



SELECTED ISSUES IN CROSS-BORDER E-COMMERCE DEVELOPMENT IN ASIA AND THE PACIFIC



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STUDIES IN TRADE, INVESTMENT AND INNOVATION NO. 91

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December 2019



Studies in Trade, Investment and Innovation No. 91
Selected issues in cross-border e-commerce development
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United Nations publication
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Sales no.: E.20.II.F.8
ISBN: 978-92-1-120805-4
eISBN: 978-92-1-004886-6
Print ISSN: 1020-3516
eISSN: 2414-0953
ST/ESCAP/2894

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This publication has been issued without formal editing.

Acknowledgement

This publication was prepared by the Trade, Investment and Innovation Division (TIID) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Mia Mikic and Jonathan Tsuen Yip Wong provided crucial guidance and inputs for the publication.

Tengfei Wang prepared the report. Useful advice and inputs were provided by Michał M. Podolski. Luisa Gonzalez Boa carried out studies on cross-border e-commerce logistics and provided various support to the preparation of this report during her internship with ESCAP. The report was edited by Mary Ann Perkins and formatted by Phadnalin Ngerlim.

A discussion with Jong Woo Kang, Asian Development Bank, provided inspiration at an early stage of developing this report. Professor Wang Jian, University of International Business and Economics, China and Sami Farhad and Ren Yuan of Alibaba group provided useful comments on the report. The authors of this report gratefully acknowledge Euromonitor for allowing the use of its data in figures 1.4 through 1.6. Any error or shortcoming in the work is the sole responsibility of its authors.

Acronyms and abbreviations

AI	artificial intelligence
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
B2B	business to business
B2C	business to consumer
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
ESCAP	Economic and Social Commission for Asia and the Pacific
GST	Goods and Services Tax
ICC	International Chamber of Commerce
OECD	Organization for Economic Cooperation and Development
RCEP	Regional Comprehensive Economic Partnership
SMEs	small and medium-size enterprises
UNCTAD	United Nations Conference on Trade and Development
UPU	Universal Postal Union
WCO	World Customs Organization
WTO	World Trade Organization

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INTRODUCTION

The fascination of all actors – government, the public, business – with the digital economy is easily understood as one looks at the dynamics of its growth. The digital economy is worth an estimated \$11.5 trillion globally, equivalent to 15.5 per cent of global gross domestic product (GDP), and it has grown two and a half times faster than global GDP over the past 15 years (Huawei and Oxford Economics, 2017). The central part of the digital economy is e-commerce, which is singled out for its fast expansion and resilience. Even at times when most other types of (cross-border) transactions were hardly growing if not decelerating, e-commerce was growing. Various reports claim that cross-border e-commerce will experience equally rapid if not faster growth in the future. According to AliResearch and Accenture (2015), global cross-border business-to-consumer (B2C) e-commerce is expected to grow at a compound annual growth rate of 27 per cent from 2014, reaching almost \$1 trillion in 2020. Similarly, DHL (2016) estimated that the gross market value of cross-border e-commerce would rise from \$300 billion in 2015 to \$900 billion in 2020. According to Statista (2018), cross-border B2C sales by value in Asia and the Pacific is projected to be \$476 billion in 2020. Collectively, these estimations show that the Asia-Pacific region will account for about half of global B2C sales in the near future.

This report focuses on a few selected issues related to the development of cross-border e-commerce which should be of top interest to Asia-Pacific policymakers, consumers and business alike. These include the issues related to an overview of evolving nature of e-commerce and scale of cross-border e-commerce; governance from the national to the multilateral level; logistics of cross-border e-commerce; and *de minimis* values. Each one of these topics is reviewed based on available literature¹ and data, and inferences are made with respect to policy implications for developing countries in the region.

The scope of cross-border e-commerce includes trade in goods and trade in services. Given the complexities of definitions and measurements related to cross-

¹ The Rapid eTrade Readiness Assessments of Least Developed Countries of the United Nations Conference on Trade and Development (UNCTAD) provides useful information on countries including Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Island, Samoa and Tuvalu. This report uses the findings from the Asian Development Bank and ESCAP (2018) report Embracing the E-commerce Revolution in Asia and the Pacific.

border e-commerce, the focus of this report is on cross-border e-commerce involving goods rather than services. It is, however, recognized that services in general, and especially services traded digitally, are increasingly important for developing countries. Trade in services will be explored in future work on e-commerce.

The report is structured as follows.

Chapter 1 provides an overview of cross-border e-commerce development in Asia and the Pacific. It contains a discussion of e-commerce, including cross-border e-commerce, and shows the increasing sophistication of e-commerce. The chapter reviews the scale of cross-border e-commerce in the region and key cross-border e-commerce platforms, which have been widely used by shoppers in the region. Asia and the Pacific may account for 40–50 per cent of global cross-border B2C e-commerce by 2020. China, Japan and the Republic of Korea are among the global top 10 countries measured by cross-border B2C sales of merchandise export. The top destinations of cross-border e-retailing include China, Japan and the Republic of Korea in East Asia; Australia and New Zealand in the Pacific; India in South Asia; Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam in South-East Asia; and Kazakhstan in Central Asia. Global e-commerce platforms such as Amazon, eBay and Aliexpress have been widely used by shoppers in the region while Chinese online shoppers give preference to cross-border shopping platforms hosted by local providers.

Chapter 2 contains an analysis of policies and regulations on cross-border e-commerce. Cross-border e-commerce involves trading partner countries, which means that policy and regulatory issues on cross-border e-commerce need to be discussed at the global, regional and national levels. At the global level, e-commerce had already become a topic of interest among the members of the World Trade Organization (WTO) in 1998 when the members adopted the Declaration on Global Electronic Commerce. This chapter provides a review the latest discussion of cross-border e-commerce under the auspices of WTO. At the regional level, cross-border e-commerce has found its way into regional trade agreements. Over 25 per cent of the regional trade agreements notified to the WTO contain a specific chapter on e-commerce or individual e-commerce provisions, and the number is growing. In Asia, 15 countries recently finalized the text of the Regional Comprehensive Economic Partnership (RCEP) and seven of those countries are parties of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which both include a chapter dedicated to cross-border e-commerce. At the national level, comprehensive policies on cross-border e-commerce are very scarce, and in many countries they are rather fragmented. The complexity of designing cross-border e-commerce policies should not be underestimated.

Chapter 3 provides a review of different types of logistics service providers for cross-border e-commerce, including: (i) subsidiary logistics companies set up by large e-commerce platform and operators such as Alibaba or Lazada which are part of e-commerce eco-system of the e-commerce operators; (ii) global express companies such as DHL or regional operators such as Kerry Logistics whose main business is logistics rather than e-commerce; (iii) postal service providers; and (iv) national logistics companies that partner with international operators for last-mile delivery. Unlike domestic e-commerce, goods sold through cross-border e-commerce pass through the national borders of at least two countries. Therefore, border crossing procedures can significantly influence the efficiency of cross-border logistics. The so-called “tsunami of parcels” imposes new challenges for border agencies and measures need to be put in place to cope with the challenges. International best practice, as recommended by the WTO Trade Facilitation Agreement (especially the provisions on expedited shipments) and the Immediate Release Guidelines of the World Customs Organization (WCO) should be adopted and implemented by the countries in the region to facilitate cross-border e-commerce logistics.

Chapter 4 provides an analysis of different *de minimis* thresholds for import and export of goods in selected countries in the region, and the potential benefits and drawbacks of a high *de minimis* threshold. *De minimis* is applicable not only to traditional trade but also cross-border e-commerce, and it has substantial impacts on cross-border logistics and taxation. Available data of 24 countries in Asia and the Pacific show that the *de minimis* threshold in 12 countries is below \$100 and it is between \$100 and \$200 in five countries. While international organizations such as WCO and the International Chamber of Commerce (ICC) call for setting up *de minimis* thresholds, the optimal value should be set according to the benefits and costs for a country.

CHAPTER I

CROSS-BORDER E-COMMERCE IN ASIA AND THE PACIFIC: AN OVERVIEW

This chapter provides an overview of the development of cross-border e-commerce in Asia and the Pacific, which has increased in sophistication and can have an important relationship with domestic e-commerce in different contexts. This chapter includes a review of the scale of cross-border e-commerce and key cross-border e-commerce platforms in the region. It concludes with policy implications for the region.

A. Evolving nature of e-commerce and cross-border e-commerce

1. Increasing sophistication of e-commerce

E-commerce generally refers to the production, advertising, sale and distribution of products through electronic means. E-commerce can occur within and between three basic participant groups – business, government and individuals. There are four main types of e-commerce, namely, business to business (B2B), business to consumer (B2C), consumer to consumer and business to government. E-commerce can be divided into domestic or cross-border according to whether the buyer and seller are located in the same country or not.

While the basic definition of e-commerce seems to be simple, it has become increasingly sophisticated for the past two decades in the following ways. First, the variety of e-commerce platforms has increased substantially. In the early 1990s, most e-commerce platforms were simple marketplaces with similar functions. Today, the range of e-commerce platforms includes incumbent companies' e-commerce platforms (such as Caterpillar, Ikea and Zara) and third-party e-commerce platforms; the latter includes "goods" and "services" e-commerce platforms. Examples of goods platforms include Amazon, eBay, Alibaba and Lazada while services platforms cover multiple sectors such as transportation, delivery, tourism, entertainment, media, advertising, learning, health, digital labour and cloud services (UNCTAD, 2019).

Second, a single e-commerce platform may have evolved from a marketplace into an e-commerce ecosystem. For example, figure 1.1 shows the e-commerce ecosystem of Alibaba. It started as a simple marketplace linking buyers and sellers. As technology advanced, more business functions moved online—including advertising, marketing, logistics, finance, product recommenders and social media influencers. Alibaba today is not just an online commerce company. It has functions associated with retail, and they are coordinated online into a sprawling, data-driven network of sellers, marketers, service providers, logistics companies and manufacturers (Zeng, 2018).

