

Article Information

Received: 18 Jun 2026

Revised: 14 Aug 2026

Accepted: 21 Aug 2026

Published: 30 Sep 2026

Original Article

International Trade Policy in the Digital Economy: Legal Challenges and Future Directions

Dr. Pooja Gupta¹

Author to whom any correspondence is to be addressed.

e-mail: poojaguptaindia1@gmail.com

Keywords: international trade law, digital economy, e-commerce, data governance, WTO, digital services tax, data localization, plurilateral agreements

Abstract

The rapid growth of cross-border digital trade — encompassing e-commerce, cloud services, data flows, and digital platforms — has outpaced the multilateral trade law framework designed primarily for trade in physical goods. This paper examines the legal architecture governing international trade in the digital economy, analyzing the applicability and limitations of existing World Trade Organization (WTO) instruments, the proliferation of digital trade provisions in regional and bilateral agreements, and the unresolved legal questions surrounding data governance, taxation, and platform regulation. The paper identifies core legal challenges, including the classification of data and digital products under trade law, jurisdictional conflicts between data localization requirements and free-flow commitments, the taxation of digital services absent a settled international consensus, and the governance gap created by the continued absence of a comprehensive multilateral digital trade agreement. Drawing on comparative analysis of the United States, European Union, and Chinese regulatory approaches, the paper argues that digital trade governance is fragmenting into competing regulatory models, with significant implications for legal certainty, market access, and the future of multilateral trade law. The paper concludes with an assessment of ongoing plurilateral negotiations and recommendations for future legal and institutional development.

¹Associate Professor, Department of Business Studies, Panipat Institute of Engineering and Technology – India

Introduction

The digital economy — broadly encompassing e-commerce, cross-border data flows, cloud computing, digital platforms, and data-driven services — now constitutes a substantial and growing share of global economic activity. Yet the foundational instruments of international trade law, principally the General Agreement on Tariffs and Trade (GATT) and the General Agreement on Trade in Services (GATS), were negotiated in an era predating the commercial internet and were not designed to address questions such as the cross-border transfer of personal data, the taxation of value created through data extraction, or the liability of digital platforms operating across multiple jurisdictions simultaneously.

This mismatch between a twentieth-century multilateral trade law architecture and a twenty-first-century digital economy has generated substantial legal uncertainty. In the absence of a comprehensive multilateral framework, states have pursued divergent regulatory strategies — ranging from data localization mandates to unilateral digital services taxes to platform liability regimes — creating a fragmented and at times contradictory legal landscape for firms operating across borders. This paper analyzes the resulting legal challenges and considers the future trajectory of international trade governance in the digital economy.

The Existing Legal Framework

❖ GATT and GATS: Foundational but Incomplete

The WTO's core agreements provide a partial, indirect framework applicable to digital trade. GATS extend most-favored-nation and market-access obligations to trade in services, including services delivered electronically, but its sectoral commitment structure — based on a 1990s-era classification of service sectors — often maps poorly onto contemporary digital services. GATT's applicability to digital trade remains contested where digital products (e.g., downloaded software or streamed content) are concerned, since it is unsettled in WTO jurisprudence whether such products should be classified as goods, services, or a distinct category, a classification question with significant implications for which set of obligations and exceptions applies.²

² General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183.

❖ **The E-Commerce Moratorium**

Since 1998, WTO members have periodically renewed a moratorium on the imposition of customs duties on electronic transmissions. This moratorium has become a recurring flashpoint in WTO ministerial negotiations, with some developing-country members arguing that it disproportionately benefits digitally advanced economies and constrains policy space for revenue generation, while others emphasize its role in providing predictability for digital trade. The moratorium's contested, temporary status exemplifies the broader legal uncertainty pervading multilateral digital trade governance.

❖ **Regional and Plurilateral Digital Trade Provisions**

In the absence of multilateral consensus, states have increasingly embedded digital trade rules in regional and bilateral trade agreements. Agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the United States-Mexico-Canada Agreement (USMCA) include dedicated digital trade chapters addressing cross-border data flow commitments, prohibitions on data localization requirements, source code protection, and limitations on customs duties for digital products. The proliferation of such provisions has produced a patchwork of overlapping and sometimes inconsistent obligations, complicating compliance for firms operating across multiple regulatory jurisdictions.³

❖ **The WTO Joint Statement Initiative on E-Commerce**

Recognizing the limits of consensus-based multilateralism, a subset of WTO members launched the Joint Statement Initiative (JSI) on E-Commerce, a plurilateral negotiating track seeking to develop rules on issues including electronic authentication, consumer protection, and cross-border data flows among participating members. While the JSI represents a significant institutional innovation, its plurilateral character — binding only participating members — raises questions about its long-term compatibility with the WTO's most-favoured-nation principle and its capacity to deliver universally applicable digital trade rules.⁴

³ Mira Burri, *The Governance of Data and Data Flows in Trade Agreements: The Pitfalls of Legal Adaptation*, 51 U.C. Davis L. Rev. 65 (2017).

