bhagwati, J 1995, 'US trade policy: the infatuation with free trade agreements', in J Bhagwati & AO Krueger (eds), *The dangerous drift to preferential trade agreements*, American Enterprise Institute for Public Policy Research, Washington, DC.
- Bhagwati, J, Greenaway, D, & Panagariya, A 1998, 'Trading preferentially: theory and policy', *Economic Journal*, vol. 108, no. 449, pp. 1128-48.
- Bhagwati, J & Panagariya, A 1996, 'The theory of preferential trade agreements: historical evolution and current trends', *American Economic Review*, vol. 86, no. 2, pp. 82-7.
- Boadu, FO & Wise, SM 1991, 'Rules of origin and NAFTA', *CURRENTS: International Trade Law Journal*, vol. 1, no. 1, p. 38.
- Brenton, P & Imagawa, H 2005, 'Rules of origin, trade, and Customs' in L de Wulf & JB Sokol (eds), *Customs modernization handbook*, World Bank, Washington, DC, pp. 183-214.
- Brenton, P & Manchin, M 2003, 'Making EU trade agreements work: the role of rules of origin', *The World Economy*, vol. 26, no. 5, pp. 755-69.
- Bureau, J-C, Chakir, R & Gallezot, J 2007, 'The utilisation of trade preferences for developing countries in the agri-food sector', *Journal of Agricultural Economics*, vol. 58, no. 2, pp. 175-98.
- Cadot, O, Carrère, C, de Melo, J & Portugal-Pérez, A 2005, 'Market access and welfare under free trade agreements: textiles under NAFTA', *World Bank Economic Review*, vol. 19, no. 3, pp. 379-405.
- Cadot, O, Carrère, C, de Melo, J & Tumurchudur, B 2006, 'Product-specific rules of origin in EU and US preferential trading arrangements: an assessment', *World Trade Review*, vol. 5, no. 2, pp. 199-224.
- Cadot, O, Estevadeordal, A & Suwa-Eisenmann, A 2005, 'Rules of origin as export subsidies', Centre for Economic Policy Research (CEPR) Discussion Paper No. 4999.
- Cantin, F & Lowenfeld, A 1993, 'Rules of origin, the Canada-US FTA, and the Honda case', *American Journal of International Law*, vol. 87, no. 3, pp. 375-90.

- Carrère, C & De Melo, J 2004, 'Are different rules of origin equally costly? Estimates from NAFTA', Centre for Economic Policy Research Discussion Paper No. 4437.
- Commission of the European Communities 2003, 'Green paper on the future of rules of origin in preferential trade agreements', European Commission, EU Doc COM(2003) 787, Brussels.
- Eland, M 1995, 'Tax compliance costs: the problems and the practice – customs and excise', in C Sandford (ed.), *Tax compliance costs: measurement and policy*, Fiscal Publications, Bath, UK, pp. 39-51.
- Estevadeordal, A 1999, 'Negotiating preferential market access: the case of NAFTA', Institute for the Integration of Latin America and the Caribbean, Working Paper No. 3, June.
- Estevadeordal, A, Harris, J & Suominen, K 2007, 'Multilateralizing preferential rules of origin around the world', WTO Doc WTO/HEI/NCCR Trade/CEPR Conference, Geneva.
- Estevadeordal, A & Suominen, K 2004, 'Rules of origin: a world map and trade effects', in O Cadot, A Estevadeordal, A Suwa-Eisenmann & T Verdier (eds), *The origin of goods: a conceptual and empirical assessment of rules of origin in Preferential Trade Agreements*, IADB and CEPR, Washington, DC, pp. 1214-45.
- Estevadeordal, A & Suominen, K (eds) 2008, *Gatekeepers of global commerce: rules of origin and international economic integration*, Inter-American Development Bank, Washington, DC.
- Falvey, R & Reed, G 1998, 'Economic effects of rules of origin', *Weltwirtschaftliches Archiv*, vol. 134, no. 2, pp. 209-29.
- Fisman, R & Wei, S-J 2004, 'Tax rates and tax evasion: evidence from "missing imports" in China', *Journal of Political Economy*, vol. 112, no. 2, 471-96.
- Francois, J, Hoekman, B & Manchin, M 2006, 'Preference erosion and multilateral trade liberalization', *World Bank Economic Review*, vol. 20, no. 2, pp. 197-216.
- Hamanaka, S, Tafgar, A & Lazaro, D 2010, 'Trade facilitation measures Under Free Trade Agreements: Are They Discriminatory Against Non-members?', ADB Working Paper Series on Regional Economic Integration, No. 55, Asian Development Bank, Manila, Philippines.
- Harris, J 2007, 'Measurement and determination of rules of origin in preferential trade agreements (PTAs)', PhD thesis, University of Maryland College Park, MD, <http://hdl.handle.net/1903/7180>.
- Harris, J & Staples, B 2009, 'Origin and beyond: trade facilitation disaster or trade facility opportunity?', Inter-American Development Bank Working Paper Series IDB-WP 147, December.
- Hayakawa, K, Kim, H & Lee, H 2012, 'Determinants on utilization of the Korea-ASEAN free trade agreement: margin effect, scale effect, and ROO effect', in K Hayakawa (ed.), *Cause and consequence of firms' utilisation in Asia*, Institute of Developing Economies-Japan External Trade Organization, Bangkok.
- Herin, J 1986, 'Rules of origin and differences between tariff levels in EFTA and in the EC', EFTA Occasional Paper No. 13, Geneva.
- Hiratsuka, D, Isono, I, Sato, H & Umezaki, S 2008, 'Escaping from FTA trap and spaghetti bowl problem in East Asia: an insight from the enterprise survey in Japan', in H Soesastro (ed.), *Deepening economic integration: the ASEAN economic community and beyond*, ERIA Research Project Report 2007-1-2, Institute of Developing Economies-Japan External Trade Organization, Chiba, pp. 304-27.
- Izam, M 2003, *Rules of origin and trade facilitation in preferential trade agreements in Latin America*, vol. 31, United Nations Economic Commission for Latin America and the Caribbean, Santiago.
- James, WE 2006, 'Rules of origin in emerging Asia-Pacific preferential trade agreements: Will PTAs promote trade and development?', Asia-Pacific Research and Training Network on Trade, Working Paper Series No. 19.

- Ju, J & Krishna, K 1998, 'Firm behavior and market access in a free trade area with rules of origin', National Bureau of Economic Research Working Paper No. 6857.
- Kawai, M & Wignaraja, G 2009, 'The Asian "Noodle Bowl": is it serious for business?', Asian Development Bank Institute Working Paper Series, no. 1936.
- Kemp, MC & Wan, H 1976, 'An elementary proposition concerning the formation of customs unions', *Journal of International Economics*, vol. 6, no. 1, pp. 95-7.
- Krishna, K 1998, 'Regionalism and multilateralism: a political economy approach', *Quarterly Journal of Economics*, vol. 113, no. 1, pp. 227-50.
- Krishna, K & Krueger, A 1995, 'Implementing free trade areas: rules of origin and hidden protection', NBER Working Paper No. 4983, National Bureau of Economic Research, Cambridge, MA.
- Krueger, AO 1993, 'Free trade agreements as protectionist devices: rules of origin', NBER Working Paper No. 4352, National Bureau of Economic Research, Cambridge, MA.
- Krueger, AO 1997, 'Problems with overlapping free Trade areas', in T Ito & AO Krueger (eds), *Regionalism versus multilateral trade arrangements*, NBER-EASE vol. 6, pp. 9-24, University of Chicago Press.
- LaNasa III, JA 1993, 'Rules of origin under the North American free trade agreement: a substantial transformation into objectively transparent protectionism', *Harvard International Law Journal*, vol. 34, no. 2, p. 381.
- LaNasa III, JA 1996, 'Rules of origin and the Uruguay round's effectiveness in harmonizing and regulating them', *American Journal of International Law*, vol. 90, no. 4, pp. 625-40.
- Lawrence, RZ, Doherty, S, Hanouz, MD, Geiger, T & Herrera, ET 2010, 'Fostering recovery by facilitating trade: the Enabling Trade Index 2010', in *The Global Enabling Trade Report 2010*, in RZ Lawrence, MD Hanouz, S Doherty & J Moavenzadeh (eds), World Economic Forum, Geneva.
- Limão, N 2006, 'Preferential trade agreements as stumbling blocks for multilateral trade liberalization: evidence for the United States', *American Economic Review*, vol. 96, no. 3, pp. 896-914.
- Lipsey, RG 1960, 'The theory of customs unions: a general survey', *Economic Journal*, vol. 70, September, pp. 496-513.
- Lloyd, PJ 1993, 'A tariff substitute for rules of origin in free trade areas', *World Economy*, vol. 16, no. 6, pp. 699-712.
- Manchin, M & Pelkmans-Balaoing, A 2007a, 'Clothes without an emperor: analysis of the preferential tariffs in ASEAN', *Journal of Asian Economics*, vol. 19, no. 3, pp. 213-23.
- Manchin, M & Pelkmans-Balaoing, A 2007b, 'Rules of origin and the web of East Asian free trade agreements', World Bank Policy Research Working Paper No. 4273, July, World Bank, Washington, DC.
- Maur, JC 2008, 'Regionalism and trade facilitation: a primer', Policy Research Working Paper No. 4464, World Bank, Washington, DC.
- McLaren, J 2002, 'A theory of insidious regionalism', *Quarterly Journal of Economics*, vol. 117, no. 2, pp. 571-608.
- Messerlin, PA & Zarrouk, J 2000, 'Trade facilitation: technical regulations and customs procedures', *World Economy*, vol. 23, no. 4, pp. 577-93.
- Mishra, P, Subramanian, A & Topalova, P 2008, 'Tariffs, enforcement, and customs evasion: evidence from India', *Journal of Public Economics*, vol. 92, no. 10-11, pp. 1907-25.
- Panagariya, A 1999, 'The regionalism debate: an overview', *World Economy*, vol. 22, no. 4, pp. 455-476.
- Piermartini, R & Budetta, M 2009, 'A mapping of regional rules on technical barriers to trade', in A Estevadeordal, K Suominen, & R Teh (eds), *Regional rules in the global trading system*, Cambridge University Press, Cambridge, pp. 250-315.

- Sandford, C, Godwin, M & Hardwick, P 1989', *Administrative and compliance costs of taxation*, Fiscal Publications, Bath, UK.
- Shekidele, C 1999', 'Measuring the compliance costs of taxation excise duties 1995-96', *African Journal of Finance and Management*, vol. 7, no. 2, pp. 72-84.
- Takahashi, K & Urata, S 2008, 'On the use of FTAs by Japanese firms', Research Institute of Economy, Trade and Industry (RIETI) Discussion Paper Series 08-E-002.
- Vermulst, EA 1992, 'Rules of origin as commercial policy instruments: revisited', *Journal of World Trade*, vol. 26, no. 6, pp. 61-102.
- Viner, J 1950, *The customs union issue* (Vol. 10), Carnegie Endowment for International Peace, New York.
- Wilson, JS, Mann, CL & Otsuki, T 2003, 'Trade facilitation and economic development: a new approach to quantifying the impact', *World Bank Economic Review*, vol. 17, no. 3, pp. 367-89.
- Wilson, JS, Mann, CL, Woo, YP, Assanie, N & Choi, I 2002, *Trade facilitation: a development perspective in the Asia Pacific region*, APEC Secretariat, Singapore.
- Wonnacott, P & Lutz, M 1989, 'Is there a case for free trade areas?', in J Schott (ed.), *Free trade areas and U.S. trade policy*, Institute for International Economics, Washington, DC, pp. 59-84.
- Yang, D 2008, 'Can enforcement backfire? Crime displacement in the context of customs reform in the Philippines', *Review of Economics and Statistics*, vol. 90, no. 1, pp. 1-14.

Notes

- 1 This paper was presented at the Inaugural INCU Global Conference, 21-23 May 2014, Baku, Republic of Azerbaijan.
- 2 Rules of Origin (RoO) are classified as preferential rules and non-preferential rules. Non-preferential RoO are usually applied to impose quotas, countervailing, or anti-dumping duties. Preferential RoO set criteria for determining the eligibility of certain trade preferences. In the current research, 'RoO' refer to the preferential RoO.

Jisoo Yi



Jisoo Yi is a PhD candidate at the Centre for Customs and Excise Studies, University of Canberra, Australia. She completed her Bachelor's degree at Ewha Women's University in Korea, and her Master's degree in International Customs Law and Administration at the Centre for Customs and Excise Studies, University of Canberra.

Who benefits most from AEO certification? An Austrian perspective

Hans-Joachim Schramm¹

Abstract

In this paper, the Taxation and Customs Union Directorate-General (European Commission) (TAXUD) Authorised Economic Operator (AEO) Database was employed and supplemented with company data to develop a census of AEO certifications per company size (in terms of employees and revenue) and export/import quotas in the case of Austria 2008-2013 in order to determine who benefits most from AEO certification. Findings can be simply summarised as follows: the more export-orientated a sector is, the more AEO certifications are granted. More specifically, about 49% of all AEO certifications in Austria are granted to companies from the manufacturing industry, followed by about 29% to transport and logistics service providers and 18% to wholesale or retail companies. Others such as the primary sector, energy provision and service industries are negligible. Looking more closely at the Austrian AEO certified companies, most of them from the manufacturing industry can be classified as ‘SME’ in the European Union (EU) sense but are being heavily export-orientated at the same time and in need of an AEO certificate to smooth their export/import operations. Transport and logistics service providers do benefit from AEO certification, too, but are being pushed to apply for certification by their customers.

1. Introduction

Initiated by the World Customs Organization (WCO) as a part of the *WCO SAFE Framework of Standards to Secure and Facilitate Global Trade* (SAFE Framework) of 2005 (WCO 2007; Ireland 2009), the voluntary Authorised Economic Operator (AEO) concept received worldwide adoption. By March 2014, 168 out of 179 WCO Members had signed letters of intent committing to implement the SAFE Framework and a total of 64 AEO programs were already operational or would soon be launched (WCO 2014).

One of these programs is the uniform concept of European Union (EU) AEO as one of the main elements of the Security Amendments to the Community Customs Code (CCC, Regulation EEC/2913/92) with Regulation EC/648/2005 of 12 April 2005. After a pilot study conducted in 2006 (Weerth 2007; Wolfgang & Natzel 2007; TAXUD 2012), the EU introduced AEO certification procedures for the 27 EU Member States at that time with Regulation EC/1875/2006 of 18 December 2006 amending the CCC Implementing Provisions (CCIP, Regulation EEC/2454/93). This part of the Security Amendments was then brought into force on 1 January 2008, and after six years, there are now about 12,000 certified AEO operators registered in 27 of 28 EU Member States who potentially benefit from customs simplification and security facilitation (TAXUD 2014).

Referring to empirical work about EU AEO and other comparable voluntary security initiatives worldwide, the constant flow of surveys about the US C-TPAT and/or Canadian PIP (La Londe 2002;

DAMF Consulting 2005; Sheu, Lee & Niehoff 2006; Peleg-Gillai, Bhat & Sept 2006; Diop, Hartman & Rexrode 2007; Haughton 2007; GAO 2008; Voss & Williams 2013; Melnyk, Ritchie & Calantone 2013), Latin American BASC Programme (Gutiérrez, Hintsa, Wieser & Hameri 2009), or Swiss AEO (Granqvist, Hintsa, Lazarescu & Rşikolneko 2010) is remarkable. In the case of the EU AEO program only a few investigations are identifiable and many of them can be regarded as purely narrative (for example, Janowska-Bucka 2008; Burgemeestre, Hulstijn & Tan 2009; Houe & Guimaraes 2012; Biljan 2014) to anecdotal (for example, Lui, Tan & Hulstijn 2008; Jackson 2011). However, some recent empirical studies dealt at least partly with AEO implementation issues and were published in Germany (Materna et al. 2009, 2010), the Netherlands (den Butter & van Scheltinga 2008), Sweden (Uricuoli 2010; Uricuoli & Ekwall 2012) and by the EU (Lejeune, Tusveld, Aerts, Wagemans, Bogaerts & Buysing Damste 2013). In addition to this, Polner (2010, 2011, 2012) and Weerth (2011) commented on the progress of voluntary security programs like the EU AEO.

In principle, an EU AEO certification seems to be beneficial for all companies exporting and importing goods from/to the EU (Wolfgang & Natzel 2007; TAXUD 2012; Polner 2012). This paper relates to who really benefits the most from AEO certification, or more particularly, what are the main characteristics of companies with AEO certification in the case of Austria.

First, some background is provided about the AEO certification on the EU level and its implementation in Austria before results of an explorative data analysis of companies listed in the TAXUD AEO Database are presented and discussed. The paper closes with some concluding comments and further research implications.

2. Background

On the basis of Article 5a of the security amendments to the CCC, AEO status can be granted to any economic operator meeting the common criteria of (1) record of compliance with customs requirements, (2) satisfactory system of managing commercial and, where appropriate, transport records, which allows appropriate customs controls, (3) proven financial solvency and, (4) where relevant, appropriate security and safety standards (Wolfgang & Natzel 2007; TAXUD 2012; Polner 2012; WCO 2014).

AEO status is then granted in the form of a certificate as laid down in Article 14a (1) of the CCIP. According to the AEO Guidelines (TAXUD 2012) ‘the AEO status shall be recognised across all Member States, pursuant to Article 5a of the CCC, therefore, the holder of an AEO certificate shall receive the same benefits in all Member States’. The benefits are also summarised in the AEO Guidelines:

- easier admittance to customs simplification
- prior notification
- reduced data set for entry and exit summary declarations
- fewer physical and document-based controls
- priority treatment of consignments if selected for control
- choice of the place of controls
- indirect benefits such as more transparency and visibility of the supply chain
- recognised as a secure and safe business partner
- improved relations with customs authorities
- improved relations and acknowledgment by other government authorities.

In Austria, the application procedure for AEO certification is then outlined in the working practice guideline *ZK-0051* (BMF 2013), which also specifies in more detail the abovementioned benefits for companies with AEO status based on the AEO Guidelines.

In addition to these directly granted trade facilitation benefits, AEO certification also offers economic advantages, which may be due to reduced costs and streamlined processes in daily export/import operations. In addition, AEO status can give a competitive advantage over non-certified competitors: whenever there is a need to select between different suppliers or service providers, AEO certified companies might prefer an already AEO certified partner, as Customs regard them as a lower risk if all members of their supply chain have AEO status. This is especially true when we think about mutual recognition of AEO status like the US-American C-TPAT program (Aigner 2010; Szelp 2010).

3. Data sampling and results on the EU-level

The TAXUD AEO Database (TAXUD 2014) was the starting point for further inquiry. It contains a list of those AEOs who agreed to disclose their name, along with their certificate type, issuing country, competent customs authority and effective date they received their AEO status. By the end of 2013 a total of 11,957 AEO holders from 27 EU Member States were recorded in the TAXUD AEO Database with 5,342 or 44.9% of them being registered in Germany (see Tables 1 and 2).² Furthermore, the large number of AEO certificates issued in 2011 is remarkable. This came about with the introduction of some real benefits for AEO holders in the EU in January 2011, for example, electronic entry summary declaration, allowance of reduced data requirements, etc. (Weerth 2011). In 2012 and 2013, less AEO certificates were issued than in 2011 which indicates that the first run for AEO certifications is over.

Concerning the type of AEO certification, at the end of 2013 there were 6,200 (51.9%) companies with AEO-F status (that is, full or customs, security and safety) and 5,358 (44.8%) with AEO-C status (that is, customs only) in the EU (see Table 1). This is pretty much in line with the trend Weerth (2011) already commented on: the status of AEO-C is gaining importance as it is somehow an ‘AEO light’ for companies which are mainly interested in simplified procedures within the EU customs system (see Table 2).

Table 1: AEO holders in EU27 end of 2013 by year of receiving their AEO status

EU27	2008	2009	2010	2011	2012	2013
Holder of AEO-C	75 (17.9)	286 (17.2)	1,117 (29.2)	3,516 (45.0)	4,821 (45.8)	5,358 (44.8)
Holder of AEO-S	9 (2.1)	43 (2.6)	122 (3.2)	215 (2.7)	301 (2.9)	399 (3.3)
Holder of AEO-F	335 (80.0)	1,333 (80.2)	2,587 (67.6)	4,091 (52.3)	5414 (51.4)	6,200 (51.9)
TOTAL	419	1,662	3,826	7,822	10,536	11,957

Table 2: Ranking of AEO holders in EU27 in 2010 (Weerth 2011) and 2013 (TAXUD 2014).

