

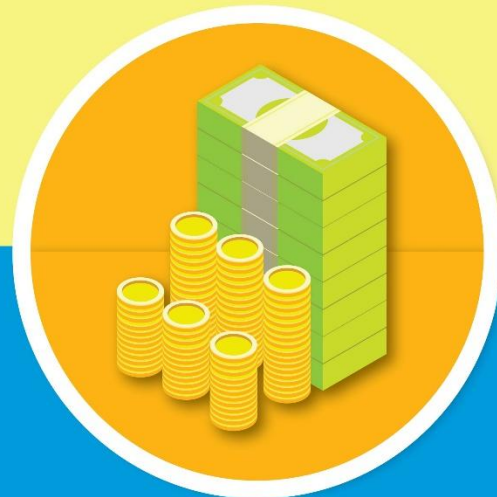
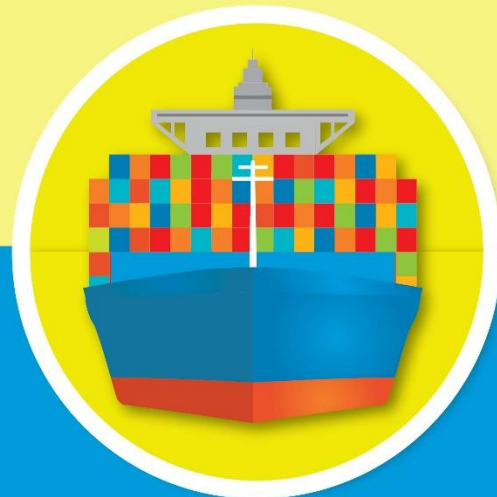
CAREC Trade Facilitation and Digitalization: A Regional Perspective

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Economic Research and Development Impact Department
Asian Development Bank

Workshop on Navigating Trade Issues and WTO Transparency Requirements
8-10 April | Astana, Kazakhstan



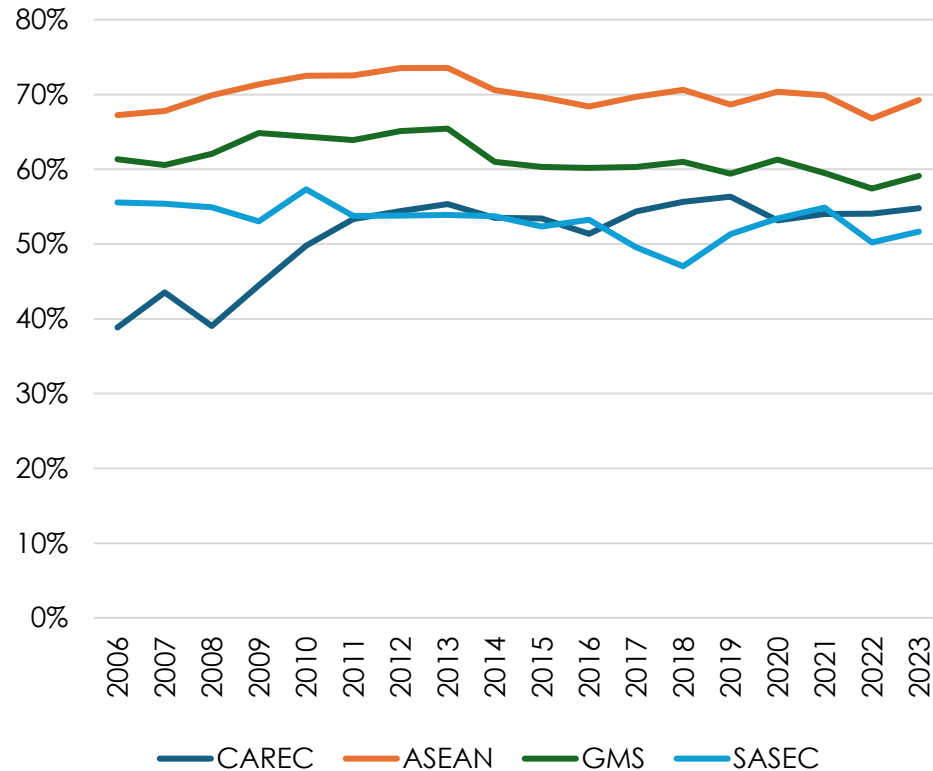
Outline

- **CAREC context:** trade costs and intraregional trade performance
- **Trade facilitation landscape:** implementation across transparency, formalities, institutional arrangement, and paperless trade
- **Digitalization:** digital economy agreements, data governance, cross-border payments, and digital taxation
- **Summary and policy implications** for the CAREC region

High trade costs limit the trade potential of the CAREC region

While CAREC's intraregional trade has grown, it lags behind other subregions

Intraregional trade exports, by subregional initiative
(% of total trade)



Note: The lines represent the averaged values across economies by subregion.
Source: ADB. Asia-Pacific Regional Cooperation and Integration Database.
<https://aric.adb.org/database/arci> (accessed March 2026).

The subregion also faces significantly high trade costs

Intra- and extra-regional comprehensive trade costs, 2006-2021
(excluding tariff costs)

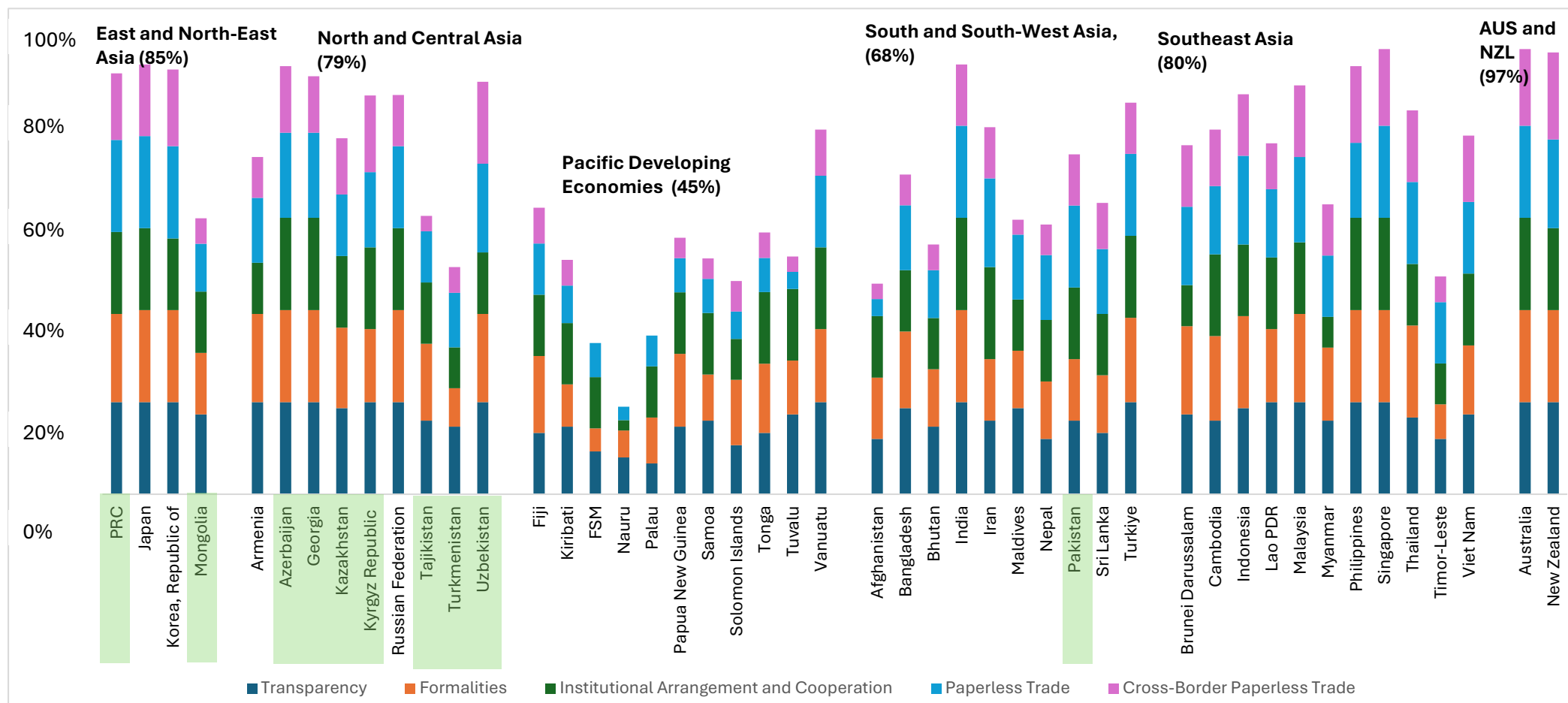
Region	ASEAN-4 (%)	East Asia-3 (%)	Russian Federation and Central Asia-3 (%)	Pacific-2 (%)	SAARC-3 (%)	AUS-NZL (%)	EU-3 (%)
ASEAN-4	74.9 (-0.6)	78.6 (3.2)	305.9 (-5.1)	298.8 (8.0)	129.6 (2.9)	104.0 (4.7)	105.3 (-0.2)
East Asia-3	78.6 (3.2)	58.0 (10.0)	167.1 (-0.2)	201.2 (-21.5)	129.3 (5.4)	89.6 (4.4)	85.6 (1.0)
Russian Federation and Central Asia-3	305.9 (-5.1)	167.1 (-0.2)	108.8 (-6.2)	427.5 (29.1)	265.7 (3.8)	310.0 (-13.3)	146.2 (-2.8)
Pacific-2	298.8 (8.0)	201.2 (-21.5)	427.5 (29.1)	89.6 (-19.9)	361.4 (6.8)	102.3 (7.1)	312.1 (0.2)
SAARC-3	129.6 (2.9)	129.3 (5.4)	265.7 (3.8)	361.4 (6.8)	160.7 (37.6)	139.2 (2.3)	117.4 (3.6)
AUS-NZL	104.0 (4.7)	89.6 (4.4)	310.0 (-13.3)	102.3 (7.1)	139.2 (2.3)	52.8 (0.8)	103.0 (-3.5)
EU-3	105.3 (-0.2)	85.6 (1.0)	146.2 (-2.8)	312.1 (0.2)	117.4 (3.6)	103.0 (-3.5)	41.8 (-2.7)
United States	84.4 (-2.1)	66.3 (3.9)	190.7 (8.0)	183.0 (-6.4)	111.7 (-0.2)	97.7 (-1.6)	65.6 (-2.0)

Source: ADB. Asia-Pacific Trade Facilitation Report 2024: Promoting Sustainability and Resilience in Global Value Chains.



