



OPPORTUNITIES AND CHALLENGES FOR TRADE IN THE DIGITAL ERA

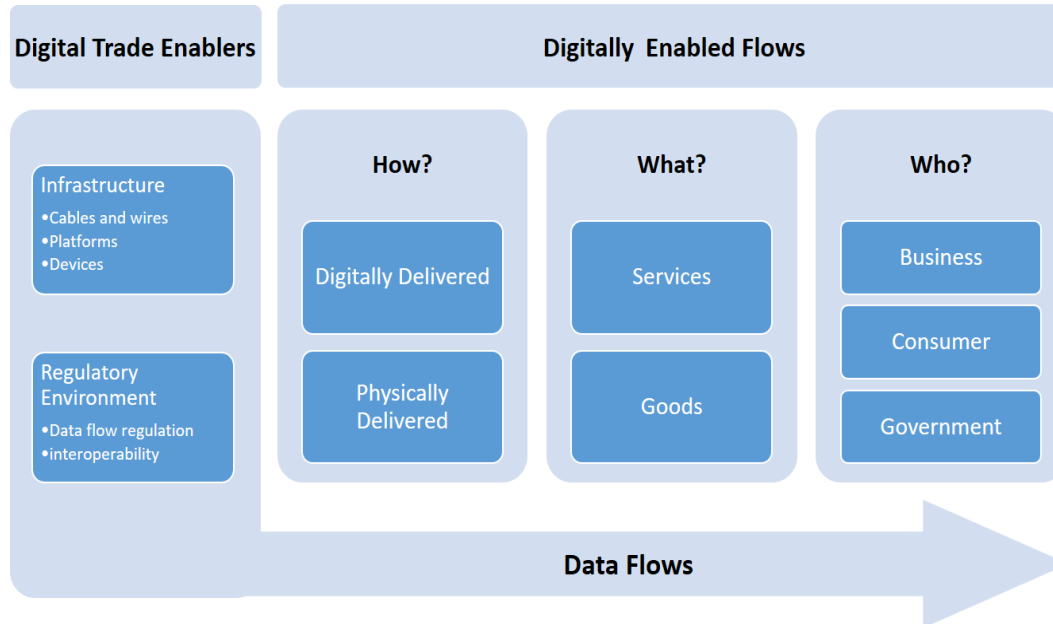
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Digital trade is different

- Reductions in the cost of sharing information are leading to unprecedented changes in *what* and *how* we trade (although not why we trade).
- This means:
 - More traditional trade (lower trade costs).
 - More digitally ordered parcels crossing borders → helping SMEs and individuals be more directly connected to importing and exporting activities.
 - More digitally delivered trade → including new services (e.g. intermediation or cloud computing services) and smaller value services (Apps) often delivered through new tech (platforms).
 - More bundled or 'smart' products → combining the characteristics of goods and services and constantly connected (smart speakers, IoT).
- This implies that more and more data is supporting international trade and crossing international borders, raising a range of new issues

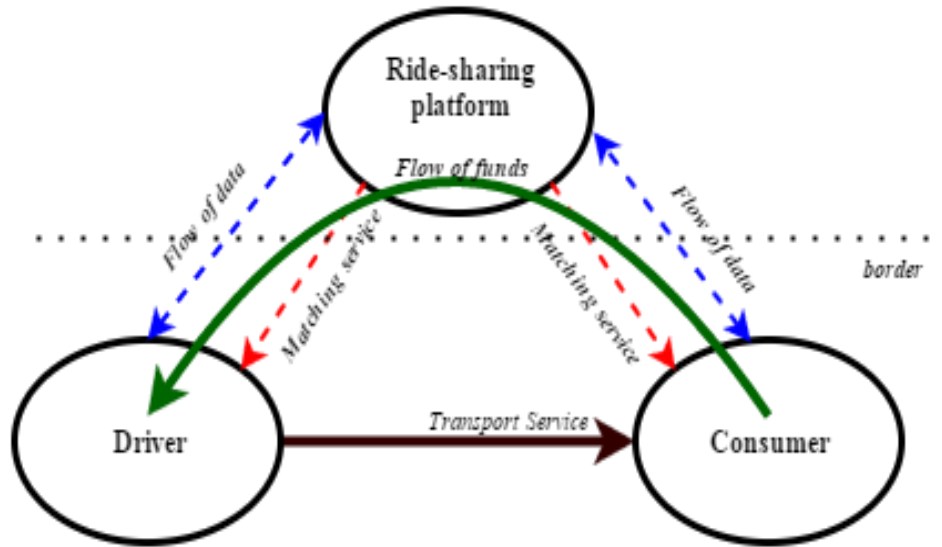
Useful to identify different elements of digital trade



Data at the core of digital trade:

- Means of production
- Asset that can be traded
- Means through which services are traded
- Means through which production and GVCs are organised
- Enabler for implementation of trade facilitation

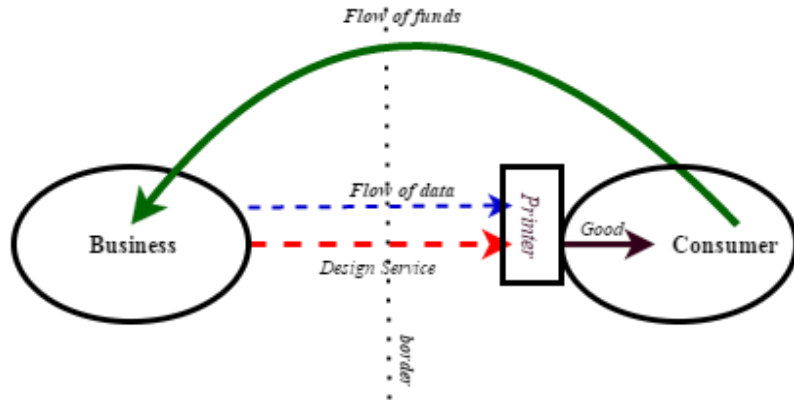
» Useful to unpack transactions to identify emerging **trade policy** challenges



- More (visible) transactions
- Movement of data underpins all transactions
- Type of service provided across border might be unclear

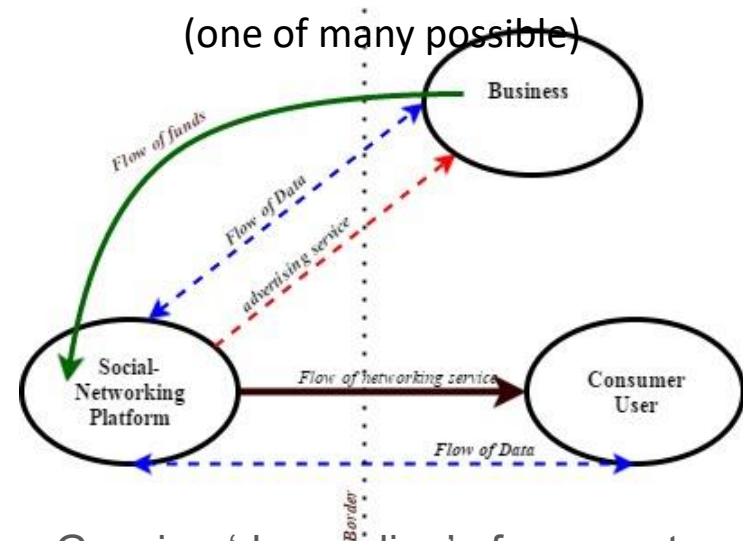
Useful to unpack transactions to identify emerging trade policy challenges

Hypothetical 3D printing transaction (one of many possible)



- Is it a good? Is it a service?
- What border does it cross?

