

World Trade Report 2020:

Government policies to promote
innovation in the digital age

Starting point



- For over a decade, more than 105 countries adopted new kinds of policies, labeled “New industrial policies”, “Industry 4.0”, “digital development plans”, etc.
- The focus of these policies is on technological upgrading, digitalization of production, supporting innovation and the transition to a more digital economy

Questions



- What has changed with the digital economy?
- What are the policy implications of such changes at the national level?
- What is the role of trade and the WTO?

Key Issues



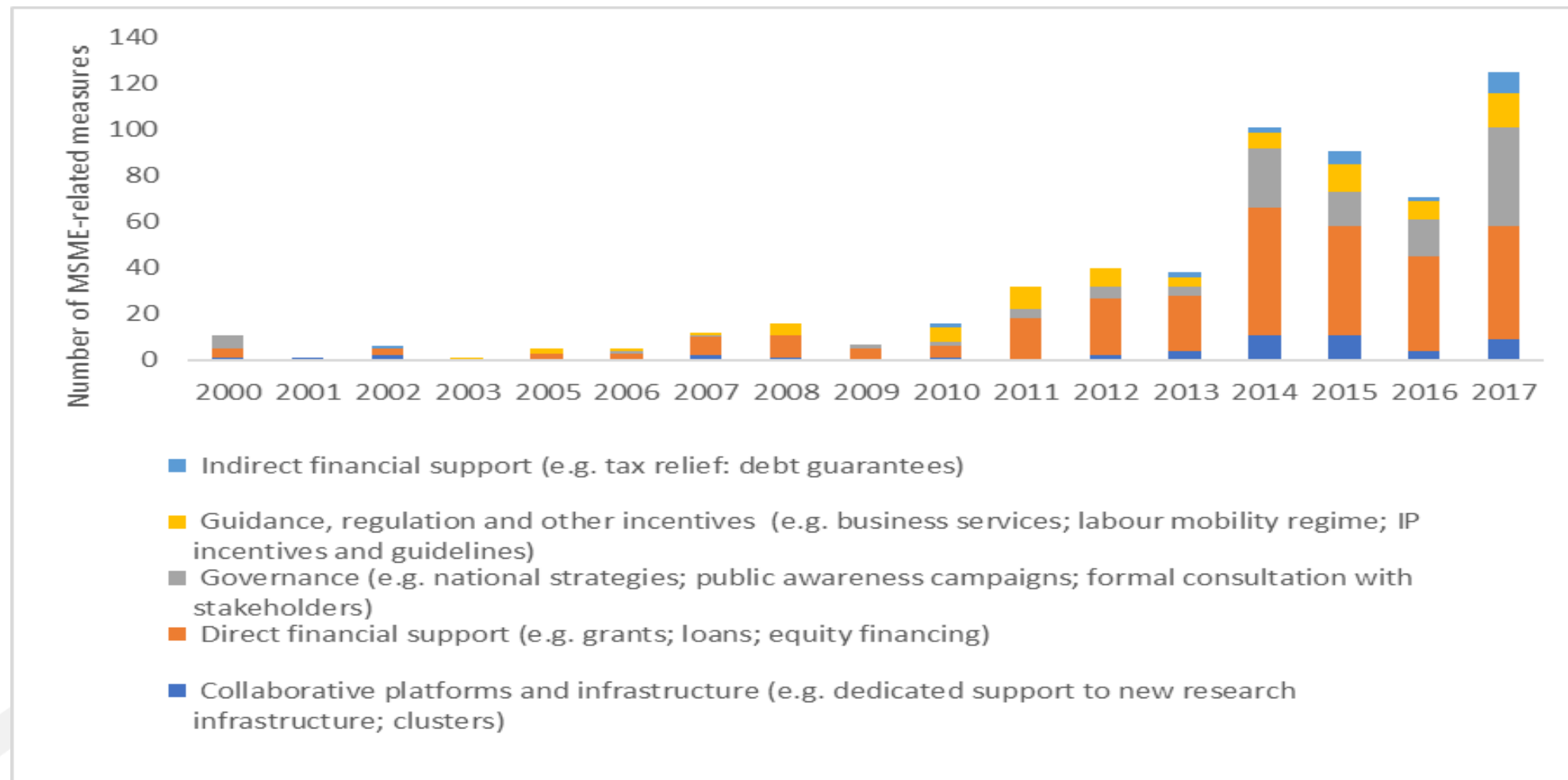
- What's changing with the digital economy? Special features of the digital economy
 - Data is key; digital tech are general purpose technologies; goods and services are more integrated; firms are more scalable; changes happen more rapidly
- What are the policy implications of such changes at the national level?
 - Today's digital-oriented policy toolkit includes new tools and adapt old ones, reflecting characteristics of the digital economy:
 - (1) Capital light model: encouraging innovation and knowledge; lot of R&D support and support to FDI in techs-immigration policy, tech hubs, agglomeration and start-up support, regulatory sandboxes;
 - (2) developing data policies and regulation;
 - (3) supporting the development of enabling infrastructure and access to it; access to network, being able to develop local software or digital services
- What is the role of trade and WTO
 - Long history of Open trade policies contributing to innovation
 - WTO rule book and commitments contributed to innovation: ITA, standards, TRIPS, e-commerce, etc. Many national policies already covered in WTO rules.
 - Looking ahead: what reforms are needed?

