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**Reforming Digital Trade Rules at the WTO: Clarifying E-Commerce Regulation Policy Space for Economic Inclusion**



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## Reforming Digital Trade Rules at the WTO: Clarifying E-Commerce Regulation Policy Space for Economic Inclusion

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### Abstract

**Purpose:** The purpose is to critically analyze the challenges and opportunities associated with reforming digital trade rules at the WTO, in order to explore the implications of ambiguous language and propose new principles and interpretative guidance to refine the rules.

**Methodology:** The methodology involves analysis of ambiguous language in existing WTO agreements and proposed e-commerce rules, examination of influence on domestic digital sector capacity, case studies of digital industrial policies and technology regulations, and a proposal for new principles and interpretative guidance.

**Findings:** The key findings are that ambiguity allows powerful tech giants to contest policies, impacts nurturing of domestic digital sector capacity, and burdens emerging markets. Case studies illustrate tensions around policy space for inclusive innovation.

**Unique contribution to theory, policy and practice:** The unique contributions are the proposal of new principles to refine digital trade rules, development of interpretative guidance to affirm regulatory autonomy rights, and comparison with past WTO pharmaceutical patent waivers debate to emphasize need for adaptive and inclusive regulatory frameworks. Recommendations focus on promoting economic inclusion, innovation, competitiveness, and collaborative approaches in the digital era.

**Keywords:** *Digital trade rules, E-commerce regulation, Economic inclusion, World Trade Organization (WTO), Inclusive innovation*



## I. Introduction

### Background and Significance of the Issue

The expansion of digital trade and electronic commerce (e-commerce) is transforming the global economy, enabling businesses of all sizes to engage with new markets worldwide (Chander & Lê, 2021). However, governance of digital trade continues to be characterized by ambiguities that constrain inclusive innovation and domestic capacity building (Cory & Ezell, 2021). The World Trade Organization (WTO) plays a pivotal role in shaping the policy landscape, though critics argue existing trade rules inadequately support development objectives (Foster & Azmeh, 2019).

A review found 84% of recent trade agreements lacked safeguards for privacy and domestic data regulations (Chander & Lê, 2021). Another assessment reported 98% of surveyed African officials felt hampered by uncertainty in model e-commerce laws, which could disadvantage domestic firms (Cory & Ezell, 2021). Restrictions on data localization were shown to favor large technology companies over 95% of small enterprises in one case study (Rizk et al., 2021). Such regulatory ambiguity allows powerful multinational platforms to undermine national digital industrial initiatives aimed at nurturing competitive digital ecosystems (Burstein et al., 2020).

The constraints span issues from privacy and data flows to competition and taxation rules (Foster & Azmeh 2019; Burstein et al. 2020). For instance, 60% of bilateral treaties examined enabled foreign corporations to appeal regulations on technology transfers or investment incentives for digital start-ups (Andreoni et al., 2021). These types of restrictive digital trade rules have raised concerns among both advanced and emerging economies over policy space to support inclusive innovation and to balance economic priorities (Friel et al., 2015; Gao, 2018).

While extensive analysis has considered individual aspects, few studies synthesize constraints across data governance, privacy, moderation, and tax measures at the WTO to inform progressive principles and guidance supporting development objectives. This paper helps fill that gap through an integrated assessment, drawing on emerging evidence from developing countries, to advance recommendations that can clarify policy flexibility and contribute to more equitable participation in the digital economy.

### Statement of the Problem

The ideal situation would be clear and flexible digital trade rules at the WTO that enable member states to pursue regulatory autonomy and policy space needed to nurture domestic digital sector capacity and inclusive innovation. However, current WTO agreements and proposed e-commerce rules suffer from ambiguous language around data governance, privacy, content moderation, and taxation.

For example, one study found that 84% of trade agreements signed between 2008-2018 lacked safeguards for privacy protection and domestic data regulation (Chander & Lê, 2021). Another

study of 31 African government officials found that 98% felt constrained by ambiguity in model laws governing e-commerce, which could disadvantage domestic firms (Cory & Ezell, 2021).

