

The ADB logo consists of the letters 'ADB' in a white, serif font, centered within a dark blue square.

# ASIAN ECONOMIC INTEGRATION REPORT 2022

ADVANCING DIGITAL SERVICES TRADE  
IN ASIA AND THE PACIFIC

Jong Woo Kang  
Principal Economist

Pramila Crivelli  
Economist

Regional Cooperation and Integration Division  
Economic Research and Regional Cooperation Department  
Asian Development Bank

10 March 2022

*The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.*

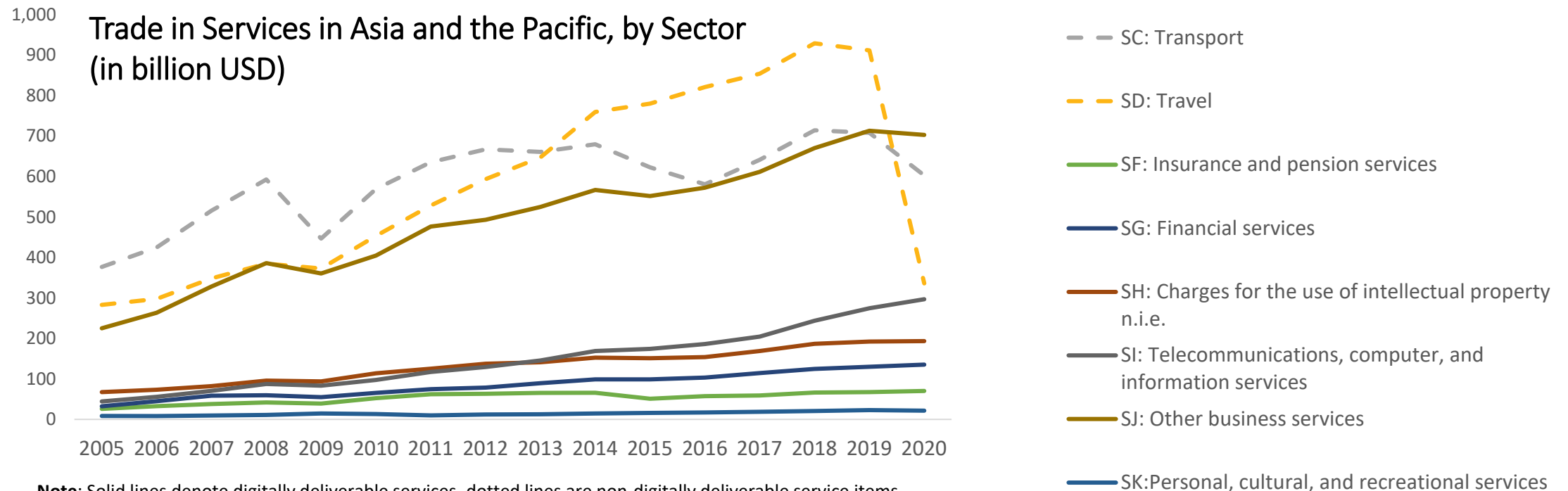
## Video: [Advancing Digital Services in Asia and the Pacific](#)



<https://www.youtube.com/watch?v=hCBR2n8wuhs>

# Background and motivation

- **Third unbundling and servicification:** international division of labor
- **COVID-19 pandemic:** trade in digital services has been more resilient to the COVID-19 shock