AEOs in 2010	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	all others
	DE	NL	FR	IT	PL	SE	UK	ES	AT	
#	1,413	430	361	332	289	251	209	152	146	573
%	34.0	10.3	8.7	8.0	7.0	6.0	5.0	3.7	3.5	13.8
AEOs in 2013	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	all others
	DE	NL	FR	IT	PL	ES	GB	SE	BE	
#	5,372	1,339	950	778	654	549	331	322	321	1,339
%	44.9	11.2	7.9	6.5	5.5	4.6	2.8	2.7	2.7	11.2

4. The Austrian perspective

In Austria, more AEO-F and less AEO-C holders registered compared with the EU27 on average with 85 (34.1%) AEO-C and 163 (65.5%) AEO-F certifications by the end of 2013 (see Table 3). Regarding spatial distribution of AEO certificates by AEO Competent Customs Authorities (with their range of operations being almost identical with the Federal States of Austria), 57 (22.9%) of these 249 AEO certificates were issued at Salzburg, 48 (19.3%) at Vienna and 41 (16.5%) at Lower Austria. This reflects spatial distribution of the Austrian economy pretty well, especially when we look at manufacturing, transport and logistics company activities.

For each Austrian AEO holder listed in the TAXUD AEO Database at the end of 2013, company-specific data like main field(s) of business activity, annual turnover, number of employees, export and import quota were examined. To get this information, company websites as well as company information databases of the Bureau van Dijk,³ Dun and Bradstreet,⁴ and Creditreform⁵ were retrieved and compared in order to obtain the most recent figures available. This approach of taking more than one source into consideration was necessary as 53% of these Austrian AEO holders in the sample have less than 249 employees and 37% have an annual turnover of less than 50 million Euro. Therefore, a lot of them fall in the range of EU small to medium-sized company definition according to Commission Recommendation 2003/361/EC of 20 May 2003, and these sorts of companies are often very cautious not to release too much information about their business. In addition, many are not autonomous companies, that is, they are local subsidiaries of much larger corporate groups headquartered in Austria or somewhere else with very specific fields of activity like procurement and import of raw material, cars and spare parts, etc., or they simply represent the management part of a larger holding company.

Table 3: Austrian AEO holders as at end of 2013 by year of receiving their AEO status

AT	2008	2009	2010	2011	2012	2013
Holder of AEO-C	6 (16.7)	17 (19.5)	31 (23.1)	58 (31.2)	80 (34.0)	85 (34.1)
Holder of AEO-S	0 (0.0)	0 (0.0)	1 (0.7)	1 (0.5)	1 (0.4)	1 (0.4)
Holder of AEO-F	30 (83.3)	70 (80.5)	102 (76.1)	127 (68.3)	154 (65.5)	163 (65.5)
TOTAL	36	87	134	186	235	249

Table 4 shows results per AEO-holders' main field(s) of business activity according to ÖNACE 2008 (Statistics Austria 2010), grouped into industries/sectors of (1) commodity (mainly gas and oil), (2) manufacturing, (3) wholesale/retail (4) transport/logistics and (5) service industry. Furthermore, for better comparison, averages per field of business activity were drawn from Statistics Austria (2014) with the latest figures of turnover and number of employees as of 2011.

First, it is obvious that in Austria the status of AEO-F is more appreciated than AEO-C (especially in the manufacturing as well as the transport and logistics sector) and the importance of AEO-S is almost negligible. Furthermore, the wholesale/retail sector shows a balanced use of AEO-C and AEO-F certifications on average, which may stem from the fact that this sector is much more nationally orientated than the others.

When comparing the date an AEO certification was granted, companies from the commodity sector, wholesalers and retailers seem to be laggards. A closer look at the AEO population development shows that early birds of AEO certification in 2008 were in fact mainly manufacturing companies or transport and logistics service providers that applied for an AEO-F status.

Table 4: Company characteristics of Austrian AEO-holders (as at end 2013)

	Commodity	Manufacturing	Wholesale/ Retail	Transport/ Logistics	Service Industry	TOTAL
AEO since (on average)	Q2 2011	Q4 2010	Q2 2011	Q3 2010	Q2 2010	Q4 2010
Holder of AEO-C	6	31	22	23	0	82
Holder of AEO-S	0	0	0	1	0	1
Holder of AEO-F	2	87	22	43	6	160
TOTAL AEO-holders	8	118	44	67*	6	243*
Average turnover (in Tsd. €)	2,688,080 (224,196)	402,816 (37,188)	128,944 (11,903)	146,901 (9,612)	188,869 (1,624)	349,739 (29,917)
Average Employees	402 (175)	957 (71)	235 (11)	262 (22)	398 (4)	598 (48)
Turnover/Employee (in Tsd. €)	12,867 (2,497)	463 (459)	1,611 (807)	343 (383)	480 (360)	1,046 (563)
Average Import Quota	50	26	57	-	51	35
Average Export Quota	61	81	52	-	29	73

* For five customs house brokers no reliable data was available, one manufacturer was listed twice.

Furthermore, throughout all industries/sectors in Table 3, AEO-holders are larger companies than on average, both in terms of annual turnover and average number of employees. But the dataset contains some wholesale, retail and commodity sector companies where annual turnover is abnormal high with only a few employees. This is a strong indication that these companies are either working in a very focused, specialised business or they simply represent the management part of a holding company.

Last but not least, AEO-holders in the Austrian manufacturing industry are very export-orientated with wholesale, retail and commodity sector companies showing, on average, more balanced foreign trade.

5. Conclusions

In general, it can be said that obtaining an EU AEO certificate is beneficial for every company; at least, it does not provide any drawbacks. However, some benefit more from it than others.

First, the more export-orientated an industry sector is, the more AEO certifications are issued. In the case of Austria, many AEO-holders come from the manufacturing industry as their business is very often heavily export-orientated. At least some benefits that come with AEO status make their export business easier to manage.

Second, a tight link between the manufacturing and the transport and logistics sectors is obvious: transport and logistics service providers like freight forwarding companies usually organise and/or perform transport and logistics services for the manufacturing industry on national and international levels (Schramm 2012). Thus, they are quite often pushed by their clients to apply for an AEO status or else lose them as clients.

The third big contributors in the population of AEO-holders are wholesalers and retailers, although this sector is somehow under-represented. But this in turn indicates that in this sector, export/import operations are not so important on average, but size matters: there are quite a few larger companies engaged in international sourcing and/or distribution operations which really benefit from AEO certification.

This piece of work represents explorative research but is leading to promising results. A logical next step will be a more detailed questionnaire-based survey among these AEO-holders identified in Austria. Moreover, other EU Member States could be treated the same way, given the sample is sufficiently large.

References

- Aigner, S 2010, 'Mutual recognition of Authorised Economic Operators and security measures', *World Customs Journal*, vol. 4, no. 1, pp. 47-54.
- Biljan, JA 2014, 'Good governance in Customs: the case of the Republic of Macedonia', in SO Idowu, & KT Çaliyurt (eds), *Corporate governance*, Springer, Berlin/Heidelberg, pp. 101-15.
- BMF 2013, *ZK-0051, Arbeitsrichtlinie zugelassener Wirtschaftsbeteiligter (AEO)*, GZ BMF-010313/0596-IV/6/2007, last rev. GZ BMF-010313/0801-IV/6/20130 of 18.12.2013.
- Burgemeestre, B, Hulstijn, J & Tan, Y-H 2010, 'Towards an architecture for self-regulating agents: a case study in international trade', *Coordination, Organizations, Institutions and Norms in Agent Systems V*, Lecture Notes in Computer Science, vol. 6069, pp. 320-33.
- Butter, FAG den & van Scheltinga WJ 2008, *Kosten en baten van AEO-certificering*, Onderzoeksrapport in opdracht van Trade Forum NV, Amsterdam, www.feweb.vu.nl/nl/Images/Den%20Butter%20%282008%29%20-%20Kosten%20en%20baten%20van%20AEO-certificering_tcm96-272006.pdf.
- DAMF Consultants 2005, 'The cumulative impact of U.S. import compliance programs at the Canada/ U.S. land border on the Canadian trucking industry', Transport Canada.
- Diop, A, Hartman, D & Rexrode, D 2007, 'Customs-trade partnership against terrorism cost/benefit survey', Center for Survey Research, University of Virginia, and Eldon Cooper Center for Public Service, University of Virginia, VA.
- Frühwirt, P 2012, 'MOR (Measurement of Results) 2011', presentation at eCustoms-Tag 2012-13, 6 December 2012, Vienna.
- GAO 2008, *Supply chain security: U.S. Customs and Border Protection has enhanced its partnership with import trade sectors, but challenges remain in verifying security practices* (GAO-08-240), US Government Accountability Office, Washington, DC.
- Gellert, L 2011, 'Withdrawal, revocation and suspension of AEO certification', *World Customs Journal*, vol. 5, no. 1, pp. 3-16.
- Grainger, A 2011, 'Trade facilitation: a conceptual review', *Journal of World Trade*, vol. 45, no. 1, pp. 39-62.
- Granqvist, M, Hintsa, J, Lazarescu, M & RsiKolneko V 2010, 'e-Customs study: private sector views on potential electronic developments in Switzerland', Cross-border Research Association, Lausanne.
- Gutiérrez, X, Hintsa, J, Wieser, P & Hameri, H-P 2007, 'Voluntary supply chain security program impacts: an empirical study with BASC member companies', *World Customs Journal*, vol. 1, no. 2, pp. 31-48.
- Haughton, MA 2007, 'Examining the business case for shipper participation in Canada–USA trade security programmes', *International Journal of Logistics Research and Applications*, vol. 10, no. 4, pp. 315-31.
- Houe, T & Guimaraes, R 2012, 'The impact of European customs certifications on risk management and 3PL performance: first observations and thoughts', *Logistics and Transport*, vol. 2, no. 15, pp. 19-26.

- Ireland, R 2009, 'The WCO SAFE Framework of Standards: avoiding excess in global supply chain security policy', *Global Trade and Customs Journal*, vol. 4, no. 11-12, pp. 342-52.
- Jackson, A 2011, 'Trade facilitation and supply chain security: a globally integrated approach', *World Customs Journal*, vol. 5, no. 2, pp. 123-7.
- Janowska-Bucha, E 2008, 'Customs security in the European Union: Authorised Economic Operator (AEO)', *Journal of KONBiN*, vol. 1, no. 4, pp. 454-60.
- La Londe, BJ 2002, 'Security: the shipper speaks: results of a new survey show agreement and disagreement over security, point to an opportunity for business to assume a leadership role', *Supply Chain Management Review*, vol. 6, no. 6, pp. 9-12.
- Lejeune, I, Tusveld, R, Aerts, D, Wagemans, M, Bogaerts, N & Buysing Damste, C 2013, *Study on the evaluation of the Customs Union* (Specific Contract No. 13 implementing Framework Contract No. TAXUD/2010/CC/101) Final report, DG TAXUD, Brussels.
- Liu, J, Tan, Y-H & Hulstijn, J 2009, 'IT enabled risk management for taxation and customs: the case of AEO assessment in the Netherlands', *Electronic Government, Lecture Notes in Computer Science*, vol. 5693, pp. 376-87.
- Materna GmbH et al. 2009, *Zollstudie 2008 – Zoll in Bewegung*, Materna GmbH Information & Communications, AWB Steuerberatungsgesellschaft mbH, AWA Aussenwirtschafts-Akademie GmbH & Institut für Steuerrecht an der Westfälischen Wilhelms-Universität Münster.
- Materna GmbH et al. 2010, *Zollstudie 2009/2010 – Zoll im Aufbruch*, Materna GmbH Information & Communications, AWB Steuerberatungsgesellschaft mbH, AWA Aussenwirtschafts-Akademie GmbH & Institut für Steuerrecht an der Westfälischen Wilhelms-Universität Münster.
- Melnyk, SA, Ritchie, WJ & Calantone, RJ 2013, 'The case of the C-TPAT border security initiative: assessing the adoption/persistence decisions when dealing with a novel, institutionally driven administrative innovation', *Journal of Business Logistics*, vol. 34, no. 4, pp. 289-300.
- Ojah, M 2005, 'Securing and facilitating trade through U.S. land borders: critical analysis of C-TPAT and FAST programs', *Transportation Research Records*, vol. 1938, pp. 30-7.
- Peleg-Gillai, B, Bhat, G & Sept, L 2006, 'Innovators in supply chain security: better security drives business value', *The Manufacturing Innovation Series*, September, Stanford University Manufacturing Institute, Stanford, CA.
- Polner, M 2010, 'Compendium of Authorized Economic Operator Programmes', WCO Research Paper Series No. 8, World Customs Organization, Brussels.
- Polner, M 2011, 'Compendium of Authorized Economic Operator Programmes', WCO Research Paper Series No. 14, World Customs Organization, Brussels.
- Polner, M 2012, 'Compendium of Authorized Economic Operator Programmes', WCO Research Paper Series No. 25, World Customs Organization, Brussels.
- Schramm, H-J 2012, *Freight forwarder's intermediary role in multimodal transport chains: a social network analysis*, Physica-Verlag, Heidelberg, Neckar.
- Sheu, C, Lee, L & Niehoff, B 2006, 'A voluntary logistics security program and international supply chain partnership', *Supply Chain Management: an International Journal*, vol. 11, no. 4, pp. 365-74.
- Statistics Austria 2010, *Implementation of the ÖNACE 2008*, Statistics Austria, Vienna, www.statistik.at/web_en/classifications/implementation_of_the_onace2008/index.html.
- Statistics Austria 2014, *Structural business statistics from 2008 onwards*, Statistics Austria, Vienna, www.statistik.gv.at/web_en/statistics/trade_services/index.html.

- Szelp, A 2010, *Cargo security initiatives in the EU and the USA, their impact on business operations and mutual recognition with focus on AEO and C-TPAT*, Schriftenreihe des Instituts für Transportwirtschaft und Logistik - Logistik, 05/2010, Institut für Transportwirtschaft und Logistik, WU Vienna University of Economics and Business, Vienna, <http://pub.wu.ac.at/3013/>.
- TAXUD 2012, *Authorized Economic Operator guidelines*, (TAXUD/B2/047/2011-Rev.3), http://ec.europa.eu/taxation_customs/resources/documents/customs/policy_issues/customs_security/aeo_guidelines2012_en.pdf.
- TAXUD 2014, *AEO database*, viewed 15 March 2014, http://ec.europa.eu/taxation_customs/dds2/eos/aeo_home.jsp?Lang=en.
- Urciuoli, L 2010, 'Security in physical distribution networks: a survey study of Swedish transport operators', Department of Industrial Management and Logistics, Division of Engineering Logistics, Lund University, Sweden.
- Urciuoli, L & Ekwall, D 2012, 'Possible impacts of supply chain security on efficiency: a survey study about the possible impacts of AEO security certifications on supply chain efficiency', paper presented at 24th NOFOMA Conference, 7-8 June 2012, Turku, Finland.
- Voss, MD & Williams, Z 2013, 'Public-private partnerships and supply chain security: C-TPAT as an indicator of relational security', *Journal of Business Logistics*, vol. 34, no. 4, pp. 320-34.
- Weerth, C 2007, 'European Community Customs Code: the small Customs Code revision and Americanization of European Customs Law', *Global Trade and Customs Journal*, vol. 2, no. 10, pp. 359-62.
- Weerth, C 2011, 'Three years of Authorized Economic Operator (AEO) in the EU', *Global Trade and Customs Journal*, vol. 6, no. 10, pp. 497-9.
- Wolffgang, H-M & Natzel, JM 2007, 'The Authorized Economic Operator in the European Union', *Global Trade and Customs Journal*, vol. 11, no. 11, pp. 377-84.
- World Customs Organization (WCO) 2007, *Safe Framework of Standards to Secure and Facilitate Global Trade*, WCO, Brussels, (as of June 2007), www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/~/_media/93162547322F462A97F8767D0987A901.ashx.
- World Customs Organization (WCO) 2014, *Compendium of Authorized Economic Operator programmes*, 2014 edn, WCO, Brussels.

Notes

- 1 This paper was presented at the Inaugural INCU Global Conference, 21-23 May 2014, Baku, Republic of Azerbaijan.
- 2 Notably these figures presented in the paper deviate slightly from those published in, for example, Weerth (2011), Frühwirt (2012) or Lejeune et al. (2013) as the TAXUD AEO Database always shows only active AEO certifications but not changes or withdrawals, revocations and suspensions thereof since their first issuance (Gellert 2011). Moreover, AEO applications may have been filed but not published or have been accepted but not yet issued (Weerth 2011).
- 3 www.bvdinfo.com.
- 4 www.dnb.com.
- 5 www.creditreform.com.

Hans-Joachim Schramm



Dr Hans-Joachim Schramm is Assistant Professor, Department of Global Business and Trade, Institute for Transport and Logistics Management, Austria and an external lecturer at Copenhagen Business School (CBS) in the maritime business minor. He holds a degree in economics from Humboldt-University, Berlin and a doctoral degree from Dresden University of Technology. He is a forwarding agent by profession and secretary general of the (Organisation of Tariff and Transport Experts (Internationaler Verband der Tarifeure [IVT], www.int-int.org). The main focus of his research and teaching activity relates to international transport and logistics management (including trade facilitation, customs and foreign trade management), control in logistics and transportation companies as well as economics and policy issues in sea, air, rail and road transport markets. At the 2014 Council of Supply Chain Management Professionals (CSCMP) Conference, Hans-Joachim received the Teaching Innovation Award for his paper 'Using dynamic adaptive cases to bring practical experience into the classroom'. He has authored several papers and monographs, contributed to peer-review processes, and been a visiting lecturer at universities in Finland, Sweden, Denmark, France, Belgium, Hungary and China.



Section 2

Practitioner Contributions

China Customs' reform: approaches to improving the professionalism of customs clearing agents to enhance trade facilitation

Libing Wei¹

Abstract

A professional approach to customs service by a range of stakeholders is essential to the efficient and effective provision of that service and to enhance trade facilitation. This paper presents a case study on the role of customs clearing agents (clearing agents) in China Customs' reform where proactive measures are implemented in line with the World Customs Organization's (WCO) conventions, standards and acknowledged best practices. However, it is noted that the regulation of clearing agents differs from country to country even though those agents are playing a key role in facilitating global trade. This paper contends that improving the professionalism of clearing agents through training and licensing programs will add value to their role as reliable stakeholders in customs reform and identifies approaches that have been implemented by China Customs to achieve this.

1. Introduction

The World Trade Organization's (WTO) Trade Facilitation Agreement (TFA) contains provisions for expediting the movement, release and clearance of goods, including goods in transit. In the context of implementing this new Agreement, both Customs and business recognise the important need for a partnership where they know each other and work together to achieve secure customs transactions. This is particularly true where increased regulatory and business complexities necessitate such an alliance, which is emphasised in the World Customs Organization's (WCO) Revised Kyoto Convention (RKC) and instruments such as the WCO Time Release Study.²

Reports from WCO working committee meetings demonstrate that much has been done to enhance customs professionalism and modernisation by the worldwide customs community together with international organisations and donors. However, to achieve effective and efficient border management, considerable effort and investment should be devoted to improving the competence and compliance of customs clearing agents (also referred to as 'clearing agents'),³ a key group of stakeholders in customs administrations, through knowledge-based partnerships. Further, a key message from PICARD Conferences⁴ is that customs administrations should play a role in promoting professional standards for all customs practitioners and in fostering collaborative training programs with business to contribute to world trade facilitation.

Indeed, the WCO and the worldwide customs community are playing a leading role in working together with business, for instance, in building customs professionalism through joint investment in training workshops and seminars; in enhancing compliance awareness via partnership initiatives such as Authorised Economic Operator (AEO) programs; in strengthening synergies for risk management; and cracking down on illegal trade activities.

Taking account of the possible scope of this study, this paper narrows its focus to examine partnerships with clearing agents and what Customs can do to support their professionalism.⁵ It analyses practices that were introduced as part of China Customs' reform. Generally, customs professionalism is acquired through learning, training and practising the relevant skills. This can be demonstrated by reliable performance in the workplace or (in some countries) accreditation by complying with a certain set of regulations/standards. The following sections explain why clearing agents' professional standing is critical in strengthening customs service for trade facilitation (section 2); discuss what approaches are being practised by China Customs in professionalising clearing agents (section 3); and highlight ways for decision makers to strengthen professional partnerships with clearing agents to support the facilitation of cross-border trade (section 4).