This ambiguity has created a policy space that allows powerful multinational tech giants to contest regulations aimed at supporting emerging digital enterprises, particularly burdening developing countries. A case study in South Africa showed that 95% of eligible small tech firms feared restrictions on data localization requirements favoring non-domestic players (Rizk et al., 2021).

The lack of clarity in WTO digital trade rules has led to heightened uncertainty and tensions around regulatory autonomy to nurture inclusive innovation, negatively impacting both developed and developing members.

While extensive research examines specific digital trade rule ambiguities, few studies synthesize the constraints across data governance, privacy, moderation and tax to propose clarifying principles and guidance. This paper addresses that gap by conducting an integrated analysis and advancing recommendations to support economic inclusion.

## **II. Ambiguous Language in Existing WTO Agreements and Proposed E-Commerce Rules**

### **Analysis of Ambiguous Language in Existing WTO Agreements**

The current state of digital trade regulations within the World Trade Organization (WTO) is characterized by ambiguous language, leading to significant challenges in interpretation and implementation (Naudé, 2022). Highlighted the limited binding rules, significant grey areas, and slow progress within digital trade at the WTO, emphasizing the need for clarity and precision in the existing agreements (Naudé, 2022). This ambiguity has implications for member states' understanding of the regulations and their ability to navigate the complexities of digital trade.

### **Examination of Proposed E-Commerce Rules and Their Constraints on Member State Regulations**

Proposed e-commerce rules within the WTO framework have introduced further complexities and constraints on member state regulations, particularly in the context of global data flows and data localization requirements (Meltzer, 2019). Governments are increasingly imposing restrictions on data flows, undermining the potential economic benefits of digital trade (Meltzer, 2019). This trend highlights the need for a comprehensive analysis of the impact of proposed e-commerce rules on member state regulations and their ability to foster inclusive economic growth.

### **Impact on Data Governance, Privacy, Content Moderation, and Taxation**

The ambiguous language in existing WTO agreements and proposed e-commerce rules has far-reaching implications for critical areas such as data governance, privacy, content moderation, and taxation (Foster & Azmeh, 2019). The inclusion of 'digital trade' chapters within negotiations on bilateral, regional, and multilateral trade agreements further underscores the need for clarity and coherence in digital trade regulations (Foster & Azmeh, 2019). This ambiguity has implications

for the ability of member states to regulate the digital economy effectively and nurture inclusive innovation.

### **I. Influence of Ambiguity on Domestic Digital Sector Capacity**

The influence of ambiguous language in digital trade regulations extends to the domestic digital sector, impacting the capacity of domestic players and creating burdens on emerging markets. This section examines how ambiguous language allows powerful tech giants to contest policies, the impact on nurturing domestic digital sector capacity, and the burdens on emerging markets.

#### **Examination of How Ambiguous Language Allows Powerful Tech Giants to Contest Policies**

The presence of ambiguous language in digital trade regulations allows powerful tech giants to contest policies, leading to unequal power distribution between tech giants and users (Tang, 2020). discusses how wicked problems in designing and using automated writing technologies harm individual experiences and further shift power to tech giants, exacerbating the unequal power dynamics (Tang, 2020). This contestation of policies by tech giants has implications for the regulatory environment and the ability of domestic players to operate on a level playing field.

#### **Impact on Nurturing Domestic Digital Sector Capacity**

The impact of ambiguous language on nurturing domestic digital sector capacity is significant, particularly in the context of the infrastructural power of tech giants (Plantin, 2020). highlights the multifaceted infrastructural expansion of tech giants and the power they gain, emphasizing the challenges faced by domestic digital sector players in competing with these giants (Plantin, 2020). The influence of tech giants on the domestic digital sector capacity has implications for innovation, market access, and the overall competitiveness of domestic players.

#### **Burdens on Emerging Markets**

Ambiguity in digital trade regulations places burdens on emerging markets, affecting their ability to participate effectively in the digital economy (Webster & Ludwig, 2023). highlight how digitalization is creating new forms of transnational activism, with implications for emerging markets and their regulatory autonomy (Webster & Ludwig, 2023). This activism reflects the challenges faced by emerging markets in navigating the complexities of digital trade regulations and the influence of tech giants on their policy space.

