

How Barriers to Cross-Border Data Flows Are Spreading Globally, What They Cost, and How to Address Them

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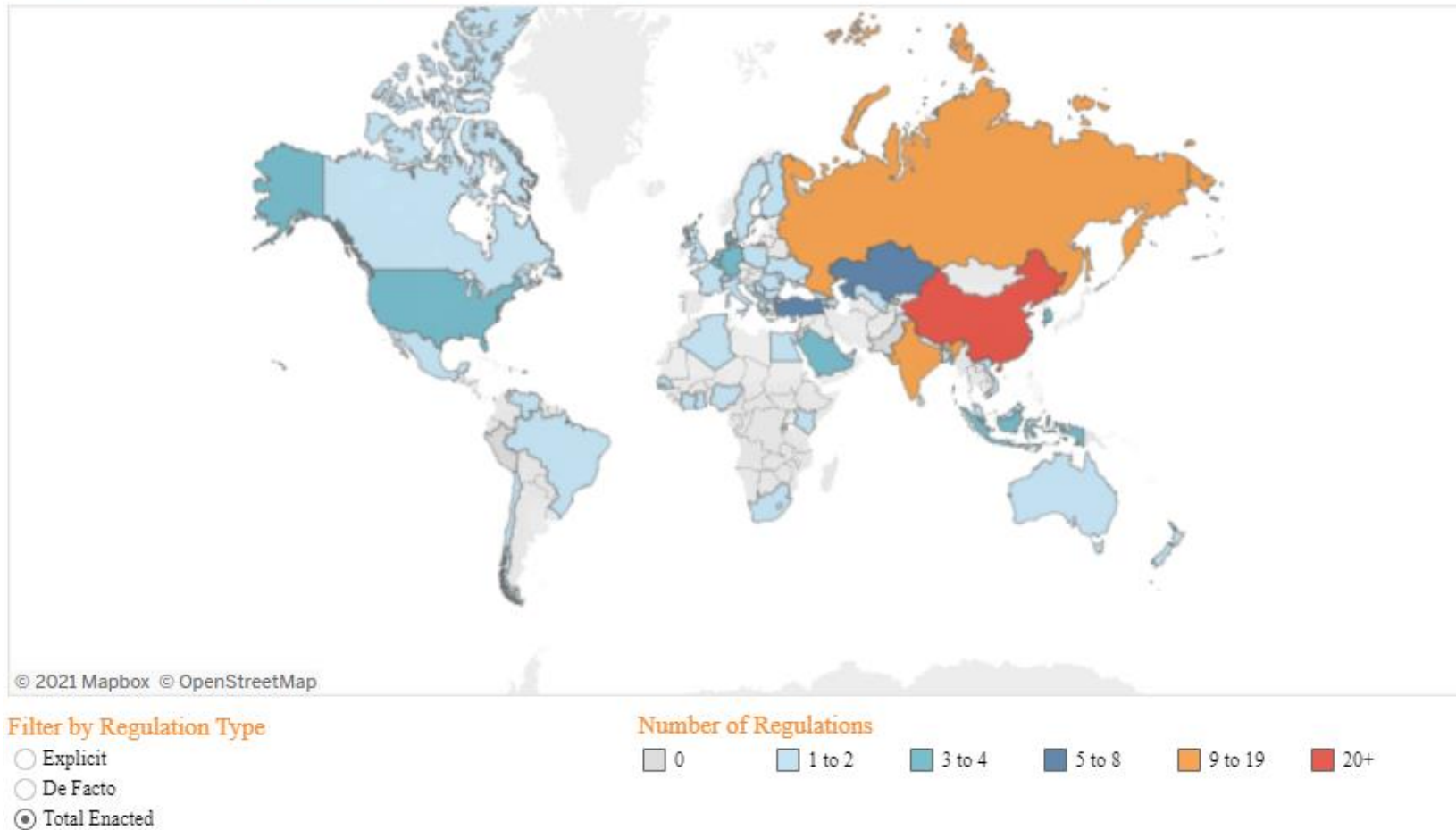
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What's At Stake: Key Driver of Productivity/Innovation

- Data is a key input in the modern global economy.
- Competitiveness and productivity: Increasingly depends on how firms leverage data and digital tools.
- Businesses use data to create value, and many can only maximize that value when data can flow freely across borders.
- Value of data comes from how it's used—not where it's stored.