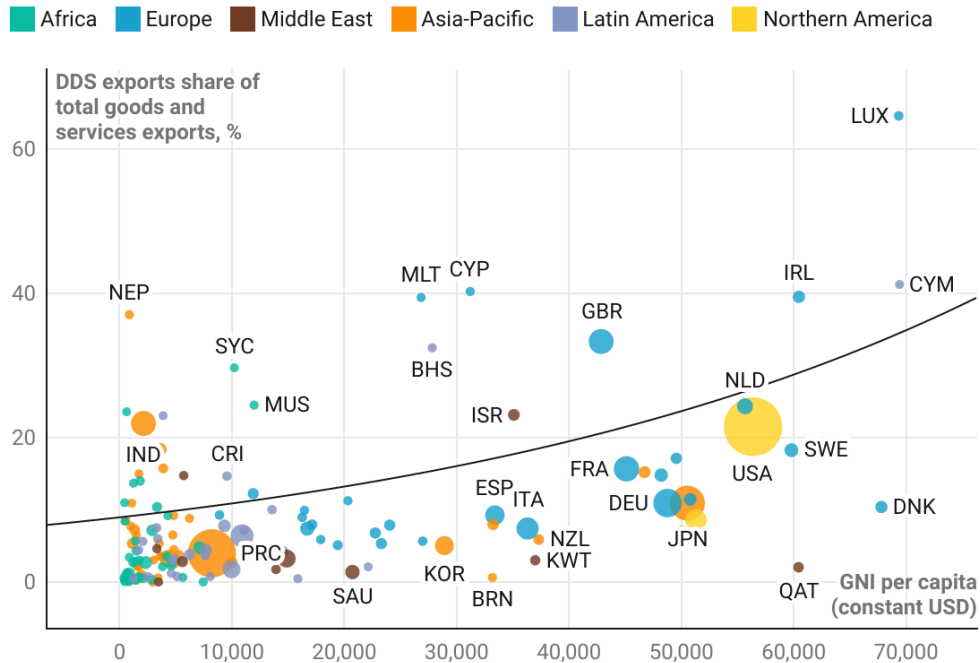


**Note:** Solid lines denote digitally deliverable services, dotted lines are non-digitally deliverable service items.

**Source:** Source: ADB calculations using WTO-UNCTAD (accessed 21 July 2021).

# Can digital services exports drive economic development?

## Share of DDS exports in total exports and GNI per capita



Source: ADB calculations using BATIS and World Bank (accessed August 2021).

- High income economies tend to have higher shares in digitally deliverable services (DDS) exports
- **Can DDS exports cause growth?**  
A Frankel-Romer approach: positive and significant impact on DDS trade/GDP on GNI per capita
- **Potential for Asian economies** to expand DDS exports as development strategy
- **Persistent challenges for Asia:** low productivity and competitiveness and high regulatory barriers.

# Scope: digitally deliverable services

## Digitally Deliverable Services (DDS)

Code	Service description
SF	Insurance and pension services
SG	Financial services
SH	Charges for the use of intellectual property n.i.e.
SI1	Telecommunications services
SI2	Computer services
SI3	Information services
SJ1	Research and development services
SJ2	Professional and management consulting services
SJ3	Technical, trade-related and other business services
SK1	Audio-visual and related services
SK2	Other personal, cultural and recreational services



### Main Sources

- WTO-UNCTAD trade in services
- WTO-OECD Balanced Trade in Services (BaTiS) BPM6
- Trade in Services data by Mode of Supply (TISMOS)

Source: ADB, based on OECD-WTO-IMF Handbook on Measuring Digital Trade, IMF Balance of Payments and Manual on Statistics of International Trade in Services (MSITS 2010)

# Digitally deliverable services in Asia: Examples



## Insurance and pension services

- Claim underwriting (PRC)
- Claim management
- Digital insurance (Indonesia, Viet Nam)
- Life insurance
- Freight insurance



## Charges for the use of intellectual property n.i.e.

- Use of proprietary rights (patents, trademarks)
- Patent portfolio, licenses (PRC)
- Franchises fees



## Other business services

- Professional services (legal, accounting, advertising) (India)
- Management consulting services (BPO, BPM) (Philippines)
- Technical services (engineering, architectural, scientific)



## Financial services

- FinTech, Digital payments (Singapore)
- Marketplace platforms for SMEs (Indonesia)
- Brokerage services
- Credit card services



## Information, Computer and Telecommunications services

- Internet, mobile telephony
- Data transmission, data processing, cloud computing, data storage (India)
- ITC support (Tata, Infosys, Wipro)

