A case study of B2C cross-border e-commerce challenges in China from Customs to consumers

Ti Yu

Abstract

The World Customs Organization (WCO) established a working group on e-commerce in July 2016. While China has experienced substantial growth in e-commerce, it is still in the transitional period in terms of the associated customs control regime. The aims of this paper are to investigate the challenges that consumers face when importing foreign commodities into China, and the challenges that China Customs faces when supervising these commodities; and to provide policy recommendations. The recommendations may serve as a stepping stone for further research into improving the system of customs control for business to consumer (B2C) cross-border e-commerce imports.

1. Introduction

China is the biggest e-commerce market in the world. In 2016, the volume of e-commerce trade in China was 0.585 trillion RMB, with an annual growth of 28.2 per cent, representing 21.4 per cent of total trading volume (Gao, 2017). The overarching aim of this research is to examine challenges faced by cross-border e-commerce consumers when importing goods into China, and the challenges that China Customs faces when supervising these commodities. Here, 'cross-border e-commerce consumers' refers to private individuals who import goods into China subsequent to making purchases on e-commerce platforms (e.g. alibaba.com). Identifying challenges from the perspective of both the private and public sector will enable the customs authority to gain a more complete picture to support improvements in Customs' taxation collection and supervision of cross-border e-commerce commodities, thereby promoting the development of the industry.

2. Literature review

As a new participant and stakeholder in B2C cross-border e-commerce, individual consumers have high expectations of integrity, fairness and responsiveness from government organisations such as Customs (Price & Brodie, 2001). Applying the theory of customer orientation, which considers challenges from the perspective of consumers, can improve operational performance and lead to customer satisfaction (Yeung, Cheng, & Chan, 2004). Adopting a consumer relationship management (CRM) strategy would also help Customs to make better use of electronic systems to reduce the costs of compliance. In this context, CRM refers to a process by which a firm gathers information about the needs of its customers to adjust its offerings to better fit those needs (West, Ford, & Ibrahim, 2016). Technology-facilitated CRM is now an essential way for government to streamline large bureaucratic procedures (Batista & Kawalek, 2004; NOIE, 2003), and in developed countries where governments are faced with increasing political and social pressure to provide cost-effective services, CRM has created a goal of working towards e-government to achieve seamless interactions between agencies, departments and consumers (Kolsky & Keller, 2001).

2.1 International guidelines

The World Economic Forum (WEF) estimated that lowering supply chain barriers could stimulate and increase e-commerce cross-border trade by as much as 60–80 per cent (WEF, 2013). The tools are readily available. International guidelines, such as the World Trade Organization's (WTO) Trade Facilitation Agreement (TFA) and the WCO's Revised Kyoto Convention on the simplification and harmonisation of customs procedures (RKC), have tremendous potential to help achieve these results, but need to be adopted and implemented (GEA, 2015).

The TFA is the WTO's multilateral trade agreement that contains provisions for release and clearance of goods and sets out measures for effective cooperation between Customs and other organisations on customs compliance issues (WTO, 2017a). The TFA entered into force on 22 February 2017 and is expected to reduce trade costs by an average of 14.3 per cent and boost global trade by as much as $1 trillion per year with full implementation (WTO, 2017b). For developing countries, the requirement to implement the TFA is directly linked to the capacity of the country to do so and the 'TFA Facility' has been developed to help ensure that developing and least developed countries obtain the assistance needed to implement and gain benefits from the TFA (WTO, 2017c).

The WCO Revised Kyoto Convention information and communication technology (ICT) guidelines provide details on how Customs can use information and communication technologies to enhance trade facilitation and move towards an electronic environment. For several years, international organisations, including the WTO, Organisation for Economic Co-operation and Development (OECD), WCO, the World Bank and the European Union (EU), have recommended using ICT to improve the processes of customs administrations and enhance trade facilitation (Lewis, 2009). Moreover, the WCO recently developed IT guidelines to provide further information and insights into the strategic management process concerning the use of ICT for senior executives of customs administrations, including managing ICT security risks and the potential loss caused by poor design and operation of the system (WCO, 2017b).

The WCO's immediate release guidelines can also support e-commerce by providing simplified customs clearance procedures for low-value consignments where no duties or taxes are to be collected (WCO, 2014). The guidelines offer a range of solutions for each customs administration to select the practices that are best suited to its own trade patterns and compliance requirements.

