



# Digitalization and trade

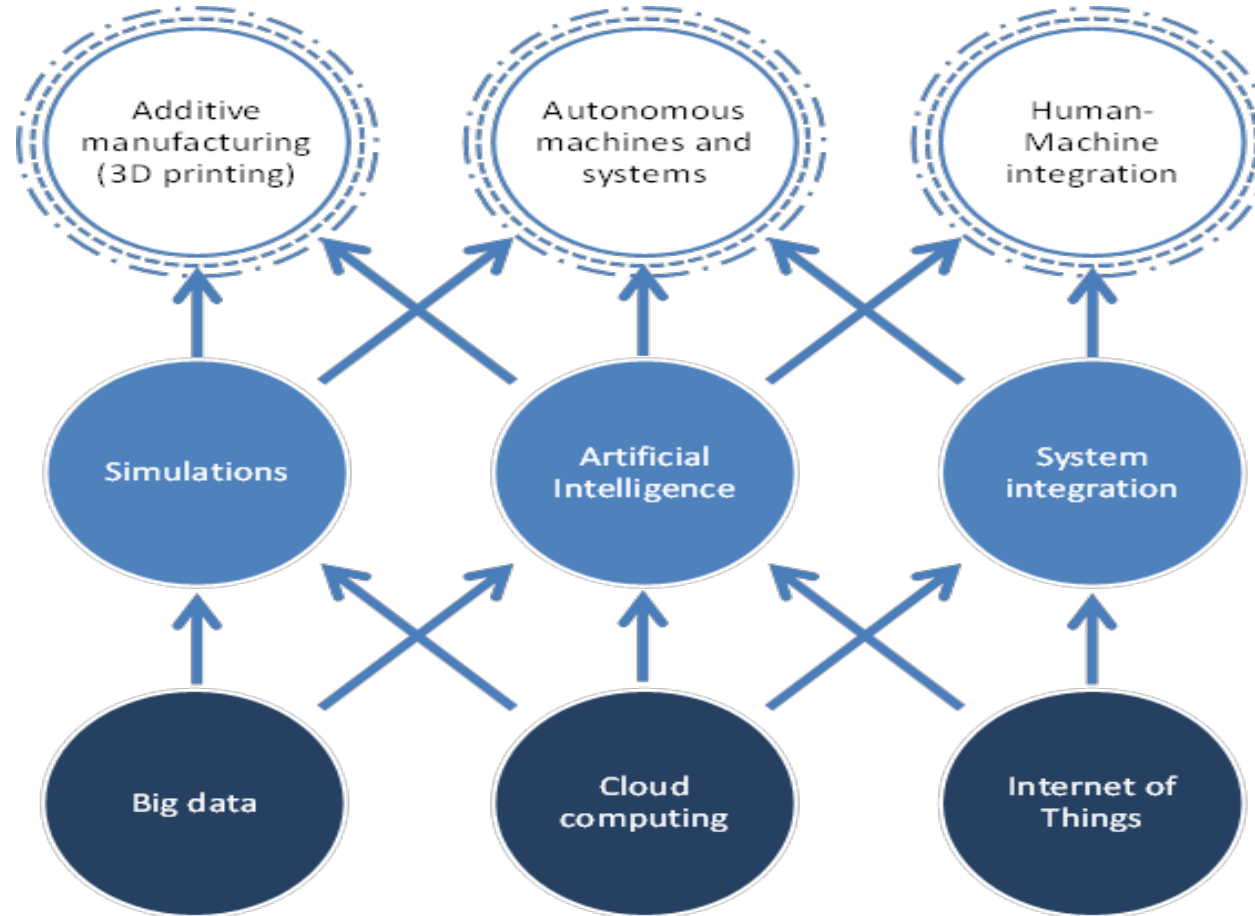
Queen's Institute on Trade Policy  
November 17-19

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Head of Division  
Trade in Services