Trade facilitation measures vary across subregions in Asia

Trade Facilitation Score, 2025—Asia and the Pacific



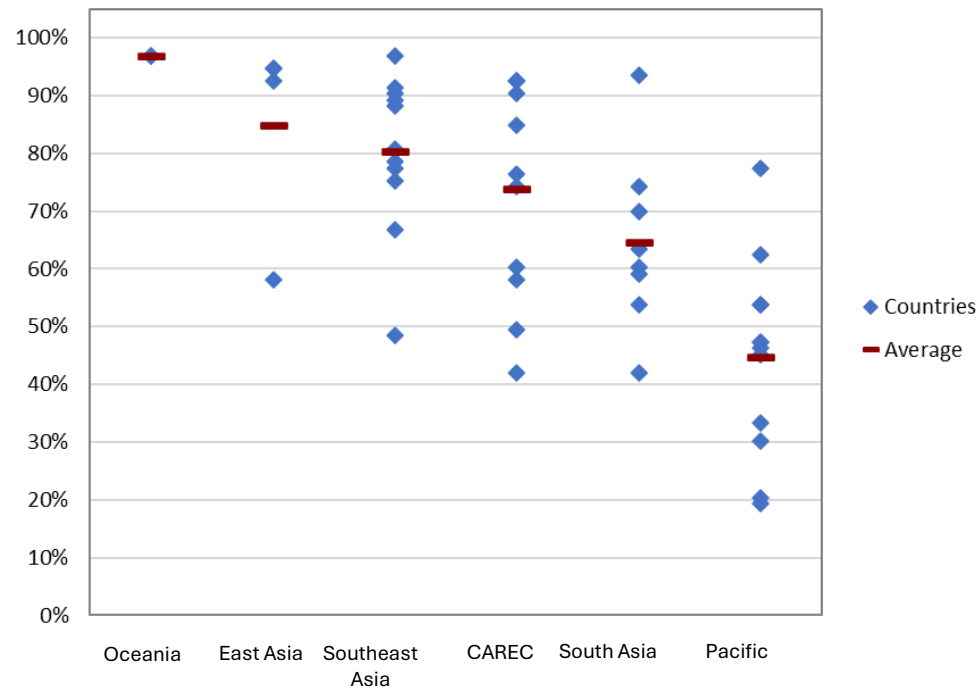
Notes: AUS = Australia, NZL = New Zealand, PRC= People's Republic of China. The UN Global Survey on Digital and Sustainable Trade Facilitation currently covers over 180 economies and 62 measures related to the WTO's Trade Facilitation Agreement (TFA) as well as to paperless trade and the UN treaty on cross-border paperless trade in Asia and the Pacific (CPTA). The survey is conducted jointly by all five UN Regional Commissions, UNCTAD and a growing number of global and regional partners every two years. Source: UNESCAP.

Within CAREC, there is also noticeable differences in terms of implementation

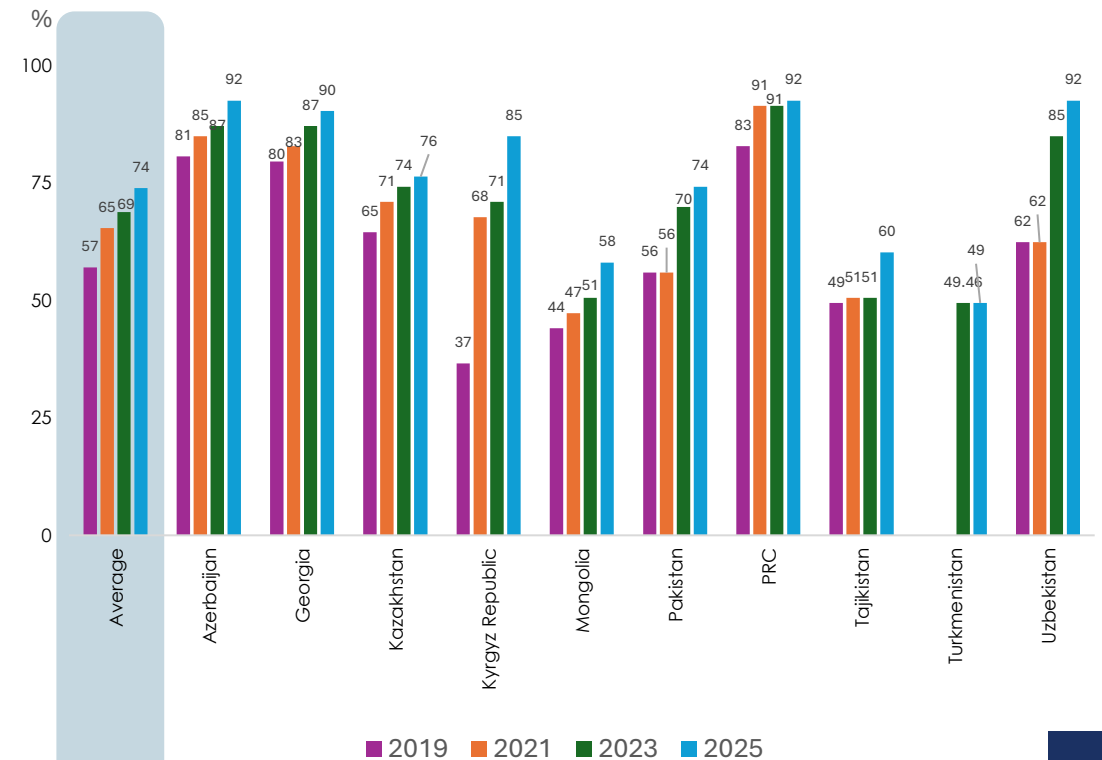
CAREC's average implementation rate of 74% signals room for improvement

CAREC countries exhibit varying degrees of implementation with the PRC leading

Average trade implementation rate, by Asian subregion



Trade facilitation implementation by member country



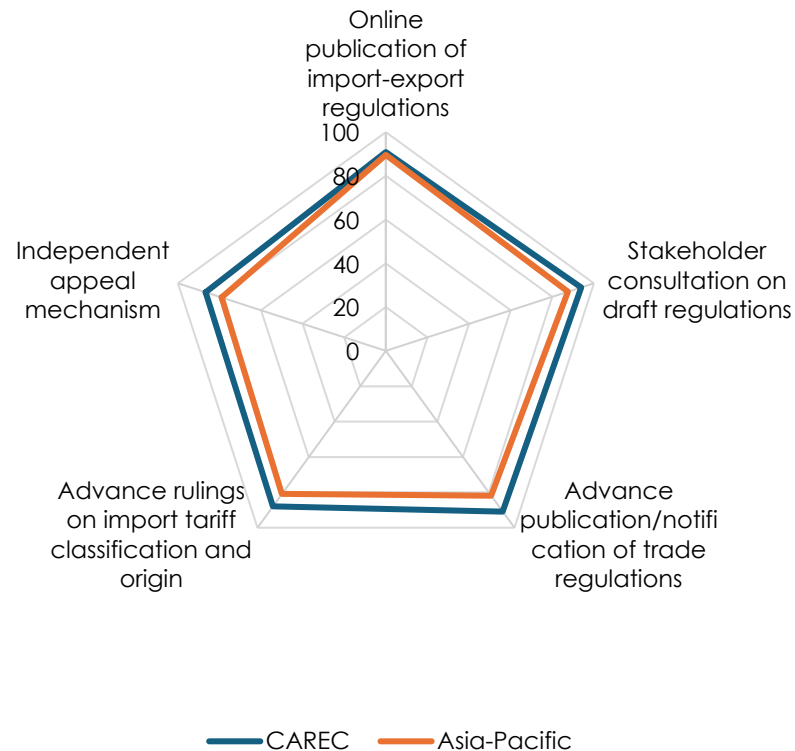
Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.

CAREC demonstrates high implementation rates under the transparency measure

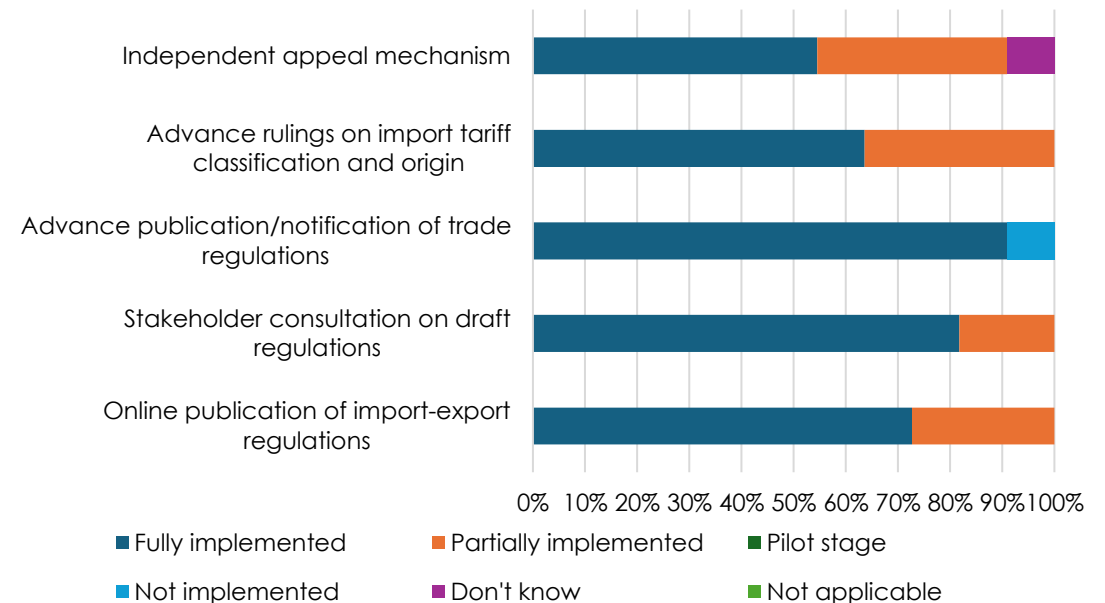
Publication of existing import-export regulations on the shows strong implementation rate

But measures under 'transparency' are implemented to various degrees in the CAREC subregion

State of implementation of 'transparency' by CAREC benchmarking Asia-Pacific



State of implementation of 'transparency' in CAREC



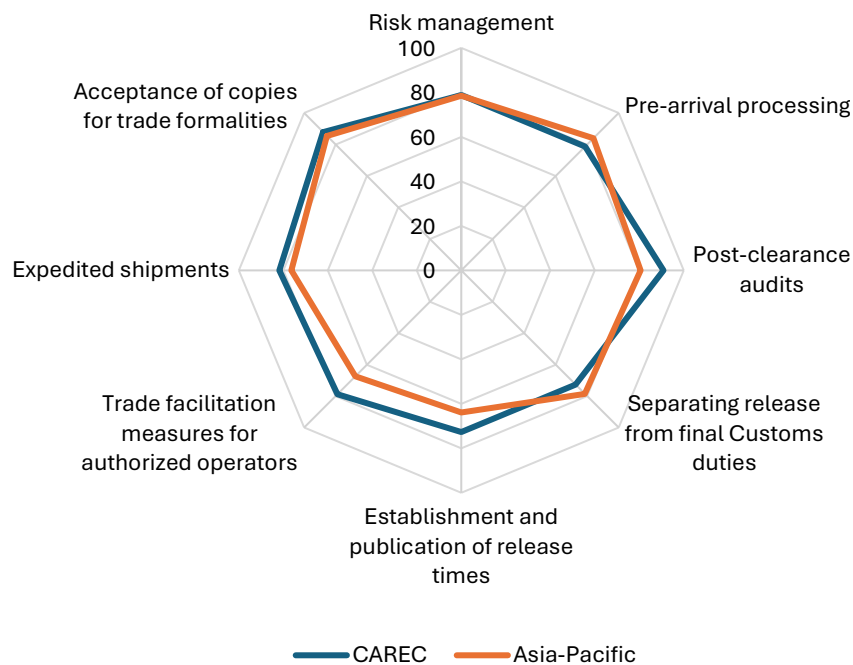
Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.