Hypothetical Social networking transaction (one of many possible)

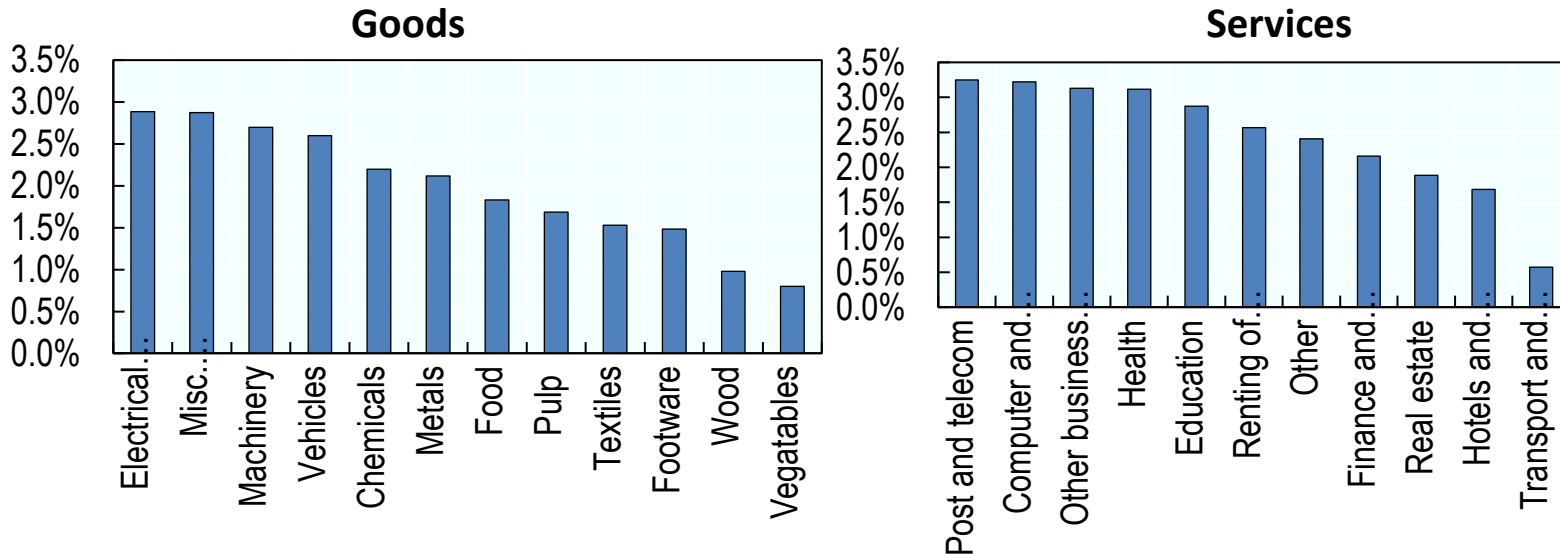


- Growing 'decoupling' of payment (multi-sided markets)



OPPORTUNITIES FOR TRADE IN THE DIGITAL ERA

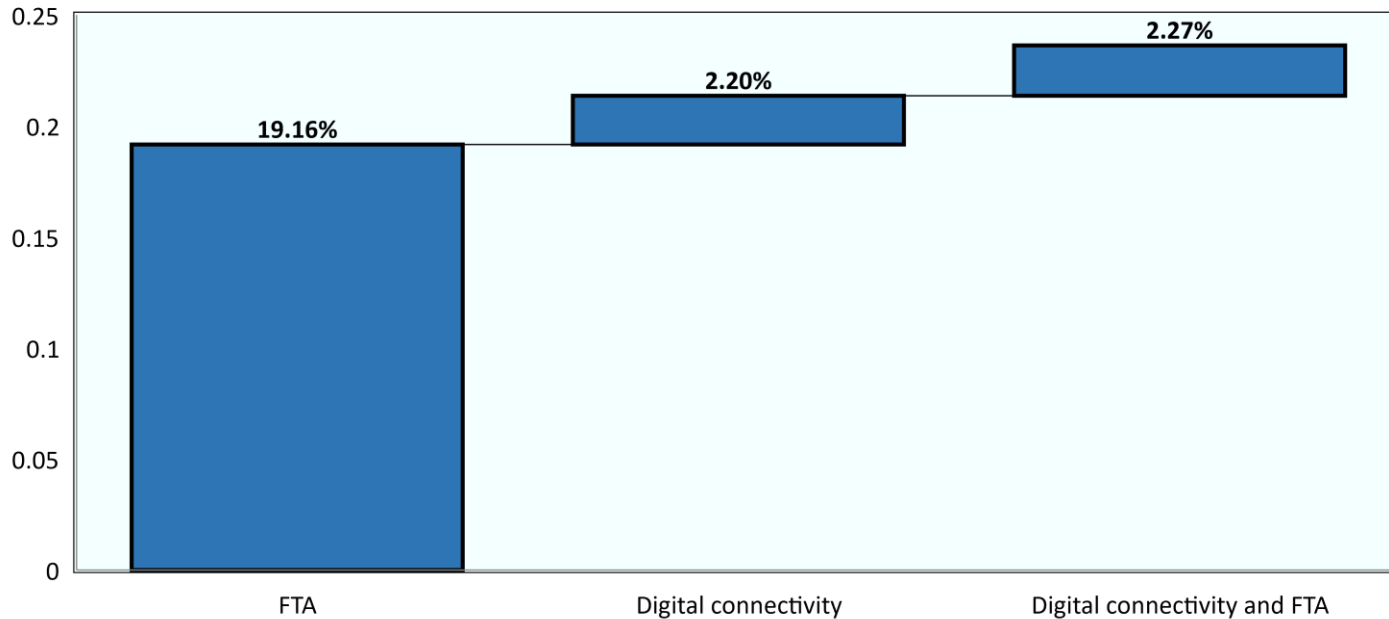
1. Digitalisation not just about ICT sectors: it means more trade in goods, services and parcels



Source: Lopez-Gonzalez and Ferencz (2018)

- A 10% increase in bilateral digital connectivity is associated with a 4% increase in **parcel trade** (Lopez-Gonzalez and Sorescu, 2021)

2. Digitalisation allows you to reap more benefits from trade agreements



Source: Lopez-Gonzalez and Ferencz (2018)

3. Digitalisation gives rise to new relationships between goods and services

- We know that services are critical for goods trade (logistics etc).
- But new evidence points to the importance of **goods for digitally delivered services** (smart products) and on the complementary role of **3D printing** and trade

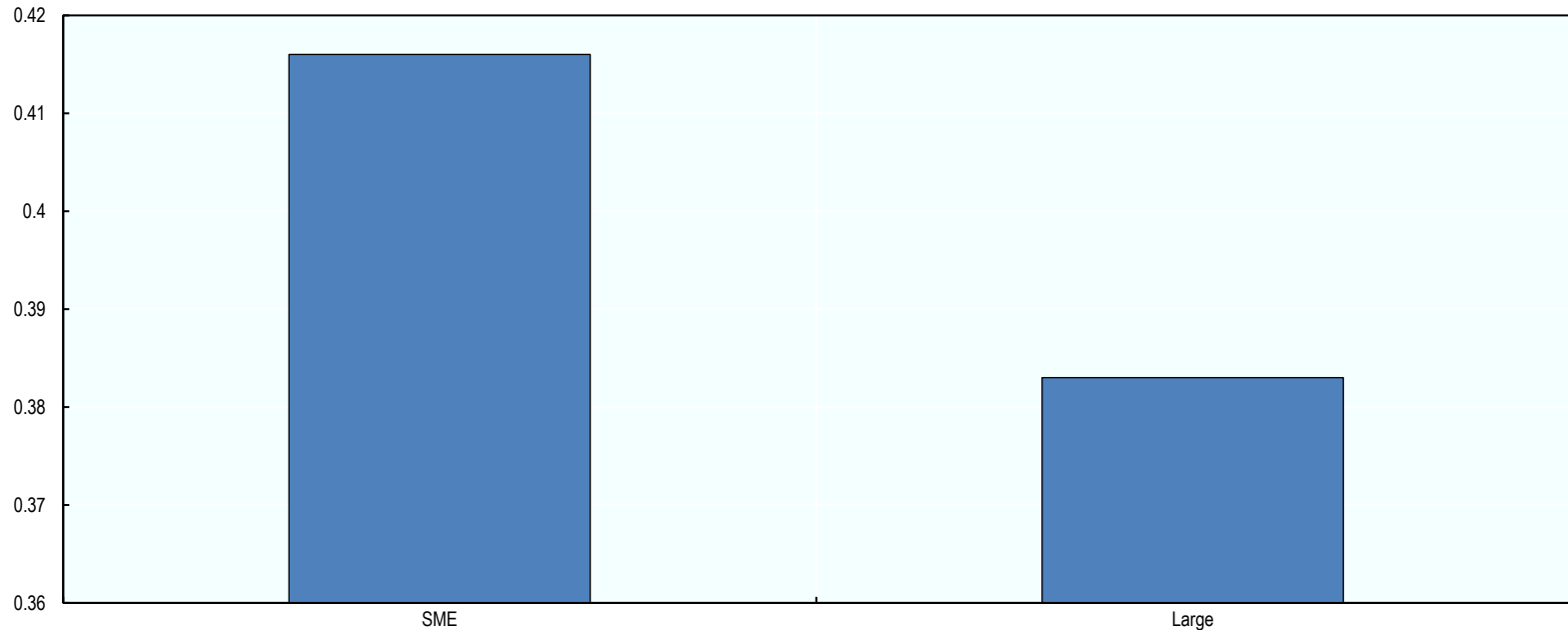
ICT goods matter for digitally deliverable services exports

