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WORLD CUSTOMS ORGANIZATION



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# World Customs Journal

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## ***World Customs Journal***

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## Editorial



This year the World Customs Organization dedicated International Customs Day (26 January 2021) to the important role that customs administrations will be required to play in the wake of 2020 by “bolstering Recovery, Renewal and Resilience for a sustainable supply chain”.<sup>1</sup>

As I describe in this edition’s Special Report, the pandemic has affected, and continues to affect, every aspect of daily life, and the role of Customs is no exception. Even the most fundamental elements of customs operations have changed, including the presumption that officers can work from their desk, regulate points of entry, attend traders’ premises, or even proceed past their own front door.

Indeed, the way we do business now and into the future is a far cry from the way things used to be. The concept of officers working remotely has to this point been anathema to many administrations and rejected outright by them. But faced with no alternative, even those administrations have accepted the need to tear up outdated policies and face the reality of our new environment. The interface between academia and Customs is similarly changing – online learning is now *de rigueur*, with many INCU-affiliated institutions now delivering their courses in this way, and countries that have to this point refused to accept online learning as a legitimate form of education are now embracing it.

Conferences and working groups, which are also being run ‘virtually’, are attracting far more participants than has been the case in recent years. Here, the feedback from INCU members is that, despite the inconvenience of time differences that can be significant, attendance at such fora has been made possible due to the considerable savings in time and resources.

Despite such disruptions to our daily lives, it is pleasing to see contributions to the Journal increase in both number and quality. In the current edition we present a broad spectrum of topics ranging from intellectual property rights to digital transformation, from rules of origin to performance management, and from the promotion of diversity to illicit trade in tobacco.

The Editorial Board would like to thank our readers and contributors for your ongoing support, and wish you the best of health during these challenging times.

A handwritten signature in blue ink, appearing to read 'D. Widdowson'. The signature is fluid and cursive, with a large initial 'D' and 'W'.

Professor David Widdowson AM  
Editor-in-Chief

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<sup>1</sup> The WCO Secretary General’s International Customs Day address can be found at <http://www.wcoomd.org/en/about-us/international-customs-day/icd-2021.aspx>





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## *Section 1*

### *Academic Contributions*



# The social-political embeddedness of import clearance: 20 years of digital transformation at Tema, Ghana

*Jonas Aryee, Casper Andersen and Annette Skovsted Hansen*

## Abstract

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Social structures embed technologies, which people use in the implementation of national single window digital platforms. We argue that stakeholder interests determine digital transformation – with people being the key to understanding how digital platforms change or do not change the environments into which they are introduced. In our multicase studies based in the port of Tema, Ghana, stakeholders have divergent opinions about technology, which causes conflicts. Our empirical findings reflect the interpretive flexibility that moderates the traditional dichotomy between technological determinism and social constructivism. By employing the theory of sociotechnical systems, we identify the frictions and interlinkages of non-technological factors.

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## 1. Introduction

Customs throughout the world has digitalised many of their operations for efficiency and transparency. However, if efficiency is relevant to all stakeholders, why is there a lack of commitment to make the system work most effectively? Based on an analysis of a series of successive cases from Ghana import clearance, we argue that the procurement of new digital systems is highly politicised. This reflects the social embeddedness of technology, which can explain why systems may be more or less successfully implemented regardless of their immediate utility. For political and other reasons, people may not engage with or support the implementation of new systems and, therefore, obstruct or lessen the potential positive impact. Key users may also fail to see the benefit of yet another system procured, which requires investments of time and money unproportioned with the perceived benefit.

### 1.1. Background

The port of Tema, Ghana, is a leading port in west Africa and a gateway for the landlocked countries of Burkina Faso, Mali and Niger. With a new container terminal opened in June 2019, the port aims to secure for itself the position of the preferred port of call for large vessels bound for west Africa. Following a worldwide trend of digitalisation of port operations and trade facilitation, the port is central in public discourse concerning the introduction of new digital platforms changing the *modus operandi* of the port authority, government agencies and other stakeholders. In September 2017, the vice-president's office announced the introduction of a paperless port system by the government of Ghana to curb corruption without mentioning that plans and projects to digitalise import clearance had been ongoing since 1998. During the last two decades, a chequered story of successes and failures in implementing digital technologies has spurred public interest because of high expectations to digital transformation in customs clearance procedures.

This study traces and analyses this protracted process of digital transformation in Tema. Our starting point is that digital transformation occurs within sociotechnical systems in which social reality is coproduced in the interface of technological hardware and the social attributes and interests of people (Leonardi, 2012). Applying Pinch and Bijker's (1984) social constructivist idea of interpretive flexibility, as modified by Sahay and Robey (1996), we analyse cases representing technological interventions in the customs clearance process since 1998. Our aim is to understand how stakeholder interests affect decisions and outcomes in the introduction of digital platforms and we argue that the vigorous stakeholder politics played out around digitalisation run counter to the public discourses that narrate digital solutions as nonpolitical drivers of port transformation in Tema. This discourse has reinforced the perception that the reason for digitalisation is to eliminate the human factor. Based on our findings, we argue that even if digital technology may potentially eliminate the human factor, humans are an integral part of the politics of procurement, which affects the success of the implementation.

### **1.2. Digitalisation in customs clearance and the Ghana national single window**

In customs clearance, the single window concept gained popularity in the new millennium. The World Customs Organization (WCO) defined it as 'a facility that allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements' (United Nations Centre for Trade Facilitation and Electronic Business [UN/CEFACT], 2005, p. 7). The argument is that if the information is electronic then individual data elements only need to be submitted once, which has the potential to save users time, which is a key measure of efficiency. According to the WCO, countries reap fuller benefits using information and communication technology (ICT) and dataset standards commonly accepted by the relevant public and private stakeholders (World Customs Organization [WCO], 2012). Blockchain technology is now emerging as the next key technology to improve trade facilitation, as in the case of Maersk's TradeLens platform (Milne, 2018) and CargoX offering digital shipping documents.

For the sake of security and trade facilitation, many ports have moved from manual processes to digital processes, employing powerful scanners to detect contraband goods and false declarations. De Wulf and Sokol (2004) present case studies showing a common motivation for the digitalisation of customs processes. In the Philippines, Turkey, Uganda, Morocco, Mozambique and Peru, digitalisation happened as part of customs reforms. In Turkey, besides reforms, there was also the need to bring customs legislation and administrative structures in line with European Union (EU) standards. From 1998, Ghana pursued customs reform to complement an initial trade reform meant to improve the investment climate, which posted results below expectations. What is common among the countries mentioned is the fact that politicians insisted on these reforms, primarily, to curtail corruption in the customs authority that led to the loss of revenue.

The Ghana National Single Window (GNSW) is an online portal that provides a comprehensive set of services to the trading community. It is a secure trade platform that facilitates the exchange of information between the Government of Ghana and the logistics community. The platform reduces the need for data to be entered multiple times – instead, it can be exchanged and re-used electronically, achieving faster, more accurate results and making it easier to comply with Government of Ghana requirements.

The GNSW consists of TradeNet Services, eTax services and eRegistrar Services. TradeNet permits the logistics community to exchange trade-related documentation electronically with all agents involved in trade-related processes. eTax allows taxpayers to register for a tax identification number, manage their profile, submit tax returns online, and make electronic payments to settle liabilities. A tax identification number is required for all importers wishing to bring goods into Ghana. eRegistrar allows investors

to register their businesses online and pay associated fees electronically. During business registration, the new company automatically receives a tax identification number – a requirement for all importers wishing to bring goods into Ghana. Also, integrated into the GNSW is a module, named eMDA, that connects shippers with the Ministries, Departments and Agencies (MDAs) electronically, as well as the Ghana Integrated Cargo Clearance System (GICCS). eMDA allows online submission, processing, approval and distribution of a wide range of trade-related documentation by ministries, departments and agencies. GICCS, on the other hand, has modules that allow submission of the manifest and payment-related processing. The logistics module has cargo tracking, container transfer, delivery order submission and tracking features.

### **1.3. Theory: interpretive flexibility and stakeholder interests**

The latest scholarly publication on digitalisation at the port of Tema is by Amankwah-Sarfo et al. (2018) who analyse the paperless port as a boundary object. Their findings show that digitalisation of import clearance procedures can improve efficiency in customs clearance, increase government revenue, and reduce port-related corruption. This narrative is not new and is a widely accepted ability of digital technology as applied in ports, including e-governance systems, e-management, e-services and e-democracy (Al-Shbail & Aman 2018, Asogwa 2013, Imam & Jacobs 2007). However, Amankwah-Sarfo et al. (2018) focus only on the Tema narrative promoted by the implementing authorities. Their claims represent that of a section of the producers of the digital hardware artefact and the implementers; however, they do not represent other stakeholders, such as those deciding on acquisition and procurement.

To allow us to include other stakeholders, we draw on the social constructivist theory of technology (SCOT), which provides us with two key concepts that we use to explore the interface between digital platforms and stakeholders. The first is the concept of ‘interpretive flexibility’. Interpretive flexibility expresses the idea that cultural assumptions among and between the relevant social groups shape different interpretations of technological artefacts such as digital platforms. Interpretive flexibility underscores human agency in the sense that the meaning of a given technology is never fully fixed. It is a well-known empirical fact that identical technologies have different impacts depending on social and cultural contexts. The notion of interpretive flexibility serves to explore the dynamic interface between technology and social context (Fulk, 1993; Bijker et al., 1993).

The second concept we employ is the notion of ‘relevant social groups,’ which consist of ‘all members of a certain social group [who] share the same set of meanings, attached to a specific artefact’ (Pinch & Bijker, 1984, p. 30). The relevant social groups are those groups whose agency give meaning to a given artefact. At its most basic, it is the producers and users of a given technology, but within those broad categories, subgroups exist, for example competing producers as well as users with different political or socio-economic status and interests. Focusing on relevant social groups offers a way of identifying and analysing competing stakeholder interests in the interface between digital platforms and social context. Assessing the impact of digital platforms in import clearance requires attention to the fact that such technologies are embedded in social processes, therefore, we explore the interface between digital platforms (the hardware) and the people. Our analysis seeks to unravel and identify stakeholder interests among the relevant social groups at the port of Tema paying attention to interpretive flexibility and its limits (Klein & Kleinman, 2002; Sahay et al., 1994).

For our analysis, we used the sources mined from the LexisNexis database, conducted semi-structured interviews with key stakeholders at the port, and data generated from a stakeholder’s workshop at the University of Ghana in Accra, Ghana, in 2019. The focus group had representation from Ghana Standards Authority and Ghana Shippers Authority (shippers’ representatives), West Blue Consulting (one of the digital solutions providers to the state), and Meridian Port Services (the only private

on-dock terminal operator). Also present was Amaris Terminal (an off-dock terminal operator), the Chartered Institute of Logistics and Transport (a professional body), and the Maritime and Dockworkers Union. The plenary session had other representative groups such as journalists, an advocacy group, private consultants, and state agencies such as the Ghana Maritime Authority, who also contributed to the discussion of the digital solutions to import clearance. Moreover, for two months, we conducted semistructured interviews with key stakeholders such as customs, the port authority, and freight forwarders. Furthermore, we attended selected lectures at the Regional Maritime University and the Ghana Institute of Freight forwarders (GIFF) to gain a better understanding of the background of the stakeholders and the issues relating to the GNSW in the port of Tema. We will now zoom in on three specific cases to demonstrate the workings of stakeholder politics.

## 2. Evolution of digital transformation in Tema

The World Bank and other interested parties reviewed Ghanaian trade reforms introduced in the 1990s and found that they needed the support of reforms of other sectors to achieve their objectives. This gave birth to the project dubbed the Ghana Trade and Investment Gateway Project, referred to hereafter as the Gateway Project. The project sought to transform and improve the operational efficiency of frontline agencies such as the Ghana Ports and Harbours Authority, Ghana Immigration Service, Customs Excise and Preventive Service, Ghana Investment Promotion Centre, and Ghana Free Zones Board that interact with trade, businesses, and people entering or leaving the country (De Wulf, 2004). The aim was to make Ghana the Gateway to West Africa and the preferred destination for investments into west Africa, a vision which still permeates government policies in Ghana to date. A notable result of the Gateway project was the reform of the Port Authority from a service port to a quasi-landlord port that allowed increased private participation in port operations and the creation of the GCNet.

GCNet is a joint venture company with shareholders consisting of SGS (Société Générale de Surveillance) (60 per cent), Customs Division of the Ghana Revenue Authority (20 per cent), the Ghana Shippers Council (10 per cent), and two local banks (each 5 per cent). GCNet operates under a service agreement with the Ministry of Trade and Industry, under which they installed and operate the Electronic Data Interchange system called TradeNet and the Ghana Customs Management System (GCMS) (De Wulf, 2004). GCNet rolled out a system modelled after Singapore's famous TradeNet, a single window platform where all stakeholders, both state agencies and private service providers submit and access information. According to De Wulf (2004), many customs and import processes were automated, simplified, and improved, which contributed to cost savings to businesses, better collection of customs revenues, and speedier processing of container traffic through the port of Tema.

GCNet marked the beginning of the digital transformation in the import clearance processes in Ghana. However, the digitalisation of customs processes was not all rosy. As De Wulf (2004) points out, changes in government around the time of incorporation, change in legislation to accommodate automation in customs operations, as well as commitment issues on the part of the newly formed government and customs leadership meant that the project was delayed until 2002, when the government had settled and given its blessing to the project. GCNet linked the systems of several other government agencies involved in the clearance process using its eMDA platform. It was the harbinger of the current single window system. However, they faced challenges of non-cooperation even from some of its shareholders, but they continually invested in the system and built capacity.

In September 2015, the Government of Ghana contracted West Blue Consulting. Their introduction was met with opposition within both government ranks and other stakeholders due to alleged procurement breaches. Here, the changes in the interpretations of single relevant social groups and diversity of interpretations among different social groups determine the outcome of the implementation process. After West Blue was contracted (by the Ministry of Finance) to take over the functions

of Destination Inspection Companies (DICs) the company operated hand-in-hand with GCNet (under contract with the Ministry of Trade and Industry) as a technology solutions provider for Ghana Customs. They have since introduced new modules to improve the import clearance process. Whereas the two companies try to convince the public that their softwares work seamlessly in delivering the GNSW platform, some stakeholders have often referred to it as ‘Single Windows’; some in jest, but others quite seriously when they encounter problems with the system.

West Blue has proven their mettle, but they have had to justify their introduction into the import clearance at various forums. This statement by the CEO of West Blue is one of them:

This 2nd phase of the single window system takes the project much further by extending the National Single Window automation and integration approach to all government agencies and private sector operators involved in international trade, utilizing existing systems and infrastructure wherever this is efficient and effective. A key feature of the 2nd phase is the fully automated and paperless ‘single entry point’ to facilitate the single submission – by businesses – of the required trade information for processing by government agencies and private sector operators, and the receipt of the relevant responses through a seamless and easy to use service. (Organisation for Economic Co-operation and Development [OECD], 2017, p. 2)

The reference to a second phase had never surfaced in any discourse when GCNet was the single service provider of technology to customs. Apart from the suspicion of procurement breaches by government, the initial opposition to West Blue’s contract partly reflects a section of the relevant social group interpreting this as a replacement of GCNet with West Blue. Some held that GCNet could be improved if the authorities did not frustrate their effects. Others preferred the status quo and did not want to rock the boat after years of co-creating solutions at the port with GCNet.

Other state agencies have added more providers and platforms since 2015. Amidst heavy resistance from freight forwarders and shippers, in 2015 the Ghana Shippers Authority first introduced the Advanced Shipment Information (ASHI) policy, which is an electronic platform to receive pre-arrival cargo information in advance. The protestors argued that it is costly for the shipper. The Ministry of Transport later suspended the policy with the view that further capacity building is required to give the protestors a good understanding and, hence, acceptance. However, in an interview with *The Chronicle* (2016) newspaper, the CEO of Ghana Shippers Authority stated: ‘Due diligence and stakeholder consultation was made before the introduction of the policy, hence, I cannot fathom why the severe objection exhibited by a cross-section of players within the industry.’ This statement indicates a mixture of problems including wrong targeting and socio-political underpinnings.

However, a change in government following the 2016 election saw the policy resurface in another form called Cargo Tracking Note (CTN) – very popular in many parts of Africa. This time, it was to be in the realms of the Ghana Revenue Authority, but to be implemented by a private company called CTN Ghana Limited. The government’s justification for its introduction and rebuttal for the issues raised by other stakeholders was that those opposing it were nation wreckers who were apprehensive that their illegal activities such as under-invoicing would be blocked by the introduction of CTN. The proponents of CTN alleged that the nation was losing too much money due to these irregular activities. However, the GIFF, the main users affected by the new systems, insisted that the statistical reports from the Single Window platform showed otherwise. GIFF (Ghana Institute of Freight Forwarders [GIFF], 2018) stated in a position paper that:

It should be noted that GIFF is in no way kicking against the established objective of the Cargo Tracking Note. What we find difficult to understand is the parallel path being charted, the legality of the scheme and the needless cost that it comes with. We present this piece to enhance the conversation at norming a system that will deliver at the optimum ensuring a win-win situation for the State and Citizenry. (p. 4)

As it stands now, CTN is an anomaly in the single window import clearance process because it is a stand-alone system. The United Nations Economic Commission for Europe (UNECE) defines single window as ‘a facility that allows parties involved in trade and transport to lodge standardised information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once’ (UN/CEFACT, 2005). The vice-president’s office suspended the CTN implementation twice in 2018. In principle, the ASHI/CTN offers rather simple technical solutions that had been tried and tested in other countries. However, competing interpretations over what the technical solution is and what problem it is intended to address – to stop ‘nation wreckers’ or intentionally add a costly layer to the clearance process – created conflicts among relevant social groups and frustration over a situation which the GIFF report (GIFF, 2018) describes as a ‘parallel path being charted’.

We see how stakeholder interests and digital transformation are intertwined. GCNet was formed to modernise customs by the provision of IT infrastructure and systems. The core functions of customs were also handled by the DIC contracted to use their technology and databases to provide the service. GCNet collaborated with the DICs until 2007 when a new government awarded a contract to Bankswitch Ghana Ltd to deliver the services the DICs were providing. The state news portal Graphic Online (Abbey, 2015) reported Bankswitch to have convinced the government that they would be able to collect more revenue for them with its system than the DICs were doing. This generated the debate as to why Customs was not allowed to perform its functions, but rather pay a share of the country’s revenue to third parties to offer the service. It is widely quoted that the WCO frowns upon the practice of countries contracting core customs services to private companies. It simply means the country does not need its customs administration so it must disband it (Abbey, 2015). Bankswitch piloted its system through 2008. However, in 2009, another government came into power and abrogated the contract of Bankswitch citing non-performance and a duplication of the activities of GCNet and the DICs (The Ghanaian Chronicle, 2015).

In 2015, the same government in its second term of office (but under a new president after the demise of the first term president) contracted West Blue Consulting to provide technical assistance to Customs to take over their core function of classification and valuation (The Ghanaian Chronicle, 2015). This, effectively, ended the operations of the DICs. Subsequently, the two major IT solution providers (that is, West Blue Consulting and GCNet) became the joint operators of the Ghana National Single Window system. The mandate of West Blue Consulting is from the Ministry of Finance to work for the Customs Division of the Ghana Revenue Authority, while GCNet derives their mandate from the Ministry of Trade and Industry. The official narrative had been that the two are collaborating well in providing the service, but as noted, stakeholders have described the Single Window as ‘Single Windows’, because they face problems transacting business seamlessly. Concerning the two service providers, GIFF (2017) alleges that:

Compromising to deliver that integration has the element of rendering one of them redundant on certain fronts. A case in point was when the Import Declaration Form (IDF) module had to be plucked off the GCNET platform unto [*sic*] Ghana’s Trading Hub (PAARS) [of West Blue]. Another classic case is the call of Manifests onto the PAARS platform [of West Blue] creating anxiety within GCNET who used to house the manifests. The two scenarios above ‘justifies’ [*sic*] the turf war because one can only survive if their bargaining chips are intact, but whiles [*sic*] they are at it, trade facilitation as well as port efficiency suffers with its attendant cost! (Systems Integration section, paras 3–5)

The new and increased cost is a key complaint among users of the system(s), however, the duplication of functions appears to be equally problematic.



In March 2018, the Ministry of Trade and Industry awarded a new provider, *Ghana Link Network Limited*, a USD\$40 million 10-year single window contract to provide paperless services at the port. The new system, known as UNIPASS, was, apparently, an adaptation from the Customs UNI-PASS International Agency (CUPIA) of Korea whose benefits have been enumerated by (Choo & Nam, 2016). Headed by the vice-president, the Economic Management Team (EMT) had scheduled the implementation of the UNIPASS Single Window System to commence on 1 January 2019, however, it suspended implementation after stakeholders registered their disapproval. Shippers contend that the UNIPASS deal was costly. To support this response from the stakeholders, a prominent news portal in Ghana (Acquah-Hayford, 2019) reported that UNIPASS would be more costly to the shipper than GCNet and West Blue combined. Freight forwarders interviewed in Tema in February 2020 were suspicious of any new contract for technological services insisting it would increase their costs due to bad contracts and duplication of services. Moreover, Acquah-Hayford (2019) reported that after a UNIPASS system demonstration, participants were not convinced that the system differed from that offered by GCNet and West Blue. Subsequently, West Blue has sued the operators of UNIPASS for cloning their software and redirecting social media links in the demonstration of the UNIPASS platform (Business and Financial Times, 2019). Ghana Ports and Harbours Authority officials interviewed had the opinion that further improving the combination of GCNet and West Blue is a feasible option.

### 3. Eliminating the human factor

The cases reveal the stakeholder politics involved in the protracted introduction of single window technologies. What are the implications of this for how we understand digital transformation processes in Tema? Firstly, it is important to note that this insight into stakeholder politics runs counter to widespread discourses on digitalisation, which tout digital platforms as an ‘agent of change’ independent of the politics of local contexts. As the historian of technology David Nye rightly points out, technology is misleadingly seen as something ‘that comes from outside society, like a meteor, and has an immediate effect, almost like a natural force’ (Nye, 2007, p. 234). In the case of digitalisation in Tema, meteor-type claims about the impact of digital platforms flourish as when the Bolloré and MPS Terminal operators insist that the Tema Port expansion and the new ICTs introduced will ‘bring a host of upgrades within the systems and information teams, which is a huge boost to the Ghanaian talent pool. This transfer of knowledge to Ghanaians will secure the future for generations to come’ (Bolloré Transport & Logistics, 2016, 6:33). We need to treat such claims on the impact of digital platforms cautiously. Indeed, the statements significantly downplay the critical way, in which specific social contexts and stakeholder interests have shaped and continue to shape the implementation and use of ICTs in import clearance.

Relevant social groups confront each other and define meaning through their interpretations of digital solutions to perceived challenges. Most stakeholders at the port of Tema express a shared expectation of a technological-determined solution to curtail corruption in various forms and prevent political interference. For example, the Ghanaian Government touted the paperless port as a system that would, inadvertently, reduce corruption and increase government revenue. The claim illustrates the technological determinism adhered to by many stakeholders at the port of Tema. However, unmet expectations lead to conflicts and blame games among different social groups. For instance, when the Customs Division of the Ghana Revenue Authority was not able to meet revenue targets even after the introduction of the paperless system, the government blamed the customs officials and the customs officials, in turn, blamed the government. This resulted in a rift which has so far culminated in the staff holding a meeting to register their displeasure with government in 2019 (Ibrahim, 2019).

Where we do register a convergence of opinion is in fact that the solution to efficient import clearance consists of getting rid of human interference, which reinforces the idea of a technological fix. The statement below illustrates the sentiment of the largest freight forwarding association, the GIFF, on the digital transformation process. Of a system that is termed paperless, they write:

Solutions which have been delivered today still have a lot of human intervention and this allows for a lot of discretion. This is where the problem is, because this allows the ‘system’ to choose and pick which solution to give who [persons] is on the most ‘favored list’. Why should two traders buying from the same source, on the same conveyance be handed two contrasting outcomes? This does not bode well for COMPLIANCE! (GIFF, 2017, Migraines with Automation Efforts section)

The founder of West Blue Consulting expressed a similar view in her application to the OECD for funds to support the GNSW: ‘The GNSW also reduces, to the maximum extent possible, the human interface in trade transactions, allowing most processes to be undertaken automatically. This greatly increases transparency and reduces the possibilities for irregular interventions and payments’ (OECD, 2017, p. 2). The two statements illustrate the shared expectations of a technical service provider and the users that good technology eliminates bad human influence. The statements by GIFF and the founder of West Blue Consulting describe human intervention as a problem, automatically fixed by a supposedly neutral technology.

The identification of the human factor as the underlying problem that technology must fix further amplifies the deterministic perception of technology as a force free of human interest. However, such macro-level expectations and explanations fail to capture the specific tensions among the relevant social groups that we identified at Tema. The interference of and deferment to political powers is evident. For example, TV3 of Ghana (a Ghanaian television network) recorded this statement made by one staff member, supported by her colleagues, at a staff meeting of the Customs Division of the Ghana Revenue Authority (GRA):

They [referring to politicians/government] are creating enmity between us [staff]...there are some people who came through political appointment who have their children as clearing agents [Customs House Agents] and they use exemptions to clear goods. Is that not a conflict of interest? (Ibrahim, 2019)

The statement confirmed the role of politics in their work and the row that ensued between government and staff of GRA regarding shortfalls in revenue generation.

Observations made and confirmed by the interviews with stakeholders reveal that state agencies introduce systems to maximise their revenue and facilitate their work and trade, but, unintentionally, add to the overall cost of doing business at the port. In March 2019, stakeholders present at our focus group discussion explained that some government border agencies have been elevated from Councils and Boards to Authority status, weaning them from government budget and/or payroll and giving them the autonomous power to charge fees and generate revenue to sustain themselves. According to GIFF and the Ghana Ports and Harbours Authority, in a bid to generate funds for their operations, they cause undue delay and increase the cost of doing business by imposing fees (Ghana National Chamber of Commerce & Industry, 2017) which, clearly, expresses the concern of the shipping community. The point we emphasise here is not the legitimacy of the concern, but rather that digital solutions presented as neutral tools eliminating the human factor amplify tensions between stakeholders.

## 4. Conclusion: new providers in the old game

With the recent UNIPASS contract, digital transformation remains, at best, an unfinished business. Analysing the protracted process of digital transformation, we have focused on cases where new technologies and often new service providers have been engaged by the government of Ghana to illustrate the underlying politics associated with the GNSW. We have highlighted the interpretive flexibility that exists among the relevant social groups and their interests and how politics influence these interpretations. This interpretive flexibility and interest gerrymandering reflect turf wars among state agencies with the constant engagement of new service providers by changing governments and differing measures of resistance and support from shippers for new technological introductions/or companies. Our findings support the World Customs Organization's interpretation that outsourcing key functions to private companies undermines the legitimacy and effectiveness of the national customs institution to collect revenue.

In our introduction, we posed the question 'if efficiency is relevant to all stakeholders, why is there a lack of commitment to make the system work optimally?' Our findings propose the answer that, on the one hand, the state is suspicious of its citizens and, on the other, its citizens are suspicious of the state, which produces a situation where the elusive aim becomes to eliminate human interference through digital technology. Our analysis suggests, however, that any solution to ameliorate low revenue generation by Ghana Customs lies in, firstly, recognising the social embeddedness of the digital tools, which new providers have given far less attention than the purchase and implementation of new technologies.

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### Jonas Aryee



Jonas Aryee is a lecturer in maritime studies at the Transport Department of the Regional Maritime University (RMU) in Ghana. His research interests include maritime policy, trade facilitation, maritime labour, maritime education and training and the social aspect of the maritime sector. He has represented RMU on committees at the Ministry of Transport, Ghana and been part of policy formulation at the national level. He is host of the Podcast, The African Transportation Convos where he discusses Transportation in Africa. He is currently part of a team working on a Danish Foreign Ministry-funded research project on Port Efficiency and Public Private Capacity at the Port of Tema, Ghana.

### Casper Andersen



Casper Andersen is an associate professor in the history of ideas at the University of Aarhus, Denmark. His field of research is the history of science and technology in global contexts with a particular focus on sub-saharan Africa. He has published extensively on political, technological and scientific infrastructures in Africa including the monograph *British Engineers and Africa 1875–1914* and articles in *ISIS*, *Canadian Journal of African Studies*, *Technology and Culture*, among others. Casper Andersen is member of The Young Academy under the Royal Danish Academy for Sciences and Letters.

### Annette Skovsted Hansen



Annette Skovsted Hansen is an associate professor of Japanese and global history at Aarhus University, Denmark. Previously, she was a United Nations international staff member and currently is a spokesperson for the Association of Development Researchers in Denmark (FAU) and member of the Consultative Committee on Development Research, Danida Fellowship Centre, Danish Foreign Ministry. Her research interests include maritime history, shipping as global history, the history of global networks, human resource development, 19th-century lexicography, and Japan in Africa. Her publications include a volume entitled *Aid Relationships in Asia* co-edited with Yasutami Shimomura and Alf Morten Jerve and articles in *Forum for Development Studies* and *Journal of Japanese Studies*.

# Sustainable development in European Union (EU) customs law

*Ewa Gwardzińska*

## Abstract

Increasingly, the concept of sustainable development in legal sciences has become the subject of in-depth research analyses. Some treat it as a political norm and do not subject it to legal analysis. Others attempt to ascribe a legal nature to it. The aim of this article is to answer the following questions: can sustainable development be a principle of customs law? What is its legal status? How can the achievement of sustainable development goals in the customs environment be verified?

## 1. Introduction

The European Union (EU) actively participates in work that aims to benefit sustainable development, both internationally and in the framework of its internal policies. Nonetheless, to date, a normative approach has not been developed for this concept.

The concept of sustainable development as the basis of integrating the environment protection policy with sectoral policies was stipulated for the first time in Article 11 of the Treaty on the Functioning of the European Union (European Union [EU], 2012). It was the Treaty of Amsterdam (EU, 1997) that shaped its legal regime by promoting economic and social development and high employment levels. What was instrumental for this was the achievement of sustained and long-term development, especially by the creation of an area without internal borders, strengthening of the economic and social cohesion, and creation of the economic and monetary union, finally adopting the single currency.

### 1.1 Sustainable development as a principle of EU customs law

The now-common definition of the term ‘sustainable development’, applied in all areas of science and first coined in the so-called Brundtland Report (United Nations [UN], 1987a), rather generally characterises it as an economic approach aimed at solving the dilemma of the necessity to satisfy unlimited demand with the use of limited resources. In this context, sustainable development provides for the satisfaction of the needs of the present generation without impairing the ability of the coming generations to satisfy their own needs.

In his analysis of international and EU law, Ziemblicki (2016) concludes that there is no international, or European, legal definition of sustainable development and that the theoreticians unsatisfied with the definition provided in the Brundtland Report continue to coin and suggest their own definitions. They associate these definitions with either economic development and the gains for both the present and future generations, or with ecological sustainability. Yet, these definitions are not normative, and neither is the very principle of sustainable development.

Decleris (2000) is of quite a contrary opinion. He argues that the Treaty of Amsterdam has in fact sufficiently explained the legal regime of sustainable development, and it is one of the main principles adopted by the EU member states, which have shared the EU’s experience in this regard. Also, a significant theoretical and practical role regarding sustainable development has been played by the

body of judgements of the European Court of Justice (now the Court of Justice of the European Union, CJEU). The CJEU is efficiently implementing the vision and the idea of the Rio Declaration (UN, 1992), as well as those of the Treaty of Amsterdam which tackles a wide range of issues related to sustainable development.

Decleris (2000) also presents sustainable development using two separate legal definitions, one narrow and one broad. In the first option sustainable development is the gross income increase which does not result in the parallel depletion or degradation of natural resources. In this definition, sustainable development is usually a combination of economic and environmental policies and, as such, it pertains to a broader social policy.

In the broader definition, sustainable development is the overall reconstructive policy, combining all public policies aimed at restoring a balance among all types of man-made systems and a balance between them and ecosystems. This is to provide for the future stable co-evolution of man-made systems and ecosystems. In line with this definition, each public policy must consider not only the requirements of natural resources protection but also those of sustaining and developing the cultural and social capital. In the broader spirit above, explicit provisions aimed at balancing the relevant public policies should be interpreted. This is because the inclusion of these criteria really means the necessary interdependence of the relevant public policies and any other policies implemented using systemic logic

Mindful of these three requirements the international legislator for the Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific (Antigua Convention) (United Nations Environment Programme [UNEP], 2002) also presents a legal definition of sustainable development where sustainable development is defined as a gradual change in the quality of human life based on the acknowledgment of sustainability as the main and the original objective of the development. This is to be achieved through economic development, coupled with social equality and a transformation of both production methods and consumption patterns, pursuing ecological balance and deeply rooted in the specifics of the region. The process stipulates respect for regional, national and local ethnic and cultural diversities, and a full participation of people in a peaceful and environment-friendly coexistence with nature, without threatening the life quality of future generations or impeding the chances of providing it.

The normative nature of this approach is its strong asset, while the regionality may be considered its weakness, due to the largely limited number of states who have signed the convention. What is noteworthy is the positioning of sustainable development as the main objective of economic, social and cultural growth.

EU customs law lacks a legal definition of sustainable development, as well as an explicitly stated principle of sustainable development, which immediately gives rise to the fundamental questions: can sustainable development be a principle of customs law, and what is its legal status?

From a formal point of view, the Union Customs Code (UCC) (EU, 2013) contains only three articles (quoted below) referring to environment protection, yet it does not directly address the concept of sustainable development. These three articles regard the purpose of customs law regulations and the principle guiding the prohibitions and restrictions applicable upon the entry of goods into EU customs territory and with reference to goods brought out of it.

First, Article 3 of the UCC states that apart from ‘protecting the financial interests of the Union and its Member States’, ‘protecting the Union from unfair and illegal trade while supporting legitimate business activity’ and ‘maintaining a proper balance between customs controls and facilitation of legitimate trade’, the purpose of customs law shall be ‘ensuring the security and safety of the Union and its residents, and the protection of the environment, where appropriate in close cooperation with other authorities’.



Then, Article 134 of the UCC provides for the guiding principle of prohibitions and limitations, which shall be ‘justified on the grounds of, inter alia, public morality, public policy or public security, the protection of the health and life of humans, animals or plants, the protection of the environment, the protection of national treasures possessing artistic, historic or archaeological value and the protection of industrial or commercial property, including controls on drug precursors, goods infringing certain intellectual property rights and cash, as well as to the implementation of fishery conservation and management measures and of commercial policy measures.’

Finally, Article 267 of the UCC, as in the previous articles, provides for prohibitions and limitations also with reference to ‘goods to be taken out of the customs territory of the Union’, with the priority given to ‘controls against drug precursors, goods infringing certain intellectual property rights and cash’, among others, on the grounds of ‘public morality, public policy or public security, the protection of the health and life of humans, animals or plants, the protection of the environment, the protection of national treasures possessing artistic, historic or archaeological value and the protection of industrial or commercial property’, but also accounting for ‘implementation of fishery conservation and management measures and of commercial policy measures.’

Coupled with the rational assumptions of the lawmakers and the definition approach to the customs law which specifies general provisions and procedures applicable to goods brought into or taken out of the customs territory of the Union (Article 1.1 of the UCC) – whereby supervision of the EU’s international commercial exchange is exercised by the customs authorities, thus supporting ‘fair and open trade’, as well as the ‘implementation of the external aspects of the internal market’, ‘the common trade policy’ and ‘the other common Union policies having a bearing on trade, and to overall supply chain security’ (Article 3 of the UCC) – the legal matters presented above indicate that the lawmaker has not included the concept of sustainable development into customs regulations. Customs regulations have a supervisory and control function regarding the common commercial policy (EU, n.d.) provisions and the remaining EU policies in commercial exchange, including the environment protection policy, albeit only in a trade-related context.

As far as customs legislation is concerned, the references to sustainability mentioned above are included, among others, in the following provisions:

- the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973), drafted because of a resolution adopted in 1963 at a meeting of members of IUCN (The World Conservation Union). The text of the convention was finally agreed at a meeting of representatives of 80 countries in Washington, DC, the United States of America on 3 March 1973, and on 1 July 1975 CITES entered in force.
- the World Heritage Convention, adopted at the United Nations Educational, Scientific and Cultural Organization (UNESCO) General Conference on 16 November 1972 (UNESCO, 1972). It acknowledges that world heritage should not only be protected for our own present wellbeing, but for the benefit of future generations as well.
- the Stockholm Convention on Persistent Organic Pollutants, adopted by the Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden (UNEP, 2001). The text was subsequently amended by the Conference of the Parties at its 4th meeting (4–8 May 2009), 5th meeting (25–29 April 2011), 6th meeting (28 April–10 May 2013), 7th meeting (4–15 May 2015), its 8th meeting (24 April–5 May 2017) and at its 9th meeting (29 April–10 May).

- the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, adopted on 10 September 1998 by a Conference of Plenipotentiaries in Rotterdam, the Netherlands (UNEP, 1998). The convention entered into force on 24 February 2004. The text was subsequently amended by the Conference of the Parties at its 1st meeting (20–24 September 2004), 4th meeting (27–31 October 2008), 5th meeting (20–24 June 2011), 6th meeting (28 April–10 May 2013), 7th meeting (4–15 May 2015), at its 8th meeting (24 April–5 May 2017) and at its 9th meeting (29 April–10 May).
- the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, adopted on 22 March 1989 and entered into force on the 90th day after the date of deposit of the 20th instrument of ratification, acceptance, formal confirmation, approval or accession, on 5 May 1992
- the Montreal Protocol on Substances that Deplete the Ozone Layer, adopted on 15 September 1987 (UN, 1987b). The Protocol is to date the only UN treaty ever to be ratified by every country on Earth, all 198 UN member states.
- the Cartagena Protocol on Biosafety to the Convention on Biological Diversity, as well as the introduction of temporary prohibitions (UNEP, 2000). The Protocol is an international treaty governing the movements of living modified organisms (LMOs) resulting from modern biotechnology from one country to another. It was adopted on 29 January 2000 as a supplementary agreement to the Convention on Biological Diversity and entered into force on 11 September 2003.

Moreover, there are limitations of trade in certain goods and national regulations in environment protection (although there the legislation is being aligned because of the EU directives).

In Polish environment protection law (Act of 27 April 2001)<sup>1</sup> the concept of sustainable development is built into the regulations (Article 1), together with its definition (Article 3, point 50). It is characterised as socioeconomic development in the framework of which integration of political, economic and social activities occurs, taking account of the biological balance and sustainability of biological processes, with the aim of preserving the ability to satisfy basic needs of communities and citizens both for current and future generations.

The analysis conducted so far, based solely on literal interpretation, suggests that protection of the environment is built into customs law regulations. This is, however, without referring to the concept of sustainable development, and that protection of the environment is legally rationalised in line with the principle of subsidiarity of the EU legislation (Czyżowicz, 2004). While the EU promotes certain issues related to protection of the environment, including implementation of the concept of sustainable development, and is currently aligning legislation of some member states regarding these issues, the role of customs regulations in commercial turnover is largely limited to supervisory and controlling functions,

The concept of sustainable development is treated in law as a relative goal and not as an absolute one – the states are not obliged to achieve it but rather to promote it (see Barral, 2012). It seems that the time allowed for promotion of sustainable development has come to an end and it is now necessary to take decisive legal actions to give it an absolute status, with the view of securing the ability to satisfy basic needs for future generations, as well as for the present one.

Therefore, the lack of a legal definition of sustainable development in the currently binding customs law regulations and the use of the principle of subsidiarity of the EU legislation, in line with a dynamic interpretation of law, suggest that sustainable development is a principle of customs law that has a normative nature.