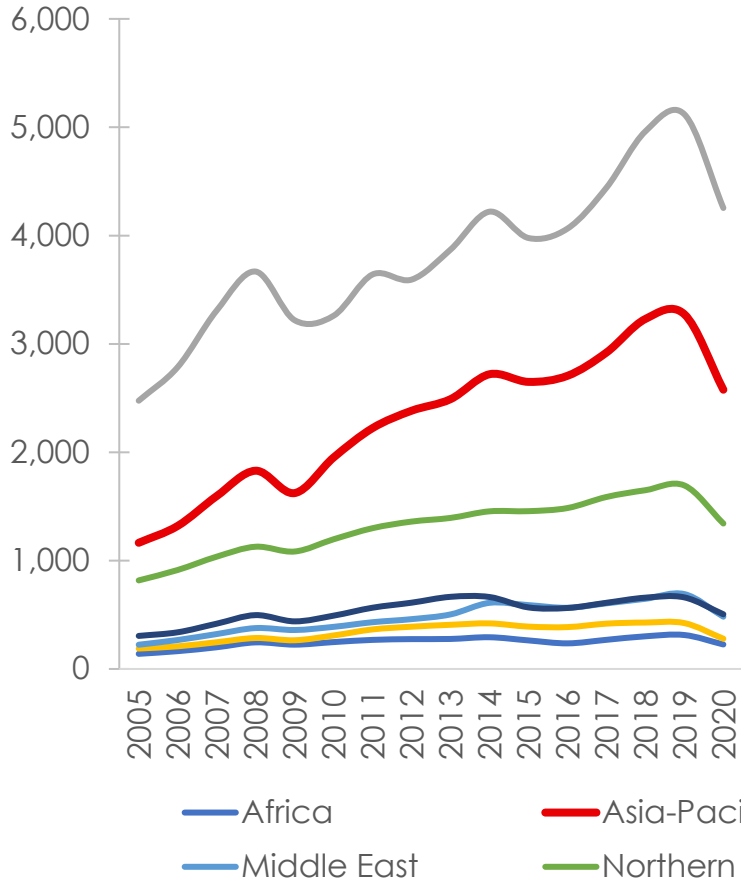


## Personal, cultural, recreational

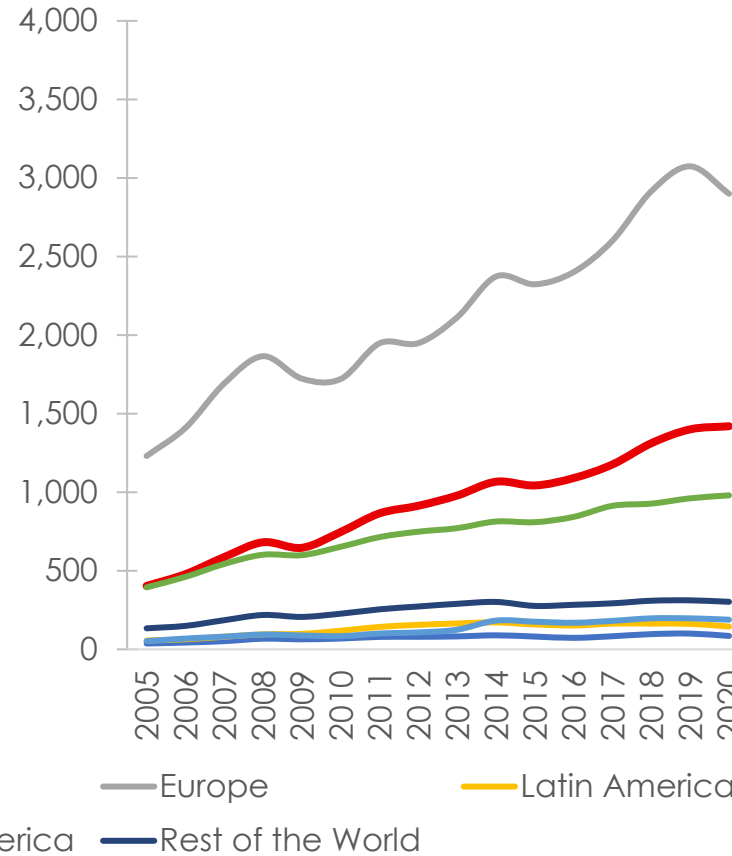
- Audio visual services
- Health services (PRC, Indonesia)
- Education services (Singapore)
- Heritage and recreational services

# Recent trend: Digital services trade accelerating in Asia with its global share increasing

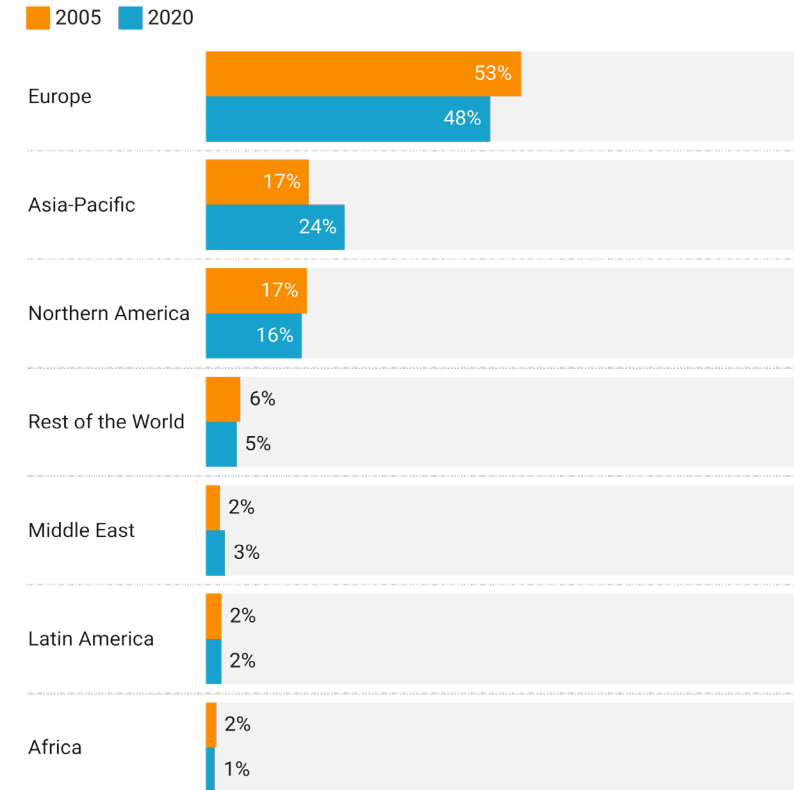
## Total services



## Digitally Deliverable services



## Global share in digitally delivered services trade



Source: ADB estimates, based on WTO-UNCTAD (accessed 21 July 2021).