Formality measures in CAREC tend match Asian average, but full implementation rates tend to be low in some areas

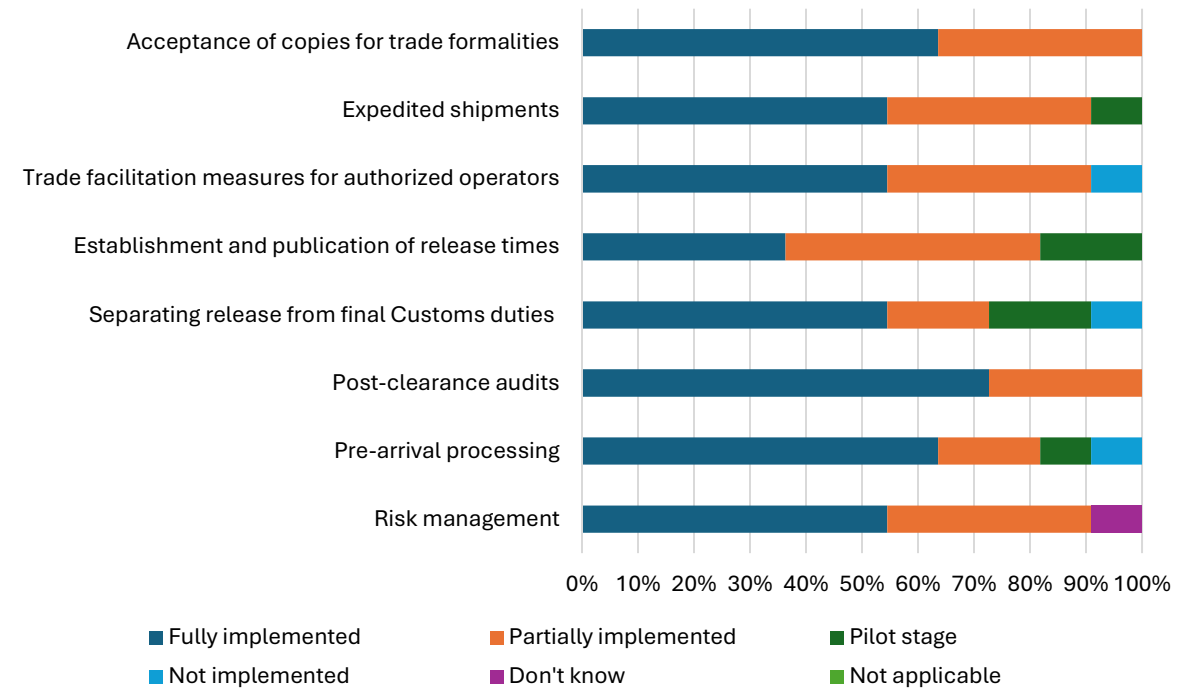
Implementation rate for all formality measures for CAREC aligns with the regional average

In most formality measures, full implementation rates tend to be medium.

State of implementation of 'formality' by CAREC benchmarking Asia-Pacific



State of implementation of 'formality' in CAREC

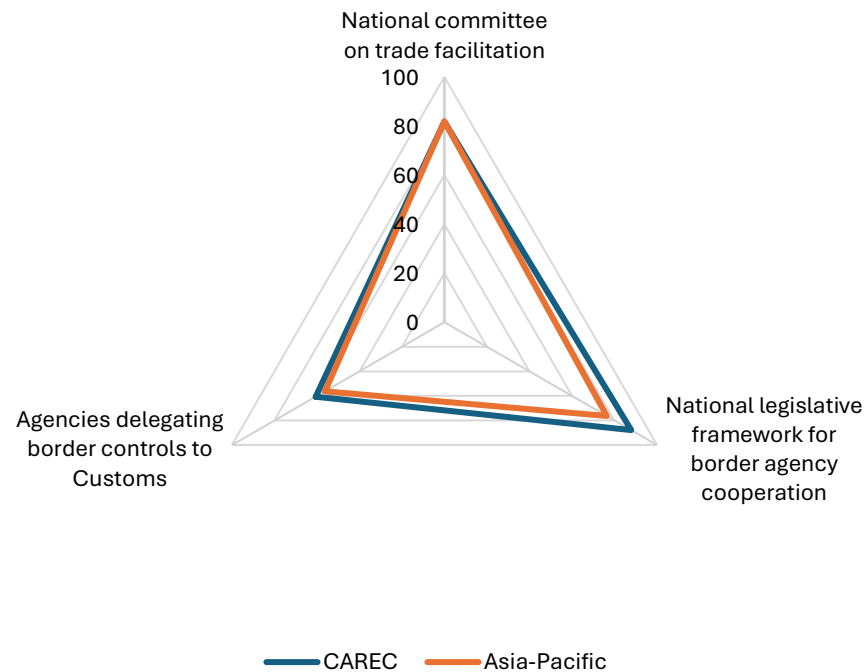


Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.

Full implementation of institutional arrangement measures in CAREC tend to be low

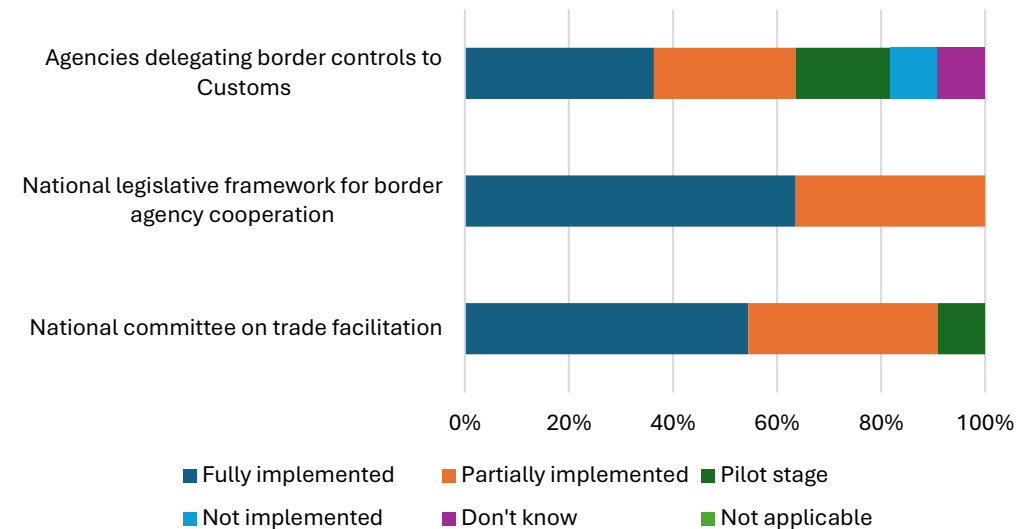
Implementation rate for institutional arrangement and cooperation for CAREC closely is slightly above the regional average

State of implementation of 'institutional arrangement and cooperation' by CAREC benchmarking Asia-Pacific



Least implemented measure is government agencies delegating border controls to customs authorities

State of implementation of 'institutional arrangement and cooperation' in CAREC

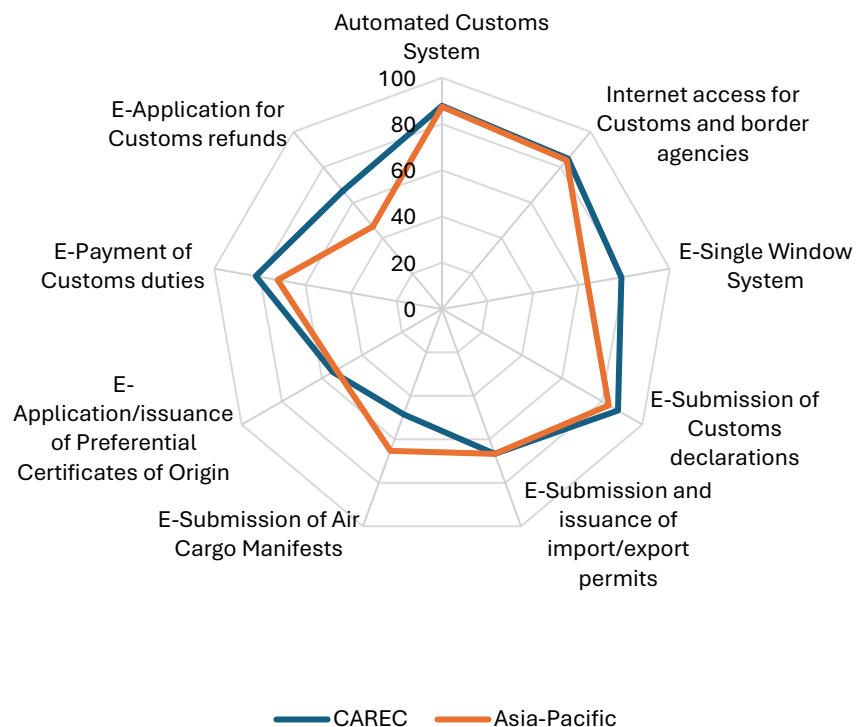


Paperless trade measures in CAREC is above average, although electronic certifications are low