Similar conclusions can be drawn from an analysis of customs regulations. This includes an analysis of the objectives and principles governing prohibitions and limitations regarding the flow of goods, and providing for environment protection, as mentioned earlier. It refers to the autopoietic theory of law (Rogowski, 2015, pp. 554–556), which perceives autonomy of law in self – or auto – reproduction of the communication network and views its (the law’s) approach to society as an infringement on other autonomous communication networks.

The legal system, in autopoietic theory, is a social functional subsystem where legal communication is achieved by legal norms, decisions and the doctrine of law (Rogowski, 2015). Both formal and substantive, and legal rationality occur in this case (Teubner, 1983).

The existing regulations pertaining to sustainable development differ significantly one from one another at times, depending on the adopted instrument. Yet, there is overall cohesion among them, as sustainable development is legally defined as an objective to be achieved (Barral, 2012), and it has currently become an unavoidable paradigm, which – as it is commonly accepted – should be a foundation of most, if not all, human activities, both in the lawmaking process, and regarding the implementation of law.

## **2. Customs control of goods as a verifier of the achievements of sustainable development goals within the customs environment**

Customs control of goods is the key mechanism for verification of the achievement of sustainable development goals within the customs environment. On one hand, the control has a fiscal function which safeguards the interests of the EU budget, and the budgets of individual member states. On the other hand, it has a protective role related to the safety of the lives and health of people, plants, animals and the natural environment.

Numerous definitions of customs control exist in the literature. As argued by Michalak (2014, pp. 365–380), most of them relate directly to customs regulations, international trade (easings) and law enforcement (control). Czyżowicz (2004), as well as Lux (2004), defines the controls as customs supervision, that is, the activities conducted by customs authorities with the aim of securing obedience to customs legislation.

For definition purposes Michalak (2014) combines all elements of customs control found in the literature to date, and characterises it as the implementation of all acts of customs law and other acts by appropriate customs authorities within the framework of law governing international trade, with the purpose of enforcing compliance with the law. This approach in fact reflects the normative definition of customs control found in the Kyoto Convention of 1973 (World Customs Organization [WCO], 1973), where customs control is defined as all the means taken with the purpose of securing obedience of law (acts and directives), the enforcement of which is the responsibility of customs authorities. This definition has been copied, almost directly, by the International Convention on the Harmonization of Frontier Controls of Goods (UN, 1982).

In the UCC (EU, 2013) the definition has been largely extended to mean:

specific acts performed by the customs authorities in order to ensure compliance with the customs legislation and other legislation governing the entry, exit, transit, movement, storage and end-use of goods moved between the customs territory of the Union and countries or territories outside that territory, and the presence and movement within the customs territory of the Union of non-Union goods and goods placed under the end-use procedure. (Article 5, point 3)

The structure of these definitions is similar as they are united by a common purpose – to establish compliance or noncompliance of facts at hand with the relevant provisions of the law. What they also have in common is the controlling entity – the customs authorities, as well as the nature of activities undertaken in the process, which are supported by specific means and methods leading to the establishment of compliance or lack of compliance of the facts at hand with the relevant provisions of the law. The list of activities undertaken by customs authorities, presented as an example in the UCC, is not that important as it regards obedience to all customs regulations, which comprise the following:

the Code and the provisions supplementing or implementing it adopted at Union or national level; the Common Customs Tariff; the legislation setting up a Union system of reliefs from customs duty; international agreements containing customs provisions, insofar as they are applicable in the Union. (EU, 2013, Article 5, point 2)

Customs controls are directly aimed at identification of noncompliance customs regulations and at application of relevant sanctions. The law enforcement in this context has been, and remains, subject to national jurisdictions, which has led to numerous differences in the treatment of economic operators on the EU market, thus breaching the basic principle of the EU legislation: that of equal treatment of economic operators in the market. This has led to the situation where in one member state certain actions are regarded as a breach of customs regulations and, therefore, are punishable. Consequently, the economic operator has no right to use custom easings and simplifications. In some other member states, however, the same actions would not be deemed as a breach of law and would not be punishable, so there would be no legal obstacles for economic operators to avail themselves of customs easings and simplifications. Therefore, in the exact same situation different treatment would be applied to economic operators, thus breaching the sacred principle of fair competition in the EU market (Gwardzińska, 2016).

This issue requires a quick legal intervention – the customs law requires uniform regulations regarding both the rules for punishing noncompliance with the customs law, and regarding the severity of the sanctions. The European Commission, and then the EU, have not addressed the issue of these discrepancies for 28 years, that is, from the establishment of the Community Customs Code (EU, 1992), where integration of customs procedures was the main goal, through numerous iterations, to the Modernised Customs Code (EU, 2008), where the main theme was the digitalisation of customs transactions, to the UCC (EU, 2013)<sup>2</sup> which also stops short of providing a uniform approach to the issue of sanctions. The EU legislator has limited themselves to the conclusion that ‘each Member State shall provide for penalties for failure to comply with the customs legislation. Such penalties shall be effective, proportionate and dissuasive.’ Administrative sanctions may take the form of, for example, ‘a pecuniary charge by the customs authorities, including, where appropriate, a settlement applied in place of and in lieu of a criminal penalty’ or ‘the revocation, suspension or amendment of any authorisation held by the person concerned’ (Article 42, UCC) (EU, 2013).

As observed, these provisions of the UCC delegate punishment for noncompliance with the customs legislation to the individual member states. The lack of a uniform approach to this issue, however, will largely impede legislation reform and weaken the prospects for the advancement of the concept of sustainable development in the customs environment.

The custom controls conducted at present comprise the key components of sustainable development, that is, socioeconomic development coupled with protection of natural resources and cultural capital, as they:

- provide for the legal turnover of goods within the framework of business activities conducted by economic operators, which may contribute to an increase in profits of the state and the EU budget due to the payment of duties and taxes by entities involved in the international turnover of goods; the increase of the turnover of goods may translate not only into increased legal employment but also into more general socioeconomic development
- counteract illegal economic turnover by detection and prevention of all kinds of custom offences related to illegal trade in wild animals and plants, or in wastes polluting the environment, or in goods breaching certificated standards which might be harmful to the life of people, animals or plants, and which go against the rules of fair competition on the market. On one hand, the controls protect society, citizens and the natural environment from harm, but on the other hand they protect the states from failures in the collection of budget receipts
- prevent the smuggling of dangerous goods, including arms and munitions, thus impeding the growth of terrorist organisations and contributing to the development of strong state institutions
- protect goods with national cultural values (artistic, historic or archaeological), as well as intellectual property, trademarks, thus contributing to the maintenance of the cultural heritage not only for the present generation but also for future ones.

### **3. Conclusion and recommendations**

This analysis, conducted in line with the concept of dynamic interpretation and a systemic approach, has shown that sustainable development is a principle of customs law and that it has a normative status. Such a statement does not contradict the legal norm included in the treaties of Maastricht and Amsterdam which require a connection between development policy and environmental protection, as well as the treaties' connection with harmonisation of other public policies. This is to secure stable and continued advancement of the European nations. Consequently, for the EU, the concept of sustainable development is also a legal standard.

Provisions of customs law have been integrated into regulations in the common commercial policy, including those of customs policy and other EU policies. Also, the environment protection policy has been integrated with the others but only with reference to its commercial aspect, where the customs regulations play supervisory and control functions. Customs controls have become an exemplary verifier of all the components of sustainable development, that is, of socio-economic development coupled with the environment and the cultural capital protection.

#### **3.1 Recommendations**

1. Currently, there is no meaningful coordination of activities of the General Directions of the European Committee on the creation of legislation pertaining to sustainable development and, therefore, there is an urgent need to strengthen such activities.
2. Sustainable development should have an absolute status, and not a relative one, as is the case at present.
3. Uniform application of customs law in the individual member states requires a uniform enforcement framework and a uniform set of sanctions for noncompliance. The lack of a uniform enforcement framework at the EU level contributes to the weakening of sustainable development and is conducive to illegal trade in goods posing a threat to the environment.

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## Notes

- 1 Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska, Dz.U. 2001 nr 62 poz. 627 z późn. zm. [The Act of 27 April 2001 Environmental Protection Law, the Polish Journal of Laws 2001 No. 62, item 627, as amended]. <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20010620627>
- 2 Article 11 of the Treaty on the Functioning of the European Union (former Article 6 of the Treaty establishing the European Community): Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development. [oide.sejm.gov.pl/oide/index.php?option=com\\_content&view=article&id=14804&itemid=946](https://oide.sejm.gov.pl/oide/index.php?option=com_content&view=article&id=14804&itemid=946)

## Ewa Gwardzińska



Ewa Gwardzińska, PhD, is an Associate Professor of the Taxes and Customs Unit, Department of Administrative and Financial Corporate Law, Warsaw School of Economics, Poland. She is also a customs broker and was previously a member of the Consultative Council of the Customs Service (2015–2016). She specialises in customs law and customs intermediary services and has authored numerous research papers. ORCID iD: <https://orcid.org/0000-0003-1656-2078>



# Quantifying the relative contributions of customs, trade and ports to cargo time delays

*Alwyn Hoffman, Schalk Rabé and Kristen Hartpence*

## Abstract

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Sub-Saharan African delays for cargo are much longer than global benchmarks, reducing the competitiveness of the affected economies. This paper quantifies the contributions of customs, traders, and the port terminal operator to cargo time delays through the parallel customs and ports processes, by categorising cargo based on customs regime and declaration plans. We find that customs processes are the primary contributor for import cargo delays, while terminal operator processes are the primary contributor for transit cargo delays. Traders, however, also contribute significantly to time delays based on their response times. This is aggravated by the fact that traders from neighbouring countries are not allowed direct access to the port's electronic invoicing system. We recommend the implementation of electronic single window systems accessible by importers from all countries served by the port and the use of intelligent customs risk engines to reduce the need for physical inspections.

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## 1. Introduction

Imports and exports have steadily increased in recent times as a fraction of the global economy (The World Bank, 2018). As 80 per cent of this trade is by sea (The United Nations Conference on Trade and Development [UNCTAD], 2018), ports therefore form a vital link between the economies of trading partners residing in different parts of the globe. While customs and ports processes are well streamlined in most developed economies, this is not yet the case in most developing countries (Arvis et al., 2013). In the case of Sub-Saharan Africa (SSA) port delays for cargo are still around 20 days, compared to global benchmarks of three to four days (Raballand, 2018). These delays add cost to the supply chain; as a result, transport as a fraction of the total cost of landed goods is about twice in SSA compared to the rest of the world (Portugal-Perez, 2008). This places countries within SSA in a disadvantageous position compared to competitors from continents like South America and Australia that also largely export raw materials and import manufactured goods.

Despite the severe impact of port inefficiencies on regional economies in SSA, surprisingly little research has been published about the composition of these delays, or subsequently, possible solutions to observed inefficiencies. While much effort and investment has gone into port improvements in Africa, the identification and elimination of remaining problems are not trivial, due to the large number of independent participants involved in ports operations, and the interdependence of the operations of these players. Recent studies (Hoffman, 2019) identified the terminal operator and customs authority as the primary players influencing port time delays; other role-players include cargo importers and exporters, freight forwarders and clearing agents and road and rail transport operators. To improve the

speed of cargo movements through ports in SSA to be comparable to global benchmarks, it is essential to firstly identify the root causes and to secondly redesign existing operational practices and supporting systems to eliminate these causes.

This paper investigates the primary reasons for long delays experienced by cargo processed through a major east African port. This port forms part of a corridor, which serves not only the port country but also several landlocked countries in Eastern and Southern Africa. The challenges experienced at this port are therefore representative of typical challenges of trade corridors in SSA. The first objective of our study was to quantify the relative contributions of customs and terminal operations towards time delays for different cargo categories. In the process cargo is categorised based on customs clearance plans and customs regimes, as these proved to be primary determinants for the relative contributions of customs and the terminal operator towards measured delays (Hoffman, 2019). We furthermore identified the reasons why long delays tend to occur and made recommendations towards the elimination of these root causes. As import cargo is subject to longer delays compared to export cargo, we primarily focused on imports.

The rest of the paper is organised as follows: Section 2 provides a literature overview and Section 3 provides an outline of the methodology and approach to address the research problem. Section 4 describes the data collected to study port time delays, Section 5 reports on the observed results while Section 6 concludes, makes recommendations and provides topics for future research.

## 2. Literature review

Much work has been performed on multinational trade and transport corridors in general and on African corridors in particular (Bowland & Otto, 2012; Byiers, 2014). The impact of trade corridors on economic activities has also been widely studied (Jordaan, 2014; Hoffman et al., 2017). The specific trade corridor activity that has received the most attention in these studies is customs operations (Laporte, 2011; Davaa, 2015; Finger, 2010; Komarov, 2016; Hoffman, 2018). The most important recommendation resulting from these studies is that customs authorities should use risk management techniques by mining historical databases reflecting the relationships between customs risk and various contributing factors like country of origin and cargo type.

Ports operations have also been widely studied, with a focus on the costs and benefits of speeding up reporting formalities (Vaghi, 2016), the benchmarking of ports operations (Jeevan, 2017), port service congestion (Talley & Ng, 2016), applying queuing methodology to analyse congestion (Saeed & Larsen, 2016) and the economic losses resulting from port disruptions (Zhang, 2016). Other studies addressed drivers of port efficiency (Serebrisky et al., 2016) and simulation models for complex port operations (Kotachia, Rabadi & Obeid, 2013).

We could not, however, find published research that addresses the topic of this paper, namely the quantification of the relative contributions of customs and ports operations to the overall time delays experienced by cargo from the point of arrival of the ship until cargo leaves the port by road or rail. The absence of such studies provides additional motivation for the work reported in this paper.

## 3. Methodology and approach

### 3.1. Port layout, capacity and condition

The port under study is a large seaport along the east Africa seaboard and like many African ports is located directly in the city centre. It is strategically located to serve both domestic cargo and transit traffic from hinterland countries and is an important hub for the international trade of the neighbouring

landlocked countries. However, the port is surrounded by the city to the north, west and south, so there is limited space to expand the port precinct to increase its capacity. Its location within the city also leads to congestion as the port traffic sometimes leads to queues that back up into the city.

The port is accessible from the Indian Ocean through an entrance channel. Its current depth allows vessels access with up to 234 m length overall. Berthing of large vessels is subject to operational (daylight and high tide) constraints. The port is linked to both road and rail but faces issues with landside access. The capacity of road access points does not meet current traffic requirements and the problem is compounded by lack of parking areas and insufficient gate management or trucking appointment systems operated by the Ports Authority.

The port has a capacity of 10 Mtpa (million tonnes per year), including 3.1 Mtpa of bulk cargo, 1 Mtpa (about 620,000 twenty-foot equivalent container units, or TEUs) of containerised cargo, and 6 Mtpa of liquid bulk (Port Statistics obtained from annual reports).

To ease congestion at the marine terminals, the Ports Authority allows for the transfer of domestic import containers to bonded Inland Container Depots (ICDs) located outside the port that are operated by private enterprises. The Port and Customs Authority currently do not allow transit imports to proceed to outside ICDs, so all transit imports are cleared and processed in the port prior to departure.

### **3.2. Port traffic**

The port offers a wide range of shipping services to key destinations around the world. The import country's major markets comprise China, India, South East Asia, Europe, the Americas and the rest of Africa. Six fully cellular container services call at this port, which integrate this regional port with global hub ports.

In recent years, just under 5,000 vessels entered the port per year or about 400 vessels per month. One-fifth were deep-sea vessels and four-fifths coastal vessels. There has been steady growth in traffic, at a CAGR (compound annual growth rate) of 7.5 per cent. This growth has been led by a surge in imports at a CAGR of 7.8 per cent. Export growth has mirrored the growth in imports but from a much lower base, at a CAGR of 7.1 per cent. The highest growth in imports has been recorded in containerised cargo (10%), followed by dry bulk (8.4%) and liquid bulk (7.8%). In exports, growth was the highest for containerised cargo (9.3%). The growth in containers, measured in terms of TEUs (twenty-foot equivalent units) has been 10.3 per cent, with container traffic stabilising at between 40–45 per cent of total traffic. This growth in container traffic justifies our approach to focus primarily on the measurement of time delays for containerised cargo.

### **3.3. Port vessel processing time**

The time a consignment spends at a port is broadly divided between time-on-ship (marine side, or ship dispatch) and time-in-port (landside, cargo handling). Table 1 provides results for the time from arrival of a vessel at berth till departure from berth. As these figures were obtained from the Ports Authority and Port Operator annual reports as well as a report from Hamburg Consultants (HPC Hamburg Port Consulting GmbH, 2017), we can only display those statistics that were available from these sources. The time at berth includes the cargo discharge and loading period, that is, it is shared between the time required for imports and time for exports. The time at berth takes close to two days.

Table 1: Arrive at berth to depart from berth time (hours)

Terminal	Source	Number of Observations	Average	Median	Upper Quartile	Lower Quartile
Ports Authority	Annual Report 2015	154,060	57.1			
	Annual Report 2016	139,037	39.5			
	Annual Report Jun/Jul 2016	18	47.6	44.5	53	24.8
	HPC Oct/Nov 2016	22	32.6	26.0	51.3	17.0
Intermodal Container Terminal	Annual Report 2015	495,689	53.1			
	Annual Report 2016	485,189	47.5			
	Annual Report Jun/Jul 2016	34	45.9	42.0	58.0	32.0
	HPC Oct/Nov 2016	23	52.9	49.0	71.0	26.5

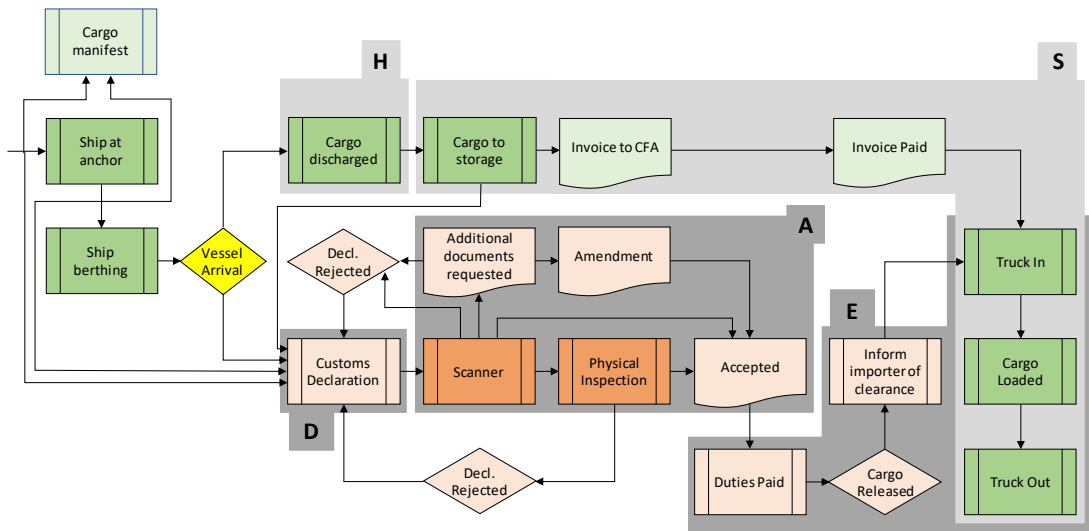
Source: HPC Hamburg Port Consulting GmbH 2017, Consulting services for productivity improvement study, PRQ20141894, Ports Authority, Intermodal Container Terminal & HPC Report, 30 September 2017.

Added to the previous measure (anchor-to-berth), the total effect of ship turnaround on cargo delay is around four to five days. This does not compare well with the international benchmark of 1.06 days and the Durban figure of 2.1 days (HPC Hamburg Port Consulting GmbH, 2017). Due to lack of information about the reasons for individual vessel delays it is not clear if performance improvements mainly depend on improvements to the port (for example, deepening the entrance to prevent tide delays), adding more berths or improving the efficiency of cargo handling capabilities inside the port. As the focus of our study is on cargo delays rather than vessel delays, we did not further investigate the underlying reasons for vessel delays.

### 3.4. Port and Customs process flows

Figure 1 provides a schematic depiction of typical ports processes for the importation of cargo. Careful consideration of these processes is important as there are several processes taking place in parallel while cargo is being processed through the port. The purpose of this study is to quantify the contribution towards overall time delay for each parallel process, and to repeat this for different scenarios (as determined by Clearance Plan and Customs Regime), so that the contribution of each role player to time delays for each scenario can be quantified.

Figure 1: Port landside processes



Legend: yellow: shipping line processes; dark green: port terminals physical processes; light green: port terminal documentation processes; dark orange: customs physical processes; light orange: customs documentation processes; dark grey: processes controlled by customs; light grey: landside processes controlled by port.

H: handling; S: storage; D: declaration; A: acceptance; E: exit.

### 3.5. Data available from operations

In a well-managed operation, the completion of each important activity in the port is recorded and stored on the IT system as it represents the change in status of documentation and cargo. Such changes in status should trigger further activities until the cargo and documentation processes have been concluded and the released cargo leaves the port. It furthermore allows measurement of the duration of each activity or process step.

The port processes are indeed recorded, but not all this data is combined in the same system. For example, the cranes that are used to pick and place containers are equipped with on-board computers that record these events, but this information is not uploaded to a central system and can therefore not be related to other transactional data. One area of recommendation in the HPC study (HPC Hamburg Port Consulting GmbH, 2017) was that the Ports Authority implement a proper Terminal Operating System (TOS) so that all terminal resources involved in the transport process of the cargo can be planned and tracked according to the progress of operation. That report furthermore stressed that the TOS should be fully integrated with other surrounding systems, including customs, government agencies and the Ports Authority financial systems.

For this study we therefore had to reconstruct the port situation in isolation, using data available from the Customs Authority and a port terminal, without being able to verify any of this information against information about concurrent process steps reflected in the systems of other participants in the overall process. It was therefore not possible to identify accurately the reason for process delays in individual cases, as any of several parallel processes could in principle cause a delay to the overall process at any stage. We could, however, generate accurate statistics for different time delays for both customs and ports processes and for each relevant cargo category.

The contributions of customs and the terminal operator to port delays are not easy to separate, as the activities that they are responsible for are interactive and run in parallel. Both sequences of activities have the potential to cause delays, and as a result it is not a simple matter to apportion blame for unnecessary or avoidable delays. The approach that we followed involved the collection of data from both customs and ports operations over the same period and for the same cargo consignments. We used identifiers of cargo, including manifest numbers and shipping container numbers, as well as date and time, to associate information collected by customs for a cargo consignment with information collected by the terminal operator for the same cargo consignment. This allowed us to calculate time delays for the two streams of parallel processes, as conducted by the customs authority and the terminal operator, and to determine in each case which process stream was the primary determinant of delays for that consignment.

### **3.6. Relevant cargo categories to measure contributions of customs and ports to time delays**

It was apparent from the available data that big differences exist regarding the treatment by customs and ports of cargo consignments falling into different categories. The focus of this investigation is on inbound cargo, as inbound cargo in general experiences longer delays compared to outbound cargo. Inbound cargo is divided mainly into two customs regimes, namely import (code IM4) and transit (code IM8); other customs regimes represent a very small fraction of total cargo. Customs furthermore distinguishes between several so-called clearance plans; the two most important ones are Pre-Arrival Declarations (PAD) and Post-Manifest Declarations (PMD). We therefore divided cargo consignments into four categories based on these two dimensions and reported results separately for each category. This allowed us to investigate the reasons for delays as applicable to each category.

When customs processes declarations, several outcomes can be reached for any specific cargo consignment: 'Released with no stop or amendment'; 'Inspected'; 'Amended'; 'Inspected and Amended', and several others. The outcomes listed are the most important ones regarding possible time delays in the customs process. We calculated time delays for each of these customs outcomes.

The fact that both import and transit goods are processed by the same entities and through the same choke points has the result that the two categories cannot be analysed totally in isolation, for the following reasons:

- Transit containers may wait for Import containers to be scanned at the port x-ray scanner.
- Trucks collecting transit containers from the port may wait in queues for trucks collecting Import containers.
- Transit containers already discharged from ships may wait to be taken to the x-ray scanner because the fleet of port trucks is busy offloading Import containers, for example.

Against this background we analysed both Import and Transit traffic, so that the performance achieved with both cargo streams can be compared and to allow the possible impact of one area of performance on the other to be assessed.

### 3.7. Landside import processes and responsibilities

The landside cargo handling and clearance processes take place after ship arrival until the cargo exits the port (in the case of imports). Several players are responsible for how long this takes:

- The port terminal operator physically moves the cargo off the vessel and through the port to a place of temporary storage.
- Customs (and some other regulatory agencies) verify the status of the goods and collect duties.
- The consignee/shipper, shipping line and freight forwarder are variously responsible to make applications and present documents, respond to issues raised, and to pay the port and Customs.
- Road and rail transport operators must physically remove cargo from the port after both customs and the terminal operator has released the cargo.

Apart from establishing how much time is consumed by the passage of cargo through the port, a key question is how to separate out the contribution of each of these parties to the total time goods take in-port.

Control of the cargo transfers from the shipping line during the voyage (forming part of the vessel sailing time), to the port terminal as well as to customs at the receiving port since it is also a customs port of entry. At the port, there is both a physical flow of cargo as well as a supporting flow of documents. What is clear from Figure 1 is that there is much interdependence between port and customs processes. For example, the delays measured from the point of discharge of cargo until cargo is collected will usually include the completion of the customs clearing process, which may involve physical inspections. If long delays occur during this period it may be caused either by customs clearance processes, or by the port not issuing the invoice to the clearing agent for ports services, or the cargo owner not paying the invoice, or a truck not arriving in time after being notified to collect.

From Figure 1 the total time in port is equal to the port's own processes (handling/H and storage/S) and to the customs processes in the port (Declaration/D, Acceptance/A and Exit/E). Customs processes that fall outside the landside period have a zero duration in the port. Delays in D and E are not primarily caused by customs; therefore A (Customs Acceptance) is on the critical path in the port. In other words, A as a share of total delay shows how much of the port time is essentially customs related.

### 3.8. Landside processes for exports

The primary focus of the investigation is on inbound cargo, as imports in general experience longer delays compared to exports. For exports, the same set of processes are involved as described for imports previously, but in a somewhat different order. For port cargo handling, the main difference is that for imports the cargo is first offloaded from the ship before trucks are notified to collect; for exports trucks deliver cargo in their own time before a ship is loaded. For customs processes, the import declaration is replaced by an export declaration.

In the case of imports, delays and unnecessary congestion may occur if trucks arrive before cargo has been offloaded from the ship and released. In the case of exports, delays may occur if a ship is ready for departure but critical cargo has not yet been delivered to the port. In such cases ships will often depart without this cargo, due to the high penalties involved when a ship does not keep to its berthing schedule at subsequent ports.

Another important difference between imports and exports is the probability of a physical inspection of cargo. As exports in this case are mainly raw materials, they seldom require physical inspections. Imports are mainly containerised goods subjected to inspection rates of between 70 per cent and

95 per cent. As a result, long delays and ports congestion are mainly related to imports. However, since exports must be processed by the same entities (port and customs) the delays spill over to exports as well, even though export activities may not be the root cause.

Of the available data sources, only the HPC report provides a comparison of equivalent important export processes. Table 2 provides the results for cargo dwell time (that is, storage, or discharge to truck-out for imports vs truck-in to loading for exports) for both imports and exports. These are averages as no median was available from this report. The results are from a short sample period in October/November 2016. In both cases (Ports Authority and Intermodal Container Terminal), export dwell time appears substantially shorter than import dwell time (a third shorter for the Ports Authority and about 50 per cent shorter for Intermodal Container Terminal). This justifies our decision to focus the detailed analysis on import cargo.

*Table 2: Transit storage time (days, Oct/Nov 2016)*

Terminal	Direction	Observations	Average
Ports Authority	Import	±25,000	7.5
	Export		4.7
Intermodal Container Terminal	Import	±80,000	10.6
	Export		5.5

*Source:* HPC Hamburg Port Consulting GmbH 2017, Consulting services for productivity improvement study, PRQ20141894, Ports Authority, Intermodal Container Terminal & HPC Report, 30 September 2017, Table 90, Table 91.

## 4. Data collection

Raw transaction data was obtained from both Customs and from the International Container Terminal Services, mostly for the calendar year of 2017. As the focus of this investigation is on the relative importance of the ports and customs processes as far as time delays are concerned, and as not all customs authority transactions apply to cargo handled by the Intermodal Container Terminal, only those transactions that were present in both the Customs Authority and the Intermodal Container Terminal datasets were used for the time delay analysis. The unique identifiers that were used to link Customs Authority and Intermodal Container Terminal transactions are Bill of Lading number and container number.

Against the above background, we divided the available data from the Customs Authority and Intermodal Container Terminal that were common to both data sets into categories as described in Table 3. Table 3 also indicates the number of transactions that was available in each category. The reason why the numbers for the individual clearance plans and Regimes do not add up perfectly to the total number of transactions is the fact that the relevant data fields in the Customs Authority tables indicating Clearance Plan or Regime are not always populated, making it impossible to allocate all transactions to specific categories. There are also several Clearance Plan and Regime categories that contain only a small number of transactions. To limit the complexity of the results tables, we show only the results for categories that contain a significant number of transactions.



Similarly, all the possible customs outcome categories are not displayed, but only the few where performance significantly deviates from population statistics (that is, for declarations that were inspected and/or amended, as this usually implies additional customs activities that consume a significant amount of time).

Within the available common dataset, approximately 75 per cent of declarations fall in the PAD category and about 25 per cent in PMD. Similarly, about 75 per cent are Import and 25 per cent are Transit goods. Of all inbound cargo, about 50 per cent is inspected, but this figure is much lower for Transit goods (only six declarations from about 18,000 transit declarations were inspected as opposed to almost 75 per cent of Import cargo). About 20 per cent of Import declarations are amended, with only about 1.5 per cent of Transit declarations amended.

*Table 3: Number of transactions in each category that were investigated*

Categories	All	Clearance Plans		Regimes		Clearance Plans + Regime
		PAD	PMD	Import	Transit	PAD + Transit
Total	77,372	48,213	16,720	49,688	17,998	8,276
Inspected	37,603	32,289	4,930	37,376	6	3
Amended	16,844	14,914	1,872	15,321	1,276	740
Inspected & Amended	12,989					

## 5. Results for contributions of Port and Customs to time delays

### 5.1. Analysis of combined dataset

Table 4 displays the median and average of time delays measured across all regimes and clearance plans. The median value for the entire ports process (from arrival of vessel to payment of port invoice) is four days (8.5 days on average), while the median of the entire customs process (from submission of declaration to release of cargo) is 10 days (13.7 days average). For declarations that are amended, inspected and/or rejected, the customs clearance median time increases to between 14 to 19 days (17 and 21 days on average). It must, however, be considered that the declaration to customs may be made while the vessel is still at sea – for this reason we must also consider whether the ports or the customs process is first concluded for each consignment.

The customs process can be further broken down into different process steps:

- submission received to verified by customs official
- from verified till completion of the assessment process
- from assessment to inspected and/or paid
- from paid to released.

As can be seen below, all the customs process steps contribute significantly to the total duration. Measurement of the contribution of each process step is complicated by the fact that for a single declaration there may be several customs responses indicating an assessment and payment, for example. These processes are often repeated for declarations that are not immediately released. This causes possible overlap between our measurements for different processes, resulting in the sum of identified process steps taking longer than the overall process. The length of individual process steps should therefore only be used to obtain an indication of their relative contribution to total time.

Measuring the duration of the combined customs and ports process is not that simple either, as cargo not destined for re-export (that is, cargo falling in ‘Regime: Import’) usually moves from the port to an ICD before being cleared. For that reason, the delay from customs clearance to truck leaving the port is on average negative, as the customs process is not yet completed by the time that cargo leaves the port but is only concluded while the container is at an ICD.

*Table 4: Time in port, by process step (all regimes and clearance plans, days)*

<b>Process Step</b>	<b>Total</b>	<b>Customs Outcome</b>							
<b>Start</b>	<b>Finish</b>			<b>Amended</b>		<b>Inspected</b>		<b>Rejected</b>	
<b>Port Processes:</b>		<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>
Actual Arrival of Vessel	Payment of Port Invoice	4.06	8.53	2.87	5.86	2.41	4.42	2.46	7.37
Actual Arrival of Vessel	Cargo Discharged	2.84	3.30	3.10	3.51	2.84	3.30	2.79	3.48
Cargo Discharged	Port Invoice Delivered	0.22	3.74	-1.22	1.10	-1.42	0.08	-1.57	2.25
Port Invoice Delivered	Payment of Port Invoice	1.00	1.49	0.99	1.25	0.99	1.04	1.24	1.64
<b>Customs Processes:</b>		<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>	<b>Median</b>	<b>Ave</b>
Declaration Received	Cargo Released	10.01	13.66	17.04	20.01	14.19	17.58	19.01	20.47
Declaration Received	Declaration Verified	0.85	5.18	9.95	13.99	1.82	6.63	12.97	17.98
Declaration Verified	Declaration Assessed	1.11	5.47	8.96	12.58	2.85	7.44	12.47	17.34
Declaration Assessed	Cargo Inspected	11.96	14.89	13.91	16.85	11.96	14.89	9.23	13.19
Declaration Assessed	Duties Paid	6.57	10.25	10.88	14.67	9.99	13.28	7.73	13.72
Duties Paid	Cargo Released	2.98	6.06	6.93	9.46	6.25	8.67	3.92	7.33

Process Step	Total	Customs Outcome							
Start	Finish			Amended		Inspected		Rejected	
Combined Processes:		Median	Ave	Median	Ave	Median	Ave	Median	Ave
Declaration Received	Actual Arrival of Vessel	-1.45	-0.99	4.48	5.32	2.64	2.91	0.87	1.02
Cargo Discharged	Cargo Released	6.46	10.56	7.31	11.16	7.32	11.37	12.81	15.96
Cargo Discharged	Cargo Inspected	7.20	11.17	7.21	10.93	7.20	11.17	12.79	15.83
Payment of Port Invoice	Cargo Released	4.11	5.93	7.03	8.81	7.47	10.25	10.23	12.06
Cargo Released	Truck/Train In	-2.19	-3.55	-4.16	-6.47	-4.55	-7.89	-7.4	-9.78
Payment of Port Invoice	Truck/Train In	1.92	2.38	2.87	2.34	2.92	2.36	2.83	2.28
Truck/Train In	Truck/Train Out	0.09	0.18	0.08	0.15	0.08	0.15	0.09	0.16
Truck/Train Out	Border Exit	9.22	19.05	10.13	16.03	6.84	7.66	13.38	15.55
Actual Arrival of Vessel	Truck/Train Out	6.07	11.09	5.82	8.35	5.41	6.93	5.38	9.81
Cargo Released	Border Exit	7.12	15.68	6.05	9.71	2.37	-0.08	6.07	5.93
Actual Arrival of Vessel	Border Exit	15.29	30.14	15.95	24.38	12.25	14.59	18.76	25.36

## 5.2. Analysis by clearance plan

To allocate the time-in-port between the port terminal and customs, it is necessary to separate the analysis by regime and clearance plan. Table 5 shows the results when distinguishing clearance plan, while Figure 2 and Figure 3 display the histograms for Discharge to Invoice and Customs Submission to Release, respectively. The information that indicates which of customs and the terminal operator was the primary reason for delays is displayed in Figure 4. The benefit of observing the histogram is that it allows all behaviour to become visible, rather than considering only medians or averages.

The following comments are relevant:

- For PMD, the ports process takes much longer than for PAD, mostly because port invoices are delivered much later for PMD than for PAD, as displayed in Figure 2. This may be because the required information in the case of PMD is not available at an earlier stage to allow the port to finalise the invoice.
- For PAD, the customs process takes much longer than for PMD, as shown in Figure 3. All the individual customs process steps take much longer for PAD. This is of concern as PAD declarations are usually made by importers for whom time is of the essence and who need to reduce customs delay time. This finding is exacerbated by the fact that for PAD, the fraction of cargo consignments that is inspected is about two-thirds, while it is less than a third for PMD.
- Figure 4 shows that for PAD declarations the time from payment of port invoice to release by customs is usually positive with a median value of more than five days. As a result, the customs process is the primary contributing factor for PAD. For PMD declarations this time delay is negative most of the time, with a median value of -0.83, which confirms that the ports process is the primary contributing factor for PMD.
- The total time from arrival of the vessel until the cargo exits to a neighbouring country is somewhat shorter for PAD vs PMD both in terms of median (four days) and average (seven days). The realised time saving is, however, not nearly as much as the difference in declaration submission times between PAD and PMD (11 to 16 days as can be seen by comparing 'Declaration Received' to 'Arrival of Vessel' for PAD vs PMD). As a result, the combined ports and customs processes at least partly defeat the purpose of making the PAD option available to importers.

Table 5: Time delay, by clearance plan (days)

	Start	Finish	PAD		PMD		PMD minus PAD	
			Med	Ave	Med	Ave	Med	Ave
<b>Port</b>	Actual Arrival of Vessel	Payment of Port Invoice	2.93	5.92	7.54	11.44		
	Actual Arrival of Vessel	Cargo Discharged	2.89	3.36	2.65	3.15		
	Cargo Discharged	Port Invoice Delivered	-0.95	1.31	3.74	6.15		
	Port Invoice Delivered	Payment of Port Invoice	0.99	1.25	1.15	2.14		
<b>Customs</b>	Declaration Received	Cargo Released	13.71	16.57	3.07	5.37		
	Declaration Received	Declaration Verified	1.67	6.54	0.15	1.4		
	Declaration Verified	Declaration Assessed	2.12	6.8	0.7	1.85		
	Declaration Assessed	Cargo Inspected	13.42	16.21	4.06	6.89		
	Declaration Assessed	Duties Paid	9.05	12.8	1.65	3.19		
	Duties Paid	Cargo Released	5.3	7.62	0.16	1.66		

	Start	Finish	PAD		PMD		PMD minus PAD	
			Med	Ave	Med	Ave	Med	Ave
<b>Combined</b>	Declaration Received	Actual Arrival of Vessel	2.39	4.67	-8.47	-10.82	-10.86	-15.49
	Cargo Discharged	Cargo Released	5.86	8.54	9.5	13.03		
	Cargo Discharged	Cargo Inspected	6.27	9.06	13.63	20.08		
	Payment of Port Inv.	Cargo Released	5.28	5.97	-0.83	4.73		
	Cargo Released	Truck/Train In	-3.17	-3.54	2.15	-2.26		
	Payment of Port Inv.	Truck/Train In	2.11	2.43	1.32	2.47		
	Truck/Train In	Truck/Train Out	0.08	0.17	0.09	0.19		
	Truck/Train Out	Border Exit	10.42	15.41	10.34	16.34		
	Actual Arrival of Vessel	Truck/Train Out	5.12	8.52	8.95	14.1		
	Cargo Released	Border Exit	7.33	12.04	12.58	14.27		
Actual Arrival of Vessel	Border Exit	15.54	23.93	19.29	30.44	3.75	6.51	

Note: Table includes both domestic imports and transit movements. Negative values mean that the end of a step occurred before its start.