# Drivers of digital services trade

## ■ Human Capital:

educational attainment, technical skills to make full use of digital technologies

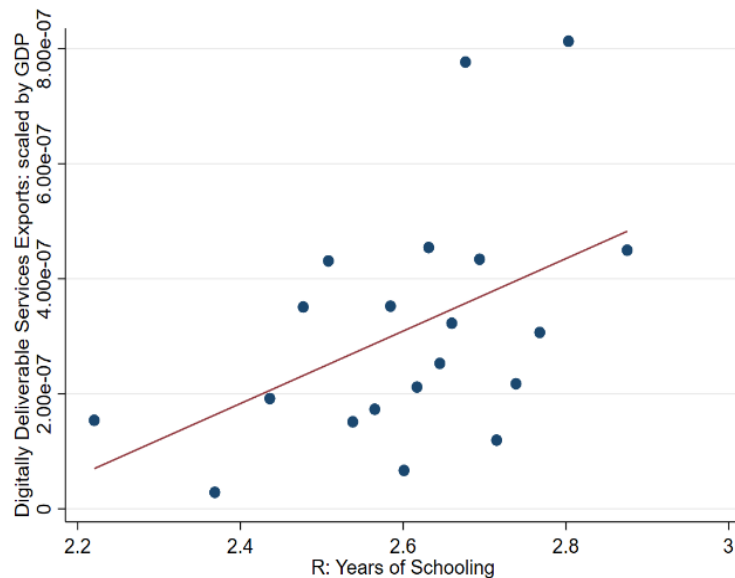
## ■ Digital connectivity:

availability, quality, cost and divide

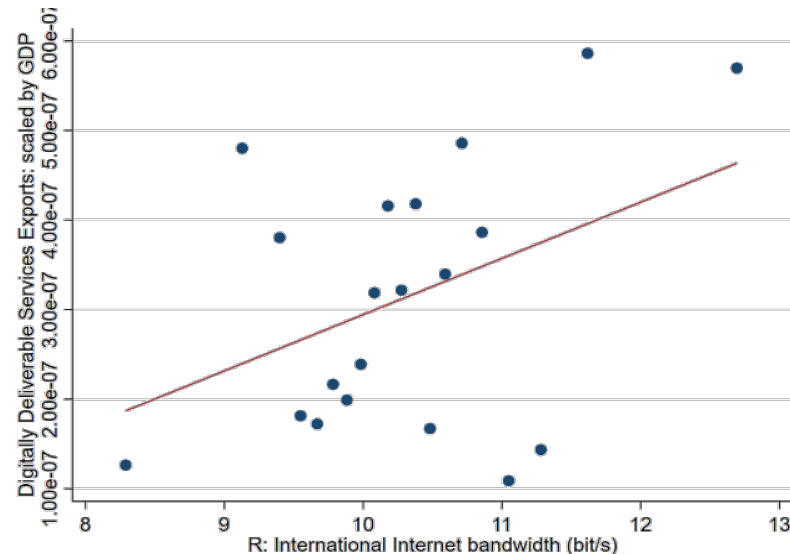
## ■ Investments:

telecommunication and digital solutions

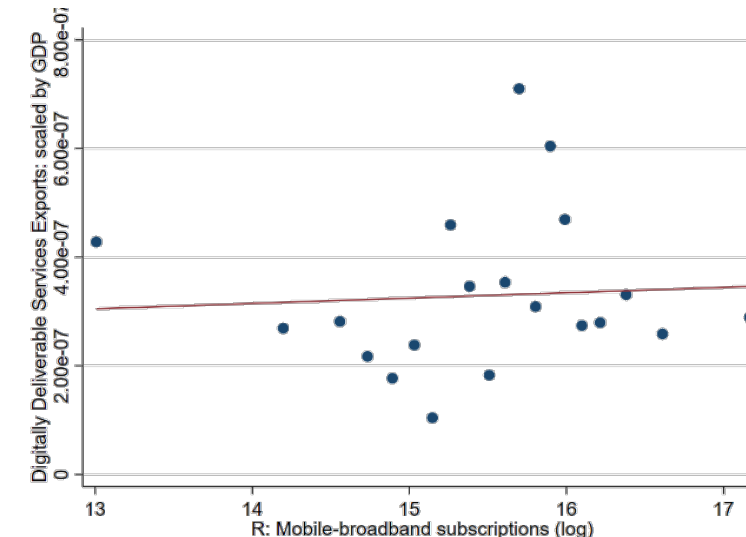
### Expected Years of Schooling



### International Bandwidth per Internet User (bit/s)



### Mobile Broadband Subscriptions

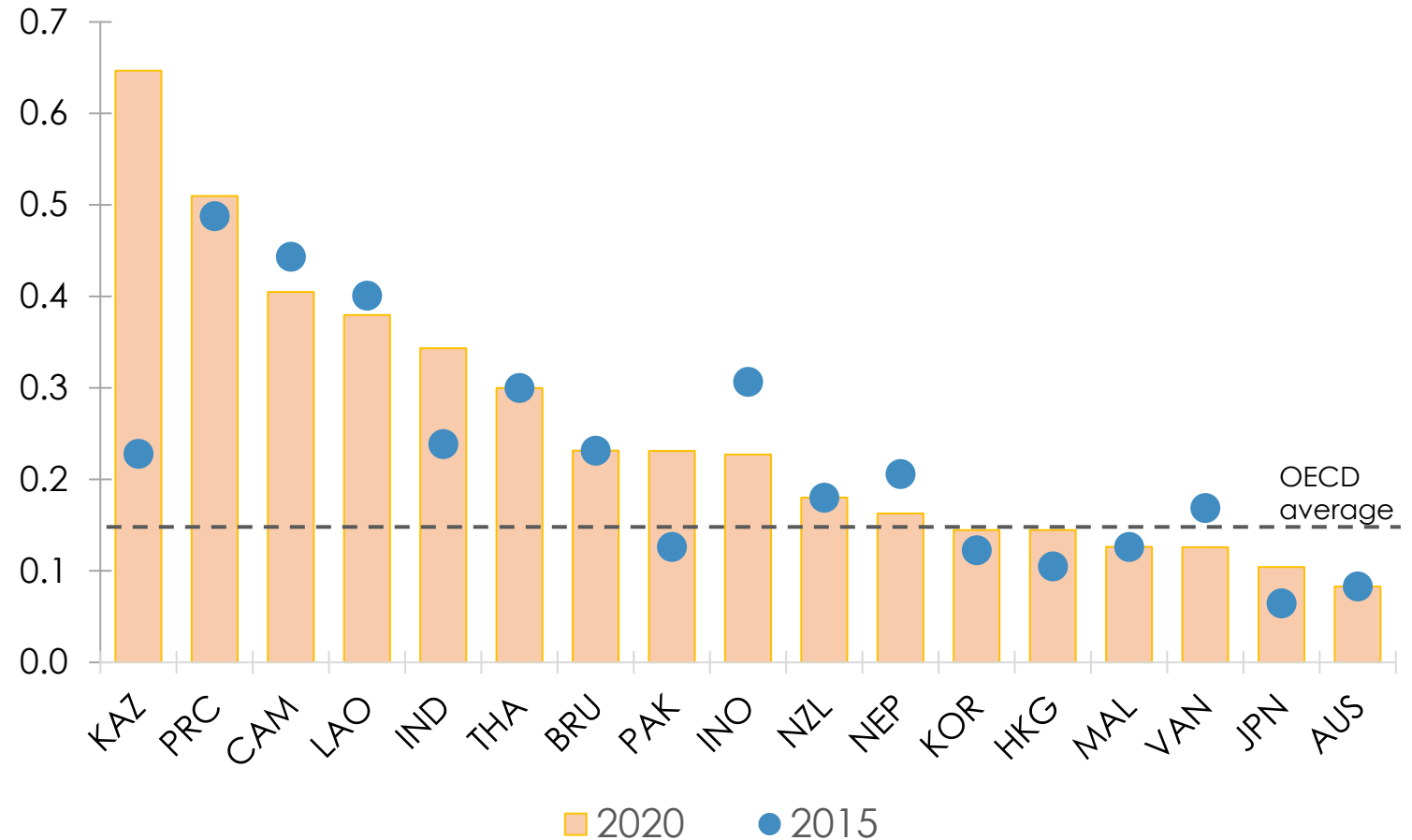




# Policies: deregulation and trade liberalization

- Regulation (ex. data restrictions)
- Trade liberalization (ex. Regional trade agreements)
- International co-operation (ex. Mutual recognitions arrangement)

