Next Steps on ADB Tools and Research on Regional and Global Integration

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Rethinking Globalization and Fragmentation: From Regional to Global Linkages
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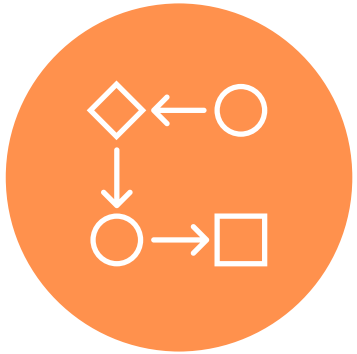
Why are indexes on regional and global integration useful?

- ADB adopted **Regional Cooperation and Integration (RCI) as a strategic operational priority** under Strategy 2030.
- **ARCII** and **GII** offer standardized measurements to understand regional and global integration trends and dynamics
- Comparability **across countries** and **across dimensions** is needed to provide a full picture of regional and global integration
- RCI and globalization are **multidimensional** and evolving and their dimensions need to be reassessed
- New metrics incorporate new dimensions of growing importance such as **digital connectivity** and **environmental cooperation**.

Potential uses of ARCII and GII

Policy reform

- Can be an input in policy planning and national budgeting process
- Provide insights in selecting government projects to prioritize
- RCI dashboards are useful in tracking the performance of a country in key policy areas



Benchmarking

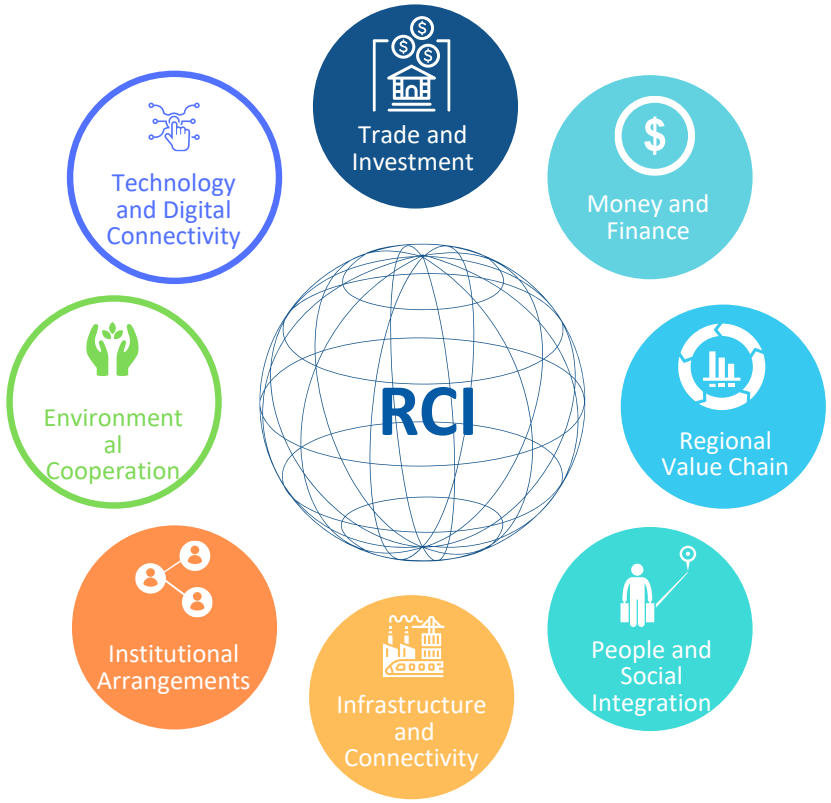
- Gauge progress in economic integration vs. regional performance
- Compare integration of an economy at the indicator or dimension level
- Assess performance against set goals
- Understand how deep the linkages of a country with its own region vs. outside, and the vulnerabilities

New indicators

- Bilateral environmental agreements
- Global value chain indicator from ADB-MRIOT
- Services exports/imports
- International students
- Carbon dioxide emissions

An overview of the ARCII and GII frameworks

Dimensions of Regional and Global Integration



Baseline ARCII

Enhanced ARCII
Measure of integration within regions

Global Integration Index
Measure of global integration

Regional integration Index
For Comparability with the GII

Intraregional integration
Regions covered: Asia and the Pacific, EU, Latin America, Africa, Middle East, North America

Asia and the Pacific

- **Intrasubregional integration** → **Geography**
- **Intersubregional integration** → **Economic groups**