Figure 2: Discharge to invoice time delay per declaration

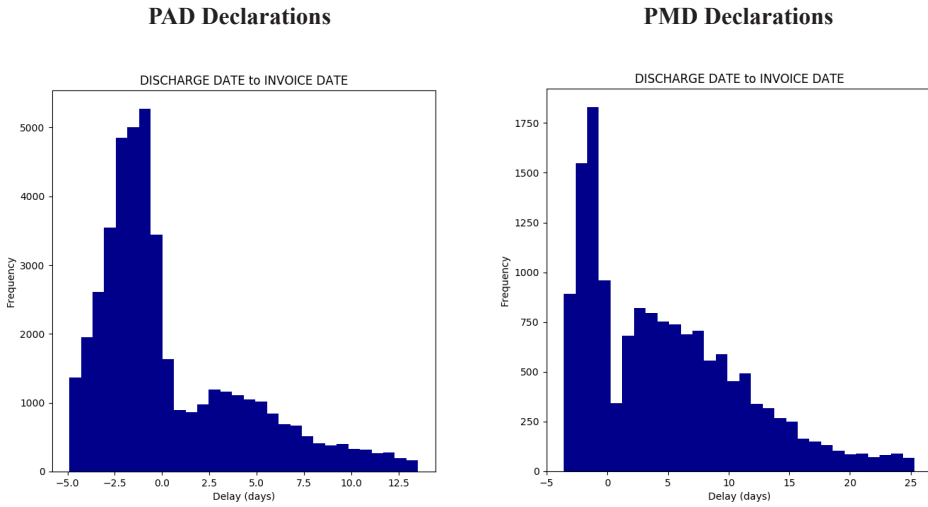


Figure 3: Customs submission to released time delay per declaration

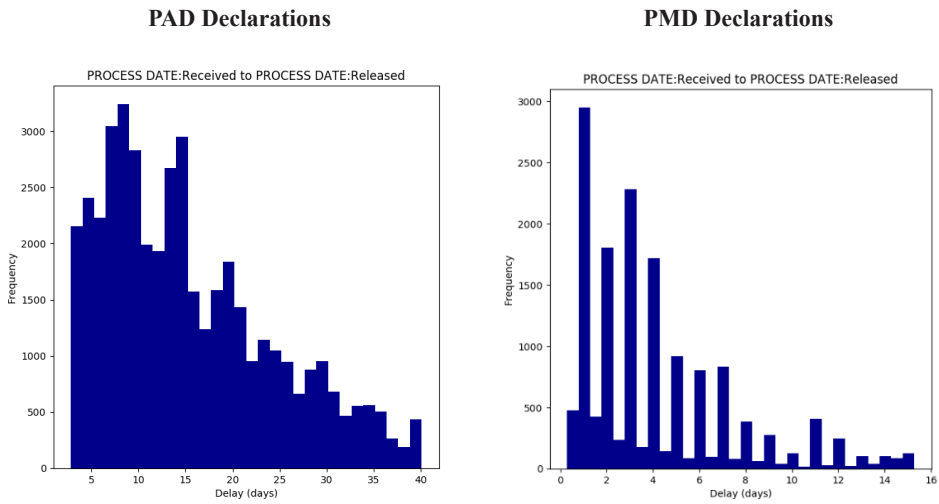
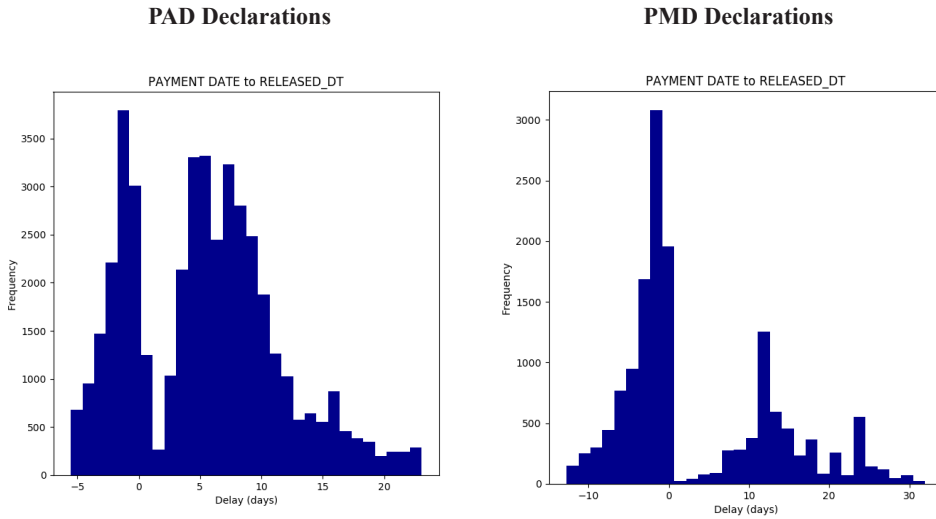


Figure 4: Payment of port invoice to customs release time delay for import and transit goods



### 5.3 Analysis by regime

Table 6 displays time delay results for different regimes (containing transactions for all clearance plans unless otherwise stated). The following comments are relevant:

- On first observation, it may seem that ports processes dominate time delays for Transit goods. On average customs clear cargo about a day before the ports invoice has been paid for transit goods, mainly due to long delays between discharge of cargo and delivery of ports invoice. This can also be seen in Figure 5, which displays the histogram for port invoice payment date to customs release date. If the time delay from Payment of Port Invoice to Customs Release of consignments is positive, payment of invoice occurred before customs release, implying that the customs process was the primary reason for delays. A negative value means that payment occurred after release, implying the ports process was the primary reason for delays. Delays for import goods were mainly positive, meaning that the customs process was typically the reason for the delay. Delays for transit goods were all negative, meaning that in those cases, the port process was the primary reason for the delay.
- This is confirmed by analysing time delay from release of goods by ports or customs until entry of truck or train. If this time delay is positive, customs release of a consignment occurred before the truck entered. This is mostly the case for transit goods that must wait in the port until release before it can be transported to a neighbouring country. However, if this time value is negative, release of consignment occurred after the truck entered; this is mostly the case for import goods staying in the import country and that must be taken to an ICD before being cleared, resulting in the truck entering and leaving the port with the cargo while customs is still busy with the clearing process.
- Figure 6 shows that for transit cargo it takes typically five to seven days from customs clearance to truck/train port entry, while it takes only four to five days from payment of port invoice to truck/train port entry, confirming that the port is mostly the delaying factor. It is suspected that this lengthy time delay at least partly results from the fact that all containers must go to the x-ray scanner before they can leave the port.



- Customs processes dominate time delays for Import cargo, with time delays evenly spread across different customs processes, and with a high fraction of inspections. This is, however, not without good reason, as about a third of inspected consignments are amended.
- For Transit goods following the PAD clearance plan, the overall time delay, both in the port and until cargo exits the border, is not much less than for transit goods following the PMD clearance plan. This is mainly due to the lengthy time delay from discharge to delivery of the ports invoice, and possibly also due to containers waiting to be taken to the x-ray scanner.

Table 6: Time delays, by regime (days)

	Process Step		Regime				Clear. Plans + Regime	
	Start	Finish	Import		Transit		PAD + Transit	
			Med	Ave	Med	Ave	Med	Ave
<b>Port</b>	Actual Arrival of Vessel	Payment of Port Inv.	2.56	5.04	10.31	14.86	9.48	13.51
	Actual Arrival of Vessel	Cargo Discharged	2.85	3.30	2.84	3.33	3.13	3.50
	Cargo Discharged	Port Invoice Delivered	-1.27	0.69	6.29	8.87	5.24	7.56
	Port Invoice Delivered	Payment of Port Invoice	0.98	1.05	1.18	2.66	1.11	2.45
<b>Customs</b>	Declaration Received	Cargo Released	13.90	16.96	3.10	4.99	5.06	6.64
	Declaration Received	Declaration Verified	1.87	6.98	0.17	1.06	0.18	1.13
	Declaration Verified	Declaration Assessed	2.29	7.17	0.68	1.65	0.71	1.83
	Declaration Assessed	Cargo Inspected	11.96	14.9	6.77	6.83	8.34	7.72
	Declaration Assessed	Duties Paid	9.29	12.94	2.1	4.17	4.20	6.03
	Duties Paid	Cargo Released	6.03	8.29	0.00	0.39	0.00	0.11

	Process Step		Regime				Clear. Plans + Regime	
	Start	Finish	Import		Transit		PAD + Transit	
			Med	Ave	Med	Ave	Med	Ave
<b>Combined</b>	Declaration Received	Actual Arrival of Vessel	1.46	1.19	-3.60	-5.54	-1.58	-2.59
	Cargo Discharged	Cargo Released	7.29	11.72	4.30	7.19	<b>3.25</b>	<b>5.72</b>
	Cargo Discharged	Cargo Inspected	7.18	11.15	14.46	14.95	16.68	16.78
	Payment of Port Inv.	Cargo Released	7.21	9.98	-0.90	-1.67	-2.05	-4.28
	Cargo Released	Truck/Train In	-4.26	-7.60	4.80	6.82	4.76	6.98
	Payment of Port Invoice	Truck/Train In	2.95	2.38	3.90	5.15	2.71	2.70
	Truck/Train In	Truck/Train Out	0.08	0.15	0.11	0.25	0.11	0.27
	Actual Arrival of Vessel	Truck/Train Out	5.59	7.57	14.32	20.26	12.30	16.48

Source: Customs Authority. Med, median. Ave, average. Inv., invoice.

Figure 5: Payment of port invoice to customs release time delay for import and transit goods

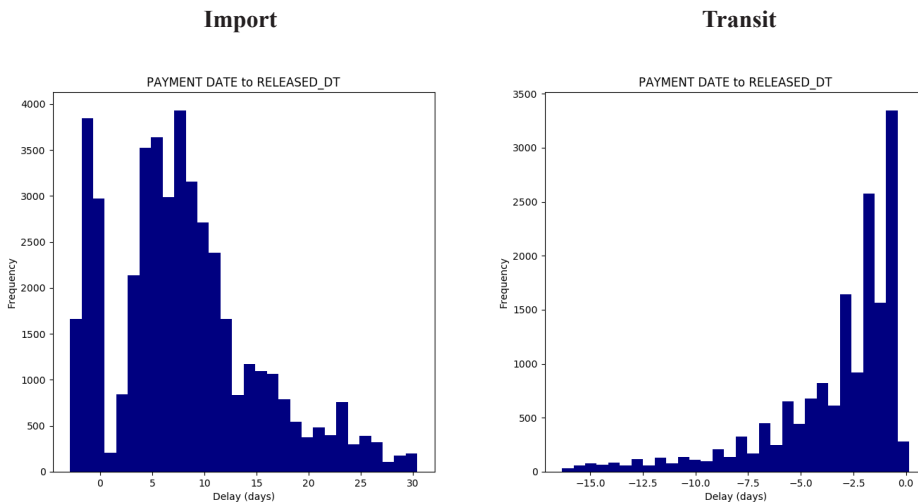
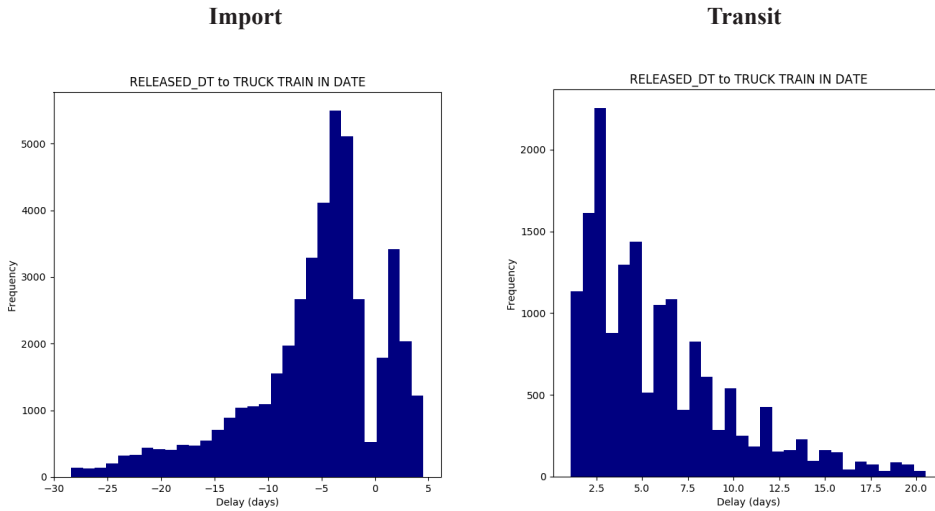


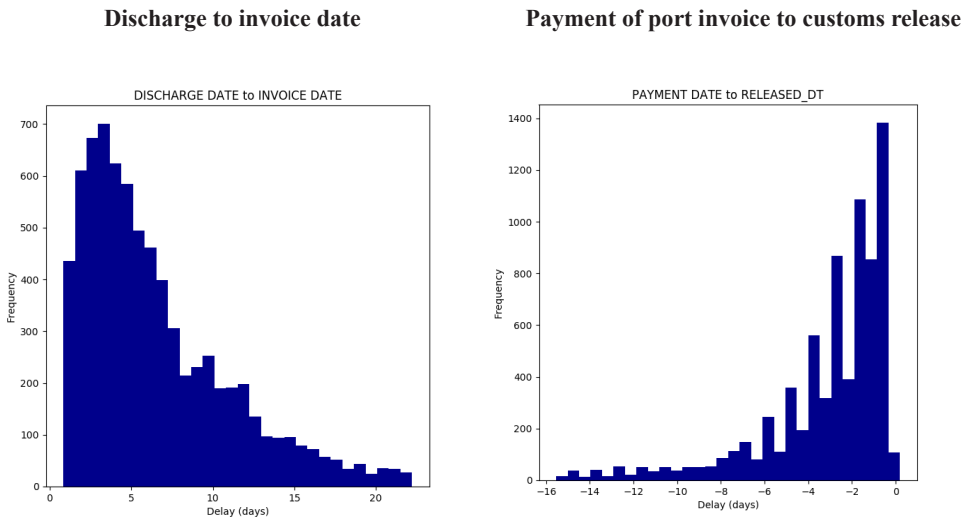
Figure 6: Customs release to truck/train entry time delay for import and transit goods



#### 5.4. Analysis for transit PAD cargo

A combined category that is of specific importance is transit cargo with a PAD clearance plan. This is cargo imported through the port but destined for a landlocked neighbouring country and where the importer used a declaration plan with the aim to expedite the process as far as possible. The median and average time delay values appear in the last two columns of Table 6. Figure 7 displays the histograms of time delays from discharge to port invoice (average value of 7.6 days) and from payment of port invoice to customs clearance (average value of -4.3 days). For this cargo category the activities of the terminal operator are the primary delaying factor, as customs clearance is provided before the port invoice is paid and port clearance is subsequently provided. This is the case mostly due to the long delay from discharge of cargo until the port invoice is delivered to the importer (this process step consumes about 75 per cent of the landside port activities until cargo is released by both customs and port for collection).

Figure 7: Discharge to invoice and payment of port invoice to customs release time delay for transit PAD goods



## 6. Measuring the contributions of traders to time delays

The above analysis assumes that the customs authority and ports terminal are fully responsible for the time delays associated with the processes that they impose on traders. In fact, the traders also contribute towards the effective time delays due to their response times, once requested by either customs or ports to either provide documentation or to collect cargo.

We therefore performed additional analyses by breaking down the customs (and ports) processes into those where customs (or ports) are responsible for completing the current activity and those where trade is responsible. For the customs chain of activities customs must receive, select, assign, accept, verify, assess, compare and release documents, while trade must submit additional documents upon request, amend documents and make payments. For the port chain of activities, the port is responsible to discharge cargo, issue an invoice and release cargo, while trade must pay the invoice and collect the cargo.

We firstly analysed only the customs chain of activities from submission of a declaration until it is released, and goods were removed from the port. Table 7 displays the relative contributions of customs and trade to this process for each customs regime. While customs consume most of the total time delay in each case, the contribution of trade is also very substantial, specifically for Import (IM4) and Transit (IM8) goods that represent the bulk of all cargo.

Table 7: Relative contributions of customs and trade to customs process time delays

Regime	All	EX3	IM4	IM5	IM6	IM7	IM8
Customs	0.56	0.93	0.55	0.81	0.65	0.66	0.58
Trade	0.44	0.07	0.45	0.19	0.35	0.34	0.42

Legend: EX3: re-exportation; IM4: entry for permanent imports; IM5: temporary import; IM6: re-importation; IM7: entry for warehousing; IM8: transit/transhipment.

We then proceeded to analyse the parallel customs and ports processes from where the vessel has arrived until goods leave the port, and divided it between customs, the port terminal and trade. This was somewhat more complex, as we first had to determine which of the customs and ports process caused the primary delay in each case. The primary delaying entity was allocated that part of the time delay that overlapped between the two parallel chains of events. By applying this logic, we derived the following set of rules for allocating time delays:

i. Contribution of Port Activities:

- If CUSTOMS RELEASE DATE < PORT INVOICE PAYMENT DATE: from VESSEL ARRIVAL DATE to PORT INVOICE DATE
- If CUSTOMS RELEASE DATE > PORT INVOICE PAYMENT DATE: from VESSEL ARRIVAL DATE to CARGO DISCHARGE DATE

ii. Contribution of Customs Activities:

- If CUSTOMS RELEASE DATE < PORT INVOICE PAYMENT DATE: zero
- If CUSTOMS RELEASE DATE > PORT INVOICE PAYMENT DATE: Total duration of all Customs Activities as from CARGO DISCHARGE DATE to CARGO EXIT DATE

iii. Contribution of Trade Activities:

- If CUSTOMS RELEASE DATE < PORT INVOICE PAYMENT DATE: from PORT INVOICE DATE to CARGO EXIT DATE
- If CUSTOMS RELEASE DATE > PORT INVOICE PAYMENT DATE: Total duration of all Trade Activities as from CARGO DISCHARGE DATE to CARGO EXIT DATE

Table 8 displays the relative contributions of customs, ports and trade to this combined process, based on the above set of rules. The contribution of trade to overall time delay is now even more apparent.

*Table 8: Relative contributions of customs, ports and trade to customs and port process time delays*

<b>Regime</b>	<b>All</b>	<b>EX3</b>	<b>IM4</b>	<b>IM5</b>	<b>IM6</b>	<b>IM7</b>	<b>IM8</b>
<b>Customs</b>	0.25	0.91	0.23	0.68	0.42	0.31	0.28
<b>Port</b>	0.23	0.02	0.23	0.11	0.22	0.27	0.23
<b>Trade</b>	0.52	0.07	0.54	0.21	0.36	0.42	0.48

Legend: EX3: re-exportation; IM4: entry for permanent imports; IM5: temporary import; IM6: re-importation; IM7: entry for warehousing; IM8: transit/transhipment.

The above results clearly indicate that traders are equally responsible, as are customs and ports, for the long delay times that are experienced. From interviews with traders, it was determined that there are, however, at least two mitigating factors in this respect:

- Customs does not always provide a complete list of required documents before a declaration is submitted for the first time, resulting in unnecessary repeated requests and submission of additional documentation before cargo is released
- The port does not allow foreign freight agents to electronically receive port invoices, resulting in delays while the local agent of a foreign agent relays such documentation to the entity responsible for payment.

## **7. Conclusions, recommendations and future research**

The above analysis provides conclusive evidence for the following findings:

- For Import and PAD declarations, the customs process is the primary bottleneck as it causes delays much beyond the ports processes. The total customs process from submission of the declaration to clearance typically ranges from 14 to 17 days. The time to verify and assess declarations and to physically inspect cargo all consume significant portions of this delay.
- For Transit and PMD declarations, the ports process is the primary bottleneck as it causes average delays beyond the customs process. In the case of the Intermodal Container Terminal from which the ports data was obtained, the total ports process from arrival of the vessel until payment of the port invoice typically consumes between seven and 15 days. As no data are available for the rest of the port operated by the Ports Authority, no results can be provided for the rest of ports operations. The single biggest contributor to ports delays is the time taken from discharge to issuing an invoice to the importer. This appears to result from the fact that transit cargo is mostly handled by freight agents from neighbouring countries, and that data about the imported cargo is not immediately available to freight agents from outside the import country, as they are not allowed to use the eSWS (electronic single window system) but must work via local agents.

- While almost no transit cargo is inspected, the large fraction of import cargo that is inspected, combined with the fact that all containers, including all transit containers, must be x-ray scanned, contributes to congestion in and around the port and adds to time delays for both import and transit goods. As the times when containers go to and return from the scanner in the port were not available for this study, the contributions of these delays cannot be determined more accurately than the information provided above.

While many aspects of operations in and around the port can be marginally improved, the average long overall cargo dwell times in the port are mainly observed for the following reasons:

- The Customs Authority selects a large fraction of import cargo declarations, specifically Pre-Arrival Declarations, for the Red lane (rather than the Yellow or Green lanes) and thus subjects them to physical inspections. This largely defeats the efforts by commercial trade to expedite the process through pre-arrival declarations as well as the purpose of having a Green/Yellow/Red lane system.
- The Customs Authority requires all containers to be x-ray scanned, resulting in further delays even after cargo is released, due to lack of sufficient port land transport capacity and due to congestion inside the port, between the port and ICDs and long queues at the scanners.
- The same standard set of documents is not always requested by customs before cargo is released; this results in many additional requests for further documents, adding further time delays while traders are preparing such additional documents.
- Foreign freight agents do not have remote access to the port system and thus do not immediately receive invoices from the port once cargo has been discharged.

The first two problem areas can be largely eliminated by employing a data analytics – based customs risk management system, which uses historical data about actual customs infractions to produce a quantified risk figure for cargo before arrival. By using such a system that is trained over a period it should be possible to reduce the fraction of physical inspections from more than 70 per cent to around 1–2 per cent high risk cases, and the fraction of scanned containers from 100 per cent to below 25 per cent representing moderate risk cases (Laporte, 2011). This should reduce cargo dwell time from around 14 days to less than three days on average, in line with international standards and to the benefit of the entire regional economy.

Based on the above, the following recommendations are made:

1. The Customs Authority should use a higher level of automation, including an intelligent risk engine, to reduce the time delay of 14 to 17 days to assess declarations. This should not take more than one to two days.
2. An eSWS should be implemented that allows local and foreign importers to exchange all required information with customs and ports authorities through one system; this will prevent late issuing of port invoices to foreign agents or repetitive customs requests for additional documents due to unavailability of data.
3. The required minimum list of documents to be submitted into the eSWS should be sufficiently complete to prevent frequent requests for additional documents after an initial declaration has been accepted by the system.

4. The requirement for all containers to be x-ray scanned should be replaced by a system where the risk profile of all containers is assessed and only high-risk containers are scanned. It is expected that this will reduce the time that transit containers spend in the port by several days.
5. The ports operator should employ enough trucks in the port to allow it to always take containers directly to the scanner after discharge from a ship. This will eliminate double movements of containers in the port.
6. Information that is collected inside the port through terminals installed in trucks and cranes should be uploaded to the central system in real time to allow the scrutiny of field operations and the immediate detection of deviations.
7. Data collected at the x-ray scanner about the time when containers are processed should be uploaded to the Customs Information System in real time to allow delays in the scanning of containers to be detected in real time.

Future research will focus on the development of a customs risk engine based on historical data reflecting the characteristics of cargo consignments and the frequency of infractions found through inspections. This will indicate the extent to which the current methods used by the Customs Authority can be improved to allow a lower inspection rate without increasing the risk posed by import cargo.

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### Alwyn Hoffman



Alwyn Hoffman has a master degree in Engineering, an MBA and a PhD from the University of Pretoria (UP, South Africa). He has worked in the South African high technology electronics industry (1985–1994 and 2001–2008) and at Northwest University (1995–2001 and since 2009). Alwyn’s recent research work focuses on the application of new technologies in the fields of transport and logistics, particularly transport corridors and has worked with many international organisations, including the World Bank and regional organisations, such as SADC (Southern Africa Development Community) and the EAC (Eastern African Community). This work is mainly aimed at establishing permanent corridor performance monitoring systems and promoting the concept of Green lanes for Authorised Economic Operators.

### Schalk Rabé



Schalk Rabé studied as a computer and electronics engineer at Northwest University, South Africa from 2010 until 2015. He is currently finishing his master degree in Engineering on implementations of corridor performance dashboards. During his studies he developed data visualisation solutions for projects from DFID (Department of International Development, UK) and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit, Germany). Currently he is involved in developing a data visualisation solution for a Cost and Performance Comparison Study for the Central and Dar es Salaam Corridors and the development of a Corridor Performance Monitoring System for Dar es Salaam Corridor. This involves the implementation of a cloud-based dashboard that presents key performance indicators for a wide range of corridor stakeholders.

### Kristen Hartpence



Kristen Hartpence is the Logistics Practice Lead at Nathan Associates Inc. in Arlington, Virginia, USA. She has a master degree in Applied Economics from Johns Hopkins University (USA) and bachelor degree in economics and international relations from Lehigh University, USA. Ms. Hartpence’s recent work has focused on assessing the performance of transport corridors in eastern and southern Africa and eastern Europe and proposing actions for reducing the time and cost to trade. Other assignments have looked at the potential economic impact of trade facilitation and transport improvements. Her work has included projects sponsored by the United States Agency for International Development (USAID), the World Bank, the African Export-Import Bank, and others.

# The global zone network, a safe pathway to prosperity in the post-Coronavirus era?

*Lars Karlsson, Shanker Singham and Daniel A. Gottschald*

## Abstract

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The coronavirus pandemic has underlined the vulnerability of global supply and value chains. Free trade zones can play a crucial role in re-booting the world economy but need to break out of the historical binary paradigm through which they have traditionally been viewed. New multitiered Advanced Special Economic Zones (ASEZs), named Prosperity Zones, need to be created with an inner core built around a modernised compliant free trade zone, and with outer layers offering integrated incentives and benefits for a wide range of businesses and support services. These zones will be the engine room of new and more resilient 'Trade Superhighways' that offer increased safety, compliance, predictability and flexibility to international trade.

This paper outlines the development of a new paradigm of transparent and compliant Prosperity Zones that have emerged from traditional freeports and freezones<sup>1</sup> and how these new Prosperity Zones will play an essential role in the development of emerging supply chains and future integrated value chains, especially in the aftermath of the COVID-19 crisis. This paper will highlight the importance of developing a new and all-embracing global standard for Prosperity Zones and the potential for the emergence of new Trade Superhighways that will bring greater transparency to trade and become a crucial factor in driving value during the coming economic recovery.

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## 1. Introduction

Freeports, freezones, and other types of special economic zones (collectively called free trade zones), often based around ports, are facing twin pressures in their roles within the international supply and value chains. These free trade zones need to break free from the historical binary trade/export and high-risk framework that has characterised their operation and perceptions. For some time, free trade zones have needed to address the perception and reality that they have too often become the target for illicit trade and criminal syndicates. Mechanisms such as the World Free Zones Safe Zone Program,<sup>2</sup> the Organization for Economic Cooperation and Development (OECD) Code of Conduct for Clean Free Trade Zones,<sup>3</sup> and Authorized Economic Operator<sup>4</sup> status, as well as the use of advanced data technologies and integration with Customs, offer an opportunity for free trade zones to clearly differentiate themselves as a transparent and compliant institution in the global supply chain.

The second and more immediate pressure is how free trade zones can respond to the economic crisis caused by COVID-19 and the emergence of protectionism. In the coming years, the world will need a burst of wealth creation and private sector economic growth. The longer the pause in the economy caused by COVID-19, the more vital this will become (Organization for Economic Cooperation and

Development [OECD], 2020, p. 2). The need for renewed emphasis on ensuring the resilience of global and regional supply and value chains has been recognised (OECD, 2020b, COVID-19 and international trade issues, p. 9), and Prosperity Zones as hubs will play an increasingly important role in economic recovery.

A new type of free trade zone, Prosperity Zones, can become high-performing multidimensional zones, supporting an ecosystem of innovative and value-creating businesses and support services around a core free trade zone recognised for its transparency and compliance. Prosperity Zones will form the basis of new Trade Superhighways that will deliver to host countries the economic growth needed to recover from the COVID-19 economic crisis, and the supply chain resilience that businesses are demanding as they create new ‘just-in-time-always’ supply chains within a trading environment increasingly marked by the threat of protectionism.

## 2. The historic view of the freeports and freezones: a binary paradigm

By some estimates, there are more than 5,000 different types of free trade zones currently in operation in more than 140 economies around the world (United Nations Conference on Trade and Development [UNCTAD], 2019, p. 129). The nature of and nomenclature around free trade zones has changed since the first free ports were established as far back as the early eighteenth century. At the core of all the types and descriptions of these free trade zones is the concept articulated in Specific Annex D of the World Customs Organization International Convention on the Simplification and Harmonization of Customs Procedures (as amended), known as the Revised Kyoto Convention (RKC), where goods in a free zone are considered outside the customs territory for the purposes of duties and taxes (World Customs Organization [WCO], 2008, Specific Annex D 2.1). More broadly, Prosperity Zones have developed to become areas that provide “advantages to business with respect to tariffs, financing, ownership, taxes and other regulatory measures that would otherwise be applicable in the host country” (OECD, 2018, p. 116).

Regardless of the exact nature of the advantages provided to businesses, different types of free trade zones have historically been viewed through a binary paradigm: economic benefits delivered through trade and exports tempered with risks of illicit trade and criminality. This paradigm has resulted in the clumping together of zones without a clear differentiation of transparent, compliant, and high-performing zones from other low-performing zones.

When it comes to economic benefit, free trade zones are designed to act as drivers of growth and, in particular, to attract foreign direct investment (FDI), increase employment and industrial activity, and bring benefits to the host economy primarily through the vehicle of trade. While some studies suggest that the economic benefits of these Prosperity Zones can be difficult to distinguish from growth in the host country (World Bank, 2017, p. 117), other studies have identified clear economic benefits accruing to the communities and areas around different types of zones, including jobs and wage growth as well as value-add for local, small – and medium-sized businesses (The Trade Partnership [TP], 2019, pp. 1–2). Other studies confirm the benefits of free trade zones to global value chains (Siroën & Yücer, 2014, p. 22) as well as the benefits for individual company supply chains (TP, 2019, p. 2).

Notwithstanding the benefits of free trade zones, much attention has been given to the historical issues of illicit trade and organised crime in these zones. This has had a significant negative impact on the perception of zones and the consequent benefits. One of the areas that has garnered most attention over a long period of time is the issue of intellectual property crimes and counterfeiting in particular. Studies have shown that the presence of free trade zones in an economy increases the presence of piracy and counterfeiting in that economy (Organization for Economic Cooperation and Development

and European Intellectual Property Office [OECD/EUIPO], 2018, p. 53) and other studies provide case studies of counterfeit and piracy linked to free trade zones (International Chamber of Commerce [ICC], 2013, pp. 25–28) and the use of free trade zones as trans-shipment points for illicit trade (Financial Action Task Force [FATF], 2010, p. 15). A 2010 report from the FATF (2010, p. 27) identified the risks that free trade and other zones present for money laundering, fraud and other financial crimes.

Many of the drivers of illicit trade and crime in free trade zones are now being addressed. Among the underlying causes has been the absence of international standards (OECD, 2018, p. 116), as well as the fact that while these zones are outside the customs territory only for the purposes of duties and taxes, a low-level of customs involvement in the design and operation of free trade zones has left them vulnerable (Omi, 2019, p. 3). The lack of transparency and ability to monitor transactions and the movement of goods within free trade zone operations has also been identified as an underlying issue in illicit trade and crime (FATF, 2010, p. 28).

The historical binary paradigm for free trade zones of economic benefit and high risk is no longer relevant. A new Prosperity Zone paradigm is now emerging that seeks to clearly differentiate transparent, compliant, and high-performing free trade zones that can generate benefits for global supply and value chains as well as the local, regional and global economy. This new paradigm has never been more critical as the world seeks to emerge from the economic crisis in the wake of COVID-19 and the threat of trade protectionism.

### 3. The new global supply and value chain landscape

The world of trade has changed. Over the past decade, more advanced supply and value chains have emerged and today about 70 per cent of international trade involves global value chains (OECD, n.d., The trade policy implications of global value chains. Global value chains and trade, p.1) and more than half of the goods traded in the world are intermediate goods (UNCTAD, 2018, p. 12). This has created a highly integrated and complex global trading environment. Most trade now is intracompany trade not intercompany trade. This intracompany trade enables greater specialisation, lower costs and ultimately has generated significant economic growth. The issues surrounding the United Kingdom's exit from the European Union shows just how integrated economies can and have become.

In a recently released paper, the European Central Bank (di Nino et al., 2020) highlighted the critical role that free trade zones will play for global value chains in a world where protectionism is increasing, both due to trade conflicts and in the wash-up of COVID-19:

Products manufactured within global value chains (GVCs) obtain the greatest cost-saving benefits from FTZs [Free Trade Zones], as they typically cross borders repeatedly and would otherwise be subject to duties at each border. In the absence of FTZs, tariffs would pile up on GVC products because they are levied on the gross value of the item and not on the value added at each stage. (p. 1)

These global supply and value chains are fast, efficient and cost-effective, but are also highly vulnerable as the COVID-19 crisis has shown. This impact can be seen by the fact that the six countries hit hardest by the coronavirus as of 20 March 2020 accounted for 50 per cent of world manufacturing exports (Baldwin & Tomiura, 2020, p. 59).

The challenge now is to rebuild economies and trade without losing the benefits that have been achieved in recent years through the creation of global value and supply chains. Businesses will increasingly move to create more resilient supply chains, moving away from 'just-in-time' sourcing – often reliant in one supplier – to using of multiple suppliers and more sophisticated inventory management (Bain & Company, 2020, p. 70) to develop new 'just-in-time-always' supply chains. The increasing risks of trade wars and isolation will only reinforce this trend.

These approaches will create new, more dynamic and often more complex supply and value chains. Businesses will require increased visibility over supply chains and greater flexibility to be able to respond to new shocks, particularly in transportation and logistics.

We expect that these trends will concentrate the goods flows into the already existing major trade routes creating new ‘trade highways’ that increase the role and importance of the major free trade zone hubs and support the emergence of new hubs. Future trade highways will be much more than just trade and logistic routes – they shall become well-managed, serviced and self-expanding prosperity corridors. Competition along these highways will shift from a fight for capacities, access and control to a competition of the most advanced service providers and most functional governance structures. Just as in the IT sector there is ever more increased competition between platforms than within technologies in the same platform, we can expect the most efficient, and best regulated, Trade Superhighways will compete (often for the business of the same company).

Both the existing and new hubs will link major market groups of economies and offer regionalised or local production, warehousing and new free trade zone capacity. To break the historical free trade zone paradigm, these expanding and new hubs will need to be clearly differentiated from existing zones across several dimensions. Prosperity Zones will need to be able to offer the transparency, compliance and high-performance to not only meet the needs of supply chain resilience, but to demonstrate – through certification programs such as the WCO Authorized Economic Operator (AEO) program certification and others – that they offer a low-risk operating environment to host countries and businesses. They will also need to be able to demonstrate that they have the operational capabilities to deliver resilient supply chains. Finally, they will need to be able to show that they can move beyond the current economic benefit paradigm to become fully-fledged Prosperity Zones

### **4. Prosperity Zones: a multidimensional paradigm**

The first element in the creation of a new Prosperity Zone will be the development of multidimensional zones. These zones will incorporate a layering approach with an inner core built around a modernised compliant free trade zone and with outer layers offering integrated incentives and benefits not only for businesses involved in manufacturing, trading, and logistics, but also in the areas of technology, education, innovation and support services. This layered ecosystem creates a multiplier effect expanding both the range and depth of benefits a free trade zone creates.

Those Prosperity Zones that offer this multidimensional approach will be clearly differentiated from free trade zones operating in the existing binary trade/export paradigm.

Part of the successful establishment of Prosperity Zones will be removing many of the distortive effects of the “behind-the-border barriers” and regulatory distortions (Singham et al., 2016, p. 2) that can act as disincentives to trade and development. Addressing issues such as the procedural burden to import and export within the core free trade zone have been identified as particularly important as have labour laws, the regulatory process and access to infrastructure (Singham et al., 2016, p. 12). In many countries these Prosperity Zones will not be enclaves of success embedded in poor countries or neighbourhoods but will be alternative delivery mechanisms for reform as they will demonstrate what a successful approach looks like. Increasingly, the tax breaks and incentives that traditional FTZs provide are not enough by themselves to stimulate investment, and allow the deployment of global capital, much of which remains on the side-lines and stuck on balance sheets. These Prosperity Zones can use several tools including a more pro-competitive regulatory framework to attract this capital. The impact of distortion reduction has been underestimated (Singham & Rangan, 2018).

The heart of a Prosperity Zone is a free trade zone. Unlike traditional free trade zones, these will break free of the historical zone paradigm by developing several key characteristics:

- **Compliance with the Revised Kyoto Convention<sup>5</sup> (RKC):** Prosperity Zones will need to ensure compliance with the RKC as a starting point for low-risk operations.
- **Certification under internationally recognised compliance programs:** This can include AEO certification as well as certification under the World Free Zones Organizations Safe Zone and compliance with the OECD Code of Conduct for Clean Free Trade Zones.
- **Fully electronic operating environment:** Ensuring that the Prosperity Zone and businesses operating within the free trade zone can achieve transparency and auditability in their operations.
- **Integration with Customs:** Allowing not only for an on-site customs presence, but the sharing of data, giving Customs and other regulatory agencies visibility over goods and commercial activity within the zone.
- **Modern customs practices:** This includes, among others, fully electronic single windows and an electronic customs environment, the use of modern technologies to monitor cargo movements and inspections away from the entry/exit of the free trade zone, and Mutual Recognition Agreements<sup>6</sup> (MRA) as part of developing Trade Superhighways.

Above all, Prosperity Zones will operate on the basis that although they are outside the customs territory for the purposes of duties and taxes, they are not outside the law, and money laundering and intellectual property right (IPR) laws will apply. A low-risk operating environment and integration with Customs and other government authorities has a positive re-enforcing effect: high-quality and sustainable businesses prefer to operate in this setting, which in turn attracts and builds other high-quality and sustainable businesses. Indeed, successful Prosperity Zones will attract tenants and investments by providing more transparency, not less, offering higher standards of IPR regulations and guaranteeing a more effective enforcement of compliance. Their code of conduct shall be a benchmark for the national regulatory framework, not a reduction.

Beyond the core free trade zone, the new breed of Prosperity Zones will create an environment that supports the creation of new businesses and services. By having the right set of integrated regulations and incentives, Prosperity Zones can create a multiplier effect that drives the creation of additional value to businesses as well as the host economy. This also sets up Prosperity Zones to be able to meet the current and future changing nature of international supply and value chains.

To bring the outer layers of the Prosperity Zone to life will require an integrated approach between governments and other businesses and authorities to ensure that the regulatory structures, incentives, and soft and hard infrastructure are in place to generate development. Some of the key elements that will drive these structures and incentives include:

- **Governance:** A single governance structure for the Prosperity Zone that provides one face and stands between investors, tenants, and government departments. Governance issues are critical in generating economic activity and for creating certainty for all stakeholders.
- **Infrastructure:** Infrastructure beyond the core free trade zone will facilitate the development of supporting businesses and services. As Prosperity Zones will be connected by superhighways, production within each zone will be connected by an integrated provision of media, feedstock, disposal, supply and logistic services, which optimise value creation. Core elements of such an integrated infrastructure are circular economy platforms to turn waste streams out of the zone into value streams within the zone, a smart grid system to allow stable, efficient and autonomous energy supply, an intelligent, digitally controlled supply platform and cyber-physical logistic system to ensure fastest time-to-market, but also advanced communication infrastructure and a high level of safety and security installations.

- **Competence centres:** One element that can promote the development within the wider Prosperity Zone is the creation of competence centres that can act as providers of qualification services, operators of laboratories, testing facilities and business incubators as well as coordinators of port-related research programs. They can be established through links with educational institutions<sup>7</sup> and
- **Innovation:** Creating incentives for the testing and application of new technologies and services can also promote the development of businesses and new services. For example, the increased use of artificial intelligence in ports and logistics can be encouraged. The use of A Prosperity Zones as a test bed for new technologies can create a leverage point for innovation in trade related services.

It is critical to recognise when designing the framework for Prosperity Zones that it is not static and will change over time. Just as COVID-19 has forced adaptations in how global supply and value chains operate, so the framework will need to be updated over time.