# HOW IS DIGITALIZATION CHANGING TRADE AND INVESTMENT?

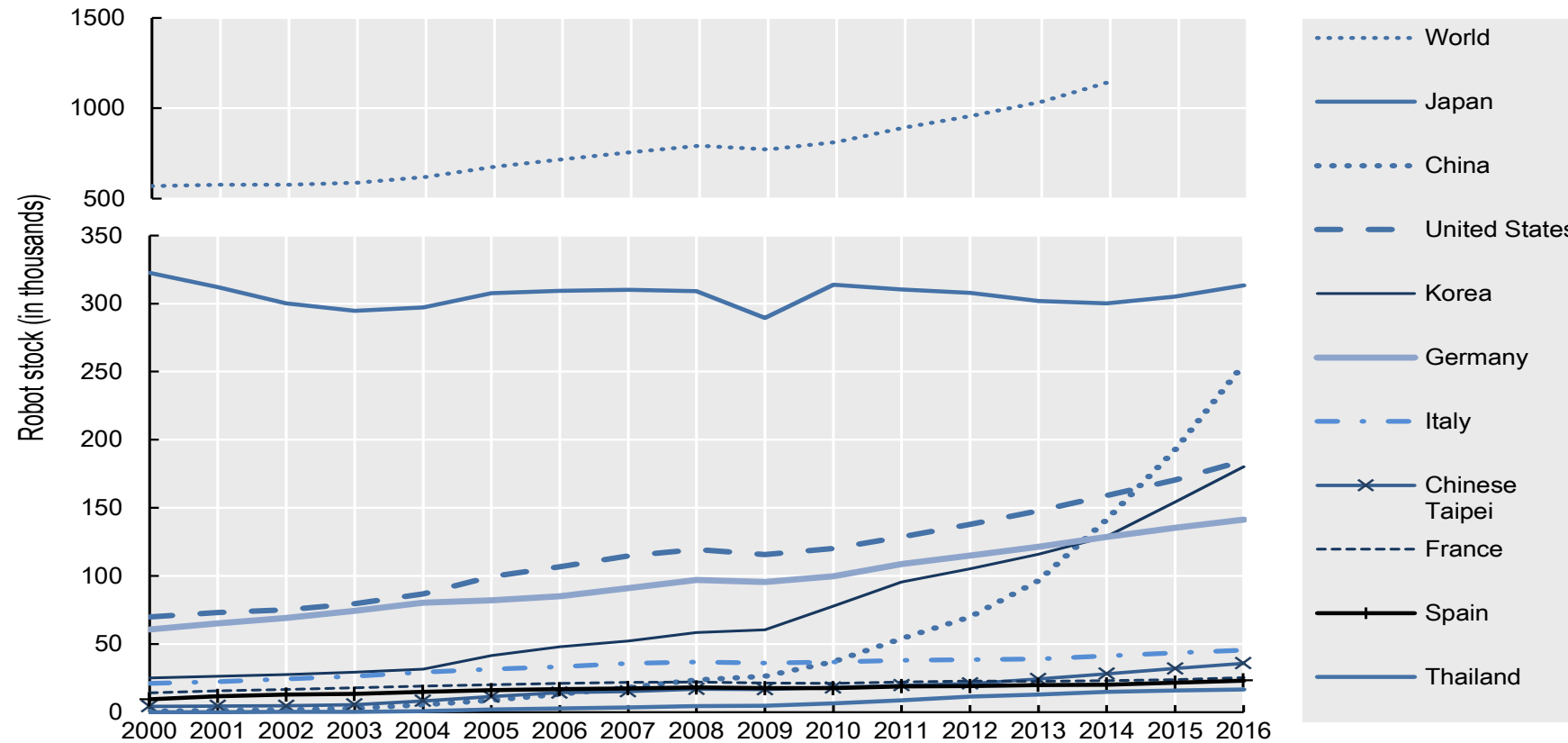
# The digital revolution



Source: OECD

# Robotization

Robot stock among top 10 using economies, 2000-2016

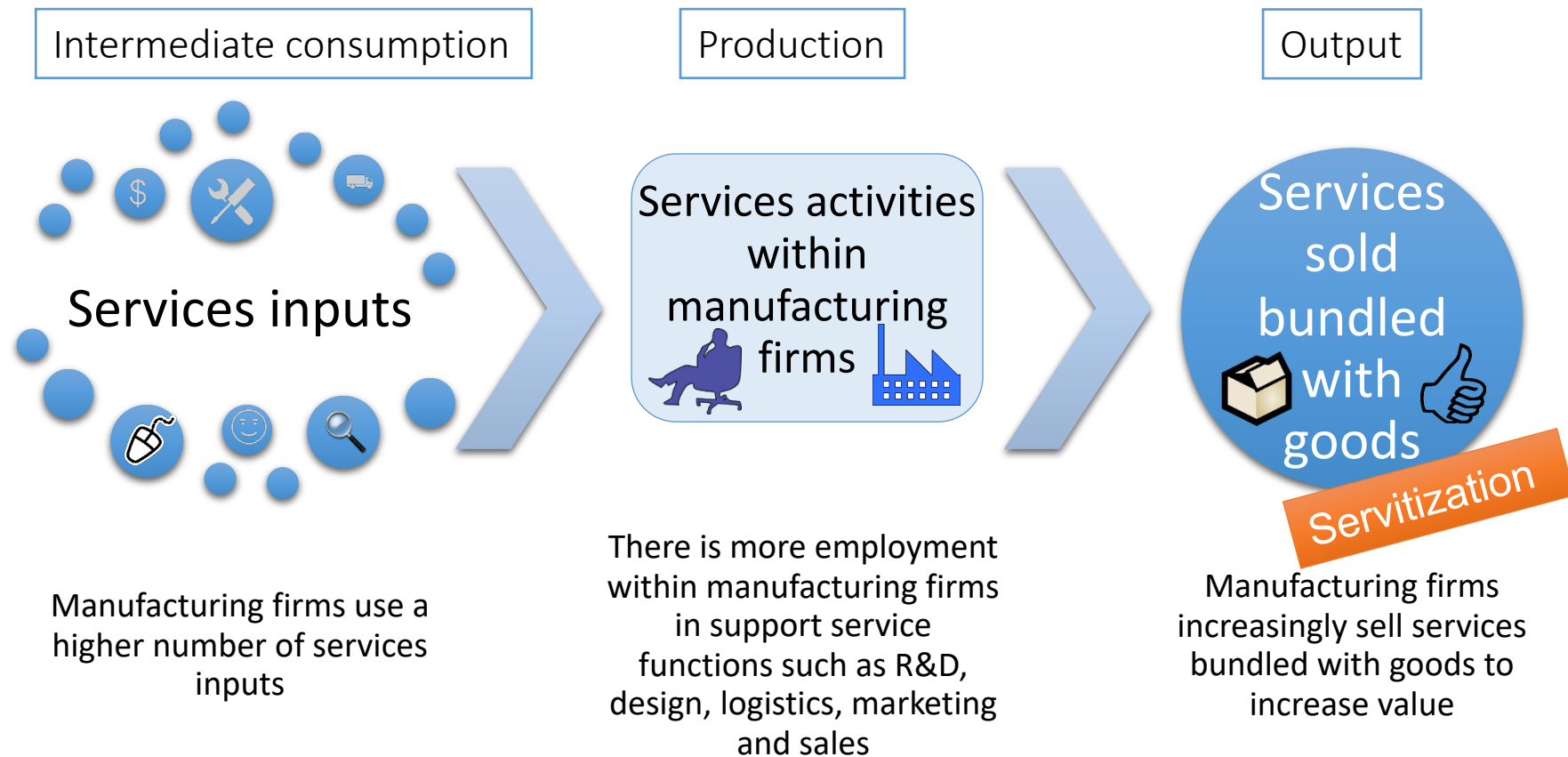


Source: International Federation of Robotics in OECD (2018)

