Drafting e-commerce regulations for a sustainable economic recovery: Lesson from DEPA analysis¹

Regulando o comércio eletrônico para uma recuperação econômica sustentável: Lição da análise do DEPA

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Abstract

The current international pandemic situation caused by the COVID-19 outbreak has disrupted economic activity and development worldwide. However, digital enabled activities have proven a relative stronger resilience, and, worldwide, most economic sectors have shifted to digital platforms to continue operating. In this context, the drafting of digital economy regulations has become a relevant policy issue for governments across the Asia Pacific region. Nevertheless, the absence of multilateral regulations in this area has become an obstacle for achieving common regulatory frameworks to deal with digital economy issues, for which regional and bilateral agreements have begun to draft regulations. The proliferation of digital economy provisions in preferential agreements may lead to the so called "spaghetti

¹ Recebido em: 7/3/2022. Aprovado em: 20/5/2022.

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bowl". From here, the objective of this paper is to contribute to the governance of digital economy among APEC economies, through the characterization of free trade agreements signed between APEC and Latin American economies. This selection was made due to the diversity of agreements that can be found within this subregion. In this context, the Digital Economy Partnership Agreement (DEPA), led by Chile, New Zealand, and Singapore has become a reference point that could serve as a steppingstone towards common regulatory frameworks in this matter. The paper concludes that DEPA may be used as a benchmark for the development of regulations that will help boost cross border e-commerce in APEC economies for a post pandemic sustainable recovery.

Keywords: APEC. DEPA. Digital Economy. E-commerce. Free Trade Agreements. Latin America.

Resumo

A atual situação de pandemia internacional causada pelo surto de COVID-19 interrompeu a atividade econômica e o desenvolvimento em todo o mundo. No entanto, as atividades habilitadas para o digital provaram uma resiliência relativamente mais forte e, em todo o mundo, a maioria dos setores econômicos mudou para plataformas digitais para continuar operando. Nesse contexto, a elaboração de regulamentos de economia digital tornou-se uma questão política relevante para os governos da região da Ásia-Pacífico. No entanto, a ausência de regulamentações multilaterais nesta área tornou-se um obstáculo para alcançar marcos regulatórios comuns para lidar com questões de economia digital, para as quais acordos regionais e bilaterais começaram a regulamentar a matéria. A proliferação de disposições de economia digital em acordos preferenciais pode levar à chamada "tigela de espaguete" ("spaghetti bowl"). Com base nesse cenário, o objetivo deste artigo é contribuir para a governança da economia digital entre as economias da APEC, por meio da caracterização dos acordos de livre comércio firmados entre os países de APEC e as economias latino-americanas. Esta seleção foi feita devido à diversidade de acordos que podem ser encontrados nesta subregião. Nesse contexto, o Acordo de Parceria para a Economia Digital (DEPA), liderado por Chile, Nova Zelândia e Cingapura, tornou-se um ponto de referência que pode servir de base para marcos regulatórios comuns nesse assunto. O documento conclui que o DEPA pode ser usado como referência para o desenvolvimento de regulamentos que ajudarão a impulsionar o comércio eletrônico transfronteiriço nas economias da APEC para uma recuperação sustentável póspandemia.

Palavras-chave: Acordos de Livre Comércio. América Latina. APEC. DEPA. Ecommerce. Economia Digital.

Introduction

In recent years, the digital transformation led by technological advances in electronic devices as well as information and communication technologies (ICT) networks, have had a strong effect on global economy through the expansion of ecommerce.⁴ The current international pandemic situation caused by the COVID-19 outbreak has enhanced these business transactions, while it has proved the relative stronger resilience of the digital economy.⁵ In this context, the expansion of ecommerce has forced the economies of the world to review and develop the physical, human and regulatory infrastructure to establish policies within this sector.

The drafting of digital economy regulations has become a relevant policy issue for governments across the Asia Pacific region, even before the pandemic. Nevertheless, the absence of multilateral regulations in this area has become an obstacle for achieving common regulatory frameworks to deal with digital economy issues, for which regional and bilateral agreements have begun to draft regulations. The discussion in APEC has focused on elements such as electronic transaction frameworks, openness to e-commerce, cybersecurity, or data privacy. It has also been widely addressed, especially by developing economies, the relevance of the reduction of digital gaps in order to benefit from digital economy related opportunities.⁶

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⁴ APEC - Asia-Pacific Economic Cooperation. **Economic Policy Report 2019: Structural Reform and the Digital Economy**. Singapore, 2019. www.apec.org/docs/default-source/Publications/2019/11/2019-APEC-Economic-Policy-Report/2019-AEPR---Full-Report.pdf.. ⁵ ZIYANG, Fan; GALLAHER, Mike. **5 ways to advance digital trade in the post-COVID world**. 18

^a ZIYANG, Fan; GALLAHER, Mike. **5 ways to advance digital trade in the post-COVID world**. 18 de jun, 2020. Available at: https://www.weforum.org/agenda/2020/06/5-ways-to-advance-modernize-digital-trade-in-the-post-covid-pandemic-world/..

⁶ APEC - Asia-Pacific Economic Cooperation. **Facilitating digital trade for inclusive growth: key issues in promoting digital trade in APEC**. n. 12, April, Singapore, 2017. www.apec.org/docs/default-source/publications/2017/4/facilitating-digital-trade-for-inclusive-growth-key-issues-in-promoting-digital-trade-in-apec/217_psu_digital-trade_final.pdf?sfvrsn=5c14d4c8_1. *In:* CÁCERES, Javiera; MUÑOZ, Felipe. **El desafío chileno en la implementación del Acuerdo de Asociación de Economía Digital**, 3 de julio, 2020. Available at: https://www.elmostrador.cl/destacado/2020/07/03/el-desafio-chileno-en-la-implementacion-del-acuerdo-de-asociacion-de-economia-digital/.

Moreover, in order to have mandatory regulations, bilateral and regional preferential trade agreements have incorporated various disciplines regarding e-commerce and the digital economy. Nevertheless, one of the main concerns of the proliferation of this kind of provisions in preferential agreements is the so called "spaghetti bowl". Multiple approaches towards how to regulate the digital markets may led to its fragmentation.⁷

It can be acknowledged that Asia Pacific has become one of the most dynamic regions in terms of the development of regulatory frameworks regarding digital economy. E-commerce standards have rapidly developed in forums such as APEC, which characteristics foster the cooperation and the exchange of information between like-minded economies. This work has been deepened through the negotiation of preferential trade agreements within the region, with especial emphasis on e-commerce chapters. Taking into consideration the relevance of the digital economy and the potential costs of a digital market fragmentation, efforts have been put into harmonizing the regulations in this area. One of the latest efforts being the Digital Economy Partnership Agreement (DEPA), subscribed in 2020 by Chile, New Zealand and Singapore, which aspires to become a benchmark for drafting regulation regarding the digital economy.⁸

In order to contribute to the literature regarding the governance of the digital economy in the Asia Pacific region, this paper analyze if DEPA may become a benchmark for digital economy regulations drafting. For this purpose, through a systematic review of international trade agreements a characterization of ecommerce chapters included in them was conducted. To strengthen the analysis, the paper focus on agreements subscribed by APEC member economies with Latin American economies. This selection was made due to the diversity of agreements

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⁷ LACEY, Simon. Reality Check: The lack of consensus on new trade rules to govern the digital economy. **T Journal of World Trade**, v. 54, n. 2, p. 199- 218, 2020. *In;* LÓPEZ, Dorotea; *et al.* The new rules on digital trade in Latin America: regional trade agreements. In: SMEETS, Maarten. **Adapting to the digital trade era:** challenges and opportunities. Switzerland: World Trade Organization, 2020, p. 214-228.