Prosperity Zones will create a new global free trade zone paradigm with a multilayered and high-performance ecosystem able to meet the needs of the new supply chains and value chains emerging from the COVID-19 crisis. These Prosperity Zones will be highly differentiated from traditional zones and will also be much better positioned to adapt and meet future changes in the international trading environment. Prosperity Zones will only be able to realise their full value when they can demonstrate high levels of compliance and transparency within an internationally recognised framework.

### **5. Authorised safe and clean free zone: transparency and compliance paradigm**

Another element in breaking the historical binary paradigm for free trade zones is the creation of new Prosperity Zones that are clearly differentiated based on low risk and high levels of transparency and compliance. This approach directly addresses the reality and perception around the use of zones for illicit trade and crime. As noted earlier in this paper, the establishment of transparent and compliant Prosperity Zones is a self-reinforcing virtuous circle: reputable and dynamic companies will establish in those Prosperity Zones that offer transparency and compliance which will in turn attract new businesses. This will also reinforce the multidimensional aspect of Prosperity Zones as outlined in this paper.

Creating transparency and compliance is considered as a key driver of improved performance of zones regarding illicit trade and crime, most recently in the OECD Recommendation of the Council on Countering Illicit Trade: Enhancing Transparency in Free Trade Zones (OECD, 2019, p. 2). Prior to this the ICC has identified the need for compliance and a lack of transparency (ICC, 2013, pp. 5, 6) as major issues as has the FATF (FATF, 2010, pp. 16, 20).

One of the tools that has been recognised as most important in achieving a critical level of transparency and compliance is the World Customs Organization SAFE Framework of Standards which includes at its core the concept of Authorized Economic Operators (WCO, 2018a, p. 23). An AEO is defined as a party involved in the international movement of goods that has been approved by, or on behalf of, a national Customs administration as complying with World Customs Organization or equivalent supply chain security standards and is open to all participants in international supply chains. When certified as an AEO, businesses receive benefits including faster processing times, fewer interventions and lower compliance costs. There are now more than one hundred AEO and customs compliance programs operating around the world (WCO, 2018b, p. 3), covering potentially hundreds of thousands of operators.



In recent years there has been an increasing number of supply chain participants becoming AEO-certified by customs administrations, including transporters, logistic providers, freight forwarders, trading companies, ports, airports, terminal operators and warehouse owners. The importance of AEOs for the future world trade environment is highlighted by recognition of Authorized Operators in Article 7 of the World Trade Organization (WTO) Agreement on Trade Facilitation (WTO, 2014).

AEO supply chain participants are now increasingly being linked through Mutual Recognition Agreements (MRAs) between national customs administrations. Under these agreements, customs administrations recognise each other's AEO programs and AEO-certified operators. More than 75 MRAs have been concluded globally with more than 50 under negotiation. These MRAs have paved the way for the creation of secure end-to-end supply chains – a pre-requisite for the development of future Trade Superhighways.

For the new breed of Prosperity Zones, AEO certification for the zone and for the tenants and businesses that operate within the core and outer layers of the zone will be a critical point of differentiation and a demonstration that they have achieved high levels of transparency and compliance. This will be an important element in putting Prosperity Zones at the heart of future resilient supply and value chains as they can offer security and certainty to businesses reliant on those chains.

Recognising the special issues that pertain to free trade zones, there are several initiatives now under way to address the issues of transparency and compliance within zones and that will allow the new breed of Prosperity Zones to differentiate themselves based on low risk.

One of the major initiatives has been the development by the OECD of a Code of Conduct for Clean Free Trade Zones (Code of Conduct). This Code of Conduct was developed in consultation with the WCO, WTO and FATF as well as OECD members, global supply chain participants and free trade zones. The Code of Conduct aims to “assist governments and policy makers in reducing and deterring illicit trade conducted through and inside Free Trade Zones” (OECD, 2019).

The OECD Code of Conduct includes a number of measures designed to increase transparency and compliance within free trade zones, including, but not limited to: providing unconditional access to competent authorities (for example, Customs, police or other government agencies), in accordance with their domestic law, to carry out enforcement checks of operators; prohibiting operators and persons who do not provide the necessary assurance of compliance with the applicable customs provisions from carrying out an activity in the FTZ; ensuring that economic operators active in the free trade zone maintain detailed digital records of all shipments of goods entering and leaving the zone, as well as all goods and services produced within it and providing access to those records; and, ensuring that economic operators active in the FTZ are required to grant access to their detailed digital records upon request of the competent authorities in the jurisdiction where the zone is established (OECD, 2019, p. 4).

To build on the Code of Conduct, the OECD is now leading the development of mechanisms to assess free trade zones that will allow them to become recognised as ‘Clean Zones’ (OECD, 2019, p. 4).

In addition to the development of the OECD Code of Conduct, another initiative to allow free trade zones to achieve recognition as transparent and compliant is the World Free Zone Organization (World FZO) Safe Zone program.<sup>8</sup> This world-first approach involved an interactive partnership with the OECD and the OECD's Code of Conduct forms the core of the Safe Zone program together with a Security Declaration. The Safe Zone program provides a clear pathway for recognition of transparency and compliance and, in addition to incorporating the OECD Code of Conduct, is based on the WCO SAFE Framework of Standards. Using self-assessment and external validation, Safe Zone is a multitier program with built-in re-certification that provides the track record of compliance needed for free zones to achieve AEO certification.

The first of the emerging group of Prosperity Zones will be in the vanguard of zones seeking to achieve recognition under a range of programs, including Clean Zone, Safe Zone and ultimately achieving AEO status. Over time more and more zones will achieve this recognition of their compliance and transparency creating an ever-wider network of AEO zones. These zones will also be supported by the growing number of MRAs and will underpin the emergence of new Trade Superhighways that will be needed for future resilient supply and value chains.

### **6. Trade superhighways: a champions league for approved operators**

The need for new, more resilient global supply and value chains and the emergence of high-performing transparent and compliant Prosperity Zones support by MRAs will facilitate the creation of new Trade Superhighways. Along these Trade Superhighways, Prosperity Zones will be the engine rooms and routers in resilient supply and value chains, creating a new higher quality level of approved operators, a “champions league division”, like a group of football clubs elevated their own division due to their strengths and results.

Trade Superhighways will create new levels of supply chain flexibility and visibility for manufacturers, suppliers, traders and other supply chain participants that have also achieved AEO status. Inputs, intermediate and finished goods will be able to be routed to, through, and onto Prosperity Zones in the same country, region or another continent using these trade ‘green lanes’ with a minimum of control and supported by the network of manufacturing and other support services within Prosperity Zones. It will open the opportunity for business to create ‘just-in-time-always’ supply chains where goods stay within a controlled AEO ecosystem and decisions on shipping and distribution can be made late in the process due to the ability to move goods quickly in a low-friction trade environment.

Underlying the creation of Trade Superhighways will be Custom’s use of modern border management strategies, in particular the use of data, and as noted earlier, through Prosperity Zone integration with Customs. Modern border management strategies focus on obtaining advance notification of the arrival of goods and people. Supported by MRAs, access to this supply chain data enables risk assessments and customs checks to be performed at all points in their journey, not just when they physically arrive at the port. This ‘multiple border strategy’ provides access to a much richer pool of data to strengthen the compliance and risk assessment for each consignment for use by Customs as well as compliant Prosperity Zones. For example, in addition to consignment information providing details on the nature of the goods, other factors such as manufacturer, shipping agents, carriers, consignees and consignors, embarkation and whole journey details can be obtained and mined to build a more robust risk profile. Prosperity Zones will need to be integrated with Customs and have these modern best border management practices as part of the simplified and streamlined customs administration to maintain globally competitive and efficient services, which support resilient supply and value chains.

Increasing digitisation improves the speed, flexibility and accuracy of supply chains and also feeds into the use of modern border management practices. Emerging technologies such as blockchain will also play an important role, giving greater visibility to all players in the supply chain and allowing Customs, Prosperity Zones and other supply chain participants to take full advantage of the Trade Superhighways.

The creation of a network of Prosperity Zones will also support Trade Superhighways. There will be an incentive for the new breed of Prosperity Zones to collaborate, coordinate, and share to be able to provide networked services to the clients. This will be supported by the natural specialisation that will evolve for Prosperity Zones at a national, regional, and international level.

Trade Superhighways will allow connectivity to different kinds of economic zones: they are not exclusive channels between a few production sites, but will integrate smaller ‘Resilience Hubs’, local competence centres and clusters as well as large-scale Prosperity Zones into a global community of more flexible, resilient and efficient value creation. Their key features are:

- **A high-standard service infrastructure** offered and provided by operators of the Prosperity Zones involved. This will include sourcing, tracking and integrated logistics services, but also talent, knowledge and technology scouting, financial services and general business support. You will find along a Trade Superhighway the typical service portfolio of a strong logistics cluster, and it is a natural that the world’s leading logistics clusters are not allocated at one geographical place, but along a global highway.
- **A self-controlled governance structure** making sure that Trade Superhighways are not just bridging the outskirts of Prosperity Zones, but are subject to the same high governance standard as geographically routed zones. A market mechanism will be in place to apply the most suitable regulations from different Prosperity Zones for operations along the Superhighways, and – as ownership of goods, vehicles, information and technology may change on their way along the Superhighway – compliance with these regulations will be mandatory in order to benefit from business opportunities along ‘prosperity corridors’.
- **An emerging visibility and socioeconomic identity** demonstrating that Trade Superhighways are not just a symbol for a free, sustainable and fair globalisation, but that they actually enfold soft power to motivate a new work and business culture in particular in places outside a Prosperity Zone. Well-managed, noninvasive Superhighways will deliver hope and opportunities to a broad spectrum of the global society and in fact enable a real ‘glocalisation’ – preserving local heritage and identity by giving access to the world’s prosperity hotspots without forcing people or businesses to leave their traditional clusters.

The development of trade superhighways (see Figure 1 below) will not only bring benefits to supply chain participants, governments and A Prosperity Zones, but will be an important part of the economic recovery from COVID-19 by delivering more flexible and efficient trade. They will also provide a bulwark against potential trade wars and protectionism for modern complex, flexible and resilient supply and value chains.

Figure 1: Trade Super Highways driven by Prosperity Zones<sup>9</sup>



Source: Technical University of Munich, TUM International GmbH

## 7. Conclusion

A new breed of Prosperity Zones is emerging, characterised by their multidimensional nature and their transparency and compliance. These Prosperity Zones break free from the historical binary trade/export and high-risk freezone/freeport paradigm. At the core of the new Prosperity Zones will be a new type of high-performance free trade zone that is integrated with Customs, employs modern customs and trade practices, and achieves recognition through programs such as Safe Zone, Clean Zone and AEO certification. Prosperity Zones will also be characterised by the ecosystem of innovative business and support services within a wider zone and the requirements for high levels of compliance for businesses and tenants within the Prosperity Zones.

Driven by the need to create more resilient supply and value chains in the wake of COVID-19 and the risk of greater protectionism, Prosperity Zones will pave the way for the creation of Trade Superhighways that provide high levels of flexibility and visibility for all supply chain participants. These Trade Superhighways will support new ‘just-in-time-always’ supply chains by allowing goods to be moved quickly and efficiently with a low-friction trade environment.

Prosperity Zones and Trade Superhighways offer significant opportunities for businesses and customs administrations. Higher levels of visibility and flexibility create the conditions for greater economic benefit from trade and a more compliant, transparent, and secure trading environment. The concept of Trade Superhighways as the aorta of the global economic bloodstream provides an obvious alternative to the negative aspects associated with globalisation – a highly functional, decentralised and open prosperity corridor, unlocking the economic power of highly Prosperity Zones to socioeconomic ecosystems all over the world.

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### Notes

- 1 While the characteristics may vary between individual countries and economies, the terms free zone, freeport, free trade zone, special economic zone are often used interchangeably when analysis is undertaken at a regional or global level. For the purposes of this paper all these terms refer to designated areas providing certain advantages to business with respect to tariffs, financing, ownership, taxes and other regulatory measures than would otherwise be applicable in the host country. This is based largely on the definition used by the OECD in its 2018 report *Governance Frameworks to Counter Illicit Trade* (2020, p. 116) and draws on the definition of Free Zone used in the WCO Revised Kyoto Protocol Specific Annex D.
- 2 Established in 2019 by the World Free Zones Organization, Safe Zone is the world's first free trade zone compliance program. Safe Zone is a voluntary compliance program based on the Authorized Economic Operator concept and offers multi-tiered compliance levels with the highest level being certification as a 'Safe Zone'. The Safe Zone program incorporates the OECD Code of Conduct for Clean Free Trade Zones as well as a Security Declaration.
- 3 The OECD Council adopted the Recommendation on Countering Illicit Trade: Enhancing Transparency in Free Trade Zones on 21 October 2019. The recommendations aim to "to assist governments and policy makers in reducing and deterring illicit trade conducted through and inside Free Trade Zones" (OECD, 2019). The recommendations include a Code of Conduct for Clean Free Trade Zones and also include an instruction for the establishment of a mechanism to assess the performance and compliance of free trade zones with the Code of Conduct (OECD, 2019, p. 4).
- 4 The Authorized Economic Operator (AEO) Program was established in the SAFE Framework of Standards to Secure and Facilitate Global Trade (as updated in 2007) as a 'trusted trader program' to balance heightened security requirements with a continuing global need for trade facilitation. It provided for the security vetting of trading and logistical companies and for expedited customs clearance for those who qualified. The SAFE Framework of Standards to Secure and Facilitate Global Trade was adopted by the WCO Council in June 2005 in response to the 9/11 terrorist attacks and aims to act as a deterrent to international terrorism, secure revenue collections and promote trade facilitation worldwide. The standards have been updated several times, most recently in 2018.
- 5 The World Customs Organization International Convention on the Simplification and Harmonization of Customs Procedures (as amended).
- 6 As defined by the WCO, Mutual Recognition Agreements are a broad concept embodied within the SAFE Framework of Standards, whereby two countries close an agreement or arrangement to mutually recognise AEO authorisations that have been properly granted by one customs administration. This can also include mutual recognition of AEO validations and authorisations, customs security control standards and control results to eliminate or reduce duplication of effort (WCO 2018, AEO Mutual Recognition Strategy Guide, p. 3).
- 7 Examples of institutions are the Competence Centre for Port and Energy Logistics (by Transalpine Pipeline Group, Port of Trieste, Italy, and the Technische Universität München, Germany) and the Centre for Customs and Excise Studies (CCES), Charles Stuart University, Australia.
- 8 <https://www.worldfzo.org/Services/Support/safe-zone>
- 9 Figure 1 illustrates the portfolio of knowledge-driven socio-economic ecosystems, as developed by TUM International GmbH of Technische Universität München, Germany: these ecosystems differ in their key function of managing local cluster networks, applying technology innovation, optimizing supply chains or integrating all of these missions within a prosperity zone. As local or international hubs, they are all connected by Trade Super Highways to support global value creation and control compliance of transactions. The level of connectivity is a key quality indicator for all of these hubs.

**Lars Karlsson**

Lars Karlsson is Chief Executive Officer of KGH Global Consulting, providing consulting services to governments and companies worldwide as the global customs competence centre of Maersk. He has served as the Director for Capacity Building at the WCO and as Director General of Swedish Customs. Lars Karlsson has an extensive background over three decades in Customs, borders and international trade policy. He was the architect of the world's first Authorized Economic Operator (AEO) program and has served as a senior advisor to the EU and the UK on Brexit. He is a Doctor of Education (honoris causa) and holds a Master in International Customs Law and Administration. He is an advisory board member of the International Network of Customs Universities (INCU), and a board member of the International Border Management and Technology Association (IBMATA) and the International Summit on Borders (ISoB).

**Shanker Singham**

Shanker Singham is Chief Executive Officer of Competere, Academic Fellow of Institute of Economic Affairs and Chairman of GlobalVisionUK.com. Shanker was an advisor to the US Trade Representative and to the UK Trade Secretary and is a non-government adviser to the International Competition Network. He is one of the world's leading trade and competition experts and a regular commentator on TV, radio and in newspapers.

**Daniel A Gottschald**

Daniel A Gottschald has held several board positions at Technical University Munich (TUM). He was CEO of TUM's international venture arm TUM International GmbH and director of the Siemens Center of Knowledge Interchange at TUM. Daniel was managing director of Southern Germany's chemical industry network, Chemie Cluster Bayern GmbH, chairman of the Cluster Excellence Expert Group of the European Commission and engaged in many international cluster and research projects. He coordinated the development of more than 20 technology-driven production clusters worldwide.





# Exploring human resource management approaches to improve performance in the new customs agency in China from a human resources business partner perspective

*Nan Li*

## Abstract

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As a law enforcement department which is affiliated to the state council, China Customs is playing an important role in safeguarding international trade and national security. China Customs witnessed a fundamental change in 2018, with the merging of the China Entry-Exit Inspection and Quarantine Bureau (CIQ). The restructured government agency is facing a series of challenges in human resource management due to changes in human resource policies following the merger.

This research aims at proposing an innovative approach to human resource management in a selected customs branch, based on surveys and interviews. By distributing questionnaires to nearly two hundred customs officers, analysis was conducted through both qualitative and quantitative methods.

This article discusses the possibilities of adopting a human resources business partner (HRBP) model in this government agency. The results show that this model is overwhelmingly supported by customs officers at various levels and demonstrate the added value of the HRBP. However, the author realises that there is a long way to go for the implementation of HRBP in the customs service in China for a couple of reasons, and this article further proposes an action plan in implementing an HRBP model in the service.

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## 1. Introduction

### 1.1. Organisational change

After experiencing fast development for years, China's foreign trade has entered a 'new normal' featured by single digit growth. According to the Xinhua News Agency (2014), China is now the world's largest trading country in goods and is firmly implementing its 'opening-up policy';<sup>1</sup> however, significant changes have occurred, and China is facing increasing security threats associated with entry and exit activities. Since the reform and opening-up at the end of 1970s, China has carried out seven reforms of government agencies to reduce administrative costs and improve efficiency and effectiveness. The latest reform was initiated in 2018, aimed at streamlining the central government and providing better service to the public.

The central government requires the customs authority to improve customs supervision and service. Hundreds of import and export enterprises and all sectors of society have high expectations for the fair enforcement and efficient services of Customs. Consequently, promoting the healthy and stable growth of foreign trade has become a long-term task of Customs. From a global perspective, China is engaging in the implementation of the 'Belt and Road Initiative',<sup>2</sup> promoting pragmatic cooperation with relevant countries and regions in various fields for mutual benefit between the east and the west. A new customs authority was established in April 2018, which incorporated the responsibilities and staff of CIQ. The total number of employees of the organisation increased from about 60,000 to nearly 100,000.

### **1.2. Challenges faced by the new customs authority**

Operational adjustment is one of the main challenges faced by the new service, but it is by no means the only one. Human resource management is regarded as another major concern. Before the merger, Customs and CIQ had their own responsibilities and human resource management policies and practices, wore different uniforms and had totally different cultures.

Before the new government department was established in 2018, HR policies of the former customs agency needed great improvements. Many customs officers complained about the HRM practices which indeed, from the author's perspective, were far from reasonable. The challenges faced by the new service, as identified in the study, are summarised below.

#### **1.2.1. Transformation of HR department functions**

It is generally believed that HRM should contribute to the strategy of the whole organisation, as Armstrong (2005, pp. 196) points out, 'HR is not a menu of fads, fashions, and prejudices loosely connected to the business' but one 'creating opportunities for employees to share extensive information about their organisation and to participate in decision making'. However, HR departments at different levels of Customs are still playing traditional roles, and HR staff perform like a 'mechanical operation' with standards based on the requirements of higher levels in the hierarchy rather than performing with innovation, not to mention providing strategic support to the organisation.

#### **1.2.2. Person-post matching**

Person-post matching in the new organisation needs considerable improvement because previously customs officers had been allocated positions on a random basis in many cases. It is necessary to stress that Customs is a law enforcement department, and many posts require professional knowledge, such as inspection, inbound and outbound goods declaration, and tax collection, and the CIQ work has its own technical requirements as well. After the merger, new departments were established consisting of both customs and CIQ staff with different academic backgrounds and experience, and there was a lack of a talent assessment procedure before job allocation. As a result, many employees found that the jobs they were doing did not fit them, and negative consequences appeared later in the workplace.

#### **1.2.3. Human resource development**

Many customs officers are in jobs which fail to draw upon their educational background. As a result, staff who are not interested in their positions become less motivated as time goes by. Also, job rotation policies are not sufficiently flexible which may lead to a career 'glass ceiling' for a few customs employees, resulting in a higher turnover rate in recent years.

For many regional customs authorities, there are no systematic human resource development (HRD) plans for their employees following the merger. Dozens of training programs are organised in almost every branch of Customs; however, these programs mainly focus on customs operations. The problem

lies in the absence of longer term HRD plans for customs officers. In many cases, employees are 'required' to participate in this training because customs branches must fulfil tasks coming from headquarters.

It was not possible to cover all these challenges in this study. However, this article explores possible approaches with an aim to improve overall performance from a human resource management (HRM) perspective. The study was conducted in a selected customs branch and the possibility of initiating a pilot program in certain units is discussed.

### 1.3. Context

'AA' customs, a fictitious name used for confidentiality purposes, was chosen as the research branch in this article for several reasons. This customs branch is in AA city of Guangdong Province, a region in southeast China which has witnessed a high level of development during the past few decades. AA Customs is based in an important transportation hub and is one of the busiest branches in Guangdong, covering almost every customs operation in this area. Currently there are 20 sections in AA Customs, including the general office, the HR and Training department, the financial department, and other customs operation departments. The total number of customs officers is 239 (it was 164 before the merger), including eight HR employees (for details see Table 1).

AA Customs is now experiencing a dramatic change because nearly 50 per cent of new employees were incorporated in its organisation, and it is now shouldering more responsibilities than ever before.

*Table 1: Number of customs officers before and after the merger with the local CIQ authority*

Number of staff	Before the merger	After the merger
Total	164	239
Male officers	88	132
Female officers	76	107
Section chiefs & deputies	33	57

## 2. Human resources business partner

The roles and responsibilities of HR professionals have witnessed dramatic changes in the past few decades. Besides functioning traditionally, HR professionals nowadays are required to cooperate with business units to solve human resource challenges and make strategic proposals. HRBP has become one of the main focuses of both academic research and HR practice.

### 2.1. Meanings and roles

HRBP literally defines the role of HR professionals as partners in business sectors, and dozens of research studies concentrate on the roles that HR professionals should play in the workplace (Tyson, 1985; Dyer & Holder, 1988; Ulrich & Lake, 1990; Briscoe & Schuler, 2004; Francis & Keegan, 2006; Torrington et al., 2014).

The term ‘business partner’ is evolved from the concept of ‘business manager’ in the study of Tyson (1985), who advocated that HR people should be able to identify business opportunities, see a broader view and know how to perform their roles in achieving organisational goals as ‘business managers’. Another important concept to emerge after that of business partner is ‘strategic partner’, coming from the study of Dyer and Holder (1988, pp. 31–32) who pointed out that an HR professional should be a ‘strategic partner’ in the organisation, and emphasised the strategic influence that HR practitioners at different levels should exert.

Ulrich (1998) continued the study on HR professionals and advocated that more roles should be taken by HR staff with more active involvement in the decision-making process within an organisation, as illustrated in Figure 1.

*Figure 1: Role of HR*

<b>Management of process</b>	<b>Strategic</b>		<b>Management of process</b>
	Change agent	Business partner	
	Administrative expert	Employee champion	
	Tactical		

*Source:* Ulrich (1998)

The roles envisaged by Ulrich are those of a:

- **Business partner:** HR should collaborate with line managers and top management level staff and be equipped with enough knowledge of how the business operates.
- **Administrative expert:** optimising the administrative operation and playing an important role in increasing the overall performance through appropriate HR approaches.
- **Employee champion:** motivating the employees to be more committed to the organisation. HR professionals are supposed to speak for the staff in fighting for rights and providing career opportunities and guidance.
- **Change agent:** assisting the organisation to take initiatives in reforming and addressing challenges and being capable of identifying its strengths while avoiding disadvantages when faced by pressures from external change.

Cascio and Aguinis (2004, p. 51) stressed the importance of HRBP in strategic sessions of an organisation, stating that HR professionals should become full partners with top level staff who are responsible for strategies in ‘anticipating future staffing requirements and formulating action plans to ensure that enough qualified individuals are available’. Armstrong (2005, p. 196) further gives his own views on what a HRBP should perform, pointing out that ‘HR is not a menu of fads, fashions, and prejudices loosely connected to the business’ but one ‘creating opportunities for employees to share extensive information about their organisation and to participate in decision making.’ Furthermore, Torrington et al. (2014) pointed out that in some organisations a HRBP plays a more strategic role, being able to give valuable suggestions to top managers and being actively involved in the organisational business.

The concept of HRBP connects the HR roles and responsibilities to the organisational business and emphasises a more proactive involvement in the strategy of the organisation, as Stredwick (2005, p.14) states: ‘It is interpreted in different ways but the central precept of the close relationships with business units, helping to solve practical problems and delivering real value to the organisation’.

## 2.2 Human resource business partner practice in organisations

In analysing the advantage of the HRBP approach and getting a deeper insight of how it works, it is worthy studying the practice in organisations of various industries within different contexts.

Střítěský and Quigley (2014) conducted research on the HRBP model from the perspective of Czech organisations. They reviewed a few human resource theories and made their reflections on an HRBP model put forward by Ulrich (1998), as described earlier in Figure 1. The scholars adopted both quantitative and qualitative methods in carrying out the research and nearly one hundred Czech companies were involved, focusing on HR roles and HR structures in the organisations as well as HR services provided. Specifically, they investigated companies which transformed HR organisational structures from traditional ones to HRBP models. Based on the research and a case study in the Czech context, they concluded that organisations that transformed from traditional HR structures to HRBP models are more dynamic and actively involved in decision making. HR departments with HRBP are providing better service with high efficiency and stronger support to line managers in the targeted companies.

The HRBP practice in the Chinese context has important reference value for this study, and Huawei, a Chinese Fortune 500 company has made great progress in its HRBP practice.<sup>3</sup>

In 2006, Huawei firstly adopted a HRBP model in its R&D department. The HRBP personnel are required to work in the front line, the purpose being to get a clear picture of the business needs and provide appropriate solutions to better support the business. The HRBP staff are drawn from two sources, administrative employees and those from the business units. Before adopting an HRBP, the HR department was regarded as isolated from the business and not able to solve problems from a business perspective. One HRBP is serving around 150–200 employees, and the HRBP is working with the business department staff. There are three core competency requirements for being an HRBP in the company: R&D professional ability, management ability and HR professional capability.

In reviewing Huawei's HRBP it is easy to summarise a few of its roles, which include business partner, tailored HR policy planner and executor, change agent and employee relationship manager. The HRBP in Huawei is engaging in identifying the business 'pain point' because simply applying HR knowledge itself has no value.

In summary, HR business partners are not just a title. An HRBP should be a systematic project with a top-level design and given sufficient support from different levels in the organisation. It is worth mentioning that qualified HR business partners with clear job expectations are key to achieving the organisation's strategic goals.

## 3. Methodology

This study aimed to understand the current HR policies applied in the selected customs branch through both survey and interviews. Data analysis was conducted based on the feedback from questionnaires that were distributed to the customs employees, covering the previous customs officers and the CIQ personnel at different levels. A structured question list was designed, covering several issues focusing on current human resource management and development challenges, and the survey was conducted in an anonymous manner.

Since the study was designed to propose renewed HR approaches to improve the overall performance in AA Customs based on the understanding of the current HR policies and practices, an inducted approach was adopted in this study which is necessary in a situation not previously researched. It is essential to describe, explain and understand current HR process to construct a new theory of how improvement can be made in this specific context. However, the number of respondents to the

questionnaire survey was large and involved a quantitative approach. An interview was conducted to gather in-depth information, aimed at further exploring the views on the HR practices in AA customs with customs officers.

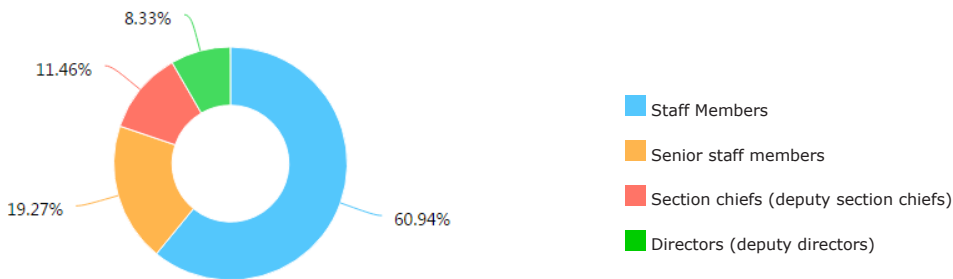
### 4. Statistical analysis

The number of customs officers that were involved in the survey and participated in the study exceeded the expectations of the author. Ultimately 192 questionnaires were collected and the results were analysed as follows.

Among the 192 respondents, 98 were male officers while the number of the female employees was 94. Staff working for less than three years accounted for 50 per cent and those who had been working for over 10 years were nearly 20 per cent (19.8%), almost the same number as customs officers who had work experience of between three to five years (18.8%).

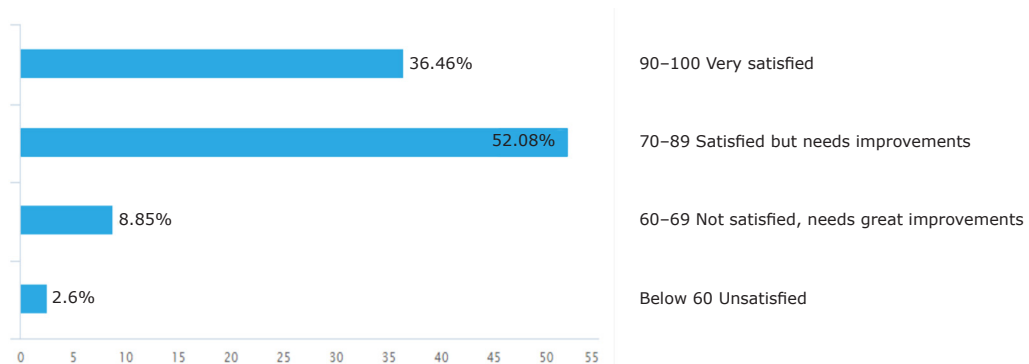
Sixteen directors (including deputy-director level officers) and twenty-two section chiefs (including deputy section chiefs) completed the questionnaire. The roles of the respondents are illustrated in Figure 2.

Figure 2: Positions of respondents



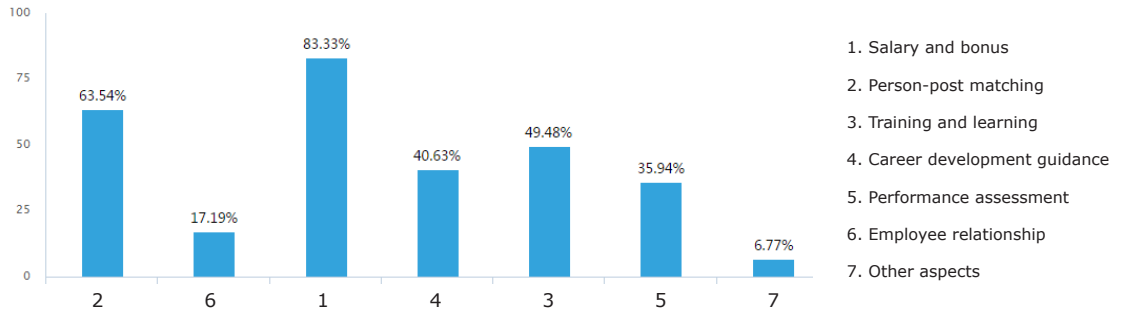
The satisfaction rate of employees’ relationships was much higher than the author’s expectations before the survey. One hundred and four respondents, or 54.2 per cent of all respondents, believed that the relationship between customs officers and previous CIQ staff is improving after the restructure. The overall score rated by employees of human resource management (Figure 3), however, indicates that some problems deserve attention.

Figure 3: Human resource management assessment



While more than half the employees showed a positive attitude toward employee relationships, only about one third (36.5%) gave high marks (90 to 100) to the current HRM practices. One hundred respondents are basically satisfied but they hope more improvements can be made, including person-post matching, performance assessment, and training and learning activities. Those who are pessimistic about the customs HRM approach account for 11.5 per cent. Participants shared their views on aspects that need improvement, as illustrated in Figure 4.

Figure 4: Expectation of improvements on HR issues



It is worth noting that person-post matching, training and learning, career development guidance, and performance assessment are major concerns of the respondents. In the meantime, performance assessment is expected to be optimised in the new organisation, partially because there are distinct differences between the customs work and CIQ operations.

When it comes to matters relating to an HR business partner, the result is very encouraging. 179 respondents showed their strong support to a business partner presence in their departments, believing that HRBP is helpful in identifying human resource challenges and optimising HR policies. Furthermore, the statistics show that the higher-level employees accept or are in favour of HRBPs. For instance, all 16 directors and deputy directors accepted HRBP, and 19 of the 22 section chiefs and deputies were also in its favour. A few customs officers were reluctant to accept an HR business partner, arguing that HR staff as business partners may not play their roles effectively if they know little about the customs business. This view makes sense because it echoes some points from studies reviewed in the previous section, that an HRBP should also be a business expert.

The survey collected the employees' opinions on HRBP qualifications, asking them what competencies a good HRBP should be equipped with. The responses are illustrated in Figure 5.

Figure 5: HR business partner competence factors

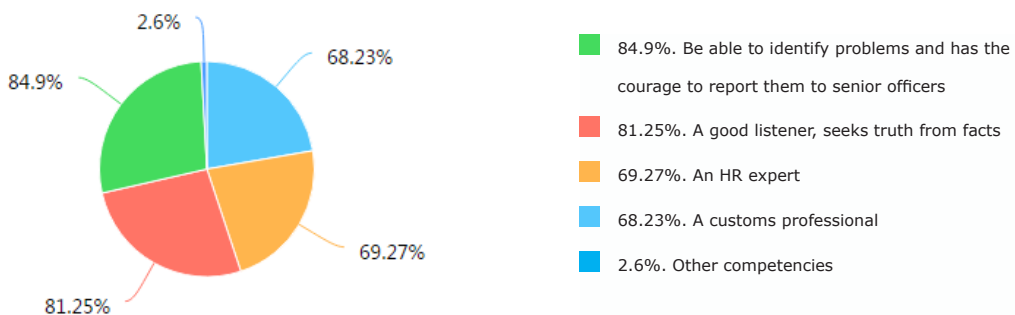


Figure 5 indicates that about 85 per cent of customs employees believe an HR business partner should be brave enough to tell the truth to the supervisors. This is understandable in the Chinese context, especially among civil servants, because China is a developing country with a high power distance culture. Officers are generally cautious when they have discussions with their supervisors; therefore, a ‘whistle blower’ who has the courage to reflect the existing HR problems is regarded by many employees as one of the roles that an HRBP should have.

In general, respondents are expecting new HR approaches to reform the current practice. One of the employees pointed out that the human resource management is lacking in innovation: ‘Many of us feel more tired than before because human resources are not in the right places.’

## 5. Findings from the interviews

One respondent, a Section Chief of the Administrative Office in AA customs, who began her career in 2000, was invited to take part in the interview. There are currently six employees in the Administrative Office, and three are previous CIQ staff. The new team members are getting on well in the workplace. In general, the section chief is satisfied with the current operation, but she also points out a few challenges.

Firstly, the previous CIQ staff are not accustomed to the paramilitary management approach of Customs, because Customs is operationally based with more disciplinary rules, with a focus on executing commands. CIQ concentrated on professional techniques, such as chemical testing, and sanitary and phytosanitary inspection. In other words, the CIQ employees were enjoying a comparatively loose working environment with a slower working pace.

Second, people-post challenges indeed exist. The Administrative Office is playing a crucial role in ensuring the smooth operation of a customs branch because the officers are dealing with hundreds of documents, reception work and important meetings. Employees are required to have good communication skills and an outgoing personality as well as good English skills. Some staff, however, cannot currently meet these standards, resulting in lower efficiency.

Third, there are less learning and training prospects for front-line officers, who are provided with limited training opportunities in customs operations. A respondent once asked them to identify their learning needs and most of the employees wished for more courses on stress management and communication techniques.

When talking about the roles of the HR section in the customs branch, she stated that HR is doing routine work with little involvement in strategy, which is a common situation in many customs branches. Although she thinks the HR department should take a more strategic role; the situation is unlikely to change soon because crucial decisions are made by members of the Board in AA Customs. When it comes to the HR business partner, a respondent indicated their full support for this model and welcomed a business partner who is specialised in human resource issues. The respondent noted that an HRBP could provide valuable advice on HR issues, including developing young officers, improving performance evaluation and organising more learning and training activities.

## 6. Discussion

Based on the questionnaires and interviews, most customs officers show great interest in an HRBP, and it appears to be fully supported by high-ranking executives in AA Customs. However, there are several issues that should be discussed because while there are many successful cases in implementing HRBP in the private sector, especially in world-renowned multinational enterprises, very few examples or pilot programs exist in the public sector in China.



## 6.1. Added value of an HR business partner

Given the current level of satisfaction, what else does an HRBP bring to the organisation? This is a key point that needs further reflection because most customs officers are satisfied with the current HR practices. HR business partners are expected to play their roles in many aspects; however, they must always bear in mind that they should perform in a humble way. The reason lies in that once they steal the show, they might be faced with difficulties in performing their roles effectively in Customs, which is a paramilitary organisation characterised by high power distance.<sup>4</sup>

An HRBP is supposed to support the section chief instead of taking the lead in the workplace. In bridging the HR policy and customs practice, the business partner is expected to understand the customs control procedure as well as knowing the people in the section. Moreover, a qualified HR business partner should spare no efforts to smooth out amalgamation in the customs authority, working out effective approaches to integrate the teams and build a shared vision. Furthermore, as corruption risks always exist in a law enforcement agency, as a business partner in the customs control section, HRBP is expected to act as a watchdog, supervising the integrity status of the daily operations. Also, as a colleague of customs employees in the same section, an HRBP could understand their learning needs and give advice on formulating appropriate learning and development strategies, consequently increasing the effectiveness of the learning programs.

## 6.2. HR practice at AA Customs

### 6.2.1. HR roles and responsibilities in the restructured government agency

For an HR department in the public sector in China, its role is far from strategic compared with its counterpart in the private sector. Based on the interviews with section chiefs, the strategic role of the HR department in AA Customs is not as prominent as expected, though it is supposed to shoulder more responsibilities. Crucial decisions on human resource strategies are made by the members of the board in AA Customs, and the head of the HR section has little opportunity to be involved in this process, which is commonly seen in most Customs Houses in China. As a paramilitary team in the service, HR departments tend to complete the tasks as required but they were criticised by many respondents in the survey due to their lack of flexibility and innovation.

### 6.2.2. Promoting the engagement of the previous CIQ officers

Currently the HR section is focusing on increasing the cohesion of the workforce, organising various activities including team building and other training programs. In the meantime, HR staff are taking time to listen to the feedback from front line officers. Notably, due to a huge salary gap between Customs and CIQ before the merger, the HR department was particularly required to focus on the engagement of previous CIQ staff because when the two organisations became one, CIQ employees suffered a decline in income. At the same time, promoting culture integration is of great importance, and HR staff as well as section chiefs are engaged in facilitating the recognition of the 'customs culture' by CIQ employees.

### 6.2.3. Addressing the person-post matching challenge

This is one of the biggest challenges for almost all customs branches following the merger. For the previous CIQ employees who might be specialised in chemical analysis, most are doing the same jobs, but in different positions. However, those who were administrative staff have taken on new customs jobs because of a lack of staff in this field. To equip the previous CIQ officers who do not have customs experience, the HR section is organising on-the-job training through a traditional approach – apprenticeship. Experienced customs employees are designated as coaches of the new staff, providing daily guidance in the customs operation areas, such as inbound and outbound cargo inspection, and customs declaration form examination.