## Digital Services Trade Restrictiveness Index—Asia



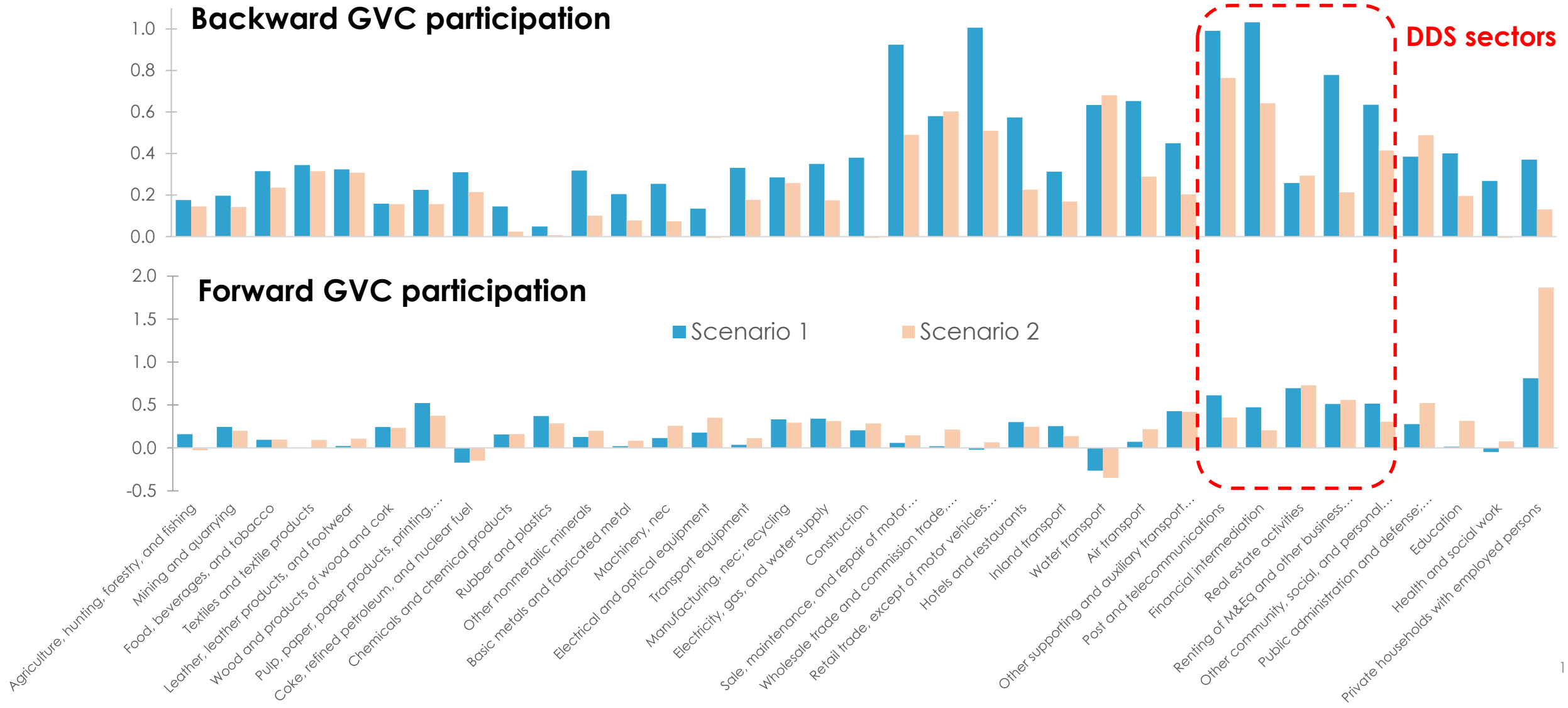
Source: OECD.

# Simulation Exercise on Policies

- Quantitative general equilibrium model based on the ADB MRIOT for 2019.
- **Two counterfactual simulations:** Reduction of iceberg trade costs in digitally delivered service sectors
  - ❖ **Scenario 1 (Trade Liberalization):** International trade costs reduction by 10% (intranational costs unchanged).
  - ❖ **Scenario 2 (Deregulation):** International and intranational trade costs reduction by 10%.
- Impact on trade flows, GVC linkages and aggregate real income

# Results: Spillover impact through GVC linkages

Percentage of Gross Exports by Sector, Intra-Asia (% change over baseline)



# Policy: Impact of data restrictions

- Trade in digital services is reliant on the transmission of data across economies
- Categories of data-related policies
  - Data localization policies (DL)
  - Local storage requirements (LS)
  - Conditional flow regimes (CF)
- Proportion of data localization measures applied by Asian economies is larger than the rest of the world (70%).

## Impact of Cross-Border Data Restrictions Summary of Results

		Digital services imports			
		Overall	DL	LS	CF
Sectors/Region		Reference: Non-Digital			
Digital	World	-14%			
	Non-Asia	-9%	-0.6% <sup>a</sup>	-24%	-8%
	Asia	-70%	-94%	-29%	-45%

<sup>a</sup> = statistically insignificant; DS = Telecom, Computer, Information, Insurance, Financial.

# Regulatory Environment: International Regulations

## World Trade Organization

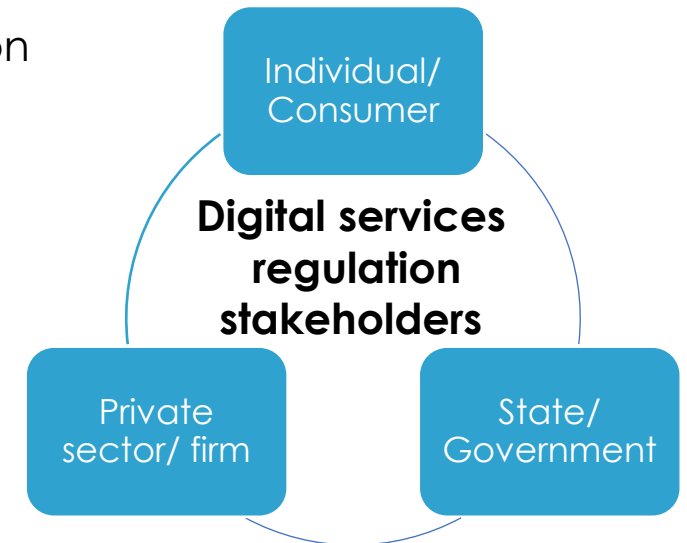
- Main obligations of the regulation of digital trade under the existing WTO legal framework can be found in the **GATS Telecom Annex**.