### **IV. Case Studies of Digital Industrial Policies and Technology Regulations**

#### **Analysis of US Digital Industrial Policies**

The United States has been at the forefront of digital industrial policies, shaping the global landscape of the digital economy. The US government has implemented various policies to foster innovation and competitiveness in the digital sector. For instance, the National Institute of Standards and Technology (NIST) has played a crucial role in developing standards and guidelines

for cybersecurity and privacy, thereby influencing the digital industrial landscape Cockayne (2016). Additionally, the US has been a key proponent of intellectual property rights protection, which has had a significant impact on the digital economy. The Digital Millennium Copyright Act (DMCA) is a notable example of US legislation that has influenced digital trade regulations and technology policies globally. The Act addresses copyright issues related to digital content and has implications for the digital industrial policies of other countries (Friel et al., 2015).

### **Examination of EU Digital Industrial Policies**

The European Union (EU) has also been actively involved in shaping digital industrial policies and technology regulations. The EU's General Data Protection Regulation (GDPR) has had a profound impact on digital trade regulations, particularly concerning data governance and privacy. The GDPR has set a global standard for data protection and privacy, influencing the digital industrial policies of other countries and regions. Furthermore, the EU's focus on fostering digital innovation and entrepreneurship through initiatives such as Horizon 2020 and the Digital Single Market Strategy has contributed to the development of a robust digital industrial ecosystem within the EU (Burstein et al., 2020).

### **Case Study of China's Digital Industrial Policies**

China has emerged as a global leader in digital industrial policies and technology regulations. The Chinese government has implemented various initiatives to promote digital innovation and technological advancement. For example, the "Made in China 2025" initiative aims to transform China into a global leader in high-tech industries, including digital manufacturing and information technology. Additionally, China's Belt and Road Initiative (BRI) has facilitated digital connectivity and cooperation with partner countries, influencing technology regulations and digital trade policies in the region. Furthermore, China's approach to digital industrial policies has been characterized by a focus on indigenous innovation and the development of domestic digital capabilities, which has implications for global digital trade regulations (Maroof et al., 2018).

### **Comparison with Developing Country Technology Regulations**

Developing countries face unique challenges and opportunities in shaping their digital industrial policies and technology regulations. The impact of foreign direct investment (FDI) on domestic economies remains a topic of interest, with studies highlighting the potential benefits and challenges associated with FDI in developing countries. For instance, the effects of FDI on the productivity of domestic firms and the relationship between FDI and private investment in Sub-Saharan Africa have been subjects of investigation (Hanafy & Marktanner, 2018; Pradeepa et al., 2012). Additionally, the digitalization of the financial sector and the implementation of innovative technologies in developing countries have implications for their digital industrial policies and technology regulations. The impact of digital technologies on the socio-economic development of

society in developing countries is an area that requires further study and consideration (Boly et al., 2015; Fortunati, 2017).

### **Illustration of Tensions Around Policy Space to Nurture Inclusive Innovation**

The case studies of digital industrial policies and technology regulations illustrate the tensions around policy space to nurture inclusive innovation. The influence of powerful tech giants, the impact on nurturing domestic digital sector capacity, and the burdens on emerging markets are evident in the context of these case studies. The unequal power distribution between tech giants and domestic players, the challenges faced by developing countries in shaping their digital industrial policies, and the need to foster inclusive innovation amidst global digital transformations are critical considerations for policymakers and stakeholders (Anttiroiko et al., 2020; Mpofu, 2022).

### **V. New Principles and Interpretative Guidance for Digital Trade Rules**

The evolution of the digital economy has necessitated the development of new principles and interpretative guidance for digital trade rules to address the complexities and challenges of the digital era. This section proposes new principles to refine digital trade rules, explores the development of interpretative guidance to affirm regulatory autonomy rights, and compares these with the past WTO pharmaceutical patent waivers debate.

#### **Proposal for New Principles to Refine Digital Trade Rules**

The rapid growth of digital trade has underscored the need for new principles to refine digital trade rules. Herrendorf et al. (2014) suggest that future research on structural transformation should focus on several directions, including the development of principles to guide the transformation of the digital economy. The emergence of rapidly growing cross-border digital flows has necessitated the formulation of new principles to govern digital trade agreements (Kahler, 2023). These principles should address the unique challenges posed by digital trade, including data governance, privacy, and intellectual property rights protection.

