

Cross-Border Data Flows

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May 3, 2018

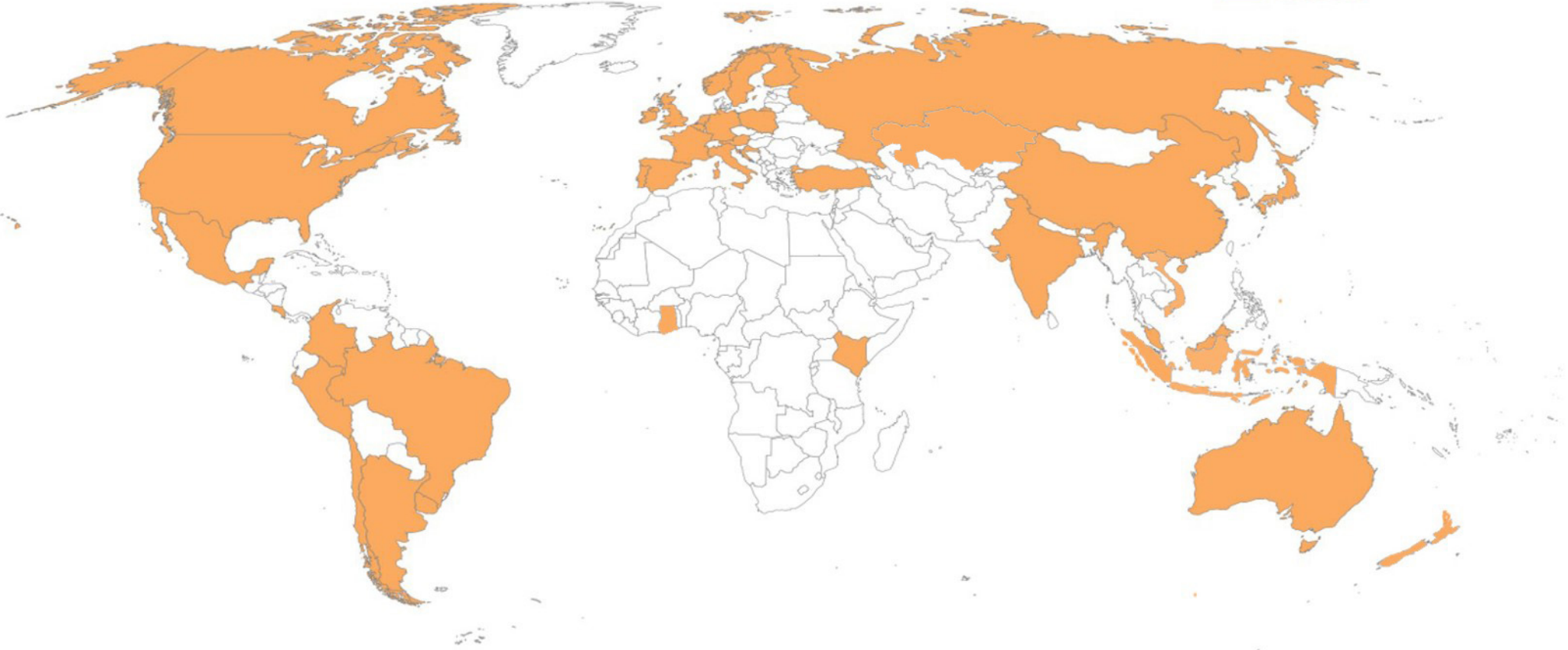
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 - Telecommunications
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Increasingly Digitalized Global Economy

- 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”

Cross-Border Data Flows Enable Commerce & Trade

Virtually every industry—tech and traditional—rely on data flows from locations around the world