⁸ MUÑOZ NAVIA, Felipe; et al. Mejorando las Disposiciones sobre Economía Digital en la Alianza del Pacífico: lecciones del DEPA. **Integración & Comercio**, n. 47, deciembre, p. 47-75, 2021.

that can be found within this sub region. Latin American economies have negotiated agreements with Asian, American, and European economies, incorporating different negotiation approaches towards the drafting of e-commerce related provisions. 24 agreements negotiated, and coming into force, between 2004 and 2020, that included e-commerce chapters, were considered in the analysis. The paper concludes that DEPA may be used as a benchmark for the development of regulations that will help boost cross border e-commerce in APEC economies for a post pandemic sustainable recovery, reducing the fragmentation risk between these economies.

After this introduction, the paper is structured as follows. First, a literature review on the development of e-commerce trade regulations in APEC will be conducted. Second, an analysis of provisions included in e-commerce chapters between APEC and Latin American economies will be carried out. Then, in order to establish if DEPA could become a benchmark for e-commerce and digital economy regulations, the provisions identified in the sample will be contrasted with DEPA. Finally, from the previous analysis some final remarks and policy recommendations will be drafted.

1. Digital trade in APEC

At the multilateral level, it must be stated that World Trade Organization (WTO) agreements date back to 1994, before most of the current technological advances existed, or their use was not widespread across international trade. Nevertheless, some commitments included in the General Agreement on Trade in Services (GATS), the Agreement on Technical Barriers to Trade (TBT), and Trade Related to Intellectual Property Rights Agreement (TRIPS) do cover aspects related to the digital economy, including the supply of services, technical regulations and

copyrights or patents protection.⁹ Some advances have been achieved in the Information Technology Agreement (ITA) which have lowered barriers for equipment necessary for digital trade. Nevertheless, as negotiations under the WTO have stalled and electronic commerce was part of the Doha Agenda, there has not been a multilateral agreement on this topic. A moratorium on customs to digital products have been reached, but it depends on member states to renew its commitment towards this issue. It can be highlighted that in the context of the World Economic Forum in 2020, 76 WTO members issued a Joint Statement regarding the need to continue negotiations under the WTO to achieve multilateral rules on e-commerce.¹⁰ Therefore, much of the advances in term of regulatory frameworks for digital economy have been achieved through preferential negotiations.

APEC has become one of the main laboratories for trade policy formulation as its non-binding characteristic, and like-minded group of economies, allow members to address emerging issues on the trade agenda. Although APEC operates under a voluntary scheme, hence their enforcement and coordination capabilities are limited, their soft-law power and best practices approach have raised awareness of the need to regulate this issue. For instance, the use of Pathfinder Initiatives, in which a group of economies undertake a project to provide a framework

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⁹ WU, Mark. **Digital Trade-Related Provisions in Regional Trade Agreements:** Existing Models and Lessons for the Multilateral Trade System. RTA Exchange. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and the Inter-American Development Bank (IDB), 2017. Available at: www.rtaexchange.org/.

MUÑOZ, Felipe, et al., Towards crisis-sensitive trade provisions: An analysis of the pacific alliance. Technical Report, December, 2020. Available at: https://www.researchgate.net/publication/346811351_TOWARDS_CRISIS-

SENSITIVE_TRADE_PROVISIONS_AN_ANALYSIS_OF_THE_PACIFIC_ALLIANCE.

¹¹ PETRI, Peter A. APEC and the Millennium Round. *In*: YAMAZAWA, Ippei. Challenges and Tasks for the Twenty First Century. London: Routledge, 2000. *In*: CHOI, Byung-il. Competition principles and policy in the APEC: How to proceed and link with WTO. **Global Economic Review**, perspectives on East Asian Economies and Industries, v. 28, n. 3, April, p. 31-48, 1999.

¹² WEBER, Rolf H. Digital Trade and E-Commerce: Challenges and Opportunities of the Asia-Pacific Regionalism. **Asian Journal of WTO & International Health Law and Policy**, v. 10, n. 2, p. 321-348, September, 2015.**In:** ELEK, Andrew. APEC in the emerging international economic order: lame duck or catalyst? *In:* SOESASTRO, Hadi; FINDLAY, Christopher. **Reshaping the Asia Pacific Economic Order**. London; New York: Routledge, 2004, p. 88-110.

that may encourage other APEC members to join when ready, is highlighted as a process to advance in cutting-edge topics, such as electronic commerce. 13

E-commerce was first addressed during 1997 APEC Leaders' Declaration, in the context of the forum's vision for the 21st Century. It stated that "...electronic commerce is one of the most important technological breakthroughs of this decade. We direct Ministers to undertake a work program on electronic commerce in the region...". 14 In 1998, the APEC Blueprint for Action on Electronic Commerce was subscribed. This blueprint recognized the potential of e-commerce to expand business opportunities, reduce costs, increase efficiency, improve the quality of life, and facilitate the greater participation of small business in global commerce. 15 For this purpose, the blueprint established a work program to promote the development of e-commerce in the region, in order to consolidate, and reinforce, the various APEC initiatives related to e-commerce, which would be implemented by the Electronic Commerce Steering Group (ECSG).¹⁶

The ECSG objective was to promote and facilitate the development and use of electronic commerce by drafting predictable, transparent and consistent legal, regulatory and policy environments in the APEC region. Thus, it looked into mechanisms that would increase users' trust and confidence on electronic commerce and facilitate trade transactions among economies.¹⁷ One of its first achievements was the implementation of the E-commerce Readiness Initiative. This initiative was primarily driven by the private sector and brought forward by APEC,

¹³ COPPOCK, Karen; MACLAY, Colin. Electronic commerce: a regional approach, Emerald, 5 Info, p. 17-23, 2003.

¹⁴ APEC. Leaders' Declaration, 1997. Available at: https://apec.org/Meeting-Papers/Leaders-Declarations/1997/1997 aelm.

¹⁵ APEC. APEC Blueprint for Action on Electronic Commerce, 1998. Available at: https://www.apec.org/Meeting-Papers/Leaders-Declarations/1998/1998 aelm/apec blueprint for.aspx.