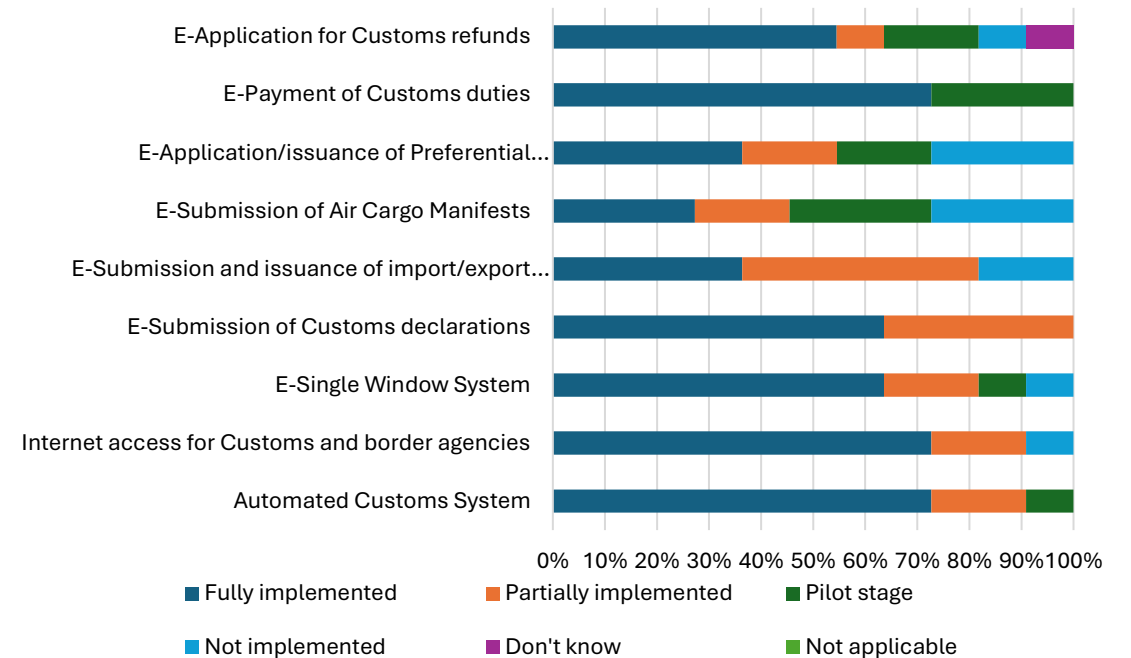
Implementation rates tend to vary significantly across paperless trade measures

Electronic certifications and applications tend to demonstrate low rates of full implementation

State of implementation of 'paperless trade' by CAREC benchmarking Asia-Pacific



State of implementation of 'paperless trade' in CAREC



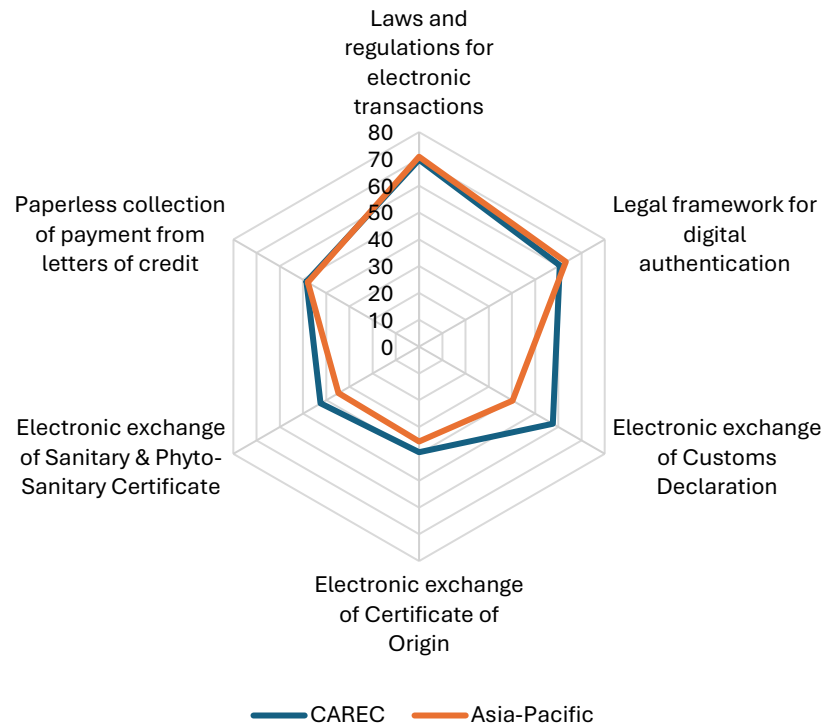
Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.

Cross-border paperless trade still have some room for improvement

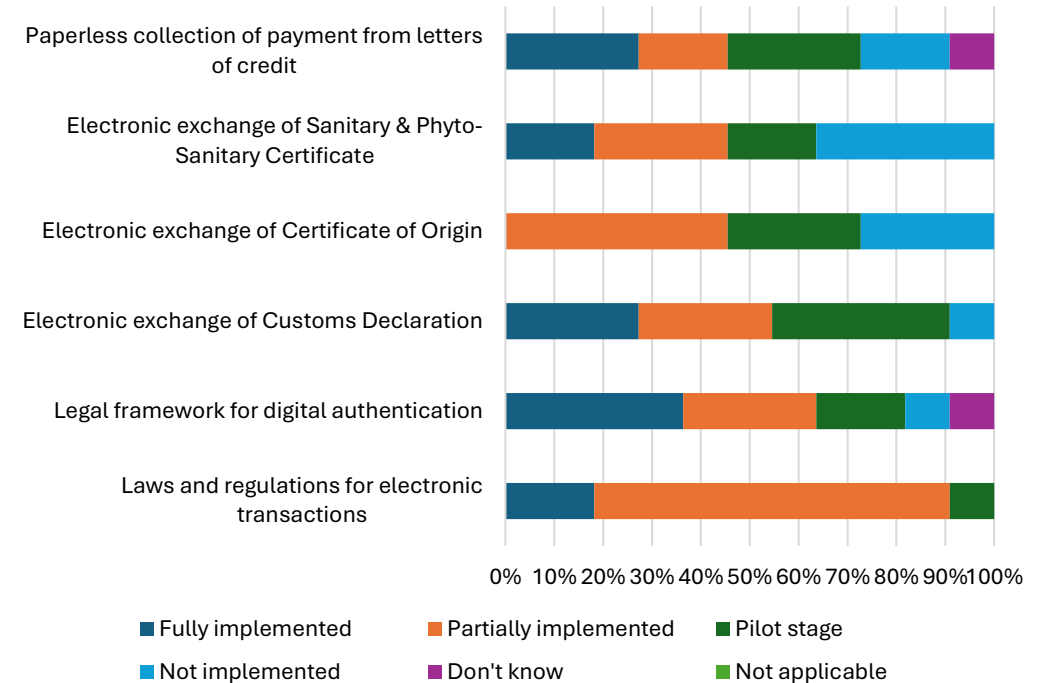
Implementation rates on cross-border paperless trade measures have improved, but are still low compared to other subgroups

'Laws and regulations for electronic transactions' and 'electronic exchange of customs declaration' have progressed

State of implementation of 'cross-border paperless trade' by CAREC benchmarking Asia-Pacific



State of implementation of 'cross-border paperless trade' in CAREC

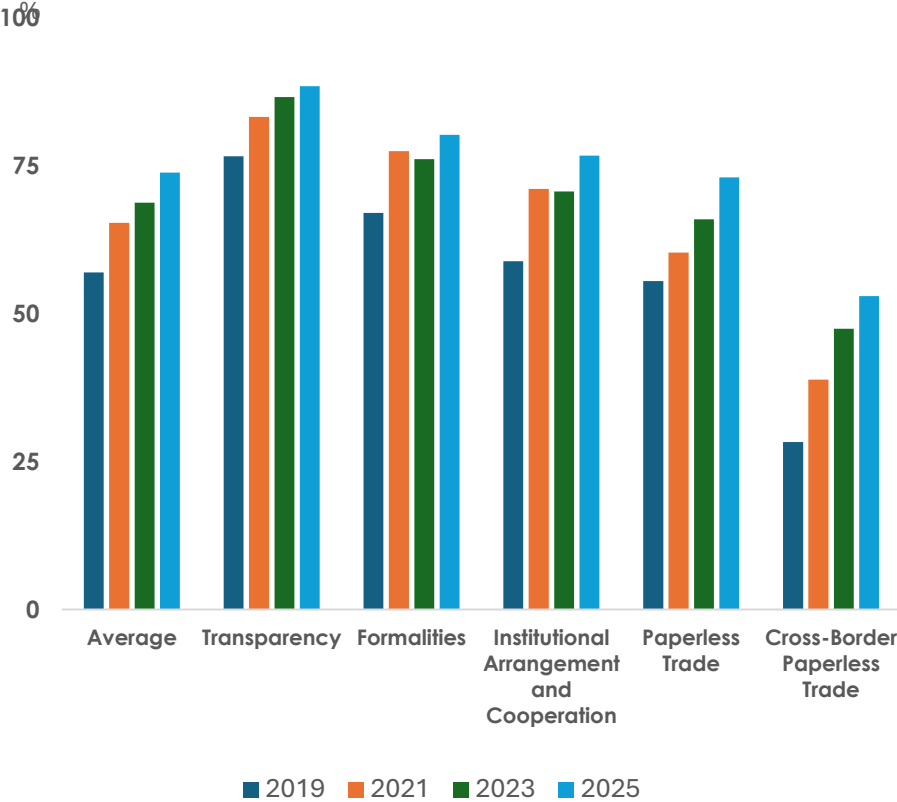


Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.