## 7. Conclusion

The results of the questionnaires showed that employees at AA Customs are basically satisfied with the current human resource policies and practices but have more expectations in the foreseeable future. A more strategic involvement by HR departments may face many difficulties in China Customs, but HR business partners might be a good alternative for improving human resource management effectiveness and efficiency, as well as overall organisational performance. Both the survey and interviews showed a positive attitude from most respondents towards the HR business partner model.

According to the interviewees, HR business partners in the public sector should have several qualities to successfully fulfil their roles. Firstly, HR business partners should be smart, meaning that this role should act as a bridge between the business section and the HR department, and they should know how to achieve cooperation with the head of the customs control department and become a member of the group rather than an outsider. Secondly, an HRBP should be clear about his or her position. The section chief is the decision maker and the HR business partner is an advisor or assistant but not the other way around. Thirdly, the HRBP should be an HR professional and customs expert, as advocated by many respondents. This view agrees with much of the literature, such as Tyson (2006) and Armstrong (2006) who advocate that HR business partners should play a strategic role and possess business knowledge at the same time. Fourthly, an HR business partner should be a person of integrity because this post is supposed to give advice from an HR perspective for promoting young officers with potential.

It is worth mentioning that an HRBP deserves more attention from the discipline inspection department to prevent possible corruption. As mentioned in the previous part, HRBP is functioning as a human resource advisor whose suggestions might influence the assessment of individuals. Presumably for a few customs officers who have high expectations for their careers may bribe the HRBP to get a better impression, which might be a shortcut to achieve a higher position.

## 8. Proposed action plan

This article aimed to propose a new perspective for improving human resource management effectiveness in a government department. It is not a purely theoretical study and ideally the suggestions and proposals will be tested in a chosen customs branch. An action plan is therefore proposed for implementing a pilot program in AA Customs.

Briefing the members of the board of AA Customs is the first step, following a top-down procedure to ensure smooth implementation in the Chinese public sector context. It will be necessary to introduce the concept of an HR business partner and illustrate a few successful cases in various companies, helping the top executives to get a general idea of what an HRBP is and how it works. The briefing should also include detailed information of how the business partner may work in AA Customs and how this pilot project will be assessed. It is equally important to understand the board's view on what they would expect the HRBP to achieve.

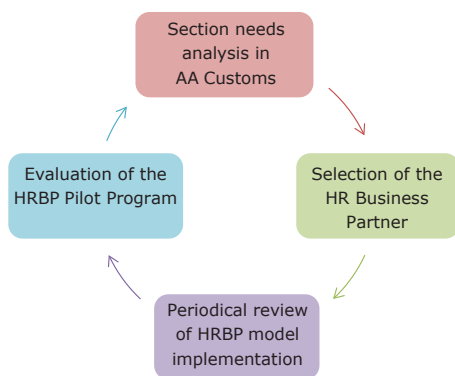
Secondly, after getting the permission of the customs leaders, the organiser should discuss with an HR Section Chief and a Deputy Director who are responsible for HR issues the question of selecting a section in which to implement an HR business partner model. The discussion should mainly focus on which section is appropriate to have a business partner, whether the section chief is willing to have an HR colleague as an advisor and whether the customs officers in this section are likely to support such a pilot program.

Thirdly, the Deputy Director should designate a candidate to take the job after discussing with the section chief of the selected department. Besides possessing the basic qualities of an HR professional, the chosen candidate should be equipped with sound stress management and interpersonal abilities because the employee relationship in the public sector is complicated in the Chinese context.

Fourthly, a periodical review should be conducted *on a regular basis*. The section chief, business partner and HR staff should attend the regular meeting, sharing their views on the process. The meeting should focus on the challenges faced by the HRBP and the cooperation between the business partner and the section chief, which may be the key factor in achieving the desired outcome.

Lastly, a final assessment should be organised. The directors of AA Customs, the section chief and HRBP, as well as representatives of the selected section should be asked to take part in the evaluation meeting. Issues to be discussed would include whether the HRBP is seen to be workable in AA Customs, whether the HRBP model should be implemented in other departments, and if the answer is yes, what implementation approach should be taken.

Figure 6: Action plan



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## Notes

- 1 China persists in opening-up to the outside world and is continuously expanding and developing its economy, trade, and technological exchanges and cooperation with other countries based on equality and mutual benefit.
- 2 China's Belt and Road Initiative (BRI) is a strategy initiated by the People's Republic of China that seeks to connect Asia with Africa and Europe via land and maritime networks with the aim of improving regional integration, increasing trade and stimulating economic growth. The name was coined in 2013 by China's President Xi Jinping, who drew inspiration from the concept of the Silk Road established during the Han Dynasty 2,000 years ago – an ancient network of trade routes that connected China to the Mediterranean via Eurasia for centuries. The BRI has also been referred to in the past as 'One Belt One Road'. The BRI comprises a Silk Road Economic Belt – a trans-continental passage that links China with south east Asia, south Asia, Central Asia, Russia and Europe by land – and a 21st century Maritime Silk Road, a sea route connecting China's coastal regions with south east and south Asia, the South Pacific, the Middle East and Eastern Africa, all the way to Europe. The initiative defines five major priorities, including policy coordination, infrastructure connectivity, unimpeded trade, financial integration and connecting people. <https://www.ebrd.com/what-we-do/belt-and-road/overview.html>
- 3 [http://www.360doc.com/content/16/0829/22/30720696\\_586875535.shtml](http://www.360doc.com/content/16/0829/22/30720696_586875535.shtml)
- 4 'Power distance' is a term that describes how people, belonging to a specific culture, view power relationships – superior/subordinate relationships – between people, including the degree that people not in power accept that power is spread unequally.

### Nan Li



Mr Nan Li is a principal staff member of the Department of International Cooperation at Shanghai Customs College. He graduated from East China Normal University with a Master in Education in 2010. In 2019, he achieved his master degree with distinction in Human Resource Management at the University of Manchester as a Chevening Scholar. His major research domains include capacity building research and human resource management and development

# Integration of gender practices and promotion of diversity in customs and trade: the case of East and Southern Africa

*Dennis Ndonga, Sendra Chihaka and Anne Fielder*

## Abstract

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The East and Southern Africa (ESA) region continues to lag in gender equality, with women remaining largely underrepresented in leadership and high-status positions compared to their sisters in other world regions. This is even though the three Regional Economic Communities (RECs) in ESA have all made efforts at incorporating gender perspectives in their customs and trade policies. This article explores the gender gap in customs and trade across ESA and concludes that the region's member countries stand to benefit from improved organisational performance and increased global competitiveness by integrating gender perspectives in their customs and trade operations.

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## 1. Introduction

Gender equality dimensions remain poor in sub-Saharan Africa (SSA) in general, and East and Southern Africa (ESA) in particular, despite women's empowerment being acknowledged in international trade discourse as being crucial to stimulating sustainable development and growth. According to the United Nations Development Programme's (UNDP) Human Development Report (UNDP, 2019a), SSA recorded higher levels of gender inequality compared to other more developed regions like Europe and Central Asia. This partly seems to suggest that the lack of sustained empowerment of women and girls impedes a country's development. Moreover, current trade debates on the multilateral trading system are taking place at a time when there is a reconceptualisation of development itself. The new trend points towards moving away from measuring development using market criteria such as consumption and income, to measuring development based on human wellbeing, especially of the marginalised in society such as women (Cagatay, 1998).

The critical role that gender dimensions play in international trade and economic development has been recognised both at the international and the continental level. Perhaps the most influential international policy on gender equality is the Beijing Declaration and Platform for Action (United Nations [UN], 1995), which recognises the persistent inequalities between women and men as an obstacle to the wellbeing of all people globally and introduces a series of measures designed to enhance the advancement and empowerment of all women. In 2015 the United Nations also highlighted gender equality and the empowerment of women and girls as one of its key Sustainable Development Goals (SDGs) for achieving global peace and prosperity by 2030 (UN, 2015, p. 14). Matters of gender inequality have also featured in multilateral trade negotiations with the World Trade Organization (WTO) members endorsing the Buenos Aires Declaration on Women and Trade at the Eleventh WTO Ministerial Conference in 2017 (World Trade Organization [WTO], 2017). The declaration calls for

the inclusion of women in trade by acknowledging that inclusive trade policies have the capacity to advance gender equality and women's economic empowerment, which would ultimately have a positive impact on economic growth and poverty reduction.

Despite SSA registering some of the highest levels of gender inequality (UNDP, 2019a, p. 149), some of the continent's major regional and continental agreements contain gender-related provisions. The Economic Community of West African States (ECOWAS) Revised Treaty, first signed in 1993, has dedicated Article 63 to Women and Development and encourages the member states to establish appropriate policies and measures to enhance the economic conditions of women (Economic Community of West African States [ECOWAS], 1993). Chapter 24 of the 1993 treaty establishing the Common Market for Eastern and Southern Africa (COMESA) also encapsulates member states' commitment to implementing appropriate laws and measures aimed at promoting the role of women in development and business (Common Market for Eastern and Southern Africa [COMESA], 1993). Similar provisions have been articulated in the 1999 Treaty for the Establishment of the East African Community (EAC) in chapter 22 on "enhancing the role of women in socio-economic development" (EAC, 1999). More recently, Article 3(e) of the Agreement Establishing the African Continental Free Trade Area (AfCFTA) has highlighted the promotion and attainment of "sustainable and inclusive socio-economic development, gender equality and structural transformation of the State Parties" as one of its general objectives (Africa Union, 2018, p. 4). Article 5 of The Treaty of the Southern African Development Community (Southern African Development Community (SADC) Treaty) highlights gender mainstreaming in the process of community building as part of SADC's key objectives (Southern African Development Community [SADC], 1992, p. 6). It further assigns the SADC Secretariat responsibilities for gender mainstreaming all SADC programs and activities (SADC, 1992, p. 14).

Apart from the multilateral and regional commitments, there have also been initiatives that have specifically targeted gender integration and inclusion in customs and trade. The United Nations Conference for Trade and Development (UNCTAD) has developed the Trade and Gender Toolbox, which provides a systematic framework and methodology to support countries in their assessment of the impact of their trade reforms on women. The toolbox applies four components: an overview of the gender inequalities in the country's economic context, a quantitative analysis of the anticipated consequences of the trade reform on women's participation and the economy, an outline of the accompanying gender-sensitive measures and monitoring indicators and a trade and gender index to synthesise the evolution of trade openness on gender inequalities in a single indicator (The United Nations Conference for Trade and Development [UNCTAD], 2017b, p. 1).

The World Customs Organization (WCO) has also developed various initiatives aimed at promoting gender equity, equality and diversity in its capacity building agenda. One of the most notable initiatives that covers trade facilitation issues has been the WCO's Gender Equality Organizational Assessment Tool (GEOAT) introduced in 2013 (World Customs Organization [WCO], 2013). The GEOAT is designed to enable customs administrations to assess their policies, practices and processes to address gender equality issues. This is geared towards promoting the implementation of gender-responsive customs reforms and modernisation initiatives. As listed on its website, in 2018 the WCO, under the framework of the Finland East and Southern Africa Programme II, introduced a blended training package on how to advance gender equality in customs administration. The training package was aimed at sensitising customs officials on gender equality and its link with customs reforms and modernisation. The pilot workshop where the training package was introduced included participants from Kenya, Uganda, Rwanda, Mauritius, Malawi, South Africa, Swaziland and Zimbabwe (WCO, 2018).

Despite these gender mainstreaming efforts, gender inequality still poses a threat to customs and trade performance particularly within the ESA region (Mwondha et al., 2018, p. 6–7). Though the benefits of promoting women’s participation in international trade have been noted in previous studies (Brenton et al., 2013; Organisation for Economic Co-operation and Development [OECD], 2019), very little work has focused on Customs in the ESA region. This article seeks to identify the gender equality challenges facing customs and trade in the ESA region and explore some of the benefits that the member states customs and trade authorities stand to gain from enforcing gender equality measures.

To achieve these aims, the article will firstly explore the related concepts of gender equality and gender equity as well as the global approaches to gender inequality and development outcomes. Next, the gender dimensions across the ESA region will be reviewed. This discussion will initially highlight some of the gender mainstreaming efforts made across the region and subsequently assess their impact by analysing the gender equality levels as presented by various indices of inequality. The following section will then examine how gender inequality has manifested in Customs across the ESA member countries. Finally, prior to concluding remarks, the article will discuss some of the key benefits that the ESA member countries stand to gain from enforcing gender equality measures in their relevant customs authorities and trade policies.

## **2. Gender equality, gender equity and global approaches to gender and development**

The words gender and sex are often conflated but have different meanings. Similarly, the term gender equality and gender equity are sometimes used interchangeably but represent two distinct concepts. The term gender has been distinguished from sex which points to biological differences between women and men. Gender refers to how persons are perceived and expected to act and think. These gender roles are premised on social construction as opposed to the biological differences that manifest through being either the male or female sex (Nicholson, 1994, p.79). At birth boys and girls are distinguished based on their sex, but as they grow up society accords them different roles, attributes, opportunities, privileges and rights that in the end create the social differences between women and men (World Health Organization [WHO], 2002). Thus, gender roles are dynamic and vary widely among societies and cultures. The “set of activities available to be performed in accordance with cultural gender expectations” are defined as gender practices (Martin, 2003, p. 354). Gender practices may also be demonstrated in the way people talk or position themselves relative to others and this is what defines the gender order in each society.

Gender equity refers to “fairness of treatment for women and men, according to their respective needs” (International Labour Organization [ILO], 2000, p. 48). It usually requires differential treatment of women and men (or specific measures) to compensate for the social and historical disadvantages that prevent women and men from sharing a level playing field. Gender equality, on the other hand, refers to the absence of discrimination between women and men in terms of access to opportunities, services and allocation of resources (ILO, 2000, p.48). This refers to fairness and justice in the enjoyment of rights, responsibilities and opportunities between women and men. Vyas-Doorgapersad (2017, p. 169) defines gender equality as referring to women and men being equal and sharing the same rights.

The equitable representation of persons of different genders, usually in the workplace, is defined as gender diversity. Equity leads to equality. Achieving gender equity would typically entail taking differential actions to address historical inequality among women and men to achieve gender equality. Some of those differential actions may involve promoting gender diversity in sectors that had historically been male dominated.

Gender equality, equity and diversity have long been identified as fundamental ingredients for the achievement of sustainable development and growth. Nevertheless, the economic inequalities facing women and men in SSA have been a major contributor to the region's low level of human development (UNDP, 2016, p. 54). The importance of integrating gender practices into development dates to the 1960s. Studies by Boserup (1970) had noted that the early colonial and postcolonial development policies across many developing countries in Africa, Asia and Latin America had been biased against women. She noted that with the spread of capitalism in such regions men were being migrated for wage labour or were engaged in the highly productive export-oriented farming sector, while women were left behind as subsistence producers in the low yielding agricultural sector characterised by the use of primitive techniques. Initial attempts at increasing women's participation in development led to the Women in Development (WID) regime in the 1970s that pushed for integration of women into the international development strategy. This led to development organisations establishing institutions that supported women as well as implementing development assistance policies and programs that included women. However, one of the major criticisms of the WID approach was based on its failure to recognise the source of women's oppression in the economic system. Critics of the approach noted that it focused on integrating women into the existing social structures and failed to take note of the fact that those structures were inherently exploitative of women and had already granted women unequal terms through allocating them positions in subsistence labour (Vijayamohan et al., 2009, p. 11).

Criticisms of the WID regime gave birth to the Women and Development (WAD) movement in the late 1970s. The WAD perspective recognised the inequalities ingrained within the existing global structures and pushed for reform to more equitable international structures as a solution to promoting women in development. Proponents of the regime viewed the global inequalities existing between countries as well as class inequalities based on wealth distribution as being part of the reason why women were not benefiting from the current structures (Muyoyeta, 2004, p. 7). WAD further recognised that women from third world countries who did not have elite status were more "adversely affected by the structure of inequalities within the international system" (Rathgeber, 1990, p. 493). The WAD approach proposed the removal of the patriarchal hegemony through designing intervention strategies that created women-only development projects. It further pushed for improvement to the international structures by making them more equitable through resolving the underrepresentation of women in economic, political and social structures. Nevertheless, the WAD regime has been criticised for failing to consider that the pre-existing marginalised status of women and their lack of relevant skills would likely act as a barrier to the success of the women-only development projects. It was further argued that the WAD intervention strategies focused on income-generating activities without accounting for the reproductive side of women's lives and work. This was centred on western countries' assumptions that placed no economic value on household activities that were mostly performed by women in the global south, such as family maintenance, childbearing and rearing, or care of the elderly (Rathgeber, 1990, p. 493). They simply classed all women into one group and failed to account for the differences existing between women in terms of race and ethnicity. Another weakness of the WAD approach was its presumption that the position of women would improve once international structures were made more equitable, but it failed to address the inequalities stemming from the social relations of gender and how to shift such gender perceptions.

By the 1980s reflections on women's development experience, particularly the growing poverty of women and men in developing countries, led to a shift in approach to addressing the development problems. This gave rise to the Gender and Development (GAD) approach, which placed emphasis on gender rather than women. GAD focuses on how gender relations between women and men are socially constructed, often to the detriment of women. It looks at how society has assigned specific roles, responsibilities and expectations to men and women, which have shaped the division of



labour and control over resources, often subordinating women. Rather than integrating women into development projects, GAD focuses on redistributing powers in social relations (Vijayamohan et al. 2009, p. 14). It tries to address “male cultural, social and economic privileges, so that women are able to make equal social and economic profit out of the same resources” (Goetz, 1997, p. 3). It recognises that gender divisions of labour operate differently in different societies and cultures, advocating for social transformation of gender role expectations in development policies. So, for instance, in planning for development, the provision for childcare may not be a priority for men but would be crucial in ensuring that women participate in the development opportunities (Muyoyeta, 2004, p. 8). GAD places emphasis on the participation of states in “promoting women’s emancipation” by providing some of the social services which were typically assigned to women by society (Rathgeber, 1990, p. 494). Owing to its focus on reconstituting social structures and institutions, GAD perspectives are less often found in projects and activities of international development agencies.

The current practical approach to promoting gender equality in developing countries is the push to view the reduction of gender inequality as being part of smart economics. This view was advocated by the World Bank (2012) and holds gender equality as an instrument for development. It stresses that bridging the gap between women and men in human capital and economic opportunities is smart economics and vital to enhancing productivity and improving other development outcomes. This approach seems to draw on the WID in promoting investment in women to achieve effective development outcomes. It points to three ways in which gender equality matters for development. First, by eliminating barriers that limit women from having the same access as men to education, productive inputs and economic opportunities would generate broader productivity gains. Second, improving women’s status would lead to more investment in their children’s human capital and have a positive impact on other outcomes for their children. Third, improving women’s chances of being as politically and socially active as men would result in more representative and inclusive institutions and policies, thereby promoting better development outcomes (World Bank, 2012, p. 3). This article acknowledges the smart economics approach to gender and development.

### **3. Gender dimensions across the ESA region**

In assessing the gender dimensions across the ESA region, it is important to first identify the efforts made towards closing the gender gap to make regional trade more inclusive. This will be followed by an assessment of the gender equality levels across the region, which will attempt to evaluate the effectiveness of the gender mainstreaming efforts.

#### **3.1 Gender mainstreaming efforts in trade policies across ESA**

To address gender inequality, the three RECs within ESA have developed various strategies to mainstream gender practices in trade to foster economic development. COMESA Heads of State and Government adopted the COMESA Gender Policy (CGP) in 2002. The Gender and Social Affairs Division of the COMESA Secretariat was given a mandate to implement the CGP. The CGP provides a comprehensive GAD Strategy aimed at addressing gender inequalities and facilitating the engendering of member states’ legislations and development policies (UNCTAD, 2017a, p. 4). As part of its gender equality efforts, the COMESA Secretariat has been implementing its five-year Gender Mainstreaming Strategic Action Plan since 2009. Part of COMESA’s key gender equality achievements include the development of the Gender Mainstreaming manuals, which serve as guidelines to policy makers to apply gender equality principles to several vital sectors which include trade, infrastructure development, investment promotion and private sector development, as well as information and communication. The guidelines for mainstreaming gender in the trade sector provide for several measures aimed at assessing the gender redistribution effects of trade.

They include:

- developing data and information systems for recording and generating detailed quantitative and qualitative information disaggregated by sex
- undertaking gender analysis on how women and men are impacted differently by trade practices and processes
- formulating gender policy for the trade sector
- taking actions to bolster women's capacities and competitiveness in the trade sector both at the national and regional levels
- facilitating and strengthening women's representation and participation in decision-making processes
- designating a gender focal person at a senior level to oversee gender dimensions of the trade sector
- allocating gender mainstreaming funds
- developing clear targets as well as indicators to monitor and evaluate the attainment of the objectives (The Common Market for Eastern and Southern Africa [COMESA], 2010, pp. 9–12).

Aside from the gender provisions contained in the EAC Treaty, the East African Legislative Assembly (EALA) passed the 2016 EAC Gender Equality and Development Bill which consolidates into one document all the legal provisions and policy frameworks on gender equality that member states are party to at the regional, continental and international level (EAC, 2016). It aims to ensure that the rights of women and men are uniformly promoted and realised across the region (UNCTAD, 2018, p. 35). Clause 14 of the Bill makes provision for promoting women's participation in regional trade and economic development. As part of engendering trade, member states are required to:

- support national and regional associations of women in business
- address gender and nontariff barriers
- scale up efforts to address gender constraints such as access to technology, market information and credit or financial services
- facilitate women's and girls' entry into trade by providing them with training on information and communications technology (ICT) and e-commerce
- ensure gender analysis in trade impact assessments
- promote women's participation in trade negotiations as well as engendering trade policies
- establish women's trade and enterprise development frameworks.

The region has also implemented the 2018 EAC Gender Policy, which aims to strengthen gender mainstreaming in the planning and budgetary processes of EAC organs, institutions and member states (EAC, 2018). The policy also prioritises the promotion of gender equality in trade and economic empowerment. On this matter, it commits member states to increase access and control of productive resources and economic benefits by men and women, and boys and girls, in both informal and formal sectors.

The SADC Secretariat established a Gender Unit in 1998 to monitor and implement SADC gender commitments at national and regional levels. The Gender Unit was able to develop a Gender Mainstreaming Toolkit as well as a Gender Workplace Policy, which were adopted by the ministers responsible for Gender and Women's Affairs in the member states. The Toolkit serves as a generic guideline for mainstreaming gender in various activities including trade, industry, investment and social human development (Shayo, 2012, p. 18). SADC further passed the SADC Protocol on GAD in 2008, which entered into force in 2013 (SADC, 2008). The Protocol aims to provide for the empowerment of women and achieve gender equality and equity through development by encouraging the harmonisation and implementation of gender-responsive legislation, policies and projects. The Protocol was later amended and the 2016 Revised Protocol entered into force in 2018 (SADC, 2016).

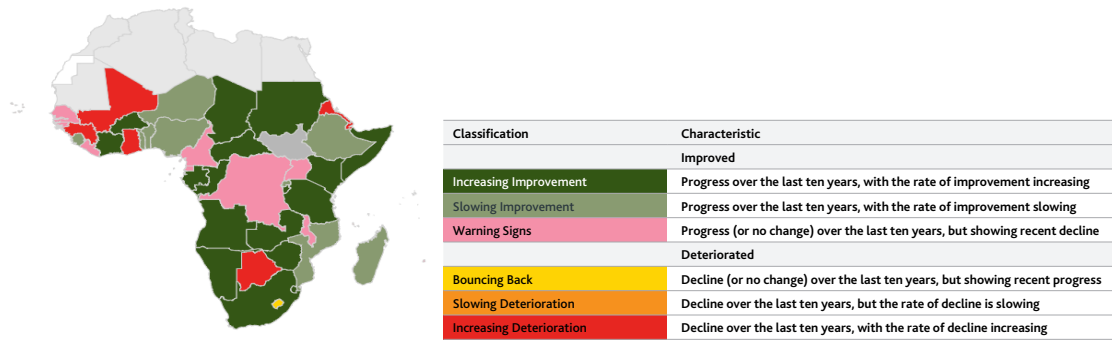
### 3.2 Gender equality levels across the ESA region

Despite ESA regional bodies developing broad gender mainstreaming blueprints, there has been a lack of clear and consistent implementation of the various policies and strategies. There remains a large employment difference between men and women across Africa, with women being largely assigned to unpaid and vulnerable activities. For instance, over 60 per cent of the female workforce in SSA is employed in the agricultural sector (ILO, 2016, p. 23). A large portion of women in SSA still work in informal work arrangements with around 34.9 per cent engaged as contributing family workers, which exceeds that of men which stands at 17.9 per cent (ILO, 2016, p. 10).

In addition, informal cross-border trade (ICBT) forms a significant part of the continent's trade and provides a source of income for approximately 43 per cent of Africa's total population (Afrika & Ajumbo, 2012, p. 1). Women account for a large percentage of ICBT representing around 60 per cent of informal traders in west and central Africa and 70 per cent in the SADC (Koroma et al., 2017, p. 1). Yet women face more challenges when engaging in ICBT than their male counterparts. A recent survey conducted by UNCTAD found that female informal traders in Malawi, Tanzania and Zambia still encountered problems including limited capacity to trade in higher value-added goods, limited capacity to diversify the goods they trade, limited access to financial resources, harassment and personal safety risks, as well as strict regulations applicable to small-scale traders (UNCTAD, 2019, p. 34). This is even though all three countries link through the SADC and, by being signatories to the SADC Protocol on GAD, have committed to addressing gender issues as well as implementing gender-responsive legislation and policies. Similarly, Malawi and Zambia also belong to COMESA and are guided by the COMESA Gender Mainstreaming manuals aimed at bolstering women's participation in trade (COMESA, 2010). Tanzania is also a member of the EAC and a stakeholder in the EAC Gender Equality and Development Bill.

According to the Ibrahim Index of African Governance (IIAG) which includes a gender indicator and gives an index score ranging from 0–100, with zero being the worst possible score and 100 being the best, SSA scored 55.8 of 100 in 2017 (Ibrahim Index of African Governance [IIAG], 2018). Several countries showed notable improvements in addressing their gender issues while others kept declining (Figure 1). The IIAG gender index considers eight indicators measuring promotion of gender equality, workplace gender equality, women's labour force participation, women's political representation, gender parity in primary and lower secondary school, representation of women in the judiciary, laws on violence against women and women's political empowerment.

Figure 1: IIAG gender inequality status in SSA



Source: IIAG (2018)

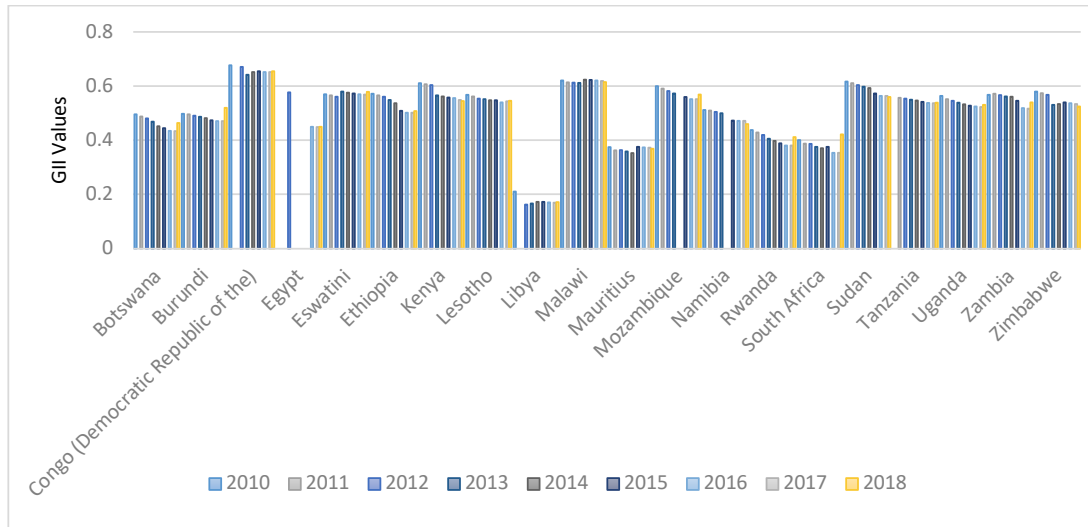
A detailed look at the specific gender measures in the three RECs within ESA revealed that the EAC performed better than its counterparts in terms of promotion of gender equality with a gender score of 62.4, followed by SADC and COMESA which scored 58.1 and 57.1, respectively. In terms of women’s labour force participation, the EAC scored high with 82.5, SADC scored 69.2 and COMESA scored 62.1. However, all three RECs seem to perform poorly in terms of the workplace gender equality measure with the EAC scoring 50, followed by SADC with 45.3 and COMESA scoring 40.8. It is important to note that the size of the individual RECs membership influences the IIAG indicator scores. This is especially applicable to the EAC scores, which are an aggregate of the individual scores of the region’s six member countries, while SADC and COMESA have much larger memberships consisting of 16 and 19 countries, respectively.

Nevertheless, over the last 10 years, the ESA region, taken individually, has generally made positive strides towards addressing gender inequality and improving the status of women, except for a few countries like Botswana, Malawi and the Democratic Republic of Congo (DRC) (Ibrahim Index of African Governance [IIAG], 2018). One of the major obstacles to gender equality in Botswana is the patriarchal attitude in the political class with only 10 per cent of members of parliament and 25 per cent of cabinet being women, leaving the country far from achieving 50 per cent of women in decision-making as stipulated in the SADC Protocol on GAD (World Bank, 2020). This is like Malawi, where entrenched patriarchal tendencies, manifested in factors such as violence against women, lack of affirmative measures and low representation of women in political structures, have all worked to limit women’s representation in political positions (UN Women, 2019). In the DRC the civil wars experienced from 1997–2003 are likely to have reversed any gender equality gains.

Data from the United Nations Development Program (UNDP) Gender Inequality Index (GII) shows that gender inequality levels in SSA were the highest in comparison to other global regions (United Nations Development Program [UNDP], 2019a). The GII ranges between zero and one, with zero being full equality between women and men and one indicating the highest level of inequality. GII measures gender inequalities based on three aspects of human development: reproductive health – measured by maternal mortality ratio and adolescent birth rates; empowerment – measured by the proportion of women in parliament, as well as both women and men over 25 years who have some secondary education; and economic status – measured by the rate of female and male labour force participation. In 2018 the SSA score on the GII stood at 0.573 compared to 0.276 in Europe and Central Asia, 0.310 in East Asia and the Pacific, 0.383 in Latin America and the Caribbean, 0.510 in South Asia and 0.531 in the Arab states (UNDP, 2019a, p. 319).

According to the 2019 UNDP Human Development Report most ESA countries have been experiencing a slight decline in gender inequality levels over the 2010–2018 period (Figure 2) (UNDP, 2019b). However, like the IIAG, a few countries such as the DRC and Malawi still maintained very high levels of gender inequality (over 0.6) in 2018 (UNDP, 2019b).

Figure 2: Gender inequality index in East and Southern Africa (2010–2018)



Source: UNDP (2019b)

The GII further suggests a positive correlation between low levels of gender inequality and the development of a country in terms of human development. Some ESA economies deemed to have high human development in 2018, like Mauritius, Botswana and Libya, registered low levels of gender inequality of 0.369, 0.464 and 0.172, respectively. This contrasts with the high levels of gender inequality registered by some of the economies deemed to have low human development like Malawi (0.615), the DRC (0.655), Lesotho (0.546) and Zimbabwe (0.525). However, the evidence is not conclusive as a country like Rwanda, which had a low level of gender inequality (0.412), has been placed in the low human development category, while Eswatini with a much higher level of gender inequality (0.579) is classified as having medium human development. Nevertheless, the slight inconsistency in the data reflects the dynamic nature of development and its varying indicators. The determinants of economic growth and development are multifaceted and complex. However, the World Bank's smart economic approach recognises women's economic empowerment and labour force participation, which is part of the GII measures, as being crucial in advancing other development outcomes.

Despite some of the gender mainstreaming efforts, most ESA countries still register relatively high gender inequality levels, which fall below the world average score on the GII (0.439). Most of the gender-specific challenges that women face when trying to engage in trade have persisted owing to the member countries' failure to commit to enforcing the gender mainstreaming policies endorsed by the RECs. Thus, some of the efforts required in the trade sector should focus on a shift towards gender-sensitive customs and trade policies.

## 4. Gender inequality in Customs in the ESA region

Although the WCO has offered various resources and training on gender equality, including the GEOAT, gender inequality persists in most customs administrations across the ESA. In terms of leadership, most customs administrations in the ESA are male dominated. Most revenue authorities in ESA are currently headed by male Commissioner General or directors, with limited exceptions including the Zimbabwe Revenue Authority (ZIMRA) and Uganda Revenue Authority (URA). A review of ESA customs administrations' top leadership further indicates that the executive management teams are male dominated. For instance, women occupy only 20 per cent of the executive leadership team for the South African Revenue Service (SARS), 25 per cent for the Rwanda Revenue Authority (RRA), 35.7 per cent for ZIMRA, 35.7 per cent for URA and 40 per cent for the Malawi Revenue Authority (MRA).<sup>1</sup> More women occupy the lower and nonpolicy making ranks compared to their male counterparts. For instance, according to ZIMRA's human resources statistics from 2012–2019, male employees have consistently accounted for over 55 per cent of the total employees.<sup>2</sup>

The male dominance exhibited in the composition of most revenue authorities can partly be attributed to the historical work practices and patriarchal attitudes. Tariff collection used to be handled manually with customs officials being required to physically collect taxes from taxpayers. These practices increased the chances of confrontation between officials and taxpayers, with the threat of coercion or violence (Mwondha et al., 2018, p. 6). Thus, these kinds of tasks were monopolised by men who were viewed as being capable of handling the related risks. The prestige and good income associated with employment in the sector further meant that such roles were mostly reserved for men, while women were left to fill the lower-paying occupations. However, the streamlining and automation of most processes with the introduction of e-filing and Single Window systems have promoted the submission of electronic data, and minimised face-to-face interactions between customs officials and taxpayers. Border inspection risks have further been mitigated with the promotion of postclearance audits through the introduction of risk assessment measures, declaration processing centres and Authorised Economic Operators (AEOs). These modern reforms have meant that customs officials are valued for their data analytics and other technical skills rather than any physical attributes. Thus, there is a need to improve on the number of women in the customs workforce as well as their representation in leadership positions.

Responses from customs officials within ZIMRA further indicate that work in some sections of the organisation is typically allocated along gender lines. This was to some extent based on the perception that women are less committed to their work owing to their social role as family caregivers. For instance, some female customs officials within ZIMRA cited situations where senior officers preferred working with men because they were less likely to take time off for family obligations and more likely to work odd hours, unlike their female counterparts.<sup>3</sup> Some even claimed that men are more likely to get promoted because they had fewer family commitments than women. The truth of these statements cannot be empirically verified. However, they do highlight the persisting perception among female employees about gender inequality in the workplace. This points to the need for customs authorities to ensure that their gender mainstreaming efforts are accompanied by information sharing, training and awareness-raising to help change attitudes and beliefs about gender inequality within the organisational culture.

As noted earlier, the RECs within ESA as well as the WCO have already outlined measures to redress gender inequalities at the national and regional level. As such, members need to commit to the implementation of the various policies and programs. To this effect, an appreciation of the broader benefits likely to be gained from integrating gender equality into customs and trade operations would serve to motivate member countries to take action to promote gender equality.

## 5. Benefits of integrating gender into customs and trade operations

There is strong evidence to suggest that gender mainstreaming in customs and trade policy and practices has a positive effect on economic growth. The implementation of gender-responsive trade policy measures that aim to promote greater participation of women in trade would generally have a positive effect on the growth potential and productivity of the relevant ESA economies. The World Bank (2017, p. 3) further notes that the economic participation of women has the capacity to boost global competitiveness and growth, with economies that have a high female labour force participation managing to improve their international competitiveness mostly through attracting export-oriented manufacturing industries that typically favour the employment of women (ILO, 2014, p. 13).

Other studies that have analysed the impact of integrating gender issues into customs policies have noted similar positive gains. For instance, a study by Mwendha et al. (2018) focusing on female leadership within the URA found that women had a superior work ethic and were likely to focus on getting their work done, compared to men who were found to be more motivated by the prospect of extra earnings. This was further reflected in the length of employment with women within the URA serving an average period of 12.3 years compared to the men who averaged 11.6 years. The study also found that female employees received better performance appraisals than their male co-workers. Thus, promoting gender equality in the recruitment of customs officials within ESA will contribute to enhancing the effectiveness of member customs administrations.

Promoting gender equality and diversity in the workplace would not only increase the diversity of ideas and improve individual and organisational performance, but also have an impact on corruption. Several studies have found that greater female participation in leadership positions could have an impact in reducing bribery and corruption. A study by Bauhr et al. (2019) found that an increase in female representation has an effect in reducing corruption in the long term. It noted that the inclusion of female representatives in elected assemblies had a negative effect on the prevalence of both petty and grand forms of corruption. This was largely owing to such women representatives prioritising efforts aimed at improving service delivery to traditionally female-oriented sectors as well as the breakup of male-dominated clientelist networks. A World Bank report also notes that women are generally less tolerant of corruption and less likely to accept a bribe in their jobs when compared to men (Mason & King, 2001, p. 93). However, contrary arguments have been made that “women’s participation in corrupt activities may not be limited by gender-based propensities for probity, but rather by opportunities for corruption” (Hossain et al. 2010, p. 23). The proponents of this argument note that women in public office may not necessarily be less corrupt than men, but that corruption typically operates in specific networks to which women usually do not have access at the initial stages (Hossain et al. 2010, p. 24). These findings do suggest that the integration of women in leadership positions within Customs could further contribute to lowering levels of corruption and increase levels of integrity within the organisations, at least in the short term. However, increasing the representation of women in leadership should be supported with additional measures aimed at improving accountability, transparency and good governance.

## 6. Conclusion

Gender equality has long been recognised internationally as one of the key drivers of economic development. Efforts to achieve gender equality and the empowerment of women and girls are in line with the UN's 2030 Agenda for Sustainable Development (UN, 2015). Since the 1970s there have been various theoretical assumptions and perspectives on gender and development, seeking to explain how development affects women and how women's issues are relevant to development. This has recently culminated in the World Bank's exclusive focus on gender equality and women's empowerment as smart economics, noting that investing in women and girls has the potential to improve a country's economic efficiency and help it achieve other development outcomes.

The positive impact of gender-responsive trade policies and measures in promoting both women's economic empowerment and inclusive development in the ESA region has further been highlighted in various agreements and strategies endorsed by the RECs. The EAC, COMESA and SADC member states have all passed regional agreements that push for the incorporation of gender perspectives into member countries' customs and trade policies. Nevertheless, the gender mainstreaming efforts made at the regional level have failed to materialise at the national level, with many member countries still registering high levels of gender inequality compared to other regions. This is largely attributed to the fact that individual member states have failed to implement the regional gender guidelines effectively. As a result, many women in ESA engaged in ICBT continue to be plagued by multiple challenges that limit their capacity to diversify their products and expand their enterprises. In the same context gender parity is yet to be achieved within the region's customs and revenue authorities, as many remain largely male dominated at the executive management level.

The failure to effectively promote gender equality in trade and customs' policies has limited the ESA member countries' ability to seize the associated economic gains. The implementation of gender-responsive trade measures would not only increase wages for women but also has the potential to boost such economies' global competitiveness especially through attracting foreign export-oriented firms which tend to favour female employees. Moreover, integrating women into leadership positions in customs administrations has the potential to not only improve the organisational performance but also reduce the risk of bribery and corruption. Thus, the ESA member countries need to take steps to implement and enforce the gender measures they have committed to in their regional agreements.