¹⁶ LEE, Cassey. E-commerce and Trade Policy. In: LEE, Cassey; LEE, Eileen. E-Commerce, Competition & ASEAN Economic Integration. Singapore: ISEAS - Yusof Ishak Institute - CCCS, 2019. In: COPPOCK, Karen; MACLAY, Colin. Regional Electronic Commerce Initiatives: Findings from three case studies on the development of regional electronic commerce initiatives The Information Technologies Group Center for International Development. Harvard University, July, 2002. Available at: https://cyber.harvard.edu/itg/libpubs/andes%20pubs/Regional Ecommerce.pdf. ¹⁷ LARYEA, Emmanuel. Facilitating paperless international trade: a survey of Law and Policy in Asia, International Review of Law, Computers y Technology, v. 19, n. 2, Aug., p. 121-142, 2005.

enhancing cooperation between the public and private sectors, and facilitating e-commerce progression at the national and regional levels. The initiative addressed six indicators: infrastructure and technology; access to services; current level and type of use of the Internet; promotion and facilitation activities; skills and human resources; and positioning for the digital economy, through which the status of the e-commerce environment in each individual member economy could be assessed and concrete steps could be taken to address national-level issues, thereby facilitating the acceleration of e-commerce at a regional level. 19

Besides, within the Blueprint actions, the Paperless Trading Initiative was developed, looking for APEC members to create a Paperless Trading Individual Action Plan. In this context, member States committed to reduce or eliminate paper documents for trade administration by 2005 or 2010, depending on their economic development level.²⁰ This initiative has been positively evaluated²¹, as it has led to various member economies to advance in their paperless trade implementation plan, initiate Pathfinder projects, as well as include mandatory commitment within their preferential trade agreements.²²

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¹⁸ COPPOCK, Karen; MACLAY, Colin. Regional Electronic Commerce Initiatives: Findings from three case studies on the development of regional electronic commerce initiatives. The Information Technologies Group Center for International Development. Harvard University, July, 2002. Available at: https://cyber.harvard.edu/itg/libpubs/andes%20pubs/Regional_Ecommerce.pdf. *In*: MENIPAZ, Ehud; MENIPAZ, Amit. Opening Case: Advancing e-commerce in the Asia-Pacific Economic Cooperation (APEC) region: In international business: theory and practice. London: SAGE, 2011. p. 252-254.

¹⁹ HESELTINE, Colin. **APEC - Meeting the Challenges of Regional E-Commerce**, 9 de November, 2007. Available at: http://apec.org/Press/Blogs/2007/1109_jpn_ambhaseltinegbde.

²⁰Ministry of Foreign Affairs and Economic Cooperation Australia, **Paperless Trading. Benefits to APEC**, 2001.

²¹ ELEK, Andrew. APEC: genesis and challenges. *In:* KESAVAPANY, K.; LIM, Hank. **APEC at 20:** Recall, Reflect, Remake, Singapore: Institute of Southeast Asian Studies, 2009. *In*: LARYEA, Emmanuel. Facilitating paperless international trade: a survey of Law and Policy in Asia, **International Review of Law**, Computers y Technology, v. 19, n. 2, aug., p. 121-142, 2005.

²² DUVAL, Yann; MENGJING, Kong. Digital trade facilitation: Paperless trade in regional trade agreements, **ADBI Working Paper**, Asian Development Bank Institute, Tokyo; Japan, n. 747, June, 2017. Available at: https://www.adb.org/sites/default/files/publication/321851/adbi-wp747.pdf.

In the 2000 APEC Ministerial Conference, the Action Agenda for the New Economy was implemented, resulting in the 2001 e-APEC strategy.²³ This strategy focused on facilitating infrastructure investment; creating an environment for strengthening market structures and institutions; and enhancing human capacity building and entrepreneurship.²⁴ Within its legal and regulatory environment recommendations, the strategy recognized issues that would become part of member economies preferential trade agreements, such as: online transactions; electronic authentication and signatures; information security; personal data protection; consumer trust; access to digital information; and, standards and conformance. Furthermore, electronic commerce has been incorporated into APEC's Trade Facilitation Action Plans (TFAP) I (2001 - 2006) and II (2007 - 2010). For instance, following TFAP I objectives, the ECSG worked on the implementation of an action program to reduce trade transaction-related paper documentation, and develop an APEC E-Commerce Data Privacy Framework, while TFAP II looked into the removal of barriers and speed the use of electronic commerce.²⁵

In 2004, the ECSG created the APEC Privacy Framework which set a milestone for the forum's work on digital issues. It was based on nine principles: preventing harm, notice, collection limitation, uses of personal information, choice, integrity of personal information, security safeguards, access and correction, and accountability. In 2007, within the Privacy Framework, the APEC Data Privacy Pathfinder was implemented to achieve accountable cross-border flows of personal information within the APEC region. The framework progressed through the application of Information Privacy Individual Action Plans (IAPs) by 14 economies, and the creation of a study group within the Data Privacy Sub-Group (DPS). The

²³ APEC - Asia-Pacific Economic Cooperation. e-APEC Strategy. October, 2001. Available at: https://www.apec.org/docs/default-source/publications/2001/10/eapec-strategy-october-2001/01 ecsg eapec.pdf?sfvrsn=6556556e 1.

²⁴ APEC - Asia-Pacific Economic Cooperation. e-APEC Strategy. October, 2001. Available at: https://www.apec.org/docs/default-source/publications/2001/10/eapec-strategy-october-2001/01 ecsg eapec.pdf?sfvrsn=6556556e 1.

²⁵ APEC - Asia-Pacific Economic Cooperation. APEC'S second trade facilitation action plan. September, 2007. Available at: https://www.apec.org/publications/2007/09/apec-second-tradefacilitation-action-plan-brochure-september-2007.

scope of this framework has been both appraised and criticized.²⁶ On the one hand, when contrasting the 1981 CoE Convention, the OECD Guidelines, the European Directive 1995/46/EC and the APEC Framework, it can be concluded that the framework is a step towards the establishment of a global standard for data protection.²⁷ On the other hand, privacy principles are not correctly tackled as they are based on OECD principles that have not been modified to meet the current challenges.²⁸ Additionally, new experiences within the European Union and the APEC region were not incorporated. During the last decade, various initiatives have been achieved to promote digital economy within APEC. In 2010, APEC's efforts brought together the establishment of a multilateral arrangement, the APEC Cross-Border Privacy Enforcement Arrangement (CPEA), which improved the actual implementation of the APEC Privacy Framework. This instrument set a mechanism for the region's privacy enforcement authorities to share information and help with cross-border data privacy enforcement. In 2011, the APEC Cross Border Privacy Rules (CBPR) system was implemented, which aimed to balance the flow of cross border data and information, while ensuring personal information protection. Although its objectives may not be achieved due to its non-binding characteristic²⁹, it is recognized that it serves as a starting point for harmonization of domestic and regional rules.³⁰ In 2014, the role of Internet economy was recognized through the APEC Initiative of Cooperation to Promote Internet Economy, especially in terms of the promotion of an innovative development. In 2015, both the establishment of an Ad Hoc Steering Group and the Privacy Recognition for Processors System (PRP)

²⁶WATERS, Nigel. The APEC Asia-Pacific Privacy Initiative: A New Route to Effective Data Protection or a Trojan Horse for Self-Regulation? October 7, UNSW Law Research Paper, n. 59, 2008. Available at:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1402445.

²⁷ TAN, Johanna G. A comparative study of the APEC privacy framework-a new voice in the data protection dialogue? Asian Journal of Comparative Law, v. 3, p, 1-48, 2008.

²⁸ GREENLEAF, Graham. Five years of the APEC Privacy Framework: Failure or promise? Computer Law Security Review, v. 25, n. 1, p. 28-43, 2009.