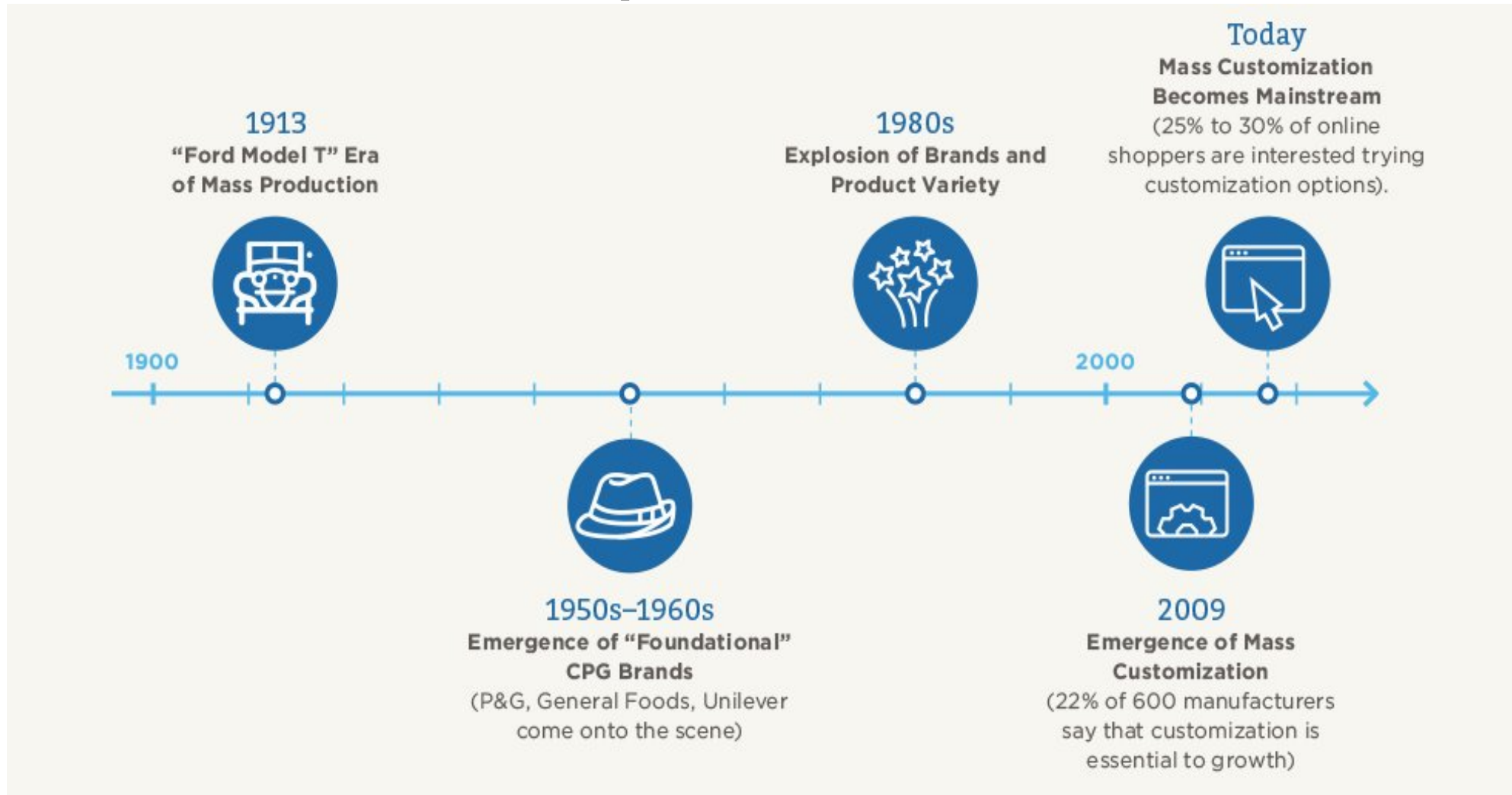
## **Fundamental changes in what and how we trade**

- Rising number of small packages
- Changing business models
- New information industries (big data, quantum computing)
- Emerging technologies (Blockchain or 3D printing)
- Greater bundling of goods and services

# » Servicification: using, producing and selling services



# >> From mass consumption to mass customization





# HOW IS DIGITALIZATION CHANGING THE GAINS FROM TRADE?



# Digitization can increase the gains from trade

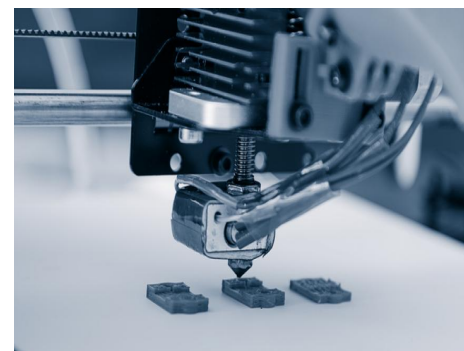
Easier access to **global**  
**markets**



