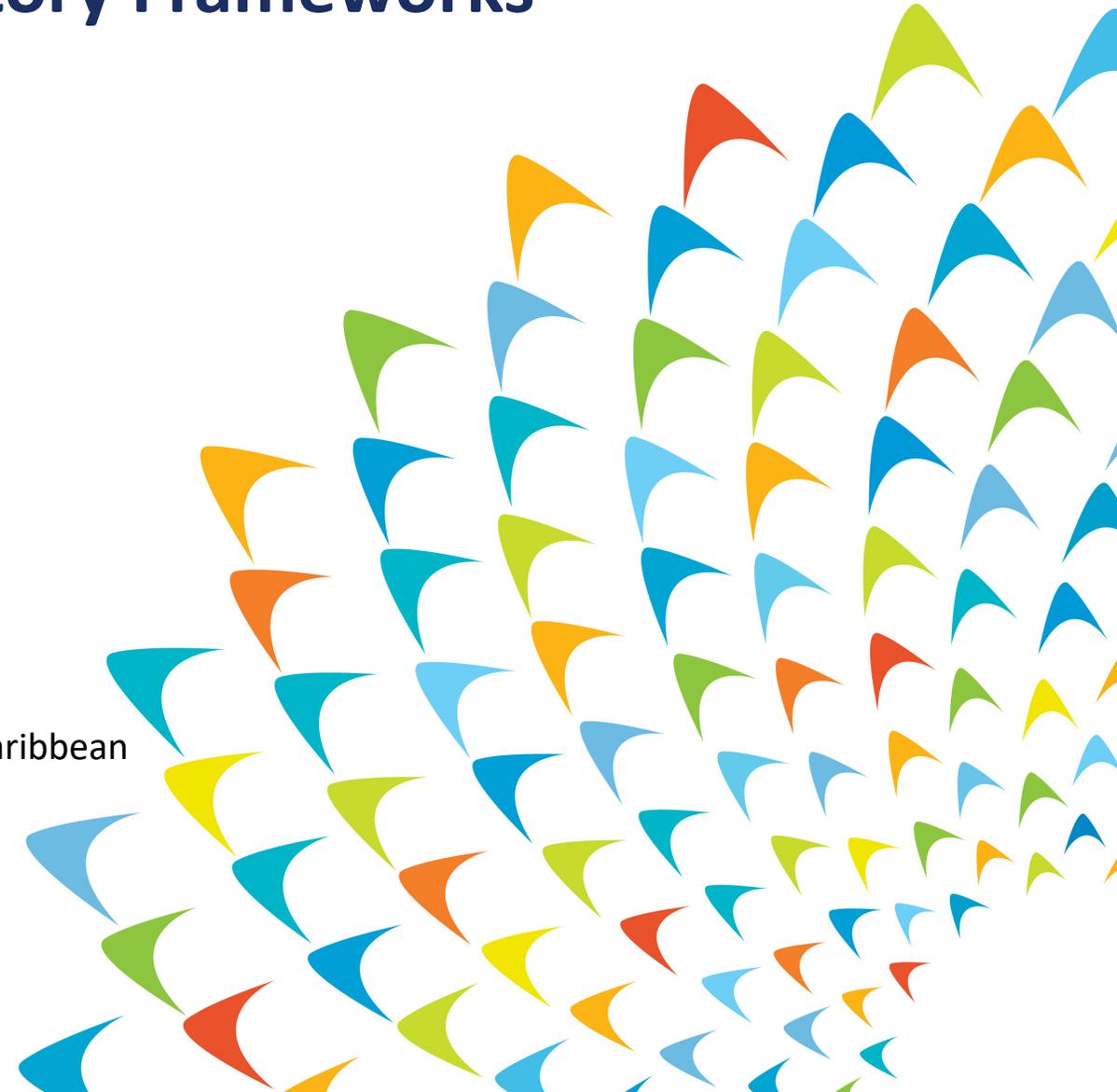


Trends and Impact of Digital Regulatory Frameworks in Asia and the Pacific

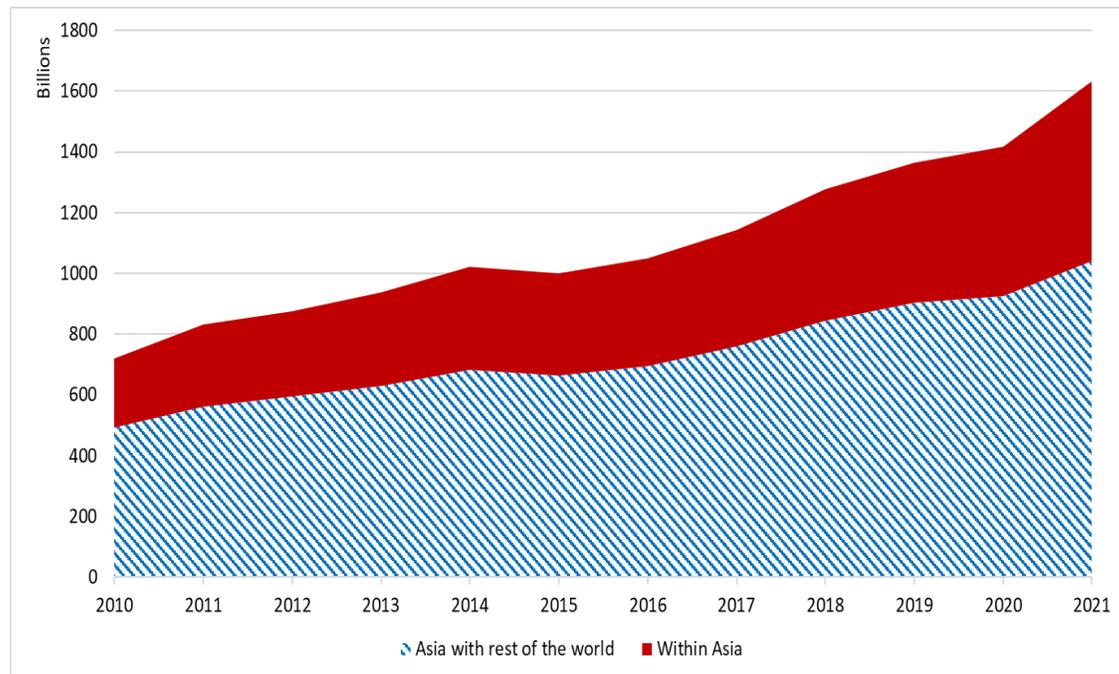
Rolando Avendano
Economist
Asian Development Bank