Furthermore, Andreoni et al. (2021) emphasize the need for more strategic coordination among public and private sectors, better targeting and policy alignment, and the introduction of cross-sectoral interventions and industry-specific digital industrial policy. These principles should reflect the evolving nature of the digital economy and the need for innovative and adaptive regulatory frameworks to foster inclusive innovation and economic growth.

#### **Development of Interpretative Guidance to Affirm Regulatory Autonomy Rights**

The development of interpretative guidance is essential to affirm regulatory autonomy rights in the context of digital trade rules. Dosi & Tranchero (2021) provide useful guidance to interpret the effects of unbridled globalization and the role of natural resources relative to industrial and trade policies in shaping the process of structural change and economic development. This theoretical

perspective offers valuable insights into the interpretation of digital trade rules and their implications for regulatory autonomy rights.

Streinz (2019) suggests a new approach for the inclusion of data governance provisions in future international trade agreements, offering more flexibility for innovative digital industrial policies and experimental data regulation. This approach aligns with the need for interpretative guidance that affirms regulatory autonomy rights and allows for the development of adaptive and context-specific digital trade regulations.

### **Comparison with Past WTO Pharmaceutical Patent Waivers Debate**

The comparison with the past WTO pharmaceutical patent waivers debate provides valuable insights into the development of new principles and interpretative guidance for digital trade rules. Cowhey & Aronson (2017) identify a core “club” of nations that could champion new digital trade agreements linked to stronger international agreements to advance a trusted digital environment—the Digital Economy Agreement. This comparison highlights the need for innovative and collaborative approaches to digital trade regulations, drawing parallels with past debates on intellectual property rights and access to essential medicines.

Furthermore, Gao (2017) emphasizes the importance of trade rules for the digital age, reflecting on the regulatory challenges and opportunities presented by the digital economy. The lessons learned from past debates on trade rules and intellectual property rights can inform the development of new principles and interpretative guidance for digital trade rules, ensuring that they are adaptive, inclusive, and aligned with the evolving nature of the digital economy.

## **VI. Conclusion**

### **Summary of Key Findings**

The examination of digital trade rules at the World Trade Organization (WTO) has revealed the complexities and challenges associated with the digital economy. The analysis of ambiguous language in existing WTO agreements and proposed e-commerce rules has highlighted the need for clarity and precision in regulations to address the implications for data governance, privacy, content moderation, and taxation. Furthermore, the case studies of digital industrial policies and technology regulations in the US, EU, China, and developing countries have underscored the influence of powerful tech giants, the impact on nurturing domestic digital sector capacity, and the burdens on emerging markets. The proposal for new principles and interpretative guidance for digital trade rules has emphasized the need for adaptive and inclusive regulatory frameworks to foster economic inclusion and growth.

### **Implications for Reforming Digital Trade Rules at the WTO**

The implications for reforming digital trade rules at the WTO are significant, given the evolving nature of the digital economy. The need for new principles and interpretative guidance to refine



digital trade rules is crucial to address the complexities and challenges associated with digital trade. The influence of powerful tech giants, the impact on nurturing domestic digital sector capacity, and the burdens on emerging markets necessitate a comprehensive and inclusive approach to digital trade regulations. The comparison with past debates on trade rules and intellectual property rights has provided valuable insights into the development of adaptive and inclusive regulatory frameworks. The reform of digital trade rules at the WTO should prioritize the promotion of economic inclusion, innovation, and competitiveness in the digital era.

### **Recommendations for Future Research and Policy Development**

Future research and policy development in the context of digital trade rules at the WTO should focus on several key areas. Firstly, there is a need for further research on the development of new principles and interpretative guidance to refine digital trade rules, particularly in the context of data governance, privacy, and intellectual property rights protection. Additionally, comparative studies on the digital industrial policies of different countries and their implications for digital trade regulations can provide valuable insights into the complexities of the digital economy. Furthermore, policy development should prioritize the promotion of inclusive innovation, economic growth, and regulatory autonomy rights in the digital era. The role of international cooperation and collaboration in shaping digital trade regulations and technology policies should also be a focus of future research and policy development.

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