⁴ WTO, *Joint Statement on Electronic Commerce*, WT/L/1056 (Jan. 25, 2019).

Core Legal Challenges

❖ Data Localization versus Free Data Flow

A central legal tension in digital trade governance concerns data localization requirements — domestic laws mandating that certain categories of data be stored or processed within national borders — which many governments justify on grounds of privacy protection, national security, or law enforcement access, but which trading partners frequently characterize as disguised digital protectionism.⁵ Trade agreements increasingly attempt to reconcile this tension through general exceptions clauses permitting data localization for legitimate public policy objectives, but the scope and judicial interpretation of such exceptions remains largely untested, creating significant compliance uncertainty for multinational firms.⁶

❖ Taxation of the Digital Economy

Traditional international tax law, built around the concept of physical permanent establishment, struggles to allocate taxing rights over profits generated by digital businesses that can serve a market without maintaining a physical presence there. This gap prompted numerous states to adopt unilateral digital services taxes (DSTs), which trading partners have in some cases characterized as discriminatory trade measures, generating retaliatory tariff threats and formal trade disputes. The OECD/G20 Inclusive Framework's two-pillar solution, particularly Pillar One's reallocation of taxing rights for large multinational digital businesses, represents an attempt at a coordinated multilateral resolution, though its implementation has faced significant political and legal obstacles, including domestic ratification challenges in key jurisdictions.⁷

⁵ Susan Ariel Aaronson, *Data Is Dangerous: Comparing the Risks that the United States, Canada, and Germany See in Data Troves*, CIGI Papers No. 241 (Ctr. for Int'l Governance Innovation, Apr. 2020).

⁶ Andrew D. Mitchell & Neha Mishra, *Data at the Docks: Modernizing International Trade Law for the Digital Economy*, 20 Vand. J. Ent. & Tech. L. 1073 (2018).

⁷ OECD/G20 Inclusive Framework on BEPS, *Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy* (OECD 2021).

❖ Platform Liability and Content Regulation

Digital platforms operating across borders face divergent and at times conflicting legal obligations regarding content moderation, intermediary liability, and algorithmic accountability. The EU's Digital Services Act, for example, imposes due-diligence and transparency obligations on platforms operating in the EU market regardless of their jurisdiction of establishment, while other jurisdictions maintain more permissive intermediary liability regimes. This divergence raises unresolved questions about the extraterritorial application of platform regulation and its compatibility with trade law's non-discrimination principles, particularly where compliance costs disproportionately affect foreign relative to domestic platforms.

❖ Intellectual Property and Source Code Protection

Digital trade agreements increasingly include provisions restricting government requirements to disclose or transfer source code and algorithms as a condition of market access, aimed at addressing forced technology transfer concerns. These provisions intersect with, and at times create tension with, legitimate regulatory interests in algorithmic transparency and accountability, particularly in contexts such as competition law enforcement and consumer protection, raising unresolved questions about how trade law's protections for proprietary technology should be balanced against emerging regulatory demands for algorithmic scrutiny.

❖ Cybersecurity and National Security Exceptions

States have increasingly invoked national security exceptions under trade law to justify restrictions on foreign digital technology providers, including restrictions on telecommunications equipment and cloud service providers. The scope of national security exceptions under GATT Article XXI and its GATS equivalent has historically been treated as largely self-judging, but recent WTO panel jurisprudence has signaled a willingness to review the good-faith invocation of such exceptions, introducing new legal uncertainty regarding the outer limits of security-justified digital trade restrictions.⁸

⁸ Neha Mishra, Privacy, Cybersecurity, and GATS Article XIV: A New Frontier for Trade and Internet Regulation?, 19 *World Trade Rev.* 1 (2020).

Comparative Regulatory Models

❖ The United States: Market-Oriented Free Flow Approach

US digital trade policy has historically emphasized free cross-border data flow, limited data localization, and strong intermediary liability protections, reflecting a broader policy orientation favoring minimal regulatory friction for digital commerce, though this position has shown signs of recalibration in areas such as national security-driven technology restrictions.

❖ The European Union: Rights-Based Regulatory Approach

The EU has developed a comprehensive regulatory framework — anchored in the General Data Protection Regulation (GDPR), the Digital Services Act, and the Digital Markets Act — that prioritizes data protection, platform accountability, and market contestability, applying extraterritorially to any firm serving EU consumers regardless of establishment location. This model has proven influential internationally, with numerous jurisdictions adopting GDPR-inspired data protection legislation, a phenomenon often described in the literature as the 'Brussels Effect.'⁹

❖ China: State-Directed Digital Sovereignty Approach

China's regulatory model emphasizes data sovereignty and security review, reflected in legislation such as the Cybersecurity Law, Data Security Law, and Personal Information Protection Law, which impose data localization requirements and security assessments for cross-border data transfers, particularly for data classified as important to national security or public interest. This model reflects a broader conception of digital trade governance as inseparable from national security and industrial policy objectives.