EUI-ECLAC-OECD Conference
Building a Competitive Regulatory Environment for Latin America and the Caribbean
Santiago - 21-22 September

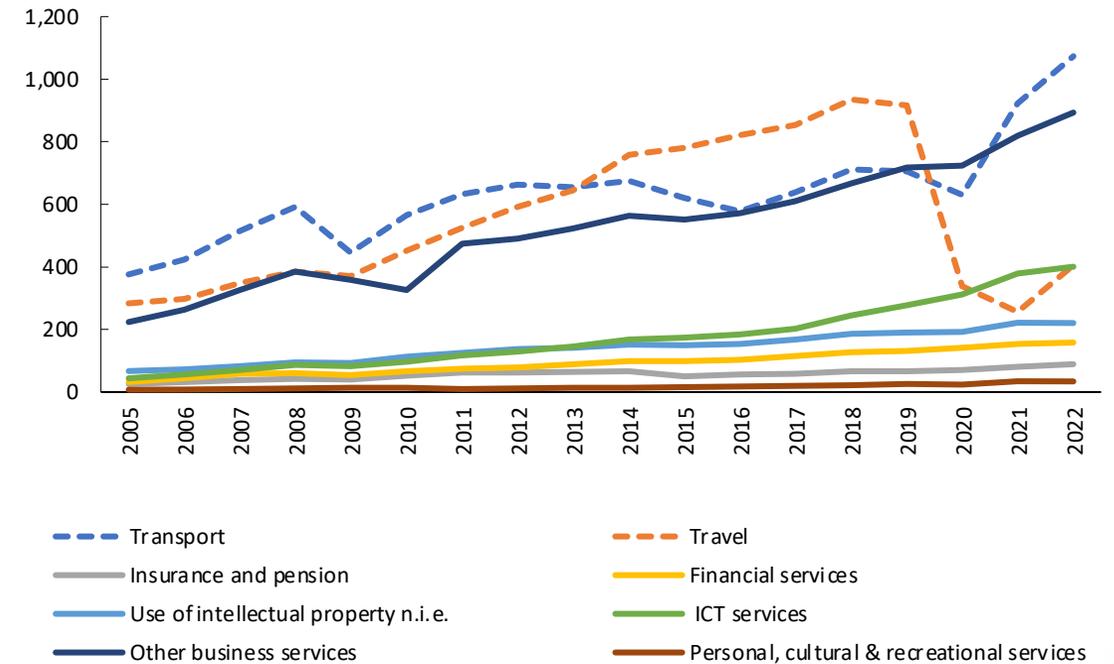


Trade in digital services has grown rapidly, including in Asia and the Pacific

Distribution of Digitally deliverable services trade for Asia, 2010-2021



Trade in Services by Sector, Asia and the Pacific (\$, billion)



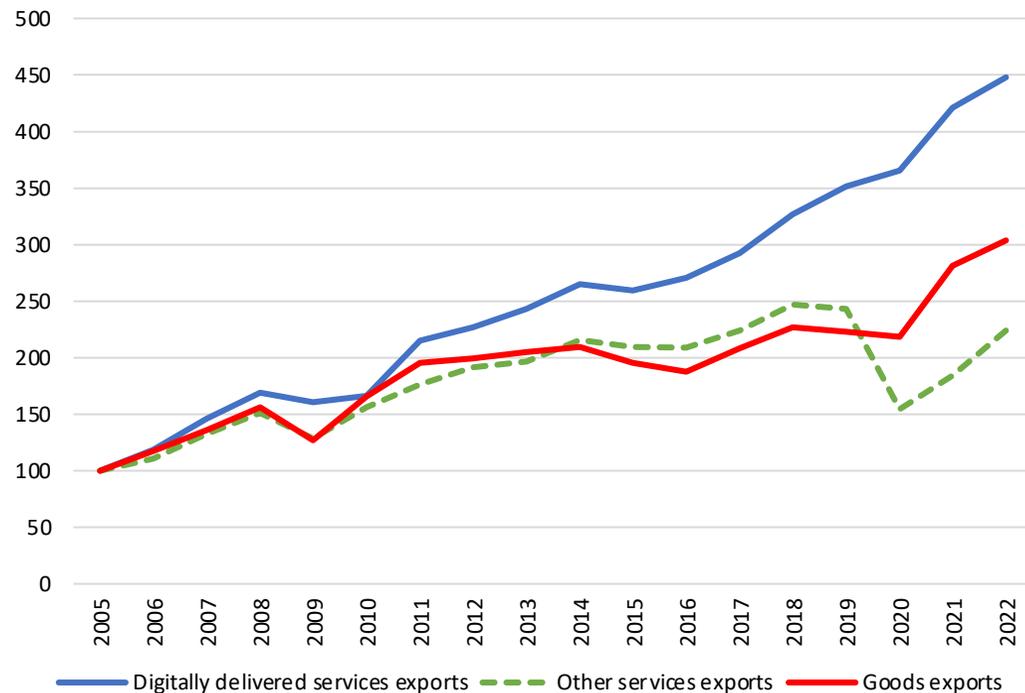
Note: Solid lines denote digitally deliverable services, dotted lines are non-digitally deliverable service items.