	All Services	Digitally Deliverable Services
Log of combined GDP	+	+
Log of distance	-	-
Contiguity	+	+
Former Colony	+	+
Common language	+	+
Free trade agreement	+	-
Minimum internet use	+	+
Minimum internet use * ICT good imports		+
FE: reporter-product-year	YES	YES
FE: partner-product-year	YES	YES
N	353,926	95,456
Adj R-sq	0.788	0.739

Imports of 3D printers are associated with exports of 3D printable goods (preliminary results)

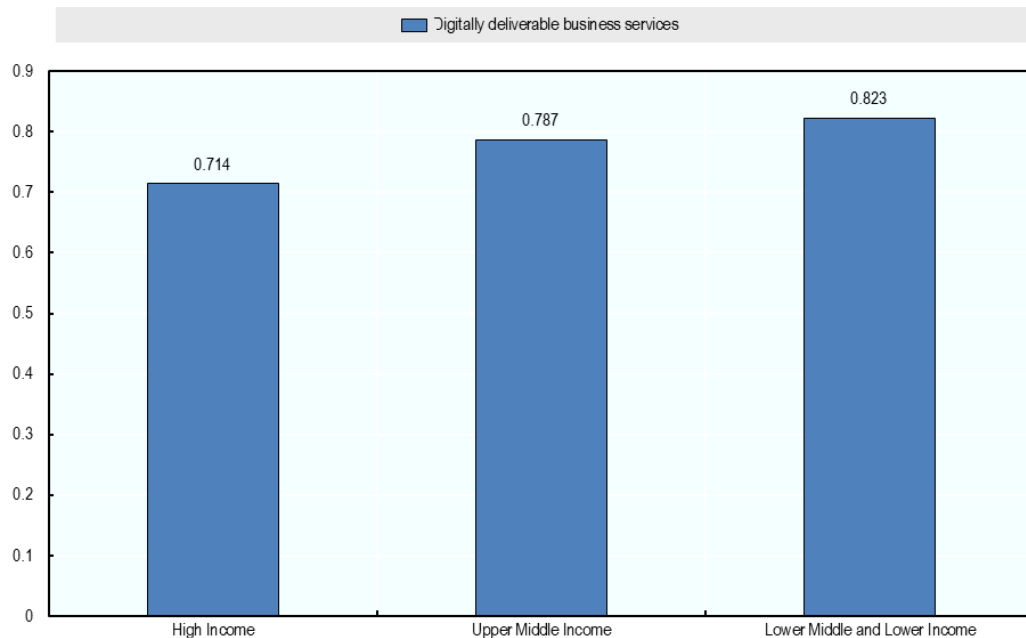
	2002-2018	2002-2009	2010-2018
Dependent variable:	3D printable exports	3D printable exports	3D printable exports
3D printable exports (N-1)	0.661*** (0.0803)	0.771*** (0.0657)	0.647*** (0.0902)
3D printable exports (N-2)	0.0939 (0.115)	0.103 (0.0793)	0.238 (0.145)
Proxy for 3D printer imports	0.00638 (0.00674)	-0.0111 (0.00729)	0.0224** (0.00873)
Total imports	0.281* (0.162)	0.173* (0.0879)	0.100 (0.0789)
GDP per capita	0.0382 (0.0420)	0.0402 (0.0376)	-0.000965 (0.0302)
R&D expenditure	0.0917 (0.0563)	0.0109 (0.0426)	0.0622 (0.0396)
Inward FDI	0.000662 (0.000557)	0.000632 (0.000532)	0.000783 (0.000727)
Observations	1284	519	765
No. of instruments	37	42	74
No. of groups	129	113	124
AR1 (p-value)	0.00265	0.0278	0.0375
AR2 (p-value)	0.726	0.631	0.405
Hansen-J (p-value)	0.339	0.00408	0.253

4. Digital technologies increase export propensities of firms in developing countries



Andrenelli and Lopez-Gonzalez (2019) "Electronic transmissions and international trade – shedding new light on the moratorium debate", OECD Trade Policy Papers, No. 233, OECD Publishing, Paris. <http://dx.doi.org/10.1787/57b50a4b-en>

5. Digital service inputs help drive domestic value added in exports, especially in developing countries



Andrenelli and Lopez-Gonzalez (2019) "Electronic transmissions and international trade – shedding new light on the moratorium debate", OECD Trade Policy Papers, No. 233, OECD Publishing, Paris. <http://dx.doi.org/10.1787/57b50a4b-en>

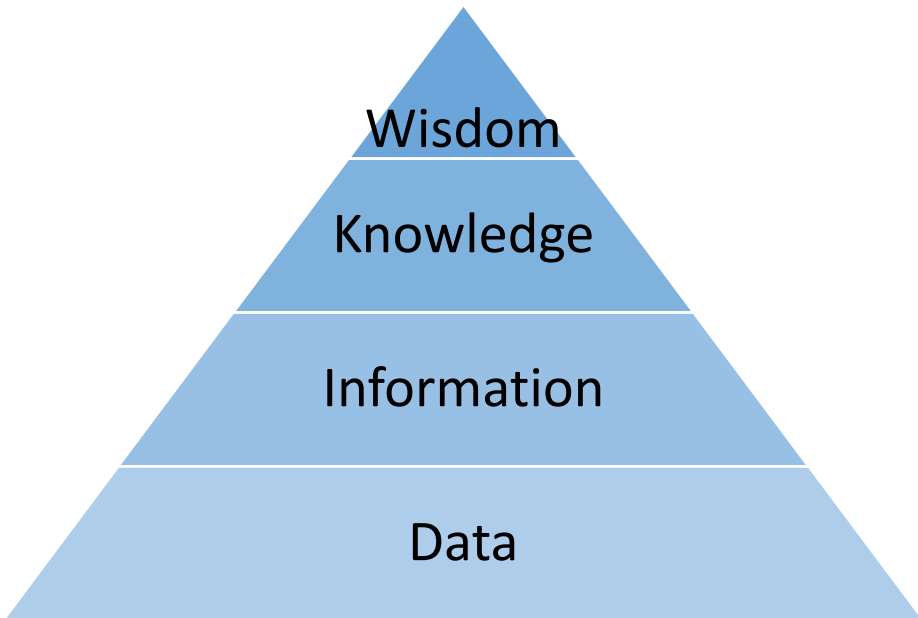


CHALLENGES: CROSS-BORDER DATA FLOWS

Data flows underpin modern day economic and social interactions

- Today's digitised and globally interconnected world is underpinned by the movement of data across borders.
- They
 - Enable the **coordination of production along Global Value Chains**;
 - allow firms, including smaller ones, to **access global markets**; and
 - Change **how goods and services are produced** and delivered.
- This means that today, it is increasingly difficult for an international trade transactions to take place without a cross-border data transfer for some sort.