²⁹ GREENLEAF, Graham. APEC's Cross-Border Privacy Rules System: A House of Cards? Privacy Laws & Business International Report, v.128, n. 42, April, p. 27-30, 2014.

³⁰ KHUMON, Prapanpong. Regulation for Cross-Border Privacy in Southeast Asia: An Institutional Perspective. 9th European Regional ITS Conference, Trento, International Telecommunications Society (ITS), 2018.

can be pointed out. The former guided the discussion for these issues, while the latter was designed to help personal information processors assist controllers regarding privacy obligations.

In 2017, in the framework of the Concluding Senior Officials Meeting (CSOM), APEC Leaders adopted the APEC Internet and Digital Economy Roadmap. Within the Roadmap, the balance between openness and data security became one of the most sensitive issues.31 It proposes 11 cooperation areas, including digital infrastructure; interoperability; broadband access; government policy framework; regulatory approaches; enabling technologies and services; trust and security in the use of ICTs; free flow of information and data; Internet and digital economy measurements; inclusiveness; and the facilitation of e-commerce and cooperation. Various member economies have expressed their interest in cooperation towards allowing digital economy to become an essential element for sustainable economic growth.³² In 2018, the Digital Economy Steering Group (DESG) was created, with the objective of facilitating the development of the Internet and digital economy. This group substituted ECSG, incorporating the subgroups previously created such as the Data Privacy Subgroup, APEC Cross-Border Privacy Rules (CBPR) System, APEC Privacy Recognition for Processors (PRP) System, and APEC Privacy Framework.

APEC's work creates definitions and commitments that can guide trade policymaking. Although the effectiveness of the initiatives and programs previously mentioned depend on the political will of APEC Members, these advances move forward these commitments in preferential trade agreements or other international instruments, and can serve as the basis for the expansion of global efforts.33 The

³¹ BIRYUKOVA, Olga; DANILTSEV, Alexander. Multilateral Institutions under Stress? International Organizations Research Journal, v. 14, n. 1, p. 1-20, 2019.

³² GON KIM, Jeong. The Digital Economy in Southeast and South Asia: Towards Mutually Beneficial Cooperation with Korea, Korea Institute for International Economic Policy, KIEP) Research Paper Series, Korea, n. 177, January, 2020. In: XIAOMING, Pan. A New Competitive Situation in the Digital Economy and China's Actions, China International Studies, n. 82, 2020.

³³ BIRYUKOVA, Olga; DANILTSEV, Alexander. Multilateral Institutions under Stress? International Organizations Research Journal, v. 14, n. 1, p. 1-20, 2019.

non-binding characteristic allows to discuss new issues, such as digital economy, looking for best practices and mechanisms to be incorporated in future negotiations, including mandatory commitments.

2. Digital economy at the bilateral level

Having stated the advances achieved within APEC work addressing digital economy, this section analyzes the evolution of provisions incorporated in ecommerce chapters subscribed between APEC and Latin American economies. The agreements signed by Latin American economies present a series of characteristics that make them a relevant case study of the progression of e-commerce provisions. On the one hand, economies in the region have been actively involved in trade negotiations since the early 2000s, including the modernization and upgrade of firstgeneration agreements. On the other hand, these negotiations have taken place with partners from Asia, the Americas, and Europe. Consequently, these agreements incorporate different negotiation approaches towards the drafting of e-commerce related provisions, which allows to characterize and comprehend e-commerce provisions. Moreover, it is possible to assess if the different elements required to promote the development of digital markets are being incorporated in preferential trade negotiations and if conflicting normative bodies arise. Hence, for this analysis 24 agreements negotiated, and coming into force, between 2004 and 2020, that included e-commerce chapters, are considered (Table 1).

Table 1. APEC - Latin American FTAs

Agreement	Chapter	Effective	Agreement	Chapter	Effective
		date			date
Chile - United States	Ch. 15	2004	Panama - United States	Ch. 14	2012
CAFTA-DR ³⁴ - United States	Ch. 14	2006	Panama - Canada	Ch. 15	2013
Nicaragua - Chinese Taipei	Ch. 14	2008	Costa Rica - Singapore	Ch. 12	2013
Peru - United States	Ch. 15	2009	Honduras - Canada	Ch. 16	2014
Peru - Singapore	Ch. 13	2009	Mexico - Panama	Ch. 14	2015
Peru - Canada	Ch. 15	2009	Pacific Alliance ³⁵	Ch. 13	2016
Chile - Australia	Ch. 16	2009	Colombia - Republic of Korea	Ch. 12	2016
Chile - Colombia	Ch. 12	2009	Chile - Uruguay	Ch. 8	2018
Peru - Republic of Korea	Ch. 14	2011	CPTPP ³⁶	Ch. 14	2018
Colombia - Canada	Ch. 15	2011	Chile - China	Ch. 4	2019
Central America - Mexico	Ch. XV	2012	Chile - Argentina	Ch. 10	2019
Colombia - United States	Ch. 15	2012	USMCA ³⁷	Ch. 19	2020

Source: Authors' elaboration.

The design of frameworks to regulate e-commerce and digital economy comprise different elements as its transactions may involve the exchange of physical goods, the provision of services, and digital goods protected by copyrights or patents. This has imposed challenges as to define what would be covered under this

³⁴ The agreement is composed by Costa Rica, Honduras, Guatemala, El Salvador and Dominican Republic.

³⁵ The Pacific Alliance is composed by Chile, Colombia, Mexico and Peru.

³⁶ For Australia, Canada, Japan, Mexico, New Zealand, and Singapore, the agreement entered into force on 30 December 2018; on 14 January 2019 in Vietnam, and on 17 July 2021 in Peru. Chile, Brunei, and Malaysia have not completed their respective ratification process.

³⁷ The USMCA is composed by Canada, Mexico and the United States of America.

kind of regulations, what could be considered as a digital product, or how these transactions can be classified.³⁸ For this reason, there is a growing interest within the literature in classifying digital related provisions in free trade agreements, including their scope, depth, and enforceability.³⁹

In order to assess how the sample address e-commerce and digital economy issues, first, the paper has identified the 19 issues that agreements could cover. As shown in Table 2, the analysis conducted identifies how many agreements refers to each issue. This identification allows to recognize consolidated and emerging topics within digital economy. For instance, the moratorium on custom duties to digital products has become a standard in e-commerce chapters. Nevertheless, it must be stated that these provisions have evolved throughout the years, therefore, some elements have been selected to illustrate their core objective. It can be stated that those provisions that are included in the majority of agreements may be well consolidated at the time of drafting provisions. Hence, in order to present the results from the analysis of these provisions, the paper will follow a descending order according to the number of agreements incorporating them. This will allow to correctly identify non-consolidated and emerging topics in this area.

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³⁸ WU, Mark. **Digital Trade-Related Provisions in Regional Trade Agreements:** Existing Models and Lessons for the Multilateral Trade System. RTA Exchange. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and the Inter-American Development Bank (IDB), 2017. Available at: www.rtaexchange.org/.