Government R&D funding key to promote innovation

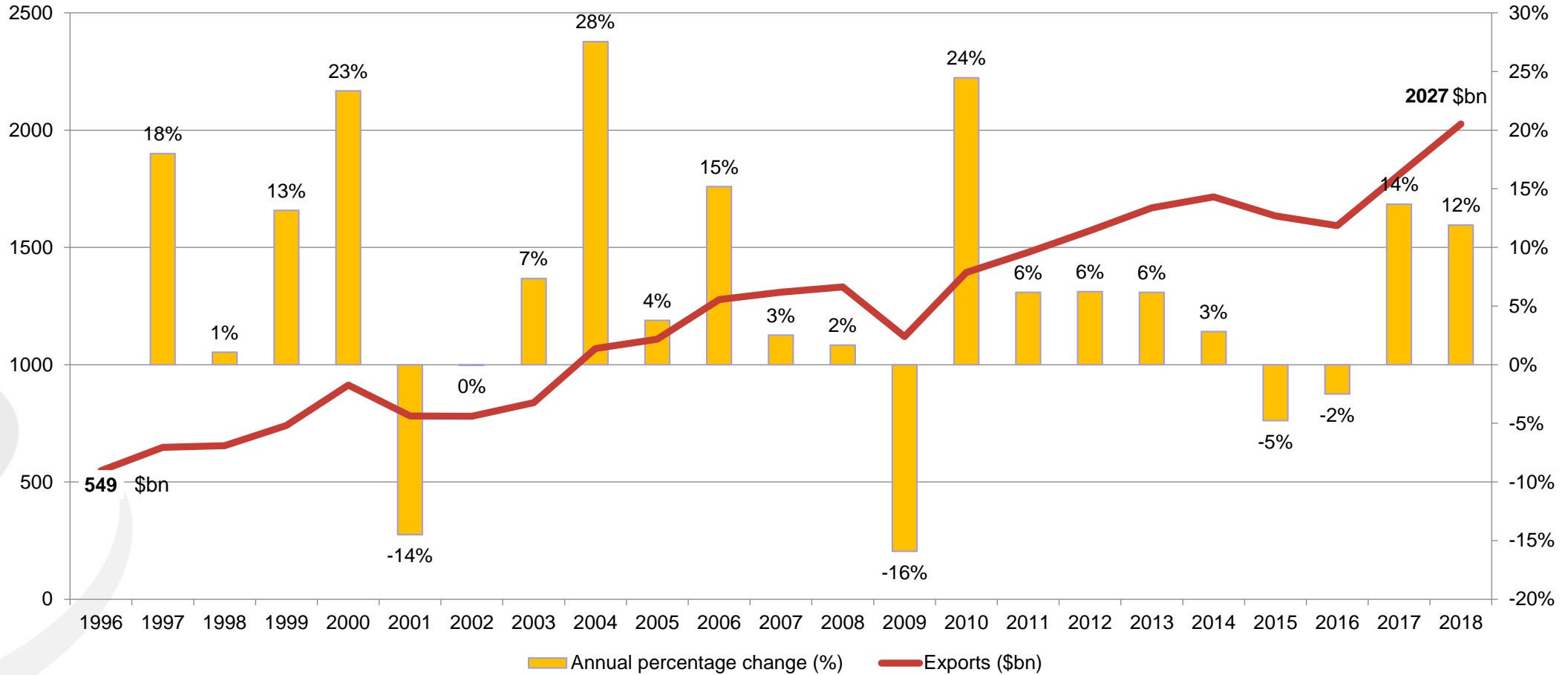


Source: Author's calculation based on UNESCO data

Direct financial support is the main instrument to support MSMEs R&D – source European Commission (PREDICT), OECD



