



Digital Trade

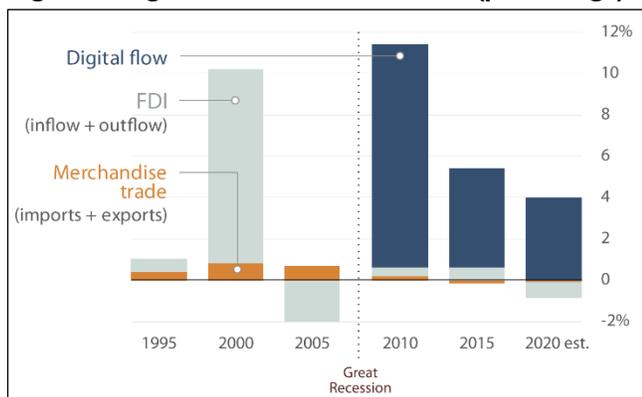
Background

The rapid growth of digital technologies in recent years has facilitated economic activity and created new opportunities for U.S. consumers and businesses. For example, consumers today access e-commerce, social media, telemedicine, and other offerings not imagined 30 years ago. Businesses use advanced technology to reach new markets, track global supply chains, analyze big data, and create new products and services. At the same time, new technologies raise new trade policy issues, including the lack of common disciplines to help govern such trade, the emergence of new trade barriers and broader public policy questions about online information.

Data and data flows form a pillar of innovation and economic growth. Trade in manufactured goods and agricultural products often depends on cross-border data flows. For example, manufacturers may communicate with global customers and suppliers via the internet. Farmers may use real-time satellite data to optimize the productivity of crops and soil. Digitally delivered service exports also rely on cross-border data flows.

In 2017, U.S. exports of information and communication technology (ICT) goods were \$146 billion, and ICT services exports were \$71 billion. In addition, exports of potential digitally enabled services were \$439 billion, comprising over half of U.S. services exports. The volume of global data flows is growing faster than trade or financial flows, and its positive GDP contribution offsets the lower growth rates of trade and foreign direct investment (FDI) (see **Figure 1**).

Figure 1. Digital Effects on World GDP (percentage)



Source: Gary Clyde Hufbauer and Zhiyao Lu, “Can Digital Flows Compensate for Lethargic Trade and Investment?,” Peterson Institute for International Economics, November 28, 2018.

In general, the United States supports an open, interoperable, secure, and reliable internet, including the free flow of online information. However, industry stakeholders raise growing concerns about the rise of digital trade barriers, divergent rules, and national standards

around the globe that could impair U.S. digital sales or undermine U.S. technological leadership.

Selected Digital Trade Issues

Protectionist policies may erect barriers to digital trade, or damage trust in the underlying digital economy, and can result in the fragmentation of the internet or discriminatory trade treatment. As with traditional trade barriers, digital trade constraints can be classified as tariff or nontariff barriers and take many forms (see **Text Box**). What some policymakers see as protectionist, however, others may view as necessary to safeguard certain domestic policy interests. Prominent trade issues include:

Internet Sovereignty. In some nations, the government seeks strict control over digital data within its borders, such as what information people can access online, and how information is shared inside and outside its borders, creating digital trade barriers. For example, firms operating in China experience a variety of barriers, such as censorship (the so-called “Great Firewall”), requirements to use local standards, and national security reviews; Russian laws ban virtual private networks and require providers of encrypted messaging services to potentially share users’ chats.

Localization and Cross-Border Data Flow Limits.

Organizations seek efficiency and market access by freely moving data across national borders or by using cloud services. Regulators seeking to promote security and personal data privacy, or support domestic firms, may impose mandates for local data storage or use of local partners or inputs, raising costs for foreign firms. A 2017 survey by the U.S. International Trade Commission found that data localization was the most-cited policy measure seen to impede digital trade. For example, the European Union’s data protection regulation places limits on the use and cross-border transfer of individuals’ personal data.

Cybertheft or Forced Technology Transfer. Infringement of intellectual property rights (IPR) or lack of IPR enforcement may limit a company’s ability to benefit fully from its innovations and investments, such as trade secrets, proprietary algorithms, or source code. IPR infringement in the digital environment is particularly difficult to quantify but is considered to be significant, potentially exceeding the volume of sales through traditional physical markets or legitimate downloads.

Regulatory Issues. Governments may impose requirements deemed overly burdensome by firms and which increase costs, or that favor local firms. Regulations may be applied, for example, in a discriminatory or overly trade-restrictive manner, creating a trade barrier for foreign firms. For example, India has compulsory registration of all ICT goods imports with the national standards agency.