Digital trade facilitation lags behind, with cross-border paperless trade the weakest link

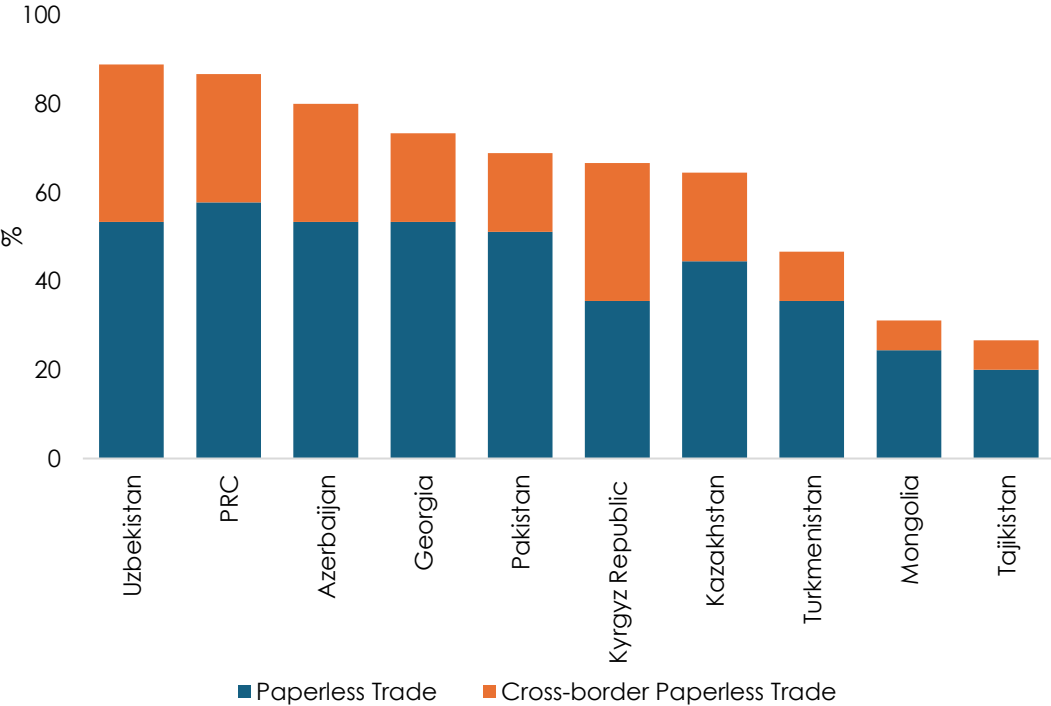
Digital trade facilitation consistently trails behind stronger-performing indicators

Implementation of various trade facilitation measures



Cross-border paperless trade remains a key challenge

Trade Digitalization Index in CAREC economies (2025)



Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2025 Survey results at untfsurvey.org.



Implementation of digital trade facilitation measures creates greatest reduction in trade costs

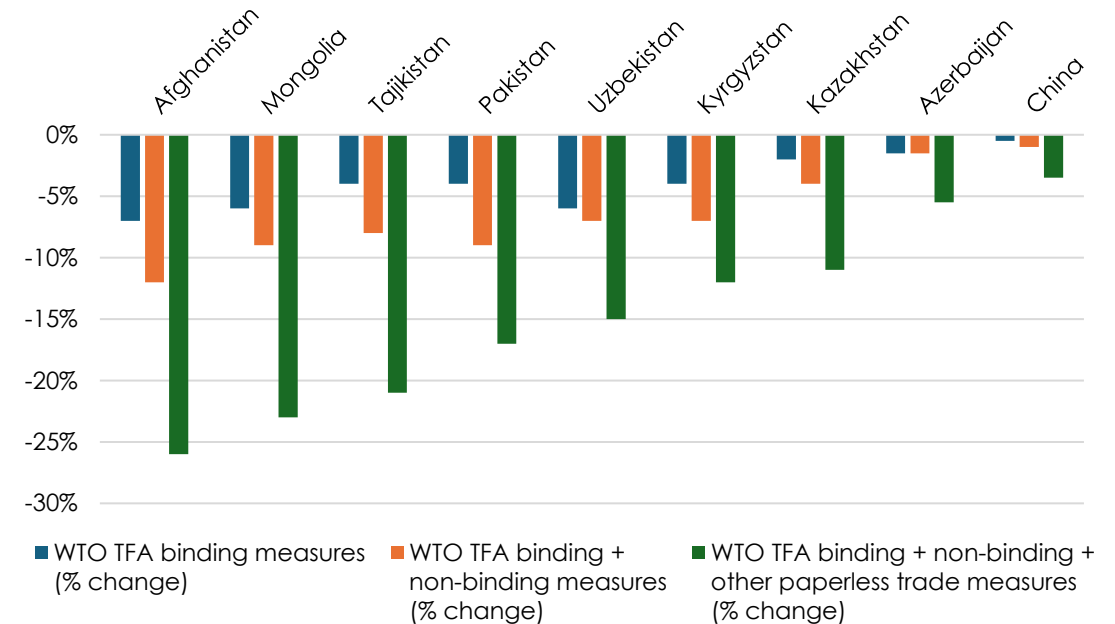
Implementation of digital trade facilitation on top of WTO TFA requirements further reduces average trade costs across Asian economies

Full implementation of trade facilitation also results in trade cost reductions for CAREC economies

Changes in international trade costs of Asia and the Pacific as a result of alternative trade facilitation reforms

Asia-Pacific: Trade Costs Model	WTO TFA (binding only)		WTO TFA (binding + nonbinding)		WTO TFA+ (binding + nonbinding + other paperless and cross-border paperless trade)	
	Partially Implemented	Fully Implemented	Partially Implemented	Fully Implemented	Partially Implemented	Fully Implemented
	Overall trade facilitation	-0.59%	-2.68%	-1.15%	-4.61%	-5.15%
Model 2						
General trade facilitation measures	-0.46%	-2.05%	-0.61%	-2.94%	-0.86%	-3.42%
Digital trade facilitation measures	–	–	-0.50%	-1.12%	-4.10%	-6.95%

Impact of trade facilitation implementation on trade costs of CAREC economies

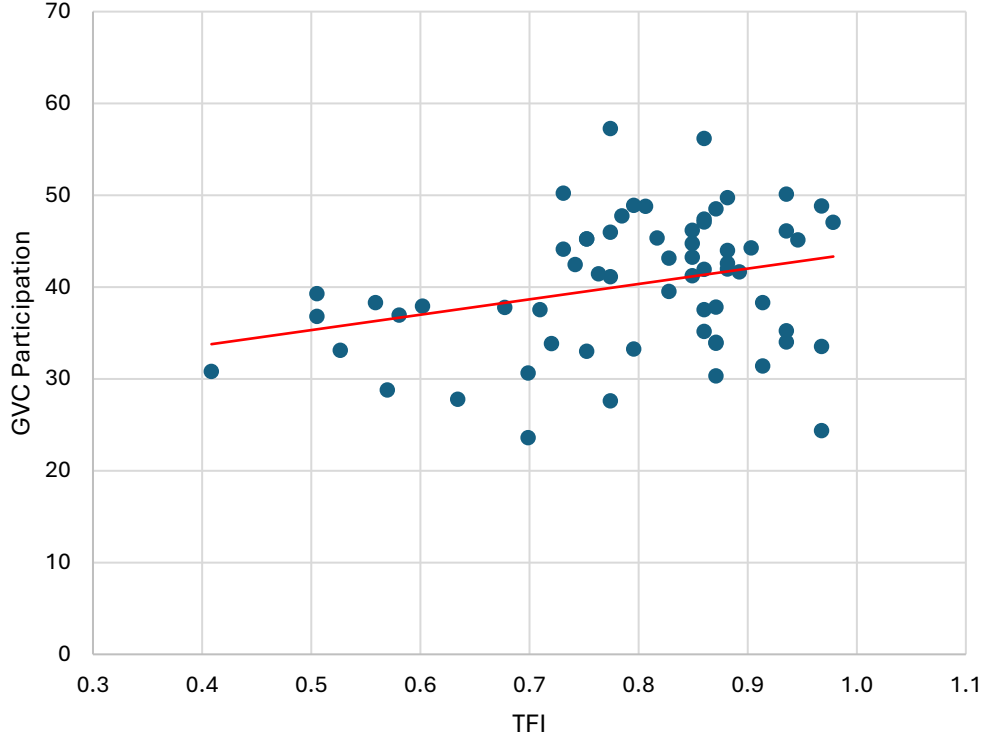


Source: ADB. Asia-pacific Trade Facilitation Report 2024: Promoting Sustainability and Resilience in Global Value Chains.

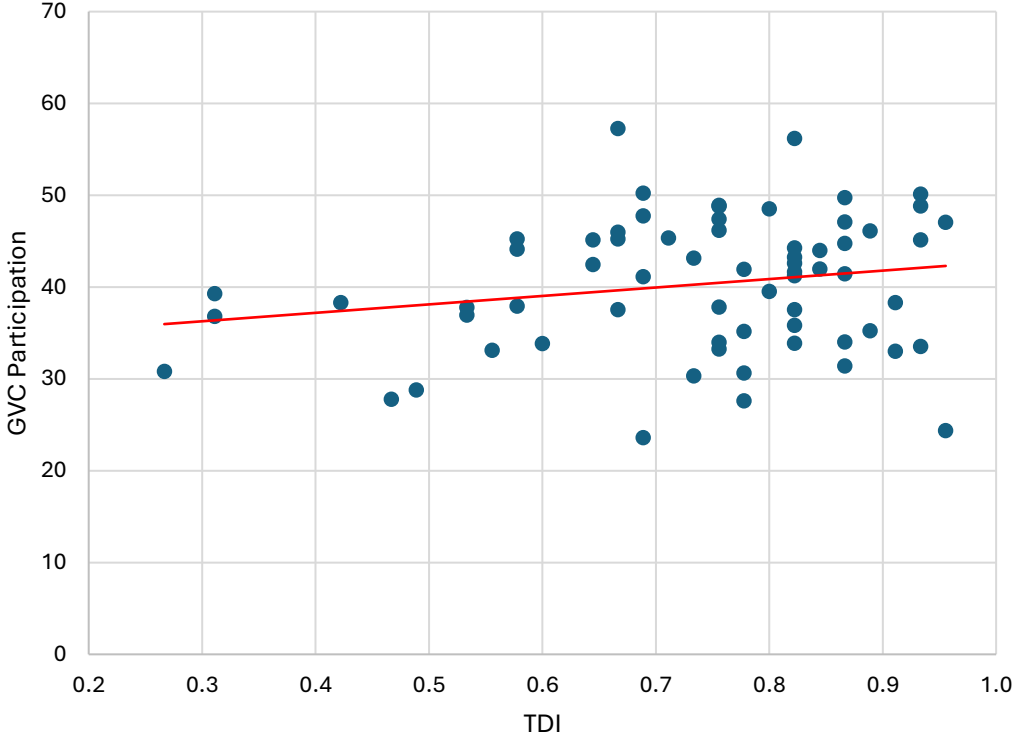
Source: ESCAP and CAREC Institute (2023). Digital and Sustainable Trade Facilitation in the Central Asia Regional Economic Cooperation (CAREC).