2. Why clearing agents? An overview of their key role and relevant regulations

2.1 The evolving trade landscape requires professional performance by clearing agents

Briefly considering some emerging trade trends and business models in global supply chains helps us to understand the important role of clearing agents as key facilitators in world trade and key partners in assisting Customs to guarantee a nation-state's revenue collection and other priorities.

Global production specialisation has advanced, particularly in manufactured goods. There are some prominent features of this situation: the share of manufactured goods in world merchandise trade has grown significantly in both developed and developing countries; intra-firm trade, that is, trade within the same multinational company and/or its affiliates, has become a widespread phenomenon; cross-border trade has multiplied through Regional Trade Agreements (RTAs); and exported goods contain a significant portion of imported intermediate inputs.⁶

This implies that the global supply chain is increasingly important for economic competitiveness. Intermediary economic operators, particularly clearing agents, are playing critical roles in the area of logistics, for instance, to achieve timely clearance of goods at borders and reliable delivery of intermediate consignments for cost-efficient production. As well, increasing international trade has intensified the need for regulatory agencies to establish partnerships with reliable economic operators to carry out effective and efficient service at borders.

E-commerce is increasing rapidly, particularly in express cargo. The use of information and communications technology (ICT), such as sophisticated forms of internet communication, has made cross-border activities easier. In this context, all parties concerned need to demonstrate high performance in terms of punctuality, rapidity and reliability in addition to the traditional criteria of business cost and predictability. As a result, importers and exporters, including large numbers of SMEs, tend to pay increasing attention to who actually supplies the service with secure and additional value. In this regard, competent clearing agents (most of which are SMEs) are expected to be reliable business partners of both regulatory agencies and consigners/consignees to fulfil clearance procedures for those time-sensitive consignments in a fast and reliable manner.

Concern about supply chain security remains a big issue. Considering recent natural, criminal, political and technological disruptions to international supply chains, the demand for security has increased so as to ensure *getting the right product to the right place at the right time without compromising the national security*. In other words, any security effort might be in vain if a party in the supply chain fails to achieve a minimum level of professional integrity. In addition, illegal trade and commercial fraud tend to increase

side-by-side with large volumes of goods moving across borders. This increases concern on the part of both border regulatory agencies and legitimate traders as normal business always demands protection from unfair international trading practices such as smuggling of goods, under-invoicing, origin fraud, tariff misclassification and intellectual property rights (IPR) infringements.

In this context, Customs must work effectively and efficiently, and take a pivotal role in developing a professional Customs-Business partnership in order to secure and facilitate global supply chains. In fact, many customs administrations are taking the initiative to maintain partnerships with compliant and competent economic operators although the process of building trust between Customs and business appears to be a thorny path.

2.2 Clearing agents play a key role in customs transactions

With the advances in digital communication technologies and the demand for efficient use of resources to accelerate product life cycles, importers and exporters can potentially use standardised electronic platforms such as single window and other client-orientated service facilities to declare their consignments. However, in fact, most importers and exporters, whether a multinational corporation or an SME, do not establish a dedicated in-house customs department because it is not easy to handle sophisticated customs techniques and the complexity of data requirements for regulatory purposes. They prefer to use an external brokerage service and in this way, clearing agents are expected to assist clients to comply with customs procedures and regulations, and declare goods in a professional and cost-efficient way.

On examining WCO Members' websites, it is apparent that almost 100% of customs transactions in South America, Africa and in most Asian countries are performed by clearing agents who work as customs brokers, freight forwarders, and carriers. In Europe, Oceania and North America, a high percentage of customs transactions are still completed in agent declarations. According to a study conducted by the Federation of Freight Forwarders' Associations in India (FFFAI), 'it is estimated that 95 percent of international trade is handled by international freight forwarders/customs brokers' (*FFFAI News* 2012). These clearing agents gather, organise and manage the commercial and trade data in fulfilment of all customs formalities related to the international movement of goods on behalf of their clients. This situation helps to explain why clearing agents are generally under strict controls in respect of professional licence and market access in making declarations on behalf of other economic operators.

The WCO RKC acknowledges the importance of using clearing agents in dealing with customs transactions. Chapter 8 of the RKC ('Relationship between Customs and Third Parties') provides standards on how to work with clearing agents and other service providers. The introduction to this chapter recognises that the use of a customs specialist can speed up the passage of goods through customs controls:

Importers and exporters are able to employ specialists to deal with complicated and detailed Customs procedures that may be unfamiliar to them and who can act on their behalf at times and places which they themselves would find inconvenient. Carriers and delivery services are able to expedite the movement of goods in their charge through Customs controls and to service the steadily growing proportion of time-sensitive consignments. **Customs are able to more steadily and predictably clear goods, thereby better managing their own resources and the release times for the trade. In some countries, Customs also benefit from dealing with agents and brokers who are often more expert at handling the requirements for Customs procedures than some of their customers** [*emphasis added*] (WCO Revised Kyoto Convention 1999, General Annex Guidelines Ch. 8, p. 1).

The important role of clearing agents is also reflected in the WCO *Framework of Standards to Secure and Facilitate Global Trade* (SAFE Framework) (WCO 2012a). An important component of the SAFE Framework is the AEO⁷ program which has become a paradigm to enhance Customs-Business partnerships in facilitating legitimate trade. According to the WCO (2014a), 88% of operational and

to-be-launched AEO programs have incorporated clearing agents as potential AEOs, including customs brokers, warehouse operators, freight forwarders and carriers (the remainder of the AEO programs cover either importers or exporters exclusively or cover both importers and exporters). This demonstrates that most AEO programs attach great importance to clearing agents who are expected to act as professional promoters and responsible 'filters' in cross-checking customs declaration data to ensure that business partners are reliable and secure within the supply chain at national and international levels.

2.3 Achieving levels of professionalism in clearing agents through formal examinations

There have been concerns from both the public and private sectors that the complexity of the documentation to be submitted to Customs with regard to the clearance of goods often leads to an incorrect compilation of information, with data frequently missing, so slowing down the entire clearance process. The International Federation of Customs Brokers and Customs Representatives (CONFIAD) observed that opening up the possibility for any person without the necessary professionalism to act as clearing agents would increase the risk of damages stemming from inaccurate declarations or incorrect fulfilment of formalities and wrong calculations of duties and excise due on the merchandise. CONFIAD (2007) citing the joint report of the International Finance Corporation and the World Bank, 'Reforming the Regulatory Procedures for Import and Export', noted that the lack of training and professionalism by all those intermediaries who deal with customs formalities is one of the major sources of serious clearance delays:

The lack of training and professionalism by the Customs broker/clearing agent can frequently be a source of serious clearance delays in the preparation of the Customs goods declaration. Lack of knowledge regarding the clearance process, its document requirements, where and how to obtain necessary certificates, insufficient technical knowledge on how to determine the classification of goods, can all contribute to unnecessary errors and significant delays in preparing an error-free goods declaration for Customs and having it accepted as correct. It is critical that any Customs reform/modernization and trade facilitation develop a strategy to improve the professionalism and conduct of the customs brokers and clearing agents. This can be addressed through professional training and licensing programs (possibly even requiring retraining and relicensing of existing brokers/agents), and the application of sanctions, temporary suspension or permanent revocation of licenses when brokers/agents are deemed to be unprofessional, non-performing, or involved in a customs fraud or other corrupt practice (International Finance Corporation 2006, p. 77).

It should be noted that the newly adopted European Union Customs Code (Article 18) stipulates that 'Member States may determine, in accordance with Union law, the conditions under which a customs representative may provide services in the Member State where he or she is established'. The Customs Code emphasises the 'conditions' in providing services as a third party, when compared with the current Modernised (European) Community Customs Code which stipulates: 'It will be no longer national restrictions on customs representation but possible conditions and common criteria to be fulfilled by those persons who want to act as representatives in other Member States'.

In the same vein, this paper draws attention to the WCO RKC Standards and the WTO TFA. Chapter 8 of the RKC ('Relationship between Customs and Third Parties') provides that:

Persons concerned shall have the choice of transacting business with the Customs either directly or by designating a third party to act on their behalf (Standard 8.1).

National legislation shall set out the conditions under which a person may act for and on behalf of another person in dealing with Customs and shall lay down the liability of third parties to the Customs for duties and taxes and for any irregularities (Standard 8.2).

Accordingly, in terms of using customs brokers, Article 10 of the WTO TFA requires that:

Without prejudice to the important policy concerns of some Members that currently maintain a special role for customs brokers, from the entry into force of this agreement Members shall not introduce the mandatory use of customs brokers. ... With regard to the licensing of customs brokers, Members shall apply rules that are transparent and objective.

It is fair to say that neither the WCO nor WTO support the mandatory use of clearing agents, but do require conditions/rules that are transparent and market-orientated when regulating clearing agents.

In respect of licensing clearing agents, the International Federation of Customs Brokers Association (IFCBA) advocates that customs brokers should be licensed by following a standard rule. The IFCBA believes that education and training of customs brokers and other clearing agents is the cornerstone of building a private sector that can be a reliable partner of Customs in managing security and facilitation.

In practice, Customs must pay attention not only to validation of the applicant’s qualifications beforehand and auditing of their performance thereafter, but also set out operational standards and training criteria to ensure their ongoing regulatory compliance and professional standing. Further, when managing or employing others, clearing agents are obliged to set good examples by acting lawfully and competently at all times.

However, in referring to websites of WCO Members, market access control for clearing agents is seen as a complex issue subjected to regulations that differ from country to country (see Table 1).

Table 1: Example of diverse regulatory modes for clearing agents

Level of Restriction	Regulations on Access to Customs Declaration of Goods’ Importation or Exportation		Example of Countries
	No prerequisites, and liberty on market competition.	No qualifying requirement necessary for both self and agent declarations (including agent declarations by means of direct and indirect representatives*).	Germany, the UK
	No licence is required on self declarations fulfilled by traders themselves.	Licence is required for agent declarations in direct representative, but without tailored requirement on professional examination.**	Some countries in Africa
		Licence is required for agent declarations.	Most southern and eastern European countries
		Both qualifying and professional examinations are required in licensing clearing agents as third parties.	Australia, Canada, Japan, Republic of Korea, Russian Federation, the US
	Licence is required on both self and agent declarations pragmatically.	Both qualifying and professional examinations are required in licensing clearing agents to make either self or agent customs declarations (if beyond a certain minimum customs duty).	Brazil, Mexico, the Philippines
High	Licence is required and agent declaration is mandatory.	Both qualifying and professional examinations are required in use of licensed clearing agents.	Some countries in Africa and South America

Source: Compiled by the author.

* According to the current EU Modernized Community Customs Code, ‘direct representative’ means a customs declaration in the name of and on behalf of another person; ‘indirect representative’ means a customs declaration in its own name but on behalf of another person.

** Here ‘qualifying examination’ means the licensing process conducted by customs administrations in evaluating the applicants’ eligibility in terms of citizenship, compliance and credibility; ‘professional examination’ means

the professional exam relating to trade regulatory rules, customs procedures and declaration skills, etc. (it is also termed ‘licensure examination’ in countries like the Republic of Korea and the US, according to their relevant regulations). In practice, passing the professional examination is the prerequisite to qualifying for a licence to conduct customs brokerage services.

3. Approaches practised by China Customs in promoting trade facilitation through professionalising clearing agents

As a member of the WCO, China Customs at various levels is taking the initiative and working with the private sector to develop training programs that apply WCO conventions and instruments in a bid to ensure service-orientated organisations and good governance. These programs include seminars, workshops, formal consultative committee meetings and/or *ad hoc* round-table consultations to keep the private sector, especially clearing agents, informed of customs policies, regulations and new management mechanisms. Frequently, clearing agents are also invited to participate in the discussions in forums such as the APEC Customs-Business Dialogue and the WCO World Customs and Trade Forum, in a bid to optimise channels to listen to suggestions from frontline business.

The following three sub-sections describe other approaches being practised by China Customs and their outcomes. It should be noted that they are introduced for illustrative purposes and do not prescribe how a customs administration should act.

3.1 Enhance professional integrity through market competition and partnership with trade associations

In most WCO member countries, clearing agents and their commercial entities are obliged to be registered with Customs under national law. This is perceived as a professional permit for clearing agents to provide service as a third party. However, in the context of ever-increasing demand for reliable performance and to address the bottlenecks in trade facilitation initiatives, China Customs is aware of the importance of customs professionalism in partnering with reliable clearing agents. From the beginning, China Customs has noticed that qualifying examinations for clearing agents are not sufficient to guarantee high levels of professionalism. For instance, around 100,000 practitioners have passed the examination and qualified as licensed customs brokers but less than 50% are in active operation in the customs brokerage market.

To address risks of low professionalism (and low professional integrity), China Customs revised the licensing system in 2014, giving freedom to market competition in respect of the use of reliable clearing agents. Consequently, Customs Brokers Associations nationwide are commissioned to regulate the brokerage market and manage the professional examinations in a bid to facilitate market-orientated competition to ensure a high level of reliable performance on the part of clearing agents.

This modification of regulations requires close partnership between customs authorities, clearing agents and the Customs Brokers Associations. To avoid commercial fraud and potential collusion for illegal gains, such trade associations are not permitted to be directly involved in customs transactions; they cannot act as gatekeepers of the market and possible poachers. Their mandate is on monitoring, training, and bridging dialogue channels in the interests of both customs administrations and clearing agents. This is coincidentally consistent with the recommendation being highlighted by the WCO Capacity Building Committee that ‘Customs administrations require organized partners and business associations to deal with in training and capacity building’.⁸

To enhance professional integrity and good governance, Customs Brokers Associations are mandated by the customs authority to take, *inter alia*, the following proactive measures:

- host ‘Customs Clearing Agents’ Professional Examination Committees’ at national and regional

levels, comprised of customs officials, association specialists, representatives of importers/exporters and senior clearing agents

- unify training materials and examination criteria nationwide
- unify the electronic declaration platform and operational process through paperless declarations, a key step towards establishment of a single window environment
- organise competitive campaigns nationwide every three years to select the top 100 customs brokerage companies and clearing agents respectively, based on their record of performance and compliance in customs transactions, accountability, etc.

Experience attained

Professional integrity is of critical importance for trade facilitation and business competitiveness. However, building business professionalism will be unlikely to have good results in governance if they do not align with the strategies and efforts of the customs authority and other government departments. Thus, professional partnerships in which trade associations act as neutral intermediaries between the customs authority, clearing agents and civil society can provide legitimacy of training and fair competition for professionalism, for projects that strengthen customs integrity and good governance.

This regulatory innovation introduces a win-win situation into the customs brokerage market. Knowledge and intelligence are well explored and motivated through the synergy of trade associations; meanwhile, customs administrations are significantly relieved of the burden of training and monitoring of legal liabilities in market regulation.

According to the latest survey report by China Customs Brokers Association (CCBA 2013), some trends have been appearing in business partnerships and advancing towards a more efficiently regulated brokerage service. For instance, training projects that ‘train the trainer’ have enhanced professional sustainability and achieved significant results with relatively small financial resources. Selected reliable clearing agents are playing an exemplary role nationwide in accurate declarations and data security; and SMEs are enthusiastic to join the Customs Brokers Association, and to assign their in-house customs professionals to attend formal training courses.

3.2 Promote trade facilitation through clearing agents’ expertise

Against the backdrop of increasing global trade, there is an increased expectation on clearing agents to help their clients comply with customs rules and regulations in view of their experience in dealing with local customs procedures associated with goods classification and valuation of consignments, etc. For this reason, clearing agents play an essential intermediary role in consultations between importers/exporters and customs administrations, and are typically the main points of contact in customs transactions.

In China, Customs is rolling out a professionalism-orientated approach to certify ‘Customs Specialists in Goods Classification’⁹ in line with the WCO Standards on Advance Rulings and the SAFE Framework, advocating ‘compliance for trade facilitation’. Customs administrations grant expedited clearance of consignments declared by those specialised clearing agents who must be employed by a credible categorised brokerage company under the AEO program and declare goods on behalf of an AEO company or at least a credible categorised operator. For instance, they can declare goods at a local customs house where they are registered and obtain clearance from any customs house, that is, a consignment can be declared at a ‘home’ customs house when it is to be imported or exported at other ports without any further customs declarations; they can submit one declaration form to both Customs and Quality Inspection and Quarantine services in Shanghai and Zhejiang province in eastern China, by applying the WCO Data Model which is a foundation for interoperability among border agencies’ reporting requirements.

In practice, the specialised clearing agents are obliged to be:

- attentive in plausibly examining trade documents throughout the supply chain to safeguard the interests of trade partners and their own professional integrity profile
- alert in reporting to Customs any potential illegal or illegitimate activities and suspicious transactions such as fraudulent goods classifications, under-valuation, origin fraud, IPR infringement
- proactive in the education of SME partners by developing a Code of Conduct and a set of Risk Indicators.

Experience attained

This measure provides opportunities for clearing agents to demonstrate their professional expertise in conformity with regulations and standards applicable to international trade. What is inspiring is that they can be motivated as facilitators to strengthen customs service; be ‘filters’ to assist Customs to target high risk consignments more effectively, and be professional integrity promoters to secure the interests of stakeholders. On the other hand, it is hard to imagine that a person without the necessary specialised knowledge in customs operations would be able to assist Customs and carry out services with due diligence and reliability.

This measure has led to the shift of customs enforcement focus from individual consignment-based checking to brokerage company-based auditing. The specialised clearing agents are able to enjoy benefits such as expedited clearance procedures, periodic audits and reputable business opportunities. It also demonstrates that the vast majority of SMEs benefit when their customs transactions are conducted by these clearing agents. Such specially certified clearing agents voluntarily operate closely with the regulators to prevent potential commercial fraud. They have become a key group in assisting Customs to secure supply chains and act as market ‘filters’ to expose informal and non-compliant brokerage activity such as ‘One-Broker-Shop’ businesses (such service is often offered by a broker at an attractive price by shortcutting regulatory requirements).

3.3 Maintain effective performance measurement that integrates the customs authority’s regulatory and business operations

In the context of China Customs’ reform for better trade facilitation, Customs is required to be highly capable in ‘risk management, post-clearance auditing and efficient management of enterprises’. These are perceived as new challenging functions in terms of customs professionalism, which are highlighted in the Second-Phase Strategy of China Customs’ Modernization in a bid to build an *intelligent Customs system with smart ears and eyes*. To achieve this strategy, China Customs pays particular attention to partnerships with stakeholders based on their professionalism, in particular with clearing agents considering that more than 85% of large customs transactions are conducted by means of agent declarations. In this regard, China Customs actively manages the implementation of its AEO program through its Interim Regulations on Categorised Management of Enterprises’ Credibility¹⁰ (China Customs Decree No. 225, 2014). One of the outstanding features of this program is that enterprises are regulated based on their performance at borders and their professional standing in respect of knowledge of customs regulations, goods classifications, etc. Specific measures are defined relating to the performance of clearing agents with particular emphasis on being:

- time-valid (to keep track of business performance in areas such as possible smuggling; erroneous declarations)
- consistent with other performance indicators (to keep track of clearing agents’ performance recorded by other border regulatory departments in a bid to eradicate illegal activities, commercial fraud, and fraudulent use of credible economic operators’ names)

- conscious of good governance (to be committed to all-round communication with partners, invite clearing agents to actively participate in the discussions about optimising the AEO program to safeguard the credibility of that program and better guide professional development of the brokerage market nationwide)
- consistent in developing professional integrity (by designating direct contact points between customs officials and clearing agents of AEO companies to motivate business to voluntarily invest in professionalism, and to keep them addressing professional integrity issues that are relevant to their business activities and core competencies).

Until now, only around 200 clearing agents' companies are registered as Highly Credible Authorised Operators (these are AEO companies validated by China Customs), which is a small number when compared with the large number of enterprises registered with the customs authority (there are around 342,600 registered enterprises, 98.32% of which are ordinary SMEs). Conversely, in 2012, around 800 clearing agents' companies rated as Credible Operators and Operators were demoted to a questionable class, 320 of which were deprived of the right to customs brokerage business (CCBA 2013).

Experience attained

With the AEO program and its practical implementation, trust is being fostered between customs officials and reliable clearing agents in a manner of equal social status instead of the outdated paradigm of the 'cat-and-mouse game' at borders. As an outcome, customs officers are frequently invited by business to attend workshops and thus gain more accurate knowledge of the products subject to goods classification, and vice versa, clearing agents are encouraged to attend workshops organised by Customs to update their compliance awareness of new regulations, new tariff rules, etc.