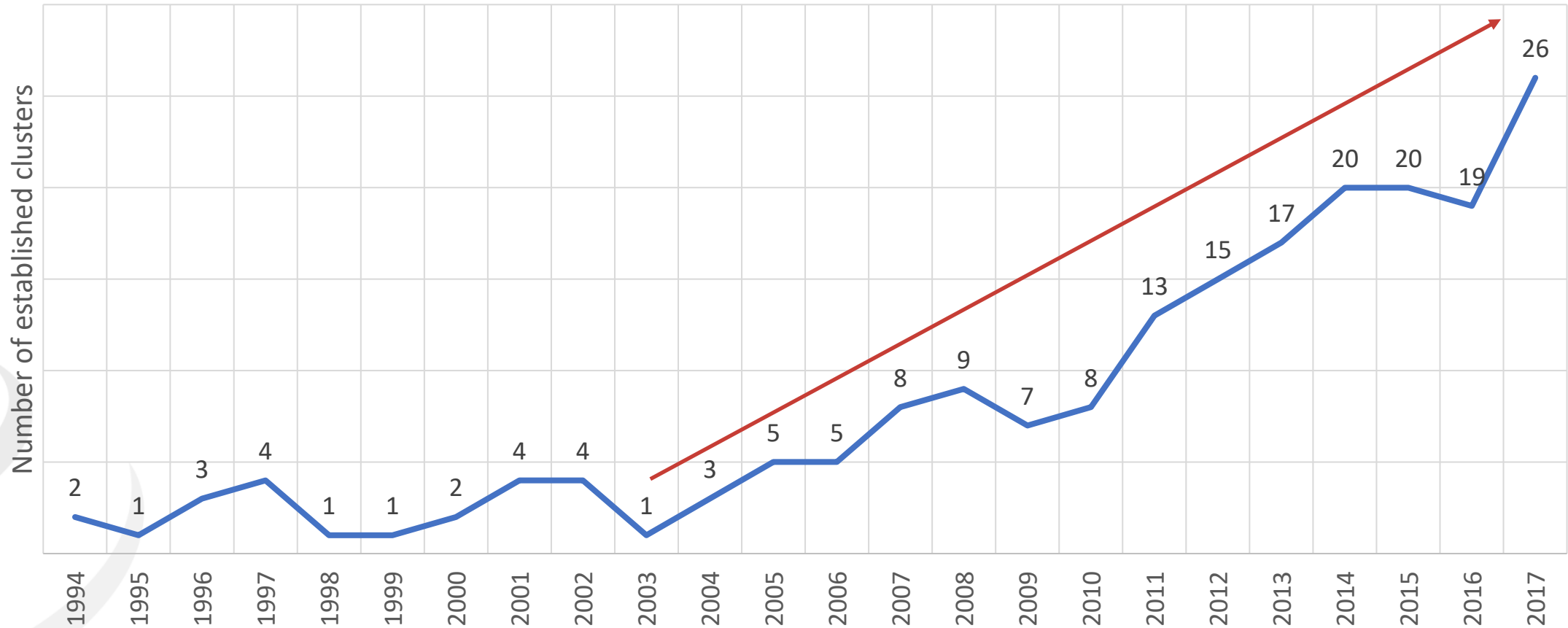
World exports of ITA products almost quadrupled



Source: WTO Secretariat based on UN Comtrade (reported data, complemented by mirror estimates).

