The links between and among digital trade, development, and inequality are multifaceted and ever evolving. They depend on what is understood as development and as inequality, concepts that transcend the North-South divide, and the fora in which these issues arise. Conceptually, development and inequality are intrinsically intertwined as the measures to address both are often complementary or even the same.1 In this essay, we consider development and inequality as pertaining to the ability of developing countries2 and least-developed countries (LDCs)3 to shape and participate in the digital economy, and particularly, the regulatory framework for digital trade. We explore how the relationships between digital trade, development, and inequality are addressed in the main venues for digital trade rulemaking: the World Trade Organization (WTO) and Preferential Trade Agreements (PTAs). We then examine two contentious issues in digital trade: the customs duty moratorium and data governance.

Digital Trade Rulemaking and Fora

There is no specific WTO agreement that regulates digital trade. However, discussions on this subject have taken place since 1998 under the WTO Work Programme on E-commerce,4 and in the ongoing E-commerce Joint Initiative (JI) negotiations, which began in January 2019.5 Development and inequality issues permeate both discussions. For example, the 2022 WTO Ministerial Decision commits to reinvigorate the E-commerce Work Programme, “particularly, in line with its development dimension.”6 Moreover, Côte d’Ivoire, an African developing-country JI participant, has noted the necessity of addressing the lack of effective ecosystems that allow the country to fully exploit its e-commerce potential and benefit from digitalization.7

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1 Sustainable development goals eight and ten, respectfully, refer to economic development and decreasing inequality. This indicates a recognition that addressing both is necessary to achieve certain desirable results, e.g., sustainable development. See United Nations (UN), Sustainable Development Goals.

2 As self-selected at the World Trade Organization (WTO).

3 As defined by the UN.

4 WTO, Work Programme on Electronic Commerce, WTO Doc. WT/L/274 (Sept. 30, 1998). For the definition of “e-commerce” and “digital trade,” see Mira Burri & Anupam Chander, What Are Digital Trade and Digital Trade Law?, 117 AJIL UNBOUND 110 (2023). We acknowledge that they are different concepts but, unless otherwise specified, we use “digital trade” to refer to both in this essay.

5 WTO, Joint Initiative on E-Commerce, WTO Doc. WT/L/1056 (Jan. 25, 2019).


The difference in nature and scope between the WTO E-commerce Work Programme and JI negotiations affects the participation of developing countries and LDCs. These countries, which constitute 75 percent of the WTO’s membership, are better represented in the WTO E-commerce Work Programme, given its multilateral character, than in the plurilateral JI negotiations. However, the WTO E-commerce Work Programme is modest in scope and mandates only four of the nearly fifty WTO bodies to consider the link between e-commerce and the WTO agreements. Nevertheless, the WTO’s Committee on Trade and Development has been specifically tasked to consider the development dimension. Unfortunately, these discussions have fallen prey to the negotiation impasse at the WTO and progress on substantive discussions stalled in 2016.

In contrast, the JI negotiations include only those WTO members that wish to participate. To date, of the eighty-eight JI participants, thirty are developing countries and four are LDCs. These negotiations cover an expansive range of issues similar to those contained in the most advanced PTAs with digital trade rules. This raises concerns over how less-resourced countries can effectively participate in crafting rules that will regulate one of the most important areas of trade policy. The relatively low rate of participation of many developing countries and nearly all LDCs (particularly from Africa) in the JI negotiations could also be attributed to the critical stance they have taken against these negotiations in favor of the WTO E-commerce Work Programme discussions. Moreover, their skepticism in negotiating cutting-edge rules has been justified by their need to first understand the phenomenon and implications of digital trade before agreeing on its international regulatory framework.

Notably, the very identity of some developing countries is contested at the WTO. There are members who do not think that certain members should be considered developing countries and those who believe that it is their right to self-identify as such. The issue of who qualifies as a developing country could have systemic implications, including who accesses the special and differential treatment provisions of the concluded JI.