In respect of promoting customs professionalism, those clearing agents employed by Credible Operators and higher class companies (for example, AEOs) are taking the initiative to protect their corporate brand image by advocating knowledge-based company ethics, voluntarily protecting their accreditation status as well as the interests of trade stakeholders to ensure sustainable partnerships. In fact, these clearing agents are playing an exemplary role in assisting Customs to do more with less.

This experience reflects the principles of the WCO's 'Performance Measurement Contracts Guide':¹¹

Performance measurement and contracts make it possible to enter a virtuous cycle of reform. ... Since the evaluation of the performance of each entity is openly shared (at least internally), each entity will want to be assessed as accurately or positively as possible. This leads it to share information related to the difficulties and constraints it has encountered when carrying out its activities. This "forced" feedback feeds the debate on the reform with more accurate information, thus leading to a more realistic evaluation of the modernization process (WCO 2014b, p. 13).

4. Conclusions

In support of the implementation of the WTO TFA and as a result of other changes, the WCO is making a considerable investment in upholding its determination to serve its Members and upgrading customs professionalism through WCO instruments, standards, and tools including the newly launched Mercator Programme.

Moreover, the WCO pays great attention to promoting professionalism through partnering with stakeholders. As is mentioned in the WCO 'Orientation Package for Decision Makers':

Now, more than ever before, there is a need for Customs administrations to be more effective and efficient in order to achieve the objectives set by policymakers. This requires investment in either significant reform and modernization or continuous improvements. This in turn requires the support

of a broad base of stakeholders, including decision makers in Government, other government agencies, ... and a range of private sector actors (WCO 2012b, p. 1).

Generally, customs authorities are expected to comprehend precisely the environment and invest in capacity building for efficient and effective administration but this paper demonstrates that they also need to invest in their partnerships with business. In this connection, it is the responsibility of Customs to take initiatives in setting professional standards and performance guidelines to motivate reliable clearing agents to comply with regulatory rules and thus motivate them to play an exemplary role for SMEs in respect of professional competence and regulatory compliance.

In the context of China Customs' reform, the authority pays particular attention to the professional standing of clearing agents who are key partners in the provision of service and key stakeholders in achieving the Second-Phase Strategy of China Customs' Modernization. The approaches discussed in this paper have proved successful in strengthening customs professionalism through partnerships on a structured basis in addition to *ad hoc* cooperation, and have led to a win-win environment for the three parties: the Customs administration, importers/exporters, and reliable clearing agents. Consequently, knowledge and intelligence are better shared, and reliable clearing agents who have succeeded through market selection are obliged to shoulder due responsibilities in such areas as accurate declarations, data security, IPR protection, etc. Some of these approaches, though still nascent, are being practised in the context of China Customs' reform. Much work relating to trade facilitation, professional integrity, and capacity building is ongoing to secure greater participation of other regulatory departments; however, it will take some time before this is fully achieved.

References

- China Customs 2014, 'Interim regulations on categorized management of enterprises' credibility', Decree No. 225, Beijing.
- China Customs Brokers Association (CCBA) 2013, 'A survey report on customs brokerage service', Beijing.
- Confédération Internationale des Agents en Douane (CONFIAD) 2007, 'Memorandum on the impact of the customs representation on the EU's competitiveness and security', CONFIAD Steering Committee for the Modernization of the CCC, Lisbon, p. 46.
- European Union (EU) 2008, 'Modernized Community Customs Code', Regulation No. 450/2008, Brussels. OJ L 145, 4.6.2008.
- European Union (EU) 2013, 'Union Customs Code', Regulation No. 952/2013, Brussels, OJ L 269/1, 10.10.2013.
- Federation of Freight Forwarders' Associations (FFFAI) 2012, 'Honoring the past celebrating the present', *FFFAI News*, Inaugural Launch, Mumbai, vol. 1, no. 1, p. 9.
- International Finance Corporation 2006, *Reforming the regulatory procedures for import and export: guide for practitioners*, Small and Medium Enterprise Department, World Bank Group, Washington, DC.
- World Customs Organization (WCO) 1999, *International Convention on the Simplification and Harmonization of Customs Procedures (as amended)*, (Revised Kyoto Convention), WCO, Brussels.
- World Customs Organization (WCO) 2011, 'Guide to measure the time required for the release of goods, Version 2', WCO, Brussels.
- World Customs Organization (WCO) 2012a, *WCO SAFE Framework of standards to secure and facilitate global trade* (SAFE Framework), June, WCO, Brussels.

- World Customs Organization (WCO) 2012b, 'WCO Orientation package for decision makers', WCO, Brussels.
- World Customs Organization (WCO) 2014a, 'Compendium of authorized economic operator programmes', WCO, Brussels.
- World Customs Organization (WCO) 2014b, 'The why & how of performance measurement contracts (WCO PMC Guide)', WCO, Brussels.
- World Trade Organization (WTO) 2013a, 'Trade Facilitation Agreement: Ninth Session of the Ministerial Conference, Bali', WTO, Geneva.
- World Trade Organization (WTO) 2013b, 'World Trade Report 2013: factors shaping the future of world trade', www.wto.org/english/res_e/publications_e/wtr13_e.htm.

Notes

- 1 The views and opinions presented in this paper are those of the author and do not necessarily reflect the views or policies of the WCO or WCO Members.
- 2 Delays in the release of goods are very often attributed to the procedural and documentary requirements of Customs. Therefore, the time required to release goods has increasingly become the measure by which the international trading community assesses the effectiveness of a customs administration. This explains why Article 7 'Release and clearance of goods' of the WTO TFA encourages members 'to measure and publish their average release time of goods periodically and in a consistent manner, using tools such as, *inter alia*, the WCO Time Release Study (TRS)'. According to the 'Guide to measure the time required for the release of goods, Version 2' (WCO 2011), activities that relate to the calculating and recording of the time needed by Customs to release goods can provide pertinent information to guide any necessary process improvements or identify desirable regulatory changes to ensure the effective facilitation of trade. The Guide highlights that the involvement of customs brokers (associations) is indispensable to undertake the TRS, as they may be able to provide Customs with the necessary data for the TRS which the customs administration does not have. The TRS would be a typical area where Customs, other border agencies and business can work together for mutual benefit. Details are available at: www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/pf_tools_time_release.aspx.
- 3 A 'customs clearing agent', in the WCO 'Glossary of International Customs Terms', is defined as a person who carries on the business of arranging for the customs clearance of goods and who deals directly with Customs for and on behalf of another person. In this paper, 'customs agents' refers to customs brokers, forwarders, shipping agents, other customs intermediary operators and in-house customs professionals of import/export companies; whereas 'customs practitioners' generally includes all those involved in customs service including customs agents and customs administration officials.
- 4 Since 2006, the WCO has successfully held nine PICARD (Partnership in Customs Academic Research and Development) Conferences in association with the INCU (International Network of Customs Universities), where participants can exchange experiences and customs-related research for customs professionalism, and enjoy the opportunity to interact with their government, commercial and academic counterparts from around the world. See: www.wcoomd.org/en/topics/capacity-building/activities-and-programmes/cb_picard_overview.aspx.
- 5 This study perceives that 'customs professionalism' includes knowledge, skills, attitude and professional integrity relevant to customs service. Here 'professional integrity' includes two key components: professional competence and regulatory compliance, both of which entail reliability and responsibility to business partners in the global supply chain. It differs from 'personal integrity' in that personal integrity does not have 'company' or 'client' as the main driver in providing customs service. Professional integrity, however, is probably not easy to claim if one does not have personal integrity. This is because a lot of what is considered professional integrity is actually an extension of personal integrity into the workforce.
- 6 According to the WTO Trade Report 2013, 'Preliminary estimates of trade measured in value-added terms show that almost 30 per cent of total trade consists of re-exports of intermediate inputs, thus indicating increased international interdependence through international production chains. ... Economies import more and more intermediate goods and services to produce both for the domestic market and for exports. A positive correlation has been found between access to imported inputs and export performance – the more an economy integrates into international supply chains, the more its exports grow. Efficient access to imports of intermediate inputs improves the capacity of firms to increase their productivity and remain competitive in an interconnected world' (WTO 2013b, p. 6).
- 7 AEO is defined in the WCO SAFE Framework as 'a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards' (WCO SAFE Framework 2012a, p. I/1).
- 8 This recommendation was stressed in the second session of the WCO Capacity Building Committee document, 'Working with the private sector to build customs capacity', that '... A second issue to be explored is the creation of national business associations or the evaluation of existing associations to provide advice and support to become more effective and efficient.

Customs administrations require organized partners in business to deal with'. The purpose of this document was to outline how the WCO proposes building on the Customs-Business building block of the Customs in the 21st Century policy paper to enhance capacity building activities. The document suggested that a Business-Business approach would complement the Customs-Customs and Customs-Business approaches.

- 9 There are prerequisites for this certification: the applicant must be a licensed customs broker; have a minimum of five years working experience in customs brokerage service; be a graduate with a tertiary college education and above; a certificate holder of the training program organised by the regional Customs Brokers Associations on goods classification and customs tariff regulations; and have no record of violation of customs regulations within the last two years.
- 10 The newly promulgated Interim Regulations on Categorized Management of Enterprises' Credibility (an upgraded version of the previous Measures on Categorized Management of Enterprises issued in April 2008) stipulates that all enterprises registered with Customs are verified based on their credibility and announced to the public for transparency, monitoring and dynamic management. Enterprises are certified into four categories: High Credible Authorised Operators (AEO companies), Credible Operators, Ordinary Operators, and Questionable Operators. High Credible Authorised Operators and Credible Operators are granted respective clearance facilitation permission, while Ordinary Operators will be subject to regular enforcement and Questionable Operators are subject to strict customs controls. Its main goals are to enhance credible performance of enterprises, promote compliance management for the security and facilitation of global trade, and improve the effective performance measurement of both the customs authorities and business companies.
- 11 According to the Guide, 'In this document: "Measuring performance" means that the customs authority regularly analyses data extracted from automated Customs clearance systems to describe and understand the activities and practices of a specific entity (frontline Customs officers, importers, etc.) in connection with Customs procedures' (WCO 2014a, p. 6).

Libing Wei



Libing Wei previously worked in the General Administration of China Customs. His areas of interest are in research related to customs good governance, Customs-Business partnerships, professional integrity, and ways in which international customs standards and conventions can be incorporated in the Chinese business environment. He is now a Technical Attaché of the World Customs Organization and holds a Masters degree in law.

Preliminary insights from the Philippine Bureau of Customs imports database

Ronald U Mendoza and Aladdin Ko

Abstract

This paper provides an analysis of recently released importation data by the Philippine Bureau of Customs (BOC). The dataset has been released as part of the government's open data and transparency reforms aimed at boosting good governance and reducing corruption. The dataset includes information on over 88,000 imported items in December 2013, such as a description of the item imported, its HS code number and standard HS code description, what country the item came from, its value, and the amount of duties and taxes collected on that item. The BOC released the data along with a call for the public to assist by helping to analyse the dataset and (where necessary) report data discrepancies noted between the import valuation recorded in the dataset and those used in practice. The paper presents a preliminary analysis of the data released by the BOC and provides a platform to understand issues surrounding Philippine customs operations and reforms.

1. Introduction

The Philippine Bureau of Customs (BOC) launched an ambitious reform agenda in 2013, including the creation of offices to help spur analysis and research behind its modernisation (with the creation of the Customs Policy Research Office), the replacement of 48 customs collectors and officials as part of an agency-wide revamp,¹ and later, the abolition of the post audit function in Customs and its migration to the Fiscal Intelligence Unit in the Department of Finance.² However, what is perhaps the most novel reform so far introduced is the creation of the 'Customs ng Bayan' (Customs of the People) website³ which now makes key information on customs operations open and accessible to the public.

In early January 2014, the BOC took an unprecedented step by releasing to the public extensive information on imported goods for the month of December 2013. Reform managers in BOC intended to publish this data on the web every month, as part of the agency's efforts to reduce smuggling, improve revenue collection and professionalise the agency – all underpinned by improving data collection and enhancing transparency in customs administration.⁴

The dataset for December 2013 includes information on over 88,000 imported items, such as a description of the item imported, its HS code⁵ number and standard HS code description, what country the item came from, its value, and the amount of duties and taxes collected on that item. Since the January 2014 dataset, it has also included the type of customs entry, whether for consumption, transshipment or warehousing.⁶

The BOC invited the public to partner with it in analysing this dataset, for example by reporting discrepancies between the import valuation recorded in the dataset, and those actually used in practice, and so on.⁷ This paper responds to that call by presenting preliminary analysis of the data released by the BOC.

2. Variation in valuation

We begin based on the understanding that what the authors refer to as ‘technical’ (as opposed to ‘outright’) smuggling skirts duties and taxes owed to the government in several ways, including:

- Under-valuation – Importer declares the value of the shipment at less than its actual value (that is, the purchase price)
- Under-declaration – Importer declares the imported good at less than its weight, or at less than its total quantity
- Misdeclaration – Importer reports the shipment as something else (that is, a product with lower value and/or lower tariff)
- Misclassification – Importer incorrectly classifies the HS code of the imported good to another category (such as one with a lower duty rate).

We interpret ‘outright’ smuggling as that which relates to, for example, non-declaration of goods. Put simply, this refers to smuggling into a country which does not involve reporting the goods to Customs.

The BOC dataset could be useful in revealing potential discrepancies that arise from these forms of ‘technical’ smuggling. For instance, one might expect that one product expressed in a standardised way should display very little variation in the reported valuation.⁸ Hence, one initial hypothesis is that any discrepancy between importations of the same product can be monitored by looking at the mean and a measure of variance (for example, the coefficient of variation) of the valuation in each specific product category. Products with more variation in valuation could therefore be prioritised for follow-up analysis. In addition, by analysing patterns of dispersion in valuation, outliers can be identified and subsequently examined as well.

It should be noted that there are potential legitimate sources of variation in the value of certain products (even when standardised, such as by weight). For instance, the country of origin of the product, human error, and bulk purchasing are among some of the possible factors that could affect their price. For the purpose of our analysis, it is important to try to group more similar items that can be expected to have more similar valuations per unit of the product. Using this approach, we limit the other sources of variance in valuation, and by a process of deduction could potentially expose unexplained factors, including possible corruption or fraud.

Table 1 describes the specific product categories examined in this paper to illustrate this approach. Customs valuations are divided by the mass of the import and converted to a common currency (in this case, the US dollar). The use of the mean as a benchmark is indicated in Table 1.

While the mean valuation reported in Table 1 is likely to reflect a confluence of valuation estimates (that is, in the case of some products, possibly including values from both corrupt and correctly valued transactions), it can nevertheless serve as an initial and practical guide on valuation. Later in this paper, possible strategies for improving this basic approach will be discussed.

The coefficient of variation (CV) also provides a ready reference to compare variance in valuation across products – indicating the possible scope for more standardisation in the case of products with relatively higher CVs. From a practical customs administration viewpoint, a high measure of variation could indicate a need for more standardisation in the approach to valuation (or in minimising discretion which often leaves open the potential for corruption). For instance, from the products in Table 1, the product category ‘sacks and bags’ displays the most variance in valuation, across the sample of products selected, while ‘ferrous waste’ valuation displays the least variance.

Table 1: Descriptive statistics of the valuation (USD) per kilogram of certain products, December 2013–January 2014

Description: 4 digit	Description: 6 digit – Specific good	Category Size	Standard Deviation	Mean	Coefficient of Variation ⁹	Normal Duty Rate ¹⁰
Coffee; coffee husks and skins; coffee substitutes containing coffee	Coffee, not roasted or decaffeinated	66	0.578	1.92	0.30	30/40
	Decaffeinated coffee, not roasted	7	10.550	13.62	0.77	40
	Roasted coffee, not decaffeinated	35	8.554	6.53	1.31	40
Rice	Broken rice	42	0.136	0.33	0.41	40/50
	Rice in the husk (paddy or rough) ¹¹	10	1.554	2.46	0.63	0
	Semi-milled or wholly milled rice	41	0.305	0.45	0.68	40/50
Articles for use in goods made of plastics, etc.	Sacks and bags (including cones) of other plastics (excluding ethylene)	82	542.517	117.10	4.63	15
Springs and leaves for springs, of iron or steel	Leaf-springs and leaves therefor, of iron or steel – Used Leaf Spring ¹²	46	0.249	0.48	0.52	20
Springs and leaves for springs, of iron or steel	Helical springs of iron or steel – Used Leaf Spring	10	0.478	0.53	0.90	15
Ferrous waste and scrap; re-melting scrap ingots of iron or steel	Ferrous waste and scrap, nes – Other	27	0.014	0.33	0.04	3

Source: AIM Policy Center analysis using Bureau of Customs data.

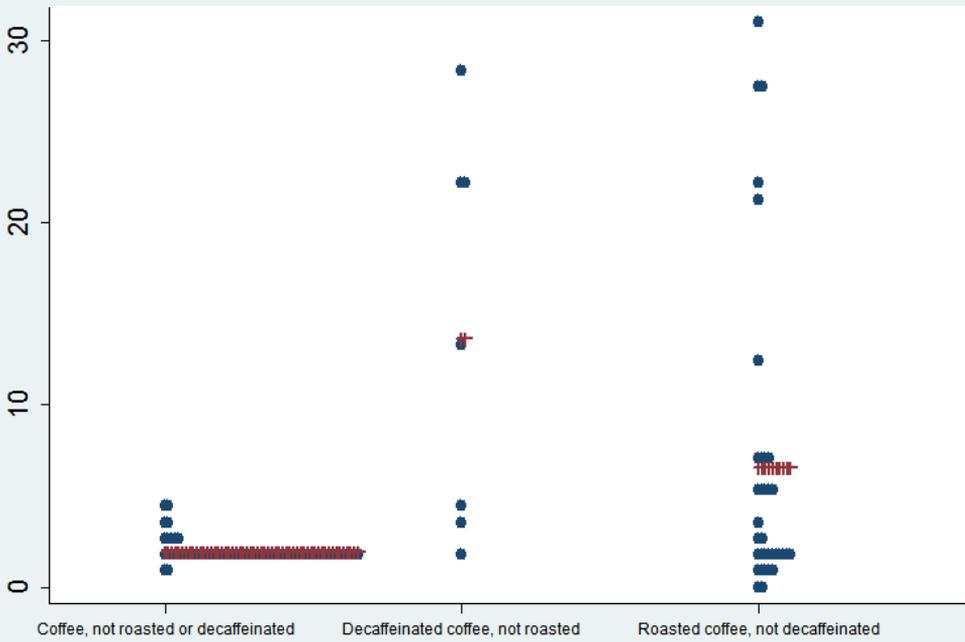
3. Dispersion and outliers in valuation

In addition, one could examine the degree of dispersion in the valuation for a certain product using dot plots. Outliers could then be examined for the veracity in their valuation (such as by comparing these with reported values by exporters to the Philippines). Just as an illustration, dot plots are presented in Figures 1 to 4, with each dot representing a specific importation. The lines marked by crosses in each figure refer to the mean valuation of the product.

If valuations were equal, or close to equal, then dots would be beside and close to each other, as in Figure 2 for broken rice or in Figure 4 for ferrous waste, indicating little dispersion in the figures. Reform managers could direct their attention towards products with higher variation in valuation, such as those for coffee in Figure 1 and rice in husk in Figure 2. Once again, the variation does not necessarily suggest corruption or fraud, however it can be used as a trigger for more focused and effective monitoring by reform managers with limited resources.