Digital services trade can enhance manufacturing upgrading

Rapid growth in digital services and a dynamic export sector can promote innovation and productivity

Trade in goods, services, and digital services in Asia and the Pacific (2005 = 100)



Digital service imports **can foster** manufacturing upgrading through innovation and internet development. This effect is stronger:

1. where institutional quality is high;
2. for imported ICT services, intellectual property use services, other business services and financial services

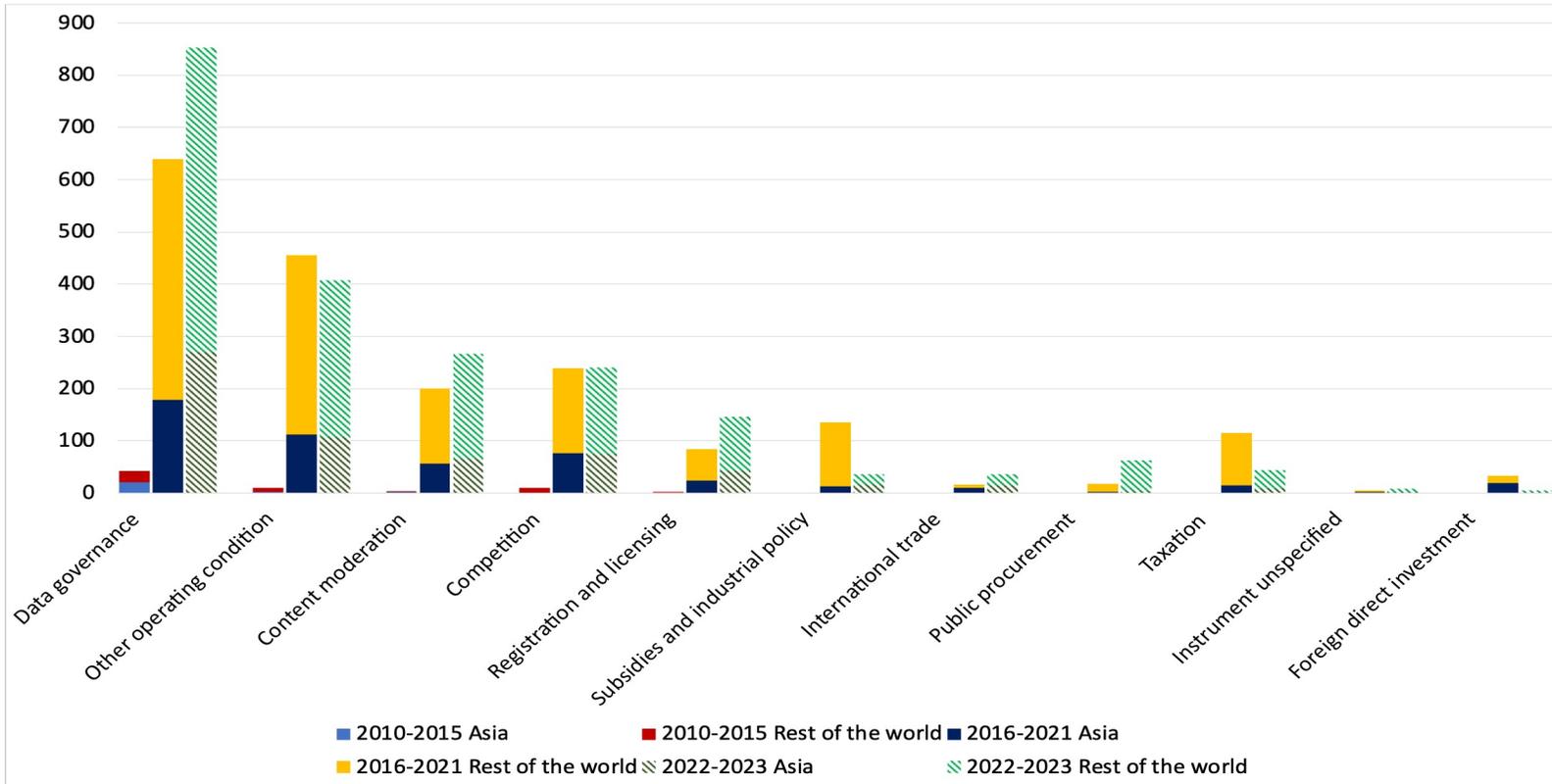
Source: Ling, Dan, and Yueping Wu. "The impact of digital service imports on manufacturing upgrading." *SHS Web of Conferences*. Vol. 169. EDP Sciences, 2023.

Source: ADB calculations using WTO-UNCTAD (accessed Aug. 2023)