Reduced **trade costs**



Gains from **technology-driven**  
**production**



More efficient **integration** in  
**GVCs**



More **inclusive trade** – new  
opportunities for smaller players



Closer **proximity to clients** and better  
customization of products and services





# SMEs are first to gain from removing barriers to cross-border services

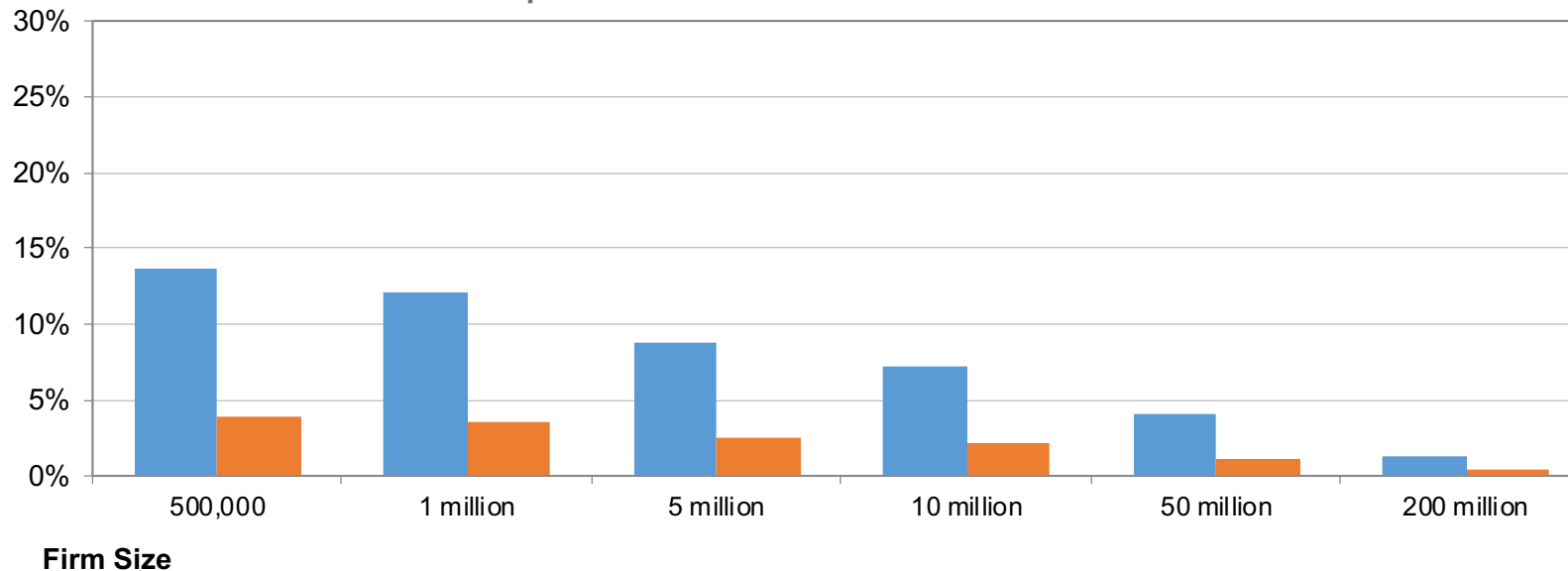
Additional trade cost of regulatory restrictions for

SMEs

Estimated additional tariff equivalent for SMEs compared to large firms of 400 million EUR or more