*“service suppliers shall be accorded access to and use of public telecommunications transport networks and services on reasonable and non-discriminatory terms and conditions”*

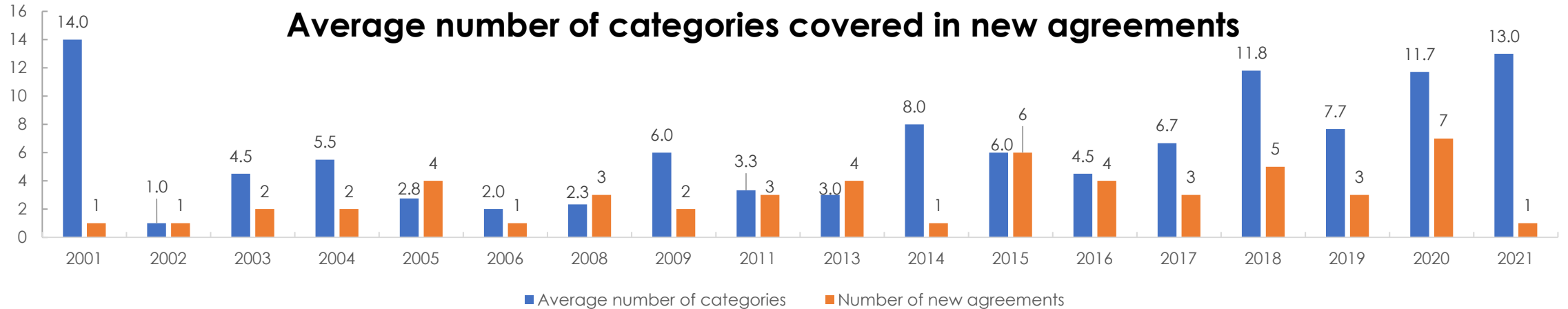
- **Three elements to consider:**
  - **Classification:** goods or services trade? Critical practical implication on border measures vs. domestic regulations
  - **Liberalization levels:** from «none» to «unbound»
  - **Exceptions:** allowing WTO Members to deviate from their trade obligations

## Regional Trade Agreements

- Three main sovereign approaches (United States, the PRC, European Union) reflected in trade agreements
- Balancing the interests of stakeholders with different priorities.