Implementation of digital regulatory policies is uneven

Digital policy interventions in Asia vs Rest of the World, by period

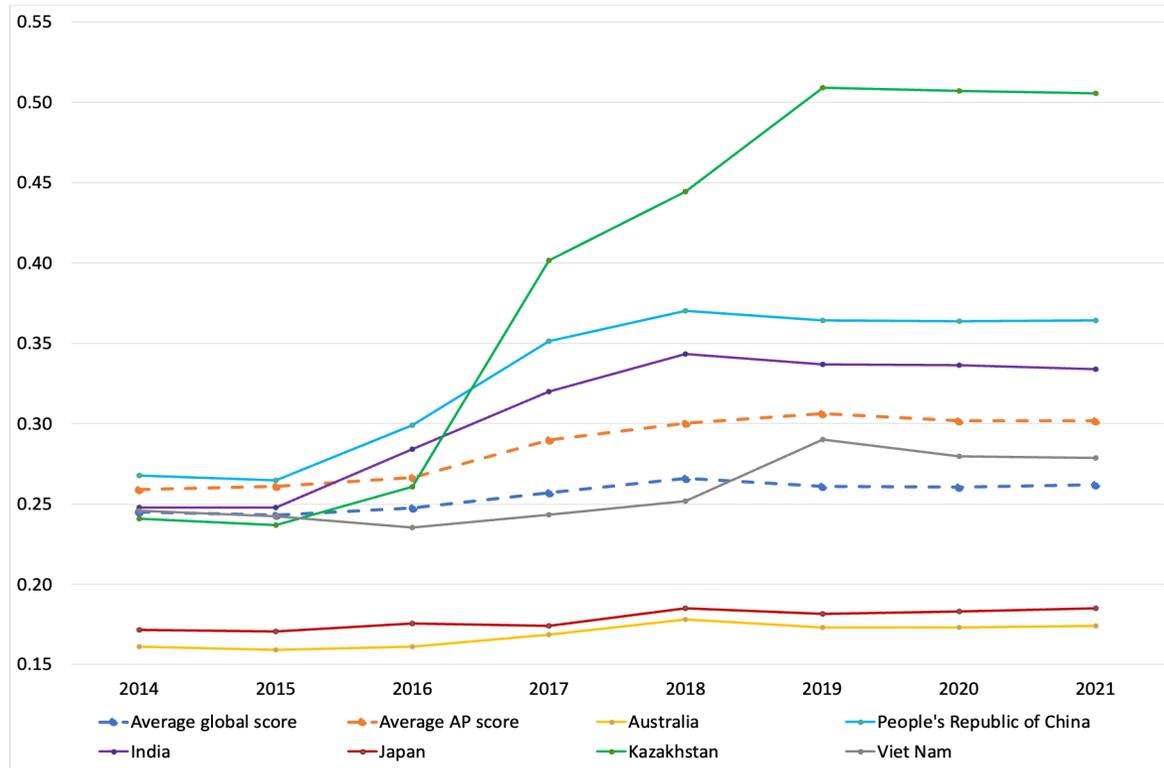


- Unilateral implementation of policies to balance economic and political objectives.
- From 2016 to 2023, uneven increase in implementation across regulatory areas.
- Policy gaps in some areas for Asia (e.g. public procurement, FDI, taxation)

Source: Authors calculation using Digital Policy Alert data. Only policies that are implemented or adopted are considered. The policies could be binding or non-binding. Whether these policies are restrictive, or liberating cannot be determined from the existing data. We also include policy changes from 2022-2023 because these years have experienced more policy implementations than the last decade.

Despite progress in regulatory frameworks, implementation has been inconsistent

Digital services restrictiveness heterogeneity index score for Asia, 2014-2021



Initiatives tracking digital regulatory frameworks in Asia

UNCTAD cyberlaw Tracker, DPA, EUI DTI

Regulatory scope is complex and “core issues” differ. Low digital trade integration.

OECD’s DTI and DSTRI

Identifies regulatory heterogeneity and restrictions across economies.

UNESCAP AP digital trade regulatory review, UNCTAD Pacific E-commerce initiative

Tracks regulatory stance based on unique challenges, requirements, features,

ITU’s ICT regulatory tracker, ASEAN, AP

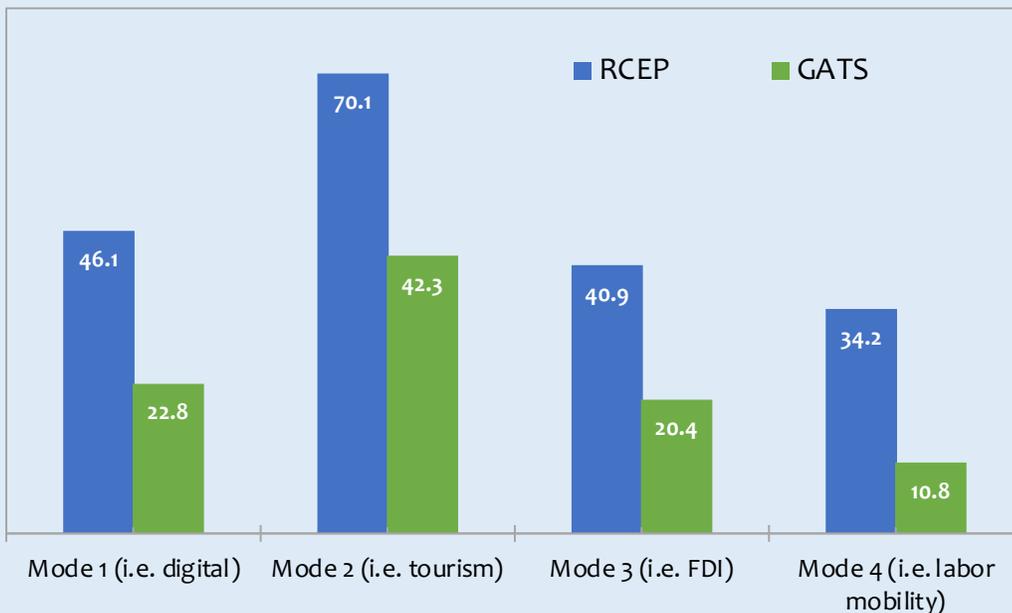
High variation in managing data flows, digital payments and digital standards.

Source: OECD Digital STRI heterogeneity scores. Accessed in September 2023.

Asia can expand market opportunities by liberalizing (digital) services trade

- RCEP, the largest FTA, can go much further in liberalizing services trade.
- Since WTO accession, PRC has expanded services liberalization commitments

RCEP Services Liberalization Rates, in %

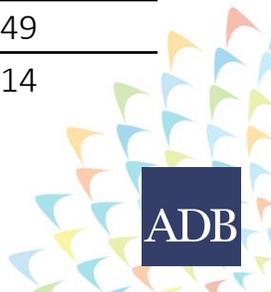


Source: Crivelli, P. J. Marand, and G. Pascua. 2022. Liberalizing Services Trade in the Regional Comprehensive Economic Partnership: Status and Ways Forward. *ADB Briefs 237*, Asian Development Bank, Manila.

Share of services subsectors with at least one commitment by the PRC in FTAs by sector (%)

1. Business Services	74
2. Communication Services	42
3. Engineering Services	100
4. Distribution Services	100
5. Educational Services	100
6. Environmental Services	100
7. Financial Services	85
8. Health Related And Social Services (Other Than Those Listed Under 1.A.H-J.)	15
9. Tourism And Travel Related Services	94
10. Recreational, Cultural And Sporting Services (Other Than Audiovisual Services)	20
11. Transport Services	49
12. Other Services Not Included Elsewhere	14