³⁹ MITCHELL, Andrew; MISHRA, Neha. Digital trade integration in preferential trade agreements. **ARTNeT Working Paper Series**, n. 191, May, Bangkok, ESCAP, 2020. BURRI, Mira; POLANCO, Rodrigo. Digital Trade Provisions in Preferential Trade Agreements: Introducing a New Dataset. **Journal of International Economic Law**, v. 23, n. 1, November, p. 1-34, 2019. **In:** MONTEIRO, José-Antonio; TEH, Robert. Provisions on electronic commerce in regional trade agreements. WTO Staff Working Paper, n. 11, World Trade Organization (WTO), Geneva, 2017.

Table 2. Inclusion of e-commerce issues in APEC - Latin American FTAs

Topic	Number of	Topic	Number of	
_	mentions		mentions	
Moratorium on Customs Duties	22	Unsolicited Commercial	5	
to Digital Products	22	Electronic Messages		
Cooperation/Consultations on	20	Location of Computing	5	
Electronic Commerce	20	Facilities		
Online Consumer Protection	17	Cybersecurity	3	
Department Treeds	40	Principles on Access to and	2	
Paperless Trade	13	Use of the Internet		
Non-discriminatory treatment of	13	Source Code	2	
Digital Products		Source Code		
Electronic Authentication and	12	Small and Medium	1	
Electronic Signatures		Enterprises Cooperation		
Personal Information Protection	12	Shared Internet	1	
Personal information Protection	12	Interconnection Charges		
Transparency	10	Open Government Data	1	
Cross-border transfer of	6	Interactive Computer	1	
Information by Electronic Means		Services		
National Framework for	5			
Electronic Transactions	,			

Source: Authors' elaboration.

First, it must be highlighted that most agreements analyzed include a moratorium on custom duties to e-commerce, except for Chile-China and Chile-Argentina.⁴⁰ This concept is based on the WTO Ministerial Decision of not imposing custom duties on electronic transmissions, and some agreements make direct reference to this decision. Nevertheless, due to the conceptual debate on whether electronic transmissions refer to the carrier medium or their content value, the term

⁴⁰ Free Trade Agreement between Chile and China (2019); Acuerdo de Libre Comercio Chile - Argentina (2019).

digital product has been used in the latest agreements.⁴¹ This provision provides certainty that digital products will not be subjected to custom duties. However, the debate has currently shifted to the use of domestic taxes, such as VAT, particularly on cross-border digital services.

A second element identified in most agreement are cooperation activities. This foster joint actions between like-minded economies in order to achieve their objectives, and as e-commerce and the digital economy is an evolving issue, there is a need to review how to address new challenges and technologies. For this reason, most international agreements analyzed include explicit cooperation or consultations provisions on e-commerce, with the exception of agreements between Peru-USA, Colombia-USA, Panama-Canada, and Peru-Singapore.⁴² These provisions refer to the need of sharing best practices to foster e-commerce and the active participation in regional and multilateral fora to promote the development of electronic commerce. Additionally, it must be stated that some elements, due to their relevance and novelty, are not included within cooperation sections, but the provisions incorporated in the agreements are based on cooperation schemes. On an individual basis, topics such as, cybersecurity (USMCA43; CPTPP44; Chile-Uruguay⁴⁵), small and medium enterprises (Pacific Alliance⁴⁶), and open government data (USMCA⁴⁷) are defined, and cooperation is reinforced for their development. These are emerging issues in the development of the digital economy and look to reinforce the actors' confidence in the digital market and promote their inclusive development.

⁴¹ CHENG, Wallace; BRANDI, Clara. Governing digital trade-a new role for the WTO, Briefing Paper, n. 6, 2019.

⁴² United States-Peru Free Trade Agreement (2009);United States - Colombia Free Trade Agreement (2012); Peru-Singapore Free Trade Agreement (2009); Canada-Panama Free Trade Agreement

⁴³ United States-Mexico-Canada Agreement (USMCA) 2020.

⁴⁴ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) (2018).

⁴⁵ Acuerdo de Libre Comercio Chile - Uruguay 2018.

⁴⁶ Pacific Alliance Additional Trade Protocol 2016.

⁴⁷ United States-Mexico-Canada Agreement (USMCA). 2020.

One of the main issues in the digital economy is actors' uncertainty regarding the development of transaction processes. Therefore, online consumer protection regulations help to build trust between consumers and businesses as they provide frameworks and support for these transactions.⁴⁸ Within the agreements analyzed, the parties recognize the importance of online consumer protection on a digital environment, and some promote the adoption of protection laws. This provision is not included in the agreements between Chile-USA, CAFTA-DR, Panama-USA, Panama-Canada, Nicaragua-Chinese Taipei, Costa Rica-Singapore, and Central America-Mexico.⁴⁹ These agreements were subscribed before 2013, which may signal that economies have realized the importance of including commitments regarding consumer protection in the online markets, and hence, become a standard in trade agreements.

Following APEC's work to promote e-commerce (TFAP I and II), several FTAs have included provisions referring to paperless trade. This topic has been addressed both in e-commerce and trade facilitation chapters, as it not only benefits digital trade, but also has an important transaction cost reduction to overall trade. Analyzed provisions encourage parties to make trade documents available in electronic form and, at the same time, allow the use of these documents in customs procedures. Agreements including paperless trade provisions are: Peru-USA, Colombia-USA, USMCA, Peru-Canada, Colombia-Canada, Chile-Australia, Peru-Republic of Korea, Colombia-Republic of Korea, CPTPP, Chile-China, Mexico-Panama, Pacific Alliance, and Chile-Uruguay.⁵⁰

⁴⁸ O'HARA, Erin Ann. Choice of law for internet transactions: The uneasy case for online consumer protection. University of Pennsylvania Law Review. Symposium: Current Debates in the Conflict of Laws. v. 153, n. 6, Jun., 2005.

⁴⁹ United States - Chile Free Trade Agreement (2004); Canada-Panama Free Trade Agreement. 2013; Dominican Republic-Central America FTA (CAFTA-DR) (2006); United States - Panama Trade Promotion Agreement (2012); Singapore-Costa Rica Free Trade Agreement (2013); Nicaragua-Republic of China (Taiwan) Free Trade Agreement (2008);Tratado de Libre Comercio entre México y Costa Rica, El Salvador, Guatemala, Honduras y Nicaragua (2012).

⁵⁰ United States-Peru Free Trade Agreement Chapter 15. 2009 United States - Colombia Free Trade Agreement Chapter 15. 2012; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020; Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; Free Trade Agreement between Chile and China Chapter 14. 2019; Pacific Alliance Additional Trade Protocol Chapter 13. 2016; Acuerdo de Libre Comercio Chile - Uruguay Chapter 8.

Similar to national treatment principle, agreements include provisions for the non-discriminatory treatment of digital products. This provision refers to the Parties' obligation of not giving a less favorable treatment to products from another party, and is included in 13 agreements: Chile-USA, CAFTA-DR, Peru-USA, Colombia-USA, Panama-USA, USMCA, Chinese Taipei-Nicaragua, Chile-Australia, CPTPP, Chile-China, Chile-Colombia, Central America-Mexico, Pacific Alliance, and Mexico-Panama.⁵¹ An important debate has developed in terms of the definition of which products could fall under this kind of provisions. The first chapters referred to e-commerce and the possibility of trading physical products by electronic means, but the current development of digital markets with the transmission of information and digital products through online means, have encompassed the need to clarify the concept of digital products.