Figure 1.1 The Alibaba e-commerce ecosystem

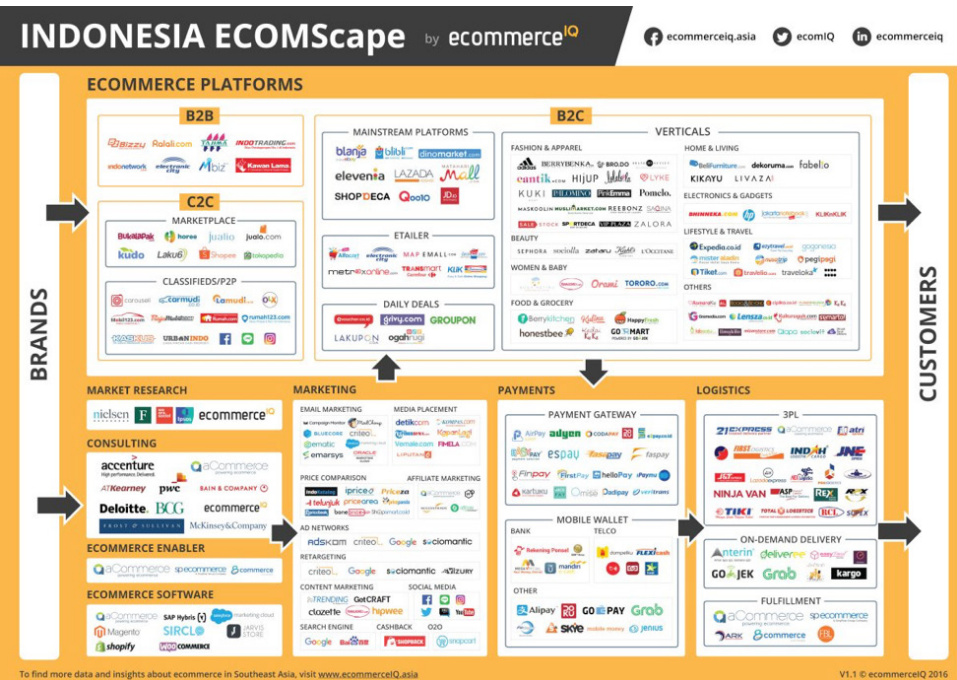


Source: Presentation delivered by a representative from Alibaba at the Workshop on e-Commerce/Cross-Border e-Commerce in Asia and the Pacific, organized by the Asian Development Bank and ESCAP. Bangkok, 27 August 2018.

Third, technologies such as cloud computing, big data, the Internet of things, artificial intelligence (AI), machine learning and blockchain have been adopted by e-commerce platforms which yield new business models. Among these technologies, the most notable ones include big data analysis and AI because such technologies can help analyse a large number of consumers and predict their likely preferences. This can be used to provide recommendations of specific products that the consumers are likely to buy, which in turn promote marketing and selling.

Fourth, the rapid development of e-commerce in many countries in the region has given rise to a large number of e-commerce operators. Figure 1.2 shows the e-commerce ecosystem in Indonesia, and similar e-commerce systems with large numbers of operators can be found in many countries in the region.

Figure 1.2 E-commerce landscape in Indonesia



Source: <https://ecommerceiq.asia/indonesia-ecommerce-landscape-ecommerceiq/>.

2. Cross-border versus domestic e-commerce

The raison d'être for cross-border e-commerce is straightforward. From the perspective of sellers/retailers, cross-border e-commerce enables them to reach global markets more easily. In theory, the increasing penetration of the Internet means that sellers can market and sell their products to more countries worldwide. From the perspective of the buyers or consumers, cross-border e-commerce is needed because of availability, costs and quality of products. First, the products may not be available in domestic markets (whether online or offline) and must be purchased from overseas markets. Second, even if the same or similar products are available in domestic markets, the overall costs for buying the products through cross-border e-commerce may be lower than buying through domestic retailers. Third, some consumers may be keen to buy products from overseas if the quality is higher than domestic products.

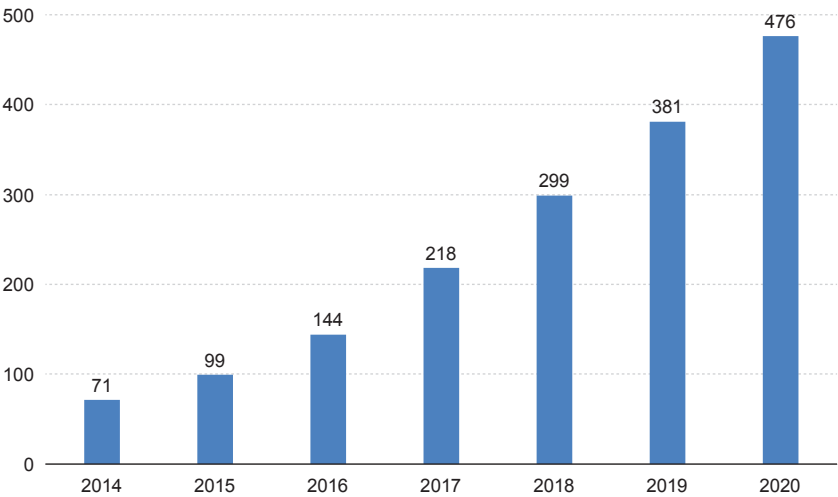
Domestic and cross-border e-commerce can compete with and complement each other. They may compete with each other, especially if the same products are available online through both domestic and cross-border retailers. In such a case, the consumers will take the factors such as costs, delivery time and the ease of returning products into consideration in their buying choice. In contrast, domestic and cross-border e-commerce may mutually strengthen the development of one another. For instance, an e-commerce player may originate within a single country, and the company can build capacity and experience before it expands to an overseas market. For small countries or economies where domestic e-commerce does not exist or is very weak, cross-border e-commerce may enable them to learn best practices on e-commerce and then develop their own e-commerce platforms or marketplaces.

B. Scale of cross-border e-commerce in the region

Globally, cross-border B2C sales by value of merchandise exports amounted to an estimated \$412 billion in 2017 (UNCTAD, 2019). This corresponds to almost 11 per cent of total B2C sales, up from 7 per cent in 2015. According to AliResearch and Accenture (2015), the global cross-border B2C e-commerce market amounted to \$530 billion in 2017. Global cross-border B2C e-commerce is expected to grow at a compound annual growth rate of 27 per cent from 2014 to 2020, climbing to almost \$1 trillion. DHL (2016) estimated that the gross market value of cross-border e-commerce would rise from \$300 billion in 2015 to \$900 billion in 2020.

According to Statista (2018), cross-border B2C sales by value in Asia and the Pacific are projected to be \$476 billion in 2020 (figure 1.3). This represents close to 50 per cent of global sales according to the projection mentioned above.

Figure 1.3 Cross-border B2C sales by value in Asia and the Pacific 2014–2020 (billions of United States dollars)



Source: Statista, 2018.

From the perspective of the sellers of cross-border e-commerce, table 1.1 lists global top 10 merchandise export countries (measured by B2C sales), including three countries from the Asia-Pacific region, namely, China, Japan and the Republic of Korea. In total, the top 10 countries account for approximately 66 per cent of global cross-border B2C sales.

Table 1.1 Estimated cross-border B2C sales of top 10 merchandise exporters and the world, 2017

Rank	Country	Total (US\$ billions)	Percentage of merchandise exports	Percentage of B2C
1	United Sates	102	6.6	13.5
2	China	79	3.5	7.5
3	United Kingdom	31	7.0	15.0
4	Japan	18	2.6	12.2
5	Germany	15	1.0	17.1
6	France	10	1.8	10.6
7	Canada	8	1.8	12.7
8	Italy	4	0.7	16.2
9	Republic of Korea	3	0.5	3.8
10	Netherlands	1	0.2	5.0
Top 10 total		270	3.0	10.7
World total		412	2.3	10.7

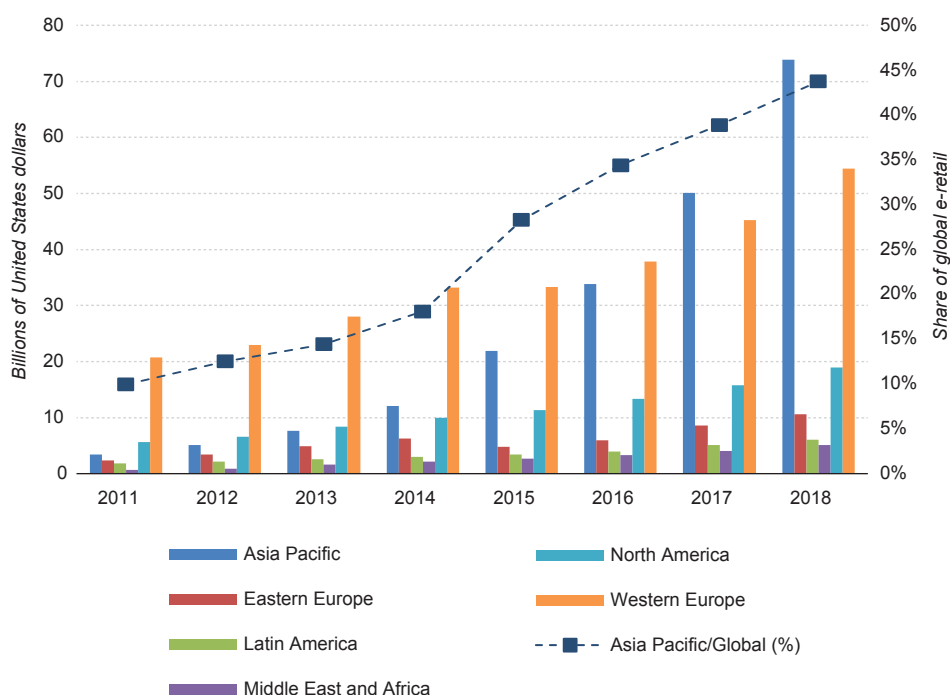
Source: UNCTAD, 2019.

At the global level, the Asia-Pacific region has experienced the most rapid growth in cross-border e-retailing (see figure 1.4). In 2011, the value of global cross-border e-retailing stood at approximately \$35 billion, and the Asia-Pacific region accounted for less than 10 per cent of the total (approximately \$3.4 billion). By 2018, cross-border e-retailing market size was about \$179 billion while the share of the Asia-Pacific region amounted to 44 per cent (approximately \$74 billion).

The top destination of cross-border e-retailing is China, which has grown very fast since 2010 (figure 1.5). The market share of China within Asia and the Pacific has increased from 17 per cent in 2011 to 83 per cent in 2018.

After China, other top destinations of cross-border e-retailing by subregion are as follows: Australia and New Zealand combined in the Pacific, Japan in East Asia, India in South Asia, Malaysia in South-East Asia and Kazakhstan in Central Asia. Other top destinations include Indonesia, the Philippines, the Republic of Korea, Thailand, Singapore and Viet Nam (figure 1.6).