» But data is different, there are significant benefits from enhancing its use and re-use

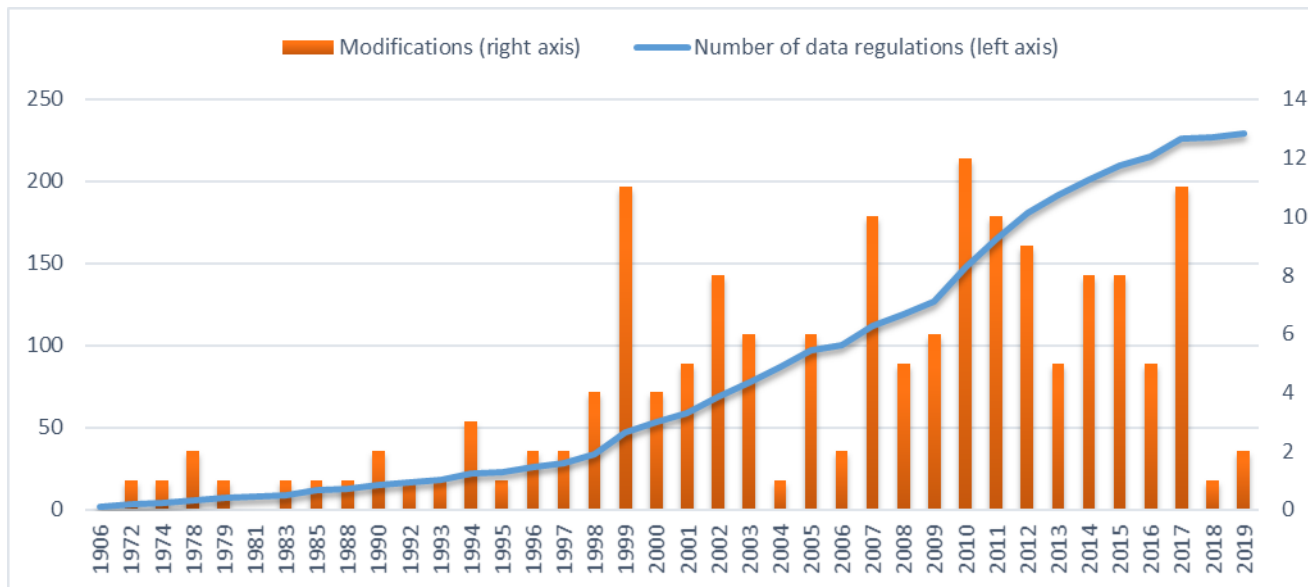


- How bits and bytes translate into dollars and cents is not easy to establish
- **Data is different** (valued at use, not volume, not scarce, can be copied and shared at virtually no cost').



- **There are considerable increasing returns to scale and scope from sharing data, including across borders**

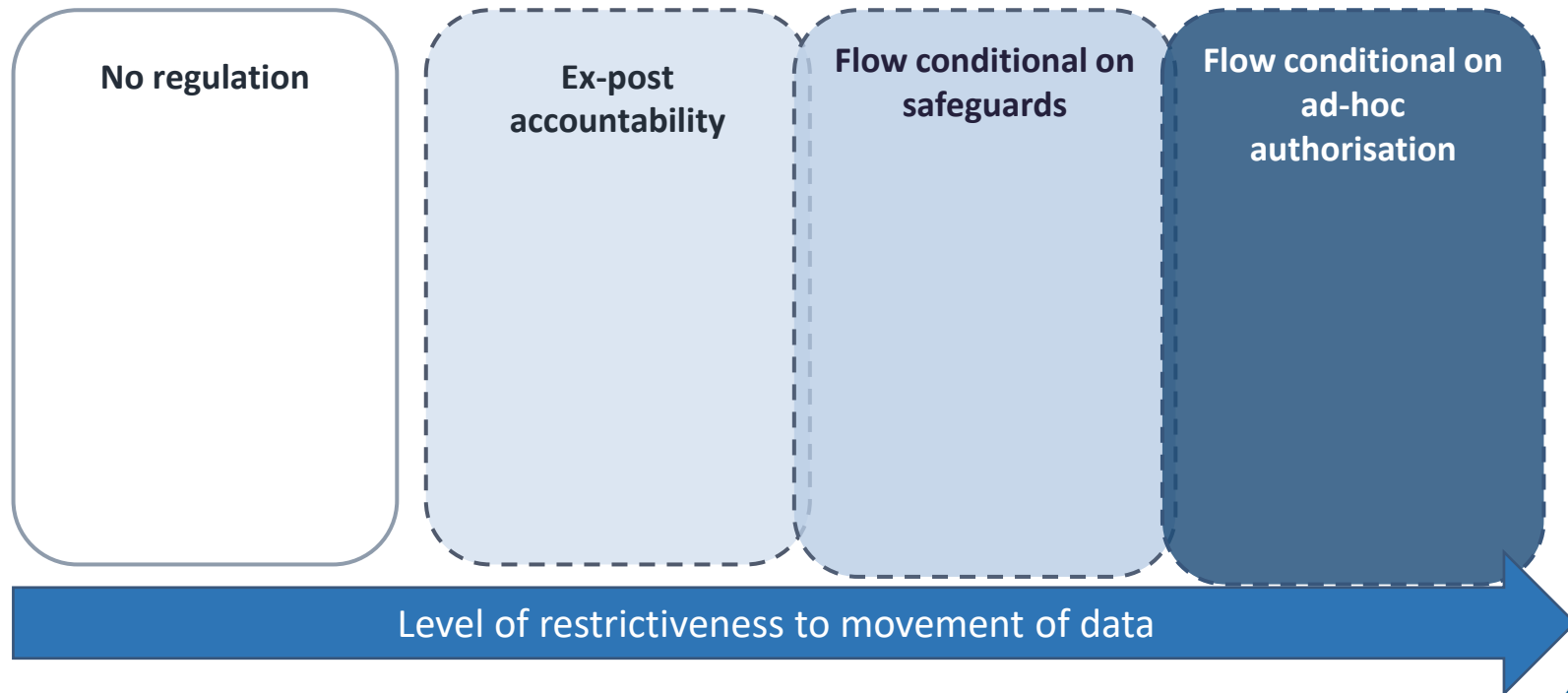
However, the pervasive exchange of data has fuelled concerns about use and misuse of data leading to new data policies...



» Why regulate data?

- Data regulation can apply to **different types of data** or sectors, reflecting **a number of objectives**:
 - Much of the debate involves movement of *personal data* raising concerns about **privacy**.
 - Some aimed at meeting **regulatory objectives** (access for audit purposes) and involve sector-specific data.
 - Others relate to **national security**, protection of information deemed *sensitive*.
 - Others still aim to develop domestic capacity in digitally intensive sectors, a kind of **digital industrial policy**.
- To better understand emerging landscape, useful to provide an overview of different regulations that affect data.