As activities within e-commerce are undertaken in a digital space, it can be pointed out the necessity of certifying the authenticity of involved participants. In this context, the use of electronic authentication and electronic signatures have been both promoted and regulated. These provisions also encourage cooperation and stress the importance of mutually standardizing these methods to facilitate e-commerce. These provisions are included in half of the sample, meaning agreements between Peru-USA, Colombia-USA, USMCA, Chile-Australia, Peru-

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^{2018;} Canada-Peru Free Trade Agreement Chapter 15 (2009); Canada-Colombia Free Trade Agreement Chapter 15 (2011); Australia-Chile Free Trade Agreement Chapter 16 (2009); Peru - Korea Free Trade Agreement Chapter 14 (2011); Colombia - Korea Free Trade Agreement Chapter 12 (2016); Tratado de Libre Comercio entre México y Panamá Chapter 14 (2015).

States - Chile Free Trade Agreement Chapter 15. 2012; United States - Colombia Free Trade Agreement Chapter 15. 2012; United States - Chile Free Trade Agreement Chapter 15. 2004; United States - Peru Free Trade Agreement Chapter 15. 2009; United States - Colombia Free Trade Agreement Chapter 15. 2012; United States - Chile Free Trade Agreement Chapter 15. 2012; United States - Colombia Free Trade Agreement Chapter 15. 2012; United States - Mexico-Canada Agreement (USMCA) Chapter 19. 2020; Australia-Chile Free Trade Agreement Chapter 16. 2009; Free Trade Agreement between Chile and China Chapter 14 (2006); Pacific Alliance Additional Trade Protocol Chapter 13. 2016; Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; Tratado de Libre Comercio entre México y Panamá Chapter 14. 2015; United States - Panama Trade Promotion Agreement Chapter 14. 2012; Acuerdo de Libre Comercio entre Chile y Colombia Chapter 12 (2009).

Republic of Korea, CPTPP, Chile-China, Chile-Colombia, Mexico-Panama, Pacific Alliance, Chile-Uruguay, and Chile-Argentina.⁵²

As a result of electronic commerce, personal data is collected, stored, and transferred, increasing consumers' awareness on its privacy and protection. In order to address this issue, 12 agreements include personal information protection provisions: USMCA, Peru-Canada, Colombia-Canada, Chile-Australia, Peru-Republic of Korea, Colombia-Republic of Korea, CPTPP, Chile-China, Mexico-Panama, Pacific Alliance, Chile-Uruguay, and Chile-Argentina.⁵³ These clauses have evolved to recognize the benefits of protecting such information; to increase consumers' confidence on electronic commerce; to promote the adoption of legal compatible frameworks, following international guidelines; and to ensure that non-discriminatory practices in protecting users of electronic commerce are imposed.

Although most FTAs include transparency chapters that apply to the entire agreement, this element has been directly incorporated within electronic commerce chapters due to its relevance to build market confidence in the digital economy. Furthermore, specific issues such as paperless trade, online consumer protection, cybersecurity, among others, have reinforced the need for transparency by incorporating specific provisions within their sections. These provisions refer to the publicly availability of laws, regulations, and administrative procedures related to e-

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⁵² Australia-Chile Free Trade Agreement Chapter 16. 2009; Acuerdo de Libre Comercio Chile - Argentina Chapter 10. 2019; Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018; Pacific Alliance Additional Trade Protocol Chapter 13. 2016; Free Trade Agreement between Chile and China Chapter 14. 2006; Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020; United States - Colombia Free Trade Agreement Chapter 15. 2012; United States-Peru Free Trade Agreement Chapter 15. 2009; Peru - Korea Free Trade Agreement Chapter 14. 2011; Tratado de Libre Comercio entre México y Panamá Chapter 14. 2015; Acuerdo de Libre Comercio entre Chile y Colombia Chapter 12. 2009.

⁵³ Canada-Peru Free Trade Agreement Chapter 15. 2009; Australia-Chile Free Trade Agreement Chapter 16. 2009; Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; Free Trade Agreement between Chile and China Chapter 14. 2006; Pacific Alliance Additional Trade Protocol Chapter 13. 2016; Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018; Canada-Colombia Free Trade Agreement Chapter 15. 2011; Acuerdo de Libre Comercio Chile - Argentina Chapter 10. 2019; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020; Colombia - Korea Free Trade Agreement Chapter 12. 2016; Tratado de Libre Comercio entre México y Panamá Chapter 14. 2015; Jansen, et al. 2019.

commerce; the need to respond to information request by interested actors; and the importance of transparent measures to protect consumers from fraudulent commercial practices in e-commerce.⁵⁴ Among the agreements analyzed, transparency can be found in CAFTA-DR, Peru-USA, Colombia-USA, Panama-USA, Peru-Canada, Honduras-Canada, Chinese Taipei-Nicaragua, Central America-Mexico, Mexico-Panama, and Pacific Alliance.⁵⁵

Cross-border transfer of information by electronic means has been recently addressed in electronic commerce chapters as individual articles, as before some agreements identified it as part of cooperation activities. For instance, in the Pacific Alliance these provisions are covered both in the cooperation sections⁵⁶, and individually, stating that this element will be considered in future negotiations.⁵⁷ One of the latest agreements subscribed, Chile-Argentina⁵⁸, acknowledges that members may have their own regulatory mechanisms to allow cross-border transmissions by electronic means. Besides, it authorizes the cross-border transfer of information, for which personal data protection should be considered. Parties can establish restrictions to cross-border information transfers to achieve a legitimate public policy objective, as long as it does not constitute a means of discrimination or restriction on trade. Other agreements covering this topic are USMCA, CPTPP, Mexico-Panama, and Chile-Uruguay.⁵⁹

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MONTEIRO, José-Antonio; TEH, Robert. Provisions on electronic commerce in regional trade agreements. WTO Staff Working Paper, n. 11, World Trade Organization (WTO), Geneva, 2017. Dominican Republic-Central America FTA (CAFTA-DR) Chapter 14. 2006; Nicaragua-Republic of China (Taiwan) Free Trade Agreement Chapter 14. 2008; Tratado de Libre Comercio entre México y Costa Rica, El Salvador, Guatemala, Honduras y Nicaragua Chapter XV. 2012; Canada-Peru Free Trade Agreement Chapter 15. 2009; United States-Peru Free Trade Agreement Chapter 15. 2009; United States - Colombia Free Trade Agreement Chapter 15. 2012; Pacific Alliance Additional Trade Protocol Chapter 13. 2016; Tratado de Libre Comercio entre México y Panamá Chapter 14. 2015; Coppock & Maclay, INFO, Chapter 14 (2003); Canada-Honduras Free Trade Agreement Chapter 16 (2014).

⁵⁶ Pacific Alliance Additional Trade Protocol Art. 13.12.c. 2016.

⁵⁷ Pacific Alliance Additional Trade Protocol Art. 13.11.

⁵⁸ Acuerdo de Libre Comercio Chile - Argentina Chapter 10. 2019.

⁵⁹ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020; APEC, APEC Blueprint for Action on Electronic Commerce Chapter 14. 1998.