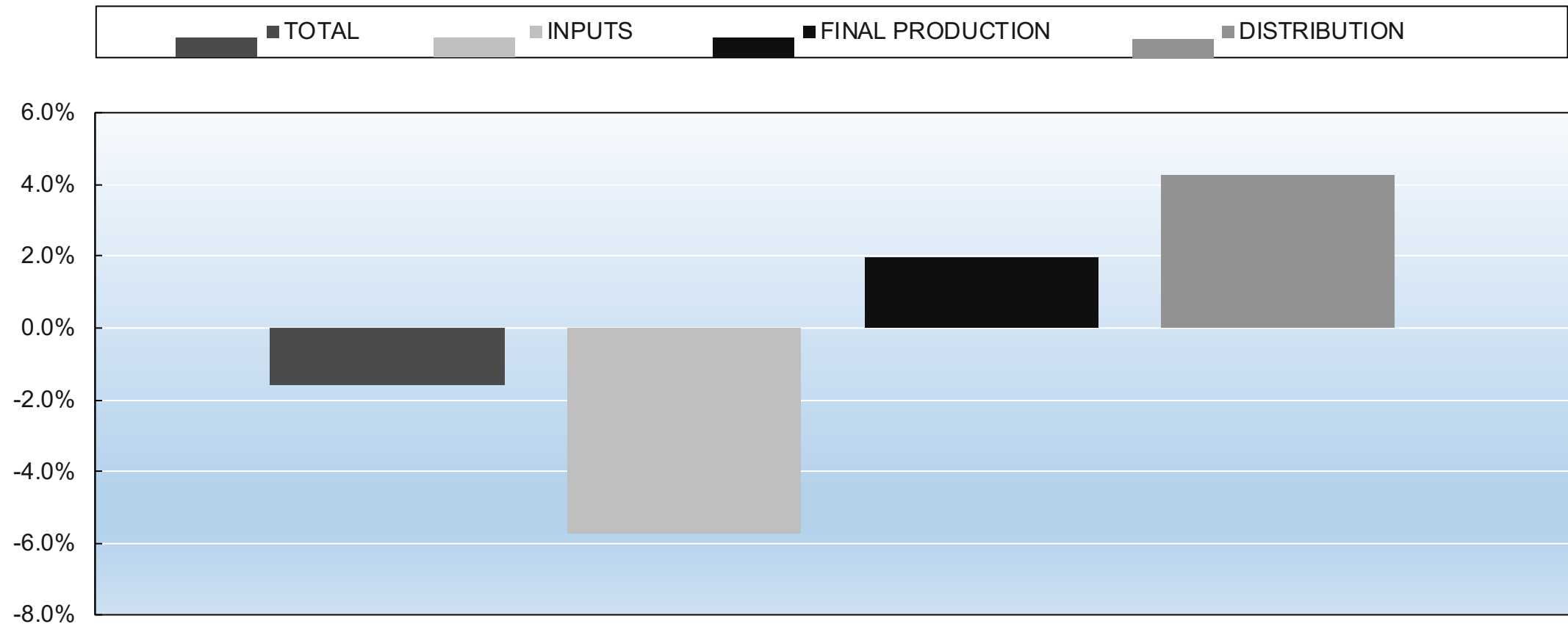
**On cross-border exports**

**Specialised and standardised services**



Source: Rouzet, D., S. Benz and F. Spinelli (2017), "Trading firms and trading costs in services: Firm-level analysis", OECD Trade Policy Papers, No. 210, OECD Publishing, Paris, <https://doi.org/10.1787/b1c1a0e9-en>.

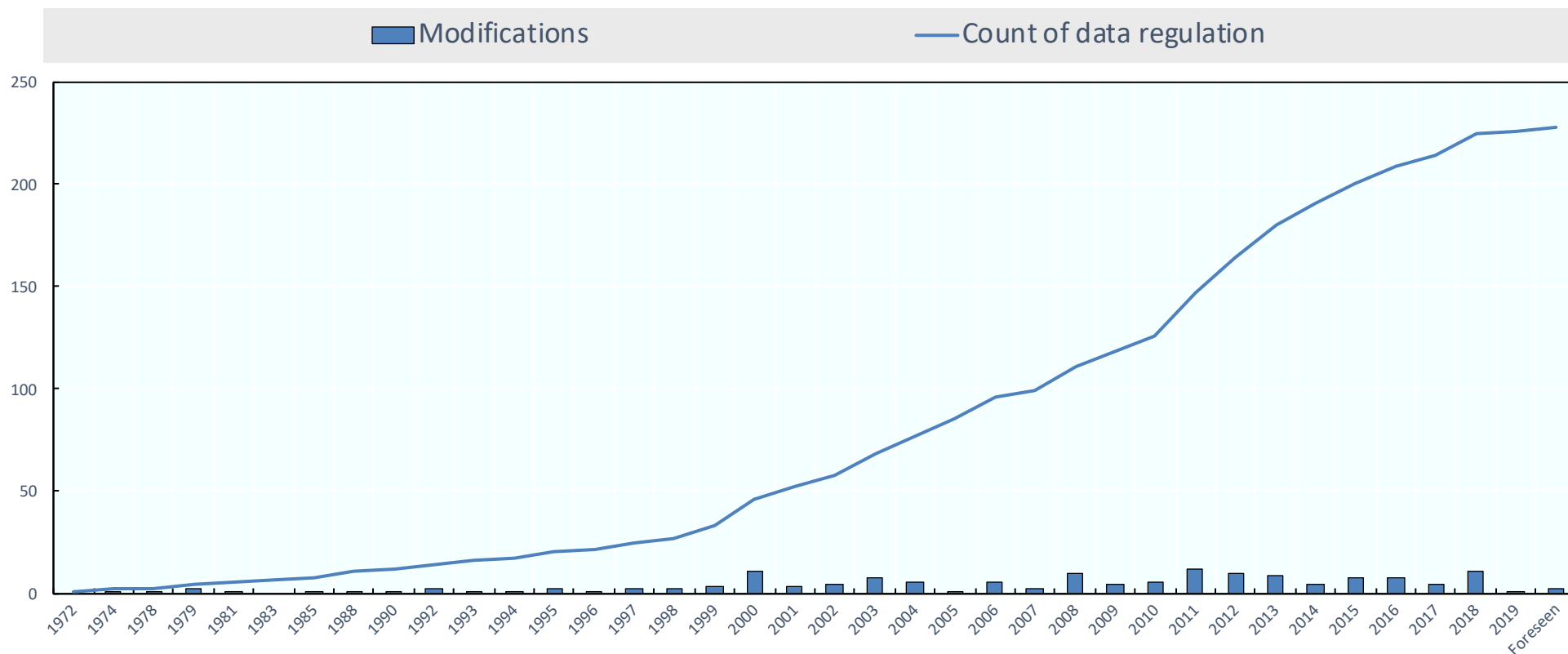
## Changes in share of income to intangibles by production stage, 2005-2015