Digital Trade in Trade Agreements

The United States has sought to combat barriers to digital trade through negotiation of rules and disciplines in free trade agreements (FTAs) and in multilateral fora. Congress established U.S. trade negotiating objectives on digital trade in U.S. Trade Promotion Authority (TPA). The objectives seek to remove barriers to trade in digital goods and services, ensure cross-border data flows, and eliminate and prevent localization measures in future U.S. trade agreements, among other objectives (P.L. 114-26).

World Trade Organization (WTO)

The WTO was established in 1995, before the current reach of the internet and the explosive growth of global data flows. Since then, no comprehensive agreement has been reached on digital trade. Some existing WTO agreements cover aspects of digital trade. To date, WTO members have agreed to a temporary moratorium on customs duties on electronic transmissions, but some countries, such as India, have suggested that duties on digital products could be a future source of government revenue.

The WTO General Agreement on Trade in Services (GATS) contains obligations on nondiscrimination and transparency that cover service sectors and modes of supply to which a member has agreed. Digital trade, data flows, and other trade barriers are not specifically included.

The WTO Information Technology Agreement (ITA) eliminates tariffs on a specific list of ICT goods and was updated in 2015 to include newer technologies that power digital trade, such as multi-component semiconductors. ITA is a plurilateral agreement, including the United States and 53 others. The benefits of the agreement are extended on a most-favored nation (MFN) basis to all WTO members.

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides minimum standards of IPR protection and enforcement, including online, for copyrights and related rights, trademarks, patents, trade secrets, and other forms of IP.

Examples of Barriers to Digital Trade

- High tariffs and/or low *de minimis* threshold
- Discrimination against digital products/services
- Localization requirements (e.g., data or computing facilities)
- Cross-border data flow limitations
- Mandated use of local technology, content, or supplier
- Discriminatory, unique standards or burdensome testing
- Filtering or blocking
- IPR infringement
- Cybertheft of trade secrets
- Requirements for source code disclosure, transfer of technology, or proprietary cryptography information
- Cross-border electronic card payment limitations

WTO E-Commerce Plurilateral. In January 2019, the United States, as part of a group of over 70 WTO members, launched efforts to explore future WTO negotiations on trade barriers related to e-commerce. The U.S. government has emphasized the need for a high-standard agreement that includes enforceable obligations. The negotiating parties continue to discuss the scope of any potential agreement.

U.S. FTA Negotiations

The United States has used FTA negotiations to set new digital trade rules, balancing innovation and an open internet with national security and privacy objectives.

U.S.-South Korea FTA (KORUS). KORUS includes the most robust digital trade provisions in a U.S. FTA currently in force. Its provisions address nondiscrimination of digital products; prohibition of customs duties; transparency; electronic authentication and paperless trading; consumer protection cooperation; and promoting cross-border information flows.

USMCA. Like the WTO, the North American Free Trade Agreement (NAFTA) entered into force when the use of the internet, e-commerce and digital trade were much less prevalent. The renegotiated proposed U.S.-Mexico-Canada Agreement (USMCA) includes provisions on digital trade and the free flow of information in multiple chapters of the agreement, and addresses a wide variety of digital trade barriers. Provisions include prohibitions on customs duties; nondiscrimination commitments; and restrictions on cross-border data flows, localization requirements, forced disclosure of source code or algorithms, technology transfer, or access to proprietary cryptography information. It also contains measures related to electronic signatures, consumer choice, authentication, and combatting IPR theft. Provisions allow for some public policy exceptions.

USMCA would require parties to establish civil and criminal procedures and penalties for trade secret theft, including cybertheft, the establishment of consumer protection laws, and a legal privacy framework to protect personal information that reflects international guidelines. To balance privacy and open data flows, the parties agree to further develop and promote interoperability systems between privacy regimes. The proposed agreement also recognizes risk-based approaches and the need for strengthened cooperation between governments on cybersecurity. Provisions would encourage the use of open government data. Some Members of Congress and Trump Administration officials have suggested that USMCA serves as a baseline for future FTA negotiations.

Issues for Congress

As Congress considers addressing digital trade, it may consider a number of issues, including the following:

- Do the proposed USMCA provisions effectively address U.S. digital trade barriers, and should they be used as a template for future U.S. FTAs?
- How can FTAs be structured to strike the right balance between digital trade liberalization and privacy and broader national security considerations?
- How can the United States use the WTO e-commerce initiative to set international rules and standards for cross-border data flows, or emerging technologies?

For more information, see CRS Report R44565, *Digital Trade and U.S. Trade Policy*, coordinated by Rachel F. Fefer.

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