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## Notes

- 1 Review of websites of the revenue authorities within the ESA member countries, April 2019.
- 2 Interview with a ZIMRA Human Resource official, Harare, March–April 2019.
- 3 Interviews with several female customs officials in the ZIMRA, Harare, March–April 2019.

### Dennis Ndonga



Dennis Ndonga has a PhD from Monash University, Australia and is a law lecturer at Murdoch University, Australia. His research interests centre on international trade law, international economic law and Customs issues. He consulted and worked with various international organisations and Customs training institutes including the World Customs Organization (WCO), WCO East and Southern Africa Regional Office for Capacity Building (ESA ROCB), Shanghai Customs College and the Kenya School of Revenue Administration. He is the author of *Single Windows and Trade Facilitation: A Tool for Development* (Wolters Kluwer Law & Business, 2015).

### Sendra Chihaka



Sendra Chihaka is a revenue officer at the Zimbabwe Revenue Authority (ZIMRA). She holds a Master of Science degree in International Trade Policy and Trade Law from the Lund University, Sweden and another Master of Science degree in Development Studies from the National University of Science and Technology, Zimbabwe. Her research interests include trade policy, trade facilitation and Customs issues, which has seen her participating in World Customs Organization East and Southern Africa research. She has experience dealing with Customs procedures and trade policy analysis within ZIMRA.

### Anne Fielder



Anne Fielder has a Bachelor of Laws (Distinction) and a Master of Laws (Research) from Murdoch University, Australia. She is a sessional law staff member and co-founder of the Tutor's Development Network at Murdoch University, Australia.

# Descriptive evaluation of the leading methodologies to estimate the scale of illicit tobacco trade

*Indrek Saar and Petr Janský*

## Abstract

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The illicit tobacco trade is a large-scale worldwide phenomenon that can be associated with many negative consequences, such as criminal activity, lost tax revenues and higher prevalence of tobacco-related diseases. Customs authorities responsible for tackling illicit tobacco trade face the difficulties of monitoring and measuring the illicit tobacco market and mostly rely on the seizure data or studies funded by tobacco industry. To provide recommendations about an appropriate methodology to measure the scale of illicit trade, we performed qualitative descriptive evaluations of the two leading approaches: survey-based and trade discrepancy methods. We used the existing literature and basic economic identities to develop a straightforward economic accounting framework. Using this framework, we assess both methods and evaluate them against the criteria of reliability, validity, feasibility and country coverage. While the trade discrepancy approach has its strengths, we find that across these four criteria the survey-based approach performs better and should be preferred.

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## 1. Introduction

Illicit trade in tobacco products (ITTP) is a worldwide phenomenon that can be associated with negative consequences that include criminal activity, lost tax revenues and a higher prevalence of tobacco-related diseases. Large amounts of cigarettes and other tobacco products are seized both at the borders and inland by customs authorities in many countries. One of the key observations from our participation in the illicit trade in tobacco products in the European Union project, carried out in 2018–2019 by the Secretariat of the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), was that seizure data is the main source of information for customs authorities to monitor the scale of the illicit market, combined with estimates from studies funded by the tobacco industry. This became clear from the interviews with customs officials during the study visits (World Health Organization [WHO] Framework Convention on Tobacco Control [FCTC], 2020). The lack of reliable estimates complicates decision-making at both the political and operational levels. There are, however, several analytical, independent studies that have been carried out that attempted to provide an approximation of the importance of ITTP through various methods. Not surprisingly, given its illicit nature, the studies vary in the estimated scale of ITTP, but as much as 12 per cent of the global cigarette market is thought to be illicit, with the associated loss of at least US\$40 billion in tax revenues (Joossens et al., 2009). Such estimates, if reliable and feasible, assist with understanding the size of the problem and with monitoring the effects of policy interventions.

There are various methods that can be used by customs authorities or others to measure the scale of illicit tobacco trade. Relying on some review studies (Gallagher et al., 2018; National Research Council, 2015; Yurekli et al., 2001) as well as more specific recent analyses (Barrera et al., 2019; Aldridge & Décary-Héту, 2015), we can identify five broad methodological categories: expert surveys, web-crawling approaches, modelling and econometric approaches, survey-based approaches and trade discrepancy methods.

Expert surveys can generate quite accurate estimations; however, their quality varies significantly from year to year due to the changing knowledge and experience of experts (Yurekli et al., 2001). In addition, expert surveys tend to provide qualitative observations rather than quantitative estimates (Agency for Research on Cancer, 2008, p. 140; see also Kupka & Tvrdá, 2016) and are typically used in combination with other methods (see Ajmal & Veng, 2015 for one example).

Web-crawling approaches involve the use of software to index all content in a website, then extract relevant information such as exact product names, vendors, prices, destinations and sources of the product, and even customer feedback, storing them in databases that can be searched and analysed (Barrera et al., 2019; Aldridge & Décary-Héту, 2015; Thelwall, 2001). Since this approach can measure only the trade taking place or initiated through online platforms, it is not a valid method to address the entire market unless the internet becomes the main platform for ITTP.

There are also various modelling or econometric approaches. For example, the impact of incentives for smuggling could be modelled by examining the effects of price differences between neighbouring countries on sales and/or consumption of tobacco products (see Goel & Saunoris, 2019; Prieger & Kulick, 2018; Yürekli & Sayginsoy, 2010; Goel, 2008; Yurekli et al., 2001). Due to its complexity, the uncertain quality of data and analytical proficiency (Gallagher et al., 2018), the feasibility of modelling or econometric approaches is rather low.

The remaining approaches can be grouped into two categories: those based on consumer surveys and those relying on discrepancies in international trade statistics. In terms of ease of implementation and feasibility, these two approaches are often the most practical and have been frequently adopted in the literature. For this reason, the remainder of the current paper will focus on the two latter methodological categories.

Methodological approaches to estimating ITTP vary in reliability, validity and feasibility, as well as in which countries they are available. We used these four criteria to evaluate consumer survey-based and trade discrepancy approaches to estimate the scale of ITTP. It is widely recognised that no currently available method for assessing ITTP is flawless (Gallagher et al., 2018, p. 9), and our evaluation suggests which methods might most reliably track ITTP over time in multiple countries.

The rest of the paper is structured in the following way: section 2 outlines the evaluation methods used, section 3 develops a simple framework for economic accounting of illicit tobacco trade that helps to capture the strengths and weaknesses of the various measurement approaches, while sections 4 and 5 analytically describe these two leading methodological approaches to estimate the scale of illicit tobacco trade. Section 6 provides a discussion and concludes the paper.

## 2. Methods

To understand the merit of consumer survey-based and trade discrepancy methods, we performed a qualitative descriptive evaluation. Specifically, we described each method based on the information we collected from prior studies that have employed or reviewed these methods. Our descriptions compare the characteristics, weaknesses and strengths of each method against four criteria: reliability, validity, feasibility and country coverage. The criteria were selected in relation to their suitability for evaluating the impact of initiatives such as the WHO Protocol to Eliminate Illicit Trade in Tobacco Products (WHO, 2013) and on target 16.4 of the United Nations Sustainable Development Goals (SDGs) to reduce illicit financial flows, which includes illicit tobacco trade. For such policy purposes, reliability and validity are not sufficient criteria, and feasibility and country coverage should also play an important role. Such criteria should also work well for estimating the scale of illicit tobacco trade more generally, for example by customs authorities for operational purposes.

In this paper the four criteria used are defined and interpreted as follows:

*Reliability* refers to the consistency of resulting estimates. A reliable method should produce similar results when applied more than once. In other words, reliability refers to the accuracy of the method, making estimates more comparable across settings/countries.

*Validity*, on the other hand, expresses the expectation of being precise with respect to the actual value that is measured. In the current context, estimates obtained via a valid methodology are close to the actual scale of illicit trade. Similarly, invalid methods might capture only part of the illicit trade and therefore cannot produce the true scale of illicit tobacco trade.

*Feasibility* implies that the data collection process should be possible in practical terms, economically reasonable and methodologically straightforward, and the estimates should be unambiguously interpretable.

*Country coverage* means that the application should be available for use by as many countries as possible. In a sense, this criterion complements feasibility: even if the method is feasible in some countries, this might not be true for others. This is an especially important criterion for evaluating methods that rely on secondary data because availability of data is an essential part of implementation. For methods that need primary data collection, the existence of prior applications of the method is one indicator of country coverage.

We combined information from various data sources to perform the evaluation. However, we began by developing a theoretical framework to structure the subsequent discussion and evaluation. Building on a few basic economic identities, we generated a simple model to distinguish between various components and types of economic activity in tobacco markets.

The characteristics of both methods under evaluation are described in the literature. We first identified review or methodology papers that could be used to map the main logic and features, as well as the overall pros and cons of each methods. To understand how each model works in practice, we also examined empirical studies utilising the methods. Rather than presenting a systematic review of related literature, our evaluation relies on studies specifically addressing illicit tobacco trade and/or its measurement. The studies were identified using various bibliographic platforms, including Scopus, Web of Science, ScienceDirect, Wiley Online Library, SpringerLink, and Taylor & Francis. Additionally, a Google web search was used to find other analytical papers on the issue. We used the following search terms: 'illicit tobacco', 'tobacco trade', 'illicit cigarettes', 'measurement of illicit trade' and 'cigarette smuggling'. In addition to studies specifically related to illicit tobacco or its measurement, we looked for studies and information addressing general aspects of both methods such as limitation of consumer surveys or trade statistics.

### 3. Accounting the illicit tobacco trade

In this section we present an accounting framework for ITTP. Implicitly, we focus on one country in one year and its interactions with the rest of the world. Assuming that total production of tobacco products  $Q$  consists of licit and illicit production,  $Q^L$  and  $Q^I$ , respectively, therefore:

$$Q = Q^L + Q^I \tag{1}$$

The products can be sold legally in domestic markets, and sales are denoted as  $S^L$ . In most instances,  $S^L = Q^L$ . However, a certain amount of locally manufactured products might be exported legally before any sale (sold abroad), denoted as  $X^L$ . Considering that imported licit products  $M^L$  are also sold in the domestic market, officially recorded sales of tobacco products in the country can be expressed as follows:

$$S^L = Q^L - X^L + M^L \tag{2}$$

Note that the entire amount of the products sold is not consumed by domestic consumers. After sale, they might be re-sold informally to consumers in other countries, denoted as  $X^{LI}$ . In the case of tobacco, this might happen in the form of ‘bootlegging’, for example. In addition, if there is a considerable cross-border trade taking place between neighbouring countries, additional export and import components appear, denoted as  $X^T$  and  $M^T$ , respectively. Therefore, to get the legal consumption of domestic consumer  $C^L$ , the last formula must be modified as follows:

$$C^L = S^L - X^{LI} - X^T + M^T \tag{3}$$

Assuming that total consumption  $C$  of tobacco consists of licit consumption  $C^L$  and illicit consumption  $C^I$ , therefore:

$$C = C^L + C^I \tag{4}$$

Equation (3) shows the components of licit consumption. For illicit consumption there are three sources. The first one is the legal export of trade partners that is diverted into an illegal form when entering the country. This can be expressed as the discrepancy between partners’ export  $X^P$  and officially recorded import of the country from these partners  $M^L$ . The second source is imports that are not recorded as exports in partner countries nor as imports in the importing country. Again, a typical example is bootlegging. This is denoted as  $M^I$ . The third source is domestic illicit production  $Q^I$ . We must also consider that part of this illicit production might be exported, and that we denote as  $X^I$ . Accordingly, illicit consumption can be formulated as follows:

$$C^I = (X^P - M^L) + M^I + Q^I - X^I \tag{5}$$

From these equations it is easy to derive simple formulas to estimate illicit consumption  $C^I$ . Survey-based studies manipulate equation (4) and illicit consumption is measured as follows:

$$C^I = C - C^L \tag{6}$$

Note that the equation (6) captures all the components shown in equation (5). If the data about total consumption and tax paid consumption is available (or possible to collect), then this formula can be utilised. However, in practice it is usually assumed that  $C^L \approx S^L$  and therefore tax paid on sales is used instead of consumption. While sales might be a good approximation for legal consumption under certain conditions, this approach ignores the variables  $X^{LI}$ ,  $X^T$  and  $M^T$  (see equation (3)). For example, if a considerable amount of sold products is moving out of the country in the form of cross-border trade or bootlegging, this approach underestimates actual illicit consumption. One way to overcome these problems would be to measure  $C^I$  directly, and that is often done in practice.



The trade discrepancy approach employs equation (5) by including only the first two terms, as follows:

$$C^I = X^P - M^L \quad (7)$$

Again, the three variables  $M^I$ ,  $Q^I$  and  $X^I$  are ignored since they are not included in the official trade statistics. This means that if there is considerable informal production or illegal importation occurring, the trade discrepancy approach will underestimate the actual illicit consumption. The survey-based approach is, therefore, potentially more exact compared to the trade discrepancy method if the overall aim is to reliably measure the consumption of illicit tobacco.

Having introduced both methods and having highlighted the pitfalls of these in a systematic manner using the accounting framework, we now move to more detailed descriptions of each method.

#### 4. Survey-based approaches

Survey-based approaches rely on the data collected directly from market participants, usually from consumers. Although there have been studies carried out that gather information from the producers' side of the market (for examples see Skinnari & Korsell, 2016), it is not reasonable to expect that producers or sellers of illicit products are willing to reveal information that could threaten their business, especially if the data collection takes place on a regular basis.

Two general approaches have been used to arrive at the estimate of the scale of ITTP. First, it is measured on the information collected from consumers about their purchases and consumption of illicit products (for example, proportion of illicit packs consumers have bought). The second, and less straightforward approach, is based on data on overall consumption of tobacco products, including both licit and illicit, avoiding the need to separate them. In this case the total consumption figures can be combined with tax paid on sales to derive the illicit part of the consumption, as expressed in equation (6). The data for tax paid on sales should be available in most countries, since it can be easily calculated based on the excise tax revenues collected from the tobacco products. Examples of studies that have utilised this approach are Nguyen et al. (2014), Ahsan et al. (2014) and Blecher (2010). It is also employed by tax and customs authorities, for example, in the United Kingdom (HM Revenue & Customs, 2020).

Comparing these two survey-based approaches, the second indirect one is certainly more feasible in terms of country coverage with respect to secondary data sources. Although conducting surveys is typically quite expensive, the data on total tobacco use/smoking prevalence are collected regularly in many countries, which cannot be said about illicit trade or consumption. For example, 76 countries in the world effectively monitor tobacco use through representative and periodic surveys of adults and young people (World Health Organization, 2017) and 146 countries regularly monitor smoking behaviour among the population aged greater than or equal to 15 years (WHO, 2018). Considering that regular monitoring of tobacco use is a requirement of the 181 parties to the WHO Framework Convention on Tobacco Control (FCTC), there is a potential to increase the number of countries even more.

Regarding data on illicit tobacco products, there are at least two regular surveys conducted but both fail to meet the criteria of validity and reliability or are not considered sufficiently transparent for us to evaluate. The Euromonitor database is quite widely used, but the methodology of this data remains unclear (see Schafferer et al., 2018 and Prieger & Kulick, 2018). Another option would be to rely on estimates provided by KPMG, an international services network funded by the tobacco industry. Several authors have employed this data (Transcrime, 2016; Calderoni, 2014), but there is relatively strong evidence indicating its non-reliability (Gallagher et al., 2018; Stoklosa, 2016).

Various methodological options exist for survey-based approaches to acquire the required information from consumers. Smokers might be interviewed face-to-face on the street or at home, via telephone or asked to mail their empty cigarette packs for examination. The latter means that data collection could involve examination of the cigarette packs by the interviewer to clarify if it is smuggled and/or taxes are paid (Yurekli et al., 2001). Respondents do not necessarily have to be aware of the legality of products they have purchased, and it might require knowledgeable interviewers to detect illicit packs. Curti et al. (2019), on the other hand, used an indirect approach to separate illegal and legal products by analysing brand information and prices.

If the sample is representative and large enough, inferential statistics can enable estimates for illicit tobacco consumption to be derived for the entire population. While there is evidence that venue-based (Muhib et al., 2001; Thomas & Freisthler, 2016) or street intercept (Graham et al., 2014) sampling can work relatively well, it is less likely to draw a representative sample with known statistical properties. Superior statistical confidence and higher reliability can be achieved if nationally representative random samples are available, whether the sampling was constructed specifically for the tobacco study, as in Joossens et al. (2014), or is included as part of another study as in Ciecierski (2007).

Regardless of the choice between different approaches or sampling procedures, it must be acknowledged that survey-based studies rely heavily on self-reported data. Therefore, they suffer from social desirability bias, according to which self-reported assessment of substance use such as alcohol, tobacco or drugs tends to underestimate the actual consumption or heavy users might remain out of the reach of researchers (Liber & Warner, 2017; Johnson, 2014; Tourangeau & Yan, 2007; Yurekli et al., 2001; Pérez-Stable, 1990). Johnson (2014) discusses various reasons behind misreporting tendency, such as the need to avoid social threat, or feelings of shame, embarrassment or weakness. In some cases, however, researchers must also account for the possibility of over-reporting that is motivated from trying to impress peers, for instance (Johnson, 2014).

There are certain measures researchers have tried to use to reduce reporting bias. For example, examination of purchased packs by interviewers might be preferred rather than allowing respondents to identify the legality of the products. Other options include the collection of additional data from the respondent's significant other, providing the respondent with greater privacy when speaking with the interviewer or exerting some sort of psychological pressure on respondents to answer more truthfully (Johnson, 2014). For example, Joossens et al. (2014) point to the at-home setting of an interview as a limitation if the interview takes place in front of the family members. Ciecierski (2007) has rather thoroughly addressed and tried to minimise under-reporting bias by providing private and at-home settings for respondents that aim to offer anonymity and a feeling of comfort to answer what might be uncomfortable questions. In addition, authors may structure interviews so that they encourage respondents to feel as comfortable as possible. Specifically, authors may intentionally ask additional questions so that tobacco-related themes do not seem overly important.

Regardless of these attempts to tackle the problem, misreporting remains an unsolved issue (Liber & Warner, 2017), comprising the main weakness of survey-based methods. Some studies have tried to deal with the under-reporting through sensitivity analysis, presenting estimates under various assumptions about the level of under-reporting. For example, Ahsan et al. (2014) and Nguyen et al. (2014) both assume under-reporting levels of 10–30 per cent. Results from these studies show that the change in the level of under-reporting by 10 per cent changes the estimated scale of illicit trade up to twofold, or even more in some years. Therefore, under-reporting bias causes substantial uncertainty in estimating the scale of illicit trade.

Due to potential misreporting, estimates derived from self-reported assessments might suffer from both low validity and reliability and should be interpreted cautiously. Specifically, in terms of validity and due to social desirability bias, estimates might resemble preferred levels of consumption rather

than actual levels. Regarding reliability, although respondents might give consistent answers over a short period, consumption estimates are based on actual consumption as well as factors affecting respondents' individual motivations to misreport. For example, in Indonesia, where smoking might be socially desirable (Ahsan et al., 2014), consumers could be inclined to over-reporting. In the United States, with decreasing smoking prevalence, the stigmatisation of smoking is probably increasing (Liber & Warner, 2017) and an under-reporting tendency might prevail. This makes it a rather complicated task to determine the actual change in consumption.

Other typical limitations that all surveys face are also important issues for tobacco surveys. According to survey error models, one must account for possible errors like sampling, coverage, nonresponse and inferential errors (Lavrakas, 2013). In this context, several errors could be decreased by focusing surveys on total consumption rather than illicit consumption. For example, it is probably less embarrassing or inconvenient for a consumer to report frequent smoking than frequent purchase of illicit tobacco, potentially reducing nonresponse errors (Tourangeau & Yan, 2007). On the other hand, focusing directly on illicit products, a researcher can decrease misreporting by personally examining tobacco products to identify illegal ones. Depending on circumstances, a direct approach to measuring illicit consumption might still be preferable.

In addition, based on the accounting framework above, the indirect approach is also inclined to under-estimate the size of the illicit market if a considerable proportion of legal sales are exported via bootlegging or via cross-border trade (that is, because too large a value is subtracted from the total consumption figure). The indirect approach is also inclined to over-estimate the size of the illicit market if tobacco products are imported via cross-border trade into the country. If the scale of bootlegging and cross-border trade can be detected and assessed using other methods (that is, expert opinions and/or other studies), the resulting error might not be a substantial problem.

## 5. Trade discrepancy approach

The trade discrepancy method uses international trade statistics to compare reported tobacco exports destined for a country against reported tobacco imports. More specifically, comparing reported export from country A to country (or region) B to reported imports to country (or region) B, the difference between official exports and imports is largely composed of illicit trade. One important assumption underlying this logic is that since there are usually no taxes imposed on exports, the exporting country most likely reports correct figures; but as the imports are taxed, importers have incentives to hide the true values and under-report or divert the goods to the illicit market (Yurekli et al., 2001). As Yurekli et al. (2001) have noted, 'persistent discrepancies between these amounts – discrepancies that cannot be explained by other factors – provide an estimate of the amount of wholesale smuggled tobacco.'

This method has been applied to estimate the scale of ITTP, but it has its origins in estimating a more general phenomenon, illicit financial flows, where it is usually referred to as the 'trade mirror statistics method'. As described in more detail by Cobham and Janský (2020), the approach contrasts what a country claims to import from (or export to) the rest of the world with what the rest of the world states it exported to (or imported from) that given country. The progressive development of this method has taken place since Morgenstern (1950, 1974) and Bhagwati (1964, 1974), the latter being used as an example by Yurekli et al (2001). These studies usually use publicly available international trade data sets. Frequently used data sources include the United Nations' (UN) Comtrade data, used recently by Kellenberg and Levinson (2016) and Ndikumana (2016), while prominent research by Global Financial Integrity's Spanjers and Salomon (2017) and Ndikumana and Boyce (2010) use International Monetary Fund's (IMF) Direction of Trade Statistics. The two data sets are similar, but the coverage

of countries and the level of aggregation (data are available at a so-called ‘product level’ and, for recent years, monthly) make UN Comtrade the preferable source. In addition, only the UN Comtrade provides detailed, separate information on tobacco trade. For example, the UN Comtrade data has been used recently as one of the sources for studying ITTP in Paraguay (Gomis et al., 2018). Using data on commodities ‘240220 – Cigarettes; containing tobacco’, authors argued that the methodology can be useful despite many caveats.

One of the strengths of this method is good country coverage, as estimations are based on data that are available for most countries. More specifically, the UN Comtrade database stores standardised official annual trade statistics reported by more than 170 countries and reflects international merchandise flows with coverage reaching up to 99 per cent of world merchandise trade (United Nations [UN], n.d). In addition, since the data is accessible online, the method is quite practical. Results are also readily understood and interpreted.

Although practices to collect the data used for the trade discrepancy approach vary across countries, in developing countries it is based on officially reported figures drawn primarily from customs declarations (UN, 2013). These figures are reasonably reliable and substantial errors are rare. Developed countries, however, rely heavily on other sources such as administrative records associated with taxation or enterprise surveys, partly due to abolition of customs control, for example within the European Union (UN, 2013).

Nevertheless, it should be noted that several potential errors can affect the accuracy of this method. Errors in commodity classifications, for example, or errors from intentional over- or under-invoicing – for the purposes of money laundering (see Altinkaya & Yucel, 2013) – can produce biased estimates. Varying valuation methods are also used to compile export and import data, sometimes requiring application of a threshold level above which illicit activity can be detected (Nitsch, 2016).

The validity of the trade discrepancy approach seems to be the most serious concern. Specifically, it is only possible to measure trade flows based on legal exports. If a considerable part of the export from country A to country B is taking place in the form of bootlegging or other forms of illegal trade, then the estimate only expresses part of the illegal flow of tobacco products. The same applies to illegal exports from country B: its magnitude affects the validity of this approach, as indicated by equation (5) above. For example, if we were to observe the export of tobacco products from Belarus to Estonia in the 2010s, we cannot detect any official trade according to the UN Comtrade database, although Belarusian illicit products are the most common ones in the Estonian illegal market, as we found out from interviews with customs officials. There is similar evidence from Latin America. Specifically, while Paraguay’s tobacco company Tabesa does not have an official export to Brazil, customs authorities in the latter country seized millions of cigarettes in the 2010s (Gomis et al., 2018). Therefore, based on trade statistics, the illicit trade is not always identified or may be considerably distorted.

One simple explanation could be that these products are mostly ‘cheap white’ cigarettes that are produced legally but then diverted to illicit markets without being reported as exports. Therefore, the entity measured through the trade discrepancy method is narrower than defined above: international flows of illicit tobacco products, net of unreported export of partner countries ( $X'$  in equation (5)). The possibility also exists that the goods can be diverted to illicit markets of other countries (Yurekli et al., 2001). Therefore, the trade discrepancy approach might not produce valid results in country comparisons. Including an entire region in the analysis might give more valid estimates. However, the precision of the estimate could turn out lower if too many countries are compared because illicit trade flows are most likely destined to a limited number of countries (Nitsch, 2016).

Another potential limitation of the trade discrepancy approach is that it does not capture domestic illicit production without payment of taxes. This is also evident from equation (7) above. Yurekli et al. (2001) argue that because of this feature, the method is not recommended for use in countries that are significant producers of tobacco. One option to overcome this challenge would be to utilise complementary data and materials to improve the interpretability of trade statistics. For example, Gomis et al. (2018) searched the websites of transnational tobacco companies and Paraguay's tobacco company (Tabesa) for activities since the mid-2000s to understand the company's global business strategy. In addition, Gomis et al. (2018) utilise data such as imports of cigarette paper (HS 4813) and cellulose acetate (HS 391211 and 391212), two key cigarette components, to account for domestic illicit tobacco production.

There are evidently several essential assumptions and related limitations for the trade discrepancy approach. For example, the method assumes that all goods reported by an exporting country but not by the corresponding importing country are ultimately smuggled into the same importing country (and no other country). Furthermore, bootlegging is not covered by this method (Yurekli et al., 2001). More generally, Nitsch (2016) observes that knowledge about trade misreporting practices is scarce and more detailed analysis about the reasons of discrepancies in trade statistics is needed to improve the validity of this approach. For example, transaction-level data with information from both countries could enable further validation of the method. Neither the UN Comtrade nor other similar international databases contain such data, and transaction-level data has been used only in a limited number of single-country case studies like Wier (2020) that generally do not focus on tobacco. Above all, it is hard to find evidence that the method fulfils the validity criteria that the estimates obtained are close to the actual scale of ITTP.

When it comes to comparing trade discrepancy and survey-based methods, Nguyen et al. (2014) have provided estimates for Vietnam using both approaches. The trade discrepancy method produced comparable estimates with the survey-based method when an assumption of roughly 30 per cent under-reporting of tobacco use was used, although some clear differences were seen in the respective results. Specifically, while the survey-based approach revealed a decreasing trend in illicit trade over time, the trade discrepancy approach showed an opposite trend (after 2006). Nguyen et al. (2014) highlighted how the two methods measure and reflect different aspects of ITTP: 'The survey-based method measures the magnitude of illicit tobacco present in the market, whereas the trade discrepancy method measures international flows of illicit tobacco products.'

## 6. Discussion

We have reviewed and evaluated two approaches that are often used to assess the scale of illicit trade in tobacco products. The key findings are presented in Table 1. Both survey-based and trade discrepancy approaches have specific strengths and weaknesses that must be considered when used for measurement purposes. According to our descriptive evaluation, the trade discrepancy method slightly outperforms the survey-based method on country coverage. While secondary data is available for both methods, a larger range of countries is covered by trade statistics. In terms of feasibility, the methods are equally practical under the availability of secondary data. However, the survey-based approach might be somewhat easier to interpret as the main data is collected directly from consumers while the trade discrepancy method derives the estimate indirectly based on certain assumptions.

*Table 1: Results of qualitative descriptive evaluation*

<b>Criteria</b>	<b>Survey-based method</b>	<b>Trade discrepancy method</b>	<b>Recommendation</b>
Validity	Misreporting	Ignores domestic production and flows that are illicit along the entire supply chain	Survey-based method
Reliability	Consumer surveys sensitive to various errors and biases	Customs declarations and enterprise surveys more reliable	Trade discrepancy
Feasibility	Practical, straightforward interpretation	Practical, less straightforward interpretation	Survey-based method
Country coverage	146 countries currently, potentially 181	More than 170 countries, 99% of world merchandise	Trade discrepancy
Overall	While the country coverage, feasibility and reliability of both methods are comparable, due to the low validity of the trade discrepancy method we evaluate that a survey-based approach would generally outperform the trade discrepancy method.		

Regarding the reliability of methods, both methods rely at least partly on data collected via surveys. However, trade statistics, which in turn rely on enterprise surveys, are probably less sensitive to various errors as businesses (unlike consumers) routinely keep records of their transactions. In addition, trade statistics are largely based on officially reported customs declarations, which we take to be more reliable than consumers’ self-reported data. This leads us to favour the trade discrepancy approach in relation to the reliability criterion.

Both methods have limitations that challenge the validity of the obtained estimates. For the trade discrepancy approach, the main limitations concern the lack of information with respect to domestic production, and illicit flows along the entire supply chain. If these forms of illicit activities are substantial, the trade discrepancy method alone is not suitable. This and other limitations, including the poor availability of transaction-level trade data, imply that an acceptable level of validity remains out of reach.

In the case of survey-based methods, one of the key challenges to acknowledge and deal with is the possibility of misreporting, which threatens the validity of estimates. Unfortunately, there is no good

solution for that problem as yet. However, there are several methods that researchers can employ to decrease the misreporting error. One is to turn to an indirect approach by measuring the scale of illicit trade through discrepancy between sales and survey-based total consumption, since the latter is probably a less sensitive survey topic than addressing illicit tobacco through direct measurement tools. One of the strengths of this approach is the fact that tobacco consumption or smoking prevalence is measured in many countries worldwide, providing good country coverage and practicality.

The misreporting challenge does not mean that survey-based methods are inapplicable. In comparison to the trade discrepancy approach – that is completely incapable of capturing certain illicit transactions – achieving a satisfactory validity is more probable with survey-based approaches. However, if the objective is to estimate the absolute scale of ITTP, studies based on self-reported data might need some form of cross-validation through less subjective statistics such as national and international trade statistics or taxes on paid sales. To obtain estimates of high quality these options should be reviewed and implemented with great care. Several contextual factors, such as existence of domestic production, overall trend in smoking prevalence and existence of bootlegging, should be accounted for.

We conclude with proposals for uses and refinements of the existing methodologies. Overall, we find that for policy purposes, such as FCTC evaluation or the SDGs target, survey-based approaches are preferred. There are aspects of the survey-based method to be improved, but across the four criteria it performs better. In the case of the trade discrepancy method, it is hard to find evidence that the method, as applied to the UN Comtrade international trade statistics, fulfils the validity criteria. As the method stands currently, we discourage its use as the main method for policy evaluations in the international context. Future research should continue to examine misreporting issues surrounding substance use, to clarify further optimal use of existing measures.

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**Indrek Saar**

Indrek Saar is a professor at the Financial College of the Estonian Academy of Security Sciences and an associate professor at the School of Governance, Law and Society of Tallinn University. He received his PhD in economics from the University of Tartu. His main teaching areas include economics, taxation, and quantitative methods. His main research interests are related to the fields of public finance and policy analysis, particularly taxation and customs policies, economics of law enforcement and cost-benefit analysis.

**Petr Janský**

Petr Janský is an economist with an empirical research interest in public finance, taxation, tax havens and international development. With academic degrees from the University of Oxford and Charles University in Prague, Petr Janský is currently an associate professor and head of department of European economic integration and economic policy at Charles University. He publishes in scholarly journals such as *Economic Geography*, *International Tax and Public Finance* or *World Economy*. Petr Janský pursues impact through collaboration with international organisations such as the European Parliament and the United Nations.



# Key theory issues of the Eurasian Economic Union customs law

*Sergey O. Shohin, Olga Bobrova & Anton Kozhankov*

## Abstract

There has been an ongoing discussion on the position of customs law in the legal system since the mid-1970s. The Treaty on the Eurasian Economic Union (EAEU) and EAEU Customs Code (EAEU CC) highlights the position of customs law within the framework of the EAEU legal system. The authors provide a list of the EAEU legal system sources governing customs relationships, a summary of scholars' views on customs law, theoretical and practical backgrounds to EAEU CC categorisations, and identify the key issues for shaping both customs legal theory and the regulation of the EAEU customs legal relations.

## 1. Introduction

The concept, subject, method and position of customs law in the legal system have been topics for discussion since the mid-1970s. Some scholars state that:

establishing and functioning of the EAEU resulted in a new legal phenomenon – EAEU law which regulates the relationship between the Member-States due to ‘functioning and developing of the economic integration, and the question being about its relationship with Member-States national law’. (Shulyat’ev & Skurchenko, 2017, p. 3)

Here, we have formulated a legal theory on categorising EAEU customs law and provide the theoretical and practical background of its development. We also examine how the viewpoints of the prominent European, US and Russian scholars evolved on the position of customs law in the legal system.

Given the complexity of the subject, the theory of law failed to develop a uniform construction of such fundamental concepts as the (national) customs law (of member states of a regional integration union), international customs law and customs law of a regional integration union. Until now no uniform framework has been created specifying the relationship between these concepts or their hierarchy, subject to the level of economic integration (free trade zone or customs union).

In addition to the hierarchy of the stated categories and establishing the interaction between them, the issues of the relationship between international customs law as universal legal rules developed by the World Trade Organization (WTO), World Customs Organization (WCO) and other international organisations; and supranational (or regional) customs law (customs law of a regional integration union, for example the EAEU and European Union). The general rule that customs law rules ratified and published are superior to regional and national customs law rules can become inapplicable because they are disregarded by the state and integration union.

Thus, the key issue in determining the position of customs law within the system of law is to characterise the relationship between international customs law (in the form of WTO, WCO regulations) and customs law of a regional integration union.

## 2. Legal basis

### 2.1. EAEU acts of law system regulating customs legal relations

In accordance with Article 25, Paragraph 1 of the Treaty on the EAEU, Common Customs Tariff of the EAEU and other common measures regulating foreign trade, and Single Commodity Nomenclature of Foreign Economic Activity, common customs regulations are applied within the Customs Union (CU) of the EAEU member states.

The Treaty on the EAEU lays down the fundamentals of the common customs regulations. In accordance with Article 32, common customs regulations are applied subject to the following Acts: the Treaty on the EAEU, the EAEC CC, treaties and acts constituting the law of the Union and governing customs legal relations.

Common customs regulations are exclusively within the scope of the EAEU authority and regulations in the specified area may be adopted by the member states in the cases provided by the Treaty to enforce EAEU acts of law. Unlike the provisions in the EAEC CC, the Treaty fails to provide an option for common customs regulations to be governed by the member states' acts of law.

Incorporating the principle of exclusive authority of the Eurasian Economic Commission (EEC) over common customs regulations, the EAEU CC distinguishes between the scope of supranational acts and national acts to identify the legal personality of the entities who enter into customs legal relations. Common customs territory implies that the rules governing importation of goods shall be uniform in all EAEU member states. However, reference rules to national law a priori shall not be a determinant of different regulation.

The Treaty on the EAEU fails to specify the concept of 'common customs regulations', which is important in its interpretation in theory (the language of a fundamental concept of the integration process in the EAEU) and in practice (predicting future impact on the lawmaking process) as the definition acts as a prerequisite for the uniform understanding of the term.

The concept of 'customs regulations', being a type of legal regulation, is closely related to the concept of 'customs law' since the former is the external form of the law and various legal devices affecting customs relationships.

The EAEU CC came into force on 1 January 2018 and is part of the development of the regulation of customs relationships in the member states. The EAEU CC drafters rejected the concept of 'customs law' that used to be provided in the CC CU. In accordance with Article 1, Paragraph 1, Part 2, of the CC CU, 'Customs Regulation in the Customs Union is made subject to the Customs Law of the Customs Union...'. Article 1 of the EAEU CC states that 'Customs Regulation in the Eurasian Economic Union is made subject to the treaties governing customs relations, including this Code and the acts underlying the Law of the Union (hereinafter "the treaties and acts in the area of customs regulation")'. It might be concluded, based on the comparative analysis of two articles, that the legislator deviated from a fundamental concept of 'legislation' to a mere listing of its underlying acts.

It should be noted that the Revised Kyoto Convention and the European Union Customs Code now in force (Union Customs Code) apply the term 'customs law'.

We shall consider the hierarchy of legal sources of the EAEU, set out in Article 32 of the Treaty of the Union. The leading role belongs to the Treaty of the Union rules, which are followed by the EAEU CC, even though it is an Annex to the Treaty, it is based thereon and develops the Treaty provisions, governing customs legal relations. The next position in the hierarchy is Treaties and Acts, governing customs legal relations, and constituting the Law of the Union.

In accordance with Article 6 of the Treaty of the Union, the Law of the Union comprises the Treaty, treaties within the Union, treaties of the Union with a third party and decisions and dispositions of the Supreme Eurasian Economic Council, the Eurasian Intergovernmental Council, and the Eurasian Economic Commission, adopted within the scope of their authority provided for by this Treaty and treaties within the Union.

Treaties within the Union imply that treaties concluded by the member states to regulate the functioning and development of the Union, whereas treaties of the Union with a third party are the ones concluded with third countries, integration associations thereof and international organisations (Article 2, the Treaty of the Union).

The decisions adopted by the Supreme Eurasian Economic Council and the Eurasian Intergovernmental Council shall not conflict with the Treaty of the Union and treaties within the Union and are subject to be implemented by the member states in the order specified in the national legislation thereof. Where there is a conflict between treaties within the Union and the Treaty of the Union, the latter shall prevail. In cases of a conflict between the decisions of the Supreme Eurasian Economic Council, the Eurasian Intergovernmental Council and the EEC, the decisions of the Supreme Eurasian Economic Council shall prevail. A similar mechanism should be provided with respect to the legal acts governing customs legal relationships.

## **2.2. The WTO law system's impact on regulating customs legal relations**

The EAEU CC (Article 3, Paragraph 1) states that customs regulations within the EAEU are based on the harmonisation of treaties and the EAEU acts in the field of customs regulations, with international law rules.

The drafters of the EAEU CC pointed out that many other tasks were fulfilled when drafting the code besides making the terminology and its rules consistent with the provisions of the EAEU Treaty and implementing the provisions of 16 treaties, governing customs legal relationship, and six drafts of treaties. For example, the task of modernising customs administration is subject to the current level of information technology, limiting the national segment of customs regulation, considering the customs rules laid down in the provisions of international conventions on customs law and obligations incurred by the member states within the framework of the WTO, including the WTO Agreement on Trade Facilitation (ATF) (11 December 2013).

Khalipov (2013, pp. 41–42) believes that customs regulations in the CC were not based on the WTO legal system and had an alternative legal framework. The situation is considered to have changed following the entry into force of the EAEU Treaty and the WTO ATF.

The WTO ATF, enacted on 22 February 2017, is part of a set of documents underlying the WTO legal system and about 70 per cent of its provisions govern customs legal relationships.

The EAEU Treaty specified that the rules and regulations of the WTO were taken into consideration when establishing the EAEU, developed and laid down in the Protocol on the Functioning of the EAEU within the Multilateral Trade System (Annex 31 to the Treaty on the EAEU). The Protocol confirmed the prior agreements to apply the Treaty on the Functioning of the Eurasian Economic Union within the Multilateral Trade System (dated 19 May 2011), to regulate the respective relations.

The Treaty specified the ratio of the rules and regulations, adopted by the WTO, to the ones adopted by the CUs, as well as complying with the obligations to the WTO.