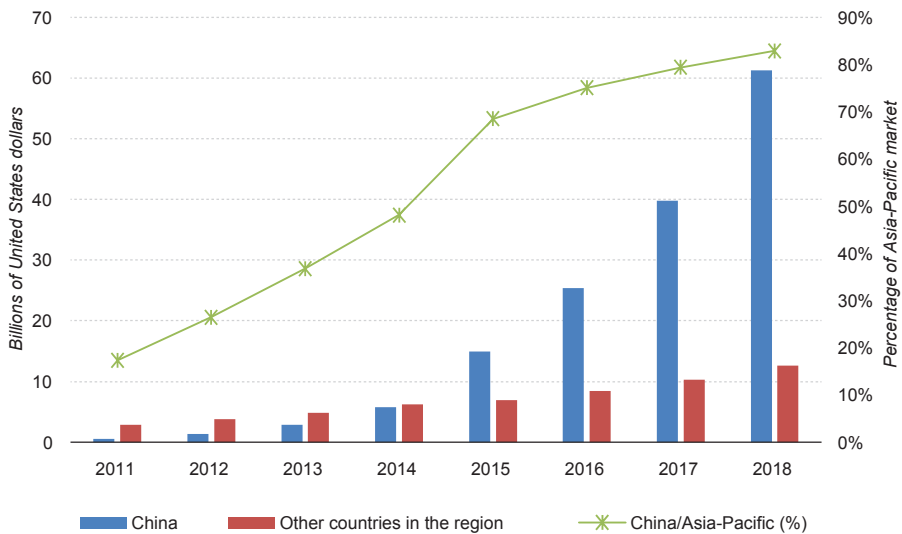
Figure 1.4 Cross-border e-retailing by region



Source: Prepared by ESCAP according to data from Euromonitor.

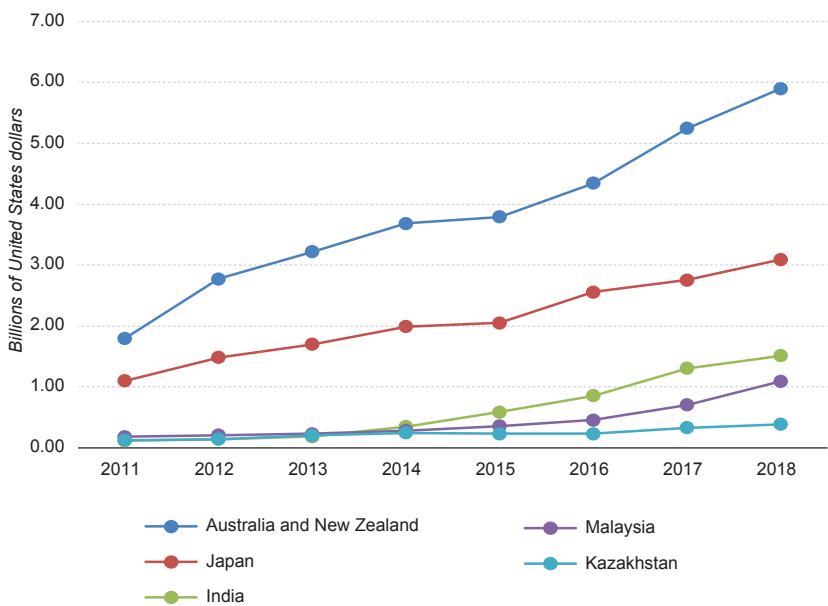
Note: Sales data are attributed to the country where the consumer is based, rather than where the retailer is based.

Figure 1.5 China's share of cross-border internet retailing in Asia-Pacific market



Source: Prepared by ESCAP according to data from Euromonitor.
Note: Sales data is attributed to the country where the consumer is based, rather than where the retailer is based.

Figure 1.6 Cross-border Internet retailing in selected Asia-Pacific countries



Source: Prepared by ESCAP according to data from Euromonitor.
Note: Sales data are attributed to the country where the consumer is based, rather than where the retailer is based.

Despite the rapid development of cross-border e-commerce, it is important to put the discussion into context. Cross-border B2C sales account for 2.3 per cent of merchandise exports and 10.7 per cent of total B2C sales (UNCTAD, 2019). In this sense, cross-border e-commerce is still at a nascent stage of development.

C. Key cross-border e-commerce platforms widely used by shoppers in the region

Global e-commerce platforms such as Amazon, eBay and Aliexpress have been widely used by shoppers in the region. Chinese online shoppers give preference to cross-border shopping platforms hosted by local providers, such as T-mall Global, Kaola and JD Global mainly because these companies catered to the demands of Chinese consumers from the very beginning. Table 1.2 shows the classification of business models of cross-border e-commerce in China.

Table 1.2 Classification of main business models of cross-border e-commerce in China

Business models	Marketplace	Retailing
Cross-border B2B (export from China)	Alibaba.com, Made-in-China.com, globalsources.com	
Cross-border B2B (import to China)	1688.com, seatent.com	
Cross-border e-commerce B2C (export from China)	AliExpress, eBay, Amazon, Wish	LightInTheBox, DX, Milanoo
Cross-border e-commerce B2C (import to China)	T-mall Global, global.taobao.com, ymatou.com	kaola.com, JD Worldwide, jumei.com, xiaohongshu.com

Source: Derived from AliResearch, 2016.

In the Republic of Korea, multi-brand on-line retailers such as Amazon.com and eBay are the most frequently used foreign on-line shopping sites (export.gov, 2019a). In Japan, the most popular cross-border e-commerce platforms include Rakuten and Amazon Japan (export.gov, 2019b). In India, there are two big players: Flipkart and Amazon. While Paytm has entered this space with Paytm Mall, it has not reached the level of adoption of Flipkart or Amazon (Shinde, 2019).

The situation of e-commerce platforms in South-East Asia, such as Lazada and Shopee, is more complicated than it appears. Alibaba bought controlling stake of Lazada in 2016. By 2019, Alibaba had invested at least \$4 billion in Lazada as part of its strategy to expand to markets in South-East Asia (Cadell and Aravindan, 2018). Similarly, Shopee is part of Sea Ltd, a company listed on the

New York Stock Exchange. Sea founder, Forrest Li, and the Chinese company Tencent jointly hold 72.4 per cent voting power of ordinary shares (Jingli, 2019). The Chinese JD.com invested actively in South-East Asia market by setting up JD Central in Thailand and becoming the largest shareholder of e-commerce operator Tiki in Viet Nam (VietNamNet, 2018a).

In terms of goods bought through cross-border e-commerce, table 1.3 shows that the most popular products include fashion and beauty and cosmetics across a few countries. Some goods such as printed materials, publishing and media were popular in Australia, Japan, the United Kingdom and the United States but they were not popular in China, India or the Russian Federation. Food products were popular for Chinese shoppers but they were much less popular in other countries.

Table 1.3 Share of consumers having purchased product type from foreign e-commerce sites (per cent)

Type of product	Australia	China	Japan	Russian Federation	United Kingdom	United States
Fashion	40	36	20	51	32	31
Electronics						
Computer electronics	21	14	12	18	11	16
Personal appliances	10	13	6	17	6	6
Mobile phones	9	12	3	17	6	8
Digital cameras and audio devices	13	19	5	8	7	8
Print, publishing and media	43	13	27	9	29	22
Beauty and cosmetics	19	42	21	21	15	14
Toys	16	8	7	20	12	15
Home and furniture	14	7	8	17	8	11
Food	7	35	14	5	6	9
Gifts and flowers	11	6	4	7	10	9
Sporting goods	11	8	7	9	4	6
Automotive parts	9	3	3	10	5	7
DIY tools and gardening	7	5	4	9	5	7

Source: DHL, 2016.

D. Summary of the chapter and policy implications

Various forecasts show that global cross-border B2C e-commerce is expected to grow at a compound annual growth rate of 27 per cent from 2014 to 2020 and the Asia-Pacific region may account for 40–50 per cent of global cross-border e-commerce by 2020. Available data show that China, Japan and the Republic of Korea are among the global top 10 countries measured by cross-border B2C sales (merchandise exports). Collectively, the top countries account for approximately two thirds of global cross-border B2C sales.

In this context, it is important for policymakers in many developing and the least developed countries to find ways to be better engaged in cross-border e-commerce, especially for the promotion of export. Some countries in the region tried to develop their own cross-border e-commerce platforms but the experience so far cannot be deemed successful. Among other solutions, it is essential to collaborate with large cross-border e-commerce platforms and build partnership between government and private sector (ESCAP, 2018). Due to network effects, large cross-border e-commerce platforms can help to link international markets to products from developing or the least developed countries. For instance, collaboration among Alibaba, the Government of Thailand and Thai farmers enabled 80,000 golden pillow durians to be sold within one minute (The Nation, 2018).

CHAPTER 2

CROSS-BORDER E-COMMERCE: POLICY AND REGULATORY ISSUES

This chapter contains an analysis of policy and regulatory issues of cross-border e-commerce in selected countries in the region. Cross-border e-commerce involves trading-partner countries, which means that policy and regulatory issues on cross-border e-commerce needs to be discussed at global, regional and national levels.

A. Global governance

Cross-border e-commerce has received global attention not only from the business sector but also from Governments. For example, 76 members of the WTO issued a joint statement on 25 January 2019, confirming their intention to start negotiations on electronic commerce (WTO, 2019a). Collectively, these economies – including 17 in Asia and the Pacific – account for 90 per cent of global trade.

The joint statement highlighted the key issues related to the negotiation: (i) the negotiation will centre on trade-related aspects of electronic commerce; (ii) the negotiation will build on existing WTO agreements and frameworks; and (iii) opportunities and challenges faced by the members of WTO, including developing countries and least developed countries, as well as by micro-, small and medium-sized enterprises, in relation to e-commerce (WTO, 2019a).

Indeed, WTO plays a key role in facilitating discussions on e-commerce. In 1998, WTO established the Work Programme on Electronic Commerce to examine electronic commerce issues related to four major areas: trade in services; trade in goods; intellectual property rights; and trade and development. Since then, the work on e-commerce under the auspices of WTO has evolved and member States have deepened their understanding of cross-border e-commerce. In 2016, several countries jointly attempted to map out the e-commerce issues at the WTO as part of the July 2016 Review of the WTO Work Program on Electronic Commerce (table 2.1).