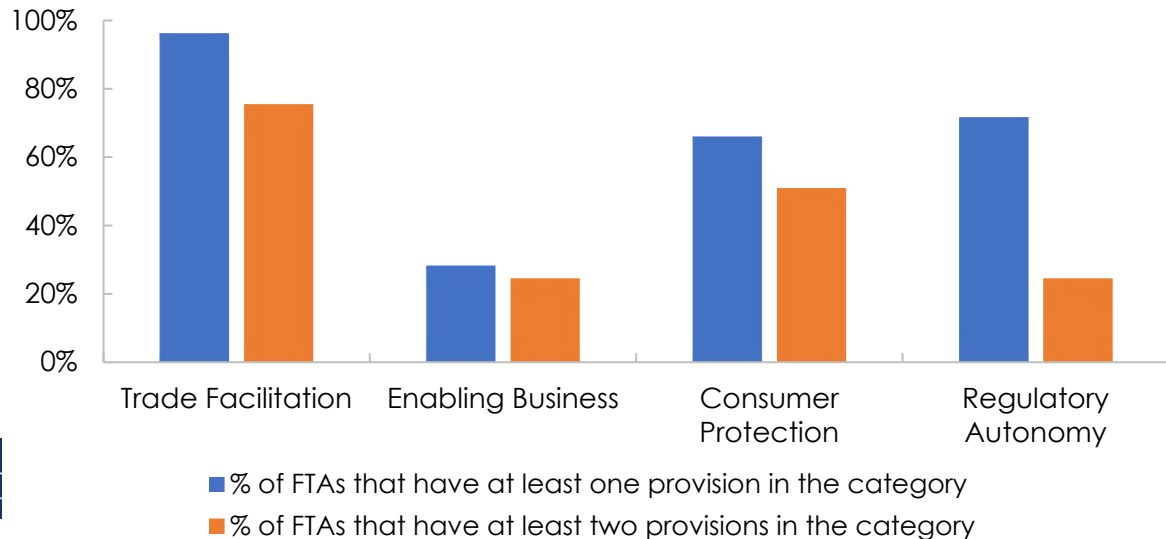


# Regulatory Environment: Trends in Free Trade Agreements

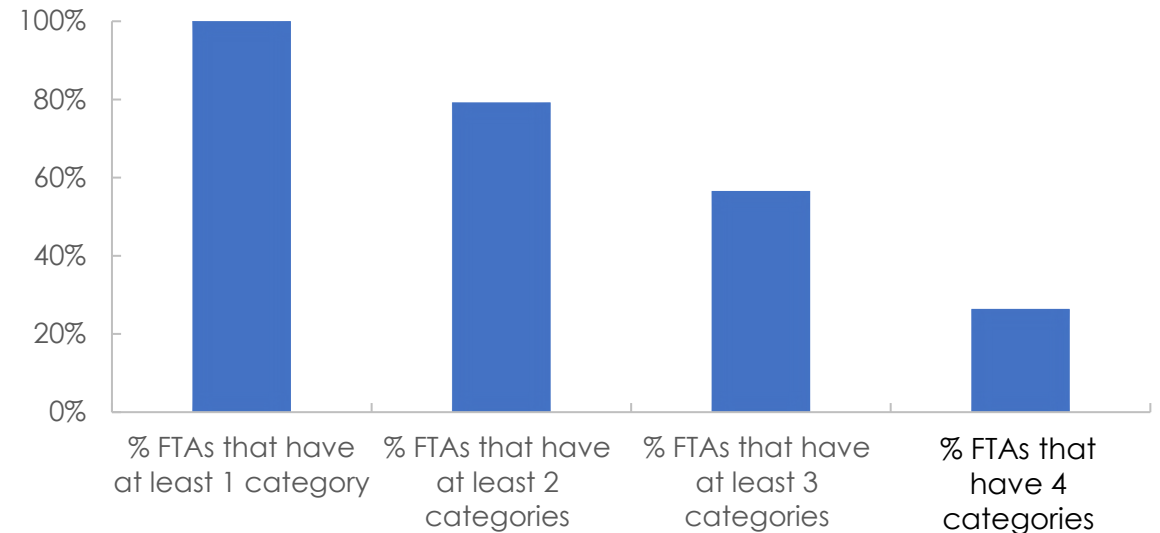


## Percentage of FTAs with...

### ... at least one provision in each category



### ... provisions in at least one to all categories



# Regulatory Environment: Domestic Regulations

## Services regulations

Transparency

Deregulation

Qualification requirements and procedures

Technical standards

Licensing requirements

## International Cooperation in Domestic Regulations

Mutual recognition agreements

## Cybersecurity

Safety of digital services trade transactions – cybercrime prevention

Confidentiality, integrity, and availability of information

Legitimate policy objectives vs. Protectionism?

Lack of adequate regulatory framework and limited human and financial capacity in DC and LDCs

Formal (e.g., WTO plurilateral negotiations) or informal cooperation arrangements (e.g., MoU) cooperation among like-minded economies

# New international tax rules: Implications for Asian economies



## Tax revenues

- Different impacts across jurisdictions
- Higher tax certainty and sustainability
- Trend towards VAT/GST collection on imported digital services



## Trade

- Risks of unilateral measures, tariffs or other barriers to trade
- Consistency between tax and WTO rules to prevent future disputes



## Compliance

- Domestic and international law amendments required
- Administrability of tax admin., firm-data collection
- Coordination to enter into force in 2023



## Competition / FDI

- Ensuring level playing field between foreign and domestic providers
- Scope of preferential tax regimes may evolve following Pillar 2 implementation



# Policy Recommendations

- Investments in human capital (digital capacity), ICT infrastructure and connectivity
  - Services sector deregulation and trade liberalization
  - Balancing between data protection/privacy and data flows
  - International cooperation for transparent, fair and harmonized regulations, taxations, and liberalization through RTA and DEPA
  - Possible differential impacts and trade-offs, for example for skilled vs. unskilled workers, or in urban vs. rural area
- Governments' role in fostering competitiveness of digital services across society and addressing digital divide and distributional impact

# Thank you for your attention!

Asian Economic Integration Report 2022 - Theme Chapter

[https://aric.adb.org/pdf/aeir/AEIR2022\\_7\\_theme-chapter-advancing-digital-services-trade-in-asia-and-the-pacific.pdf](https://aric.adb.org/pdf/aeir/AEIR2022_7_theme-chapter-advancing-digital-services-trade-in-asia-and-the-pacific.pdf)

# Annex

# Impact of digital services trade on households' welfare

- Transmission channels: consumer prices, wages, technologies and productivity
  - Widespread impacts on wages not only on services sectors but also on manufacturing wages through GVC linkages.
  - In the short-run, we may expect differential impacts and trade-offs, for example for skilled vs. unskilled workers, or in urban vs. rural area.
  - Gradual adjustments to disperse development benefits and overcome digital divide related challenges
- Governments to understand and address the factors affecting the competitiveness of digital services trade and distributional impact to set up an enabling framework in an equitable manner.

# “Digital provisions” of Trade Agreements in Developing Asia

Category	Provisions
<b>Trade facilitation</b> Create facilitating environment for digital trade in general.	Ban on customs duties on e-transmission
	Non-Discriminatory Treatment of Digital Products
	Domestic Electronic Transactions Framework
	Electronic Authentication
	Electronic Signatures
<b>Enabling business</b> Minimize the commercial and regulatory burden for digital services trade providers.	Paperless Trading
	Access to and Use of the Internet for Electronic Commerce
	Free Flow of Data
	Prohibition of Data Localization
	Prohibition on Forced Transfer of Source code
<b>Consumer protection</b> Protect the interests of consumers.	Open Government Data
	Online Consumer Protection
	Privacy and Personal Information Protection
<b>Regulatory autonomy</b> Preserve the regulatory autonomy of the government.	Unsolicited Commercial Electronic Messages
	Cybersecurity
	Exceptions
	Cooperation
	Dispute Settlement