Beyond the WTO, developing countries and LDCs are negotiating rules on e-commerce and digital trade in PTAs. According to the TAPED database, as of December 2022, 107 PTAs with an e-commerce or digital trade chapter have been signed since 2001. Out of these, ninety-eight involve at least one developing country. Moreover, thirty-seven PTAs are South-South agreements. So far, two LDCs, Cambodia and the Lao People’s Democratic Republic, have negotiated a PTA, the Regional Comprehensive Economic Partnership, which includes a digital trade chapter. The current negotiations of the Digital Trade Protocol of the African Continental Free Trade Area Agreement comprise the highest number of LDCs negotiating these rules: twenty-five. These developments highlight the importance of digital trade, the increasing diversity of countries negotiating its rules, and the preference of developing countries and LDCs to negotiate more tailored and less ambitious rules intra-regionally (rather than at the WTO). Developing countries’ increasing participation in digital trade norm-setting in PTAs might result in more “development issues” permeating these rules.

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8. Id.
9. Mona Haddad, In Digital Trade Talks, the Voices of Least Developed Countries are Missing, Trade Post (2022).
10. See WTO, supra note 7.
12. For all PTA data, see Mira Burri, María Vásquez Callo-Müller & Kholofelo Kugler, TAPED: Trade Agreement Provisions on Electronic Commerce and Data. We count the number of agreements that were concluded or signed by December 1, 2022.
The Issues Under Negotiation

Substantive development and inequality issues at the WTO focus on bridging the “digital divide.” This term refers to, among others, gaps in connectivity, infrastructure, digitalization, and regulatory frameworks, as well as low digital literacy and gender inequalities. The ongoing JI negotiations also elucidate upon other development issues, especially the participation of micro-, small-, and medium-sized enterprises in digital trade. In most developing countries and LDCs, these entities account for the majority of businesses and employment. Hence, facilitating intra-, and cross-border trade for these enterprises could spur economic growth or even increase their involvement in global value chains.

In PTAs, digital trade norm-setting is progressing rapidly. However, PTAs’ substantive provisions on digital trade have only cursory references to development and inequality. In some cases, there are discrete references to economic and social development on specific issues such as open data. Inequality related issues, such as how to address the digital gender divide, have been largely absent until recently. Thus far, provisions on digital inclusion appear implicitly in five agreements: the Digital Economy Partnership Agreement (DEPA); the Chile-Paraguay Free Trade Agreement (FTA); the India-United Arab Emirates Comprehensive Economic Partnership Agreement; the Singapore-United Kingdom (UK) DEA (SUKEA); and the UK-New Zealand FTA. Interestingly, all but the UK-New Zealand FTA have at least one developing country party. These provisions, which initially involved providing economic opportunities to micro-, small-, and medium-sized enterprises, have expanded to encompass women, rural populations, low socioeconomic groups, disabled people, and Indigenous Peoples. SUKEA is unique in that it specifically targets fair labor conditions, worker protection, and improving digital skills. Moreover, its parties also recognize the digital divide between countries and undertake to promote the participation of other countries in digital trade. Singapore, which identifies as a developing country at the WTO, has emerged as a legal innovator in digital inclusion. It is evident that it closely associates its economic development with effective participation in the digital economy.

Ultimately, given the gaps in the regulatory frameworks in and between different countries, PTAs’ main contribution to addressing the digital divide is the negotiation of the necessary rules to effectively govern cross-border digital trade. Furthermore, PTA negotiations raise questions on future aspects of digital trade governance that might impact development and equality, both in the Global North and South. For instance, provisions on Artificial Intelligence recognize the economic and social importance of developing ethical and governance frameworks for the trusted, safe, and responsible use of Artificial Intelligence technologies.

Finally, PTAs also highlight another key aspect shaping the domestic policy space: exceptions and carveouts in digital trade chapters. These often include exceptions for privacy, national security, domestic taxation, information held or processed by a government, government procurement, or exclude specific sectors (e.g., financial, audio-visual services). These flexibilities may be more meaningful to developing countries as they develop their own digital trade regulatory frameworks.