The WCO guidelines for single window data harmonisation indicate that if international standards, such as the WCO data model, are being used, a single window environment would help solve the problem of conflicting information and thus improve the accuracy of data (WCO, 2007). The single window is a concept that allows a single agency to collect all necessary information, and then deliver the information to other border agencies, providing trade facilitation by reducing non-tariff trade barriers and delivering immediate benefits to all members of the trading community, including consumers, business and government (UNECE, 2003).

E-customs, an interoperable electronic customs environment with a unified data system to facilitate communication between traders and Customs (EC, 2016), would support and facilitate the clearance of ever-increasing shipments purchased by e-commerce, and serve to enhance the effectiveness and efficiency of customs control and revenue collection.

These and other international guidelines can act as a valuable tool for customs administrations in different nations to control and facilitate the trade of cross-border e-commerce commodities.

2.2 Tax collection

Many companies, particularly those in the retail sector, identified tariffs to be the greatest barrier to cross-border e-commerce as tariffs increase the price of the products sold by e-traders, which in turn reduces their competitiveness (Kommerskollegium, 2012). The WTO, the WCO, the OECD and the International Chamber of Commerce (ICC) have all recommended the adoption of the *de minimis* regime (Holloway & Rae, 2012). It not only enables the government to focus on more efficient revenue sources but also reduces the costs to importers and accelerates the delivery of goods (Holloway & Rae, 2012). According to Hufbauer and Wong (2011), an increase in *de minimis* thresholds can release more resources to address more important problems, such as security and product safety.

In view of the significant increase in the number of small consignments in the EU, the envisaged value-added tax (VAT) measures for e-commerce would focus on advance VAT collection for low-value B2C shipments through alternative models of revenue collection, such as the purchaser collection, vendor collection and intermediary collection models (WCO, 2016).

2.3 Customs procedures

Complex customs procedures tend to create processing problems, especially when dealing with large shipments of small consignments. Some countries of the American region (AMS), such as South America, North America, Central America and the Caribbean, noted that they have a *de minimis* below which the cargoes are released immediately without manual inspection, while European countries have implemented a simplified declaration process that involves the automatic exchange of information about each consignment, including a unique ID, consignee information, weight and value (WCO, 2017a).

2.4 Risk management

As cross-border e-commerce volumes are increasing substantially, increasing illicit transactions are taking place via air cargo and mail. Some customs administrations in Europe have introduced automated customs registration of items and automatic risk assessment and control. Other European countries, and countries in other parts of the world such as Australia, have implemented a system that enables the electronic exchange of information between government and e-commerce companies; acceptance of customs declarations from express couriers; and access to the cargo data found in the company's computer system (WCO, 2017a).

2.5 Exchange of data and information

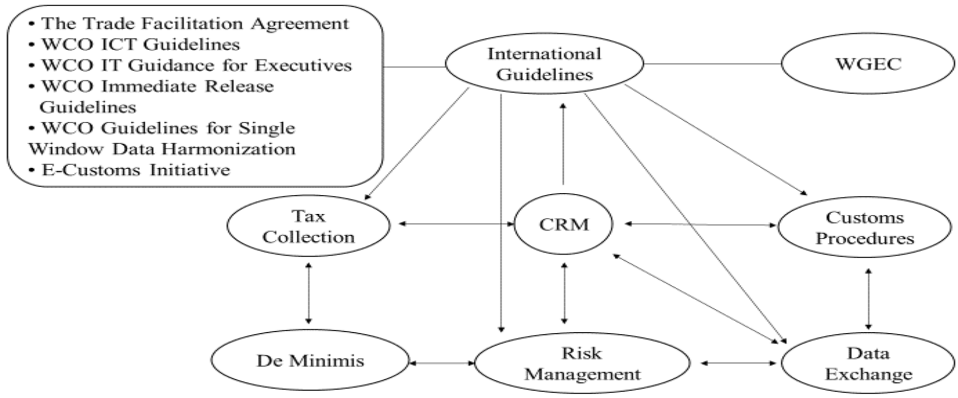
In June 2015, the UK HMRC (Her Majesty's Revenue and Customs) introduced an initiative that involved the Royal Mail in the exchange of information through the customs declaration system (CDS). The CDS features include the harmonised system (HS) lookup directory and the ability to use barcodes to link data with packages (WCO, 2016). According to the WCO e-commerce survey, the exchange of information between e-commerce operators and Customs is still developing, with only 13 per cent of responding members having MoUs in place with e-commerce operators. Some companies in member countries are unwilling to participate, as they are unable to disclose their clients' personal data.