4 broad approaches to cross-border data flows



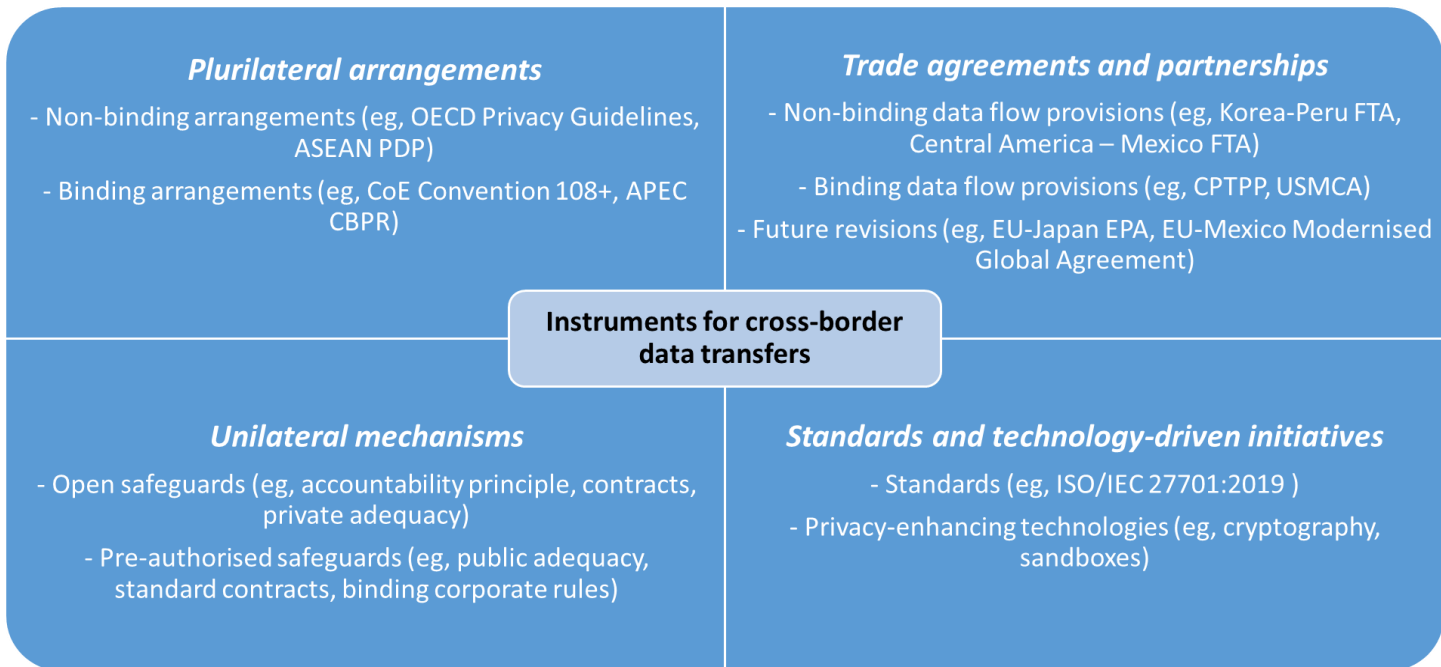
Source: Casalini and Lopez-Gonzalez (2019)



Emerging patchwork of regulation is creating challenges

- Although there are legitimate reasons for diversity in regulation, **the landscape that underpins cross-border data flows is becoming increasingly complex.**
- For governments and individuals there is growing uncertainties related to the applicable rules in any given situation.
- For firms challenges relate to ability to internationalise (more difficult and costly to operate across different markets, affecting SMEs more), but also more difficult to know what level of data protection to afford to consumers in different markets (so also compromises data protection).

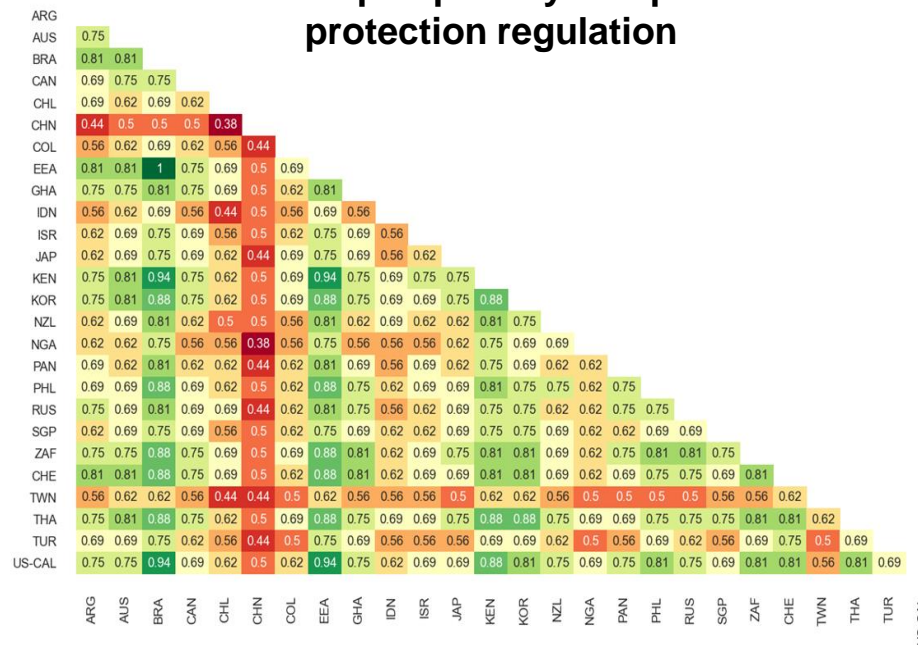
» Governments have turned to different instruments to enable data flows with trust



» Making progress on this issue can be difficult, but countries can build on emerging commonalities

- There is **no single mechanism** to enable the free flow of data with “trust”. Governments pursue different, or even multiple and complementary, approaches.
- However, a number of **Commonalities** are found between instruments (dual goal of safeguarding data and enabling its flow) and within (principles in privacy protection).
- There is also evidence of growing **convergence** (language in trade agreements) and **complementarities** (between different instruments).

Bilateral overlap in privacy and personal data protection regulation





CHALLENGES: MEASURING THE REGULATORY ENVIRONMENT FOR DIGITAL TRADE

What are the OECD STRI and Digital STRI?

Regulatory
database

Access the Data

COUNTRY 

all

SECTOR 

all

STRI MEASURE 

all

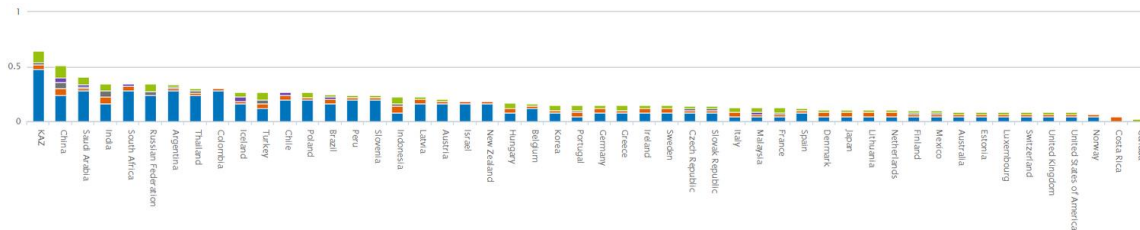
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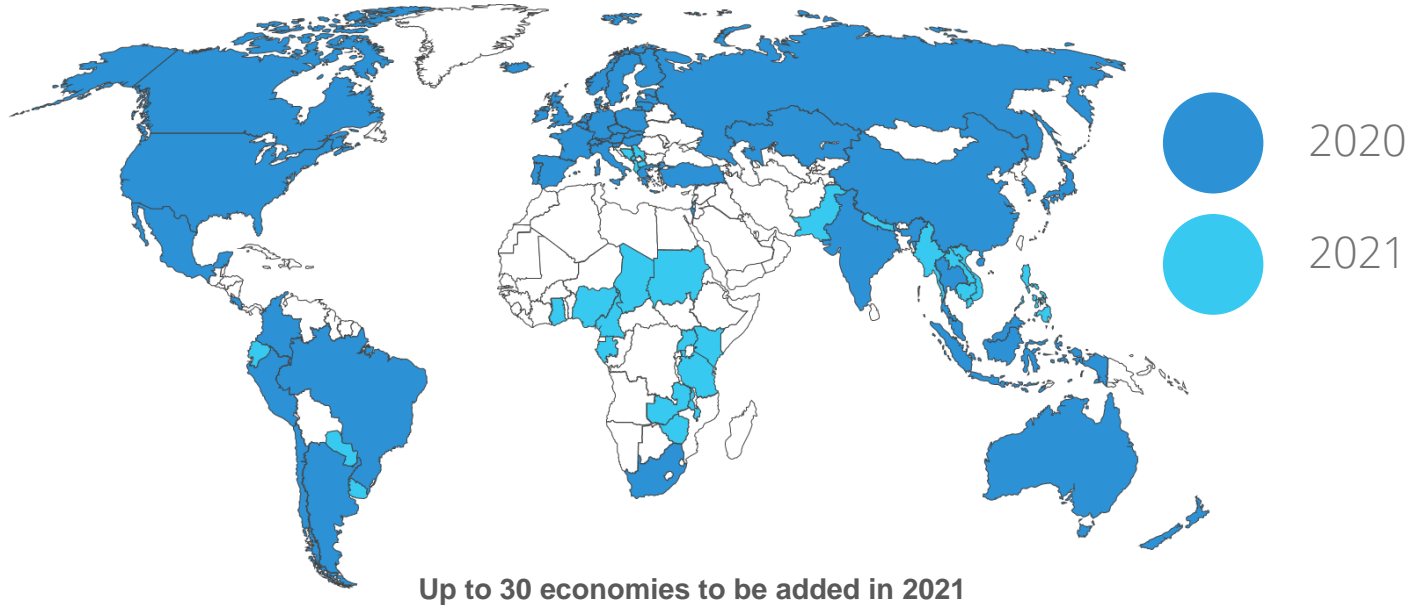
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Indices