13 Members’ Discussion on E-commerce Work Programme Highlights Need to Bridge Digital Divide, WTO NEWS (Feb. 21, 2023).
14 Emmanuelle Ganne & Kathryn Lundquist, The Digital Economy, GVCs and SMEs, in GLOBAL VALUE CHAIN DEVELOPMENT REPORT 2019: TECHNICAL INNOVATION, SUPPLY CHAIN TRADE, AND WORKERS IN A GLOBALIZED WORLD (2019).
15 See Burri, Vásquez Callo-Müller & Kugler, supra note 12.
16 See, e.g., Agreement Between Japan and the United States of America Concerning Digital Trade, Art. 20.
17 Digital Economy Partnership Agreement Between Chile, New Zealand, Singapore (June 11, 2020).
18 See, e.g., id. Art. 8.2.
19 Id.
20 For specific examples, see Burri, Vásquez Callo-Müller & Kugler, supra note 12.
The remaining parts of this essay highlight how current digital trade issues intersect with development and inequality by exploring two contentious areas: the customs duty moratorium and data governance.

Customs Duty Moratorium

The WTO practice of not imposing customs duties on electronic transmissions (Customs Duty Moratorium)\(^\text{21}\) has recently become controversial. It was most recently renewed at WTO’s 12th Ministerial Conference (MC12) in Geneva in June 2022.\(^\text{22}\) Yet, it is uncertain if WTO members will maintain this practice. According to the MC12 Ministerial Decision, if MC13 is delayed beyond March 31, 2024, the Customs Duty Moratorium will expire on that date unless it is extended by consensus. The reason for this about-turn is that some WTO members, particularly developing countries, believe that the Customs Duty Moratorium disproportionately disadvantages developing countries and LDCs. Specifically, it affects their ability to collect customs duties, which are a significant source of revenue.\(^\text{23}\) In a paper circulated at the WTO in 2019, India and South Africa argued against the maintenance of the Customs Duty Moratorium for this reason.\(^\text{24}\)

Their arguments are based on a study conducted by Rashmi Banga for the United Nations Conference on Trade and Development (UNCTAD) in 2019. The study estimated that the Customs Duty Moratorium resulted in a potential annual tariff revenue loss of U.S.$5.2 billion for developing-country WTO members and U.S.$344 million for LDCs. In comparison, the revenue loss experienced by high-income WTO members was estimated at U.S.$289 million per annum.\(^\text{25}\) In contrast, the Organisation for Economic Co-operation and Development (OECD) noted that the estimated revenue implications of the Customs Duty Moratorium range from U.S.$280 million to U.S.$8.2 billion.\(^\text{26}\) The study’s authors found that the potential foregone revenue amounts to only an average 0.08–0.23 percent reduction in government revenue for developing countries.\(^\text{27}\) They nevertheless conceded that the potential foregone revenue tends to be higher for developing countries because tariffs are generally higher in those countries. However, developing countries stand to enjoy higher welfare gains from tariff liberalization.\(^\text{28}\)

Moreover, the Customs Duty Moratorium is contentious because there is no agreement amongst WTO members on the definition of an “electronic transmission.” Consequently, WTO members treat cross-border electronic transmissions differently in their domestic customs and tax regimes. Some do not tax digital products at all. Others, like Indonesia, have classified them as “intangible goods” in their goods schedules, while countries like Australia, New Zealand, and South Africa, apply a general sales tax or value-added tax.

Notwithstanding the controversy, 104 PTAs include a provision upholding the Customs Duty Moratorium. Of these, thirty-six (or just over a third) are South-South agreements. This suggests that developing countries have


\(^{22}\) WTO, supra note 6.


\(^{24}\) See, e.g., WTO, Work Programme on Electronic Commerce, The E-Commerce Moratorium and Implications for Developing Countries, Communication from India and South Africa, WTO Doc. WT/GC/W/774 (June 6, 2019).


\(^{26}\) Id.

\(^{27}\) Id.