2.6 Working group on e-commerce

In light of the rapid development of e-commerce industry, the WCO working group on e-commerce (WGEC) was established in July 2016. This group is divided into four sub-groups, each addressing a different area of concern: trade facilitation and simplification; safety and security; revenue collection; and measurement analysis. Co-chaired by a representative from a WCO member administration and a representative from the private sector, WGEC has been paying special attention to Customs–business partnerships by involving the business community in the process of decision-making (WCO, 2017c).

As indicated in Figure 1, the seven actors reviewed above are all interconnected.

Figure 1. Literature review



Source: Author, 2017.

3. Methodology

This research followed a two-step process:

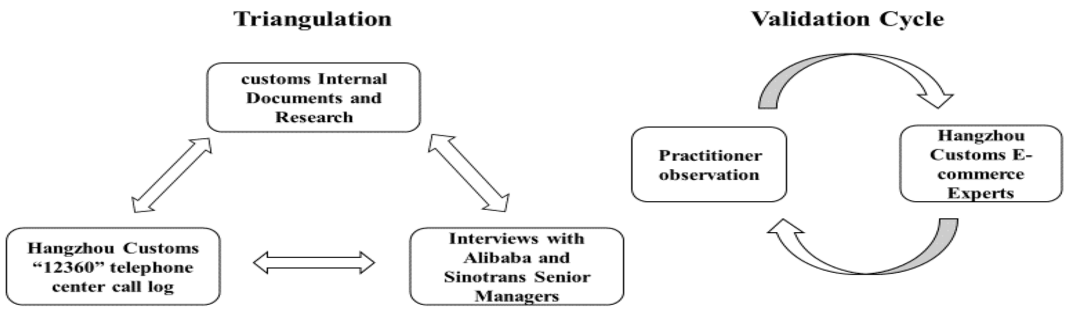
Step 1: Data collection and analysis through triangulation. Triangulation among three data sources is carried out to develop a comprehensive understanding of the customs-specific challenges that consumers face in China:

1. Qualitative analysis of call log data at Hangzhou Customs '12360' telephone service.
2. A review of customs challenges towards cross-border e-commerce control and taxation in China.
3. Qualitative analysis of two interviews: one with a senior manager of the e-commerce group, Alibaba Group, who is responsible for the group's international government affairs, including cross-border e-commerce policy advocacy, international cooperation, creation and implementation of the electronic World Trade Platform Initiative (eWTP); and the other with a manager from Sinotrans International Supply Chains Company, which is the largest international supply chain company in China. The manager deals with cross-border logistics, bonded warehousing and commercial operations. Both interviews were conducted by the popular Chinese social media tool, Wechat, which is readily available and enabled the interviewees to answer the follow-up questions. To leave space for interviewees to shape direction and content, the use of a strict interview protocol was avoided, which is also beneficial for interviewer–interviewee interaction (Spradley 1979).

Step 2: Policy recommendations are provided by making a validation cycle after discussing with Hangzhou Customs e-commerce experts.

The methodology is illustrated in Figure 2.

Figure 2: Methodology



Source: Author, 2017

4. B2C cross-border e-commerce in China

On 24 March 2016, the Chinese Ministry of Finance issued the Notice on the Tax Policy on Cross-border E-commerce Retail Imports (referred as the 'new policy') and clarified the tax rate on imported retail commodities that are purchased via e-commerce. Before the release of the cross-border e-commerce new policy, Customs regulated the rapidly growing cross-border e-commerce retail imports in the same way as mail items valued under RMB 1,000, subjecting it to 'personal postal articles tax', which includes import VAT and consumption tax under the principle of 'reasonable for personal use'. The new policy put a single transaction cap of RMB 2,000 and an annual cap of RMB 20,000 per person for cross-border e-commerce retail imports and applied an integrated tax, which is a combination of import tax, 70 per cent of VAT and consumption tax, with the tariff rate temporarily being exempted. However, a single transaction value that exceeds RMB 2,000, or an annual total purchase that exceeds RMB 20,000 will be considered as general trade and would be fully taxed (HKTDC Research, 2016). Table 1 indicates the tax policy change for cross-border e-commerce retail imports before and after the implementation of the new policy.