In accordance with Article 2 of the Treaty:

The parties shall take any action to make the legal system of the CUs and the decisions of its bodies consistent with the WTO Agreement, as it was stated by each party in the Protocol on accession, including each party obligation incurred as a prerequisite for acceding to the WTO. Prior to taking these actions, the WTO provisions, including the obligations of the parties incurred as a prerequisite for their acceding to the WTO, prevail over the respective provisions of treaties concluded within the framework of the CUs and the decisions adopted by its bodies.

When the bodies of the CUs conclude treaties within the framework thereof, adopt and apply the Acts thereof, the Parties ensure that these treaties and acts comply with the WTO Agreement.

In addition to the ATF, the most important WTO agreements affecting EAEU customs law are the General Agreement on Tariffs and Trade (GATT), as well the agreement on implementation on some articles (for instance, the Antidumping Codex or Agreement on Implementation of Article VII of the GATT 1994).

Before the treaty and EAU CC entered into force (19 May 2011):

the WTO Agreements and the treaties signed within the framework of the regional integration associations are equally binding, notwithstanding the widespread stereotype the former do not prevail over the latter. (Smbatajyn, 2011, p. 76)

At present WTO rules prevail over EAEU rules, which has been specified in the legislation.

It is said in the academic works: ‘the WTO Agreements and the treaties signed within the framework of the regional integration associations are equally binding, notwithstanding the widespread stereotype the former do not prevail over the latter’ (Smbatajyn, 2011, p. 76).

In accordance with the established classification, rules of international law are split into ‘hard’ and ‘soft’. Accordingly, subject to the impact on the Customs Law of the Union, the WTO rules are ‘hard’ (binding), however, the rules adopted by the World Customs Organization are ‘soft’ (advisory), methodical in performing obligations within the framework of the WTO.

The analysis shows that the terminology of the WTO ATF is not used in its entirety in the EAEU CC, such as ‘Single Window’, ‘Preshipment Inspection’, ‘Clearance’ and ‘Committee on Trade Facilitation’. Some sound scientific approach should be developed to deal with the possibility, feasibility and scope of implementation of the WTO ATF provisions into treaties and the EAEU acts in the field of Customs regulations. In this regard, the development and improvement of the Customs Regulations based on the WTO ATF can be continued.

### **3. Theoretical basis: analysing the legal scholars’ views on customs law branch affiliation**

The issue of customs law branch affiliation is common both to the legal scholars in the EAEU member states and to the legal theory worldwide.

#### **3.1. Customs law in the legal theory of foreign countries**

First, we shall consider European scholars’ views on the Customs law doctrine since the European Union Customs Law is one of the most developed law branches with due regard for the phases gone through and the period of integration in the European Union.



Professor Czyzowicz (2005, p. 19) points out that ‘the problem of interpreting Customs law in the modern doctrine definitions in the Western Europe and the US is actually beyond the scholars’ interests.’ The professor asserts that the only exception is France (scholars’ works are devoted to the ratio between national and supranational regulation in France and EU) and Spain (the nature of customs procedures) (Czyzowicz, 2005).

A significant contribution to the doctrine of European Customs law was made by Gellert (2009, p. 53–55) when researching the principle of legal certainty in national and supranational systems of regulating customs legal relations.

Czyzowicz (2005, p. 40) goes on to state that ‘the customs law incorporates the most important standards which ensure overall regulation of international trade. The concept of customs policy is a starting point for discussing Customs law, Customs law being the most efficient instrument of implementing customs policy’. However, the definition of Customs Law is unavailable in the works of Polish legal scholars, in customs law doctrines, and other legal sources in Poland. Such concepts as ‘customs system’, ‘Customs Law’ and ‘customs law’ are used likewise in the sources mentioned above. The issue of classifying customs law into an independent branch is also urgent in the Polish doctrine.

When describing the system of EU Customs law sources, Wolfgang (2007, p. 3) focuses on the fact that ‘European customs law is influenced by international law. The rules of commercial international law, which derive from treaties or conventions, are of paramount importance’. Wolfgang and Harden (2016, p. 4), analysing the evolution of the EU customs relations regulation, state that one of the main functions of the EU Customs Law is to formalise a new role of the customs service which is both collecting customs payments and ensuring security of international trade.

Altemöller (2018) shares Wolfgang and Harden’s (2016, p. 4) opinion that ‘customs authorities perform a leading role in the supply chain which combines supervisory and regulatory as well as mediatory and facilitative tasks’. Altemöller (2018, p. 21) assumes that ‘this calls for modernisation of the public management, customs administration as well as further associated institutional renewal’.

Widdowson (2007, p. 31) suggests that the international customs law acts of the WCO and WTO should be regarded as the legal basis for the customs role evolution:

Customs has traditionally been responsible for implementing a wide range of border management policies, often on behalf of other government agencies. The role of Customs has, however, changed significantly in recent times, and what may represent core business for one administration may fall outside the sphere of responsibility of another. This is reflective of the changing environment in which customs authorities operate, and the corresponding changes in government priorities. The World Trade Organization, World Customs Organization and other international bodies are responding through the development of global standards that recognise the changing nature of border management.

Wilmott (2007, p. 11) considers EU Customs Law as the most important factor, without a comprehensive development of which will risk surrendering Europe’s competitive edge in international trade to nations that have more aggressive customs strategies.

Lux (2007, p. 19) supposes that:

The interdependence between international law and European Community law, particularly in the area of customs, is very complex. The ways in which international customs law is incorporated into the Community’s legal system are many and varied, and there is a need to establish some standard mechanisms for the future in order to reduce the diversity of solutions that are found for problems that are similar.

The US Customs Law incorporates the following relationship, in some experts' opinions:

Customs Laws control the import of goods into the United States and the duties (or import taxes) paid on such goods. The United States Customs and Border Protection Agency is the regulatory agency primarily tasked with overseeing American customs laws. (Garcia, 2018)

Most authors point out that Customs law is a branch of Public law. It is implied from the fact that the scope of the issue to be standardised in this branch of law, regulation methods and types of entities call for the application of Customs Law as well as the orders to be performed under Customs Law (Czyzowicz, 2005, p. 40).

Thus, a small critical analysis of the view on customs law theory in different countries enables us to conclude that:

1. The scholarly discussion mentioned previously shows the importance of the customs law theory provisions for foreign doctrine.
2. Customs law is treated as a tool of customs policy, which must ensure favourable conditions for the development of the state economy and integration association economy (for instance, the EU).
3. The fact that European customs law is influenced by international law is not being challenged. At the same time, the paramount importance of the rules of commercial law, which derive from treaties or conventions, is discussed. Commercial international law rather than customs international law is confirmed to be a priority. This point of view gives rise to discourse on the determination of customs law from the standpoint of classifying law branches into public and private.
4. Regarding customs law classification, the majority of scholars point out that it is a branch of public law.

### 3.2. EAEU customs law doctrine

Matveeva and Rogacheva (2012, p. 6) concluded that:

Customs law can not be regarded so far as a mere Russian Law branch since international law rules are becoming predominant among the sources; the subject matter of legal regulation has been broadened: in particular, it is a relationship involving movement of the goods across the EAEU customs border rather than Russian Federation border. The terminology 'Russian Federation customs border', 'Russian Federation customs territory' are no longer applied'.

In the opinion of the law enforcement experts:

when drafting the CU CC the principle of comprehensive content of customs law rules was adopted: the relationships between a business entity and customs authority, resulted from moving the goods across the customs border, involving customs formalities and compliance with other requirements in the customs regulations are governed by CU Customs Law rules. However, in the cases when customs authority deal with the issues or exercise the authority delegated to them within the scope of other (administrative, tax, civil etc) relationship, not governed by CC, the rules thereof contain the renvoi to the domestic law of the Member-States. (Kozukhanov, 2016, p. 55)

Kobzar-Frolova (2013, p. 19) dwells on the independence of customs law. She formulated the definition of customs law with the help of the description of:

the relationship in the field of customs regulations and Customs which are called customs legal relationship. Customs legal relationships are governed by international, supranational and national law rules, have a particular object and subject matter to be regulated, which enables to identify for

research a specific area of public relations and their specificity, and to describe their typical features and characteristics, have a wide range of participants, arise from legal facts significant for this type of relationships.

Shumilov's (2011, p. 17) opinion can be regarded as a conclusive one:

... the adoption of the EAEU Customs Code enabled to distinguish between the 'old', purely intrastate customs law (Soviet and Russian) and modern customs law as an element of international (regional) law (specifying the system of the fundamental rules of law in the international legal act).

Now that most customs regulation issues are subject to supranational jurisdiction, and it is highly likely to become exclusively supranational in the future, it is inevitable that the EAEU Customs Law will be part of international law.

Nowadays, the international law 'integration' aspect of customs law is being rapidly developed by the experts. In particular, Tolochko (2012) considers EAEU law (Customs Union, CES) to be conditionally collectively aimed at identifying a specific subsystem (micro-level) of international law. Tolochko (2012) regards the concept of integration law as a tool 'to systemize conglomerate international law and link it to the national law system of a particular state. The law of any integration association is almost always a regulatory tool aimed at fulfilling specific economic or political tasks by the Member-States participating therein. The author points out both the theoretical significance of identifying integration law as a separate branch and its practical aspect, 'identifying integration law as a separate branch and isolating it may be the key to solving a number of socio-economic problems in the area of integration'.

### **3.3. Customs law in the law system: retrospective analysis of the doctrine prior to Eurasian integration**

The Soviet doctrine, in particular Talalaev (1987, p. 628) as the most prominent representative thereof, defined customs law as:

a set of legal rules to ensure economic control of the national borders, foreign economic and customs policy of the State. The State regulates import of foreign goods and export of domestic goods by levying customs duties thereon when crossing the state border. Customs authorities undertaking control over it are governed by the Customs Law rules provided by the national legislation as well as by the treaties.

Talalaev (1987, p. 628), one of the most prominent Soviet experts in treaty law, points out that:

in some states Customs Law is a part of Administrative Law. However, Customs law is closely connected with the area governed by international law. There are many international agreements, bilateral and multilateral, concluded by the states on customs issues.

In the 1990s three principal viewpoints were expressed in academic works on the issue of customs law branch affiliation which developed Talalaev's point of view. According to the first one, customs law was a branch of administrative law. Bakhrakh and Kivalov (1995, p. 2) formulated the following basis for the point stated: 'Customs Law is the element of Customs' which is, for its part, 'a complex inherently unified institution being part of the executive branch of power'.

The second group of scholars expressed the opinion that customs law is a sub-branch of administrative law (Sandrowskiy, 1974). Thus, Sandrowskiy (1974, p. 20) discussed the specific nature of customs law caused by the fact that:

crossing the customs border leads to the transition from one customs jurisdiction to another one. Such close contact between various legal regimes is not common to other branches or sub-branches of national law.

Moreover, Sandrowskiy, in 1974, made a valuable remark:

if we recognize that it is reasonable to have Customs Law within the scope of Administrative Law, we assume that at present there are grounds to claim that a special sub-branch exists within the area of Administrative Law, namely Customs branch. It is likely, that over time as new legal basis in this area will be developed, Customs Law might be classified as an independent branch.

Kozhukhanov (2016, p. 55) puts forward counter arguments against considering customs law as a sub-branch of administrative law:

The promoters of this approach fail to take into account that customs relationships go far beyond mere contact of various classes of persons with the customs authorities, when the latter apply mostly imperative rules. Thus, the entities involved in the foreign economic business represent various countries within the Russian Federation and actively cooperate with the customs officials, carriers and other persons to have the goods moved across the border etc.

The third viewpoint was to designate customs law as an independent, comprehensive branch of law. Gabrichidze (1995, p. 14), committed to the argument stated above, indicated that customs law in Russia was ‘a set of legal institutions and rules, governing the relationship in the area of Customs’.

In the context of the third viewpoint, Vorobiev (1996, p. 19) formulated the concept of customs law that provides that:

it is a comprehensive branch of Russian Law governing the relationship between the customs authorities and the persons regarding movement of the goods and the vehicles be the latter across the customs border, customs clearance, control and the required payments being carried out and collected in compliance with the law.

In Vorobiev’s opinion, the reason for classifying customs law into a separate branch is:

the relationship inherent thereto which is governed exclusively by it – these are specific relations, arising from movement of the goods across the customs border and the requirement (imposed by the State, being laid down as a law) to have it cleared and controlled, customs duties being collected.

Nozdrachev (1998, p. 256) assumed that ‘Customs Law was a comprehensive branch of law comprising a set of legal rules from various branches.’ At present, the scholar is working at ‘a systematic approach to define Customs Law as a new branch being developed and identifying its main institutions’. The concept of comprehensive law branches emerged in the late 1940s and remains relevant so far. In Rybakova’s opinion (2013, p. 179), ‘complex public relationships underlie emerging comprehensive legal concepts.’ Khalipov (2011, p. 61), who also mentions a complex nature thereof, articulated the following notion of customs law: ‘a set of legal rules governing the order of proper movement of the goods (vehicles) across the customs border’.

Many scholars had expressed the opinion of the considerable impact made by international law on customs law long before the CUs and Single Economic Space was formed, and legal regulation of customs relations became supranational. For instance, Fomina (1995, p. 135) considered ‘international law to be an active element affecting the area of Customs regulation’, which was caused by ‘rapid development of RF foreign economic relations as well as the increase in inter-State contacts’.

Zraychkin (2000, p. 37) asserted that:

Customs Law was at the interface of two or more legal fields of the State. National Customs law and Foreign Customs law interact in this way. When national branches of law enter into contact a new cross-territory law is being developed (international law). Thereby a newly formed international customs law is the institution both of international law and national law.

Thus, a small critical analysis of the view on customs law theory in Russia and EAEU member states enables us to conclude that:

1. Before commencement of the EAEU Russian scholars viewed customs law as part of administrative law; only some scientists stated that customs law is a separate branch in the legal system.
2. The viewpoint that customs law is partly international, as stated above by some Russian scholars, has been confirmed in the drafting of the customs law of the CUs within the framework of the EAEU.

## 4. Results

### 4.1. On approaches to have customs law hypothetically categorised within the framework of the EAEU law system

We shall therefore give arguments for having the EAEU customs law hypothetically categorised as an independent branch, applying law branch features as developed by Reicher (1974, p. 51). These arguments are:

1. A set of legal rules corresponded to a specific type of public relations (customs relations), that is, in this respect it has a single and separate subject matter of regulation and, consequently, the unity of the subject matter. The subject matter of customs law comprises the relationship arising from and (or) involving movement of goods across EAEU customs borders, their carriage across EAEU single customs territory under customs control, temporary storage, customs declaration, release and use of goods according to the customs procedures, customs control, customs payments, as well as exercising power by the customs authority over the entities who have possession, enjoyment and disposal of the goods described.
2. A specific type of public relations governed by such a set of legal rules has enormous public significance caused by the EAEU member states' budgets (Russia in particular) being critically dependent on customs revenue, as well as the need to ensure national and regional security (fight against customs offences), the safety and wellbeing of the consumers and the population at large.
3. The legal framework underlying such a set of legal rules must be significantly large. By 2019 the EAEU Customs Law comprised a few thousand regulations.
4. Public interest to have a new branch of law categorised and spun off (Chikvadze & Yampolskaya, 1967, p. 89) is aimed at organising comprehensive customs legal relations and systematising customs law, which is getting more complex due to expanding the scope of supranational regulation with the national regulation range being unchanged. Public interest is also evidenced by the fact that EAEU member states when joining the WTO undertook to make supranational and national regulation in compliance with the WTO rules. Moreover, a new paradigm of international trade is developing – a digital economy wherein cross-border paperless trade dominates. The factors mentioned, regarding emerging new transport means (unmanned vehicles) and new cross-border paperless technologies, lead to public interest in organising legal regulations in customs legal relations.

To prove the public significance of categorising customs law as an independent branch, Romanova's view (2017, p. 38) can be quoted:

the development of Customs Law within the framework of integration associations is particularly valuable, since the Customs Union is a key phase of international economic integration, and absent single customs regulations further progress in the field of integration seems hardly achievable.

Kozukhanov (2016, p. 55) shares Reicher's opinion:

Customs law is one of the Russian law branches. The rules thereof govern the process of generating budget revenue in the country and providing national security. As one of the system-forming branches it might be called meaningful and important in the functioning of the State.

Hence, a discussion on whether the EAEU customs law is an independent branch, an element of international customs law or an element of EAEU law (integration association law) is ongoing and in some cases controversial.

As has been previously stated there are both theoretical reasons to have the EAEU Customs Code categorised as an independent branch (like the European Union Customs law) and a practical background, as follows:

1. The probable primacy of the WTO rules over supranational regional EAEU Law has both theoretical and practical dimensions. The point is that the 'hard' law rules and binding international standards being laid down by the WTO comply with the Anglo-Saxon law system, with customs law traditionally being the sub-branch of commercial law (Law Merchant). Such positioning in the law system determines the method regulating customs relations, which is different from the imperative Continental Law system adopted by the EAEU member states. In Belarus, Kazakhstan, Russia, Armenia and Kirghizia, prior to the EAEU formation, customs law used to be a complex branch, significantly affected by administrative law and adopting its method of subjection to the authorities.
2. There is no doubt that, subject to rapidly developing customs relations, customs law doctrine is necessary for a successful, balanced, elaborate lawmaking process by the EAEU Member States representatives. The work on The Treaty on the Eurasian Economic Union and EAEU Customs Code revealed a severe shortage of theory provisions the legislator could rely on.

## **4.2. Determining the factors stimulating future development of the EAEU customs legal relations**

Legal regulation of the EAEU customs relations will be developing due to the following factors:

- implementation of digital agenda
- performing the obligations incurred in connection with WTO membership
- reforming the tax system
- settling traders' residence issues
- enhancing the Authorized Economic Operator status.

Cutting-edge information and communication technologies also underlie such development. The EAEU CC, which entered into force on 1 January 2018, is a document which, inter alia, lays down legal grounds for further application of information and communication technologies in customs

legal relations. Priority should be given to the electronic customs declaration, and electronic data interchange being provided when a customs applicant deals with the customs authority. Priority of the e-document has been set, with paper records as a copy. A new e-document has been introduced providing preliminary information. Some customs formalities may be carried out in an automated mode, without human intervention, by means of information systems.

A hypothesis may be formed, based on the analysis made above, that the development of a digital economy, digital supply chains, emerging new types of transport and commerce dictate the need for transforming legal regulations of customs relations. This sort of 'evolution' will cause considerable difficulties for customs authorities and border services, making them contact digitally with new interested parties and partners.

The following methodological approaches may help to determine the factors indicating the development of the EAEU customs relations regulation. Methodologists, when describing a tool for determining the realities, apply the following formula: one and the same reason in similar conditions always has the same effect. However, it should be considered that, on the one hand, the conditions and reasons are interdependent, but on the other, they are independent. Consequently, in this area of research, the formula, linking the cause and the conditions, is as follows: applying information communications technologies (ICT) on a large scale in international trade determines the revision of the legal regulation of customs relations.

Wolfgang and Rogmann (2019, p. 79) state that:

developing information-communications technologies and speeding up international integration is an integral part of establishing modern international economic relations. First of all, the events occurring take the form of making the economy digital, e-commerce being an element thereof.

ICT plays a crucial role in implementing the WTO ATF (the Agreement) subject to Article 7 rules of the General Annex to the Revised Kyoto Convention (Kyoto Guiding principles in the area of ICT).

Hence, as previously stated by the authors, the significance of the WTO and WCO Acts in determining the factors indicating the development of customs relations regulation in the Russian Federation, within the framework of the EAEU, is to incorporate into the EAEU CC the standards provided by the WTO Agreement on Trade Facilitation, by the Revised Kyoto Convention, as drafted in 2020, and other international instruments, as well as to further develop the EAEU CC legal institutions (such as customs control, customs formalities, customs declaration and Authorized Economic Operators) based on, rather than subject to, the previously mentioned Agreement and Convention (Rulskaya et al., 2018).

## **5. Discussion and conclusion**

### **5.1. Key aspects of the customs relationship in the Eurasian Economic Union at present and in the long term, 2020–2030**

We have considered the modern factors indicating the development of customs relations regulation in the Russian Federation within the framework of the EAEU and conceptually identified the key features. To create the image of the Russian Customs Service until 2024 (in the long term up to 2030), the following unique determinants may be specified:

1. The factors affecting the development of customs relations in the EAEU may include:
  - regionalisation as a new direction of globalisation (concluding a growing number of agreements on multilateral and bilateral Free Trade Areas, GATT (WTO), as a global multilateral trade system, going through crisis)
  - the need for Customs to administer movement of goods in various legal systems worldwide
  - paper workflow and manual customs procedures are replaced by automated release of goods for domestic consumption, by, for example, automated registration of customs declarations.
2. The factors considered are crucial for reviewing the legal status of the Customs Service in the hierarchy of government authorities. An attempted inquiry into the legal relationship of movement of goods and vehicles across the Union customs border, application of international standards and analysis of modern foreign experience in the operation of customs authorities worldwide, within the framework of the predictive function of legal theory, enables us to formulate the direction in which the legal status of customs authorities will be developing.
3. The International Customs Community (EAEU member states included) makes attempts to work out an international Act, with due regard for digitalising international trade, which would set proper standards of customs regulation and administration. A new version of the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures ought to become such an Act. Therefore, drafting the Act, governing customs legal relations, shall be based on the standards laid down in the WTO and WCO treaties (namely, the Revised Kyoto Convention, as drafted in 2020).

Thus, digitalising (due to the widespread application of ICT) of international trade causes transformation of the customs legal relationship; the effect thereof is amendment to the theory of Customs administration in the context of cross-border paperless trade.

In our opinion, the current trend to have customs procedures automated is crucial for the transition to a new paradigm of monitoring and supervising by customs authorities, based on:

- A fundamental standard of interaction between customs authorities and traders by means of data exchange and e-messages rather than e-workflow and e-documents
- The use of artificial intelligence, processing of big data, applying block-chain technology, the Internet of Things in customs' legal relations
- application of the WCO data model
- Automated issuing of customs documents (legally significant data) for customs control based on the information provided by commercial, transport and other documents involved in a foreign trade transaction.



## **5.2. Customs law branch affiliation and approaches to have customs law hypothetically categorised with the framework of the EAEU legal system**

The analysis of the EAEU Customs legal acts subject to the legislative supremacy of WTO rules over the EAEU rules enables us to reach the conclusion on Customs Law branch affiliation to have it hypothetically categorised within the framework of the EAEU law system.

The theory of law failed to develop a uniform construction of such fundamental concepts as (national) customs law (of member states of a regional integration union), international customs law, and customs law of a regional integration union. So far, a uniform framework has been created specifying the relationship between these concepts, with their hierarchy subject to the level of economic integration (free trade zone or customs union).

In this connection the following hierarchy is suggested:

1. International customs law, which is a set of uniform WTO and WCO legal rules (as well as those of other international organisations) governing customs issues in international trade
2. Supranational (or regional) customs law (customs law of a regional integration union, for example, the EAEU and EU), which cannot conflict with the rules of international customs law. On the contrary, the general principles and rules of international customs law lay the basis for supranational customs law and are created pursuant to the standards set out in international customs law rules.
3. National customs law of the states, including:
  - a) member states of regional integration unions (may be available if the national segment of customs regulation is allowed under supranational customs law)
  - b) non-member states, providing uniform customs tariff, customs area and customs laws.

Our assumption is that EAEU customs law may be considered a separate branch of law that is within the scope of supranational (or regional) customs law (customs law of a regional integration union), subject to the classification provided.

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**Sergey O. Shohin**



Sergey Shohin is a Doctor of Law and a professor in the Department of Administrative and Financial Law at Moscow State Institute (University) of International Relations of Ministry of Foreign Affairs of Russian Federation, Moscow, Russia. He is an honoured lawyer of the Russian Federation, an academician of the Russian Academy of Natural Sciences, a member of the Public Council under Federal Customs Service, an expert adviser to the Council of Federation and the State Duma of the Federal Assembly of the Russian Federation, the Eurasian Economic Commission, and a Lieutenant-General of the customs retired service. He is the author of more than 200 publications on Customs and finance law. Sergey Shohin acquired great experience in legislative and law enforcement work as a Deputy of the State Duma, Deputy of the Moscow City Council, auditor of the Accounting Chamber of Russia, Chairman of the control Chamber-counting of the City of Moscow, Adviser to the Chairman of the Central Bank of Russia, Executive Vice President of the Association of Russian Banks and State Secretary-Deputy Head of the Federal Customs Service. For more than 15 years he has been an arbitrator of the International Commercial Arbitration Court at the Chamber of Commerce and Industry of the Russian Federation.

**Olga Bobrova**



Olga Bobrova has a PhD in law and is an associate professor of the Public Law Chamber, Odintsovo Branch of Moscow State Institute (University) of International Relations of Ministry of Foreign Affairs of Russian Federation, Odintsovo, Russia. Her PhD thesis was in legal regulation of mutual administrative assistance in customs matters and was held in the Russian Customs Academy in 2011. She has a Master of Business and Computer Science (2012). Since 2009 Olga Bobrova has been an associate professor of the Russian Customs academy, the Russian university of Transport, the Moscow University of International Affairs. She took part in publishing more than 90 books and articles in the sphere of customs regulation in the Eurasian Economic Union, customs cooperation and International Customs Law. She is a member of the Russian Association of International Law.

**Anton Kozhankov**



Anton Kozhankov has a PhD in Law and is an associate professor, Trade and Trade regulation Chamber Moscow University of International Affairs and an associate professor, Customs Operations and Customs Control Department of the Russian Customs Academy. He took part in drafting the Russian Customs Code (2003), the Customs Code of the Customs Union of EvrAzeS (2008–2009) and the Customs Code of the Eurasian Economic Union (2016–2018). He was a member of the working group implementing the Revised Kyoto Convention by Russia (2008, the World Customs Organization). Anton Kozhankov is a member of the Expert Council under the Russian Federal Customs Service. He took part in publishing 85 books and articles in the sphere of customs regulation.

# Understanding tax and customs policies for retail export e-commerce in China

*Xiangyang Li*

## Abstract

Cross-border e-commerce (CBEC) is continuing to grow rapidly around the world. China is experiencing a two-digit growth rate for its CBEC industry, even though it has been hit hard by COVID-19. From the two business models of CBEC (export and import) in China, retail export is growing faster than retail import. The trade volume of retail export is also much larger. Therefore, it is timely to review and summarise the tax and customs policies of CBEC retail export in China. This paper examines the tax and customs policies for CBEC export in China, and in particular, retail export. First, it provides an overview of the development of CBEC in recent years in China and then gives a detailed discussion of tax policies, which mainly includes value-added tax (VAT) and corporate income tax (CIT). The details of customs policies are then covered, as are two more points of retail export: statistics and the negative list. It ends with a conclusion and outlook.

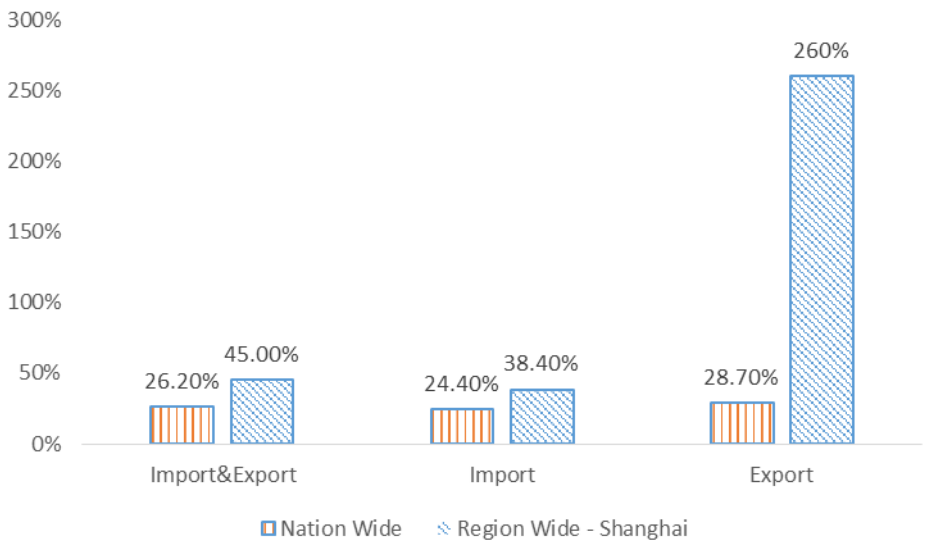
## 1. Overview

Though hit hard by the global spread of COVID-19, strong consumer demand in mainland China and around the world for imported products has continued to fuel the expansion of cross-border e-commerce (CBEC). CBEC provides an easy and fast way for consumers to buy overseas products even in quarantine. Statistics from the General Administration of China Customs (GACC) show that in 2018, retail imports and exports in China via the Customs' CBEC administration platform<sup>1</sup> were worth RMB134.7 billion (US\$19.2 billion), up about 50 per cent from the previous year. Of these, retail exports increased 67 per cent to RMB56.1 billion (US\$8 billion), while retail imports rose 39.8 per cent to RMB78.6 billion (US\$ 1.2 billion). In 2019, the combined value of e-commerce retail imports and exports soared by a further 41 per cent to RMB186.1 billion (US\$26.6 billion) which is five times that of 2015, with the average annual growth rate up to 49.5 per cent.<sup>2</sup> In the first five months of 2020, retail imports and exports grew 20.9 per cent to RMB 71.7 billion (US\$10.2 billion) and the number of orders rose 53.6 per cent to 710 million orders.

Region-wise, the import and export of CBEC in Shanghai reached RMB 4 billion (about US\$570 million) with an average of 85,000 orders per day in the first half of 2020 (January to June).

Figure 1 shows the quick growth of both imports and exports in the whole nation and its economic centre, Shanghai, all showing growth at the two- or even three- digit level. The CBEC industry has now become a very important complement to general trade in China.

Figure 1: CBEC import and export growth rate of China (nationwide) and Shanghai (regionwide) in the first half of 2020



Source: Shanghai CBEC Public Service Platform, <https://www.shcepp.com>

Note: 'Import&Export' denotes the sum of both import and export.

The quick growth of the CBEC industry in China can be linked to supportive measures and institutional arrangements like the Comprehensive Pilot Area (CPA) for the industry, as defined in Li (2019a). These CPAs were officially established and equipped with various resources to fully support the development of the industry and thus serve as incubators of newly-built CBEC firms and boosters for developing ones.

In 2019, 6,000 new CBEC firms were created and in-area CBEC firms<sup>3</sup> built up to 1,200 overseas warehouses which serve as temporary storage facilities in foreign countries for bulk transportation from China. This improves the shopping experience for foreign consumers by allowing faster and safer deliveries than from China-based warehouses. This also largely reduces the logistic costs for both firms and consumers.

Besides retail import, CBEC retail exports (business-to-consumer, B2C) is also a sophisticated business model in China. Every day, thousands of CBEC retail exporters in China export millions of dollars' worth of goods to the rest of the world. CBEC bulk exports (business-to-business, B2B), however, are just starting in China. Therefore, in this paper we discuss CBEC retail exports in detail and briefly mention some tentative trials of Chinese CBEC bulk exports.

## 2. Tax policies

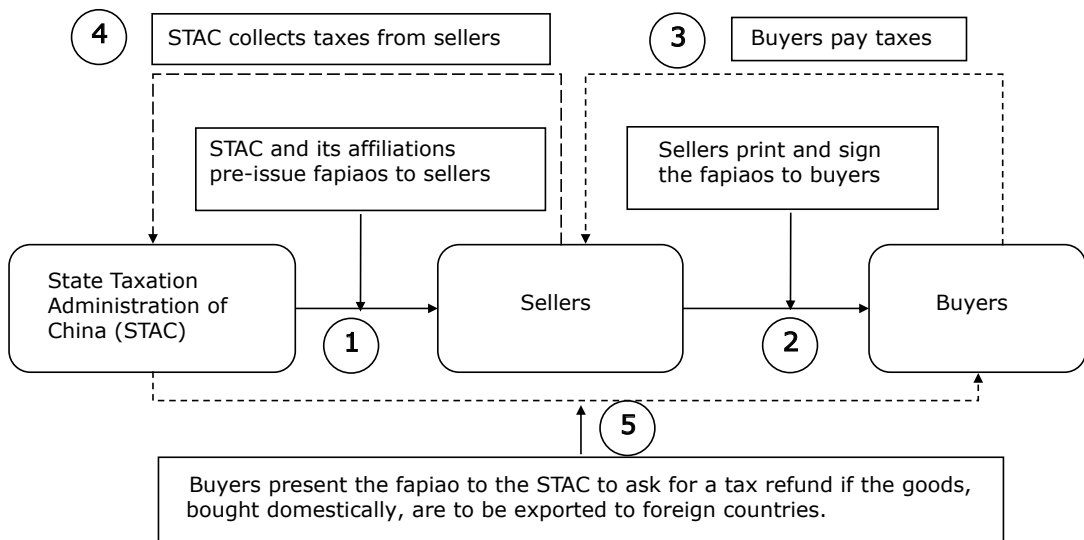
Before introducing the tax policies of CBEC retail export, a term called ‘fapiao’ must be explained before it is possible to fully understand the special tax policies for the industry.

### 2.1. Fapiao and VAT

A ‘fapiao’ is an official, legal type of invoice or receipt issued by the State Taxation Administration of China (STAC). It is proof of domestic trade between a buyer and seller and is used for taxation purposes (mainly for value-added tax, VAT, and consumption tax). Only fapiaos are officially acknowledged in China – even receipts signed by the seller are not officially acknowledged.<sup>4</sup> Fapiaos have a standard format around the country and are preissued to sellers by the STAC (State Taxation Administration of China), which are very different from the receipts commonly seen and used in the western world. Prices, quantities, names of goods and tax amounts for each good or service are listed on the fapiao. There are also identification numbers, QR codes and information for both sellers and buyers involved in the trade. There are regulations and information systems related to fapiaos to ensure their smooth issuance and circulation. Buyers must pay both the cost of the goods or services and the tax owing at the same time.

For each fiscal year, the STAC collects taxes (mainly VAT) from sellers depending on how many fapiaos the sellers have issued to buyers (see Figure 2).

Figure 2: How fapiaos work as a tool to collect tax (VAT and consumption tax) in China



Note: Sellers and buyers trade domestic goods and the buyers then export the goods bought domestically to foreign countries. Thus, the domestic buyers are exporters.

For every single copy of a fapiao signed by the seller (usually stamped in red with the seller’s name) given to the buyer, the seller must later pay the tax on this trade to the STAC. In this way, the STAC collects tax (VAT) in China. If the buyer exports the goods they bought domestically to another country, the buyer then uses the fapiao to get a tax refund from the STAC. Though the buyers have the right to ask for a fapiao for every single item they buy, there are numerous reasons and cases when buyers cannot get fapiaos for some of the goods they buy.<sup>5</sup>

If there are no fapiaos issued for a trade between sellers and buyers, it usually means that the STAC will fail to collect the tax from this single trade since both seller and buyer do not have the incentive to hand in the tax for this trade afterward.

Nowadays, fapiaos are mainly issued electronically though paper forms are still seen in some cases. Electronic issuance of fapiaos greatly facilitates their circulation and verification of their accuracy, as well as reducing criminal offences and fraud.

### 2.2. Tax policies in CBEC Comprehensive Pilot Areas

As pointed out by Li (2019a), the central government of China is setting up CBEC Comprehensive Pilot Areas (CPAs) around the country as an institutional arrangement to promote the development of the CBEC industry where domestic buyers export domestic goods overseas. As part of this arrangement, tax policies are of great importance and concern. For retail export CBEC firms, there are two main taxes applied: VAT and corporate income tax (CIT). CBEC firms can operate in and out of CPAs. But only in-area firms (firms that operate in CPAs) can enjoy preferential tax policies, such as exemption of VAT and consumption tax on retail exports and reduction of CIT rates (from as high as 25% to 4%).

Below is an introduction to the recent advances in setting up new CBEC CPAs around China, followed by details on the preferential tax policies that only apply to the in-area firms.

#### 2.2.1. Advances in CBEC CPAs

Li (2019a) provides a brief review on the first three batches of CPAs which totalled 35 since the first pilot area was set up in Hangzhou, the capital city of Zhejiang Province, in 2015.

Much advanced at the end of 2019 and the middle of 2020. Two more batches of CPAs were set up bringing the total number of CPAs to 105 (See Table 1).

*Table 1: Cross-border e-commerce Comprehensive Pilot Cities/Areas<sup>6</sup> (CPAs)*

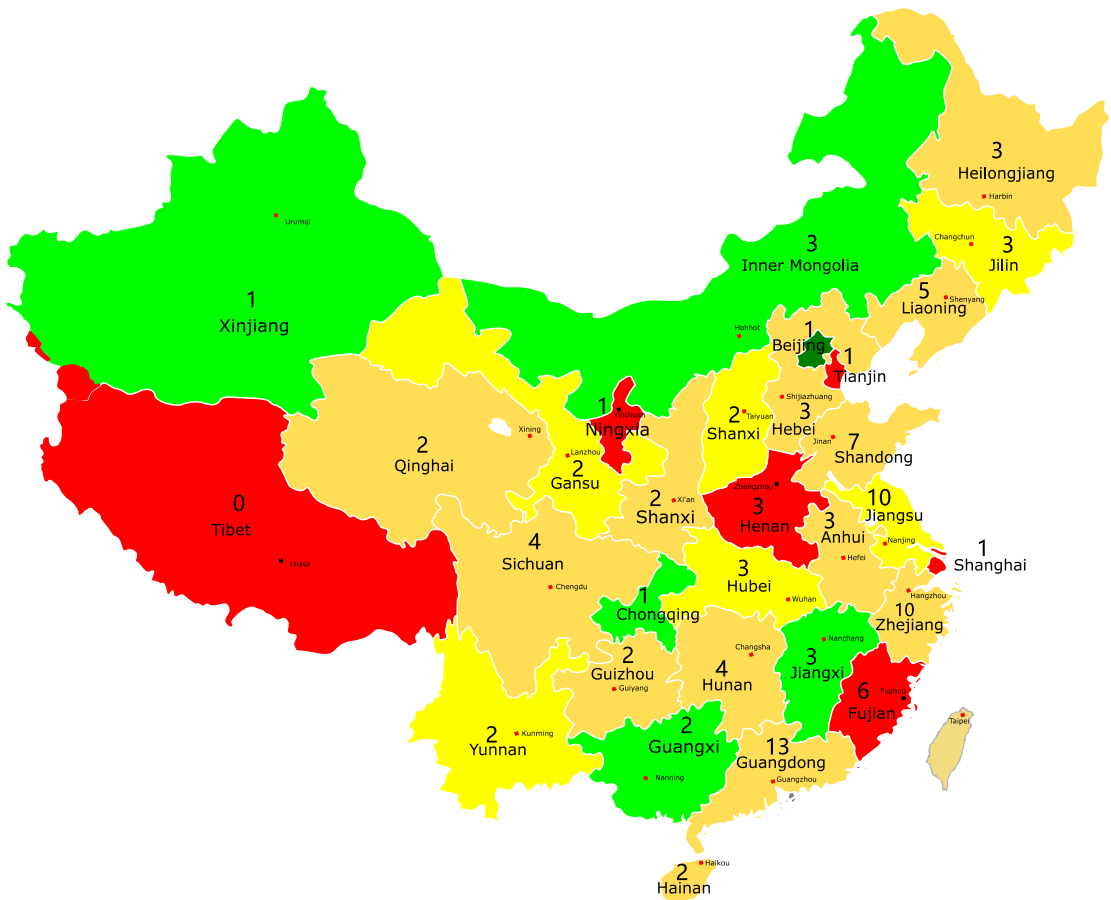
Batch no.	Number of CPAs per batch	Date initiated
1	1	7/3/2015
2	12	6/1/2016
3	22	8/8/2018
4	24	24/12/2019
5	46	6/5/2020
<b>Total number of CPAs</b>	<b>105</b>	

Source: collected from [www.gov.cn](http://www.gov.cn)



CPAs now cover 30 provinces, municipalities, and autonomous regions (except Tibet) around the Chinese mainland. Most CPAs (indicated by the numeral following the location) are in the eastern coastal region of the country, including the capital of China, Beijing (1), the economic centre of China, Shanghai (1), Guangdong (13), Zhejiang (10), Jiangsu (10), Shandong (7), Fujian (6) and Liaoning (5) (Figure 3). Guangdong has by far the most CPAs and the largest trade volumes of CBEC import and export, with about one-third the total of China

Figure 3: Geographical locations of 105 cross-border e-commerce comprehensive pilot areas



Note: Large fonts indicate the province names and small fonts with dots indicate the capital city of that province. The numbers indicate how many CPAs are in that province. The map is for illustration purposes only and does not demonstrate the precise boundaries.