Increasingly, tech clusters are used as an innovation policy

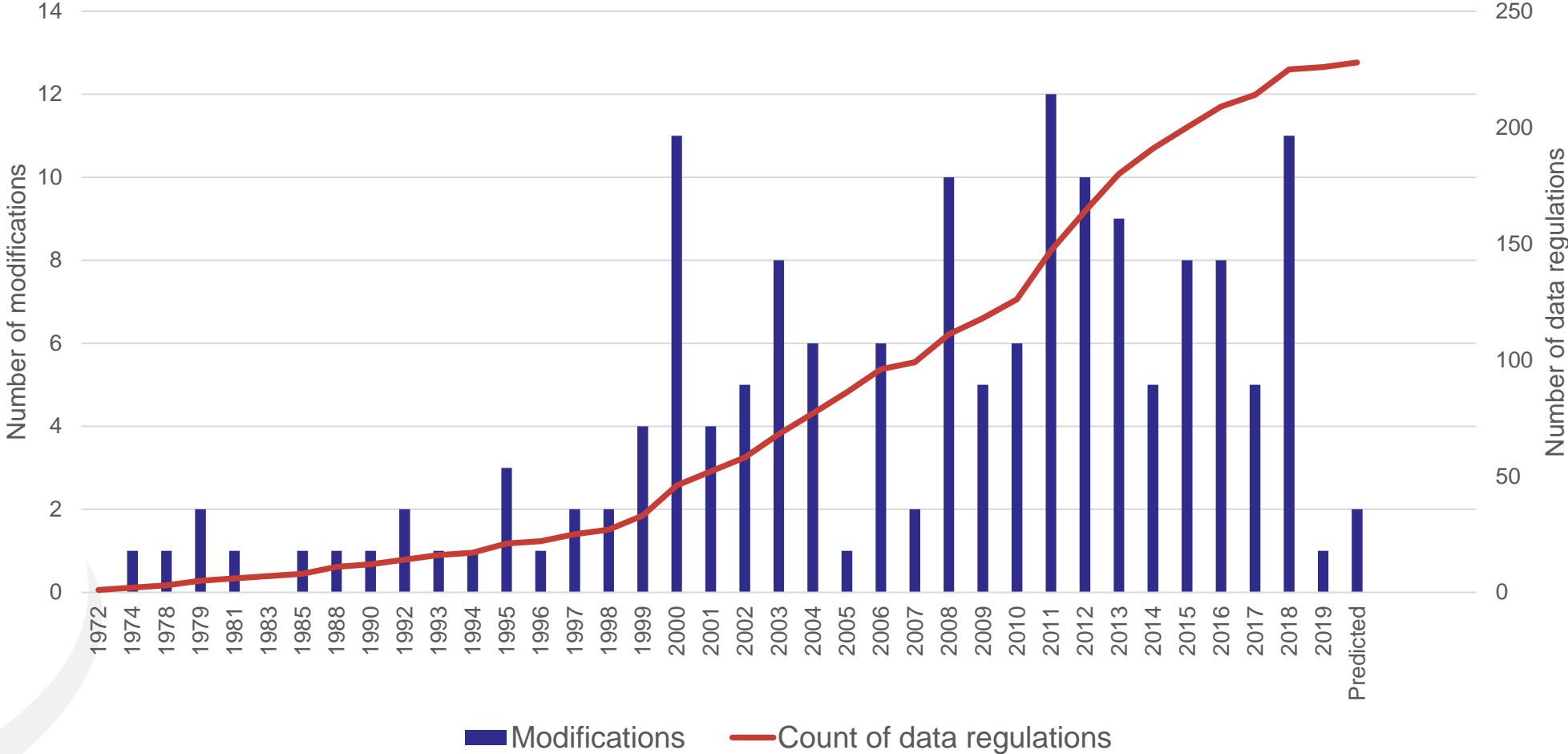
Number of clusters established in 27 economies' innovation policies



Data regulations are widely used



Data laws and regulations affecting cross-border data flows, 1972-2019



Source: Casalini and López-González (2019)

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Rationales for government policy



- Why government innovation policy?
 - Public good aspect of technology and data
 - Economy-wide benefits of general purpose technologies
 - Financial frictions
 - Network externalities, technology lock-in
 - Winner-takes-all dynamics

Trade and International cooperation: where does the WTO fit?



- Open trade and trade policies contribute to innovation through improved access to foreign markets, competition and GVC integration
- Cooperation in the multilateral trading system contributed to the expansion of digital sectors
 - Tariff elimination and reduction in some sectoral agreements
 - Technical standards
 - Government procurement
 - Trade in services
 - Trade-related aspects of intellectual property, Subsidies, TRIMS
 - Aid for Trade
- Cooperation at the bilateral, plurilateral and regional level
- Other forms of international cooperation (other international organizations)
- Questions regarding WTO in the future: ecommerce (data provisions); services; IP; government procurement

Thank you!