Table 1: Tax policies for cross-border e-commerce retail imports before and after the new policy

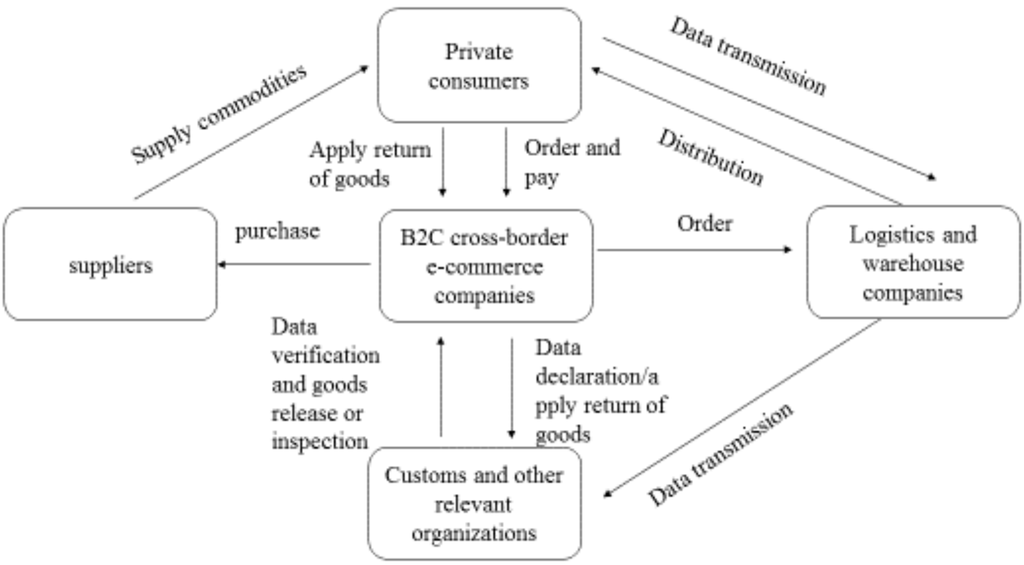
	Personal Postal Articles Tax under Old Policy	Integrated Tax under New Policy
Maximum value of each transaction	RMB 1,000	RMB 2,000
Annual total for each person	Nill	RMB 20,000
Purchase of an inseparable item that exceeds the maximum value for single transactions	Taxed under personal postal articles tax	Taxed in full using the general trade tariff
Applicable tax rates	10%, 20%, 30% and 50%, depending on type of goods	Import tariff which is temporarily set at 0%;VAT(17%x70%=11.9%); Consumption tax: rate applicable to type of goods x 70%
Payable duty of RMB 50 or less	Exempted	No exemption

Source: HKTDC, 2016.

On 7 April 2016, the Chinese Ministry of Finance, National Development and Reform Commission, the previous State General Administration of Quality Supervision, Inspection and Quarantine, and eight other ministries, jointly issued the *Announcement on the listed cross-border e-commerce retail import commodities* (referred as the 'positive list'), which clarified that only certain categories of commodities could be imported through the cross-border e-commerce retail channel. This restricted cross-border e-commerce retail imports to goods on the positive list, which includes 1,293 goods, covering most of the commodities being imported in the e-commerce pilot areas, thereby satisfying the demand of most consumers in China (She, 2016). However, all other goods must be imported under the general trade mode, which means that more complicated inspection and quarantine procedures are applied (HKTDC, 2016).

At the same time, GACC issued the *No. 26 Announcement on the cross-border e-commerce retail import and export relevant regulatory issues*, which identified the obligations that different actors have in relation to transmitting data to Customs. Before lodging a declaration for B2C e-commerce consignments, e-commerce platform companies, financial organisations and logistics companies must transmit accurate data of transactions, payments and logistics to Customs through the cross-border e-commerce import unified system (unified system) developed by China Customs. E-commerce companies are then required to submit a declaration manifest (a simplified declaration) of cross-border e-commerce retail consignments to Customs. In China, e-commerce businesses, e-platform providers or logistics enterprises that are registered with Customs are obliged to pay the duties before collecting imported goods for delivery to their clients (WCO, 2017a). See Figure 3 for details.