# HOW IS DIGITALIZATION CHANGING BARRIERS TO TRADE?

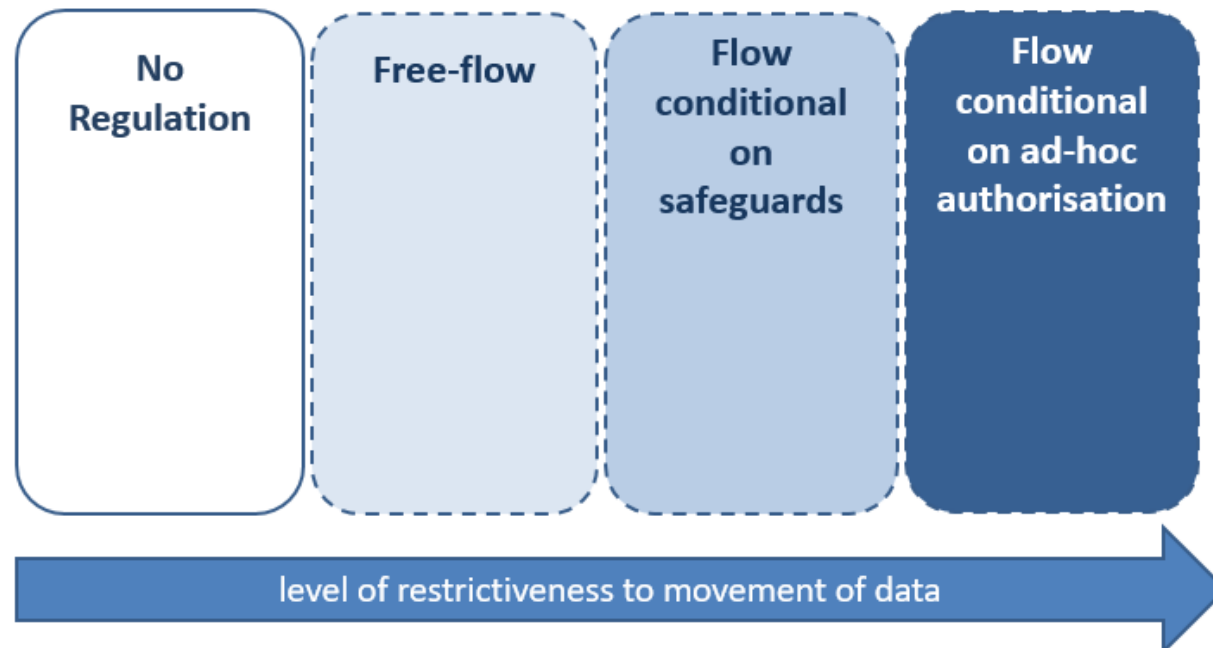
## Data regulation is increasing



Note: Data protection regulations include different types of regulation relating to data transfers and local storage requirements. Numbers are affected by the way in which regulations are structured, as this varies by country; some countries may have a single regulation covering a wide range of measures; others will have several different regulations covering, for example, restrictions on data flows for different types of data, and local storage requirements.

Source: Casalini and Lopez-Gonzalez (2019)

## Approaches to cross-border data flows



## Approaches to cross-border data flows

### No Regulation

- **Absence of regulation** on data flows, including privacy regulation.
- While data may flow unimpeded, absence of provisions on cross-border transfers **may affect willingness of others to send data**.
- Many LDCs

## » Approaches to cross-border data flows

### Free-flow

- Approaches **do not prohibit** cross-border transfer of data nor require specific conditions to be fulfilled ex-ante **BUT**
- Provide for **ex-post accountability** for the data exporter if the data sent abroad is misused.
- e.g. firms send data but if something goes wrong they are legally accountable



## » Approaches to cross-border data flows

- Includes several sub-categories all relying on the notion of **adequacy or equivalence as ex-ante condition** for data transfer.
- and options available in the absence of adequacy (e.g.):
  - Binding corporate rules,
  - Contractual clauses,
  - Consent...

Flow  
conditional  
on  
safeguards

- But differences on how adequacy is determined
  - A. **Private sector** evaluation  
or
  - B. **Public sector** determination
- Can include specific requirements on how data must be protected

## » Approaches to cross-border data flows

- Transfer also depends on public adequacy finding but
  - if not, authorisation subject to **ad-hoc approval by relevant public authority**.
- Most restrictive approaches do not foresee provisions for adequacy. All transfers are **subject to review by relevant authority**.
- Often involves very specific types of data such as ‘health data’ but also ‘important data’.