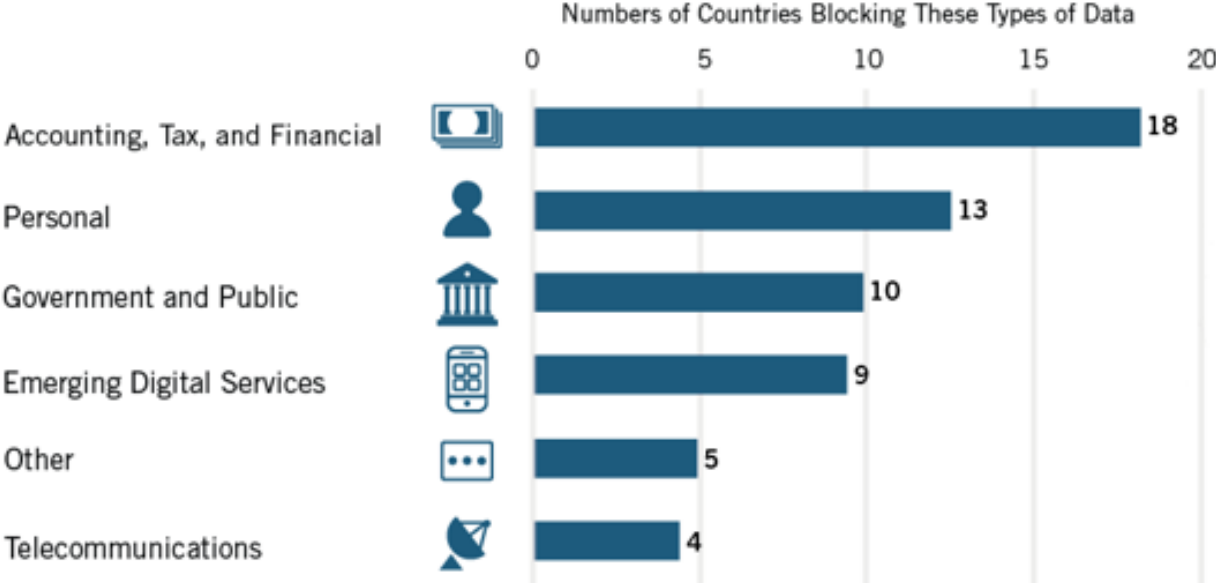
- McKinsey estimates that about 75 percent of the value added by data flows on the Internet accrues to “traditional” industries.
- UNCTAD estimates that about 50 percent of all traded services are enabled by the technology sector, including by cross-border data flows.

Trend Will Speed Up With Emerging Technologies

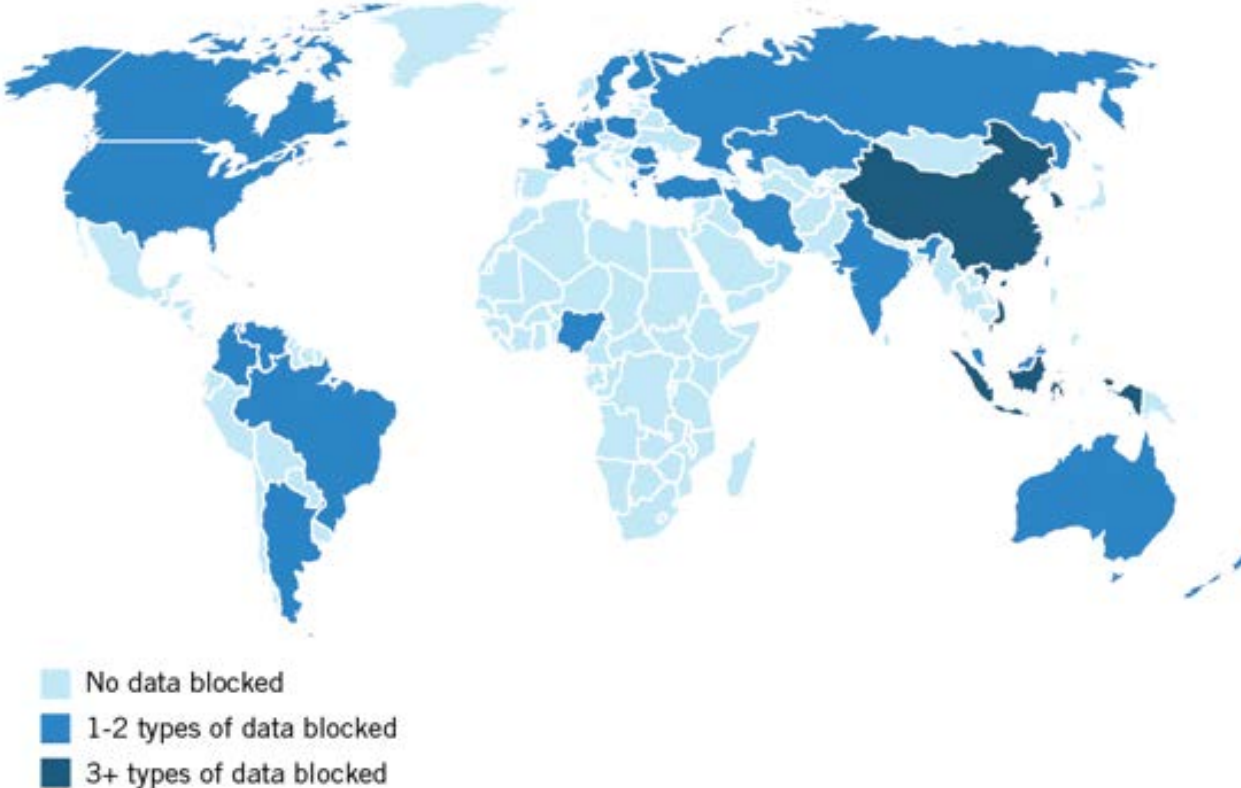
1. Cloud Computing
2. Internet of Things
3. New Production Systems (e.g., Industry 4.0)
 - Generative Design & 3-D Printing
 - Automation: Robotics & Artificial Intelligence
4. FinTech/Block Chain