Figure 3: Data transmission between different actors



Source: Developed from relevant customs regulations by Author, 2017.

4.1 Challenges faced by consumers

The national unified Customs helpline telephone number, 12360, provides citizens and the private sector with services such as assisting with customs clearance inquiries. Table 2 provides data collected from the Hangzhou Customs 12360 helpline centre in the first two quarters of 2017, indicating the 10 most frequently asked questions from consumers engaging in B2C cross-border e-commerce business and purchasing activities.

Table 2: Major customs-specific questions concerning B2C cross-border e-commerce purchases (First two quarters in 2017)

Questions	Number
1. How can the cross-border e-commerce companies be registered?	90
2. How to check annual import value?	16
3. How to pay taxes and how to return the goods and apply the tax refund?	15
4. Whether the foreign countries also have registration procedures required from e-commerce companies?	10
5. How to declare cross-border e-commerce goods to customs?	10
6. Whether Kport is ran by Customs and the information on it is true?	8
7. Whether China Customs have special regulations towards establishing overseas warehouse?	6
8. Whether private consumers can check the tax information online?	6
9. How much tax shall I pay when purchase commodities from e-commerce platform?	6
10. Which bonded warehouse are the goods delivered? Why does it always show the goods are still in process of Customs clearance?	6

Source: Hangzhou Customs 12360 helpline centre, 2017.

It can be seen from this table that the most frequently asked question (which was asked almost six times more frequently than the second most frequent question), was 'How can the cross-border e-commerce companies be registered?' This question indicates that, since the implementation of the new e-commerce retail policy, the private sector is generally concerned about the process for registering of cross-border e-commerce companies. As is required by the new policy, all companies must be registered before engaging in cross-border e-commerce business. Most of the questions relate to the procedural changes since the implementation of the new policy. According to the data, we can infer that, generally, consumers are concerned about the cost and time of customs formalities.

The interviewee from Alibaba Group, confirmed the challenges reflected in the 12360 call logs and mentioned the limitation of the positive list. He suggested that a 'negative list' that replaced the 'positive list' could be more favourable to consumers, providing them with a wider range of commodities and, at the same time, stimulating the cross-border e-commerce industry. The manager from Sinotrans International Supply Chains Company agrees with this view.

Although the new policy aimed to promote the development of cross-border e-commerce by creating a stable, unified tax policy environment, it may in fact result in more costs and restrictions for consumers.

4.2 Challenges faced by Customs

The sudden booming growth of cross-border e-commerce imports has posed huge challenges for China Customs. Through a review of customs documents and research, and through practitioner observations, the following three main challenges for Customs have been identified.

1. **Rising administration costs**. With the elimination of the *de minimis* threshold, most of the cross-border e-commerce commodities would be taxed at a higher rate. As a result, more customs officers are needed to complete administrative tasks, such as filing tax forms and other clearance procedures.
2. **Technical problems.** The new policy has set a cap on individual annual purchase limits through e-commerce channels. However, Customs does not have access to consumers' personal ID information. Observations among the pilot cities, has shown that illegal enterprises have adopted false IDs, including the IDs of other importers, for the purpose of making customs declarations in order to increase their purchases through an e-commerce channel (HCRG, 2016).
3. **An increase in the volume of personal postal articles**, which also increases the potential risk of smuggling. Fragmentation of the trade increases customs control risks, including small consignments of counterfeit goods, which violate intellectual property rights (IPR), and undervalued items. Other risks include the tendency to import goods through personal postal article channels, which has a negative impact on conventional trade and results in national revenue leakage. What could be even more serious, is that criminals may seek opportunities and loopholes to import prohibited products, such as endangered animal and plant products, drugs, and biochemical and nuclear weapons, which pose a potential threat to the overall national security.

5. Policy recommendations

Table 3 lists the major challenges faced by Customs and consumers and how these can be addressed together through global guidelines. Thereafter, policy recommendations are developed to address each category of the challenges according to the international guidelines and OECD practices.