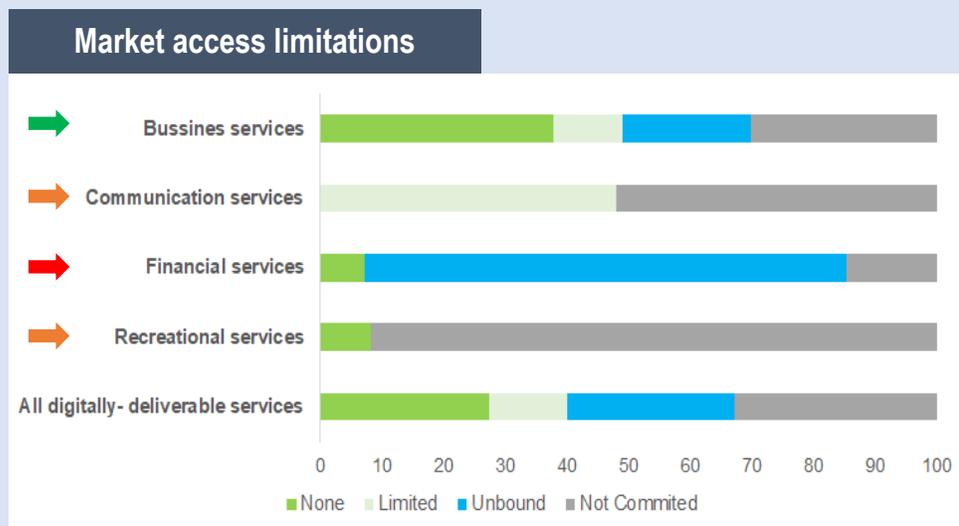
6 Note: Calculations using the People's Republic of China schedule of commitments. Share of committed subsectors is computed by counting the number of 5-digit subsectors with at least one specific commitment, divided by the total number of subsectors with defined central product classification codes in the World Trade Organization's Services Sectoral Classification List (W/120).



Asia should continue efforts to harmonize digital regulations

- Wide heterogeneity in RCEP digital services commitments across sectors.

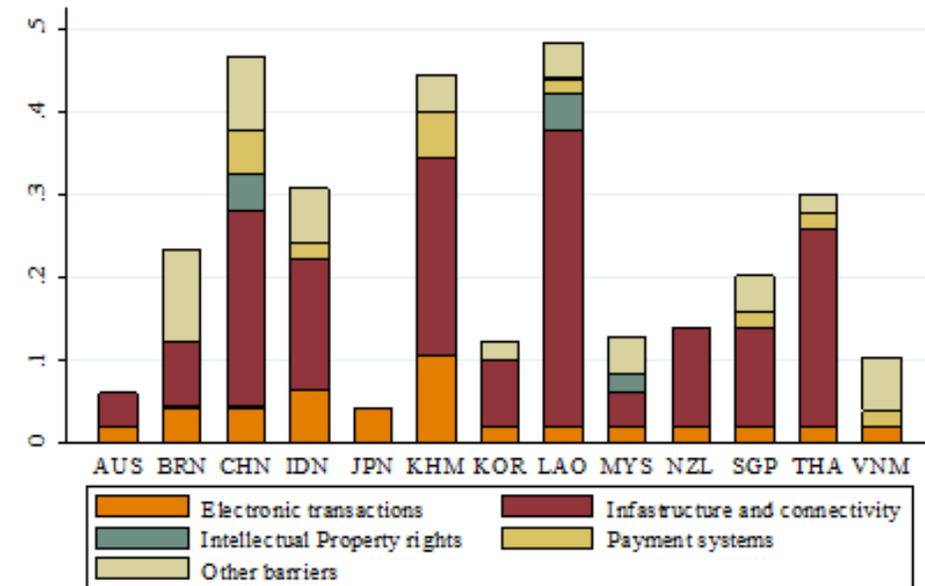
Share of DDS subsectors with Mode 1 commitments by the PRC under RCEP (2022), by type of limitation, in %



Source: Elaborated based on Crivelli, Pramila A., and Gerald Y. Pascua.2023. *(Digital) Services Commitments in RCEP and other Trade Agreements*. Slide deck presented at the Cambodia National Research and Policy Dialogue Workshop, March 2023.

Calculations using the PRC's schedule of commitments. Share of committed subsectors is computed by counting the number of 5-digit subsectors with at least one specific commitment, divided by the total number of subsectors with defined central product classification codes (CPC) in WTO's Services Sectoral Classification List (W/120).

Digital Services Trade Restrictiveness Index for RCEP members, 2021

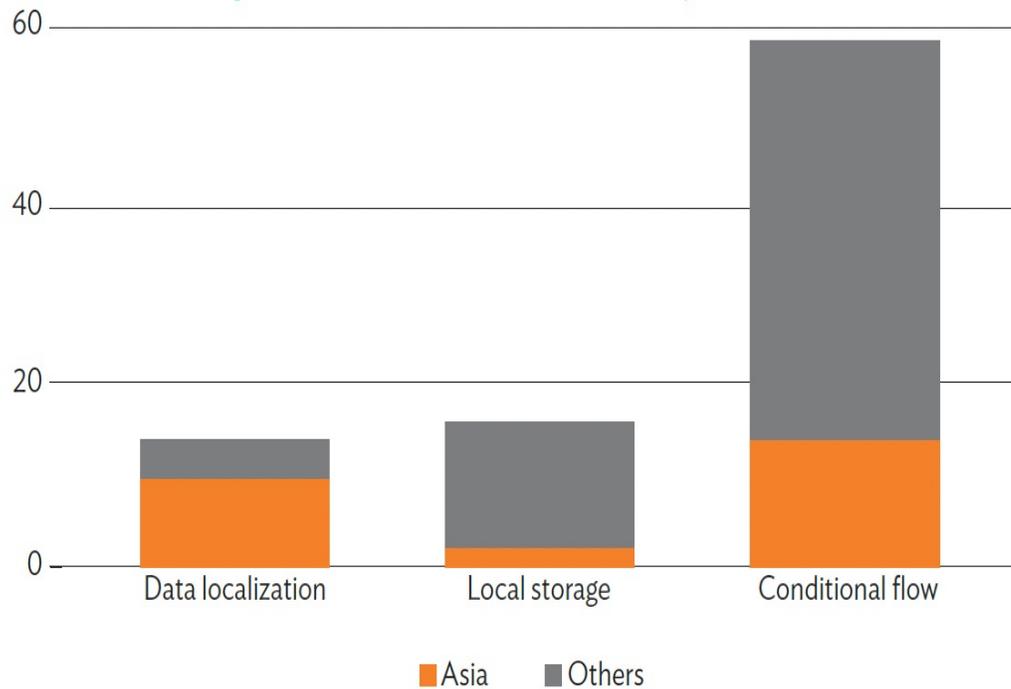


- Divergence in digital regulatory environments discourages digital services trade in the region.