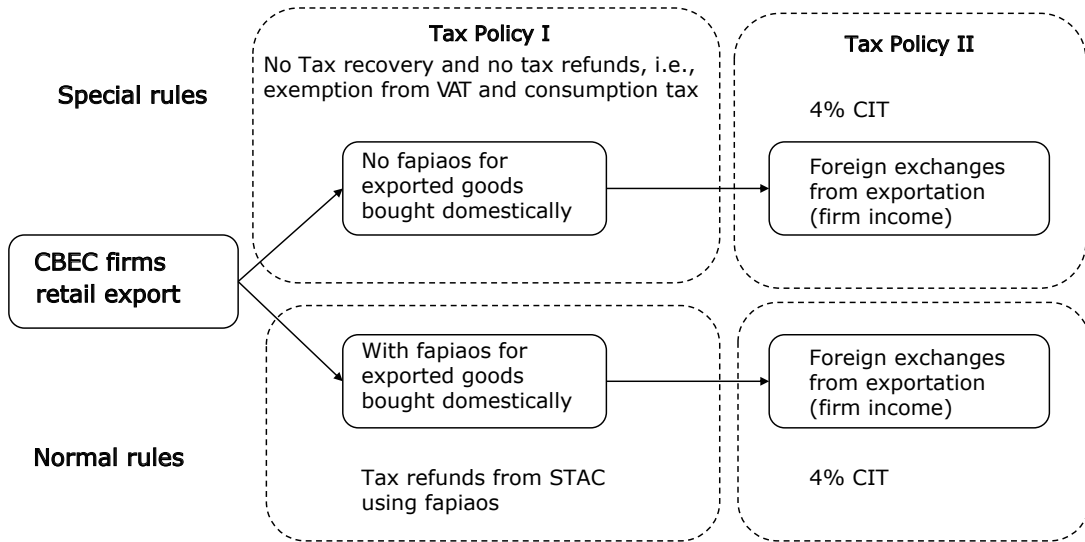
### 2.2.2. Preferential policies in CBEC Comprehensive Pilot Areas

China has been rolling out a series of measures to promote CBEC development, especially in the CPAs. Among them are major preferential tax policies.

Before we proceed, there are two scenarios that we should keep in mind. For every export, the exporters (domestic buyers) may or may not get the fapiaos from the domestic sellers for the goods they bought to export.<sup>7</sup> If not, this usually means that the STAC will fail to collect tax for the goods

traded between domestic sellers and buyers.<sup>8</sup> When the exporters claim foreign exchange as income from exports, the STAC will ask exporters for copies of fapiaos. If no fapiaos are available, the claim will be problematic or even illegal because the STAC will fail to collect tax from the domestic trade. Nowadays, a lot of CBEC retail exports do not have domestic fapiaos. For the exported goods which were bought domestically, however, there are tax refunds available if fapiaos are collected for the goods, although the refunds may be partial sometimes. Thus, recovery of tax for the cases where fapiaos are not available seems unnecessary. In these cases, the government recently rolled out a simple measure to simplify the solution to this problem (see Tax Policy I in Figure 4 where it is called a ‘special rule’ as compared to a ‘normal rule’ where fapiaos are available).

Figure 4: CBEC retail export and tax policies



Even though under both the special rule and the normal rule the tax policies are almost identical, the special rule is extremely important for CBEC retail export firms. Now, export firms only need to hand in 4 per cent (CIT) of the income from their exports to fully comply with the STAC rule.

**Policies on VAT and consumption tax exemption**

According to the STAC (No. 103, 2018, jointly issued with GACC and other two administrations, Tax Policy I) (State Taxation Administration of China [STAC] (2018),<sup>9</sup> if the exports of a CBEC retail export firm have not yet obtained fapiaos, which are a valid proof of purchase, but satisfy certain criteria, then the exports can still be exempted from VAT and consumption tax. The criteria are:

1. That the CBEC retail export firm is registered in a CPA and has registered the date of its export, description of goods, measurement unit, quantity, unit price, and amount on the CBEC online service platform which is at the place as the firm registration (that is, the location of the CPA).<sup>10</sup>
2. That the CBEC retail export declaration formalities are completed with Customs at the CPA location.
3. That the exports do not fall under the categories of goods for which an export tax refund (exemption) is clearly removed by the Ministry of Finance (MOF) and STAC.

### Pilot scheme on assessment of CIT for retail export firms

According to STAC (No. 36, 2019, Tax Policy II) (STAC, 2019),<sup>11</sup> any CBEC firms in a CPA that meet certain criteria shall be subject to the CIT pilot assessment scheme, where the taxable income rate may be lower (4%) compared to the general cases where the rate could be as high as 25 per cent. The criteria these firms must follow are:

1. That the firm is registered in a CPA and the date, name, unit of measurement, quantity, unit price, and amount of the exported goods are registered on a CBEC online service platform where the firm is registered (that is, the location of the CPA).
2. That the CBEC retail export declaration formalities are completed with Customs at the location of the CPA.
3. That there are no fapiao (that is, valid purchase proof) for the exported goods, and the export is compliant with Tax Policy I, which means that the exported goods are exempted from VAT and consumption tax.
4. In addition, if the CBEC firms meet the conditions for preferential policies for small low-profit firms, they may enjoy the accompanying preferential CIT policies. The firm can enjoy preferential policies for tax-exempt income if the income it earns is tax-exempt as stipulated in Article 26 of the Enterprise Income Tax Law of the People's Republic of China.

### 3. Customs policies

Apart from the preferential tax policies discussed above, customs facilitation is another institutional arrangement in CPAs to promote the development of the CBEC industry. The GACC has rolled out four different customs codes for different types of exports including retail (B2C) and bulk export (B2B) (Table 2).

Table 2: Customs codes for CBEC retail (B2C) and bulk (B2B) exports in China

Trade model	B2C (retail export)		B2B (bulk export)	
Customs code	9610	1210	9710	9810
Business model	Direct export	Bonded export	Business-to-business export	Overseas warehouse export
Explanation	Firms export from bonded zones directly to overseas consumers	Firms export into bonded zones when orders are from overseas consumers	Firms export to overseas firms	Firms export to overseas warehouses (owned or rented)
GACC information system	Retail Export Cross-Border E-Commerce Unified Edition (China Customs' cross-border e-commerce official administration platform for export)		Single Window of International Trade <sup>12</sup> Internet + Customs <sup>13</sup>	

Note: Customs codes are also called regulatory or supervision codes, which are just for regulatory purpose, such as statistics and identification of trade model.

The first trade model is B2C which includes two business models: one is direct export (customs code 9610, see notes in Table 2). Firms in the CPAs will deliver the packages directly to the overseas consumers using various shipping channels, including express carriers, logistic firms or even mail carriers.

The other is 'bonded export'. The CBEC firm will first bulk export goods to bonded zones in China. Once bulk-exported to bonded zones, the CBEC firms can ask for a tax refund from the STAC. The firm then delivers the retail packages from the bonded zones to overseas consumers much more quickly than direct exports since customs formalities are almost finished once the goods have been exported to bonded zones. This is similar to bonded zone retail imports as stated in Li (2017; 2019a). Both codes 9610 and 1210 are sophisticated and popular business models now in China. The GACC has also deployed an information system called 'Retail Export Cross-Border E-Commerce Unified Edition' to deal with CBEC export in the whole country.

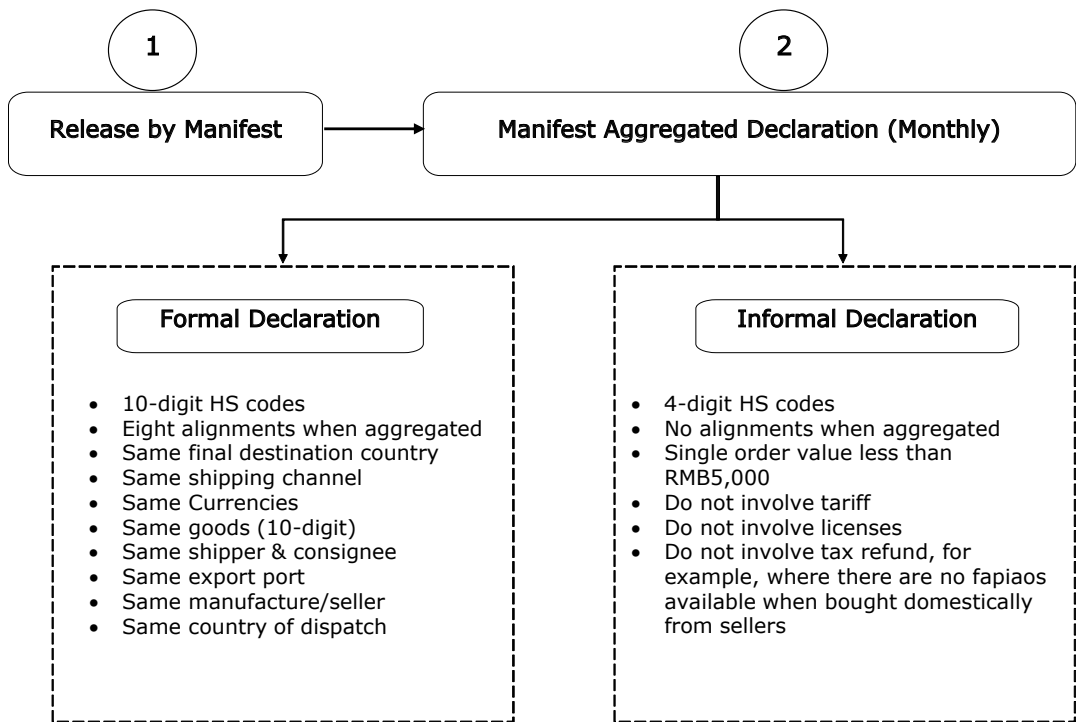
For B2B, there are two customs codes. One is 9710 which means CBEC firms in China directly export to firms in other countries. The other one is 9810 which means the CBEC firms in China export to overseas warehouses which may be rented or owned. For codes 9710 and 9810, these two business models are just beginning to roll out. On 1 July 2020, an announcement was made by the GACC about these two models (General Administration of China Customs [GACC], 2020a). The announcement involved tentative measures for CBEC bulk export firms to do B2B business in 10 trial customs ports.<sup>14</sup> For the first month (1 July to 1 August) after rolling out the measure, the statistics show that the total number of orders reached up to 3.9 million with the top three destinations being the USA, Europe and southeast Asia. The export commodities included mainly clothing, shoes, hats, household goods, electronic accessories, fitness equipment and other consumer goods. The GACC's information system for dealing with B2B export is different from retail export. Two options are provided as shown in Table 2.

However, further measures are needed to support the B2B model in the future. For example, the VAT and CIT issues for firms that do not have fapiaos for the goods they exported, as we saw in retail export. According to a questionnaire by the GACC (unpublished) early in 2020, 70 per cent of B2B firms wish to have the same tax rules as those that apply to retail import; 67.5 per cent of B2B firms wish to have simplified procedures for customs clearance; and 63 per cent of B2B firms wish to have tax-free conditions for returns or unsold goods.<sup>15</sup>

The facilitation of customs procedures in the CPAs for CBEC retail export firms is significant. Like retail import, three kinds of customs declaration information are required for every single order although it may be split into a few packages in some circumstances: online goods order, payment form and logistic information. The customs formalities have also been greatly simplified, with the GACC adopting a 'Release from Manifest' pattern which greatly speeds up the release of packages and reduces the firm's costs.

For clearance and statistical purposes, the GACC requires the firm to file an aggregated monthly declaration based on what the firm exported in the previous month using manifests. There are two methods of doing this (see Figure 5), the first being a formal declaration. This declaration is like the declaration of general trade and thus is much more complicated than the second method – the informal declaration – which is mostly adopted by CBEC retail firms nowadays in China. There are, however, some restrictions on informal declarations. For example, they require that the single order does not exceed RMB5000 (about US\$714) and does not involve, for example, export tariffs, licences and tax refunds. For classification of this informal declaration, manifests are used directly and only four digit Harmonized System (HS) of tariff nomenclature (HS) codes are needed instead of the 10 digits required for formal declarations.

Figure 5: Customs release and clearance of CBEC retail exports



In response to the concerns of firms, the GACC (GACC, 2020b) put forward a measure about goods return for exports. This measure was effective from 27 March 2020. CBEC export firms or their customs declaration agents may apply to the GACC to engage in goods returns for both retail and bulk exports, as listed in Table 2. They must set up a goods return monitoring system and make sure that the returns are the goods originally exported.

## 4. Statistics and the negative list

### 4.1. Statistics

Since July 2018, the GACC's CBEC information system, *Retail Export Cross-Border E-Commerce Unified Edition*, began its operation and official data about CBEC exports became available.

Nowadays, only a small fraction of CBEC retail exports is administered by the GACC through its information system. Many CBEC retail exports are unknown to the GACC and thus are not included in customs statistics. Many export packages are exported as personal gifts and articles using mail and express carriers as pointed out by Li (2019a; 2019b).<sup>16</sup>

To improve the accuracy of the statistics, the GACC has done a lot of work to include as many CBEC import and export packages that are not administered by them as possible. Based on some real export data, the GACC first dynamically and periodically identified how many packages were actual CBEC packages shipped through the mail and express carriers not connected with GACC's CBEC information system.<sup>17</sup> Then the ratio of how many of these packages were CBEC packages was obtained. Third, the average value of retail export packages was used to estimate an overall value for these un-administered packages. The data has been estimated since January 2019 but is not yet publicly available.

## 4.2. The negative list

For both retail and bulk exports, there is no positive list for the commodities that can be exported. There is only a negative list which is the opposite of the positive list for CBEC retail imports in China.<sup>18</sup> Similar to general trade, under this negative list, restrictive or licensed commodities need permission or licences for export, and prohibited items are not allowed to be exported.

## 5. The way forward

The CBEC industry continues to flourish around the world. Both CBEC imports and exports have grown at two-digit speeds in recent years comparing sharply with the general trade in China which was hit hard by COVID-19.

China attaches great importance to the development of this industry. Up to 105 CPAs were set up in the last five years with various institutional arrangements to support the industry. For the time being, there are not only preferential tax policies regarding VAT and CIT, but customs policies are also being rolled out to support the growth of CBEC retail export, but not bulk export. Hence the CBEC bulk export industry is still in its infancy in China.

The GACC initiated one tentative customs measure to support bulk export. The number from the first month of bulk export is promising. More measures involving tax policies, especially when fapiaos are not available as in the case of retail export, and details of customs facilitation measures applicable to all customs ports around the country, are yet to be rolled out.

China has initiated many supportive measures and institutional arrangements to promote the fast development of its CBEC industry. The supportive measures and institutional arrangements include setting up CPAs, preferential tax policies concerning VAT and CIT, customs facilitation measures including specialised information systems and customs supervision codes for statistics purposes. With more supportive measures from the government in the future, the CBEC industry will continue to flourish in China and thus benefit the rest of world.

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## Notes

- 1 See Table 2, GACC information system.
- 2 See official data: [http://www.gov.cn/xinwen/2020-04/13/content\\_5501756.htm](http://www.gov.cn/xinwen/2020-04/13/content_5501756.htm) (in Chinese)
- 3 'In-area' means in the CPAs (the comprehensive pilot areas). Zhang (2020) refers to CPAs as Integrated Pilot Zones. More information can be found in Section 2.2.
- 4 Fapiaos are different from receipts in several ways, though there are similarities. First, fapiaos are issued by the STAC and have a fixed format. Receipts are issued by sellers only and do not have fixed formats. Second, only fapiaos are admitted by the STAC for tax purposes, but not receipts.
- 5 For example, a buyer simply does not ask for a copy of the fapiao when buying the goods. In other cases, although illegal, the buyer and seller will negotiate a lower price for the goods traded if a fapiao is not involved.
- 6 Most CPAs are city-based. CPAs like Beijing, Shanghai, Tianjin and Chongqing, however, are province-level municipalities that are under the direct control of the state council. For this kind of municipality, each has many small cities. Therefore, 'area' or 'zone' is used to accurately describe this CPA.
- 7 In this paper, we only consider the cases where exporters export domestic goods.
- 8 Generally speaking, there will be no ground for the exporter to legally claim foreign exchange from export since they do not have the fapiaos to show the STAC how this income was derived. That is, fapiaos are legal proof for claiming income from export. Uncollected taxes will be recovered later.
- 9 This announcement was effective from 1 October 2018.
- 10 There are two points here. One is that the CBEC online service platform is recognised by the GACC. The other one is that this platform should connect to GACC's online information systems to exchange data for the export.
- 11 This announcement was effective from 1 January 2020.

- 12 <https://www.singlewindow.cn/>
- 13 <http://online.customs.gov.cn/static/pages/alllistitems.html>
- 14 The ten customs ports are Beijing, Tianjin, Nanjing, Hangzhou, Ningbo, Xiamen, Zhengzhou, Guangzhou, Shenzhen and Huangpu Customs.
- 15 Interview data show that the average return rate for CBEC export is about five per cent. For clothing, the rate may be high as 10 per cent. Considering the actual logistic costs of returns, the real return rate is about three per cent.
- 16 There is an unconfirmed figure for the portion of CBEC import and export that is unknown to the GACC. The figure is about 90 per cent, thus only 10 per cent is currently administrated by the GACC.
- 17 For import statistics, the GACC used interview data due to lack of actual data to estimate the ratio of import packages that were real CBEC import packages.
- 18 A big concern about the negative list for CBEC imports is that it will be a threat to general trade, since CBEC imports enjoy preferential tax policies in contrast to general trade. The prices of CBEC imports are generally lower than that of goods imported under general trade. Thus this will create an unfair market environment for the two kinds of importers: CBEC importers and general trade importers. Hence, a positive list was adopted for CBEC import in China.

### Xiangyang Li



Dr Xiangyang Li is a lecturer and graduate supervisor in the Department of Economics at Shanghai Customs College in China. He received his PhD in economics from Shanghai University of Finance and Economics and now teaches courses in economics and statistics. He was also a visiting scholar of University of Notre Dame in the USA (2013–2014 and 2019–2020). He has presided over research projects in the fields of macroeconomics, trade facilitation and tax and customs in cross-border e-commerce and has been an active participant researcher in projects sponsored by the National Social Science Foundation of China and the General Administration of China Customs (GACC).





## *Section 2*

### *Special Report*



# World Customs Organization global webinar series: Managing HR through a crisis and beyond. Keynote address 19 January 2021: Leading with 2020 hindsight

*Professor David Widdowson AM*

Firstly, I would like to thank the WCO and in particular the Secretary General, Dr Kunio Mikuriya, for inviting me to address you – virtually – today.

The WCO has announced that this year's International Customs Day (on 26 January 2021) will be dedicated to the efforts made by member administrations to address the challenges of the coronavirus crisis, and in doing so it highlights the central role played by our most valuable resources – our human resources. It is therefore timely to hold this conference with the theme *Managing HR through a crisis and beyond*.<sup>1</sup>

Note, however, that while the immediate crisis which the conference seeks to address is the COVID-19 pandemic, we cannot assume that a crisis of this magnitude – or even greater – will not occur in the future. The learnings from this conference should therefore be applicable to any future crisis, and not simply the current pandemic. Indeed, the same underlying management principles for addressing such situations should remain relevant regardless of what the current 'crisis' happens to be.

In addressing this topic, I will focus on the need for sound leadership, which is of course essential at all times, but is crucial in times of crisis. It is at such times that an organisation's policies, procedures and strategies often lose their relevance. Even the underlying culture of the organisation – 'the way we do things around here' – may no longer befit the rapidly changing environment. It is also at such times that people look to the leader for guidance and ask, "where to from here?".

With this background, I have titled today's address *Leading with 2020 hindsight*.

The concept of leadership has been around for over 5,000 years. Much has been said and written on the topic throughout the intervening period, and I have no doubt that much more will be said and written during the coming millennia. Today I do not wish to regurgitate and analyse the various theories that have been advanced over the years, but rather to share a few practical observations on its relevance to today's theme, along with some words of wisdom from a number of the world's great thinkers and leaders.

Firstly, however, let us consider what actually constitutes a crisis from the perspective of a customs administration – or any organisation for that matter.

A crisis may be defined as an event or a sequence of events that is likely to jeopardise the achievement of an organisation's objectives. It invariably leads to a period of instability as the organisation seeks to adjust to the new environment in which it finds itself.

The role of Customs, like any law enforcement agency, is to ensure compliance with the law; and while this responsibility has remained unchanged for centuries, the manner in which Customs performs its role continues to change – often incrementally, but sometimes quite profoundly.

Some twenty years ago Customs and the international trading community faced a crisis that was triggered by the terrorist attacks on the World Trade Centre in New York and on the Pentagon. This had a dramatic impact on the policies governing security in international logistics and supply chain management. You may recall that, following the attacks, the US Government took immediate measures to stop all inbound air traffic into the US, and instituted very strict inspection procedures for both individuals and cargo at all land and sea entry points. These measures had the almost immediate effect of bringing commercial international trade with the US to a virtual standstill.

Over time, land, sea and air traffic resumed, but only following the introduction of far-reaching measures aimed at ensuring that the inbound supply chain – in all modes – was as secure as possible. These measures included advance reporting obligations requiring carriers to pre-notify US Customs and Border Protection about their cargo within prescribed timeframes prior to its arrival at a US port of entry; the Container Security Initiative; and the Importer Security Filing initiative, among others.

Members of the US business community dependent on international trade moved quickly to ensure that the political pressure for tighter control did not needlessly impair their international competitiveness. They worked closely with US Customs and Border Protection (USCBP) to demonstrate that the risk of terrorist activity in the international supply chain could be controlled – and in fact was being minimised – by a variety of existing security standards already in use by major importing companies. The dialogue between the US business community and USCBP led to the creation of the Customs-Trade Partnership Against Terrorism (C-TPAT) program, which in turn led to the development of the WCO SAFE Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework) – an initiative that has revolutionised the regulatory compliance role of customs administrations around the globe by introducing the concept of Authorised Economic Operator (AEO) and the associated Mutual Recognition arrangements.

Looking back over the past twenty years, we can see the extent to which this sudden change to our operating environment has had – and to this day we continue to debate and strengthen the policies and mechanisms that seek to secure the global supply chain while facilitating legitimate trade.

Whenever changes occur in the external environment – particularly changes of such magnitude – the ongoing relevance of any organisation depends on its ability to appropriately align its internal environment with what is occurring in the outside world. Think back to *Management 101* and the SWOT analysis, which is used to identify an organisation's strengths, weaknesses, opportunities and threats.

An organisation's strengths and weaknesses are internal factors. These include our human resources, physical and financial resources, our systems, procedures, capabilities and all other elements over which we have some form of control. Opportunities and threats, on the other hand, are external factors over which we have little or no control and which, in times of crisis, are represented by the likes of the 2001 terrorist attacks and COVID-19.

What occurred in 2001 was a dramatic change in the external environment – a threat of terrorism on a scale that demanded significant regulatory reform and, as a result, a significant change to the Customs role in an effort to align its internal environment with the new realities of international trade and travel. The circumstances were such that the changes could not be made incrementally. This was no recalibration on the part of the WCO and its members – this was a revolutionary transformation.

Similarly, the current pandemic has brought about an extraordinary change to the external environment, and once again there is a need for the WCO and its members to align their internal environment with the realities of the COVID world. To do so requires true leadership.

At this point it's worth reflecting on the difference between management and leadership. Stephen Covey (1989) sums up the difference succinctly when he says that management is efficiency in climbing the ladder of success, while leadership determines whether the ladder is leaning against the right wall. In his book, *The 7 Habits of Highly Effective People*, he provides us with a lucid example. He says:

You can quickly grasp the important difference between the two if you envision a group of producers cutting their way through the jungle with machetes. They're the producers, the problem solvers. They're cutting through the undergrowth, clearing it out.

The managers are behind them, sharpening their machetes, writing policy and procedure manuals, holding muscle development programs, bringing in improved technologies and setting up working schedules and compensation programs for machete wielders.

The leader is the one who climbs the tallest tree, surveys the entire situation, and yells, "Wrong jungle!". (Covey, 1989, p. 101)

Needless to say, not everyone makes a good leader. Some don't see the importance of climbing trees, nor do they care which wall the ladder is leaning against so long as everything appears to be going smoothly. The problem is that what may have provided a smooth ride in the past will not necessarily provide a smooth ride in the future. And I think it's fair to say that what worked well in 2019 will not do so today.

Albert Einstein is said to have given the same physics exam to his class two years in a row. When asked why, he remarked, "this year the answers have changed", and I am sure you will agree that in 2020 the answers changed for us all.

In the world of customs leadership, Einstein's observation has always been a truism. For several decades now, the environment in which customs authorities operate has changed significantly. Administrations worldwide have seen a dramatic increase in workload across all areas of activity, fuelled by the advent of the global marketplace and the technological advances that have revolutionised trade and transport. In addition, there has been mounting pressure from the international trading community to minimise government intervention in commercial transactions, and a growing expectation to place an increasing emphasis on the facilitation of trade while ensuring the safety and security of the international supply chain.

The changing expectations of the trading community are in turn based on the commercial realities of its own operating environment. It is looking for the simplest, quickest, cheapest and most reliable way of transporting goods across international borders. It seeks certainty, clarity, flexibility and timeliness in its dealings with government. Driven by commercial imperatives, it is also looking for the most cost-effective ways of doing business.

These expectations have in no way been lessened by the global pandemic. On the contrary, with trade being hard-hit there is an even greater expectation that Customs will facilitate today's heavily diminished international supply chains to the greatest extent possible.

However, the current crisis differs from 2001 in one significant respect. Not only has the external environment changed dramatically in the past year – but so has the internal environment in which officers are required to operate. Even the most fundamental elements of the internal environment have changed – the presumption that officers can work from their desk, regulate points of entry, attend traders' premises, or even proceed past their own front door. How do they perform their duties under such restrictive circumstances?

The concept of officers working remotely has to this point been anathema to many administrations and rejected outright by them. But faced with no alternative, even those administrations have accepted the need to tear up outdated policy decisions and face the reality of our new environment. However, even having done so, the challenges continue – all of which impact on but are by no means limited to HR management.

In many cases officers do not have access to the information, equipment and systems they require to work remotely. This may be due to a lack of resources, the unavailability of essential infrastructure, or perhaps the security settings on government systems preclude their usage outside official premises. In other cases available infrastructure may not be an impediment, but policies and procedures may need to be fundamentally changed to ensure business continuity. For example, it may be necessary to devise new and innovative ways of verifying certain aspects of regulatory compliance if physical attendance at public or company premises is not possible – something which the SAFE Working Group is already exploring.

Add to this the need to manage staff safety and wellbeing, performance, motivation, teamwork, recruitment and selection, training and development – as well as the need to manage expectations, and the task may at times appear to be ‘mission impossible’. And last but not least, there is the confronting truth that nobody is spared from the current crisis – not you, nor your managers, your employees, their families, friends or colleagues. No wonder they ask, “where to from here?”.

What is occurring is not an evolutionary change to Customs’ internal and external operating environment, it is a revolutionary change. It requires change management at light speed, which presents serious challenges for leaders, particularly in relation to the management of human resources. It requires an overnight elimination of any organisational rigidity and an immediate injection of agility. It’s no longer a case of anticipating what may occur and developing strategies to deal with it, it’s a case of accepting the new reality – temporary or otherwise – and dealing with it – now!

And while the fundamental objective of the organisation may not change, how that objective is achieved will undoubtedly need to change.

Managing change is not an easy task, and yet it is at the heart of the leadership role. Charting a new course for the organisation inevitably involves challenging the status quo, building commitment, encouraging collaboration, and learning new ways of doing things. And when the catalyst for change happens to be a crisis, there is invariably a need for significant change – at all levels of the organisation.

In his article *Organizational learning and unlearning*, William Starbuck (2017) examines organisational adaptation, learning and unlearning. He notes that the most important research contributions in this field have been case studies of organisations that have struggled to survive serious crises. Starbuck observes that companies that encounter crises exhibit various stages of behaviour. He describes their initial behaviour as “weathering the storm” – during this period they try to continue operating in their usual manner, on the assumption that their troubles are caused by temporary environmental conditions. However, he indicates that these companies subsequently discover that the environmental changes have made their past operating methods obsolete.

And when operating methods become obsolete, they must be changed – recognising, of course, that change management is not so much a matter of changing the organisation, but the people within the organisation. And while some may welcome change with open arms, others may feel confronted by it and even actively resist change. It is human nature to be afraid of the unknown, and even though there may be broad in-principle support for the new way forward, its implementation may still be met with resistance. As DH Lawrence<sup>2</sup> observed, no-one fears a new idea, what they fear is a new experience.

Unless resistance to change is properly managed, the potential benefits of reform are unlikely to be fully realised. It is therefore incumbent on the leader – as change agent – to identify sources of potential resistance and to devise ways of dealing with it to minimise the risk of disruption and increase the likelihood of successful implementation. Leading change also requires a tolerance for ambiguity. The final goal may well be understood and the vision may be clear, but the exact nature and extent of the required change often become apparent only as the reforms progress.

It is fair to say that we are all on a learning curve – none of us have had to deal with a crisis of this magnitude before. And in times of uncertainty, mistakes will doubtless be made – we are all feeling our way – testing the water – learning as we go. After all, we are in uncharted waters. So when mistakes happen, remember that good leaders show a willingness to accept responsibility and accountability when things don't go to plan. They hold themselves responsible when things go wrong, and publicly recognise the team by putting others in the spotlight when things go right.

In the wise words of Nelson Mandela, “It is better to lead from behind and to put others in front, especially when you celebrate victory when nice things occur. You take the front line when there is danger. Then people will appreciate your leadership”.<sup>3</sup> Or as Einstein put it, “Anyone who has never made a mistake has never tried anything new”.<sup>4</sup>

Also remember that you can't make an omelette without breaking a few eggs. A good leader understands that in order to achieve an outcome it may be necessary to make a few sacrifices along the way, and this will invariably require risks to be taken, but there is a big difference between deciding to take risks and taking risky decisions.

Charles Lindbergh, the US aviator who made the first solo flight across the Atlantic said that he took chances, but didn't leave anything to chance.<sup>5</sup> This really captures the essence of how a leader should approach the management of risks. It's about anticipating what might happen in the future and putting plans in place in an effort to minimise undesirable outcomes and maximise desirable ones.

The highest risks facing any organisation, including customs administrations, are political in nature. Failing to effectively manage these will significantly undermine the organisation's credibility. At a national level, the mitigation of political risks translates into government priority setting which is reflected in an economy's focus on particular elements of its customs charter such as revenue collection, people smuggling, security, or trade facilitation. The political focus can change quite quickly – as we have seen in the past 12 months – and in this climate of change and uncertainty, leaders require keen perception to firstly identify, and then assign the highest level of priority to the management of political risks. They must be politically astute and be able to ‘read the signals’ in both the internal and external environment.

An analogy I often use is the anablep, a little-known species of Caribbean fish which swims just below the surface of the water. It's rather unusual because it has the ability to see above and below the waterline simultaneously. The fact that it is a surface swimmer makes it vulnerable to both predatory birds and other fish, and nature has therefore provided the anablep with this remarkable visual ability. Leaders can learn a great deal from this humble fish which has mastered the art of concurrently monitoring its internal and external environment to ensure its survival.

It is also important to allow others within the organisation to not only take risks, but also to make mistakes. Again and again, I see the situation where someone has correctly adhered to the organisation's risk management policy, only to be blamed if something goes wrong. Good leaders understand and accept that even with the best systems and procedures in place, things will go wrong from time to time. Accordingly, they not only focus on how risks are managed within their organisation, but also on how those who manage the risks are supported.

Another key risk to be managed is the failure to ensure that the organisation contains the right mix of knowledge, skills and competencies that collectively enable the organisation's goals to be reached. This is another important HR challenge, as the way we do business now and into the future is a far cry from the way things used to be.

In this regard, I have already mentioned that working remotely has been anathema to many administrations, and the same can be said about online learning. Interestingly, however, we are witnessing an increasing number of policy U-turns being taken by national education bodies that have previously failed to recognise qualifications gained through online study. What was previously unacceptable is now being actively encouraged and promoted as a legitimate form of training and education. Indeed, it is now *de rigueur* – and yet another example of organisations aligning their internal environments with new external realities.

Note that, while a leader plays an important role in such alignment, their role is only one of many required to get the job done. Effective leaders display a high degree of self-awareness by recognising what they are good at and what they are not, and surrounding themselves with the right people. In doing so, they have the self-confidence to select those who may be seen to be better qualified than they are. Poor leaders, on the other hand, are often intimidated by someone who knows more than they do, and this insecurity leads to the construction of an ineffective and dysfunctional team.

Having assembled the right team, a good leader will let the managers manage. As Theodore Roosevelt once said, “The best executive is the one who has sense enough to pick good people to do what he wants done, and self-restraint to keep from meddling with them while they do it”.<sup>6</sup> The role of the leader is then to coach the team, by demonstrating confidence in people's abilities to perform, being empathetic, making people feel appreciated and an important part of the team, fostering future managers and leaders, mentoring, valuing staff no matter where they sit in the organisation, giving credit where credit is due by acknowledging the talent and contribution of others and creating an environment of trust.

Trust, and of equal importance, respect, must be earned, and this has nothing to do with the number of stripes on a person's shoulder or the size of their office. Trust and respect are built through congruence and consistency of behaviour, by acting honestly, fairly and decisively, by having the courage of your convictions, sticking to your principles and demonstrating the moral courage to stand up for what you believe in, even if it may prove to be unpopular. Only then will you be able to influence others to achieve the outcomes required of the organisation. As Kenneth Blanchard (1982), author of *The One Minute Manager* says, “The key to successful leadership today is influence, not authority”.<sup>7</sup>

From this brief commentary we can appreciate the importance of effective leadership in times of crisis, and also come to realise the truth of the adage ‘it's lonely at the top’, which accurately reflects how many leaders feel when things get tough. That is why in times of crisis it is more important than ever to maintain your composure, exude self-confidence, and to put on a brave face even under the most trying of circumstances. These are the times when people look up to you and rely on you to remain strong, hold your nerve and point the way forward. And when you do, and the vision is finally realised, I would encourage you to reflect on the wisdom of Lao Tzu:

When the best leader's work is done the people say, “We did it ourselves!”.<sup>8</sup>

I trust that you find the conference productive, and I look forward to seeing you again in person when the current crisis has abated.



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## Notes

- 1 See <http://www.wcoomd.org/en/about-us/international-customs-day/icd-2021.aspx>
- 2 See <https://xroads.virginia.edu/~Hyper/LAWRENCE/dhlch01.htm>
- 3 See for example <https://www.newyorker.com/news/news-desk/leading-from-behind>
- 4 Attributed
- 5 Miller (2003, p. 91)
- 6 See for example <https://www.leadershipnow.com/leadershipquotes2.html>
- 7 See for example <https://www.forbes.com/sites/forbescoachescouncil/2018/06/15/in-leadership-influence-is-not-a-given/?sh=590c04186797>
- 8 Tao Te Ching by Lao Tzu Chapter 17. See for example <https://www.taoistic.com/taoteching-laotzu/taoteching-17.htm>

### David Widdowson



Professor David Widdowson is Chief Executive Officer of the Centre for Customs and Excise Studies at Charles Sturt University, Australia. He is President of the International Network of Customs Universities, a member of the WCO's PICARD Advisory Group and Scientific Board, and a founding director of the Trusted Trade Alliance. David holds a PhD in Public Sector Management and has over 40 years' experience in international trade regulation, including 21 years with the Australian Customs Service. In 2019 he was appointed as a Member of the Order of Australia for significant service to higher education in the field of international trade and customs.





## *Section 3*

## *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. Please ensure the image is a jpeg with a resolution of 300 dpi.
- 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 (jpeg with a resolution of 300 dpi) 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.

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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*.

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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.

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### Professor David Widdowson AM



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

Professor David Widdowson is Chief Executive Officer of the Centre for Customs and Excise Studies at Charles Sturt University, Australia. He is President of the International Network of Customs Universities, a member of the WCO's PICARD Advisory Group and Scientific Board, and a founding director of the Trusted Trade Alliance. David holds a PhD in Public Sector Management and has over 40 years' experience in international trade regulation, including 21 years with the Australian Customs Service. In 2019 he was appointed as a Member of the Order of Australia for significant service to higher education in the field of international trade and customs.

### 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, Taxation and International Trade Law and has written extensively on international trade law, customs law and export controls in Europe.

### Dr Andrew Grainger



Trade Facilitation Consulting Ltd, United Kingdom

Dr Andrew Grainger is a trade facilitation practitioner, academic and educator with over 20 years of experience. As the Director of Trade Facilitation Consulting Ltd, he is regularly contracted by government agencies, companies and international organisations around the world. He is also an Honorary Associate Professor at the University of Nottingham and collaborates with other leading universities and research institutes. In previous roles, Andrew was the Deputy Director for Trade Procedures at SITPRO, the UK's former trade facilitation agency, and Secretary for EUROPRO, the umbrella body for European trade facilitation organisations. His PhD thesis in Supply Chain Management and Trade Facilitation was awarded the prestigious Palgrave Macmillan Prize for best PhD in Maritime Economics and Logistics 2005–2008. He has authored many papers within the subject of trade and customs procedures and is a member of the International Network of Customs Universities' (INCUI) executive committee.

### Professor Aydin Aliyev



State Customs Committee, Republic of Azerbaijan

Professor Aydin Aliyev is a Colonel General of Customs Service (Rtd) and former 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 Federal Customs Service of the Russian Federation, the Republic of Hungary and by customs administrations of several other countries. In 2010, Prof. Aliyev was awarded the title of ‘Honoured Lawyer of the Republic of Azerbaijan’ by Presidential Decree. In 2014, he was admitted as an Honorary Fellow of the International Network of Customs Universities for his contribution to raising the academic standing of the customs profession.

### 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’.

### Dr Santiago Ibáñez Marsilla



Public Finance Law and Taxation Department, University of Valencia.

Dr Santiago Ibáñez Marsilla is Principal Advisor, Spain, for Trusted Trade Alliance. His area of expertise is customs law and he is currently the Jean Monnet Chair, EU Customs Law, which is awarded by the European Commission. In 2017–2018 he was the senior expert at the mid-term evaluation of TAXUD’s Customs 2020 program. EuropeAid, USAID and Europäische Rechtsakademie (ERA) are among the institutions that have relied upon his customs law expertise. Santiago is used to working in international environments and has trained, taught or delivered presentations in 23 countries, and has authored more than 60 publications.

## Principal Editor

### Dr Rebecca Louise Harcourt



Charles Sturt University, Australia

Rebecca is an editor with the Centre for Customs & Excise Studies (CCES), Charles Sturt University. She is an experienced editor, writer and communicator and is a professional member of the Institute of Professional Editors (IPEd). Rebecca has worked for many years as a research scientist and as an editor, specialising in the life sciences.