

The Importance of Cross-Border Data Flows

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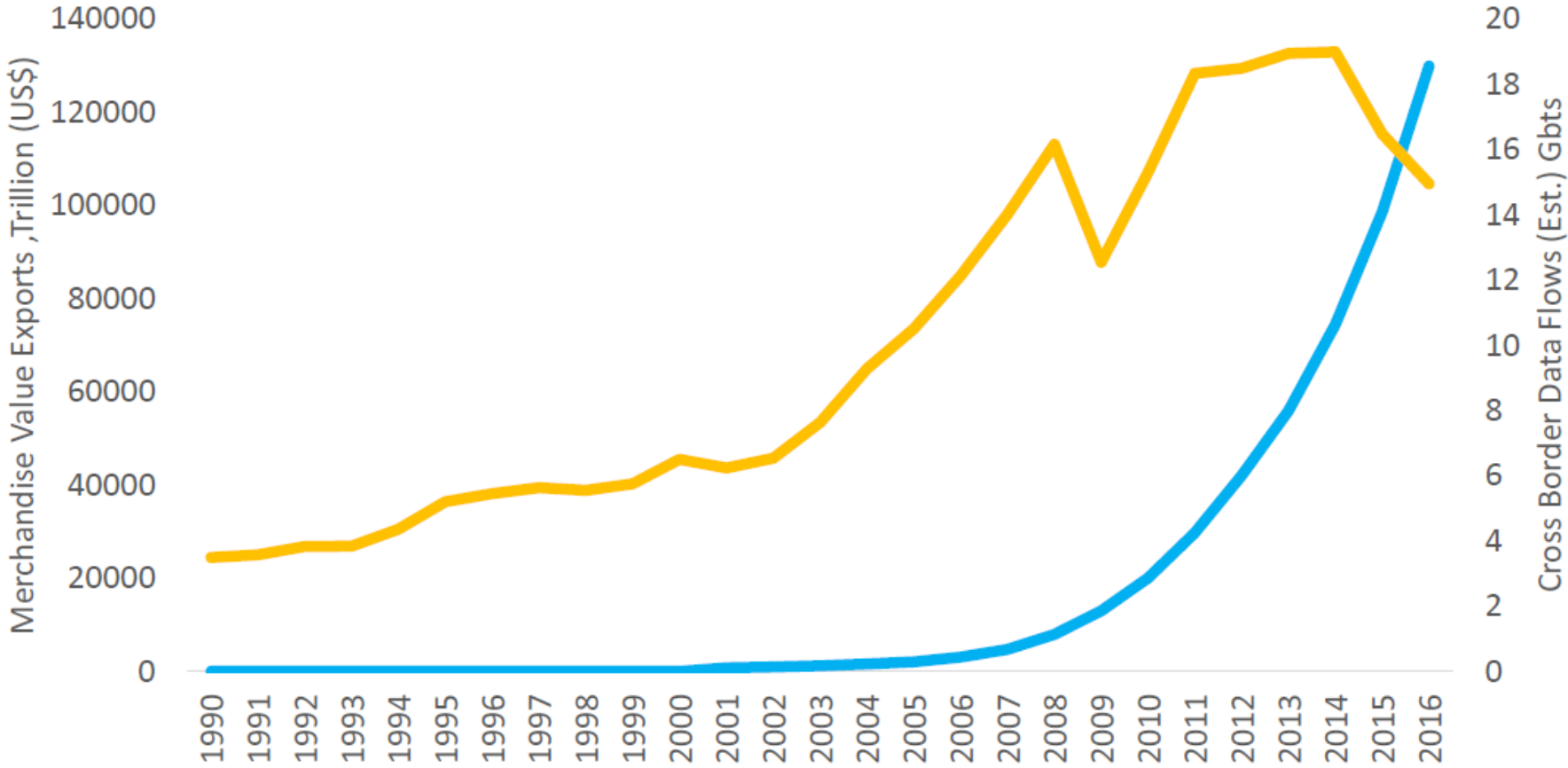
Increasingly Digitalized Global Economy

- Digital economy accounts for 25% of global GDP.
- Half of all value created in the global economy over the next decade will be created digitally.
- Value of cross-border data flows surpassed value of merchandise trade for first time in 2015.