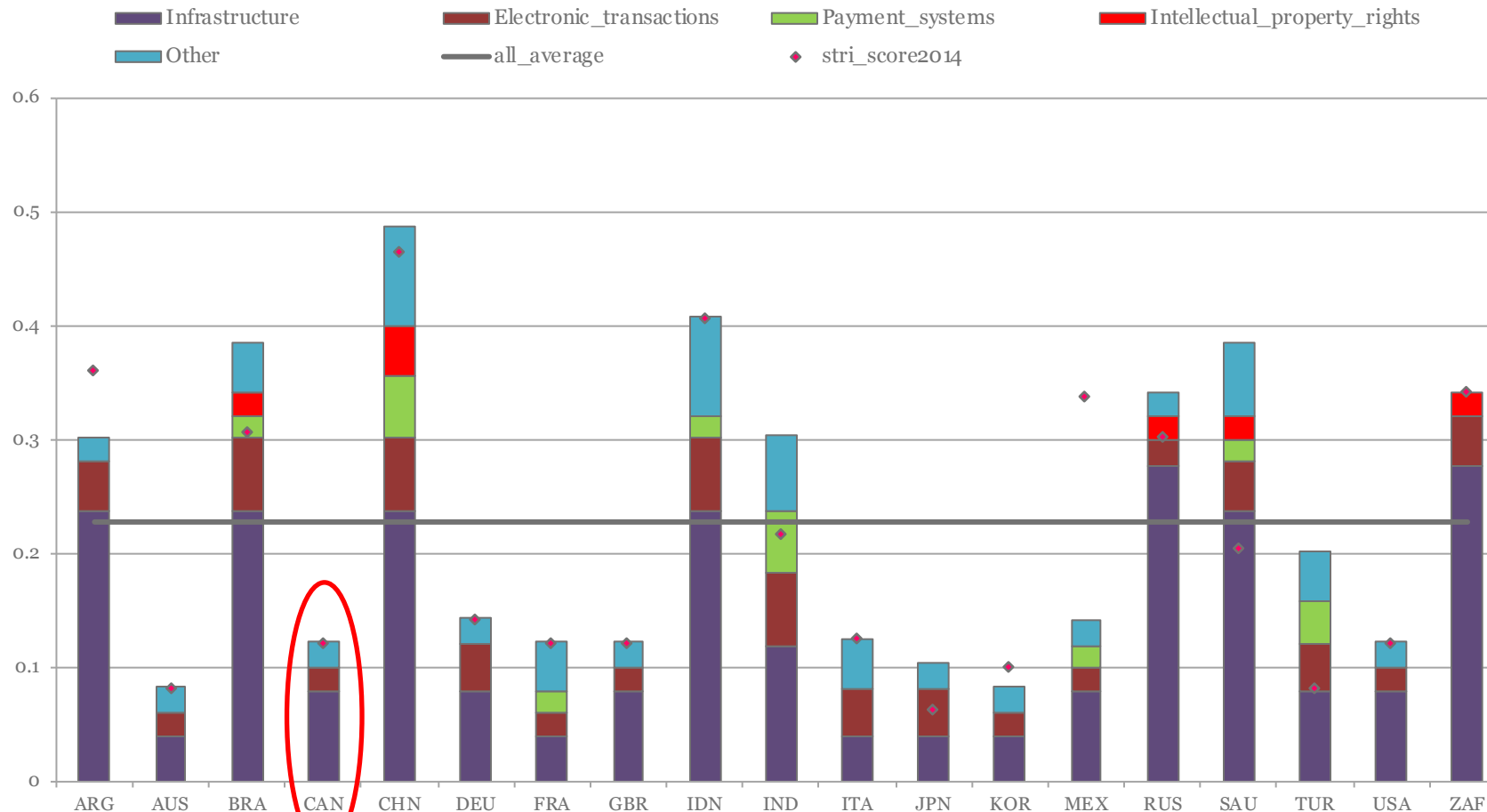
Flow  
conditional  
on ad-hoc  
authorisation

## **Barriers to digitally-enabled services (Digital STRI)**

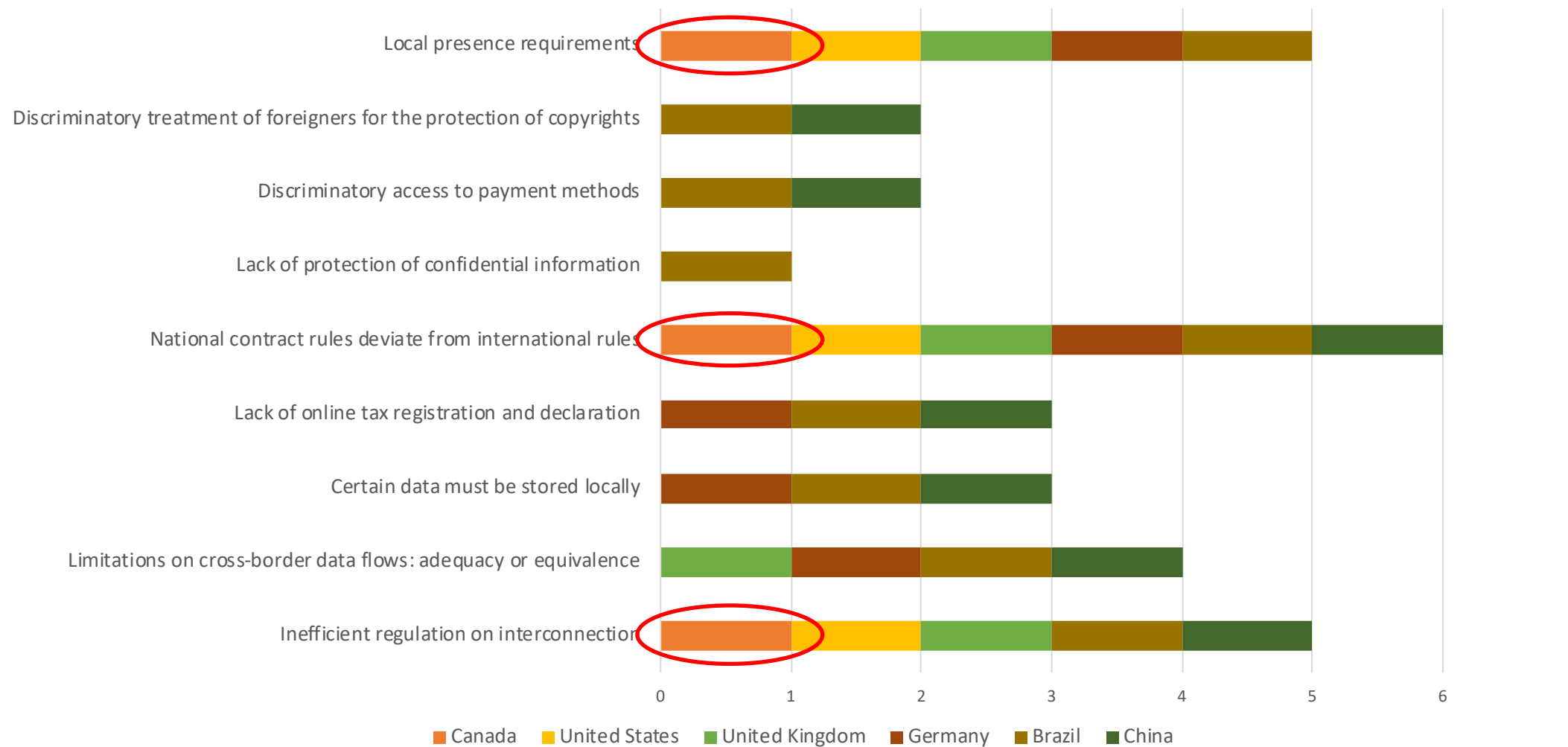
- Infrastructure and connectivity
- Electronic transactions
- Payment systems
- Intellectual property rights
- Other barriers