\(^{28}\) Id.
either not fully engaged with this issue or that some of them support the Customs Duty Moratorium. This also further highlights that developing countries’ views on digital trade are not monolithic.

Data Governance

Any discussion on development and inequality in digital trade must address the challenges posed by the governance of one of its key elements: data. The multidimensional nature of data and the promise of innovation based on its use have led to different views on the benefits of liberalizing data-related trade policies.

One issue of contention is whether data, including personal data, should be allowed to flow freely or if countries should restrict its flow. The restrictions include “data localization” measures in their most extreme version. The reasons for such measures can be related to privacy protection, but some also highlight economic development concerns, which governments believe could be alleviated by forcing corporations to locate personal data within their borders, thus supporting the creation of domestic data industries. Similar to “data localization” measures, “data sovereignty”—part of the broader notion of “digital sovereignty”—is a concept increasingly found in digital trade policy discourse as a mechanism for, among others, economic development. This notion asserts the “control of data flows via national jurisdiction.”

As data policies relate to inequality, the notion of “data colonialism”—whereby developing countries and LDCs become mere sources of raw data, repeating old patterns of natural resources extractive industries—highlights the power imbalances existing in the digital economy due to the control of data infrastructures by large corporations, mostly located in the Global North.

These issues transcend the traditional distinction between developing and developed countries, the former generally insisting on greater trade liberalization while the latter generally imposing the most restrictions. For instance, the European Union, a developed region, has made technological sovereignty a key element in its digital policy. Privacy protection also transcends the North-South divide and economic concerns. It is no longer only found in PTAs led by developed regions, but South-South PTAs increasingly require parties to establish minimum rules on privacy protection. As of March 2023, a total of thirty-three South-South PTAs include a relevant clause. It is presumed that they create consumer trust, which, in turn might accelerate the uptake of the digital economy and hence economic growth, a pre-requisite to reduce inequality and promote development.

The issue of data governance and its developmental aspects would be incomplete without considering that data is a key element of Artificial Intelligence, an essential part of the future of commerce. As Artificial Intelligence becomes a general-purpose technology, countries with Artificial Intelligence capabilities, including access to large amounts of data, will be able to innovate. Once more, this challenges the notion of the North-South digital divide. China, which identifies as a developing country, is at the forefront of Artificial Intelligence innovation, in part due to its ability to tap into large amounts of data. There are also emerging concerns about the inequalities that Artificial Intelligence technologies might create. The recent releases of Dall-E 2, GPT-4, and other technologies in

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32 See Nick Couldry & Ulises A. Mejias, Data Colonialism: Rethinking Big Data’s Relation to the Contemporary Subject, 20 Television & New Media 336 (2019).
34 Ajay Agrawal, Joshua Gans & Avi Goldfarb, Economic Policy for Artificial Intelligence, 29 Innovation Pol'y & Econ. 139, 140 (2019).
35 Data corresponding to 2019 based on the number of first patent filings in Artificial Intelligence. See WIPO, WIPO Technology Trends 2019: Artificial Intelligence 32 (2019).
the rapidly developing area of generative Artificial Intelligence,\textsuperscript{36} incite debates about the extent to which they may lead to business model disruption and job replacement, how they will alleviate or accelerate inequalities in the developing \textit{and} developed world, and what the consequences on trade policies will be.

\textit{Concluding Observations}

The digital economy offers opportunities to enhance economic development and reduce inequality. Yet, negotiating digital trade rules will deliver full benefits only if participants are committed to including the most marginalized. The inclusion of provisions in WTO negotiations and, particularly, PTAs to promote the participation of micro-, small-, and medium-sized enterprises and marginalized communities in digital trade are positive steps. But there is also a need for international development cooperation, as well as regional and domestic inter-agency best-practice and experience-sharing. PTAs contemplate such cooperation provisions. Although they admittedly lack legal enforceability, they are crucial to increasing understanding among domestic policymakers and regulators of the implications of liberalizing digital trade. The more frequent and inclusive (of participants and topics) these exchanges are, the more significant the long-term benefits of digital trade policies that effectively promote development and reduce inequality will be.