Note: AUS = Australia, BRU = Brunei Darussalam, CAM = Cambodia, INO = Indonesia, JPN = Japan, KOR = Republic of Korea, LAO = Lao People's Democratic Republic, MAL = Malaysia, MYA = Myanmar, NZL = New Zealand, PHI = Philippines, PRC = People's Republic of China, SIN = Singapore, THA = Thailand, VIE = Viet Nam. Scores range from 0 to 1, where 1 indicates the most restrictive regulatory environment. Source: Authors based on OECD Digital Services Trade Restrictiveness Index.

Impact of data restrictions in Asia

Data-related measures imposed by Asia and other economies



Impact of Cross-Border Data Restrictions Summary of Results

		Digital services imports			
		Overall	Data Localization	Local Storage	Conditional Flow
Sectors/Region		Reference: Non-Digital			
Digital	World	-14%			
	Non-Asia	-9%	-0.6% ^a	-24%	-8%
	Asia	-70%	-94%	-29%	-45%

^a = statistically insignificant; DS = Telecom, Computer, Information, Insurance, Financial.

Source: van der Marel (2022), Data-related restrictions and digital services trade: Comparing Asia with the rest of the World. In

8 ADB (2022), Unlocking the Potential of Digital services trade in Asia and the Pacific. Manila.



Drivers of regulatory approaches in Asia

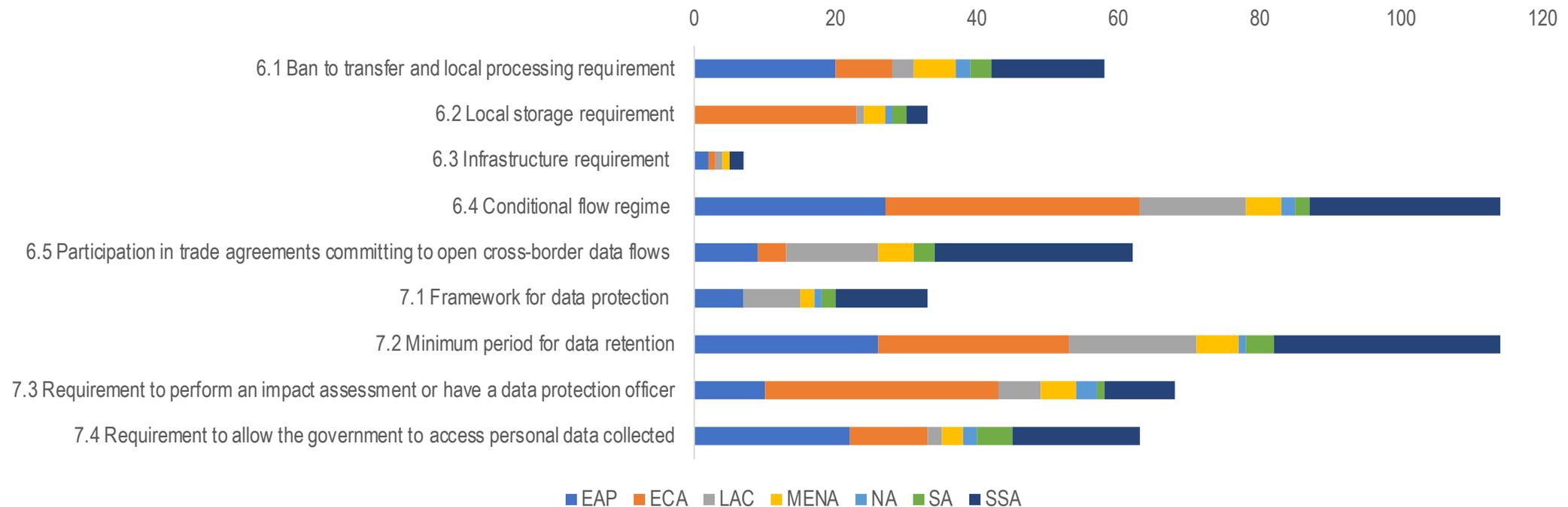
Concern	China	India	Open/Advanced (e.g. Singapore, NZ, Australia, Japan, Korea)	Other developing countries (e.g. other Southeast Asia, some Central/West Asia)	Less advanced developing countries (e.g. Pacific, South Asia, some Southeast Asia, some Central/West Asia)
Economic growth and development in the digital economy	Domestic champions backed by government intervention and investment. “Cyber-sovereignty”	Focused on domestic digital growth, enabled by data restrictions; push back against “data colonialism”	Open domestic and trade policies – seeking to create seamless large digital markets	See digital as an important enabler of development; less trade-focused than Open/Advanced	See potential in the digital economy – but capacity constraints
Data protection and privacy	Interventionist and relatively strict overall and sectorally	Strict overall and sectoral obligations	Privacy is a key concern: policy safeguards needed	Recognise importance of data protection, some regulatory gaps	May lack basic building blocks
Cross-border data flows, data localization	Extensive restrictions	Highly restrictive	Promote free flow, with some exceptions for public policy reasons	A range of light touch to restrictive (shaped by other factors)	May lack basic building blocks
National security	Wide government access and control	Strict obligations	Not a prominent concern	Some see this as a major concern	Not a prominent concern for most
Other regulatory action/sectors	Extensive	Extensive	Extensive – interest in innovative sectors, new issues e.g. competition	Moderate, with gaps	May lack basic building blocks
International cooperation and trade negotiations	RCEP; values policy space – but also applicant to CPTPP and DEPA	None; mainly focused on domestic market – but position may be shifting	CPTPP, modern RTAs, innovative/ holistic DEAs. WTO JI Co-Convenors	Interest in modern RTAs – can use to support regulatory reform; but capacity/ development limits	Few or none

Source: Honey, Stephanie (forthcoming). Inside the Black Box of Digital Regulatory Cooperation.; based on Table IV.1 in UNCTAD (2021) Digital Economy Report 2021.