Trade facilitation and digitalization performance is also positively associated with GVC participation

GVC Participation and Trade Facilitation Index



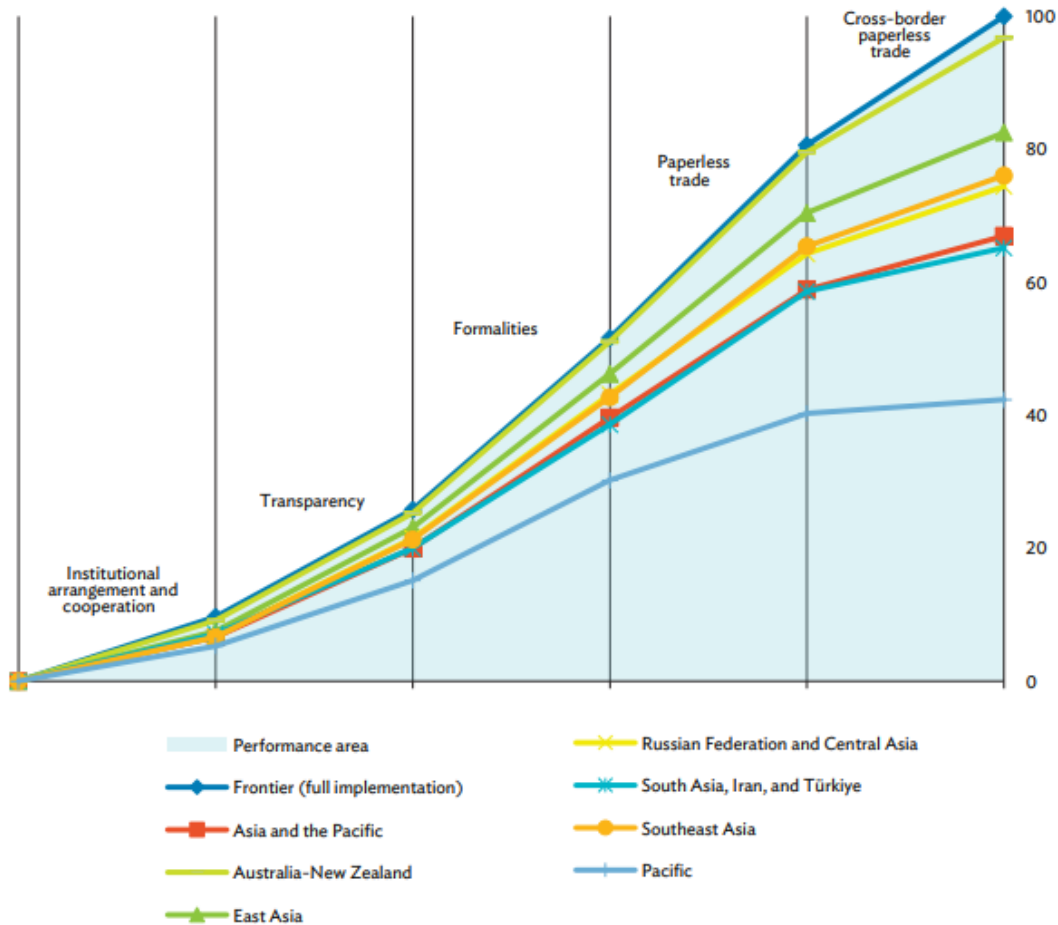
GVC Participation and Trade Digitalization Index



Source: UN Survey on Digital and Sustainable Trade Facilitation; ADB GVC indicators.



Implementation of trade facilitation as a step-by-step process



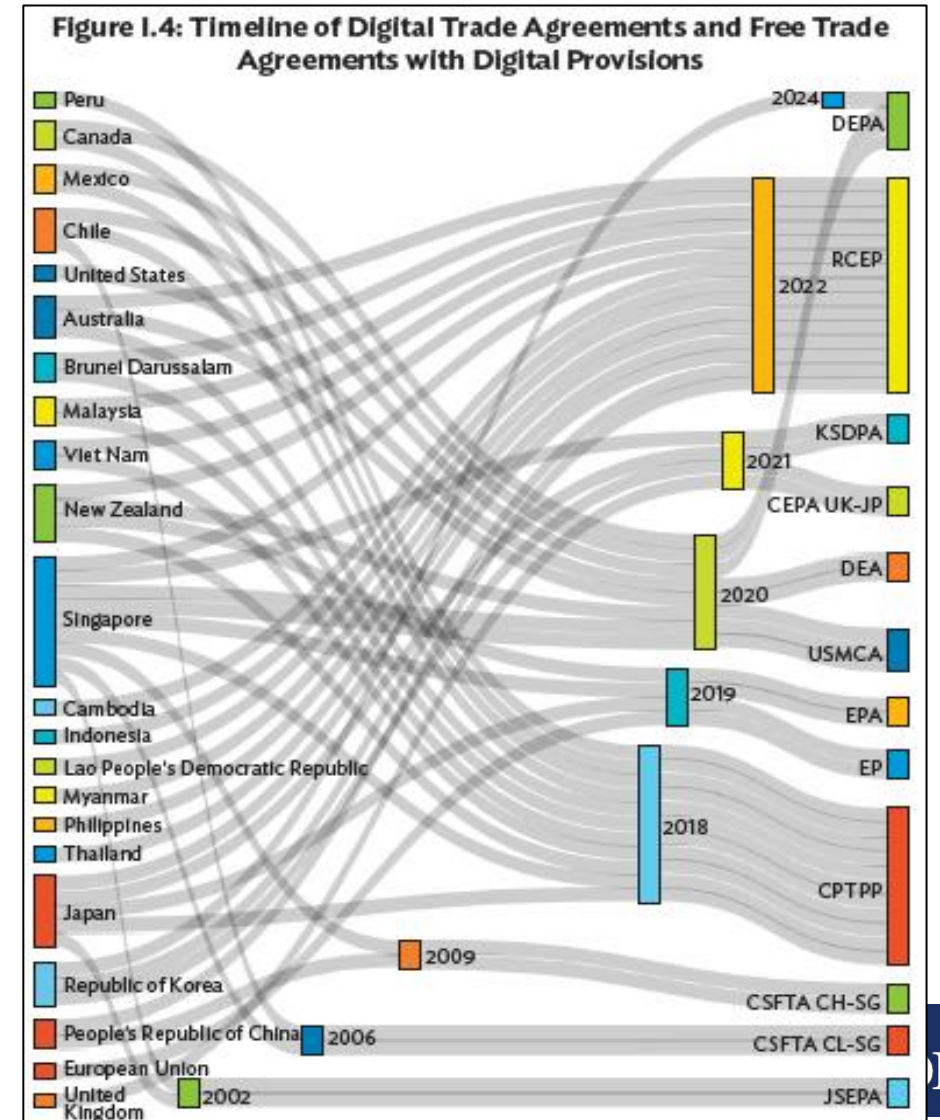
Moving up the trade facilitation ladder toward seamless international supply chains

- Establishing the necessary institutional arrangements
- Simplifying and streamlining trade formalities, initially using paper documents but advancing to information and communication technology solutions and paperless trade systems.
- Enabling electronic data and document exchange through national systems like the single window.

Note: The figure shows global cumulative trade facilitation implementation scores for different regions in the five subgroups of trade facilitation measures included in the survey. Scores are based on the equally weighted implementation of 31 trade facilitation measures, but the number of measures varies in the five subgroups. Full implementation of all measures = 100. Source: United Nations (UN). UN Global Survey on Digital and Sustainable Trade Facilitation. 2023 Survey results at untfsurvey.org.

Context and Objectives: Digital economy agreements

- **Context:** High heterogeneity in regulatory frameworks across economies, progressing at different paces.
- **Objective:** Advance digital trade and regulatory cooperation in the region.
- **Methodology:** overview and deep dives into selected thematic areas, using **Digital Economy Agreements (DEAs)** as the **common analytical thread** linking chapters.
- **Outcome:**
 - State of play of digital regulations
 - In depth-analysis of selected areas through the lens of DEAs
 - Laying the foundation for future research and dialogue on digital trade and regulations, bridging the gap between the content of DEAs and their practical application.
- *ADB Project: Digital Regulatory Cooperation: Unpacking the Implementation “Black Box”*



Digital Regulation Trends

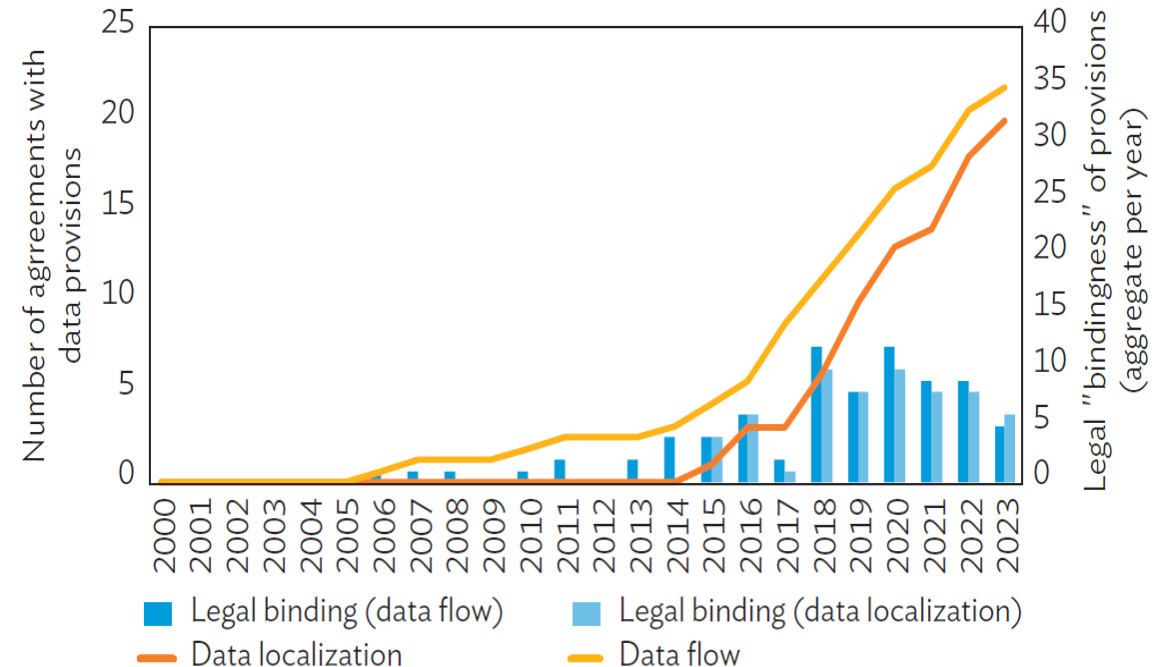
Selected Key issues

- Digital regulation is fragmented and uneven across Asia, with many countries lacking basic rules. (e.g. on data, e-commerce, consumer protection)
- Restrictive data policies (e.g. localization, limited cross-border flows) raise trade costs, especially for MSMEs.
- Low participation of developing countries in modern digital trade agreements limits their influence and benefits.