Regarding the establishment of domestic frameworks for electronic transactions, this has been included throughout electronic commerce chapters and in specific sections. The need to maintain a legal framework governing electronic transactions has been recognized.60 In particular, USMCA and CPTPP, have established that this framework should be consistent with the principles of the UNCITRAL Model Law on Electronic Commerce 1996 or the United Nations Convention on the Use of Electronic Communications in International Contracts.⁶¹ Chile-Australia refers to minimize the regulatory burden and that regulatory frameworks should promote private sector participation, supporting industry-led development of e-commerce. 62 Agreements between Chile-China and Chile-Uruguay also incorporated a specific section on domestic framework for electronic transactions.63

In the context of user's protection on digital environments, provisions regarding unsolicited commercial electronic messages have been incorporated.⁶⁴ The main purpose of this provisions is to protect users from receiving electronic messages sent for commercial purposes to an electronic address without their consent. The Pacific Alliance stipulates that the parties shall adopt or maintain measures to protect users from and minimize unsolicited electronic commercial messages.⁶⁵ CPTPP shifted the focus to the private sector, requiring suppliers to allow recipients to prevent ongoing reception of those messages or require the users'

⁶⁰ HERREROS, Sebastián. La regulación del comercio electrónico transfronterizo en los acuerdos comerciales: algunas implicaciones de política para América Latina y el Caribe, Comércio Internacional, n. 142, Julio, Naciones Unidas, CEPAL, 2019.

⁶¹ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020.

⁶² Australia-Chile Free Trade Agreement Chapter 16. 2009.

⁶³ Free Trade Agreement between Chile and China Chapter 14. 2006; Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018.

⁶⁴ GAO, Henry, Regulation of digital trade in US Free Trade Agreements: From trade regulation to digital regulation. Legal Issues of Economic Integration, v. 45, n. 1, p. 47-70, 2018.

⁶⁵ Pacific Alliance Additional Trade Protocol Chapter 13. 2016.

consent.⁶⁶ These topics are also covered in USMCA, Chile-Uruguay, and Chile-Argentina.⁶⁷

One of the main objectives of the incorporation of electronic commerce chapters within FTAs has been to agree on international standards to reduce barriers for its development. In this context, location of computer facilities, defined as the requirement of data to be stored within national borders, has been identified.⁶⁸ It is important to distinguish between computer facilities, and those related to telecommunications. In the Pacific Alliance, the former represents computer servers and devices for the processing or storage of information for commercial purposes.⁶⁹ It commits not to require the other party's service suppliers, investors and investments to use or locate computer facilities in the party's territory as a condition for the exercise of its business activity in its area, which is also included in USMCA and CPTPP.⁷⁰ This does not prevent measures needed to achieve a legitimate public policy objective, provided that they are applied in a non-discriminatory manner or constitute a disguised restriction on trade. CPTPP also recognize that each Party may have its own regulatory requirements regarding the use of computing facilities, including requirements that seek to ensure the security and confidentiality of communications.⁷¹ Other agreements including provision on this topic are Chile-Uruguay and Chile-Argentina.⁷²

Some novel elements have been included in the latest agreements like USMCA and CPTPP. First, on principles on access to and use of the Internet, both agreements recognize the benefits for consumers to access the Internet, on any

⁶⁶ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018.

 ⁶⁷ Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018; Acuerdo de Libre Comercio Chile - Argentina Chapter 10. 2019; United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020.
⁶⁸ HODSON, Susannah. Applying WTO and FTA Disciplines to Data Localization Measures. World Trade Review, v. 18, n. 4, September, p. 579 – 607, 2019.

⁶⁹ Pacific Alliance Additional Trade Protocol Chapter 13. 2016.

⁷⁰ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018;United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020.

⁷¹ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Art. 14.13.1. 2018.

⁷² Acuerdo de Libre Comercio Chile - Uruguay Chapter 8. 2018; Acuerdo de Libre Comercio Chile - Argentina Chapter 10. 2019.

end-user device, use any application or service, and to access information on the Internet access service supplier network management practices. Second, regarding source code, no parties shall require the transfer of, or access to source code of software as a condition of its import, distribution or sale. Moreover, CPTPP does not prohibit the inclusion or implementation of terms and conditions in commercially negotiated contracts, modification of source code of software necessary to comply with laws or regulations, and requirements related to patent applications.

Shared Internet interconnection charges and interactive computer services are included in CPTPP and USMCA.⁷³ These elements are not mentioned in the other agreements analyzed. On the one hand, CPTPP states that a supplier, looking for international Internet connection, should be able to negotiate with others on a commercial basis, including compensation for the establishment, operation, and maintenance of facilities.⁷⁴ On the other hand, in USMCA parties recognize the importance of interactive computer services to promote SMEs development, and limits the adoptions of measures treating suppliers or users for the information made available by the service, that has not been wholly or, in part, created by them.

Finally, it can be highlighted that, among the agreements analyzed, Chile-China is the only agreement whose e-commerce chapter is excluded from the dispute settlement mechanism. Although a common interest on the development of the digital economy led to the inclusion of these provisions within the agreements and should promote their application, the existence of enforcement mechanisms provides additional certainty, which helps foster the progress on the abovementioned topics.

⁷³ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Chapter 14. 2018;United States-Mexico-Canada Agreement (USMCA) Chapter 19. 2020.

⁷⁴ Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) Art. 14.12. 2018.

3. Digital Economy Partnership Agreement (DEPA)

The review of e-commerce and digital economy provisions previously presented allows to identify a series of issues that trade agreements are addressing in order to promote the development of digital markets. Nevertheless, the rapid expansion and evolution of these technologies force the economies to update their regulatory bodies and incorporate new provisions to promote confidence and ensure consumers protection in these kinds of transactions. Moreover, the multiplicity and evolution of these norms may lead to inconsistency and opposing regulations, hence the fragmentation of digital markets as the regulatory requirements may not be compatible which each other. To avoid this problem, and in the absence of multilateral regulations, there is a need to enhance regulatory coherence, and identify possible benchmarks.

To this respect, the paper proposes DEPA, an agreement signed between Chile, New Zealand, and Singapore in 2020, as a benchmark on digital trade provisions. DEPA represents a milestone regarding digital economy regulations in the international level, as it only focuses on digital economy, deepening previously negotiated definitions, but also introducing new elements. Besides, DEPA complements WTO negotiations on e-commerce and continue the work conducted by APEC and other international forums. The agreement is divided into 16 modules⁷⁵ which cover the most prominent issues needed to enhance digital economy between members, and is open for other members' accession.

DEPA addresses most of the traditional topics covered by other agreements (Table 2), but it also includes new elements both in specific sections and as part of cooperation activities. On the one hand, digital identities, cryptography, public domain, data innovation and digital inclusion were incorporated by means of commitments and recognizing the importance of cooperation on these topics. On the

Products and Trade Facilitation; Treatment of Digital Products and Related Issues; Data Issues; Wider Trust Environment; Business and Consumer Trust; Digital Identities; Emerging Trends and Technologies; Innovation and the Digital Economy; Small and Medium Enterprises Cooperation; Digital Inclusion; Exceptions; Transparency; and Dispute Settlement.

other hand, DEPA progressed on cooperation in topics such as fintech, competition policy, artificial intelligence (AI), and government procurement.