Table 2.1 Mapping out e-commerce issues at WTO

Regulatory frameworks	Open markets
<ul style="list-style-type: none"> • Enhanced transparency • Consumer confidence enhancing measures <ul style="list-style-type: none"> –Regulatory framework for consumer protection –Regulatory framework for privacy protection –Regulatory framework for cyber security –Regulation of unsolicited communications • Trade facilitating measures <ul style="list-style-type: none"> –Open network/access to and use of the internet –Addressing licensing and authorisation procedures –Addressing electronic payments –Access to and use of communications networks –WTO Telecommunication Reference Paper –Trade aspects of intellectual property rights –Recognition of e-signatures/authentication –Addressing e-procurement/e-auctions –Technical standards 	<ul style="list-style-type: none"> • Liberalisation commitments <ul style="list-style-type: none"> –Services <ul style="list-style-type: none"> ✓ Commitments in e-commerce-relevant sectors e.g. (Telecom; computer; Mode 1 delivery; business services; professional services, etc.) ✓ Classification, e.g. adhering to the Understanding on Computer and Related Services –Goods <ul style="list-style-type: none"> ✓ Tariff elimination, e.g. Information Technology Agreement (ITA) –Prohibition against custom duties on electronic transmissions • Measures ensuring openness <ul style="list-style-type: none"> –Disciplines ensuring cross-border data flows –Disciplines with respect to localisation (local presence – including of computer servers, local content) –Addressing the transfer of and/or access to source codeServices
<p style="text-align: center;">Initiatives facilitating the development of e-commerce</p> <ul style="list-style-type: none"> • Trade Facilitation Agreement/further custom facilitations measures/paperless trading • Aid for Trade/Technical assistance • Regulatory cooperation among Members and their regulatory authorities 	
<p style="text-align: center;">Enhanced transparency of the multilateral trading system</p> <ul style="list-style-type: none"> • Greater focus on e-commerce at the occasion of Trade Policy Reviews • DG Monitoring Report on protectionism could include a digital focus • Exchange of information through e-commerce agenda items of the regular WTO Committees 	

Source: WTO, 2016.

In recent years, the discussions about the future of the Work Programme and e-commerce discussions in general have intensified at WTO, especially since July 2016, when some members proposed negotiating new rules and pushed for multilateral e-commerce negotiations to be added to the WTO agenda. Many developing countries opposed the proposal, arguing that it was contrary to the current mandate of the Work Programme, as well as the Nairobi Ministerial Declaration that put the remaining Doha Round issues at the core of the negotiations at WTO (The South Centre, 2017). More recently, on 10 December 2019, the WTO members agreed to maintain the current practice of not imposing customs duties on electronic transmissions (aka Moratorium) until the 12th Ministerial Conference scheduled for 8–11 June 2020. They also agreed to continue work under the existing 1998 Work Programme on e-commerce in the first part of 2020. The work leading up to the Conference will include structured discussions on issues that would help ministers take an informed decision (WTO, 2019b). In this connection, a report by the Organization for Economic Cooperation and Development (OECD) points out that when countries consider whether or not to extend the Moratorium, they should take into consideration the wider benefits of the Moratorium and not focus solely on the revenue implications. Analysis shows that the revenue implications of the Moratorium are likely to be small relative to overall government budgets and that its lapse would come at the expense of wider gains in the economy (OECD, 2019).

B. Regional governance

Some countries in the region were among the global pioneers of e-commerce including cross-border e-commerce. As early as 1998 when the WTO adopted its Electronic Commerce Work Program, the Asia-Pacific Economic Cooperation (APEC) group adopted its Blueprint for Action on Electronic Commerce. The Blueprint stated that the business sector should play a leading role in developing e-commerce technology, applications, practices and services while the role of Governments is to promote and facilitate the development and uptake of e-commerce. It emphasizes that competitive market-based solutions based on competition policy and effective industry self-regulation should be favoured (although some degree of government regulation may be necessary). Cross-border e-commerce was addressed by so-called “Paperless Trading” (for trade in goods) under the Blueprint. More specifically, the member economies were urged to reduce or eliminate the requirement for paper documents needed for customs and other cross-border trade administration and other documents and messages relevant to international sea, air and land transport (APEC, 1998). This proposal was visionary in the sense that, almost 20 years

later, countries in the region adopted the text of the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific in May 2016.²

Cross-border e-commerce has found its way into regional trade agreements. Most recently, at the 3rd Regional Comprehensive Economic Partnership (RCEP) Summit in Bangkok on 4 November 2019, 15 of the 16 participating countries, including Australia, Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Republic of Korea, Lao People's Democratic Republic, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand and Viet Nam, announced the conclusion of all 20 chapters of the RCEP Agreement. Chapter 12 of the Agreement is focused on e-commerce. While the full text of the Agreement is not available to the public, from the open access information there is an indication that the Agreement contains a chapter with provisions on facilitating e-commerce trade and rules on consumer protection and personal information protection (New Zealand Foreign Affairs and Trade, 2019).

Indeed, RCEP is not the only regional agreement which contains provisions on e-commerce. As of December 2019, there are 84 enforced regional trade agreements (RTAs) that explicitly address e-commerce globally. Similar to other issues covered in RTAs, these provisions remain highly heterogeneous addressing various issues ranging from customs duties and non-discriminatory treatment to domestic regulatory framework, electronic signatures, consumer protection, data protection, paperless trading and unsolicited or undesired electronic messages. At one extreme are several relatively recent regional trade agreements whose e-commerce chapters address a wide range of digital trade issues, including data localization and the treatment of source code (e.g., in the amended Australia-Singapore Free Trade Agreement). At the other end of the spectrum are those treaties that only restrict customs duties for electronic commerce transactions and seek cooperation between regulatory authorities. Among these, there are 47 RTAs with at least one party from Asia and the Pacific.³

In South-East Asia, economic ministers from the 10 members of the Association of Southeast Asian Nations (ASEAN) signed the Agreement on Electronic Commerce in November 2018. It urges member States to use paperless trading schemes and it deals with the use of information (other than financial services) via electronic means including digital signatures. It encourages members to be transparent about consumer protection measures and urges online personal information protection

² Further information on the Framework Agreement is available from www.unescap.org/resources/framework-agreement-facilitation-cross-border-paperless-trade-asia-and-pacific.

³ Information on the RTAs is available from <https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>. Earlier discussions of the topic include Wu (2017) and Monteiro and Teh (2017).

(Elms, 2019). While the effectiveness of the implementation of the Agreement on Electronic Commerce remains to be seen, it certainly holds promise for developing a cooperative and conducive environment for e-commerce in the region.

Arguably, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) contains the most comprehensive chapters on cross-border e-commerce. Seven countries in the region, namely Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore and Viet Nam, are members of CPTPP. Through the CPTPP, member countries agree to a set of rules that will facilitate economic growth and trade opportunities fostered by e-commerce. These rules will also address the latest barriers to electronic trade. The rules include commitments that will build trust and confidence in the use of e-commerce and enhance the viability of the digital economy (see box 2.1)

Box 2.1 E-commerce and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)

The agreed CPTPP rules will help businesses of all sizes by:

- Facilitating the use of electronic commerce as a means of trade
- Protecting users from:
 - Unauthorized disclosure of their personal information
 - Online fraudulent and deceptive commercial practices
 - Unsolicited commercial electronic messages or spam
- Protecting the free flow of information across borders
- Ensuring that impediments to both consumers and businesses embracing this medium of trade are addressed
- Preventing governments of CPTPP member countries from:
 - Requiring the use of local servers for data storage
 - Demanding access to an enterprise's software source code
- Ensuring that CPTPP member countries do not discriminate against or impose custom duties or other charges on online digital products

Source: Government of Canada, 2018.

Negotiations towards a digital economy partnership agreement by Chile, New Zealand and Singapore need to be monitored by policymakers. Notwithstanding the small number of countries, the proposed agreement may include more comprehensive provisions on the digital economy including cross-border e-commerce. In addition, the intention is “to establish new international rules and best practices for supporting and promoting trade in the digital era” (New Zealand Foreign Affairs and Trade, 2019).

C. National governance

1. China

From a policy perspective, China stands out among the countries in the region in fostering cross-border e-commerce. Many other countries have ambiguous policies on cross-border e-commerce or they have limited policies that address specific technical aspects of cross-border e-commerce (such as border crossing procedures). Accordingly, the focus of this section is to review the experience of China and analyse possible lessons other countries can learn from China.

China has gone through a long process to make and adjust its policy on cross-border e-commerce (table 2.2). The Government has attached great importance to promoting cross-border e-commerce, as reflected in the 13 regulations and rules on cross-border e-commerce and the e-commerce law, which have been promulgated since 2012.

Table 2.2 China's regulations on cross-border e-commerce

Time	Prepared by	Policy	Importance/impacts
December 2012	National Development and Reform Commission and General Administration of Customs	Deployment Meeting on Cross-border E-commerce Pilot	Cross-border e-commerce pilot work is launched preliminarily in Zhengzhou, Shanghai, Chongqing, Hangzhou and Ningbo.
February 2013	State Administration of Foreign Exchange	Guidance on the Pilot Program of Foreign Exchange Payments for Cross-border E-commerce of Third-party Payment Institutions	It determines to establish pilot programs of foreign exchange payments for cross-border e-commerce of third-party payment institutions in Shanghai, Beijing, Chongqing, Zhejiang and Shenzhen.
August 2013	Ministry of Commerce and eight other departments	Opinion on Implementing Policies that Give Support to Cross-border E-commerce Retail Exports	It incorporates cross-border e-commerce retail exports into export trade statistics, introduces supportive policies on cross-border e-commerce retail exports, and puts forward six concrete measures such as export inspection and exchange collection and settlement.
December 2013	Ministry of Commerce	Notice on Taxation Policies of Cross-border E-commerce Retail Imports	Cross-border e-commerce retail exports can enjoy tax refund and exemption.

Table 2.2 *(Continued)*

Time	Prepared by	Policy	Importance/impacts
January 2014	General Administration of Customs	Notice [2014] No. 12 issued by the General Administration of Customs, i.e. Notice on Setting Customs' Regulation Code	General Administration of Customs especially sets "9610" as the regulation pattern code for cross-border e-commerce.
April 2014	State Administration of Taxation	Announcement on Issues about Tax Refund (and Exemption) for Export Goods of Integrated Trading Service Enterprise	It specifies conditions where integrated foreign trade service enterprises can enjoy tax refund and detailed requirements in that respect.
April 2014	General Administration of Customs	Notice on Issues about Online Shopping Bonded Import Model Used in Cross-border E-commerce Pilots	It specifies bonded imports and amounts as well as bonded import operation mode.
July 2014	General Administration of Customs	Notice [2014] No. 56 issued by the General Administration of Customs, i.e. Notice on Issues about Regulating Imports and Exports Traded by Cross-border E-commerce	It further clarifies regulations on cross-border e-commerce and distinguishes the concepts of commodities and goods, to which different regulation proposals will be taken.
July 2014	General Administration of Customs	Notice [2014] No. 57 issued by the General Administration of Customs in 2014, i.e. Notice on Setting Customs' Regulation Code	It specifies to add "1210" as customs regulation pattern code, with the full name of "Bonded Cross-border E-commerce Trade", enabling cross-border e-commerce bonded imports to be legal.
March 2015	The State Council	Reply of the Approval of Establishing Cross-border E-commerce Comprehensive Pilots in China (Hangzhou)	It clarifies to make breakthroughs and give priority to the pilot programs in each link of cross-border e-commerce, so as to create a complete industrial chain and an ecological chain for the development of cross-border e-commerce.
May 2015	General Administration of Quality Supervision, Inspection and Quarantine	Opinion on Playing the Role of Inspection and Quarantine to Promote the Development of Cross-border E-commerce	It provides targeted arrangements and measures for cross-border e-commerce inspection and quarantine.