But Barriers To Data Flows Are Also Growing

What Types of Data Are Blocked?*



Which Countries Block Data Flows?*



Popular Target: Financial, Accounting, and Tax Data

- Some restrictions due to outdated pre-Internet laws/regulations

Requirements for tax/accounting documents to be stored at the firm's office
(Belgium and Finland)

- Others restrictions new, due to prudential, regulatory, and cybersecurity concerns

Sweden – requires “immediate” access to data, interpreted as physical access to servers.

New Zealand – requires firms to store business records in local data centers.

Luxemburg – financial firms required to process data in country.

Brazil – considering data localization for financial data due to cybersecurity concerns.

Data Localization is a Much Broader Issue: China

- World leader in its use of data localization
- Long limited data imports through “Great Firewall of China.”
 - 2006 – e-banking data
 - 2011 – personal financial data
 - 2013 – personal credit data
 - 2014 – health and medical data
 - 2015 – (proposed) insurance data
 - 2016 – online publishing (apps, audio and video platforms, online gaming)
 - 2016 – Counter-terrorism (broad requirements)
 - 2016 – Cybersecurity law (broad requirements)
 - 2016 – Cloud computing restrictions
 - 2017 – Personal and Important Data (broad requirements)

Main Motivations for Data Localization

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

Motivations: Privacy and Cybersecurity

- Many policymakers reflexively and mistakenly believe that data is more private and secure when it is stored within a country's borders. Results in explicit and implicit localization.
- Misguided Privacy Concerns:
 - Legal Nexus: companies doing business in a nation have “legal nexus,” which puts the company in that country's jurisdiction.

Companies cannot escape a nation's laws by transferring data overseas.

Key Point: Cybersecurity: Geography ≠ Security

- Confidentiality of data does not generally depend on which country the information is stored in, only on the measures used to store it securely.
 - Secure server in Colombia, same as a secure server in Brazil.
- **What is important:** company is dedicated to using the most advanced cybersecurity protection methods.

Motivation: Digital Mercantilism

- Some countries believe data localization offers a quick way to force high-tech economic activity to take place within their borders.
- Misguided and self-defeating.
 - Data centers don't create many jobs, especially as they become more automated.
 - Increases the cost for all IT service users.

Motivation: Government Access to Data

- Governments want access to data.
- Need to Differentiate.
 - Authoritarian countries want access for political/social purposes, such as China and Russia.
 - Other countries want a legal process to facilitate legitimate requests to access data for law enforcement and national security purpose.
- Focus should be on facilitating this access:
 - Improving MLAT process and other legal mechanisms to exchange data.

The Costs of Barriers to Cross-Border Data Flows

- Firm Competitiveness
 - Companies pay more for data-related services and compliance services.
- Economic Productivity
 - Ripples throughout an economy: barriers affect data processing and Internet services—or any service that depends on data.
- Innovation
 - Makes it harder and more expensive for companies to gain exposure and to benefit from the ideas, research, technologies, and best practices that accompany data flows and the innovative new goods and services that rely on data.

Estimating the Cost of Barriers to Data Flows

- USITC: removing foreign digital trade barriers would increase U.S. GDP by \$16.7 to \$41.4 billion (0.1 to 0.3%).
- Leviathan Security Group: data localization in Brazil and the EU would increase cloud computing costs by up to 62.5%.
- CIGI and Gotham House: reduced GDP by 0.10% in Brazil, 0.55% in China, and 0.48% in the EU.
- ECIPE: full data localization reduces GDP by 0.8% in Brazil, 1.1% in China, Korea, and the EU, 0.8% in India, 0.7% in Indonesia, and 1.7% in Vietnam.

Recommendations

- Countries need to:
 - Do more to prohibit and roll back these barriers to data flows
 - Develop alternative mechanisms which address legitimate public policy issues raised by cross-border data flows.

Improved MLAT process.

New mechanisms between regulatory agencies to share data in response to legitimate requests (privacy, financial, and other).

New trade rules that prohibit barriers to data flows.

Further Reading: ITIF Reports on Cross-Border Data Flows

- Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?
- Cross-Border Data Flows Enable Growth in All Industries
- The False Promise of Data Nationalism
- Financial Data Does Not Need or Deserve Special Treatment in the TPP

Thank You!

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