As digital transactions grow, and both people and firms' online activities increase, stakeholders have identified the need of ensuring digital identities. This refers to both attributes and credentials under use on the digital environment. DEPA addresses this issue in module 7, recognizing cooperation among the Parties and that each one may have different implementations of, and legal approaches to, digital identities.⁷⁶ It also states that Parties should promote the interoperability between their respective regimes for digital identities.

Module 3, which refers to the treatment of digital products and related issues, affirms Parties' level of commitments relating to information and communication technology products that use cryptography, defining key concepts and procedures. For example, it clarifies cryptography concept and its scope in the agreement.⁷⁷ CPTPP and USMCA refer to cryptography in the context of information and communications technology products in Annex 8.B and Art. 12.C.2, respectively.

In order to foster innovations and taking advantage of digital tools to promote the dissemination of information, DEPA's Module 9, innovation and the digital economy, recognizes the importance of a rich and accessible public domain. It acknowledges the relevance of publicly available databases of registered intellectual property rights that help to identify elements that are part of the public domain.⁷⁸ Therefore, providing access to this information may contribute to both the use of creations that have already fallen into public domain and promote future innovations. Following the same argument, regarding data innovation, the Parties recognize that cross-border data flows and data sharing facilitate data-driven innovation. In addition, data sharing mechanisms, such as open licensing agreements, promote data sharing use in the digital environment.⁷⁹

⁷⁶ Digital Economy Partnership Agreement Art. 7.1.1 (2020).

⁷⁷ Digital Economy Partnership Agreement, Art. 3.4.

⁷⁸ Digital Economy Partnership Agreement, Art. 9.3.

⁷⁹ Digital Economy Partnership Agreement, Art. 9.4.

Bearing in mind the current digital gap, economies must work on ensuring people and businesses' participation in the digital environment. In the case of DEPA, Parties acknowledge the relevance of digital inclusion to make sure that all stakeholders can benefit from digital economy. In this context, Module 11 also promotes cooperation in this topic to encourage an inclusive sustainable economic growth and the participation of all groups.⁸⁰ These will be reached by using indicators, analyzing statistics, and implementing specific programs. DEPA also states the importance of facilitating digital economy by removing barriers that impede access of women, rural population and low-income groups.⁸¹

As it was mentioned, DEPA deepens cooperation in relevant areas. In module 8, emerging trends and technologies, DEPA promotes cooperation between Parties in the financial technology sector, the development of fintech solutions and encourages collaboration of start-ups in this area.82 In terms of AI, Parties recognize the importance of developing ethical and governance frameworks for the responsible use of AI technologies; therefore, parties should adopt AI governance frameworks internationally aligned to facilitate the use of Al across members' jurisdictions. 83 This module also acknowledges the importance of open, fair and transparent government procurement markets, so Parties should undertake cooperation activities in this matter. Lastly, module 8 promotes the sharing of experiences in enforcing competition law and implementing competition policies to address digital economy challenges. Among cooperation activities, sharing information and experiences, best practices and providing training, can be found.84 It is worth noting that even though source code and shared internet interconnection charges were included in CPTPP, Chile, Singapore and New Zealand did not incorporate those topics in DEPA. Source code was not included by the members, and shared internet interconnection charges was not part of their negotiation priorities. It should be considered that many

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⁸⁰ Digital Economy Partnership Agreement, Art. 11.3.

⁸¹ Digital Economy Partnership Agreement, Art. 11.2.

⁸² Digital Economy Partnership Agreement, Art. 8.1.

⁸³ Digital Economy Partnership Agreement, Art. 8.2.

⁸⁴ Digital Economy Partnership Agreement, Art. 8.3.

elements included in TPP were agreed by all members due to USA's participation, interests changed after its withdrawal.

One of the most important characteristics of DEPA is the prominence of cooperation provisions incorporated throughout the agreement. While it could be stated that these kinds of provisions do not oblige member economies; they represent an opportunity to work together to tackle the challenges that arise from the digitalization process. By acknowledging these issues, the economies can foster cooperation towards the formulation of policies and regulatory bodies taking into consideration the need of interoperability and harmonization of rules to ensure a common digital market. Moreover, putting in the center of the discussion consumers' protection and building confidence in digital transactions for its users, the agreement could enhance its development. Finally, recognizing the importance of inclusion in the digital economy, it can serve as a bridge to allow all people to benefit from these technological advances, and implement the necessary policies to ensure that vulnerable groups, such as women, rural population or elderly people can access and participate in the digital economy, as well as small and medium enterprises.

Final Conclusions

The current COVID-19 pandemic has exposed the relevance of digital environment for both economic growth and sustainable development. Digital transactions and digital-related activities have become fundamental to sustain productive networks and, as result of quarantine and social distancing measures, an increase of digital services has been observed, ranging from education or health, to entertainment and communications.⁸⁵ This new scenario poses additional challenges for the governance of the digital economy.

⁸⁵ CÁCERES, Javiera; MUÑOZ, Felipe. **El desafío chileno en la implementación del Acuerdo de Asociación de Economía Digital,** 3 de julio, 2020. Available at: https://www.elmostrador.cl/destacado/2020/07/03/el-desafio-chileno-en-la-implementacion-del-acuerdo-de-asociacion-de-economia-digital/.

Even though APEC's work has paved-the-way for the advancement on regulations related to electronic commerce, economies have relied on the negotiation of free trade agreements to build frameworks for these transactions. However, as it was presented in the analysis, due to the complexity and ongoing development of the digital environment, a variety of topics are covered in terms of definitions and their scope. In this context, the lack of a regional perspective may result in a divergence in the understanding and application of e-commerce regulations, hence the fragmentation of the digital economy.

Taking into consideration a post-pandemic economic recovery and the need to build a trusted environment for people and businesses to interact on the digital economy, it becomes necessary to identify regulations that foster certainty, which may lead to a common regulatory framework. For this purpose, the paper analyzed if DEPA may become a benchmark for digital economy regulations drafting to avoid the fragmentation of the digital market. Within the analysis, it is identified that most provisions in FTAs subscribed between APEC and Latin American economies are related to the drafting of a trustworthy and secure digital environment. Even though specific definitions and commitments are incorporated, most provisions rely on cooperation activities to advance on the identification of best practices to address these topics.

In order to avoid regulatory fragmentation and the absence of relevant topics, the analysis conducted shows that DEPA may be used as a benchmark to establish a modern trade agreement. Among the characteristics that may allow the promotion of the digital economy, it can be highlighted the interoperability, digitalization, and build trusted technologies for all users, with particular emphasis on privacy protection. It must be highlighted that the latest agreements (USMCA, CPTPP) and upgrading processes (China-Chile) have already incorporated some of these issues. Nevertheless, the current pandemic context, and the need for a sustainable recovery, stresses the need to advance into a robust framework which

⁸⁶ MUÑOZ NAVIA, Felipe; et al. Mejorando las Disposiciones sobre Economía Digital en la Alianza del Pacífico: lecciones del DEPA. **Integración & Comercio**, n. 47, deciembre, p. 47-75, 2021.

avoids fragmentation to ensure that the benefits of participating in the digital economy may reach the entire population.

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