Sources: Accenture, "Digital Disruption: the Growth Multiplier"; McKinsey Global Institute, "Digital globalization: The new era of global flows"

Increasingly Digitalized Global Economy



Source: Victor Mulas, The World Bank

Cross-Border Data Flows Enable Global Commerce

- Virtually every industry relies on data from locations around the world to make operational decisions, gain competitive advantage, and deliver benefits to customers.

Boeing (Airplanes)

- An 8-hour flight from New York to London on an aircraft with two engines can generate 320 terabytes of data.
- This data allows airlines to decrease flight delays, lower costs, and improve safety.



Volvo (Vehicle Manufacturers)

- Volvo Group collects diagnostic data from its customers' cars in over 20 countries and sells in over 190 markets.
- These systems can prevent component failures, find lost or stolen cars, remotely diagnose problems, and improve fuel efficiency.



Trend Will Speed Up With Emerging Technologies

1. Cloud Computing
2. The Internet of Things
3. New Production Systems (e.g., Industry 4.0)
 - Generative Design & 3-D Printing
 - Automation: Robotics & Artificial Intelligence
4. FinTech/Block Chain

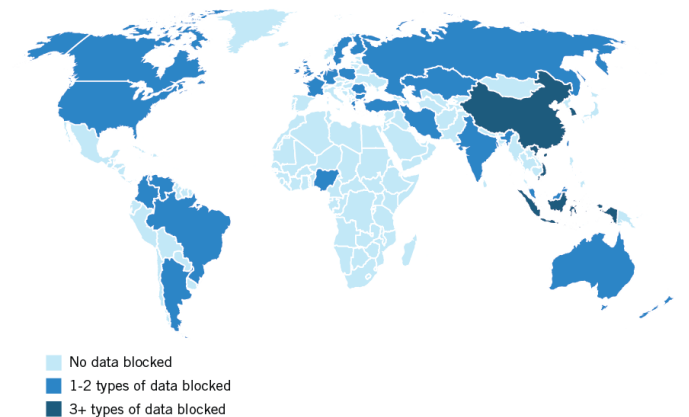


Yet Barriers to Data Flows Are Also Growing

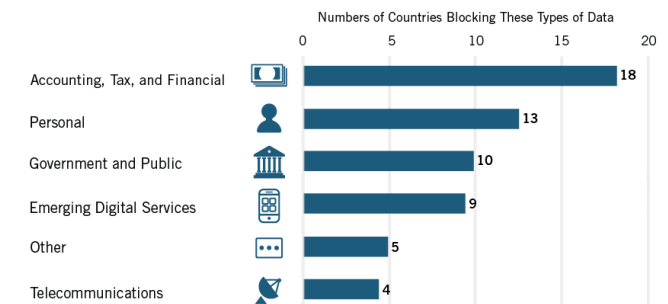
- A growing number of countries are making it more expensive and time consuming (if not illegal) to transfer data overseas.
- Currently: 34 enacted barriers and a range of proposed barriers.

Blocking the Global Flow of Data

Which Countries Block Data Flows?*



What Types of Data Are Blocked?*



*ITIF analysis of formal laws or regulations publicly reported as of April 2017.



Learn more at itif.org/databarriers

Main Motivations for Data Localization

1. Privacy and Cybersecurity
2. Government Access to Data
3. Digital Mercantilism

The Costs of Barriers to Cross-Border Data Flows

The cost of barriers to data flows are **significant**.

- Lost trade and investment opportunities, higher information technology costs, reduced competitiveness, and lower economic productivity and GDP growth.

For example:

- Causes prices for some cloud services in Brazil and the European Union to increase 10.5 to 54 percent.
- Reduces GDP by 0.7 to 1.7 percent in Brazil, China, the European Union, India, Indonesia, Korea, and Vietnam.

Policy Recommendations

- Negotiate trade agreements that prohibit/eliminate digital barriers.
- Pursue a “Data-services agreement” to address digital trade barriers.
- Consider a “Geneva Convention on the Status of Data.”
- Promote international interoperability in privacy and data protection.
- Encourage international organizations, such as the WTO and OECD, to focus on digital trade barriers.

Thank You!

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