Policy recommendation

- Develop foundational digital rules and integrate them into trade frameworks to ensure coherence.
- Promote interoperability, not harmonization - using modular models like DEPA and best-practice templates.
- Use DEAs and RTAs as tools for capacity-building, embedding cooperation, shared standards, and gradual onboarding.

Data Governance Trends in Digital Trade Provisions Among ADB Members



Source: Author, using data from Trade Agreements Provisions on Electronic Commerce and Data November 2023 edition (accessed 4 June 2024). Note that the cumulative total of agreements includes free trade agreements, regional trade agreements, and various upgrades, protocols and other elements, and digital economy agreements. Note that the measure of "Legal bindingness" (the degree to which provisions are legally binding) is scored 0 where provisions are absent, 1 for nonbinding/soft law commitments, and 2 for binding/hard law commitments.

DEPA and Developing Countries

Context

- Digital Economy Partnership Agreement (DEPA) between Singapore, New Zealand, Chile, and the Republic Korea (2025).
- A pioneering framework addressing rapidly evolving challenges, tackling issues such as, for example, data flows, AI governance, and digital identities.

DEPA modularity – No one size fits all



Data Flows	Cybersecurity	Personal Information Protection
Key Issues		
<ul style="list-style-type: none"> • Binding rules can reduce policy space over data governance. • Data flows favor big tech, may hurt local players. • Sovereignty concerns on enforcement and control. 	<ul style="list-style-type: none"> • Laws are outdated or underfunded. • Limited capacity to manage threats. • Need for cross-border coordination. 	<ul style="list-style-type: none"> • Weak Data Protection Laws: in many countries. • Privacy Concerns: Conflicts between global data flow and domestic privacy laws. • Data Localization Challenges: Issues with compliance and protection standards.
Policy focus		
<ul style="list-style-type: none"> • Adopt risk-based, flexible rules on data flow, using modular and transparent frameworks like DEPA. • Promote transparent, interoperable standards. 	<ul style="list-style-type: none"> • Align and update national frameworks with international standards • Invest in cyber capacity-building • Foster International cooperation for sharing cybersecurity threat intelligence and coordinated responses. 	<ul style="list-style-type: none"> • Strengthen Privacy Laws and promote mutual recognition of standards. • Encourage Privacy by Design into digital services from the outset.

Digital Trade Standards

Selected Key issues

- Lack of harmonized digital standards hampers interoperability in digital trade.
- Developing countries are underrepresented in digital standard-setting processes.
- Rapid tech evolution is outpacing regulatory and institutional capacity.
- Private sector engagement in developing and adopting standards remains low.

Policy intervention

- Embed digital standards into trade agreements more explicitly, including rules on data flows, authentication and digital ID.
- Promote modular and flexible agreement structures like DEPA to allow scalable participation.
- Encourage cross-sector coordination between public regulators, private tech players, and global SDOs (ISO, IEC, ITU).
- Use digital trade agreements as platforms for capacity building on standards development.

Digital Standards and DEAs

AI standards

5G and Advanced Telecoms

Examples of provisions in DEAs

- Information sharing on standards, technical regulations and conformity assessment.
- Standards cooperation in AI ethics and AI governance
- Recognition of conformity assessment results
- Participation in regional and multilateral standard-setting bodies

Standard-related provisions

	USJDTA	DEPA	ASDEA	UKSDEA	KSDPA
Logistics					
E-signature					
E-invoicing					
Express shipments					
E-payments					
Digital identity					
FinTech					
LawTech					
AI					
Paperless trading					



Cross-Border Payments

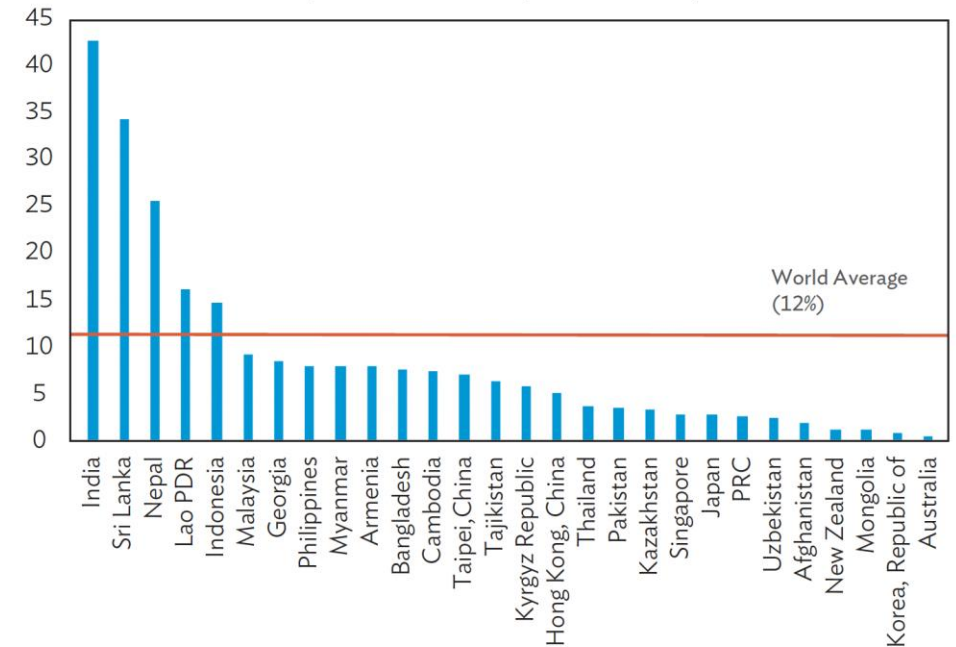
Selected Key issues

- Cross-border payments are still expensive, slow, and difficult to access - especially for remittances.
- Fragmented rules and rising data localization make it harder for payment systems to work across borders.
- Asia's over-reliance on the US dollar creates vulnerabilities and limits local currency use.

Policy intervention

- Strengthen digital payment infrastructure and promote real-time systems with broad access, including mobile money and digital ID, to lower costs and improve inclusion.
- Harmonize technical standards (like ISO 20022) and align digital regulations, especially around data sharing, AML/KYC, and privacy, to reduce frictions.
- Support regional efforts to link payment systems and promote direct local currency settlements to improve resilience and reduce dependency.
- Use digital trade agreements as platforms for capacity building on standards development.

Gap between Account Ownership and Use for Payment



Source: Chorzempa, M (2025). "Cross-Border Payments", based on World Bank Findex.

Digital Taxation

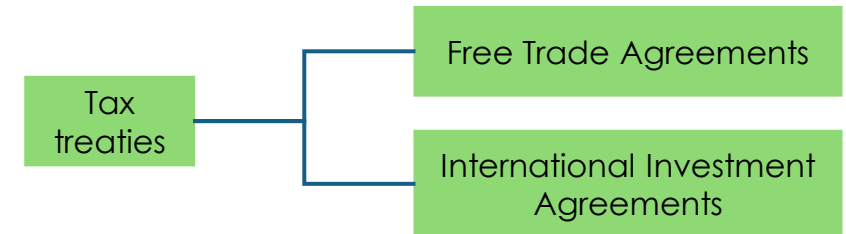
Selected Key issues

- Mapping the interaction between international tax, trade and investment regimes is crucial
- Bilateral tax treaties do not adequately address complexities of taxing digital products and cross-border data flows
- Differences in taxation regimes across members of key trade agreements can hinder members from taking full advantage of these FTAs.
- Data laws vary by country, causing uncertainty for cross-border digital trade and taxation.

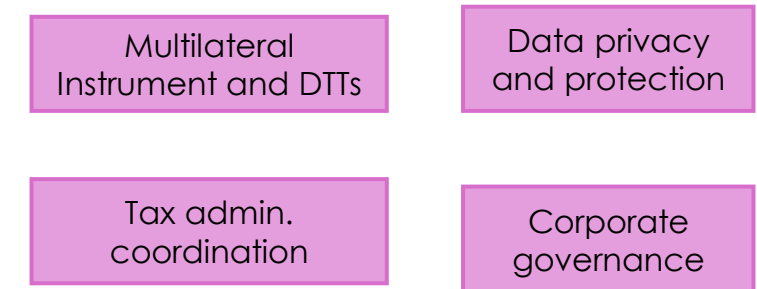
Policy intervention

- Adopt global standards in BEPS and progress Two Pillar solution to tax digital services fairly and reduce profit shifting.
- Establish robust data privacy frameworks that enable legitimate use for tax purposes
- Use trade agreements (like RCEP, DEPA, CPTPP) to align rules on digital taxation, data use, and tax cooperation between countries.
- Invest in digital tools, training, and regional cooperation to help tax offices keep up with the digital shift.

International regimes and Digital Taxation



Taxation of Digital Products



Source: Chaisse, J. Taxing the Digital Economy: Cross-Border Data and Trade Policies in Asia

Summary and way forward

- Geopolitical tensions, climate change, and supply chain disruptions make trade facilitation reforms urgent.
- CAREC's average trade facilitation implementation rate is slightly above average, but performance varies widely across members and measures.
- Cross-border paperless trade remains the weakest area, with e-certifications and electronic exchanges still at low implementation rates.
- Digital trade facilitation delivers the largest trade cost reductions.
- Reform should follow the trade facilitation ladder: building institutions, streamlining formalities, and advancing toward fully paperless systems.
- Digital economy agreements can help reshape regional integration by bridging regulatory gaps, but success depends on implementation.

Thank you!

ANNEX

Conclusion and Way forward

- Digital economy agreements are reshaping regional integration by bridging regulatory gaps, but their full potential depends on practical implementation and inclusive cooperation.

Way Forward (for panel and audience reflection):

- How can developing countries better align domestic reforms with digital trade commitments?
- Can DEAs serve as scalable, modular tools for gradual onboarding into the global digital economy?
- What role should regional institutions and donors play in addressing implementation and capacity gaps?