Table 2.2 (Continued)

Time	Prepared by	Policy	Importance/impacts
May 2015	General Administration of Customs	Notice on Adjusting Customs Work Time and Customs Clearance Time Limit for Cross-border E-commerce Regulation	It specifies that working hours and time limit for customs clearance for cross-border e-commerce goods. To be specific, “the Customs should work throughout the year (365 days) without holiday and goods should go through customs clearance procedures within 24 hours upon arrival at customs regulation place”.
January 2016	State Council	Reply of the Approval of Establishing Cross-border E-commerce comprehensive pilots in Tianjin, Shanghai, Chongqing, Hefei, Zhengzhou, Guangzhou, Chengdu, Dalian, Ningbo, Qingdao, Shenzhen and Suzhou	It approves to establish cross-border e-commerce comprehensive pilots in 12 cities.
April 2016	Ministry of Finance and 10 other departments	Notice on Taxation Policies of Cross-border E-commerce Retail Imports	The tariff is temporarily set as 0 per cent; value added tax and consumption tax are no longer exempted and will be temporarily levied by 70 per cent for imports; individual's single transaction amount is limited to 2000 Yuan and annual transaction amount is limited to 20,000 Yuan.
May 2016	General Administration of Customs	Notice on Implementing New Regulation Requirements of Cross-border E-commerce Retail Imports	It specifies new requirements to regulate cross-border e-commerce retail imports in a one-year transition period that ended on 11 May 2017.
December 2018	General Administration of Customs	Notice on administration of cross-border e-commerce retail import and export (Notice number (194))	It defines the details on China's administration of cross-border e-commerce retail import and export.
January 2019	Government	E-Commerce Law of the People's Republic of China	It provides comprehensive regulations on e-commerce development in China.

Source: Adapted from AliResearch, 2016.

There are at least three features of policies in China that other countries may find useful as they develop e-commerce regulations or laws.

First, China adjusted its policies according to the development stage of e-commerce in the country. The development of cross-border e-commerce laws and policies was incremental and oftentimes, it dealt with specific aspects on cross-border e-commerce. This process enabled China to better understand cross-border e-commerce and provide a foundation to finally promulgate the e-commerce law in 2019.

Second, it is often very difficult to regulate or promote the development of cross-border e-commerce, because it encompasses many different aspects such as tax, logistics, data and information, intellectual property rights and data protection. To deal with such challenges, China implemented various pilot projects. Hangzhou was the first pilot city with a cross-border e-commerce zone. Various policies for import or export e-commerce were pioneered there. Now there are 35 pilot cities with cross-border e-commerce zones. As of 1 October 2018, a new policy enabled registered enterprises to enjoy value added tax and consumption tax exemption for cross-border B2C exports once they fulfil the export declaration requirements with the customs authority. This policy helps ensure diligent export declaration for e-trade and reduce the tax uncertainties for cross-border e-commerce enterprises.

Third, the policy development process in China shows that it is crucial to mobilize different ministries and agencies such as the National Development and Reform Commission, General Administration of Customs, State Administration of Foreign Exchange, Ministry of Commerce, State Administration of Taxation, the State Council, the General Administration of Quality Supervision, Inspection and Quarantine and the Ministry of Finance to deal with different aspects of cross-border e-commerce.

2. Cambodia, India, Indonesia and Viet Nam

Cambodia

The Government of Cambodia enacted the Law on Electronic Commerce (E-commerce Law) in November 2019. The law broadly applies to all commercial and civil acts, documents and transactions executed via an electronic system, except those that are related to powers of attorney, wills and successions, and real estate. The law has 12 chapters, covering topics such as electronic signature, legal provisions on consumer protection on e-commerce platforms and electronic fund transfers and payments (Tilleke & Gibbins, 2019), but no single chapter is exclusively dedicated to cross-border e-commerce. Further analysis is needed to examine whether/how cross-border e-commerce is addressed by the law.

India

The Draft National e-Commerce policy, issued by the Department for Promotion of Industry and Internal Trade on 23 February 2019, could be seen as an important step taken by the Government of India to guide and facilitate development of e-commerce in the country. It addresses six broad issues of the e-commerce ecosystem: (i) data; (ii) infrastructure development; (iii) e-commerce marketplaces; (iv) regulatory issues; (v) stimulating the domestic digital economy; and (vi) export promotion through e-commerce.

Among these six broad issues, the last is particularly focused on cross-border e-commerce. It emphasizes the importance of leveraging cross-border e-commerce for export promotion. Through schemes like the Merchant Exports from India Scheme and Services Exports from India Scheme and policies for the repatriation of remittances out of exports through online payment gateway service providers, the Government has attempted to incentivize exports. A senior government official in India indicated that a national policy on e-commerce would be formulated by 2020 (Business Standard, 2019). It will be useful to observe how cross-border e-commerce will be addressed in the national policy.

Indonesia

There are no separate laws or comprehensive rules on cross-border e-commerce, however, the Government is preparing a regulation on cross-border e-commerce. Earlier, the country introduced trade law No. 7 in 2014, which included e-commerce (articles 65 and 66), and the e-commerce tax enacted in June 2017 has standardized the collection of import duties and taxes for B2C shipments (Lim, 2019).

Viet Nam

Currently, Viet Nam has many regulations on e-commerce, but state agencies manage e-commerce activities for imported and exported goods like ordinary goods. The Ministry of Finance is leading the development of a legal framework for cross-border e-commerce, and it has released a draft decree on the management of e-commerce for exported and imported goods (Customs News, 2019).

C. Summary of the chapter and policy implications

At the global level, various discussions and negotiations on cross-border e-commerce under the auspices of WTO have been ongoing since 1998 and have gained momentum since 2017. As multilateral trade rules and commercial treaties between countries will substantially shape the rules of cross-border e-commerce in the future, countries in the region should actively participate in the discussions and negotiations.

It is important for countries in the region to review their readiness to adopt supra-national rules and regulations related to cross-border e-commerce. For instance, with regard to the compatibility of e-transaction laws, a prerequisite for conducting commercial transactions online is the recognition of the legal equivalence between paper-based and electronic forms of exchange, which is the goal of e-transaction laws. Studies have shown that more than 60 per cent of the countries in the Asia-Pacific region had at least partially developed the legal and regulatory frameworks needed to support electronic transactions, but those frameworks remained incomplete and might not readily support the legal recognition of electronic data or documents received from stakeholders in other countries. Another challenge is the establishment of certification authorities which issue recognized electronic signature certificates to traders. Less than 50 per cent of the countries surveyed had established such authorities (ESCAP, 2019). To overcome these challenges, the countries in the region have negotiated the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, and after it enters into force, it is expected to accelerate the implementation of digital trade facilitation and facilitate cross-border e-commerce.

At the regional level, countries in South-East and East Asia have made more progress towards adopting regional e-commerce rules through the provisions agreed on in RTAs. Examples include 15 countries that are members of RCEP, which could be signed in early 2020, or the CPTPP, which includes seven Asian economies who, together with another four non-regional partners, have put in place what are arguably the most comprehensive chapters on cross-border e-commerce. Interestingly, those seven countries are also members of RCEP. It remains to be seen how the e-commerce chapters in RCEP and CPTPP will be implemented by these countries. Nevertheless, experiences of negotiation and implementation of RCEP and CPTPP will probably provide useful references for many countries in the region and beyond for future negotiations on trade agreement and cross-border e-commerce. Furthermore, negotiations towards a digital economy partnership agreement by Chile, New Zealand and Singapore need to be monitored by

policymakers because the agreement has the potential to create a new set of norms for digital trade and emerging digital economy issues.

At the national level, given the multi-sectoral nature of e-commerce, comprehensive policies on cross-border e-commerce are very scarce and rather fragmented. China has been at the forefront of comprehensive policymaking on cross-border e-commerce. Since 2012, the Government has promulgated 13 regulations and rules and one e-commerce law. Lessons learned from China are that regulation on e-commerce, especially cross-border e-commerce, should be a long process. Learning by doing is a good practice as countries promulgate cross-border e-commerce policies and regulations. The experience of China also shows the complexity of cross-border e-commerce policymaking. Countries may consider implementing pilot projects to manage the possible risk of introducing cross-border e-commerce regulations.

CHAPTER 3

CROSS-BORDER E-COMMERCE LOGISTICS

Successful cross-border e-commerce has to be supported by efficient cross-border logistics. This chapter contains a description of the key characteristics of cross-border e-commerce logistics and a review of the main types of logistics service providers for cross-border e-commerce. It also contains a discussion of the role of government agencies, especially customs and other border-crossing agencies, for cross-border e-commerce logistics.

A. The nature of cross-border e-commerce logistics

E-commerce redefines traditional logistics arrangements. A traditional retail logistics process is often a linear flow of products from the suppliers to the stores and the last-mile logistics is performed by consumers. E-commerce logistics often involve a wide scope of operation activities from producing to delivering a final product to the consumer including the last-mile delivery.

Cross-border e-commerce logistics involve not only business operations but also border crossing procedures. In terms of business operation, fast and reliable delivery of goods is often a deciding factor for successful e-commerce, including cross-border e-commerce. Premium shipping can be an option to deliver goods from one country to another. Setting up warehouses or fulfilment facilities located in foreign countries and regions can be another option.

Tracking and transparency can be a challenge for cross-border e-commerce logistics. It is easier to track the movements of goods if one company handles all logistics activities. In contrast, cross-border e-commerce may need to rely on different companies during the route, including local post services. Providing live updates and track and trace is a bigger challenge when the postal system of the destination country is underdeveloped and might not provide these services.

Return of goods in the context of cross-border e-commerce is often more complicated. First, many different logistics operators may be involved, and the coordination of these operators may be difficult and expensive. Second, when

the goods are returned to the sellers, border cross procedures may apply which may make the operation more complicated.

Apart from the challenges for business operations, cross-border e-commerce means the goods need to cross the border between at least between two countries. Therefore, facilitation and inspections of goods by border agencies can significantly influence the efficiency of cross-border logistics.

Often the challenge lies in the balance between facilitation and compliance. The “tsunami of parcels”, or the large number of cross-border e-commerce parcels is a challenge for many countries, where border agencies were set up before the birth of e-commerce and mainly deal with traditional trade (containers versus parcels). For example, customs officials in Central Asia report three unexpected problems when it comes to the increased parcel flow brought about by e-commerce: (i) it has led to acute congestion in customs handling in Uzbekistan and other countries that have paper-based systems; (ii) several economies lack a well-developed system to assess and deal with uncertainties and risks associated with small parcels and enforcing new global antiterrorism rules and anti-money laundering rules for small parcel shipments is a challenge; and (iii) many economies have not figured out how duties should be assessed. When customs duties are assessed based on parcel delivery method rather than the nature of traded goods, traditional postal services have an advantage. They benefit from decades-old international agreements. However, parcels delivered by express service providers are not entitled to benefit from such agreements (DiCaprio and Procak, 2016).