Digital trade measures on data flows remain restrictive in Asia and the Pacific

Digital trade measures concerning data flows, by geographical region



Source: In Avendano, R. Crivelli, P. Kang, J.W. (2023) Building an Information-Sharing Mechanism to Boost Regulatory Frameworks on Cross-Border Data Flows, T20 paper. Based on Digital Trade Integration Database, accessed April 4, 2023.



Digital Economy Agreements and emerging issues

Digital regulatory frameworks in Asia

The digital trade environment has **become increasingly restrictive** since 2015.

Because the current digital regulatory landscape environment **is fragmented and heterogeneous**.

Regional regulatory scope is affected by **unaligned national objectives** for digital trade and privacy & security concerns

Exploring DEPA Provisions

DEPA has a **modular and non-binding** approach in provision adoption

Affirms existing commitments to other agreements.

National objectives and public policy exceptions are taken under consideration.

DEPA **promotes alignment with international guides** - enabling interoperability

Digital payments in cross border trade

Missing digital infrastructure is a crucial challenge for digital inclusion.

Long cross border transaction chains expose Asia to economic headwinds from the west.

Interest in **central bank digital currency** is **on the rise** as an alternative to traditional currency

CBDCs **reduce clearing costs, financial inequalities and increase spreads** – least middle-income countries are seriously exploring CBDCs in Asia.

International Taxation and Digital Trade

Rising challenges in interaction between international taxation and investment regimes.

International tax systems are **ill equipped** to address challenges from digital economy and digital trade

Tax systems must upgrade to **capture more revenue sources but remain conducive to foreign investments**.

Next steps

Digital Regulatory Cooperation: Unpacking the Implementation “Black Box”

- Policy roadmap for implementation of digital policies and regulations
- Mapping of *de facto* regulatory processes associated with digital trade rules and/or DEAs
- Firm-level survey assessing awareness and take-up of digital policies

Improving Competitiveness and Regulatory Environment for Digital Economy

- Extension on digital trade integration indicators for selected member economies
- Sectoral analyses on the role of digital regulatory frameworks in key sectors for the region (e.g. tourism, telecommunications)

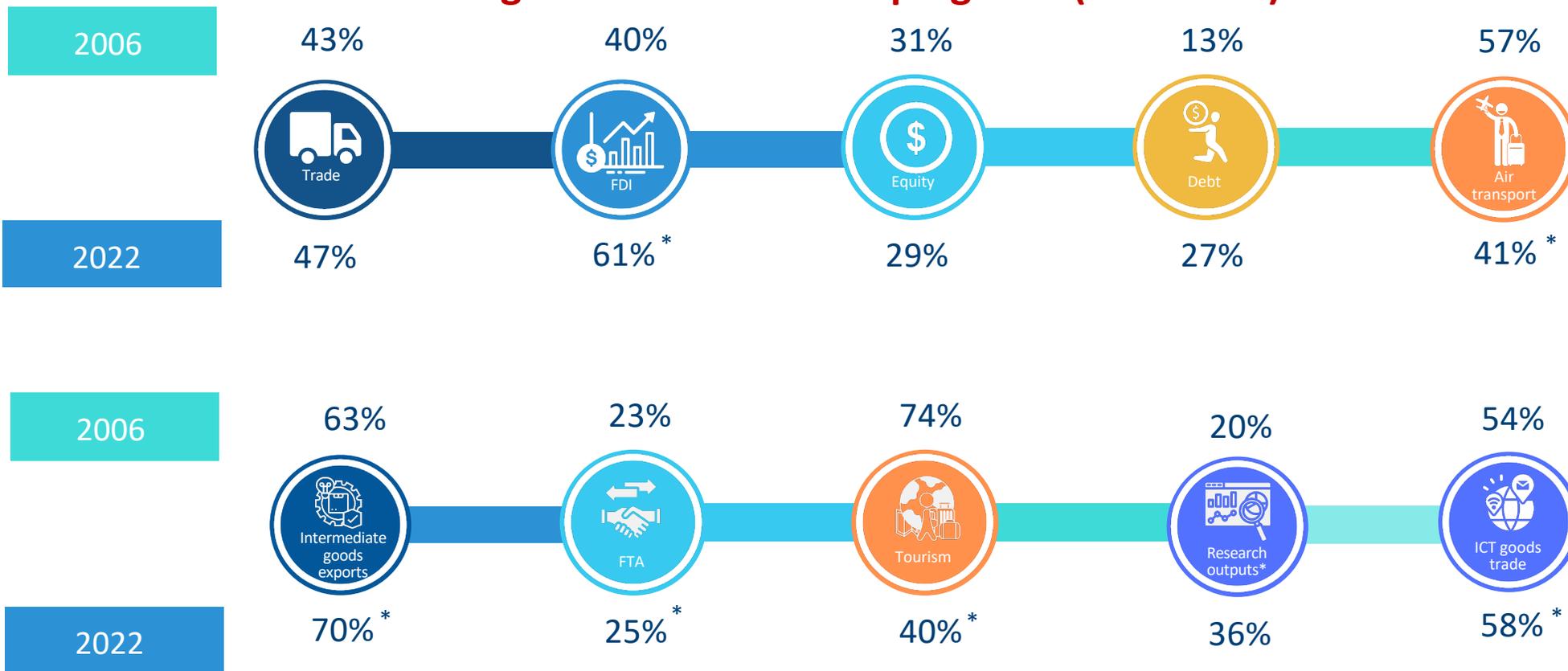


Thank you!



Asia's regional economic Integration continues to deepen

Intraregional shares Developing Asia (% of total)



FDI = foreign direct investment (flows data), Equity = equity asset holdings (stock data), Debt = debt asset holdings (stock data), Air transport = passenger seats sold.

*Numbers reflect 2021 data (latest year available).

Note: Value for research outputs reflect the averaged intraregional shares of economies in developing Asia. Indicators on intermediate goods exports and environmental goods trade are expressed as shares to total intraregional goods exports and trade, respectively. Indicator on FTAs reflects averaged shares of intraregional FTAs over the total number of economies in developing Asia.