Table 3: Findings, global practice and recommendation

Findings	**Customs challenges**	Administrative cost	Potential risk	Technological problems	
	Consumer challenges	Taxation cost	Customs procedures	Technological problems	
Global guidelines		De minimis Regime, E-customs, WCO Immediate Release Guidelines.	TFA, E-customs, WCO Immediate Release Guidelines.	WCO ICT Guidelines, IT guidance for Executives, WCO guidelines for single window data harmonization, Single Window	
Recommendations		Optimize Taxation Collection	Optimize Customs Supervision	Improve Technology	Department Cooperation

Source: Author, 2017.

5.1 Recommendations for optimising taxation

According to international practice, cross-border e-commerce tax collection should follow the principle of neutrality. In line with the OECD's recommendations, instead of creating a new tax category for e-commerce, improving the existing tax system would be more appropriate. This practice could also avoid cross-border e-commerce commodities being diverted to personal postal articles to increase the risk of customs control and tax evasion through the post (Yang, 2016). It is suggested, therefore, to implement commercially meaningful *de minimis* thresholds for all customs tariffs and taxes. In this case, an account-based collection model could be adopted, such as the intermediary collection model, which can protect revenue streams while maintaining control of growing numbers of small shipments without slowing down legitimate trade (GEA, 2015).

The efficiency of customs clearance and delivery of low-value consignments is especially crucial in B2C cross-border e-commerce. Lessons could be drawn from WCO's immediate release guidelines. Similarly, the US Customs tax practices indicate that, regardless of whether the imported goods are for personal use or for business purposes, taxes are levied at three levels according to the value of commodities: a tax exemption for the low-value goods; goods valued between \$200 and \$2500 may be imported using an informal entry; while a formal entry is required to be filed for goods valued over \$2500 (CBP, 2017). In doing so, consumers can clearly determine which method to use when declaring import commodities to Customs.

5.2 Recommendations for optimising customs control

It has been stated in the literature review that TFA can provide facilitated transactions for e-commerce suppliers and relevant stakeholders, saving costs for consumers. Thus, it is important to implement international guidelines, such as TFA and WCO immediate release guidelines in order to achieve this.

It is worthwhile considering the establishment of a consumer integrity mechanism by using a cross-border e-commerce company credit model. This could improve the effectiveness of targeting smuggling by having follow-up inspections within the improved customs control system. Lessons could be drawn from Australia, the US and the EU to establish consumer import and export credit archives that include a detailed record of import and export declarations and related information. By building a professional e-commerce enterprise credit evaluation system to constantly monitor and assess risks, a convenient and sound environment for legitimate trade would be created.

Also, several actions must be taken, including working ahead of the border and the supply chain, to prevent the import of prohibited goods. Lessons could be drawn from the international cargo clearance modernisation plan carried out by Australia's Department of Immigration and Border Protection (DIBP) to create an intelligence-led and risk-based international mail environment by leveraging electronic reporting of personal postal articles to significantly reduce the volume of mail that requires real-time assessment. Intelligence-led and risk-based selectivity and targeting technology should be employed to control e-commerce, as should cooperation with legitimate traders to identify high-risk shipments (GEA, 2015).

5.3 Recommendations for technical improvements

A technology-based CRM strategy could be adopted by Customs to involve the private sector, including cross-border e-commerce traders and consumers, to create a more efficient and modern customs administration. According to CRM strategy and the HMRC framework, a consumer unit could be established. In HMRC, a customer unit is responsible for identifying the requirements and behaviours of customers, and the risk associated with them (NAO, 2006). It is worth considering establishing a consumer unit under the e-commerce department of each Customs department so that Customs can improve the consumer experience and compliance while addressing the needs and risks of consumers and the business community. Web links could be introduced to the national unified system used by China Customs for cross-border e-commerce declarations. Pop-up messages that contain information for potential consumers and businesses on their tax and compliance obligations, including the detailed registration process, could also be used. The same measures could address issues such as problems associated with the return of goods and how to check the annual import value and declaration process.

As stated in the literature review, a single window environment, WCO data model, WCO ICT guidelines and IT guidelines would improve the accuracy of data and intelligence to avoid risks. China, in this case, could adopt the single window regime, allowing this unified IT platform for one-stop lodgement of pre-shipment information to provide accurate data and, at the same time, facilitate customs clearance for consumers and businesses. Also, lessons could be drawn from HMRC to form a joint initiative with local post offices on the exchange of information by using the CDS. This would provide Customs with access to information about commodities, including volume, weight, country of origin and ID. In the long term, a higher data-sharing and procedural coordination mechanism could be established to promote trade facilitation and reduce the costs to the business sector and consumers.