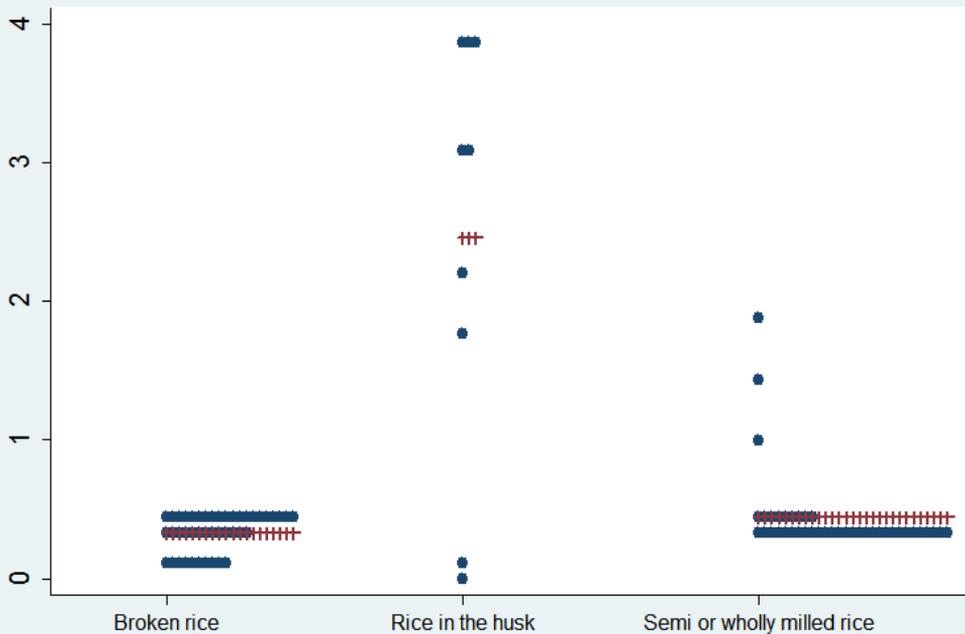
The dispersions reflect graphically the same information that can be gleaned from the CV. The CV, however, cannot identify the spread easily. For example, sacks and bags in Figure 4 had the highest variance as measured by CV, but based on its dot plot, this was not caused by dispersed figures throughout but rather due to several outliers. A majority of data points fall close to each other. However, there are extreme outliers above the mean which influence the mean upwards.

Figure 1: Dot Plot of valuations in USD per kilogram for Coffee 12/2013-01/2014



Source: AIM Policy Center analysis using Bureau of Customs data

Figure 2: Dot Plot of valuations in USD per kilogram for Rice 12/2013-01/2014



Source: AIM Policy Center analysis using Bureau of Customs data

Figure 3: Dot Plot of valuations in USD per kilogram for Used Leaf Springs 12/2013-01/2014

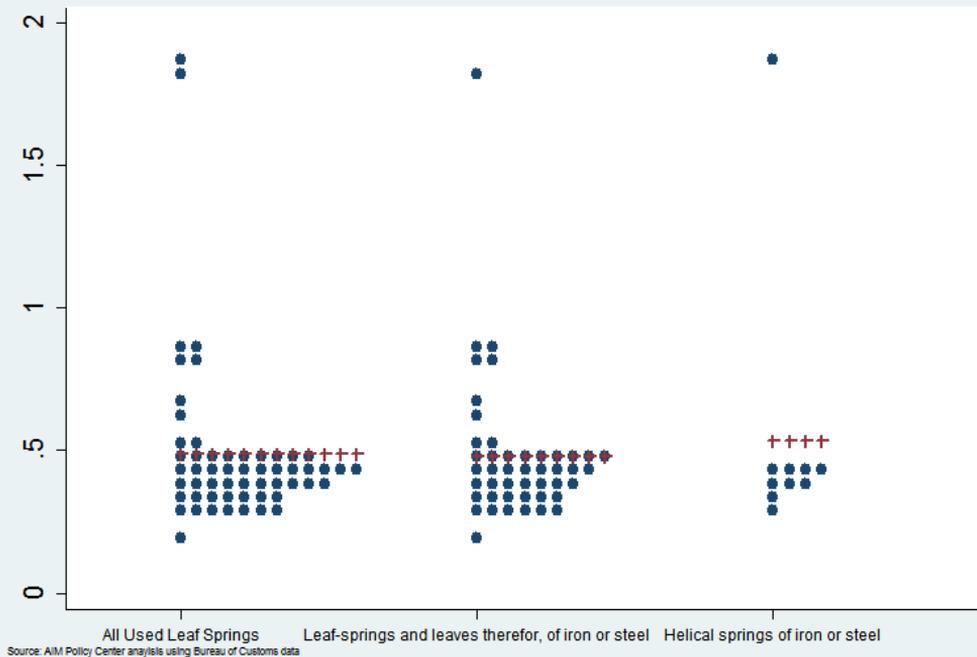
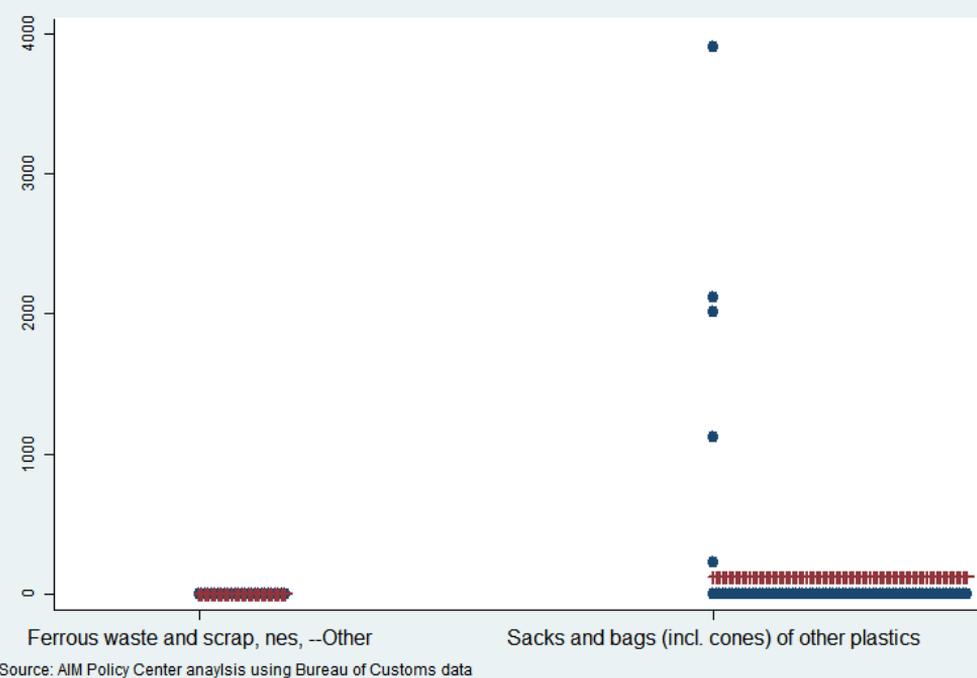


Figure 4: Dot Plot of valuations in USD per kilogram for Steel waste and Sack bags 12/2013-01/2014



Due to the non-uniformity of products made from plastic and steel, only a subset was chosen based on which categories contained similar products. For example, the category of ‘Household and toilet articles of plastics, nes’ included plastic toys, kitchenware, and toilet seats – products whose prices cannot be compared directly to measure variance in pricing. Issues with the categorisation of imports by their proper HS codes and a lack of standards in the phrasing of the declared good’s description increased the difficulty of grouping products easily into product categories. Below are some specific observations from the dataset that reflect such issues:

- Aggregation of different goods in one shipment (for example, a particular shipment included items as diverse as ‘105 pkgs. Car accessories, mannequin, hanger’ and was categorised with other articles of plastic instead of those of motor vehicles)
- Use of vague product descriptions (for example, an import from the United States was described as ‘Others’ under the categorisations of ‘Other articles of plastics, nes’, ‘---Other’)
- Using the ‘Others’ category despite a fitting category being present (for example, describing a shipment as ‘Screw’ under the 11 digit description of ‘---Other’ and 6 digit description of ‘Screws and bolts of iron or steel, nes’, instead of mentioning the exact type of screw, like metal screw or wood screw)
- Possibly incorrect figures (for example, Shipment 000107392 of Polybags from Hong Kong only weighed 1 kg but was worth USD1,133.83. From the same month, a shipment of polybags from Thailand weighing 3,615.13 kg was valued at USD37, 472.21).

While such issues with the data may not necessarily affect collected revenue negatively (if duty rates for the mislabelled category are the same, or even higher than that of the correct one), it creates further opportunities for non-conspicuous ‘technical’ smuggling if recorded data cannot be deciphered easily.

This issue is most clearly reflected in Figure 3, where ‘Used Leaf Springs’ are presented in the two separate categories from which they can belong, the main difference being a 5% duty rate difference applied (see Table 1). When the mean of all used leaf springs is compared with the data points from those that were categorised as Helical, all data points fall below the mean. Not only are these paying 5% less in taxes, their average figures do not match those that identify their imported leaf springs as leaf springs.

4. Supporting customs reform with open data

Open data and greater transparency in public sector operations and transactions can serve as powerful levers for supporting and sustaining reform. The BOC has taken an important step in this direction by publishing extensive import data on its website, with a specific call for the public to help it review the veracity of this data. This paper demonstrates the potential for a ‘public-private partnership’ in customs reform by analysing the dataset in order to expose possible patterns that could serve as ‘triggers’ for identifying possibly anomalous valuations.

Yet, questions remain. To what extent will improved access to information curb smuggling? Is it enough? What are the advantages of increased transparency? Are there any costs? How does increased transparency figure into the future role of Customs in border control and trade facilitation? It remains to be seen whether ‘Customs ng Bayan’ will be a force for good governance and reduced smuggling that most hope it will be.

References

- Co, EE 2007, 'Challenges to the Philippine culture of corruption', in *Corruption and development*, Palgrave Macmillan, New York, pp. 121-37.
- Federation of Philippine Industries 2014, 'Briefing paper on smuggling in the Philippines', Mimeo.
- Sevilla, JP 2014, 'Statement of BOC Commissioner John P Sevilla on the publication of import data for December 2013', 6 January, www.dof.gov.ph/?p=8842.

Notes

- 1 See <http://newsinfo.inquirer.net/496719/27-customs-collectors-moved-to-ghost-office>; <http://newsinfo.inquirer.net/531279/10-more-customs-execs-placed-in-think-tank-unit-in-revamp> and <http://www.philstar.com/headlines/2013/12/01/1262949/more-boc-officials-reassigned>.
- 2 See <http://business.inquirer.net/163656/customs-postaudit-team-abolished> and <http://newsinfo.inquirer.net/528447/more-customs-execs-transferred-new-collectors-to-take-office-monday>.
- 3 Found at www.dof.gov.ph/customsngbayan/.
- 4 At the time of writing, the December 2013 and January 2014 datasets had been released to the public.
- 5 Harmonized System Code or HS Code refers to the numbers assigned to specific categories of traded products now followed by customs agencies worldwide.
- 6 The data can be downloaded from the following links: customs.gov.ph/import-reports/; dof.gov.ph/?page_id=3762; dof.gov.ph/customsngbayan.
- 7 In a press statement, BOC Commissioner Sevilla noted that: 'If members of the public have specific information about actual values of specific imports which are very different from what we are using, we hope that they will share that information with us in writing, by e-mail to import.valuation@customs.gov.ph. We would particularly appreciate it if you could cite a specific HS code and country of origin or control number as shown in the list in your correspondence'.
- 8 This could be the case if markets are competitive (so that even techniques such as bulk purchasing are routinely used by almost all importers) and if the good itself is homogenous (so that there are no major differences in quality and characteristics of the goods under that category).
- 9 The coefficient of variation describes the dispersion of the variable by calculating the ratio of the standard deviation to the mean. A unitless measure, coefficients of variation can be compared to each other – smaller coefficients indicate less dispersion than those with larger coefficients.
- 10 Certain products have different duty rates for products in quota and for products out of quota (indicated with a forward slash, '/'). The first figure indicates the 'in quota' rate, the second, the 'out of quota' rate.
- 11 In January 2014, importation with Control Number 00007205 was categorised under 'Rice in the husk' instead of 'Broken Rice' despite being described as 'Long grain white rice 25% broken rice – In Quota'. The 40% duty for 'Broken Rice – In Quota' was correctly applied, however.
- 12 Used leaf springs are found in two separate categories with different duty rates.

Ronald U Mendoza



Dr Ronald U Mendoza is an Associate Professor of Economics at the Asian Institute of Management (AIM), and the Executive Director of the AIM Policy Center. Prior to his appointment at AIM, he was a senior economist with the United Nations in New York. He has published extensively in various peer-reviewed economics and policy journals as well as several books on international development, public finance and international cooperation. Ronald obtained his Masters in Public Administration and International Development (MPA-ID) from the John F Kennedy School of Government, Harvard University, and his M.A. and PhD in Economics from Fordham University. He is also a recipient of various awards, including the 2012 National Academy of Science and Technology's Ten Outstanding Young Scientist (OYS) in the Philippines (in Economics), the World Economic Forum's Young Global Leaders in 2013, and Devex 40 Under 40 Development Leader in 2013.

Aladdin Roxas A Ko



Aladdin Roxas A Ko is a Research Associate at the AIM Policy Center. He is presently engaged in research on anti-corruption and customs reforms, as well as studies on the Philippine business landscape, examining firm growth and competitiveness, the link between politics and firms, and the background of board members of large firms. He graduated *cum laude* from the Ateneo de Manila University with a Bachelor of Arts degree in Economics (Honours Program), with a minor in Development Management. He was awarded the Program Award for Economics that same year.

The use of CIF Incoterms in Indonesia's import declarations

Budi Nugroho

Abstract

The World Trade Organization (WTO) *General Agreement on Tariffs and Trade (GATT) 1994* (WTO Valuation Agreement) and the International Chamber of Commerce's (ICC) International Commercial Terms (Incoterms®) are two quite separate instruments. In Indonesia, however, reference to 'customs value' in some regulations is confused by the use of the Cost, Insurance and Freight (CIF) Incoterm in the same regulation. This paper identifies several areas of confusion and identifies changes that, if made to some Indonesian regulations related to the determination of customs value and the use of the import declaration form, would clarify the methods used to calculate that value.

1. Introduction

Indonesia ratified the Agreement establishing the World Trade Organization (WTO) in 1994.¹ The provisions of Article 7 of the *General Agreement on Tariffs and Trade (GATT) 1994*, known as the WTO Valuation Agreement, are incorporated in chapter 15 of Indonesia's Customs Law,² which requires that the value for calculating customs duties be determined using one of six methods. Further regulations to determine customs value were included in the Regulation of the Ministry of Finance,³ for example, Article 2, para. 1 provides that the 'customs value' is the 'transaction value' of the imported goods which meets certain requirements, and Article 2, para. 2 provides that the 'customs value' referred to in paragraph 1 is consistent with the International Chamber of Commerce's (ICC) International Commercial Terms (Incoterms®) Cost, Insurance and Freight (CIF).

The provisions of Article 2 of the Regulation of the Ministry of Finance essentially provide a new approach to the determination of customs value. The term 'CIF' is not recognised in the WTO Valuation Agreement despite its use in the Incoterms, and it is contended that Article 2 of the Regulation of the Ministry of Finance confuses the terminology in the WTO Valuation Agreement and that of the Incoterms. Based on the provisions in some regulations on customs valuation, the amount of customs value should be represented as 'CIF'. For example, on the import declaration form, column 23 is titled 'FOB'; column 24, 'Freight'; column 25, 'Insurance'; and column 26, 'CIF value'.⁴

The import declaration form indicates that the value in the column 'CIF value' should be the basis for calculating customs duties. The amount of duty is the multiplication of tariffs with the CIF value. In the import declaration application, the calculation is automatic, and the instructions indicate that 'CIF value' equals 'customs value'.⁵ Confusion therefore seems to exist in Indonesian law between the WTO Valuation Agreement and the Incoterms as the terminology used in Incoterms is used as a basis in the determination of customs value. The ambiguity of this approach could result in inaccuracies when calculating customs duty, and therefore the appropriateness of this practice is worthy of further examination.

Indonesian Customs adopts a self-assessment system which implies that importers are expected to understand the customs regulations and when completing import procedures, importers themselves

should declare, calculate and pay the applicable customs duty. Customs officers will examine the declaration and when the declared customs value is incorrect and the customs officers assign a higher ‘customs value’, the customs officers will issue a revised calculation. The importer must then pay the shortage in customs duty and is also subject to administrative sanctions such as fines or a penalty.⁶ For example, Article 16 of the Customs Law provides that incorrect declaration of customs value that leads to a shortage in customs duty is subject to a penalty ranging from 100% to 1000% as shown in Table 1.

Table 1: Administrative sanctions for erroneously declaring customs value

	Shortage in Customs Duty	Administrative Sanction (% of underpayment)
1	Up to 25%	100% penalty
2	More than 25% & up to 50%	200% penalty
3	More than 50% & up to 75%	400% penalty
4	More than 75% & up to 100%	700% penalty
5	Above 100%	1000% penalty

Source: Republic of Indonesia Government Regulation Number 28 of 2010.

2. Determination of customs value

The international reference for the determination of customs value is the WTO Valuation Agreement.⁷ As mentioned above, in Indonesia, customs value for the purpose of import duty calculation is based on six methods:

Method 1: Customs value is the transaction value of the imported goods

Method 2: Customs value is based on the transaction value of identical goods

Method 3: Customs value is based on the transaction value of similar goods

Method 4: Customs value is based on deduction methods

Method 5: Customs value is based on computed methods

Method 6: Customs value is based on fallback methods.

These six methods are applied hierarchically, as per the WTO Valuation Agreement. For example, the customs value for import duty calculation is the transaction value of the imported goods based on Method 1. If the customs value cannot be determined under Method 1, the customs value will be determined based on Method 2. When Method 2 cannot be applied, the customs value is determined using Method 3, and so on up to Method 6. At the request of the importer, Method 5 can be applied before Method 4.⁸

The transaction value is the price actually paid or payable by the buyer to the seller for the goods when sold for export to Indonesia, adjusted with certain costs and/or values that should be added. The Indonesian Ministry of Finance Regulation provides that those costs are as follows:

1. costs incurred by the buyer, such as commission and brokerage services, as well as packaging costs
2. the value of goods and services supplied directly or indirectly by the buyer free of charge or at a reduced cost
3. royalty and licence fees to be paid by the buyer directly or indirectly, as a condition of sale of the imported goods
4. the value of any part of the proceeds of any subsequent re-sale, disposal or use of the imported goods that accrues directly or indirectly to the seller
5. the cost of transport of the imported goods to the port or place of importation

6. the cost of loading, unloading and handling charges associated with transport of the imported goods to the port or place of importation, and
7. the cost of insurance.⁹

In addition to the above provisions, the regulations provide that the customs value shall not include certain charges or costs, including:

- activities undertaken by the buyer on the buyer's own account
- costs that can clearly be distinguished from the price actually paid or payable that occurs after the importation of goods
- dividends
- interest.¹⁰

3. Provisions of Article 8 of the WTO Valuation Agreement

Article 1 of the WTO Valuation Agreement stipulates that 'The customs value of imported goods shall be the transaction value, that is the price actually paid or payable for the goods when sold for export to the country of importation adjusted in accordance with the provisions of Article 8' (WTO 1994). Furthermore, Article 8, para. 1 provides that 'In determining the customs value under the provisions of Article 1, there shall be added to the price actually paid or payable for the imported goods' (WTO 1994):

1. costs incurred by the buyer (commissions and brokerage services except purchase commission, packaging and packing costs)
2. value of assists
3. royalties and licence fees
4. proceeds.

Then, Article 8, para. 2 stipulates that 'In framing its legislation, each [WTO] Member shall provide for the inclusion in or the exclusion from the customs value, in whole or in part, of the following:

- (a) the cost of transport of the imported goods to the port or place of importation;
- (b) loading, unloading and handling charges ...; and
- (c) the cost of insurance' (WTO 1994).

With the provisions of Article 8, para. 2, WTO Members can choose whether or not the three elements of cost (transport; loading, unloading, handling; insurance costs) are to be added to the price actually paid or payable for the purpose of determining customs value. Some countries choose not to include these three elements so that the 'addition' element of the transaction value consists of only four costs (costs incurred by buyers; assists; royalties/licence; proceeds).

Article 15 of Indonesia's Customs Law provides that the calculation of the value for customs duty is the transaction value of the imported goods, and states that transaction value is the price actually paid or payable for the goods when sold for export to an Indonesian Customs Area plus the seven elements of costs in accordance with the WTO Valuation Agreement stipulated in Article 8, paras 1 and 2. Thus Indonesian legislation has complied with the WTO Valuation Agreement Article 8, para. 2, namely that the three elements of cost (in total) shall be added to determine customs value for the purpose of duty calculation.

Further regulations regarding the determination of customs value are stated in the Ministry of Finance Regulation concerning customs value for duty calculation. Article 2, paras (1) and (2) provide:

- (1) customs value to calculate customs duty is the transaction value of the imported goods which meet certain conditions

(2) the customs value as referred to in paragraph (1) is the customs value in the Incoterms CIF.¹¹

Article 5 of the Ministry of Finance Regulation reiterates that the determination of customs value using Method 1 shall be based on the transaction value of the imported goods adjusted with the seven elements of costs explained in Article 15 of Indonesia's Customs Law. However, the provisions of Article 2, para. 2 introduce new terminology, namely 'Incoterms' and 'CIF'.