B. Classification of logistics service providers for cross-border e-commerce

There are four main types of cross-border e-commerce logistics providers. The first type of provider includes subsidiary logistics companies set up by e-commerce platform and operators as part of e-commerce eco-system of the e-commerce operators. For instance, Alibaba has a controlling stake in Cainiao and invested \$15 billion in global logistics. Lazada established Lazada eLogistics to operate its logistics in South-East Asia. Rakuten set up Rakuten Global Express for international delivery service.

The second type of provider includes global express companies whose main business is logistics rather than e-commerce. For example, DHL or regional operators such as Kerry Logistics provide logistics service for cross-border e-commerce and DHL e-Commerce aims to provide both high-volume shipment service for B2B clients and B2C service for lower-value items.

The third type of provider is the postal service. Postal operators are often major last-mile delivery service providers given that in some countries they are required to serve all citizens without price discrimination through the Universal Service Obligations, including remote rural areas. This provides e-commerce retailers with a cheaper option than private logistics providers.

The Universal Postal Union (UPU) is working on improved data sharing with other actors involved in cross-border e-commerce, such as the International Air Transport Association or the International Civil Aviation Organization, to develop a more secure postal data model (World Economic Forum, 2018). Another development by UPU is “ECOMRPO”, an integrated global framework designed to coordinate and accelerate e-commerce activities in the postal sector to improve efficiency in cross-border trade.

The fourth type of provider includes national logistics companies that partner with international operators for the last-mile delivery. The last-mile delivery is essential for completing cross-border e-commerce transactions. It is also important in terms of customer satisfaction: the customers receive goods. While international logistics companies provide international transport, they may need to partner with local operators for the last-mile delivery service. For instance, the only international player in last-mile delivery in Viet Nam is DHL. Many local service providers such as Viettel Post, VNPost, Saigon Post, Giaohangnhanh, Shipchung and Giaohangtietkiem are actively involved in last-mile delivery (VietnamNet, 2018b). NinjaVan, a start-up launched in 2014 has presence in Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam. They specialize in last-mile delivery, and they use algorithms to calculate the best delivery routes within the shortest possible time (TMO Group, 2018).

C. Facilitation by Governments on cross-border e-commerce logistics

The Trade Facilitation Agreement, the first multilateral agreement under the auspices of WTO, is not an e-commerce treaty per se, as it does not discriminate between the types of trade to which it can be applied, whether goods purchased online or through traditional means. Nevertheless, when implemented, it can greatly boost the development of cross-border electronic commerce because it will simplify and streamline border crossing procedures, enhance the transparency of trade rules and regulations, and support efficient and reliable international deliveries.

According to a survey conducted by the United Nations, the implementation of trade facilitation measures in the region is very heterogeneous. Implementation rates in Australia, Japan, New Zealand, the Republic of Korea and Singapore exceed 90 per cent, while implementation in several other Pacific countries barely reaches 30 per cent (ESCAP, 2019).

Small and medium-size enterprises (SMEs) and small shippers often have limited capacity in understanding the complicated rules in conducting cross-border e-commerce. For instance, SMEs face particular issues in e-commerce customs clearance, including: (i) challenges for understanding harmonized system classifications and customs valuation; (ii) requirements for importer registration which may not be user-friendly or that may require complex documentation; and (iii) onerous procedures to claim duties on re-exported (returned) goods which are typical of e-commerce shipments (Asian Trade Centre, 2017).

It is crucial for customs and border-crossing agencies to provide essential support to SMEs and small shippers to conduct business. Whenever appropriate, *de minimis* arrangements should be put in place to simplify import and export procedures of SMEs (see chapter 4 for more on *de minimis*). Second, countries should adopt international best practice, as recommended by the WTO Trade Facilitation Agreement (especially the provisions on expedited shipments) and the Immediate Release Guidelines of the World Customs Organization (WCO). Third, specific measures should be introduced to facilitate cross-border e-commerce, especially B2C and consumer to consumer. Finally, the emerging technologies, whenever possible and appropriate, may be applied to manage cross-border e-commerce (see box 3.1).

Box 3.1 Emerging technologies for facilitating cross-border e-commerce

In terms of cross-border e-commerce logistics, frontier technologies, such as AI, may provide solution to the so-called tsunami of parcels.

In China, on the Double Eleven Festival in 2018, more than 27 million cross-border e-commerce products passed through customs, with nearly 1,000 items being processed every second during the peak period. The customs administration used AI technologies to screen packages to cope with the escalating demand.¹

The Republic of Korea in 2018 launched the “Fourth Industrial Revolution and Smart Customs” project, with the aim of introducing AI, the blockchain and big data to back up Customs processes.²

In Thailand, the Customs Department joined blockchain platform TradeLens – a container tracking and information-sharing platform jointly developed by IBM and Maersk – as part of efforts to modernize trade and to support the Thailand 4.0 Policy.³

In Singapore, Customs is planning to use AI to scan and analyse the contents of containers at its seaports.⁴

Notes:

1 www.china.org.cn/china/NPC_CPPCC_2019/2019-03/06/content_74537486.htm.

2 www.customsclearance.net/ru/articles/korea-pilots-blockchain-technology-as-it-prepares-for-the-future.

3 www.frontier-enterprise.com/thailands-customs-modernises-with-tradelens-blockchain/.

4 <https://govinsider.asia/smart-gov/singapores-customs-sung-pik-wan-innovation/>.

D. Summary of the chapter and policy implications

Logistics service providers for cross-border e-commerce can be grouped into four categories: (i) subsidiary logistics companies set up by large e-commerce platform and operators such as Alibaba or Lazada, which are part of the ecosystem of e-commerce operators; (ii) global express companies, such as DHL or regional operators such as Kerry Logistics, that are primarily in logistics rather than e-commerce; (iii) postal service providers; and (iv) national logistics companies that serve as partners with international operators for the last-mile delivery.

Unlike domestic e-commerce, cross-border e-commerce means the goods need to cross the border between two countries, and facilitation and inspections of goods by border agencies can significantly influence the efficiency of cross-border

logistics. In this respect, Governments should pay special attention to support SMEs and small shippers to be engaged in cross-border e-commerce. At the minimum, countries in the region should adopt and implement international best practice, as recommended by the WTO Trade Facilitation Agreement (especially the provisions on expedited shipments) and the Immediate Release Guidelines of WCO.

To deal with the tsunami of parcels, many countries may need new measures to facilitate trade and also address issues on compliance. Anecdotal evidence in a few countries in the region shows that frontier technologies, such as AI, may provide useful solutions in the future.

CHAPTER 4

DE MINIMIS REGULATIONS FOR CROSS-BORDER E-COMMERCE

This chapter is focused on the patterns of *de minimis* regulations related to cross-border e-commerce in the selected countries in the region. *De minimis* is a valuation ceiling for goods, including documents and trade samples, below which no duty or tax is charged and clearance procedures, including data requirements, are minimal (ICC, 2015). The setting of the *de minimis* threshold has important implications for taxation and logistics related to cross-border e-commerce.

A comprehensive discussion of taxation issues related to the digital economy is beyond the scope of this chapter, yet the topic of tax on the digital economy has received much attention in recent years. For example, in May 2019, the Inclusive Framework on Base Erosion and Profit Shifting of OECD and the Group of Twenty agreed a Programme of Work for Addressing the Tax Challenges of the Digitalisation of the Economy.

A. Nature of *de minimis* related to cross-border e-commerce

From the perspective of practicability, one objective of the *de minimis* threshold is to achieve a balance between the costs of assessing and collecting customs duty and sales taxes and the revenues raised. When the costs of clearance procedures outweigh the revenues collected on imported goods, as often happens, it is clearly inefficient to spend resources on the collection effort. For example, the Productivity Commission, an independent economic advisory body within the Government of Australia, reviewed Australia's *de minimis* regime. Although Australia has the highest *de minimis* threshold in APEC and a substantial Goods and Services Tax (GST) rate (10 per cent), the Commission found that any reduction in the threshold would impose a substantial net cost on the economy (Productivity Commission, 2011).

A study on six APEC members, including Canada, Indonesia, Japan, Malaysia, the Philippines and Thailand, estimated the net economic benefit of four scenarios on *de minimis* thresholds of \$50, \$100, \$150, and \$200. The study showed

that the \$200 threshold generated the largest net economic benefit — around \$5.9 billion a year for these countries, equivalent to about \$30.3 billion for all 21 APEC members, or approximately 0.086 per cent of their combined gross domestic product (Stephen and Rae, 2012). Similarly, a study on tax collection in the European Union found that it will lose more threshold and collect taxes from all low-value goods. Removing the threshold will lead to 144 million low-value products flowing into the European Union. The potential revenue €594 million is overshadowed by increased processing costs for both transporters and tax authorities by €2,681 million and a net welfare reduction of €2,087 million (Næss-Schmidt, Sørensen and Basalisco, 2017).

There are both pros and cons for a country that sets up a *de minimis* threshold in international trade and cross-border e-commerce. Generally speaking, a high *de minimis* threshold may bring the following benefits to cross-border e-commerce.

- It enhances the efficiency of logistics management of cross-border e-commerce. This point has been well recognized by many countries in the region.
- It is crucial for the success of SMEs whose main business is low-value goods through cross-border e-commerce.
- It enhances the efficiency of border management. As discussed in chapter 3, many border agencies are set up for dealing with traditional trade. With the rapid development of cross-border e-commerce, the so-call tsunami of parcels imposes new challenges for border control management. *De minimis* can simplify inspection procedures and enhance the efficiency of border crossing.
- It reduces the compliance costs imposed on importers and accelerates the delivery of merchandise. It also allows governments to refocus their revenue collection efforts on those parts of the indirect tax base that yield higher net revenue.

Nevertheless, a high *de minimis* threshold may also have adverse impacts on a country.

- It may distort a level playing field between domestic and overseas retailers. For instance, the local brick-and-mortar retailers compete with postal and express delivery imports. These firms may argue that a higher *de minimis* threshold would make overseas e-commerce retailers more competitive because e-commerce firms would be exempt from value-added taxes that domestic retailers are obligated to pay.
- With a high *de minimis* threshold more low-value products can be imported to the countries more cheaply (without duties). While consumers will have more choice of purchasing products from overseas, the manufactures would have more competition from overseas market.