5.4 Recommendations for cooperation

Through international customs cooperation and partnerships with businesses, Customs has been working on facilitating legitimate trade, while preventing illicit activities. Stakeholders, such as carriers, border agencies and e-commerce platforms, should collaborate to design efficient and effective policies that secure and facilitate this crucial economic activity. Co-chaired by a representative of a WCO member administration and a representative of the private sector, WGEC is considered to be the perfect platform for Customs and business to communicate with each other. As there are no specific international guidelines for e-commerce, there is an urgent need for WGEC to develop practical cross-border e-commerce guidelines that the business community and Customs in member countries can follow.

Customs in different countries should also cooperate to facilitate cross-border e-commerce. By seeking the common interest of guarding against tax evasion and focusing on cooperation and facilitation of cross-border e-commerce B2C imports, customs authorities could work together to standardise procedures and the automated exchange of information between different countries. By making full use of multilateral and bilateral communication platforms and trade agreements, China Customs could actively promote effective control of cross-border e-commerce and carry out pilot projects based on cooperation with other countries.

6. Conclusion

The increase in both the number of small consignments and the volume of e-commerce trade, as well as the emergence of new stakeholders in the global trade arena, such as individual consumers, has brought new challenges to customs administrations. In order to be successful in e-commerce, Customs and businesses must work together and it is therefore important to establish cooperative mechanisms for Customs and the private sector to improve the regulation of cross-border e-commerce transactions. Notably, the call log data from Hangzhou Customs 12360 helpline revealed that consumers' greatest concerns related to the impact of such regulation.

Most of the figures and tables in this article were originally developed from past customs experiences, the study of current regulations and validation with Hangzhou Customs e-commerce experts. The most interesting implication of this research is the need to consider policy recommendations from the perspective of consumers, an application of the theory of customer orientation and adoption of CRM strategy to develop e-Customs initiatives to save time and costs of border formalities for consumers.

In framing policies with respect to B2C cross-border e-commerce, policy makers should not only consider the objectives of economic growth and national security, but also provide a sound framework to ensure that consumers benefit from quality products, reduced fees, faster delivery and a wider choice, which comes hand in hand with the growing trend of cross-border e-commerce.

References

Batista, L. & Kawalek, P. (2004). Translating customer-focused strategic issues into operational process through CRM – a public sector approach. In R. Traunmuller (Ed.), *EGOV 2004* (pp.128–133). Heidelberg, Germany: Springer-Verlag.

Customs and Border Protection (CBP). (2017). *Internet Purchases, Your Responsibility and Liability*. Retrieved from https://www.cbp.gov/trade/basic-import-export/internet-purchases

European Commission (EC). (2016). *2015 e-customs progress report*. Retrieved from http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/customs/policy_issues/e-customs_initiative/2015_progress_report.pdf

Gao, J. Y. (2017). 2016 Nian woguo kuajing maoyi e da 5.85 wan yi yuan. (China achieving a cross-border e-commerce trade volume of 0.585 trillion RMB in 2016. Jingji cankao bao (Economic Information Daily). Retrieved from http://www.global-express.org/assets/files/Trade/GEA-Position-Paper-on-e-commerce-final-200116.pdf

Global Express Association (GEA). (2015). *Let cross-border e-commerce be an engine for growth.* Retrieved from http://jjckb.xinhuanet.com/2017–06/08/c_136348451.htm

Hangzhou Customs. (2017). *Hangzhou haiguan guanyu baosong 2016 nian kuajing dianzi shangwu jianguan gongzuo qingkuang de han.* (Letter from Hangzhou Customs on the supervision of cross-border e-commerce in 2016).

Hangzhou Customs Research Group (HCRG). (2016). *Kuajing dianzi shangwu fazhan he haiguan jianguan jizhi chuangxin wenti yanjiu.* (Research on Cross-border -commerce Development and Innovation on Customs Supervision Mechanism).

HKTDC Research. (2016). *Cross-Border E-commerce: China Policy Update.* Retrieved from http://hkmb.hktdc.com/en/1X0A6AHP/hktdc-research/Cross-Border-E-commerce-China-Policy-Update

Holloway, S., & Rae J. (2012). De Minimis Thresholds in APEC. *World Customs Journal*, 6(1), 31–62.