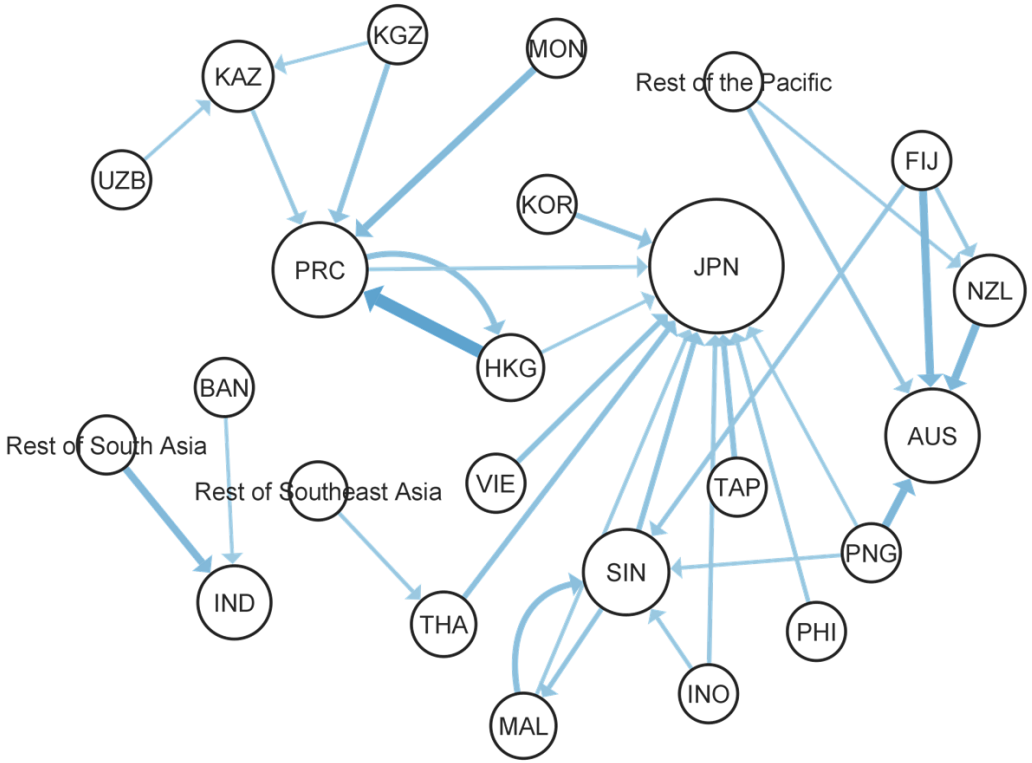
Summary of RCI measurement frameworks

	Baseline ARCII	Enhanced ARCII	Global Integration Index	Regional Integration Index	Bilateral Economic Integration Index
Methodology	PCA	PCA	PCA	PCA	Bayesian state-space model; Network density
Numerator	Intraregional estimates	Intraregional estimates	Total with world	Intraregional estimates	Bilateral flows
Denominator	Total with world	Total with world	GDP/population	GDP/population	Size of the reporting economy (nominal GDP or total population) and total flows
Number of dimensions	6 dimensions	8 dimensions	8 dimensions	8 dimensions	4 dimensions
Economy/regional coverage	153	173	173	173	169 economies (some economies are aggregated)

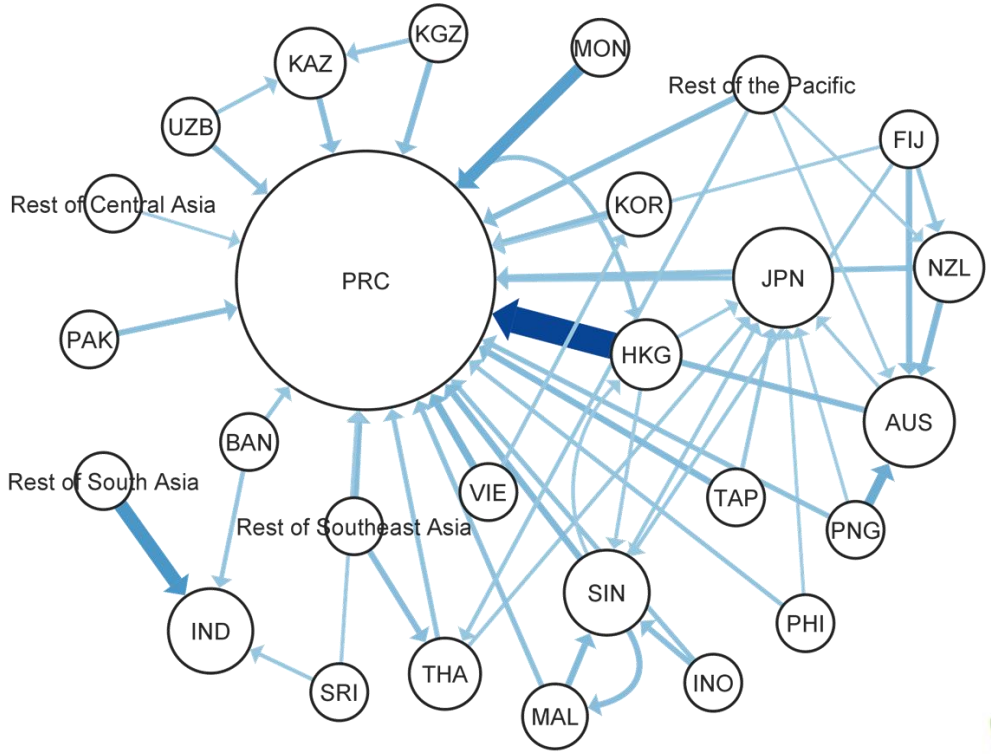
ARCII = Asia-Pacific Regional Cooperation and Integration Index, PCA = principal components analysis.