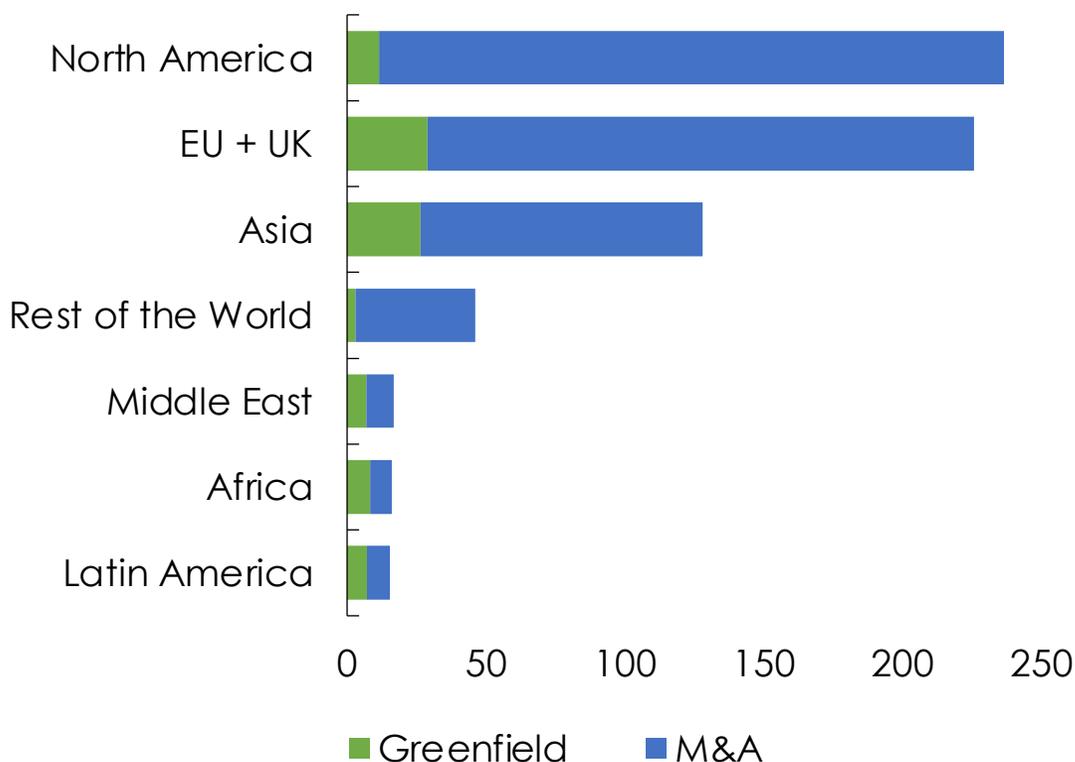
Source: ADB calculations using data from Association of Southeast Asian Nations Secretariat; International Monetary Fund; Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development; Clarivate Web of Science; ICAO Passenger Traffic by City Pair Data; and national sources.



Asia remains a strong destination of digital FDI

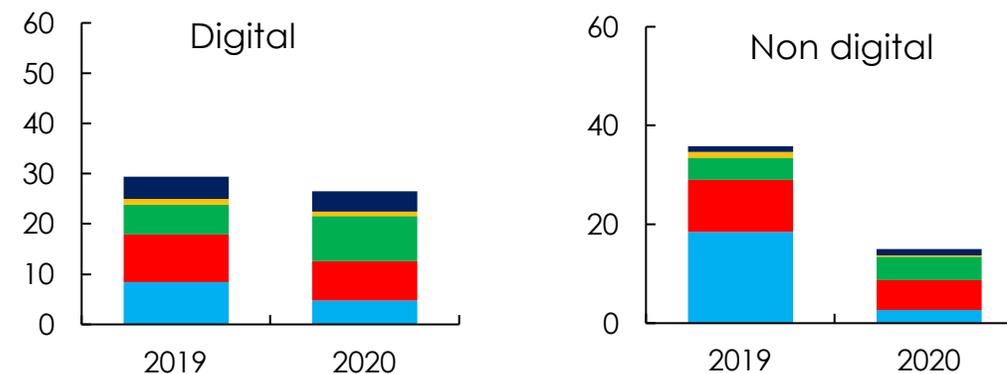
Inward FDI in digital services by region, 2020

(\$ billion)

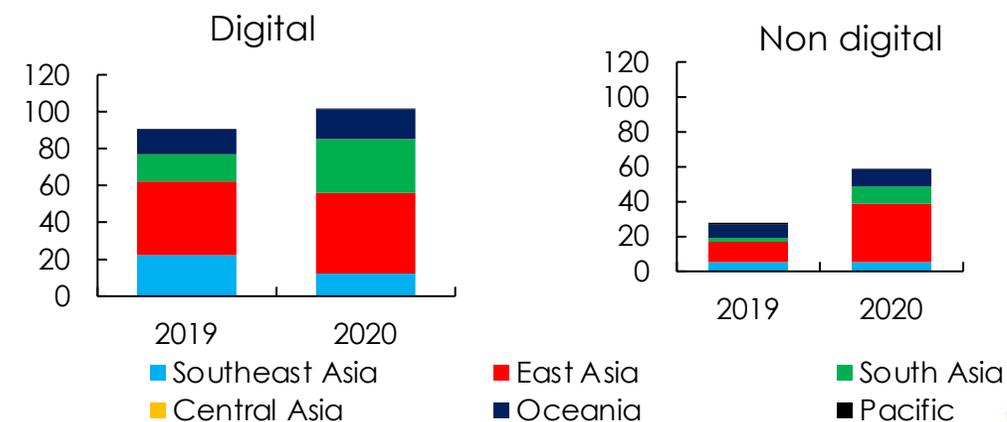


Services FDI in Asia: Digital vs. Non-Digital

a: Greenfield



b: M&A



EU = European Union, FDI = foreign direct investment, M&A = merger and acquisition, UK = United Kingdom. Oceania includes Australia and New Zealand. Sources: ADB calculations using data from Bureau van Dijk, Zephyr M&A Database; and Financial Times. fDi Markets.