4. Incoterms

Incoterms were first published by the ICC in 1936, known as Incoterms 1936, and have been updated several times. The most recent definitions, Incoterms 2010, are set out in the ICC publication number 715. Incoterms are a 'set of rules which define the responsibilities of sellers and buyers for the delivery of goods under sales contracts for domestic and international trade'.¹² Incoterms are intended to avoid misunderstandings between sellers and buyers. The terminology in Incoterms explains liability, costs and risks that arise or occur during the delivery of goods from seller to buyer. They clarify who is responsible for the cost of transporting the goods, including insurance, taxes and duties; where the goods should be picked up from and transported to; and who is responsible for the goods at each step during transportation.¹³

The highest authority of the ICC is the World Council whose members consist of business people, not government officials. Incoterms 2010 came into effect in January 2011.

There are 11 terms in Incoterms 2010, divided here into four groups for ease of understanding:

- A. Group 'E': Departure term:
 - 1. EXW: Ex Works
- B. Group 'F': Shipment Terms, Main Carriage Unpaid:
 - 1. FCA: Free Carrier
 - 2. FAS: Free Alongside Ship
 - 3. FOB: Free on Board
- C. Group 'C': Shipment Terms, Main Carriage paid:
 - 1. CFR: Cost and Freight
 - 2. CIF: Cost, Insurance and Freight
 - 3. CPT: Carriage Paid To
 - 4. CIP: Carriage And Insurance Paid To
- D. Group 'D': Arrival Terms:
 - 1. DAT: Delivered At Terminal
 - 2. DAP: Delivered At Place
 - 3. DDP: Delivered Duty Paid.¹⁴

These terms are divided into two categories, that is, seven terms applied in general, and four terms applied specifically for delivery via water transport. Groups of terms applied to all modes of transportation include EXW, FCA, CPT, CIP, DAT, DAP, and DDP. Groups of terms applied only for sea and inland waterway transport are FAS, FOB, CFR, and CIF.

5. Indonesia's customs declaration form

Indonesia's customs declaration form does not distinguish between the mode of transport (ship, truck or plane) and the type of importation ports (seaports or airports).¹⁵

Figure 1 (or Figure 1a in English) displays columns specifically related to customs value. Column 23 (FOB) has a button 'edit price (F9)' which will display a more detailed elaboration 'editing price' when clicked, as seen in Figure 2 (or Figure 2a in English).

Figure 1: Import declaration application fields related to customs value

23. FOB	<input type="text" value="0"/>	Edit Harga [F9]
24. Freight	<input type="text" value="0.00"/>	26. Nilai CIF
25. Asuransi	<input type="text" value="0.00"/>	Rp. <input type="text" value="0.00"/>

Source: Indonesia Import Declaration Application version 5.05.

Figure 1a: Import declaration application fields related to customs value (English translation)

23. FOB	0	Edit Price (F9)
24. Freight	0.0	26. CIF Value
25. Insurance	0.0	Rp
		0.0

Figure 2: Editing price column on customs declaration application

Editing Harga x

Isi Sesuai Invoice/Dok Lain

Col1	<input type="text" value="1-CF"/>	Harga CIF	<input type="text" value="0.00"/>
Valuta	<input type="text"/>	Biaya Tambahan	<input type="text" value="0.00"/>
NPDBM	<input type="text" value="0.0000"/>	Diskon	<input type="text" value="0.00"/>

Nilai ini yang akan tercantum di FIB

Asuransi bayar di	<input type="text" value="1 - Luar Negri"/>	FOB	<input type="text" value="-"/>
Nilai Asuransi	<input type="text" value="0"/>	CIF	<input type="text" value="0.00"/>
Freight	<input type="text" value="0"/>	CIF Rp	<input type="text" value="0.00"/>

Source: Indonesia Import Declaration version 5.05.

Figure 2a: Editing price column on customs declaration application (English translation)

Editing Price			
Fill using Invoice or other document			
Price Code	(CIF, CFR, FOB)	CIF Value	0.00
Currency		Additional cost	0.00
Base value for calculation of import duty	0.0000	Discount	0.00
This price will be shown on import declaration			
Insurance paid in	Domestic/abroad	FOB	
Value of insurance	0	CIF	0.00
Freight	0	CIF Rp	0.00
		Save	Cancel

Based on the information entered, the value/price (FOB, CFR, or CIF) can be adjusted in the form of ‘additional costs’ and ‘discounts’. For the value of insurance, there are options: paid in Indonesia or abroad. There is no further explanation for the additional costs and discounts. Terms used in this application are likely to follow the terms in the Incoterms but are limited to only three terms: CIF, CFR and FOB.

The main terms used in the column headings related to the determination of customs value are those used in the Incoterms. The terms in the WTO Valuation Agreement which also appear in the import declaration forms are discount, freight, and insurance. Some terms that do not appear in the import declaration application are commission, brokerage service, post-importation costs, interest, dividends and assists.

6. Comparison with other countries’ import declaration forms

6.1 United States Customs and Border Protection

The United States (US) adopts the provisions of the WTO Valuation Agreement but its implementation differs from Indonesia’s in terms of the additional elements on the price actually paid or payable for the purpose of duty calculation. The US does not add freight, insurance and charges. The import declaration to the US is divided into several ways of importing. Some import declaration forms are: CBP form 7501 (Entry Summary), CBP form 3461 (Immediate Delivery), CBP Form 3347 (Declaration of Owner for Merchandise Obtained [Otherwise Than] In Pursuance of a Purchase or Agreement to Purchase), and CBP form 3347A (Declaration of Consignee when Entry is Made by an Agent).¹⁶

Terms used in the Incoterms and in the WTO Valuation Agreement are not found in those forms. The customs value determination is described in a separate publication referred to as the WTO Valuation Agreement. Publications in the form of question-and-answer are titled ‘What Every Member of the Trade Community Should Know About: Customs Value’, published in May 1996 and revised in July 2006.¹⁷

The US import declaration form uses the term ‘entered value’ to refer to the value of imported goods. There are at least three columns related to the determination of the value or price of the goods, namely entered value, charges, and relationships.¹⁸ The explanation of how to determine the value of the goods is described in the publication ‘Importing into the United States: A Guide for Commercial Importers’.¹⁹

Customs authorities use Incoterms to facilitate the determination of the customs value and not as a final result of customs value determination. In the publication ‘Importing into the United States: A Guide for Commercial Importers’, the terms ‘FOB’ and ‘CIF’ are used only once, as the initial basis to determine the customs value. When using CIF, a deduction is required, and FOB is used as an error example to determine customs value.

6.2 Australian Customs and Border Protection Service

Australia has adopted the WTO Valuation Agreement and applies Article 8, para. 2, by excluding freight, insurance and charges. The import declaration is submitted by completing Form N10 which consists of three pages. In relation to customs value, on the first page of the form, there are multiple columns headed with Incoterms. There are also many columns on page 3, with headings which include Valuation Basis Type and Valuation Elements.²⁰

The column titled ‘Valuation Elements’ is provided to make adjustment to the value stated on the invoice. This column consists of four lines. Thus it can be understood that the column with titles using Incoterms is not the final customs value determination because there is room for adjustments to be made.

6.3 HM Revenue and Customs (UK)

In the United Kingdom (UK), HM Revenue and Customs has adopted the WTO Valuation Agreement and implements Article 8, para. 2, in the same way as Indonesia, by adding freight, insurance and charges to the price actually paid or payable. One of the declaration forms in the UK is called the C88. When the import value exceeds a certain limit (GBP6,500), the importer may be required to submit a customs value declaration (form C105A or C105B). The declaration is a form that identifies many things about the price of the goods. This form can also be requested by the customs authorities at the time of post clearance audit. Form C105A is a customs value declaration determined by Method 1, and Form C105B is for the use of methods other than Method 1.

The UK customs form C105A was used by the Indonesian Directorate General of Customs and Excise in 1996 for comparison or as a basis to create the existing form, now called the Customs Value Declaration. Procedures applicable now in Indonesian Customs include that the importer will submit a Customs Value Declaration if so requested by customs officials.

The UK import declaration form does not use Incoterms to identify customs value. However, column 3 in form C105A is related to the Incoterm 'terms of delivery' and values in this column can be adjusted based on the values in subsequent columns.

6.4 Japan Customs

The Japanese customs declaration form contains three main columns related to customs value.²¹ The first column identifies the value of the goods as agreed by seller and buyer in accordance with Incoterms. The second column contains necessary adjustments in the form of additions or subtractions. The third column is the amount of the customs value. According to the explanation given, Incoterms are needed to facilitate the calculation of customs value but CIF value itself is not the customs value. Adjustment to the CIF value is necessary, at least to include the addition of elements outside the values.

7. The negative side of using the CIF term

7.1 Interpretation of the law

The purpose of a provision in the legislation should, implicitly or explicitly, be able to be clearly understood based on the words and/or sentences used which must be appropriate, explicit and concise to avoid multiple interpretations.²² Using a particular sentence may result in different interpretation by one person to another. What a regulator actually requires is sometimes misunderstood by those who implement the regulation.

The use of CIF, for example, to determine customs value may cause multiple interpretations. The Incoterms and the WTO Valuation Agreement are two quite separate instruments. It may be that the CIF value is different from the customs value, for example, when there is royalty or a licence fee payable to a third party in a transaction, the CIF value will be less than customs value. Similarly, this would apply if there is an indirect assist (a buyer supplies raw materials to a seller in which the buyer buys the materials from other parties abroad).

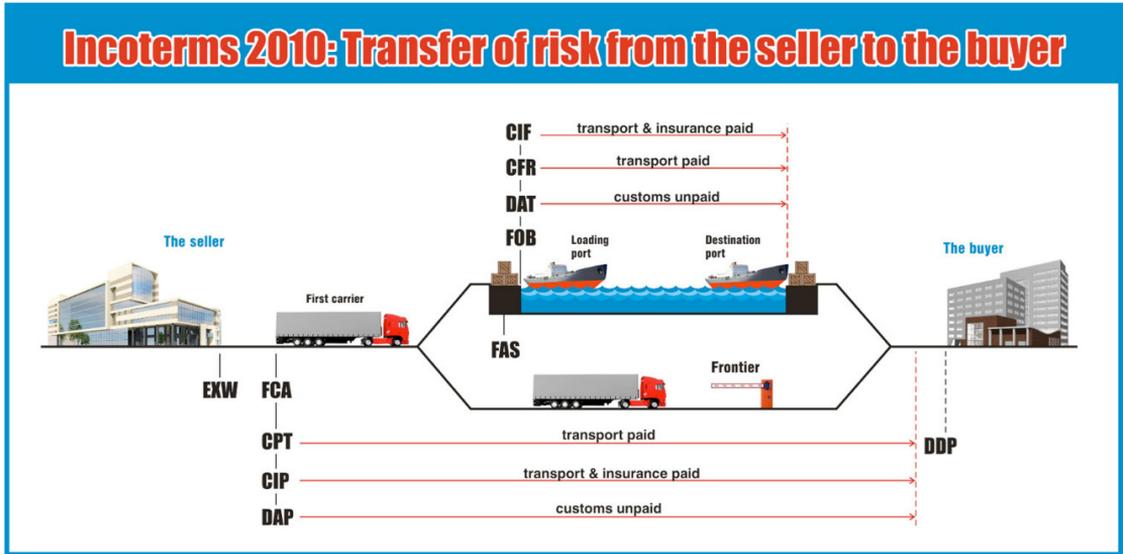
7.2 Air transport does not use the CIF term

The use of Incoterms is intended to avoid misunderstandings caused by differences in trade practices in each party's country. Each term in Incoterms is a reference to determine the obligations of each party (for example, who is responsible for services such as transportation, import and export licences, etc.). The agreed Incoterms should be stated in the sale's contract, thereby enabling the buyer and seller to achieve

exactly the same understanding of the obligations of each party, and who is responsible in case of loss, damage or accident.

Figure 3 shows the risk sharing scheme according to Incoterms 2010.²³

Figure 3: Incoterms 2010: transfer of risk



Source: WTG Logistics (www.wtg.hk/ru).

Figure 3 illustrates graphically the use of Incoterm CIF where the seller delivers the goods by passing the ship's rail at the port of shipment. The seller must pay the necessary costs and freight to bring the goods to the destination port but the risk of loss or damage to the goods, as well as any additional costs due to things occurring after the delivery, is transferred from the seller to the buyer. The seller pays the marine insurance for the risk in the event of loss or damage to the goods during shipping.

The seller arranges contracts for insurance and pays the insurance premium. The buyer must understand that in CIF terms, the seller holds the insurance contract only in respect of minimum cover. When the buyer wants greater insurance protection, they need to hold their own additional insurance contracts. Use of the CIF term requires the seller to complete the export obligation and the CIF term is used only for sea freight and inland waters. If the delivery is not by sea, the seller uses the Incoterm CIP. Thus, CIF cannot be used for transport by air and land.

Indonesian Customs does not distinguish a customs declaration based on the type of port. Indonesia's Import/Customs Declaration is a single form for all kinds of customs service and is used for transport by sea, air and inland waters. Thus the single form of uniform customs declaration using CIF terms means that the customs declaration form is inappropriate for use in the case of airfreight.

It is clear that, if a customs declaration incorporates the use of Incoterms for a value statement, a different form must be used for each kind of transport. For example, for sea or waterway transport, it may use CIF, whereas for cross-border and airport transportation, it should use CIP.

7.3 Indonesia's Directorate General of Customs and Excise

As mentioned above, UK Customs has adopted the WTO Valuation Agreement and applies the selection of seven additional elements to the actual price paid or payable in the application of Method 1, in the

same way as Indonesia. To determine the customs value, the price actually paid or payable should be increased by seven other cost elements, and according to the UK Customs' instructions for import and export, there should be an adjustment to the CIF value to determine customs value:²⁴

Where the goods you are importing are subject to a sale, the customs value should be based on the CIF price (cost, insurance, freight) plus certain other costs you may have incurred in purchasing the goods (for example, some commissions, royalty and licence fees and even the value of materials you have supplied free of charge to a manufacturer).²⁵

This description indicates that beyond the CIF value, there are other costs that should be paid by buyers. For example, commission fees, royalties and licences, and assists supplied to the seller. These costs should be added to the CIF value to determine the customs value.

If, as in the case of Indonesia, the customs declaration uses CIF value for the determination of the customs value, it is necessary to include columns to make the necessary adjustment. In Indonesia, there is a price editing window on the electronic customs declaration form. This window gives more detail about making adjustments. There is a column to make additions although it does not specify what should be added. There is also a discount adjustment column. If this column refers to the costs which need to be deducted, then it should not only mention 'discount' because there are other elements that may be deducted, including interest, costs incurred for the buyer's own interests, and costs incurred after importation.

One other shortcoming of this approach is the restricted use of Incoterms: only FOB, CFR and CIF. Incoterms recognise 11 types of condition of delivery of goods. Restricting the choice to these three terms makes it difficult for importers if the condition of their delivery is not one of the three.

8. Legal policy

8.1 Principle of formulation clarity

There are many principles that apply to the composition of regulations. Of particular relevance to this study is the principle of formulation clarity. The principle sets out that a regulation must meet the technical requirements of drafting legislation, be systematic and avoid ambiguity in the choice of words or terms, as well as use the statutory language which should be clear and easy to understand to avoid a variety of interpretations.

Legislation should also reflect the principle of order and legal certainty, and because there is the possibility of misinterpretation, Indonesia's regulations related to customs value need to be adjusted.

8.2 Amendments required

Indonesia's regulations related to the determination of the customs value require amendment, especially regarding the use of the CIF term, although other rules also need revision. In turn, the Indonesian customs declaration form needs to be amended.

Incoterms remain an important starting point for the calculation of customs value because importers are generally familiar with Incoterms, but not with the WTO Valuation Agreement. Indonesia's column 23 uses the FOB Incoterm and its value. Column 24 provides for final adjustments of additions or subtractions. Column 25 results in the customs value determination. Column 26 is titled 'determination method' and is completed using the methods used in the determination of the customs value. When the customs value is defined other than by Method 1, columns 23 and 24 do not need to be filled in. The customs declaration form should be amended by expanding the editing window to include all seven additional elements and the four subtraction elements which should be clearly explained.

9. Conclusions

The above analysis leads to the following observations and conclusions:

1. The CIF term is not a standard term in the WTO Valuation Agreement. The standard term referring to the value of goods as a basis for calculating import duty is 'customs value'.
2. The CIF term may be used in a customs declaration form for sea and waterway transport as a way to simplify the calculation of customs value because, generally, importers are more familiar with Incoterms than with the WTO Valuation Agreement. To determine the customs value, CIF values should be adjusted when costs are to be added or subtracted.
3. Indonesia's Import Declaration form should be amended, including the title of the column 'CIF Value' which should be adjusted to 'Customs Value'.

Notes

- 1 Indonesia Law No. 7 of 1994, *Ratification of Agreement establishing the World Trade Organisation*.
- 2 Indonesia Law No. 10 of 1995 about 'Customs' as amended by Law No. 17 of 2006.
- 3 Regulation of the Ministry of Finance of the Republic of Indonesia No. 160/PMK.04/2010, 'Customs valuation to calculate customs duty'.
- 4 Regulation of Indonesia Directorate General of Customs and Excise No. P-22/BC/2009, 'Customs Notification for Import' as amended by Regulation of Directorate General of Customs and Excise No. 44/BC/2011.
- 5 See Note 4.
- 6 Republic of Indonesia Government Regulation No. 28 of 2008, 'Imposition of administrative penalties in the forms of fine in customs field'.
- 7 World Trade Organization (WTO) 1994, *Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994*, viewed 10 September 2013, www.wto.org/english/docs_e/legal_e/20-val.pdf.
- 8 Article 16 of Indonesia Law No. 10 of 1995 about 'Customs' as amended by Law No. 17 of 2006.
- 9 See Note 8.
- 10 See Note 8.
- 11 See Note 3.
- 12 www.export.gov/faq/eg_main_023922.asp.
- 13 International Chamber of Commerce (ICC) n.d., 'The new Incoterms® 2010 rules', viewed 10 September 2013, www.iccwbo.org/products-and-services/trade-facilitation/incoterms-2010/.
- 14 See Note 13.
- 15 Most Indonesian Customs and Excise Offices now use information technology for import services including for the submission of import declarations. Indonesian Customs currently use import declaration application version 5.05 which is submitted using a flash drive or online with electronic data interchange. The application calculates customs duty automatically.
- 16 US Customs and Border Protection 2012, 'CBP Form 7501 Instructions (updated July 24, 2012)', viewed 10 September 2013, www.cbp.gov/sites/default/files/documents/CBP%20Form%207501_Instructions.pdf.
- 17 US Customs and Border Protection, 'What every member of the trade community should know about: customs value', An Informed Compliance Publication Revised July 2006, viewed 10 September 2013, www.cbp.gov.
- 18 US Customs and Border Protection, 'Declaration of owner for merchandise obtained (otherwise than) in pursuance of a purchase or agreement to purchase', viewed 10 September 2013, www.cbp.gov.
- 19 US Customs and Border Protection 2006, 'Importing into the United States: a guide for commercial importers', CBP Publication No. 0000-0504, Revised November 2006, viewed 10 September 2013, www.cbp.gov.
- 20 Australian Customs and Border Protection Service 2011, 'Instructions and guidelines customs valuation', File No. 2008/038154-01, September, viewed 10 September 2013, www.customs.gov.au.
- 21 Based on a verbal explanation by a Customs Clearance Division officer, Japan Customs, during his visit to Indonesian Customs in May 2013.
- 22 Bangun, Cerah 2013, 'Penafsiran Hukum' ['Interpretation of laws'], *Warta Bea Cukai*, Edition 462, May 2013, pp. 38-9.
- 23 WTG Logistics, 'Incoterms', viewed April 2014, www.wtglogistics.com/en/info/incoterms.html.
- 24 HM Revenue & Customs 2013, 'Guidance to Importing & Exporting', Version 38, June 2013, viewed 10 September 2013, www.hmrc.gov.uk/customs/.
- 25 HM Revenue & Customs 2013, 'Notice 252: valuation of imported goods for customs purposes, VAT and trade statistics', 1 July, viewed 10 September 2013, www.hmrc.gov.uk.