Outline

- Slide 1: Welcome & workshop objectives, highlight importance of trade facilitation and digitalization, and outline of the presentation; look at [CAREC Integrated Trade Agenda 2030](#) and [CAREC Digital Strategy](#).
- Slide 2: CAREC regional context, where does CAREC stand in terms of trade (include here ARCII indicators in the trade and investment dimension – potentially breakdown imports/exports on intraregional/external)
- Slide 3: CAREC regional context, where does CAREC stand in terms of digitalization (include ARCII indicators here on the digital dimension)
- Slides 4 to 6: Trade facilitation slides from Kijin (check the trade facilitation report)
- Slide 7-9: Digital & paperless trade landscape: e-customs, single windows, regional frameworks and where CAREC stands

Conclusion and Way forward

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Trade facilitation implementation in Asia-Pacific shows steady progress but is uneven

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Strong relationship between the cost of international trade in the Asia-Pacific countries and their level of trade facilitation implementation

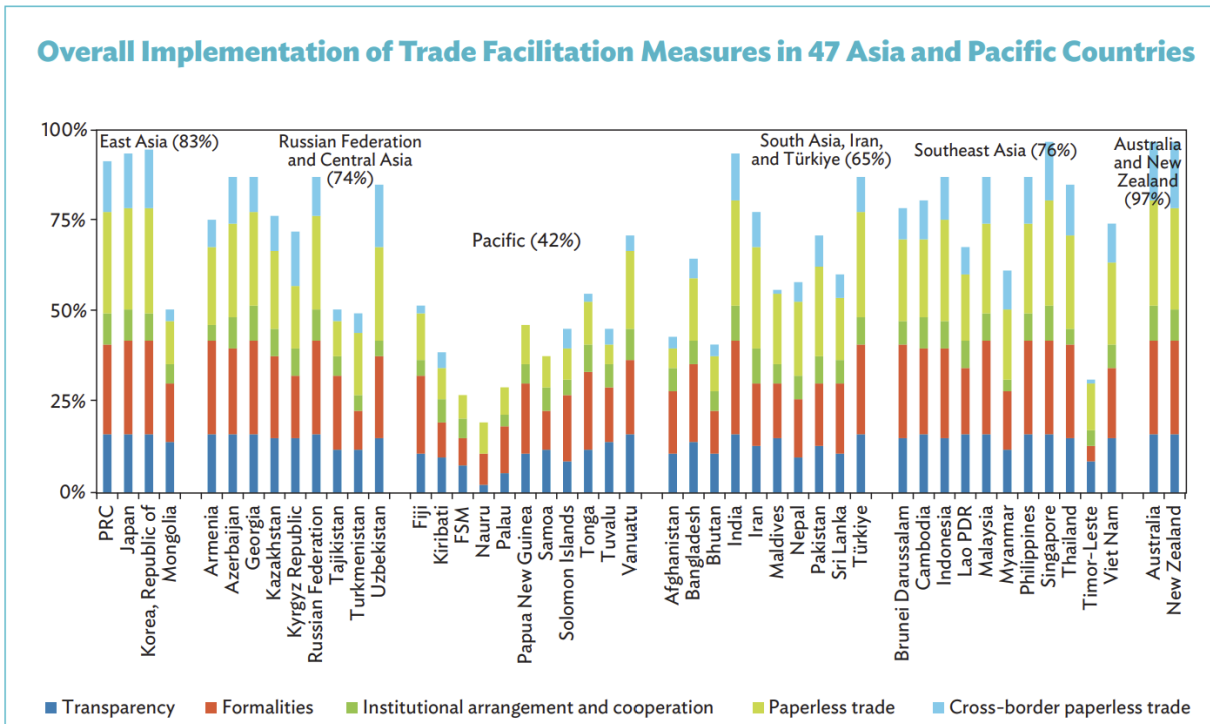
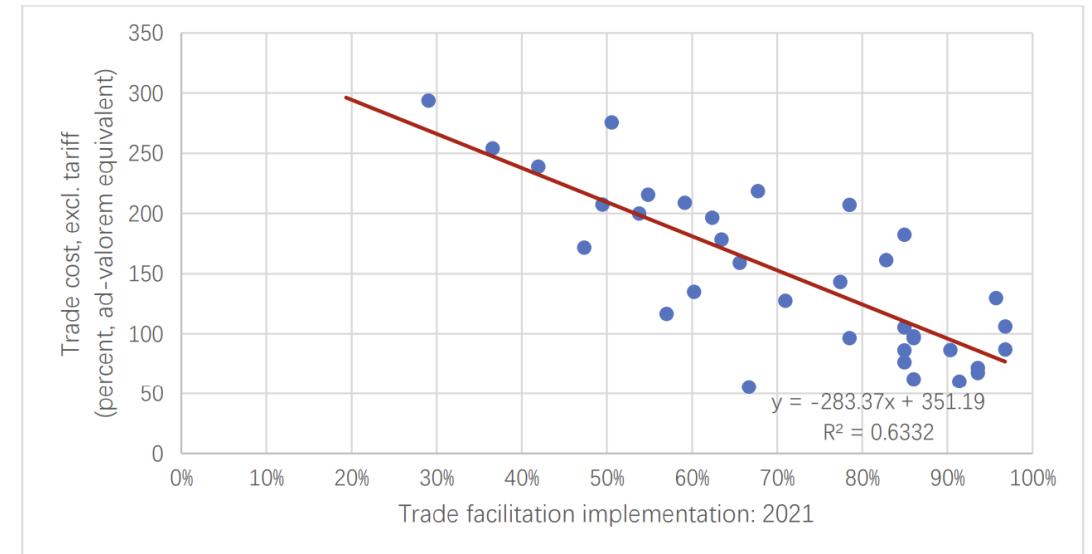


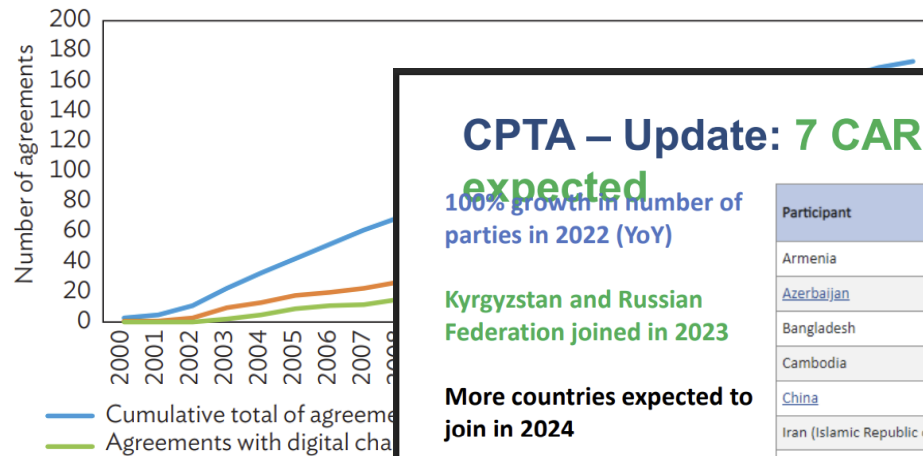
Figure 32. Trade facilitation implementation and trade costs of Asia-Pacific economies



Source: UN Trade Facilitation Survey and ESCAP/World Bank Trade Cost.

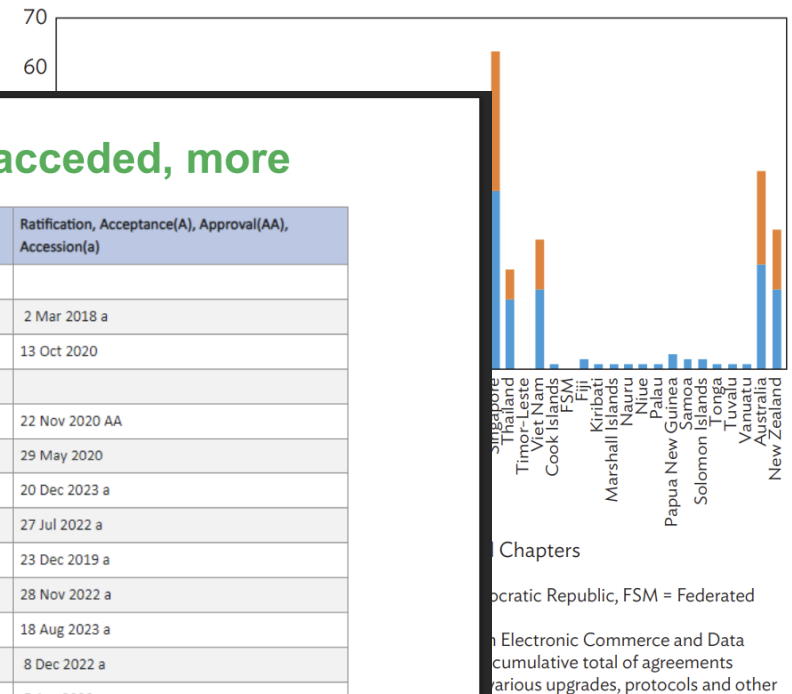
Bilateral and regional digital economy agreements are likewise essential

Figure 1.5: Trade Agreements, Digital Provisions, and Chapters in ADB Regional Economies



Note: The cumulative total of agreements includes various upgrades, protocols and other elements.
Source: Author, using data from Trade Agreements in ADB Regional Economies, November 2023 edition (accessed 4 June 2024).

Figure 1.6: Participation in Agreements with Digital Elements by ADB Regional Economies



CPTA – Update: 7 CAREC countries acceded, more expected

100% growth in number of parties in 2022 (YoY)

Kyrgyzstan and Russian Federation joined in 2023

More countries expected to join in 2024

Work on-going on model protocols for data exchange and identification of pilot projects

Next session of the Paperless Trade Council: June 2024; part of the Paperless Trade Week in Bangkok

Participant	Signature	Ratification, Acceptance(A), Approval(AA), Accession(a)
Armenia	22 Sep 2017	
Azerbaijan		2 Mar 2018 a
Bangladesh	29 Aug 2017	13 Oct 2020
Cambodia	29 Aug 2017	
China	29 Aug 2017	22 Nov 2020 AA
Iran (Islamic Republic of)	29 Sep 2017	29 May 2020
Kyrgyzstan		20 Dec 2023 a
Mongolia		27 Jul 2022 a
Philippines		23 Dec 2019 a
Republic of Korea		28 Nov 2022 a
Russian Federation		18 Aug 2023 a
Tajikistan		8 Dec 2022 a
Timor-Leste		5 Apr 2022 a
Turkmenistan		4 May 2022 a
Tuvalu		8 Dec 2022 a

<https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtid=9600-X-20&chapter=10&clang=en#EndDec>
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