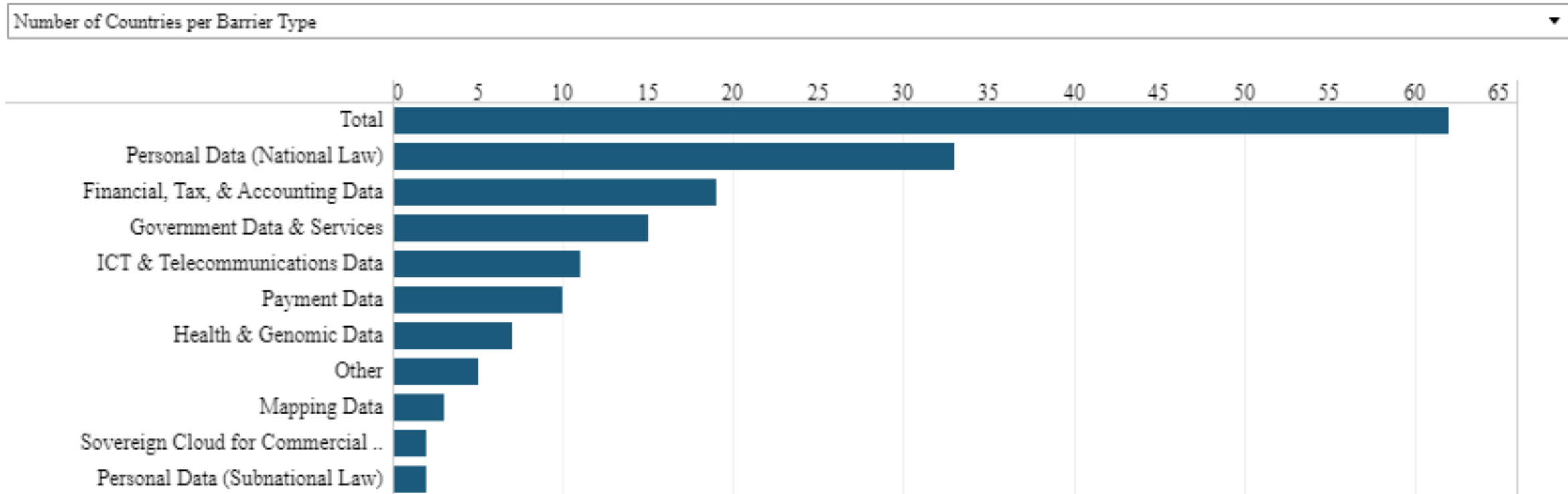
2021: Data Localization Spreads to More Countries

National Data Regulations by Type and Status



2021: Data Localization Spreads to More Types of Data

Number of Barriers by Data Type*



*Altogether, there were 144 data-localization measures in force around the world as of July 2021. Some of these enacted policies affect more than one type of data, so the total count of barriers by data type is greater than the sum of the enacted barriers.

Evolving Motivations for Data Localization

1. Misguided data privacy, protection, and cybersecurity concerns.
2. “Data sovereignty” subsumes digital protectionism.
3. Law enforcement and regulatory concerns over access to data.
4. Data localization as a cudgel for censorship and surveillance.
5. In reaction/preparation for hypothetical geopolitical risks, such as sanctions.

Data Restrictiveness Impacts Prices, Trade, and Productivity

- Uses a composite index—the data restrictiveness linkage (DRL).
- Examines impact on total factor productivity (TFP), value-added price indices (PVA), and gross output volumes (GOVs).
- Data/Model limitations:
 - Provides an indicative estimate.
 - Core components built on data from 28 OECD countries
 - But these are representative and can be applied to economic data in China, Indonesia, Russia, and South Africa.

General Results: Data Restrictiveness Is Costly

- Over five years, a one-unit increase in a country's data restrictiveness index results in an estimated:
 - 7% decrease in volume of gross output traded;
 - 1.5% increase in prices of goods and services among downstream industries; and
 - 2.9% decrease in economy-wide productivity.

Specific Results: China, Indonesia, Russia, & South Africa

Country	2013 DRI	2013 DRI Ranking	2018 DRI	2018 DRI Ranking	DRI Difference	Total Cumulative Change in Gross Output Volume (2013–2018)	Total Percent Change in Productivity (2013–2018)	Total Percent Change in Prices (2013–2018)
China	3.88	1st	4.13	1st	0.25	-1.7%	-0.7%	0.4%
Indonesia	2.03	19th	3.14	4th	1.11	-7.8%	-3.2%	1.6%
Russia	1.38	39th	2.08	12th	0.70	-4.9%	-2.0%	1.0%
South Africa	2.17	16th	3.47	2nd	1.30	-9.1%	-3.7%	1.9%

Note: DRI rankings are based out of 46 countries maintained in both 2013 and 2018 within the OECD “Indicators of PMR” database. As a result, this ranking excludes notable countries such as India and Argentina. Source: Authors.

Key Pillars to an Open & Rules-Based Global Digital Economy

- Build Interoperability Into Global Data & Digital Economy Governance
- Pursue New Digital Trade/Economy Agreements (DEA & DEPA).
 - Work with Australia, Chile, New Zealand, & Singapore.
- Use APEC's Cross-Border Privacy Rules to Build a Global Privacy Model.
- Build a Framework for Government Access to Data.
 - G7/OECD process is a tightrope process to a critical outcome.



Sectoral Pillars: Build Health & Financial Data Governance

- Support Data-Driven Health Research via Interoperability Frameworks.
 - Create clear rules to facilitate the reasonable, responsible, & ethical cross-border sharing of health and genomic data.
- Support Financial Regulatory Oversight and Data Flow: Focus on Access, Not Location.

Global Law & Order: The Law Enforcement Pillar

- Improve Mechanisms to Help Law Enforcement Make Cross-Border Requests for Data.
 - Existing legal processes & treaties are out of date, needlessly complex, and often delayed due to poorly resourced local agencies.
 - Sign on: Budapest Convention on Cybercrime.
 - Prepare for/propose: CLOUD Act executive agreements.



Conclusion: At a Critical Crossroads

- Progress will depend on small group of proactive/ambitious countries.
- Digital protectionists & scofflaws (China & Russia) build a bad model.
- Ultimate success/failure of efforts will depend on “swing states.”
 - Whether global digital economy remains open, integrated, and innovative
 - or
 - Closed, fragmented, and based on state control.

Thank You!

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