B. How is *de minimis* addressed by international conventions and recommendations?

International organizations such as WTO, OECD, WCO and ICC have all recommended the adoption of *de minimis*. For instance, the Revised Kyoto Convention, adopted in 1999, acknowledged the e-commerce trend of increasing numbers of small consignments and included a provision on *de minimis* in Transitional Standard 4.13. It states that customs administrations shall specify a minimum value or minimum amount of duties and taxes below which no duties and taxes should be collected. In the meantime, documentary requirements should be minimal for goods on which no duties and taxes will be collected.

ICC released a Policy Statement on Global Baseline *De Minimis* Value Thresholds in February 2015, which underlines that raising *de minimis* thresholds would provide significant benefits to businesses of all sizes. Setting a meaningful *de minimis* level will most notably have a positive impact on SMEs and offer opportunities for increased e-commerce. ICC recommends establishing “a preferred *de minimis* value of \$1,000 and no less than \$200 to be applied to the value of the goods and not to the dutiable amount” (ICC, 2015).

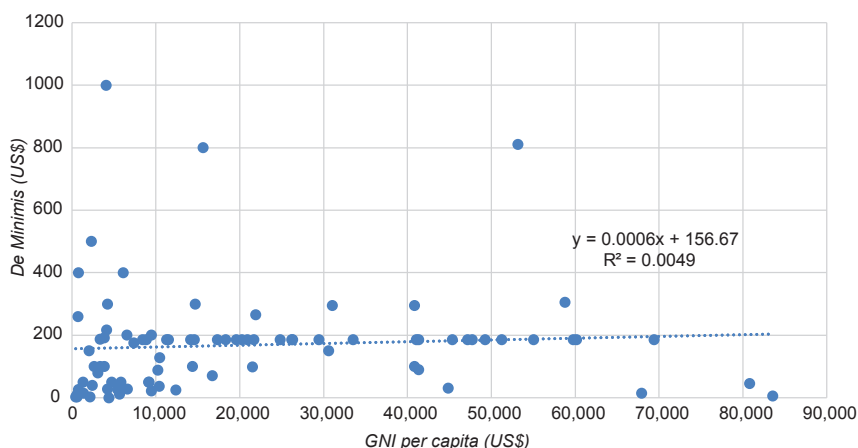
At its 2011 Summit, APEC leaders proposed a common *de minimis* of \$100. The Leaders’ Declaration emphasized the importance of enhancing supply chains to reduce the time, cost and uncertainty of moving goods and services throughout the region. Among other measures to achieve this objective, countries can establish *de minimis* values that maximize trade facilitation and economic benefits for economies in the region. It also endorsed the APEC pathfinder to enhance supply chain connectivity by establishing baseline *de minimis* values and instructed officials to develop a capacity-building programme to increase the participation of economies in the pathfinder (APEC, 2011).

C. *De minimis* thresholds in selected Asia-Pacific countries

Internationally, available data from 103 countries worldwide in 2019, including 24 Asia-Pacific countries, have an average *de minimis* value of \$147. There is no correlation between *de minimis* value and gross national income (GNI) per capita (figure 4.1), indicating that countries at various stage of economic development (measured by GNI per capita in this case) may have different policy considerations in setting a *de minimis* threshold.

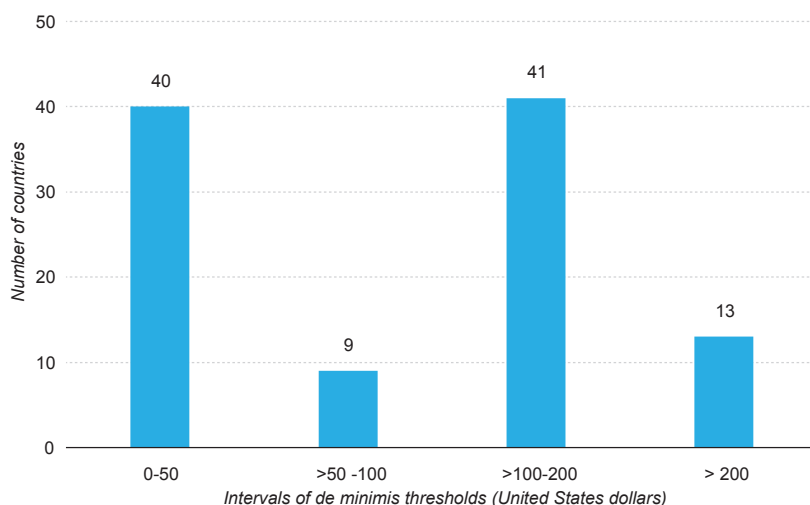
Among these 103 countries, nearly 40 per cent have a *de minimis* threshold below or equal to \$50, nearly 10 per cent have a *de minimis* threshold between \$50 and \$100. Some 40 per cent of the countries (most of the are the member of the European Union) have a *de minimis* threshold between \$100 and \$200. Finally, 13 per cent of the countries have a *de minimis* threshold above \$200 (figure 4.2). Figure 4.3 shows *de minimis* values of 24 Asia-Pacific countries.

Figure 4.1 De minimis versus GNI per capita of 85 countries worldwide



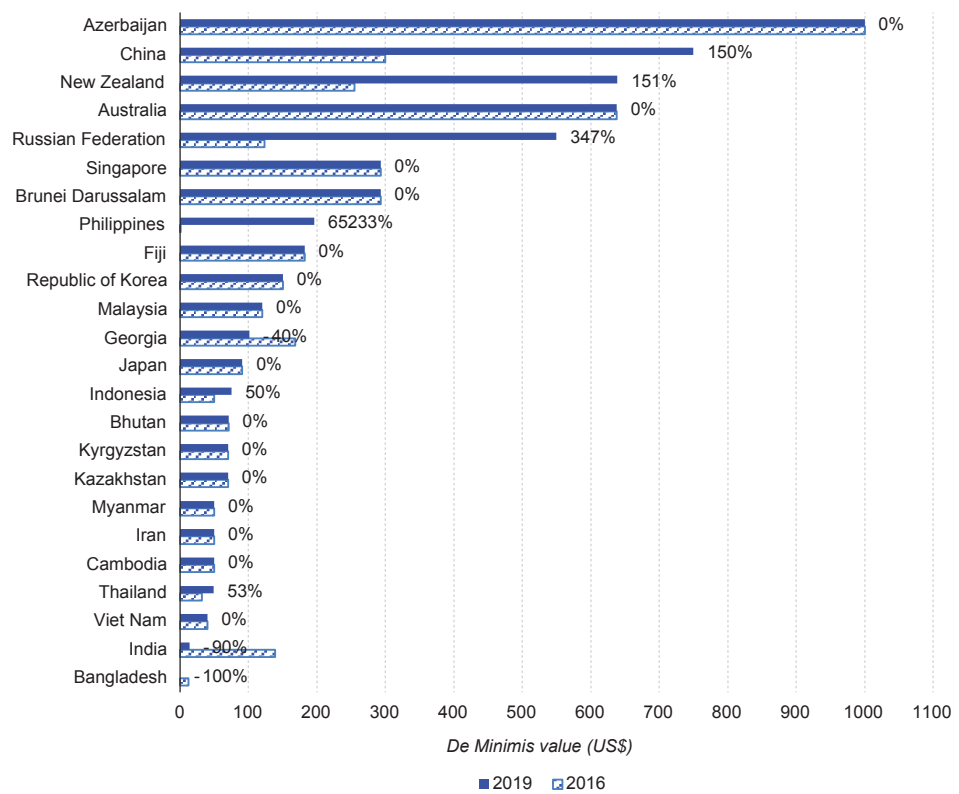
Source: Prepared by ESCAP based on data for 2018 from the Global Express Association and the World Bank (<https://data.worldbank.org/indicator/NY.GNPPCAP.CD>).

Figure 4.2 Distribution of *de minimis* thresholds in selected countries worldwide



Source: Prepared by ESCAP based on data from the Global Express Association. Data on China were adjusted according to the latest information.

Figure 4.3 *De minimis* thresholds of selected countries in Asia and the Pacific



Source: Prepared by ESCAP based on data from the Global Express Association. Data on China were adjusted according to the latest information.
Note: Percentages in the figure show the change of value between 2016 and 2019.

The following observations can be highlighted from the data.

- 1) A few countries in the region, including Australia, Azerbaijan, China, New Zealand and the Russian Federation, have very high *de minimis* thresholds – among the highest worldwide. China set a very high *de minimis* threshold at \$750, subject to two conditions: the *de minimis* threshold is applicable to a single shipment; and the accumulated value of goods that may enter duty-free for an individual person over a year is 26,000 Chinese Yuan (approximately \$3,900).
- 2) Twelve countries have *de minimis* thresholds of less than \$100. The economic development of these countries varies. For instance, Japan is classified as a developed country while Bangladesh, Bhutan, Cambodia and Myanmar are classified as least developed countries.

- 3) From 2016 to 2019, a few countries in the region dramatically increased the *de minimis* thresholds. For instance, the Russian Federation increased the *de minimis* threshold by 3.5 times. The Philippines increased the value from \$0.3 to nearly \$200. China and New Zealand increased the *de minimis* by approximately 1.5 times. Indonesia and Thailand increased the *de minimis* threshold by 50 per cent. In contrast, during the same time period, Bangladesh, Georgia and India decreased the *de minimis* threshold.
- 4) Trade agreements between countries may alter the *de minimis* thresholds. For instance, the Republic of Korea has a *de minimis* threshold of \$150. However, under the United States–Korea Free Trade Agreement, express courier service mailed goods under \$200 are duty free when sourced from the United States, and ‘made in the USA’ items under \$1,000 are exempt from the agreement.

D. Summary of the chapter and policy implications

Countries in the region have set up different *de minimis* thresholds for import and export of goods, which are applicable to cross-border e-commerce in most cases. Countries such as Australia, Azerbaijan and New Zealand have very high *de minimis* (among the highest in the world), while other countries such as Bangladesh and India have low *de minimis* thresholds.

International organizations such as WCO, ICC, OECD and WTO all call for setting up *de minimis* thresholds. ICC and APEC ministerial meetings recommended *de minimis* thresholds of \$200 and \$100, respectively. Available data of 24 countries in Asia and the Pacific show that 12 countries set *de minimis* thresholds below \$100 while 17 countries set a *de minimis* thresholds below \$200.

The optional value of *de minimis* threshold should be assessed according to the benefits and costs for a country, however, it can be difficult to conduct such studies because many factors need to be taken into consideration. Similar studies, such as those by the Productivity Commission of Australia, can serve as useful references.