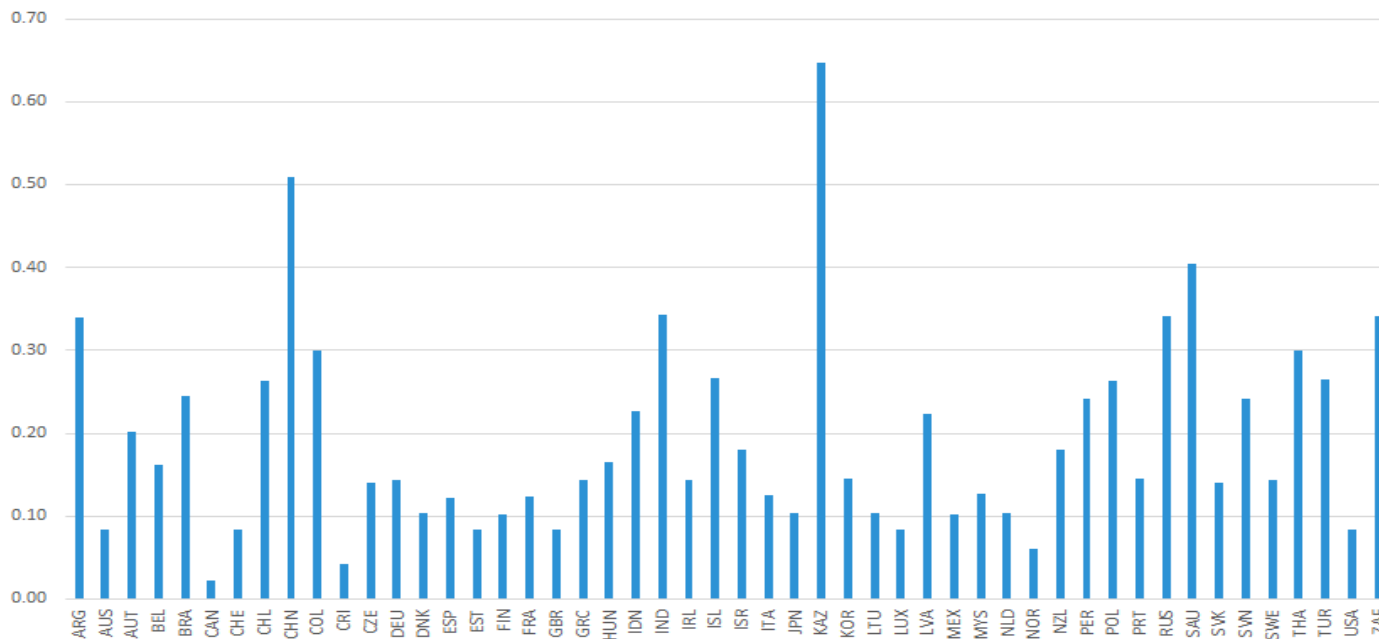




Country coverage in the OECD Digital STRI

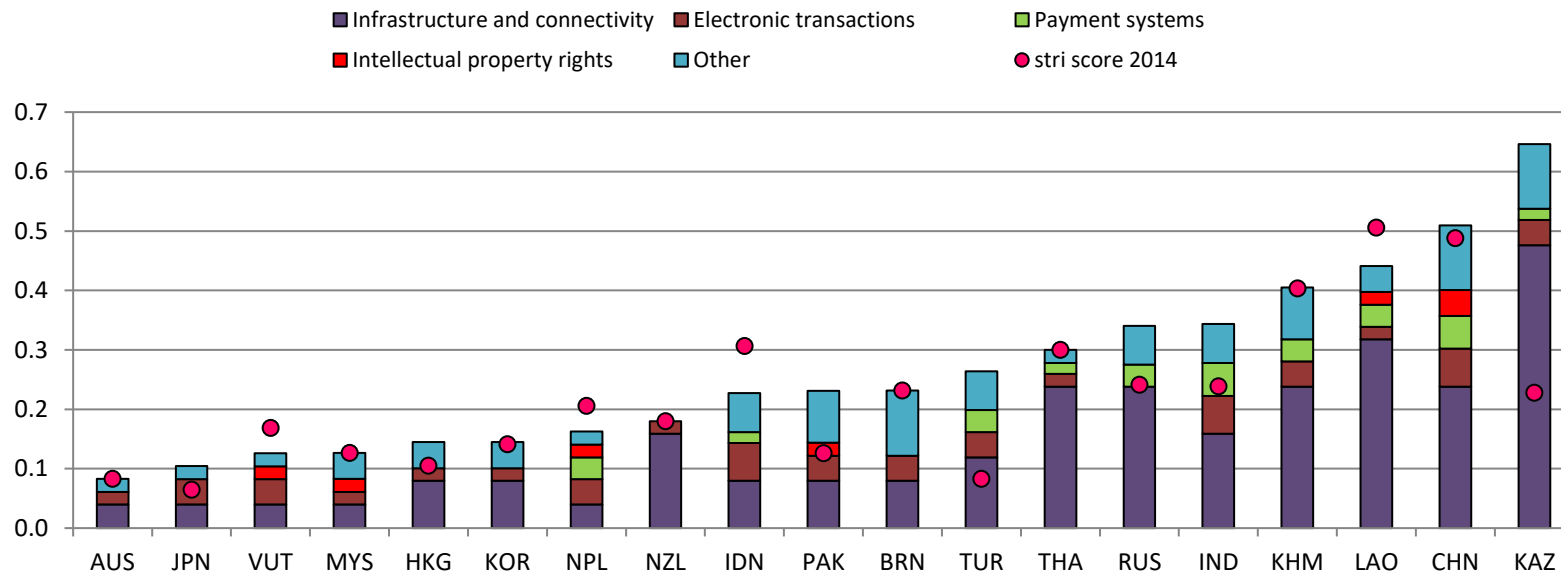


Digital trade is global but regulations are not



Source: OECD Digital STRI (2020)

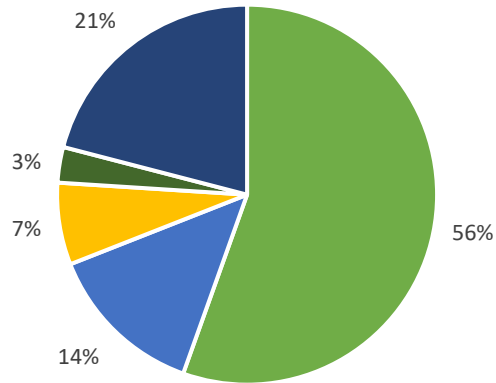
The regulatory environment in the Asia-Pacific region



Source: OECD Digital STRI (2020)

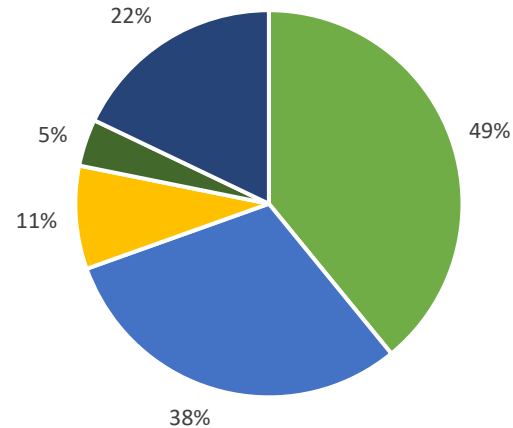
What are the main contributors to digital trade barriers in the region?