❖ Implications of Regulatory Fragmentation

The coexistence of these divergent models creates significant compliance complexity for firms operating across multiple jurisdictions and raises the prospect of an increasingly fragmented 'splinternet' of incompatible digital trade regimes. This

⁹ Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford Univ. Press 2020).

fragmentation has direct legal consequences for trade governance, as regional and bilateral digital trade provisions increasingly reflect and entrench these divergent regulatory philosophies rather than converging toward common multilateral standards.

Toward an Integrative Legal Assessment

Synthesizing the analysis above, this paper characterizes the current state of international digital trade law as one of institutional lag and regulatory fragmentation: multilateral instruments remain incompletely adapted to digital trade realities, plurilateral initiatives offer partial but not universal solutions, and major economies are pursuing increasingly divergent regulatory philosophies embedded in an expanding web of regional and bilateral agreements. This fragmentation generates genuine legal uncertainty for firms and states alike, but also reflects legitimate and differing national policy priorities — around privacy, security, taxation, and industrial policy — that a purely harmonizing multilateral solution may be unable to fully reconcile.

Methodological Considerations for Future Legal Research

- Comparative doctrinal analysis tracking how WTO dispute settlement panels and, where applicable, investor-state arbitral tribunals interpret existing trade law provisions as applied to novel digital trade disputes.
- Empirical trade-flow analysis examining the actual market-access effects of data localization and digital services tax measures, to inform the proportionality analysis increasingly central to trade law's general exceptions jurisprudence.
- Institutional analysis of the JSI negotiating process and its eventual relationship to core WTO multilateral commitments, given unresolved questions about plurilateral agreements' status within the broader WTO legal architecture.
- Interdisciplinary research integrating trade law analysis with international tax law and data protection law scholarship, given the substantial doctrinal overlap and occasional tension among these regimes in digital trade disputes.

Policy and Practical Implications

For trade negotiators, the analysis suggests that durable digital trade governance will likely require accommodating regulatory diversity through carefully calibrated general exceptions rather than pursuing uniform harmonization, given the legitimate divergence in national priorities around data governance. For multinational firms, the current fragmented landscape underscores the importance of jurisdiction-specific compliance strategies rather than a single global digital trade compliance model. For international institutions, the review suggests that resolving the legal status of plurilateral initiatives such as the JSI relative to core WTO obligations is a priority for restoring institutional coherence to multilateral digital trade governance.

Limitations and Future Directions

This paper offers a legal and policy synthesis rather than an empirical assessment of digital trade governance outcomes, and its comparative analysis, while illustrative of major regulatory models, does not exhaustively cover the growing number of national digital trade frameworks. The legal landscape analyzed here is also evolving rapidly — including ongoing WTO JSI negotiations, evolving OECD tax framework implementation, and the emergence of artificial intelligence governance as an adjacent and increasingly intertwined regulatory domain — meaning findings should be understood as a snapshot subject to continued legal development. Future research should examine how AI governance frameworks intersect with and potentially reshape digital trade law, an area of rapidly growing legal significance not fully addressed within this review.

Conclusion

International trade law's engagement with the digital economy remains a work in progress, characterized by incomplete multilateral frameworks, proliferating regional and plurilateral arrangements, and significant unresolved legal questions spanning data governance, taxation, platform regulation, and national security. Rather than converging toward a single global standard, digital trade governance appears to be settling into a period of managed fragmentation, in which legal certainty is pursued through overlapping bilateral and plurilateral instruments rather than comprehensive multilateral consensus. Addressing this fragmentation constructively — while respecting legitimate regulatory diversity — represents one

of the central legal and institutional challenges facing the international trade system in the years ahead.

Bibliography

Susan Ariel Aaronson, Data Is Dangerous: Comparing the Risks that the United States, Canada, and Germany See in Data Troves, CIGI Papers No. 241 (Ctr. for Int'l Governance Innovation, Apr. 2020).

Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford Univ. Press 2020).

Mira Burri, The Governance of Data and Data Flows in Trade Agreements: The Pitfalls of Legal Adaptation, 51 U.C. Davis L. Rev. 65 (2017).

Neha Mishra, Privacy, Cybersecurity, and GATS Article XIV: A New Frontier for Trade and Internet Regulation? 19 World Trade Rev. 1 (2020).

Andrew D. Mitchell & Neha Mishra, Data at the Docks: Modernizing International Trade Law for the Digital Economy, 20 Vand. J. Ent. & Tech. L. 1073 (2018).

OECD/G20 Inclusive Framework on BEPS, Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalization of the Economy (OECD 2021).

General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 U.N.T.S. 183.

WTO, Joint Statement on Electronic Commerce, WT/L/1056 (Jan. 25, 2019).

Declarations:

Author's Contribution:

- **Conceptualization, and intellectual revisions**
- **Data collection, interpretation, and drafting of manuscript**
- The author agrees to take responsibility for every facet of the work, making sure that any concerns about its integrity or veracity are thoroughly examined and addressed

▪ **Conflict of Interest:** NIL

▪ **Funding Sources:** NIL