# Open services policies matter

Digital STRI for G20 countries (2018)

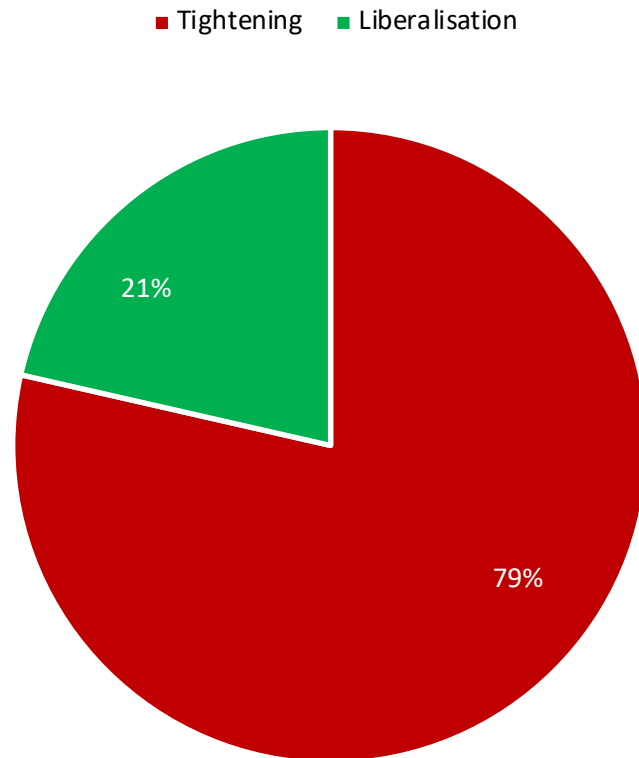


## Regulatory environment: key trading partners

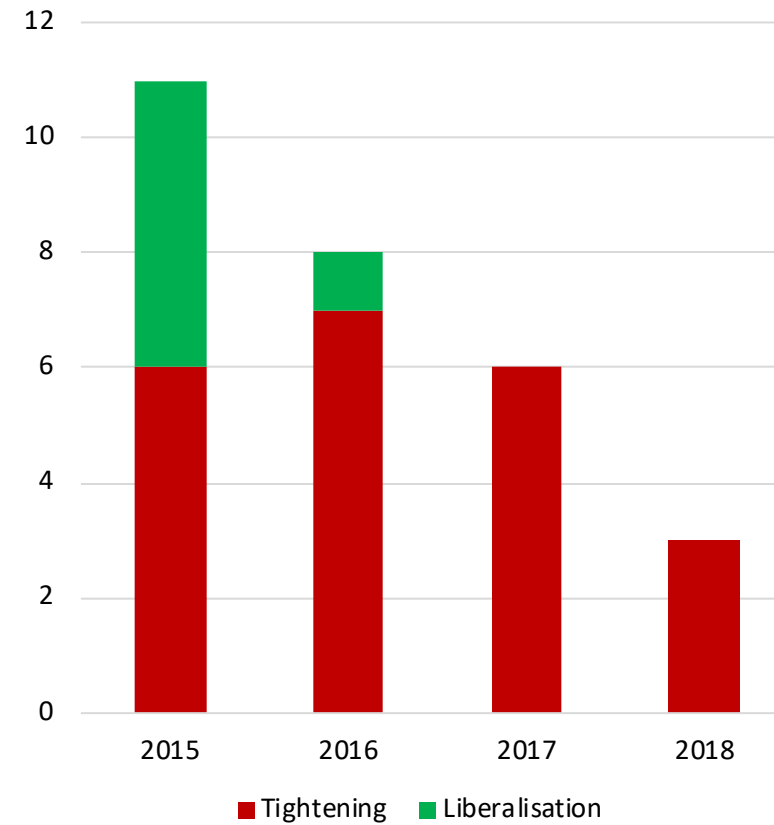


## Regulatory trends

Nature of changes 2014-2018



Number of changes





# WHAT'S NEXT FOR RULES-BASED DIGITAL TRADE COOPERATION?

## What's next for...

- ...e-commerce negotiations?
- ...WTO customs duty moratorium?
- ...cross-border data flows?
- ...services?
- ...trade and tax?



## Digital market openness

- Need new approaches to realize the potential benefits of digital trade.
- **Think holistically:** The benefits of the digital transformation for trade are contingent on a combination of factors spanning goods, services and digital connectivity.
- **Think collectively:** Digital infrastructures are born global, but they raise key challenges in a world where regulatory differences between countries remain.
- **Apply basic principles:** Transparency; non-discrimination; avoiding unnecessary trade restrictiveness; interoperability; technological neutrality.



## Contact us

We look forward to hearing from you!



Access all of the  
information on trade  
from the OECD at:

[www.oecd.org/trade](http://www.oecd.org/trade)



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