Digital STRI



- Infrastructure and connectivity
- Electronic transactions
- Payment systems
- Intellectual property rights
- Other

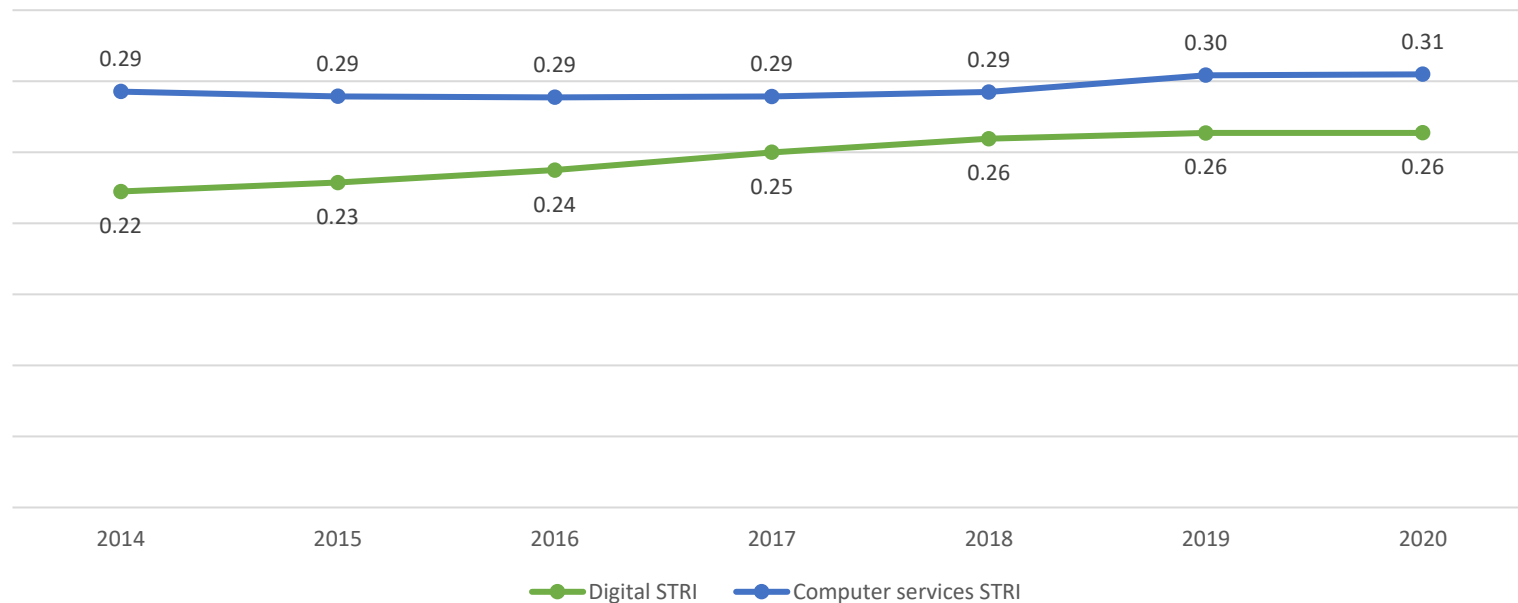
Computer services STRI



- Restriction on foreign entry
- Restrictions movement people
- Other discriminatory measures
- Barriers to competition
- Regulatory transparency

Source: OECD Digital STRI and STRI for computer services (2020)

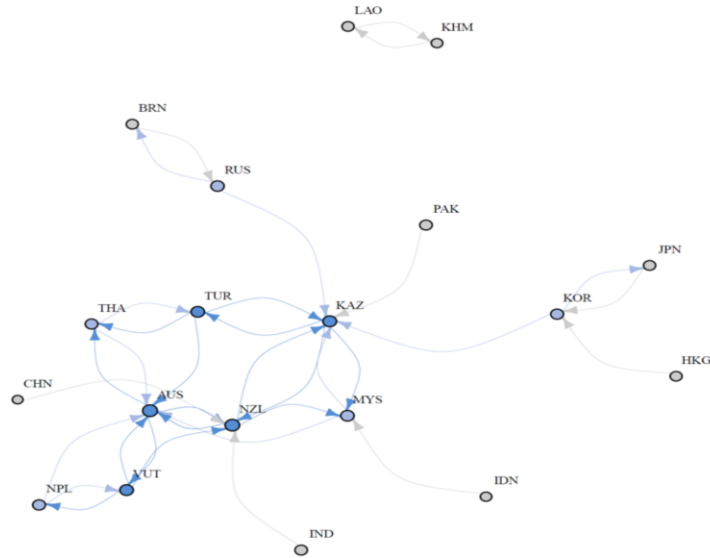
Evolution of regulations on digital trade in the region



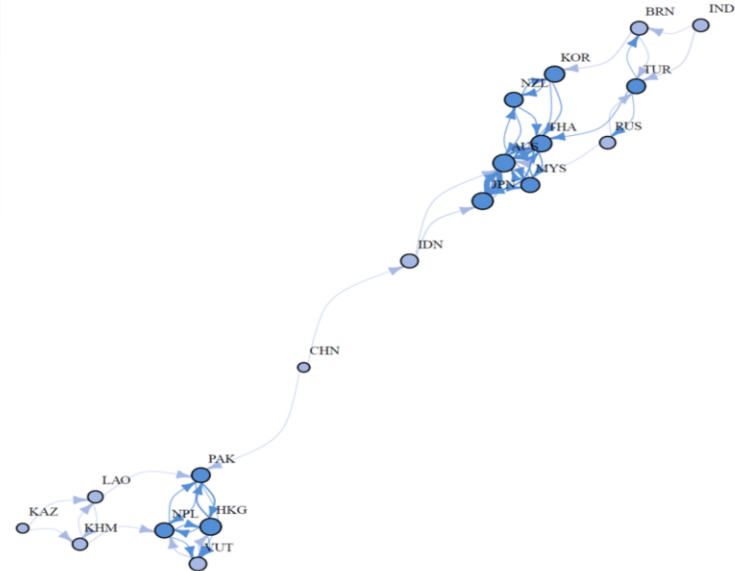
Note: This graph shows the average computer services STRI and DSTRI result since 2014 for the 19 economies covered. A higher average indicates a more restrictive environment.