References

- AliResearch. (2016). *Future of Trade: Connecting the World through E-commerce*. Available from <https://i.aliresearch.com/img/20160901/20160901171708.pdf>.
- AliResearch and Accenture. (2015). Global Cross-Border E-commerce Market 2020. Available from https://unctad.org/meetings/en/Presentation/dtl_eweek2016_AlibabaResearch_en.pdf.
- Asian Development Bank (ADB). (2015). Asian Economic Integration Report 2015: How Can Special Economic Zones Catalyze Economic Development? Available from www.adb.org/sites/default/files/publication/177205/asian-economic-integration-report-2015.pdf.
- Asian Development Bank and United Nations. (2018). Embracing the E-commerce Revolution in Asia and the Pacific. Available from www.adb.org/publications/ecommerce-revolution-asia-pacific.
- Asian Trade Centre. (2017). "RCEP: Facilitating Trade for E-Commerce." Policy brief No. 17-01, March.
- Asia Pacific Economic Cooperation (APEC). (1998). "APEC Blueprint for Action on Electronic Commerce." Available from www.apec.org/Meeting-Papers/Leaders-Declarations/1998/1998_aelm/apec_blueprint_for.aspx.
- _____. (2011). Leaders' Declaration of the APEC Ministerial Meeting, 11 November. Available from www.apec.org/Meeting-Papers/Annual-Ministerial-Meetings/2011/2011_amm.
- Bernhofen, D.M., El-Sahli, Z., and Kneller, R. (2016). 'Estimating the effects of the container revolution on world trade', *Journal of International Economics*, 98 (January), 36-50.
- BCG Henderson Institute. (2019). Global Trade Goes Digital. Available from http://image-src.bcg.com/Images/BCG-Global-Trade-Goes-Digital-August-2019_tcm9-226088.pdf.
- Bukht, R. and Heeks, R. (2017). *Defining, Conceptualizing and Measuring the Digital Economy*, Development Informatics Working Paper No. 68 (Centre for Development Informatics, University of Manchester, Manchester).
- Business Standard. (2019). "National e-commerce policy to be released within 12 months: Official." 25 June.
- Cadell, C. and Aravindan, A. (2018). Alibaba doubles Lazada investment to \$4 billion in aggressive Southeast Asian expansion. Reuters, 19 March.
- Customs News. (2019). "Finance Ministry to tighten control of cross-border retail activities." 29 September.
- Darsinouei, A. (2017). *Understanding E-Commerce Issues in Trade Agreements: A Development Perspective Towards MC11 and Beyond*, Geneva, CUTS International.
- DHL. (2016). The 21st Century Spice Trade: A Guide to the Cross-Border E-Commerce Opportunity. Available from www.dhl.com/content/dam/downloads/g0/press/publication/g0_dhl_express_cross_border_ecommerce_21st_century_spice_trade.pdf.
- DiCaprio, A. and Procaj, J. (2016). "A Snapshot of E-commerce in Central Asia." *Asia Pathways: The blog of the Asian Development Bank*, 5 February.
- eMarketer. (2014). "Worldwide e-commerce sales to increase nearly 20% in 2014: Asia-Pacific grows fast, while North America and Western Europe remain consistently strong." 23 July. Available from www.emarketer.com/Article/Worldwide-Ecommerce-Sales-Increase-Nearly-20-2014/1011039.

- Elms, D. (2019). "ASEAN's e-commerce agreement." Asian Trade Centre, 27 March. Available from <http://asiantradecentre.org/talkingtrade/aseans-e-commerce-agreement>.
- Economic and Social Commission for Asia and the Pacific (ESCAP). (2017). "Digital trade facilitation in Asia and the Pacific." Studies in Trade, Investment and Innovation No. 87.
- _____. (2018). Leveraging e-commerce for graduation of least developed countries. Available from www.unescap.org/sites/default/files/CTI_4_item%20-%20Leveraging%20e-commerce_E.pdf.
- _____. (2019). UN Global Survey on Digital and Sustainable Trade Facilitation 2019. Available from www.unescap.org/resources/un-global-survey-digital-and-sustainable-trade-facilitation-2019?ref=unftsurvey.org.
- export.gov. (2019a). "Korea – eCommerce", *Korea Country Commercial Guide*. United States Department of Commerce. Available from www.export.gov/article?id=Korea-eCommerce.
- export.gov. (2019b). "Japan – eCommerce", *Japan Country Commercial Guide*. United States Department of Commerce. Available from www.export.gov/article?id=Japan-E-Commerce.
- Government of Canada. (2018). What does the CPTPP mean for electronic commerce? 12 September. Available from www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/cptpp-ptpgp/sectors-secteurs/electronic_commerce-commerce_electronique.aspx?lang=eng.
- Holloway, S. and Rae, J. (2012). *De minimis* thresholds in APEC, *World Customs Journal* 6 (1), 31-62.
- Huawei and Oxford Economics. (2017). *Digital Spillover. Measuring the true impact of the Digital Economy*. Available from www.huawei.com/minisite/gci/en/digital-spillover/files/gci_digital_spillover.pdf.
- Hudec, O. and Prochádzková, M. (2013). The Relative Efficiency of Knowledge Innovation Processes in EU Countries, *Studies in Regional Science*, 43 (1), 145-162.
- International Chamber of Commerce (ICC). (2015). Global Baseline *De Minimis* Value Thresholds. Available from www.iccwbo.be/wp-content/uploads/2012/03/20150223-ICC-Policy-Statement-on-Global-Baseline-De-Minimis-Value-Thresholds.pdf.
- International Trade Centre (2016). E-Commerce in China: Opportunities for Asian Firms. Available from www.intracen.org/publication/E-Commerce-in-China-Opportunities-for-Asian-Firms/.
- Jingli, S. (2019). Tencent-backed Shopee wants to lure cross-border sellers in Alibaba's hometown, Hangzhou. KrASIA, 26 June.
- Kit, Tang See. (2018). *ASEAN Economic Ministers Ink First E-Commerce Agreement*, Channel NewsAsia, 12 November.
- Lim, A. (2019). "Tackling Indonesian Customs Clearance Procedures for eCommerce Merchants," Janio Asia. Available from <https://janio.asia/guides/tackling-indonesian-customs-clearance-procedures-for-ecommerce-merchants/>.
- Monteiro, J. and Teh, R. (2017). Provisions on Electronic Commerce in Regional Trade Agreements, WTO Working Paper ERSD-2017-11. Available from www.wto.org/english/res_e/reser_e/ersd201711_e.pdf.

- Munshi, N. (2014). An empirical investigation of the National Innovation System (NIS) using Data Envelopment Analysis (DEA) and the TOBIT model, *International Review of Applied Economics*, 28 (4), 507–523.
- New Zealand Foreign Affairs and Trade (2019). “Free trade agreements under negotiation.” Available from www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/.
- Næss-Schmidt, S., Sørensen, P. and Basalisco, B. (2017). Effects of Removing the VAT *De Minimis* on E-commerce Imports. Available from www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/2/412/1507816426/copenhagen-economics-2017-effects-of-removing-the-vat-de-minimis-on-e-commerce-imports.pdf.
- Organization for Economic Cooperation and Development (OECD). (2016). *OECD Science, Technology and Innovation Outlook 2016*. Paris: OECD.
- _____. (2019). Electronic transmissions and international trade – shedding new light on the moratorium debate. OECD Trade Policy Papers No. 233. Available from www.oecd-ilibrary.org/trade/electronic-transmissions-and-international-trade-shedding-new-light-on-the-moratorium-debate_57b50a4b-en.
- Organization for Economic Cooperation and Development (OECD) and World Trade Organization (WTO). (2017). Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development. Paris: OECD. Available from www.wto.org/english/res_e/publications_e/aid4trade17_e.htm.
- Shinde, M. (2019). Why India’s E-Commerce Policy Is Actually Beneficial For the Companies it Impacts. *Forbes*, 18 July.
- South Centre (2017). *The WTO’s Discussions on Electronic Commerce*. Analytical Note, January.
- The Economist (2013). “The humble hero.” 18 May.
- The Nation (2018). “Jack Ma shows e-commerce magic; 80,000 durians sold in a minute.” 20 April. Available from www.nationthailand.com/business/30343624.
- Tilleke & Gibbins (2019). Cambodia Enacts a New E-commerce Law and a Consumer Protection Law. Available from www.lexology.com/library/detail.aspx?g=2c576b5a-a566-471a-85df-f323663c6779.
- TMO Group. (2018). Southeast Asia’s eCommerce Market in 4 Words: Growth, Social and Mobile. Available from <https://www.tmogroup.asia/southeast-asia-ecommerce-market/>.
- Transaction Processing Performance Council (2019). TPC-C - All Results - Sorted by Performance. Available from www.tpc.org/tpcc/results/tpcc_results.asp?print=false&orderby=tpm&sortby=desc.
- United Nations Conference on Trade and Development (UNCTAD). (2019). *Digital Economy Report 2019*. New York: United Nations.
- Universal Postal Union. (2016). *Boosting E-commerce: A How-to Guide for Postal Operators*. Berne, Switzerland. Available from www.upu.int/uploads/tx_sbdownloader/boostingECommerceAHowToGuideForPostalOperatorsEn.pdf.
- VietNamNet. (2018a). “Tiki launch cross-border channel backed by JD.com.” 18 July.
- VietNamNet. (2018b). “E-commerce forwarding service market keeps cutting delivery times.” 29 October.

- World Customs Organization (WCO). (2017). WCO Study Report on Cross-Border E-Commerce. Available from www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/ecommerce/wco-study-report-on-e_commerce.pdf?la=en.
- World Economic Forum. (2018). Delivering the Goods: E-commerce Logistics Transformation. Available from www3.weforum.org/docs/WEF_Delivering_Goods_E_commerce_logistics_transformation_report_2018.pdf.
- World Trade Organization (WTO). (2016). Work Programme on Electronic Commerce, document JOB/GC/97/Rev.1.
- _____. (2017). Work Programme on Electronic Commerce, document WT/MIN(17)/65-WT/L/1032.
- _____. (2018). World Trade Report 2018. Available from www.wto.org/english/res_e/publications_e/world_trade_report18_e.pdf.
- _____. (2019a). DG Azevêdo meets ministers in Davos: discussions focus on reform; progress on e-commerce. Available from www.wto.org/english/news_e/news19_e/dgra_25jan19_e.htm.
- _____. (2019b). WTO members agree to extend e-commerce, non-violation moratoriums. Available from www.wto.org/english/news_e/news19_e/gc_10dec19_e.htm.
- Wu, M. (2017). Digital Trade-Related Provisions in Regional Trade Agreements: Existing Models and Lessons for the Multilateral Trade System. Geneva, International Centre for Trade and Sustainable Development; Washington, D.C., Inter-American Development Bank.
- Zeng, M. (2018). Alibaba and the Future of Business, *Harvard Business Review*, September–October.

ISBN: 978-92-1-120805-4



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