Budi Nugroho



Budi Nugroho is an Indonesian Ministry of Finance officer. He graduated from Indonesia Customs and Excise Academy in 1994. He completed his graduate program in economics and is now writing his dissertation for a doctoral degree at the Faculty of Law, Gadjah Mada University, Yogyakarta. He is also a lecturer at the Yogyakarta Finance Education and Training Agency. Prior to this, Budi was a customs and excise officer and, in that role, worked in several areas in Indonesia's Department of Customs and Excise.

Is infrastructure upgrading an antidote for smuggling? Evidence from Beitbridge Border Post, Zimbabwe

Watson Munyanyi

Abstract

In recent years, Southern Africa has witnessed an increase in the volume of commercial and private cross-border traffic. This has put pressure on inland ports of entry as well as sea ports. The Beitbridge Border Post handles the largest volume of traffic in Southern Africa yet there has been no significant infrastructure development in the past decade. Incidences of smuggling and other illegal activities have increased. The existing infrastructure fails to contain the volume of traffic, enabling travellers to evade duty payment. This paper contends that improvements in infrastructure would help to curb rampant smuggling and offers suggestions to achieve this.

1. Introduction

Cross-border movement of people and goods is common in modern civilisation. Globalisation and international trade liberalisation initiatives have resulted in rapid growth in the value and volume of goods moving across borders (Kieck 2010). According to Koslowski (2011) the world's nation-states exercise territorial sovereignty by adopting policies and enacting laws that require international travellers to pass through official ports of entry. Beitbridge Border Post, between Zimbabwe and South Africa, handles extremely large volumes of traffic and is considered one of the busiest land border posts in Southern Africa (Confederation of Zimbabwe Industries [CZI] 2015). Congestion at the border post makes access to the control area difficult and policing of that area extremely difficult (Irish 2005). The Zimbabwe Revenue Authority (ZIMRA), Zimbabwe's semi-autonomous revenue collection and customs administration body, records that on a daily basis an average of 500 haulage trucks including those in transit to other countries are cleared.

2. Contextual framework

Zimbabwe's recent economic recovery has resulted in an increase in importation of raw materials and other goods. Privately imported goods, especially used motor vehicles ex-Japan, have significantly increased over the past decade. Yet there has been no significant upgrade to physical and other infrastructure despite trade agreements to develop shared physical infrastructure.

Governments around the world spend a sizeable portion of their budget on enforcement and deterrence of illegal activities at ports of entry (Gathmann 2004). The increase in the volume of traffic through Zimbabwe's inland ports has created a breeding ground for illegal activities notably loitering, bribery, corruption and smuggling. Smuggling has been a concern not only to the Zimbabwean government but to many governments globally. A study released in 2004 indicates that efforts to curb illegal migration and smuggling along the United States-Mexican border had increased dramatically, with the budget of

the border patrol increasing six-fold since 1986 (Gathmann 2004). Irish (2005) identifies that trafficking in stolen or illicitly acquired vehicles across South African borders had become a concern for police officials not only in South Africa but also within the Southern African Development Community (SADC) as a whole. According to Naim (2005), borders create profitable opportunities for smuggling networks and weaken nation-states by limiting their ability to curb the onslaught of the global networks that hurt their economies, corrupt their politics, and undermine their institutions. This situation is of concern to Zimbabwe and South Africa and to other developing countries that require strong and effective state agencies to build their economies and deliver much-needed services to their communities.

Improvements in physical border control with more effective use of information and communication technology can be useful in supporting efforts to curb smuggling. This paper seeks to establish whether infrastructure development could reduce the incidence of smuggling and illegal activities.

Smuggling: definition, drivers and deterrents. Smuggling is a relatively sophisticated industry, often arranged in the form of a network amongst service providers and officials, organised primarily by a small number of key players, and following distinctive tactics, routines and schedules (Araia 2009). Unemployment in Zimbabwe, which currently stands at close to 94%, has forced many people to shift to the informal sector where they hope to earn a living among such groups as cross-border traders who frequently travel to neighbouring countries to sell their products and return home with more goods for re-sale and some foreign currency (Mwaniki 2011). Moreover, the pressure to maintain high profit margins has forced many traders to evade payment of duty.

The customs environment in the Southern and Eastern African sub-region is characterised by a lack of coordination among the multiple government agencies on both sides of borders which, in turn, increases the potential for fraud and the need for risk management (Barka 2012). Differences in national economic policies, regional resources, and monetary currencies make borders 'lucrative zones of exchange and trade, often illicit and clandestine' (Flynn 1997, p. 313). Flynn (1997) also points out that smuggling occurs across borders around the world, providing an important means of livelihood for border residents and prompting creative social networking and cross-border ties within borderland populations. Araia (2009) adds that officials are reportedly paid regular 'stipends', bribed on an ad hoc basis, and encouraged through the use of improper influence, to make smuggling possible in various ways and to protect the smugglers from arrest and prosecution.

Infrastructure such as road and truck parking bays, commercial offices, inspection bays, office space, housing, bridge development, information and communication technology, surveillance technology, and truck and baggage scanners is essential at ports of entry. In particular, the use of information and communication technology enables automation of border processes and increases efficiencies (Wilmott 2007).

3. Research methodology

This paper is a case study of the Beitbridge Border Post between South Africa and Zimbabwe. The border is of strategic importance to Zimbabwe and the SADC. According to Yin (2009), case study evidence may come from documents, archival records, interviews, direct observations, participant observation and physical artefacts. To ensure that there is no distortion that comes with knowing that one is a participant in research, direct observations and impromptu interviews were used in this study. Observations covered events in real time and interviews focused on the case study topics. According to Sekaran (2000), observations help in unveiling participants' movements, facial expressions, emotions, work-flow patterns and layout. Purposive sampling was used to ensure the research focused on its objectives.

4. Challenges at Beitbridge Border Post

Uncontrolled access into the customs area and poor surveillance. Beitbridge Border Post is one of the most porous border posts in Zimbabwe. People could be seen entering and leaving the border without proper searches or declarations. Small-scale traders would pass through with goods, especially bread, several times a day without completing customs formalities. Some people could be seen using the exit side of the border to enter despite the fact that police, immigration and customs officers manned the gate. At Beitbridge Border Post there is no closed circuit television (CCTV) or any electronic surveillance mechanism in place. It was observed that the border post is very busy at midday and midnight and, at these times, it is densely populated. This makes surveillance difficult in the absence of technology, and without surveillance, rampant smuggling is possible.

Absence of a customs barrier. Notably, ZIMRA does not have its own customs barrier, that which is used to control access into the customs yard belongs to a private organisation, New Limpopo Bridge (Private) Limited (NLB), the firm that collects tolls for accessing the new Limpopo Bridge. As a result, control of traffic movement has been compromised. A sizeable number of vehicles passed the customs checkpoint without stopping and the customs officer would occasionally send a security guard to collect the vehicle's gate pass.

Malfunctioning baggage scanners. In a drive to curb smuggling, ZIMRA baggage scanners operate at both entry and exit counters. However, observations and enquiries revealed that the baggage scanners have been malfunctioning since 2009 and minimal effort has been made to restore them to functionality. Customs officers have to rely on physical baggage searches which are tiresome and less effective. Evidently, small but high-value goods such as smart phones are easy to smuggle when searches are conducted physically.

Temporary shelter housing families in the customs yard. The government-sponsored program to improve the border face has taken a long time without significant progress. Temporary structures that were built to house workers on duty have been turned into homes and there are people with families living within the border post. Goods these people import from South Africa are consumed within the border, hence there is no need for customs formalities. This facilitates a breeding ground for smuggling. Also, completed buildings that are not being used are harbouring people, unofficially. This weakens the fight against smuggling.

Delays in customs clearance, bribery and corruption. The biggest challenge facing Beitbridge Border Post is queue management. During the research, it was observed that it takes an average of one and half hours to complete border formalities at Beitbridge. This has been worsened by the fact that one has to pass through the police department to have vehicles cleared inwards before reporting to Customs. It was observed that a sizeable number of bogus clearing agents now loiter at the border and constantly approach travellers claiming that they can help travellers jump the queue or assist in faster customs clearance. As a result, many travellers become impatient and restless and are tempted to evade formalities, including paying duty. These research findings are in line with the literature. Mills (2012) says that on average, producers can expect their vehicles to spend up to a week at the Beitbridge Border Post 'if they don't pay anything'. Zhangazha (2009) also indicates that it may take 12 hours to have a passport stamped at the border post. Bulawayo24.com, an online newspaper, reported on 4 June 2013 that ZIMRA suspended three officers at Beitbridge Border Post on allegations of corruption and facilitating the smuggling of several commercial goods into the country.

Information deficiency. There is no dedicated information officer or information centre at Beitbridge. The structure that is labelled 'information centre' is rundown and always unoccupied. In the customs hall, it was observed that people would join the wrong queues when wanting to pay road access fees or duty calculated or to process temporary import permits. The duty calculation queue was arguably the longest and most disorganised of all. Local cross-border transporters could be seen pushing in,

undeterred. This evidently frustrated a sizeable number of travellers who had to spend a longer time in the queue. Moreover, the security officers in the hall were not assisting travellers as they should.

Poorly arrayed parking space and separation of commercial and private imports. Beitbridge Border Post is a hive of activity especially in the early hours of the day when cross-border buses report. Parking space is a noticeable problem at the border post and is made worse by the fact that there are no permanent barricades that demarcate vehicle parking for commercial and private importations. Small trucks carrying commercial goods were seen using the private imports section, causing mayhem. This has become a threat not only for motorists but is a loophole for smuggling. Mixing private and commercial imports has resulted in unsupervised transshipments and consignment splitting. One truck was observed offloading goods into a smaller vehicle without customs supervision.

Inadequate computer infrastructure and system interruptions. The computer systems in use for duty calculation experienced outages twice in an eight-hour shift. Interviews with border officials and clearing agents indicated that the customs authority, ZIMRA, has recently migrated from ASYCUDA++ to the new and more robust ASYCUDA World. However, because of inadequate hardware and network systems, their systems were not functioning properly. Only one computer was dedicated to duty calculation and this created a bottleneck. The team of bogus clearing agents was also seen conversing with travellers in the queue, some of whom would unceremoniously leave the queue never to come back.

5. Infrastructure-related strategies to curb smuggling

The infrastructure shortcomings at Beitbridge Border Post present a breeding ground for illegal activities including smuggling. It is contended that improvements to both physical and cyber infrastructure would significantly reduce the success rate of smugglers. The following recommendations are made specifically with regard to infrastructure improvement as a means to reduce smuggling at ports of entry.

Install CCTV and surveillance systems. The need for a functioning electronic surveillance system to closely, accurately and effectively monitor the activities at border posts cannot be over-emphasised. It is imperative that all ports of entry be under constant surveillance to ensure that illegal activities are detected and measures to deter them are implemented in good time. It is also easy to identify syndicates when they are placed on computer-aided surveillance. The recommendations made by Irish (2005) as a result of research on the South African side of Beitbridge Border Post favoured the installation of CCTV cameras within the border control area as a possible means of reducing levels of corruption. Use of these technologies is of considerable relevance to supply chain security initiatives: they would speed up the inspection and control process and, ultimately, contribute to the rapid transit time of goods and so facilitate trade.

Adopt an e-government framework. The term ‘e-government’ refers to the ‘use of Information Technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees’ while ‘e-Customs’ is the ‘use of Information Technology to carry out customs compliance using electronic communications channels replacing paper format customs procedures, thus creating a more efficient and modern customs environment’ (Granqvist, Hintsa & Männistö 2010, p. 50). Such an integrated system is essential because it integrates the operations of business and government departments and enables the detection of irregularities in business operations and fiscal declarations such as income tax, value-added tax and customs duty.

Develop truck parking and inspection bays and separate commercial and passenger traffic. In order to ensure that there is minimal interaction between private and commercial importations, there is a need for clear demarcation of the two sections so that it is clear where the importer belongs. In addition, the parking bays for commercial vehicles need to be improved to enable effective surveillance. Disorganised and random parking encourages illegal activities through reduced visibility. There is also a need to emphasise to importers that transshipments conducted inside the customs yard should be authorised or

supervised by an appropriate officer. Improvements to infrastructure would go a long way to eradicating smuggling tendencies at Beitbridge Border Post.

Improve internet connectivity. The adoption of ASYCUDA World requires capable internet connectivity. There are a number of circumstances where breakdowns in the computer system cause delays in customs clearance. The interviews conducted as part of this research revealed that clearing agents spend, on average, 20% of a working day without connectivity with ZIMRA. This may be a factor that forces importers to take the smuggling route as they would have failed to get services from the customs authority. The valuation of motor vehicles is based on postings by the Japanese car suppliers on the internet. However, internet connectivity at Manica Bonded Warehouse is slow and results in serious delays. This is in line with the findings of Mills (2012) who argues that it may take a week to clear a motor vehicle. Poor service encourages smuggling, therefore, by upgrading the technology infrastructure, service can be improved.

Construction of clearance booths, renovation of information centres and installation of signage. The availability of clear and concise information makes travelling and customs clearance easier. With the right information, importers find it convenient to clear their goods properly rather than opting to smuggle them. There is a need, therefore, for the information centres to be renovated and upgraded regularly as well as for a clearing booth to be constructed. The purpose of the clearing booth is to avoid unnecessary queuing in the customs hall as travellers with nothing to declare within the travellers' rebate would be processed promptly and clear the booth. Local passenger vehicles with non-duty-payable goods can also be cleared from the booth thereby reducing pressure on the duty calculation counter in the hall. Vetting travellers and granting duty free allowances would continue to be handled outside the customs hall. Observations were made that travellers sometimes spend 30 minutes in a queue only to be informed that their goods are within the duty free allowance. Meanwhile, the long queue is frustrating duty paying travellers who are then ensnared by bogus clearing agents (*maguma-guma*) who facilitate smuggling.

6. Conclusions

Beitbridge Border Post is a strategic port of entry both to Zimbabwe and Southern Africa. The volume of traffic through the port has increased significantly in recent years and so too have the incidences of illegal activities such as smuggling. However, the current infrastructure at Beitbridge Border Post does not help to deter smuggling. The available literature supports the notion that improving infrastructure would significantly curb smuggling. To achieve this, there is a need for urgent improvements to the infrastructure at Beitbridge Border Post in line with the strategies and recommendations mentioned above.

References

- Araia, T 2009, 'Report on human smuggling across the South Africa/Zimbabwe border', University of Witwatersrand, South Africa.
- Barka, HB 2012, 'Border posts, checkpoints, and Intra-African trade: challenges and solutions', African Development Bank (AfDB), Abidjan, Côte d'Ivoire.
- Confederation of Zimbabwe Industries (CZI) 2015, 'Industrialists leave for South African business forum', www.czi.co.zw/index.php/uncategorised/33-industrialists-leave-for-south-african-business-forum.
- Flynn, DK 1997, "'We are the border": identity, exchange and the state along the Bénin-Nigeria border', *American Ethnologist*, vol. 24, no. 2, pp. 311-30.

- Gathmann, C 2004, 'The effects of enforcement on illegal markets: evidence from migrant smuggling along the south-western border', Institute for the Study of Labour, Chicago, IL.
- Granqvist, M, Hintsa, J & Männistö, T 2010, 'e-Customs study: private sector views on potential benefits of further electronic customs developments in Switzerland', paper presented at '1st Workshop on IT Innovations Enabling Seamless and Secure Supply Chains, WITNESS 2011', Delft, The Netherlands, August, pp. 49-59.
- Irish, J 2005, 'Illicit trafficking of vehicles across Beitbridge border post', Institute for Security Studies, South Africa.
- Kieck, E 2010, 'Coordinated border management: unlocking trade opportunities through one-stop border posts', *World Customs Journal*, vol. 4, no. 1, pp. 3-13.
- Kosłowski, R 2011, 'The evolution of border control as a measure to prevent illegal immigration', Monetary Policy Institute, Washington, DC.
- Mills, G 2012, 'Backwards to Beitbridge? A strategy to revive Zimbabwe's industry', The Brenthurst Foundation, Johannesburg, South Africa.
- Mwaniki, J 2011, 'The impact of informal cross-border trade on regional integration in SADC and implications for wealth creation', www.streetnet.org.za/wp-content/pdf/CORN.PDF.
- Naim, M 2005, *Illicit: how smugglers, traffickers, and copycats are hijacking the global economy*, Doubleday.
- Sekaran, U 2000, *Research methods for business: a skill-building approach*, 3rd edn, John Wiley, New York, NY.
- Wilmott, P 2007, 'A review of the European Commission's plans for an electronic customs environment', *World Customs Journal*, vol. 1, no.1, pp. 11-17.
- Yin, RK 2009, *Case study research: design and methods*, 4th edn, Sage Publications, London.
- Zhangazha, W 2009, 'Thousands stuck at chaotic border post', www.swradioafrica.com.

Watson Munyanyi



Watson Munyanyi is a Lecturer in the Department of Banking and Finance at Great Zimbabwe University. Before joining the University in 2011, he worked as a Revenue Specialist with the Zimbabwe Revenue Authority at Kwekwe Clients Care Unit. Watson's research interests are in taxation, customs, entrepreneurship and sustainable food production.

Strategy to internationalise China's customs management education system

Tong Hua¹

Abstract

Generally, colleges and other higher education institutions that offer customs management programs operate on a small scale and do so with limited domestic resources which restrict their development. Moreover, there are often only one or two institutions teaching customs-related courses in any one country, as is the situation in China, and seeking support worldwide provides a possible solution to this dilemma. Shanghai Customs College (SCC) is an integral part of the customs environment as an affiliated institute of the General Customs Administration of China and as China's provider of education specialising in customs management. With the globalisation of education, SCC decided to build an internationalised education system on the basis of its existing exchange and shared communication projects of various types. This paper explores the idea of promoting internationalised education and practice, including information about SCC's global strategy of exchange and communication efforts, and provides an outline of its forward plan to achieve these goals.

1. Introduction

According to data released by the World Trade Organization (WTO) Secretariat, China is ranked No. 1 in the world's cargo trade which means it represents a very large part of the global economy. To further this trend, China continues to experiment with innovative ways to expand its markets, involve more industries, and deepen its multiple levels of trade. However, to develop China's international trade and its General Customs Administration, many attributes are needed including an understanding and mastery of international rules and the interpersonal skills of multicultural communication.

Shanghai Customs College (SCC) has developed a 'Three-step Strategy' to introduce an international element in its courses since upgrading the program to bachelor's degree level. The first stage includes finding solutions to conflicts and problems that have been identified in the delivery of undergraduate education, followed by obtaining certification of the recently updated junior colleges sanctioned by the Ministry of Education of the People's Republic of China (PRC). By the end of the '13th Five-year Plan' in 2020, the aim is for SCC to be recognised as a college with a worldwide reputation for providing high-level education in accredited customs management programs. With this in mind and following extensive research, an 'Implementation Plan to Promote Internationalised Education in Shanghai Customs College' has been prepared and will be put into practice as part of the '13th Five-year Plan'.

SCC's plan to internationalise its courses accords with the conceptual idea of the World Customs Organization's (WCO) PICARD program. As the only college in China authorised to grant a bachelor's degree which includes customs management subjects, SCC must strengthen its relationships and communication with customs authorities, colleges and universities abroad to enable it to contribute to capacity building in the global customs network. Ways to develop a better understanding of the European Union's (EU) annual customs strategy are being explored to build SCC's relationship with the EU and provide opportunities for direct involvement in delivering customs-related projects.

As this paper demonstrates, SCC considers the education of customs professionals its core mission and aims to achieve this by building its teaching team to design and deliver world-class courses in collaboration with its international colleagues.

2. Developing an international study program

In recent years, as part of the Asia-Pacific Regional Training Center (PRC) Platform of the WCO, together with one of its member institutes, the INCU Management Committee, SCC has played a role in enhancing the ‘multiplier effect’ in conjunction with China’s ‘Talents Introduction Project’. Through international cooperation and communication a multicultural platform has been created that is beneficial for nurturing teachers and students by introducing symposiums and programs that include opportunities for training in foreign countries, teaching programs for foreign scholars, arranging international conventions for academia, and encouraging scientific research in collaboration with foreign customs experts.