Regulatory divergence is growing

Computer services for ESCAP countries



Digital STRI for ESCAP countries





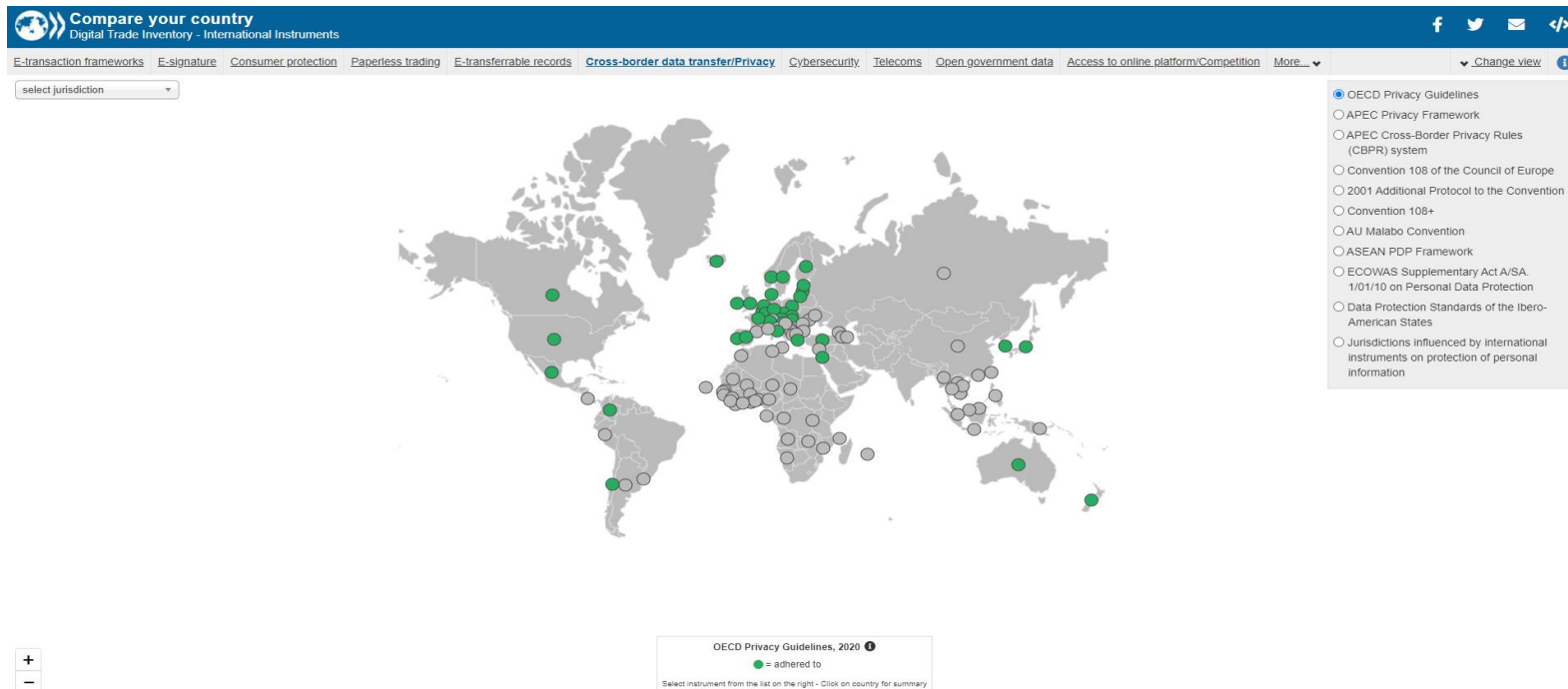
CHALLENGES: MAPPING INTERNATIONAL RULES, STANDARDS AND PRINCIPLES



Digital Trade Inventory: Mapping the international rules, standards and principles that underpin digital trade

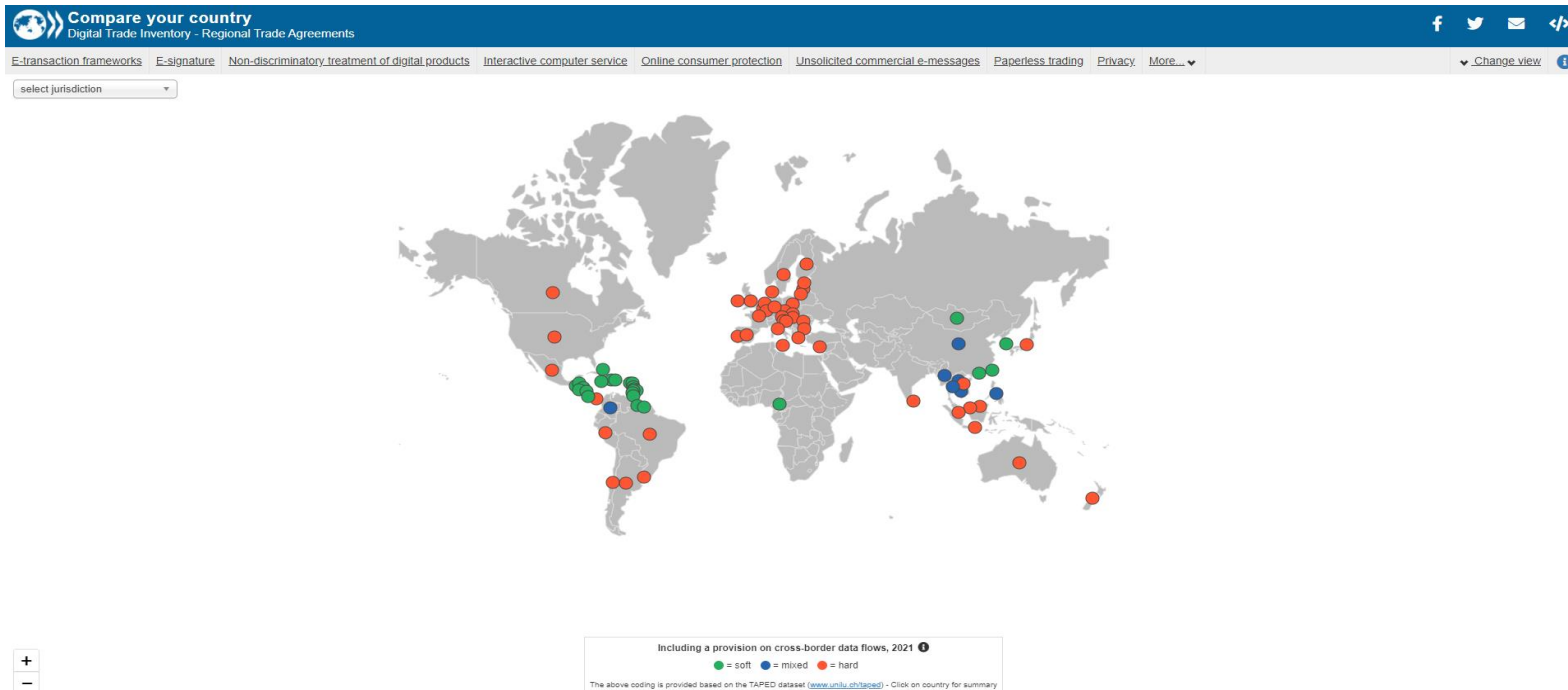
- Aim is to help countries navigate the complex and evolving digital trade landscape.
- Work identifies **52 instruments across 24 different fora** that are relevant to digital trade.
- Shows that strongest consensus is on issues related to **electronic transactions (UNCITRAL), trade facilitation, telecoms and goods market access (WTO)**.
- Highlights that many jurisdictions have **already made commitments on issues that matter for digital trade discussions, including in their RTAs.**, including across many countries that are not in the JSI discussions.
- Suggests that there is a solid basis of international instruments across a broad number of fora, upon which WTO e-commerce discussions can build.

Compare your country: International Rules



<https://www.compareyourcountry.org/digital-trade-inventory-international-instruments>

Compare your country: RTAs



<https://www.compareyourcountry.org/digital-trade-inventory-regional-trade-agreements>



WHAT DOES THIS MEAN?

Digitalisation has made trade policy more complex

- **Trade rules continue to apply** and discussions are underway → Whether at e-commerce JSI or in trade agreements.
- However, trade rules are predicated on identifying whether products are goods or services and the borders they cross, distinctions which are blurring → **increasingly difficult to identify the specific rules that apply to specific transactions** (growing uncertainty) → think of the 3D printing example.
- Barriers can be cumulative: the completion of a **simple transaction** (e.g. cross-border purchase of an e-book) rests on a series of factors which enable or support the transaction:
 - Liberalisation of related audio-visual service
 - Access to digital networks (ordering)
 - Ability to pay electronically (paying)
 - Barriers on physical device used to consume services (viewing).
- Measures need to balance “trade and ...” (privacy, consumer protection, national security) objectives.

» Getting it right on digital trade is more important than ever

- The benefits of trade for digitalisation were already apparent before COVID-19.
- Today they are more important than ever:
 - Trade can **help keep cost of access to the Internet down** by promoting more competition.
 - Trade enables **access to the devices through which we connect to the internet**
 - Trade in parcels enables consumers to **access the goods they need in times of confinement** (and smaller firms maintain economic activity).
 - Digitally enabled services help **maintain economic activity**
- Digital trade is key to **enable recovery**.
- The Internet is global, but regulations tend not to be. We need better and more global rules of the road if we are to take advantage of new opportunities and face forthcoming challenges.



Contact us

We look forward to hearing from you!



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