Hufbauer, G. C. & Wong, Y. (2011). Logistics reform for low-value shipments. *Peterson Institute for International Economics,* 6, 1–34.

Kolsky, E., & Keller, B. (2001). *E-government and CRM: Slowly moving forward.* Retrieved from http://www.gartmer/com

Kommerskollegium, (2012). *E-commerce – new opportunities, new barriers. A survey of e-commerce barriers in countries outside the EU*. Stockholm: Kommerskollegium.

Lewis, G. (2009). The impact of ICT on Customs. *World Customs Journal,* 3(1), 3–11.

National Audit Office (NAO). (2006). *HM revenue & Customs VAT on e-commerce*. London: The Stationery Office.

National Office for the Information Economy (NOIE). (2003). *Transforming Government Achievements in E-government*. Canberra, Australia: NOIE.

Price, R. & Brodie, R. (2001) Transforming a public sector organization from inside out to outside in. *Journal of Service Research*. 4(1), 50–59.

She, J. M. (2016). Kuajing dianzi shangwu lingshou jinkou shuishou xinzheng pinxi. (Thoughts on retail import taxes for cross-border e-commerce). *Haiguan yu maoyi (Journal of Customs and Trade),* 37(5), 97–106.

Spradley, J. P. (1979). *The ethnographic interview.* California: Wadsworth Publishing.

World Customs Organization (WCO). (2007). *WCO Data Model, Single Window Data Harmonization.* Retrieved from http://www.mcmullinpublishers.com/downloads/SingleWindow.pdf

World Customs Organization (WCO). (2014). *Guidelines for the Immediate Release of Consignments by Customs*. Retrieved from http://www.wcoomd.org/en/topics/facilitation/resources/~/media/D0F3EA60B983435EABE3C63DC23636C6.ashx

World Customs Organization (WCO). (2016). *WCO Working Group on E-commerce 1st meeting summary report.* Retrieved from http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/e-commerce/summary-report-1st-meeting-wg-e-commerce.pdf?la=en

World Customs Organization (WCO). (2017a). *WCO Study Report on cross-border e-commerce.* Retrieved from http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/e-commerce/wco-study-report-on-e_commerce.pdf?la=en

World Customs Organization (WCO). (2017b). *IT guide for executives.* Retrieved from http://www.wcoomd.org/sitecore/content/WCO/Home/error%20404

World Customs Organization (WCO). (2017c). *Cross-border e-commerce.* Retrieved from http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/e-commerce.aspx [Accessed 12 Sep. 2017].

West, D., Ford, J. & Ibrahim E. (2016). *Strategic marketing.* Oxford, England: Oxford University Press.

World Economic Forum (WEF). (2013). *Enabling trade valuing growth opportunities.* Retrieved from https://zh.scribd.com/document/141341253/Enabling-Trade-Report-2013-World-Trade-Forum

World Trade Organization (WTO). (2017a). *Annual Report 2017.* Retrieved from https://www.wto.org/english/res_e/booksp_e/anrep_e/anrep17_e.pdf

World Trade Organization (WTO). (2017b). *WTO's Trade Facilitation Agreement enters into force*. Retrieved from https://www.wto.org/english/news_e/news17_e/fac_31jan17_e.htm

World Trade Organization (WTO). (2017c). *Trade facilitation.* Retrieved from https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm

Yang, Y. Y. (2016). Woguo kuajing dianzi shangwu shuishou wenti yanjiu. (Research on taxation of cross-border e-commerce in China). *Shuishou guanli (Tax Management),* 11, 69–71.

Yeung, A., Cheng, E. & Chan, L. (2004). From customer orientation to customer satisfaction: The gap between theory and practice. *IEEE Transactions on Engineering Management*, 51(1), 85–97.

Ti Yu

Ti Yu has been working in Hangzhou Customs for 10 years as a member of the research team and is a practitioner in customs valuation and taxation. Her areas of interest are in research related to customs procedural innovation, Customs–Business partnerships and ways in which international customs standards and conventions can be incorporated in the Chinese environment. She was awarded the Chevening Scholarship by the Foreign and Commonwealth Office of UK in 2016 and obtained a first-class masters degree in management from the University of Nottingham.