2.1 SCC’s exchange program with Netherlands Customs

In 2013, experts from Netherlands Customs delivered two sections of international courses on ‘Customs Risk Management’ and ‘Trade Facilitation’ to SCC undergraduates, using case studies and scenario drills, and with visits to working environments. This is the first time SCC has introduced expertise from foreign customs in its undergraduate program and prompted positive feedback from students. Following this, SCC embarked on a field study and internship project to send teachers to learn and practice in an operational customs environment in conjunction with Netherlands Customs.

In 2014, building on the success of that earlier experience and in cooperation with Netherlands Customs, SCC designed the ‘International Customs Field Study and Internship Project’. A qualified teacher from the Faculty of Customs Management was selected and from 6 to 31 October, joined the Netherlands Customs Administration to participate in the project which involved a field study in management in both companies and Customs, practical experience and theoretical discussions about trade facilitation and risk management in Customs.

2.2 Developing the teaching module with Netherlands Customs

SCC accepts that high-level educational design of courses is essential, especially at the college level. To develop a new kind of teaching module, SCC started with a general outline of how to establish internationalised education, developed a strategic plan to achieve this and then worked on the project design in collaboration with Netherlands Customs. As a result of this approach, and unlike individual academic visits to foreign colleges and universities, the project is more in line with the development scheme at the college level.

The next stage involved exploring new areas of study and designing a variety of projects directly related to SCC’s internationalised education goals. Currently, SCC is experimenting with undergraduates from English language based programs in customs management, using the course outline and study guide compiled by customs experts for a one-month international study project. Following its successful delivery, SCC now plans to refine this international study project and offer it routinely in its undergraduate program.

As SCC considers it important for its lecturers to be part of the overall process of the project with Netherlands Customs, including its design and delivery, the Faculty of Customs Management teacher mentioned above is now assigned to act as the teaching guide on behalf of SCC. Thus several aspects of the project are advantageous to both SCC and its counterparts: direct involvement helps specialist teachers from SCC to become more efficient and benefit from access to customs management knowledge and practice in the Netherlands as well as build communication and trust between the two entities. As a

result of this approach, the 'Field Study and Internship Project with Netherlands Customs' is now part of SCC's internationalised education program.

A major element of projects of this kind is to put into practice the core idea of nurturing an understanding of foreign affairs. A variety of ways of teaching and learning are introduced into classes to enhance students' ability in multicultural communication skills including teamwork and the use of case studies and scenario drills. During the visit to Netherlands Customs, SCC encourages the lecturer to interact with domestic students through the college's official platform 'WeChat' and to microblog in the form of 'Question & Answer'. The experience of this exchange will be shared with students in lectures and in faculty meetings.

The innovative approach used to develop this project and its successful delivery provide a solid foundation for SCC to further its cooperation with EU customs authorities and other customs colleges abroad.

2.3 Developing curricula for international postgraduate students

A course on international environmental taxation was designed for postgraduate students and taught, in English, by a lecturer from the Centre for Customs & Excise Studies, Charles Sturt University, Australia. The basic principles and methods of applying environmental taxes were addressed and through interactive sessions, students learnt the key areas of environmental taxation such as international environment problems, carbon pricing, the role of the Revised Kyoto Convention, and tax incentives.

2.4 Lectures by overseas experts

Inviting foreign experts to lecture at SCC has become an important communication tool. American experts give cross-cultural lectures which provide students with an understanding of cultural intelligence, ways to foster effective inter-cultural communication and a platform for cultural exchange.

3. The next 'Five-Year Plan'

As mentioned earlier, in the next five years SCC's aim is to gradually build a multi-level, wide-ranging mode of international communication and cooperation in higher education. The goal is to cultivate professional expertise based on applied, compound, foreign-orientated high quality education that leads to meaningful contributions to customs, foreign trade and economic cooperation. To achieve this, the following four approaches are proposed.

3.1 Strengthen cooperation with external customs agencies, foreign colleges and universities

SCC is strengthening its connection with the WCO's Capacity Building Directorate and participates actively in its projects. Close connection with the EU Trade Office, the EU-China Trade Project (II) (EUCTP) is another way being used to strengthen relationships, as well as maintain contact and cooperation with colleges and members of the EU's customs institutions. It is also time to further develop SCC's role as a management committee member of the INCU Secretariat.

Meanwhile, expanding contact with customs colleges abroad and adopting characteristics of institutions such as Delft University of Technology in the Netherlands, Charles Sturt University in Australia, the University of Münster in Germany, and the University of Charleston in the US, will help to develop substantive and meaningful cooperation with SCC. It is anticipated that inviting experts from these and other colleges and universities to attend meetings and contribute to discussions about teaching programs will also contribute to SCC's internationalised courses.

3.2 Develop projects to build internationalised teaching faculties and provide students with a global vision

Field Study and Internship Project. Undertaking projects in conjunction with foreign customs agencies, businesses involved in customs services, and professional associations will serve to further develop effective teaching tools as well as improve the faculties' understanding of foreign customs theory and practice and contribute to an international customs vision.

The Internationalised Course System Building Project. The focus of this project is to develop an internationally recognised customs course. Certification of SCC's customs course by the WCO is, therefore, of vital importance. Attention must be given to keeping in contact with the relevant departments of the WCO, and to promoting participation in SCC's customs course to meet the certification requirements in respect of teaching and assessment criteria. A foreign customs lecture series is essential and involves designing a comprehensive lecture plan and inviting foreign customs specialists to deliver those lectures. Following the success of the Netherlands Customs' international course, SCC is now able to choose one or two developed countries to assist in building its program.

3.3 Promote wider training opportunities

SCC attaches great importance to cooperating with the Asian Development Bank and other organisations to undertake training programs that include foreign elements. The successful creation of the 'Customs Center of Excellence in the Asia-Pacific Region' provides the necessary foundation needed to promote foreign training and close cooperation with the WCO and the Capacity Building Directorate in the Asia-Pacific Regional Office (ROCB) assists this process. Other important tasks are the cultivation of Customs-Business relationships and the need for expertise in foreign language teaching. Meanwhile, SCC needs to find ways to recruit experts with WCO certification in China's customs system.

Developing a foreign-orientated training brand will help build the worldwide reputation of SCC. To achieve this, it may be necessary to make full use of the Customs Cooperation Fund (China) established by China Customs in the WCO. To meet the requirements of international cooperation, new themes and multilateral or bilateral training programs funded by China Customs need to be available. SCC will continue to play a role in industries and disciplines to undertake foreign aid training programs which, with the Ministry of Commerce's endorsement, has the theme 'Capacity Building of Customs'. Promoting the upgrading and transformation of Hong Kong and Macau customs training programs will be the next step.

3.4 Promote academic research and development

To effectively build scientific research teams, it will be necessary to encourage and guide research by lecturers and teachers that focuses on international customs knowledge and practice and includes opportunities for exchange programs to enable in-depth investigation of the operation of customs administration in different countries. Lecturers and teachers will also need to be encouraged and supported to participate in international customs research meetings, such as the WCO's PICARD conferences and Regional Training Centre meetings, INCU Global Conferences, the Ukraine international science conferences, and other international academic customs conferences. This will strengthen the building of an international customs information centre, including those of the WCO and WTO, and expand the sharing of data of key trading partners of China Customs.

4. Conclusions

SCC is committed to offering a comprehensive education system with strong international links. To achieve this, SCC plans to put in place all supporting mechanisms required to:

- build and maintain close working relationships with customs departments in China
- develop innovative ways to strengthen cooperation and communication with business and international organisations such as the WCO and INCU
- continue working with overseas customs authorities, colleges and universities to design case studies and projects that reflect current-day customs service and practice
- foster opportunities for teacher/lecturer exchange programs at foreign colleges and universities
- develop a system to evaluate projects and courses to ensure national certification and international accreditation
- participate in programs to contribute to capacity building and customs reform in the PRC and worldwide by collaborating with foreign customs authorities.

By implementing these approaches to customs management education in the PRC, SCC will fulfil its mission as the subordinate college of the General Customs Administration of China.

References

- Guangming Daily* 2013, 'Internationalized course on customs risk and management initiated in SCC', 15 June, http://epaper.gmw.cn/gmrb/html/2013-06/15/nw.D110000gmrb_20130615_7-07.m?div=-1.
- Guangming Daily* 2014, 'Field study and internship project of SCC with Netherlands Customs', 9 October, http://news.gmw.cn/2014-10/09/content_13478648.htm.
- Shanghai Customs College (SCC) 2010, '12th five-year plan of Shanghai Customs College', December, SCC, Shanghai.
- Shanghai Customs College (SCC) 2014, 'Implementation plan for internationalised education system of Shanghai Customs College', November, SCC, Shanghai.
- Tong Hua 2013, 'On the higher education development of China's Customs under globalization', Doctoral dissertation, East China Normal University.
- World Customs Organization (WCO) 2008, 'WCO international standards for the customs profession (WCO PICARD Professional Standards)', PICARD Conference, Shanghai, PRC, 14-16 May 2008, www.wcoomd.org/en/media/newsroom/2008/may/cb_picard.aspx.

Note

- 1 This paper is based on the author's presentation, 'Internationalized strategy of exchange and communication in Shanghai Customs College', at the EU-China Seminar on Customs Professional Training and Capacity Building (EU-China Trade Project II), 24-25 November 2014, Shanghai.

Tong Hua



Dr Tong Hua is the Policy Research secretary and foreign affairs coordinator of the President's Office in Shanghai Customs College (SCC). He is also a member of China Customs Academic Association and an assistant researcher. He was awarded his PhD in Pedagogy by East China Normal University. Tong Hua's research is focused mainly on customs higher education and capacity building, and the strategies of different nations to develop effective and efficient customs management. He has published many research papers and taken part in PICARD and other WCO projects. Over the past few years, Tong Hua has drafted documents, such as strategies for the National Conference of Customs Regional Directors, and submitted more than 40 proposals for ministerial decisions. From 2011 to 2013, he was a member of the committee responsible for building the Research Center of the General Customs Administration of China. He has taken part in scientific research programs at ministerial level including 'The New Development Trend of International Customs within the Framework of Trade Facilitation and Safety', 'The Comparative Research of Customs Institutes of Different Nations', and 'The Customs Development Strategy in the New Era'.



Section 3

Special Report

“Promoting the academic standing of the customs profession”



“Ten years promoting the academic standing of the customs profession”

“Through academic research and debate the INCU strives to help the people who make the big decisions in Customs to formulate strategies and policies. This is important work and it has never been more relevant.”

H.E. Ambassador Roberto Azevêdo, Director-General, World Trade Organization

“I think we have to stop thinking in one vein and start adopting new ways of seeing and then, with the help of the INCU over the course of the next generation, work towards principles and standards and intellectual frameworks that can handle the circumstances in which we live.”

Dr Alan D Bersin, Assistant Secretary, US Department of Homeland Security

“I would like to commend the efforts of the INCU in providing customs professionals, academics, industry researchers, and research students with a medium through which to share insights and knowledge in the customs field.”

Dr Kunio Mikuriya, Secretary-General, World Customs Organization

TIMELINE AND MILESTONES

Feb 2005	International Network of Customs Universities (INCUB) conceived
May 2005	INCUB Concept formally presented to WCO
Jul 2005	INCUB Website launched and first 4 Institutions joined
Apr 2006	WCO PICARD Programme launched
May 2006	1st PICARD Conference held at WCO Headquarters
Mar 2007	World Customs Journal launched
Feb 2008	INCUB becomes an Incorporated Association
May 2008	WCO Professional Standards launched
Jun 2009	WCO adopts University Curriculum Recognition Guidelines
Sep 2009	INCUB and WCO sign MOU
Jan 2010	WCO accredits first courses under PICARD Standards
Jul 2011	INCUB Membership reaches 100 Institutions
Mar 2012	New INCUB Governance and Membership Arrangements introduced
May 2014	INCUB holds its Inaugural Conference and adopts the Baku Resolution
Feb 2015	INCUB 10th Anniversary

Some noteworthy “firsts” for the INCU

2005

The first of many significant “firsts” for the INCU occurred in February 2005 when, for the first time, the term the ‘**International Network of Customs Universities**’ was created and used in print.

2008

In May 2008, the **INCU** joined with the World Customs Organization to host the **2008 WCO PICARD Conference** at the Shanghai Customs College. This was the *first* PICARD conference held outside of WCO headquarters, Brussels. Other significant milestones reached at this Conference included the release of the PICARD Standards, and the initial composition of the PICARD Advisory Group.



Attendees at the 2008 PICARD Conference, Shanghai, People’s Republic of China.

2010

On 26 January 2010, during an historic ceremony at the World Customs Organization headquarters in Brussels, the Secretary-General of the WCO, Dr Kunio Mikuriya, awarded the *first WCO Certificates of Recognition* to three universities certifying that the academic programs offered by these institutions comply with the WCO international standards for the Customs profession.



From left: Professor David Widdowson, Centre for Customs and Excise Studies, Canberra, Australia; Professor Aivars Krastiņš, Riga Technical University, Latvia; WCO Secretary-General Dr Kunio Mikuriya; Professor Dr Hans-Michael Wolfgang, University of Münster, Germany; Mr Lars Karlsson, Director, WCO Capacity Building Directorate.

2014

The **Inaugural INCU Global Conference 2014** held in Baku, Azerbaijan, was the *first* INCU conference and, notably, was the *first* international Customs conference to specifically address the World Trade Organization's Trade Facilitation Agreement (the Bali Agreement). Another *first* at this conference was the honour of featuring presentations by three Nobel Laureates in Economic Sciences, Professor Sir Christopher A Pissarides (2010), Professor Thomas J Sargent (2011), and Professor Alvin E Roth (2012).



Attendees at the Inaugural INCU Global Conference 2014, Baku, Azerbaijan.

2015 and beyond ...

With your ongoing support and commitment to enhancing the administration and practices of customs authorities worldwide, the Management Committee of the INCU is confident there will be more significant "firsts" to come.



Section 4

Reference Material

Guidelines for contributors

The *World Customs Journal* invites authors to submit papers that relate to all aspects of customs activity, for example, law, policy, economics, administration, information and communications technologies. The Journal has a multi-dimensional focus on customs issues and the following broad categories should be used as a guide.

Research and theory

The suggested length for articles about research and theory is approximately 5,000 words per article. Longer items will be accepted, however, publication of items of 10,000 or more words may be spread over more than one issue of the Journal.

Original research and theoretical papers submitted will be reviewed using a ‘double blind’ or ‘masked’ process, that is, the identity of author/s and reviewer/s will not be made known to each other. This process may result in delays in publication, especially where modifications to papers are suggested to the author/s by the reviewer/s. Authors submitting original items that relate to research and theory are asked to include the following details separately from the body of the article:

- title of the paper
- names, positions, organisations, and contact details of each author
- bionotes (no more than 100 words for each author) together with a recent, high resolution, colour photograph for possible publication in the Journal
- an abstract of no more than 100 words for papers up to 5,000 words, **or for longer papers**, a summary of up to 600 words depending on the length and complexity of the paper.

Please note that previously refereed papers will not be refereed by the *World Customs Journal*.

Practical applications, including case studies, issues and solutions

These items are generally between 2,000 and 5,000 words per article. Authors of these items are asked to include bionotes (no more than 100 words for each author) together with a recent, high resolution, colour photograph for possible publication in the Journal. The Editorial Board will review articles that relate to practical applications.

Reviews of books, publications, systems and practices

The suggested length is between 350 and 800 words per review. The Editorial Board will review these items submitted for publication.

Papers published elsewhere

Authors of papers previously published should provide full citations of the publication/s in which their paper/s appeared. Where appropriate, authors are asked to obtain permission from the previous publishers to re-publish these items in the *World Customs Journal*, which will acknowledge the source/s. Copies of permissions obtained should accompany the article submitted for publication in the *World Customs Journal*.

Authors intending to offer their papers for publication elsewhere—in English and/or another language—are asked to advise the Editor-in-Chief of the names of those publications.

Where necessary and appropriate, and to ensure consistency in style, the editors will make any necessary changes in items submitted and accepted for publication, except where those items have been refereed and published elsewhere. Guidance on the editors’ approach to style and referencing is available on the Journal’s website.

Letters to the Editor

We invite Letters to the Editor that address items previously published in the Journal as well as topics related to all aspects of customs activity. Authors of letters are asked to include their name and address (or a pseudonym) for publication in the Journal. As well, authors are asked to provide full contact details so that, should the need arise, the Editor-in-Chief can contact them.

All items should be submitted in Microsoft Word or RTF, as email attachments, to the Editor-in-Chief: editor@worldcustomsjournal.org

EDITORIAL BOARD

Professor David Widdowson



Charles Sturt University, Australia *Editor-in-Chief*

Professor David Widdowson is Chief Executive Officer of the Centre for Customs & Excise Studies (CCES), Charles Sturt University. He is President of the International Network of Customs Universities (INCU), a member of the WCO's PICARD Advisory Group, and a founding director of the Trusted Trade Alliance. David holds a PhD in Customs Management, and has more than 35 years' experience in his field of expertise, including 21 years with the Australian Customs Service. His research areas include trade facilitation, regulatory compliance management, risk management and supply chain security.

Professor Hans-Michael Wolfgang



University of Münster, Germany

Professor Dr Hans-Michael Wolfgang is Professor of International Trade and Tax Law and Head of the Department of Customs and Excise which forms part of the Institute of Tax Law at the University of Münster, Germany. He is director of the Münster Masters studies in Customs Administration, Law and Policy and has written extensively on international trade law, customs law and export controls in Europe.

Dr Andrew Grainger



The University of Nottingham, UK

Dr Andrew Grainger is an experienced trade facilitation practitioner and academic. He is currently based at Nottingham University Business School and is regularly consulted by governments, companies and international organisations. In previous roles, Andrew worked as Deputy Director at SITPRO, the former UK trade facilitation agency, and Secretary for EUROPRO, the umbrella body for European trade facilitation organisations. His PhD thesis on Supply Chain Management and Trade Facilitation was awarded the Palgrave Macmillan Prize in Maritime Economics and Logistics 2005-2008 for best PhD thesis.

Professor Aydin Aliyev



State Customs Committee, Republic of Azerbaijan

Professor Aydin Aliyev is Chairman of the State Customs Committee of the Republic of Azerbaijan. He is a graduate in Law from Azerbaijan State University, and author of educational and scientific articles and books on customs matters which have been published in several countries. His contributions to the development of customs administrations and for strengthening customs cooperation have been recognised by the World Customs Organization, the State Customs Committee of the Russian Federation, and by the Republic of Hungary. In 2010, he was awarded the title of 'Honoured Lawyer of the Republic of Azerbaijan' by Presidential Decree.

Professor Enrique Barreira

BRSV, Buenos Aires, Republic of Argentina

Professor Enrique Barreira is a founding partner of BRSV Attorneys at Law in Buenos Aires, Argentina. He was one of the drafters of the Argentine Customs Code. He has also been a professor of Customs Tax Law, Customs Regimes, and Anti-dumping and Subsidies in the Graduate Program at the School of Law, University of Buenos Aires since 1993, and is a founding member of the International Customs Law Academy. Professor Barreira has been the Argentine arbitrator to the Mercosur in various disputes.

Dr Juha Hintsa

Cross-border Research Association and Hautes Etudes Commerciales (HEC), University of Lausanne, Switzerland

Dr Juha Hintsa is a Senior Researcher in global supply chain security management. He is one of the founding partners of the Global Customs Research Network, and the founder of the Cross-border Research Association (CBRA) in Lausanne, where he undertakes research into various aspects of supply chain security management in close collaboration with several multinational corporations. Juha's PhD thesis was on 'Post-2001 supply chain security: impacts on the private sector'.

Sub-editors**Elaine Eccleston**

Charles Sturt University, Australia

Elaine Eccleston, BA, MA, is Editor at the Centre for Customs & Excise Studies (CCES), Charles Sturt University. She is a professional member of the Canberra Society of Editors. For many years, as a university lecturer, Elaine designed, coordinated and delivered undergraduate and postgraduate courses and training programs in office management, records and archives, information and knowledge management. She was Manager, Information & Knowledge Management at the Australian Trade Commission, and has worked in these fields at the Australian Taxation Office, the Department of Foreign Affairs & Trade, and as Manager, Information & Records Management BP Oil UK.

Dr Christopher Dallimore

University of Münster, Germany

Dr Christopher Dallimore is Head of Studies of the Master of Customs, Taxation and International Trade Law which is offered by the University of Münster and the AWA Foreign Trade Academy GmbH. He is also a senior researcher at the Department of Customs and Excise at the University of Münster. Chris has written a number of articles on customs and international trade law and also lectures in World Trade Organization law.