Network analysis: Asia's regional integration

2000



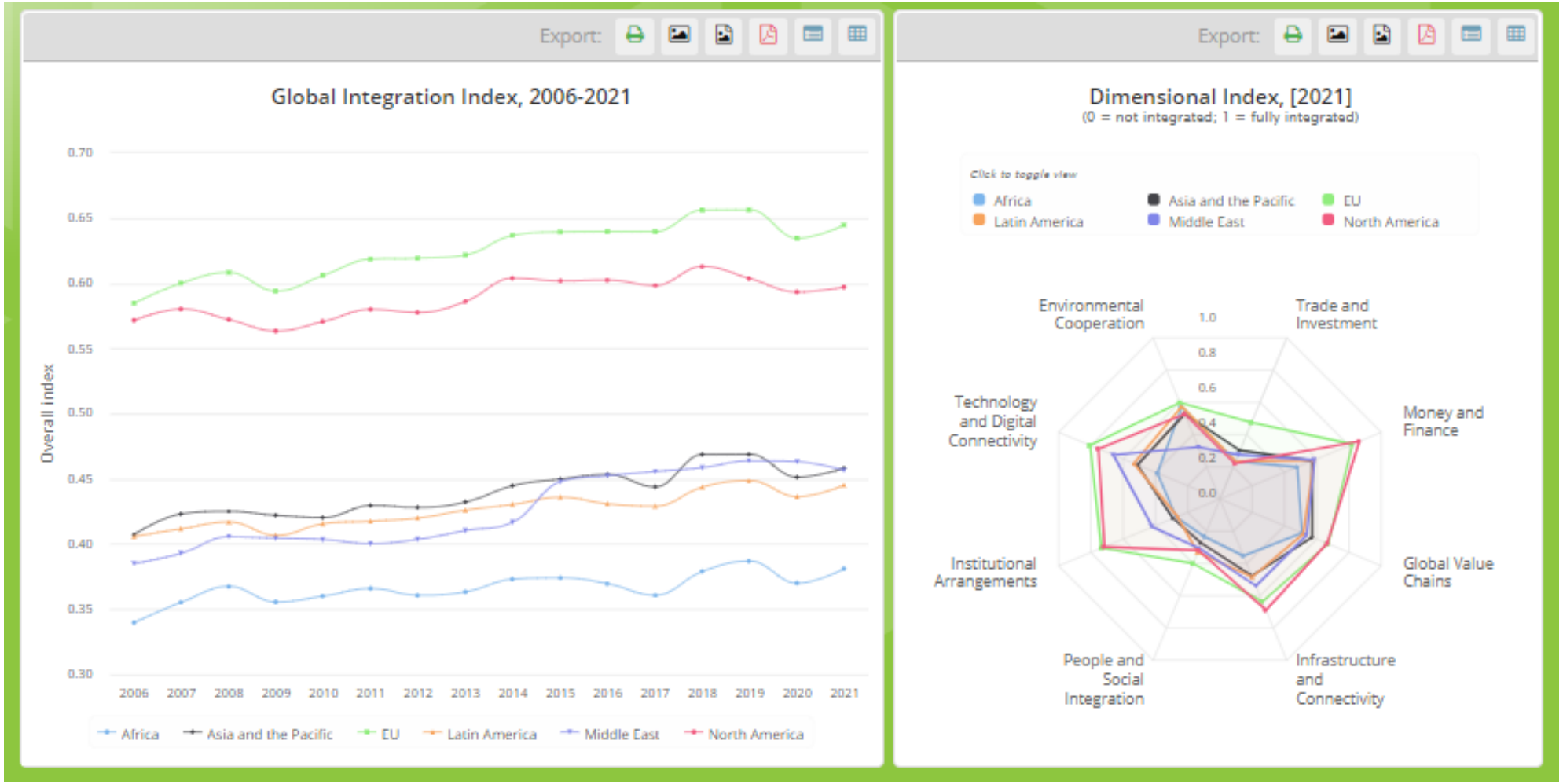
2021



Knowledge products: Online ARCII and GII database

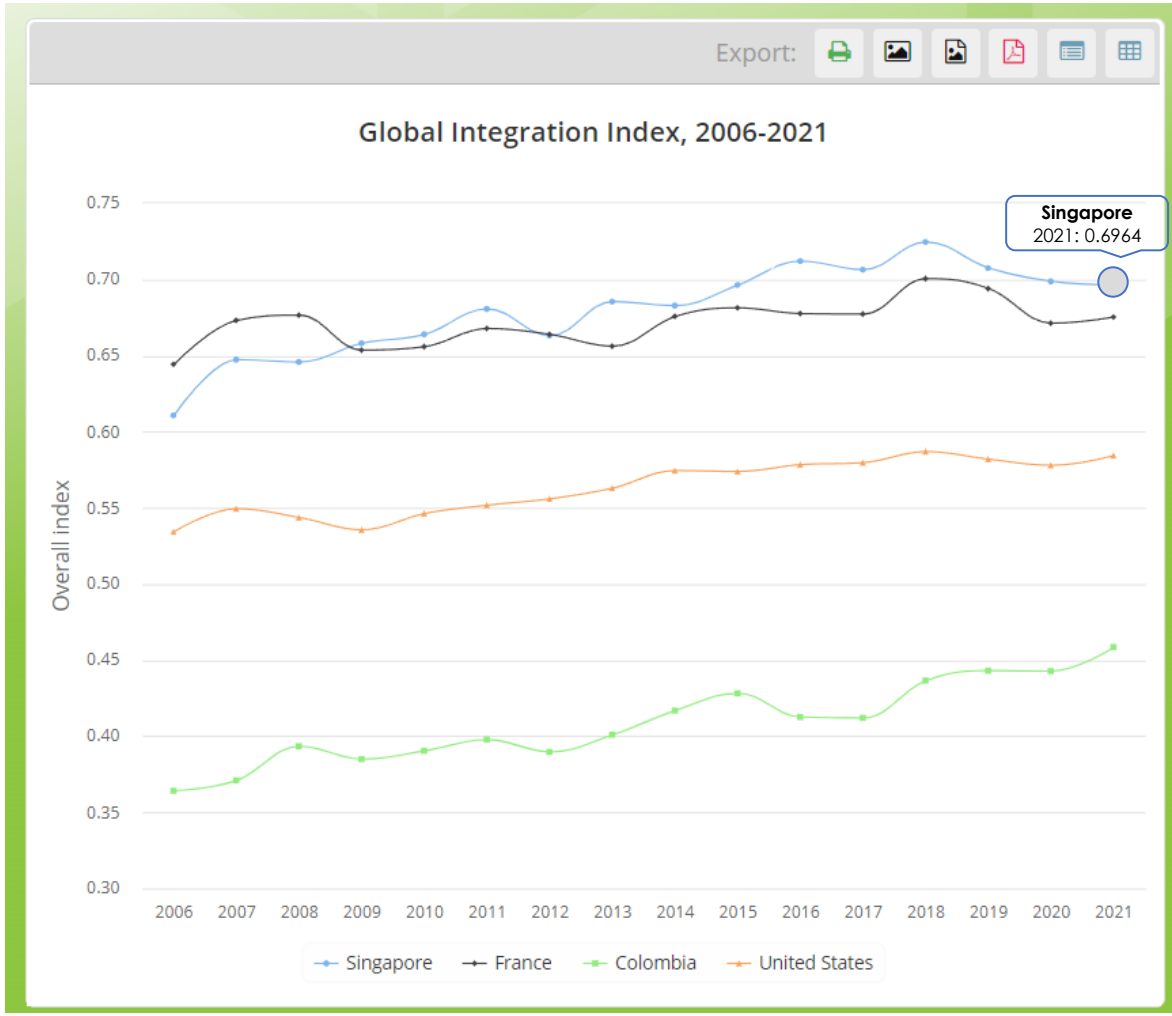
https://aric.adb.org/database/arcii

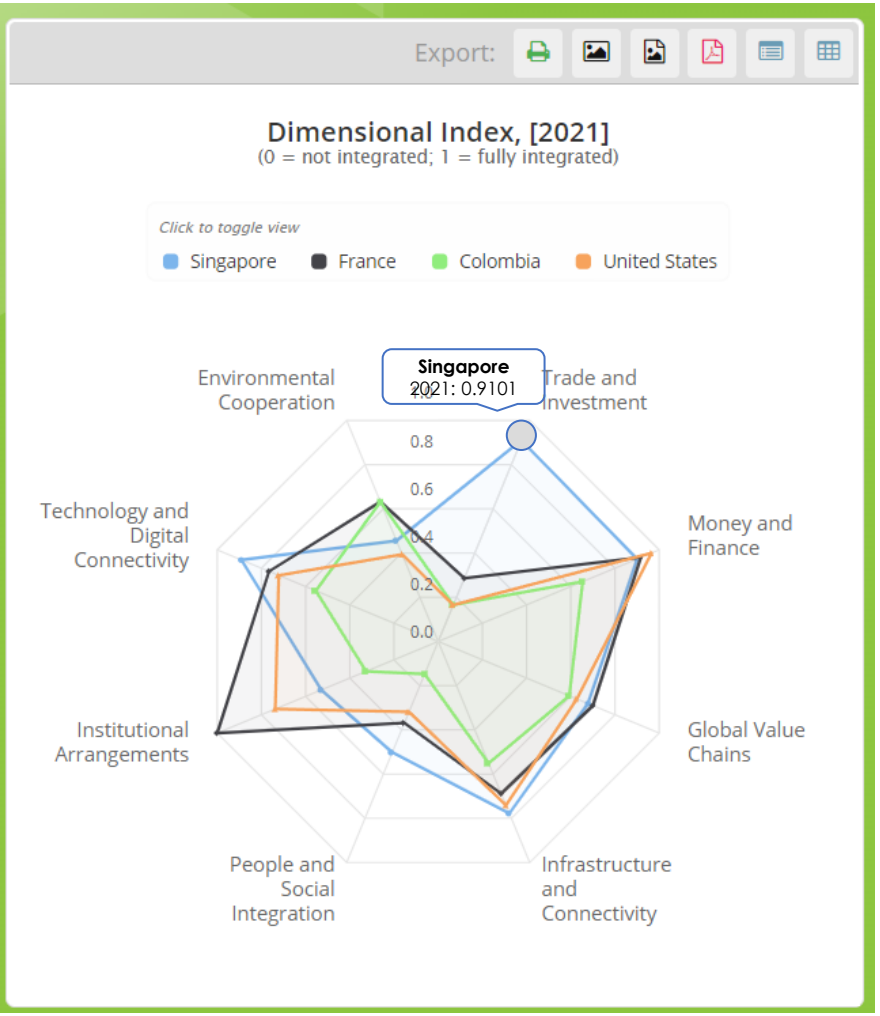
Global Integration Index: Regional comparison



The EU is the most globally integrated region, followed by North America and Asia and the Pacific. Meanwhile, Africa tends to be least integrated.

Global Integration Index: Country-level analysis





Among the four economies analyzed, **Singapore** exhibits the highest level of global integration

Singapore shows above-average performance across the GII dimensions in 2021.

New: Global Integration Index monitor

Global Integration Index (GII):

A multidimensional measure of global integration.

Highlights
A snapshot of GII results

Dimensional index
Track progress in different dimensions of global integration

Indicators
A detailed view of all indicators in the GII framework

Global Integration Index

Highlights

A snapshot of GII results

Globalization has driven remarkable economic development in Asia and the Pacific, by expanding markets, improving resource allocation, and enhancing productivity. However, it has also amplified inequalities and accelerated climate change. Digitalization and environmental sustainability are opening new channels for cooperation, but geopolitical tensions and economic fragmentation necessitate a renewed evaluation of the attributes of globalization and regional integration.

Globalization is being redefined by new issues, from supply chain disruptions caused by COVID-19 to geopolitical tensions and the effects of digitalization. Assessing the costs and benefits of global integration underscores the need for accurate measures. Although proxies like trade and capital flows provide insights, they do not fully capture the complexities of globalization.

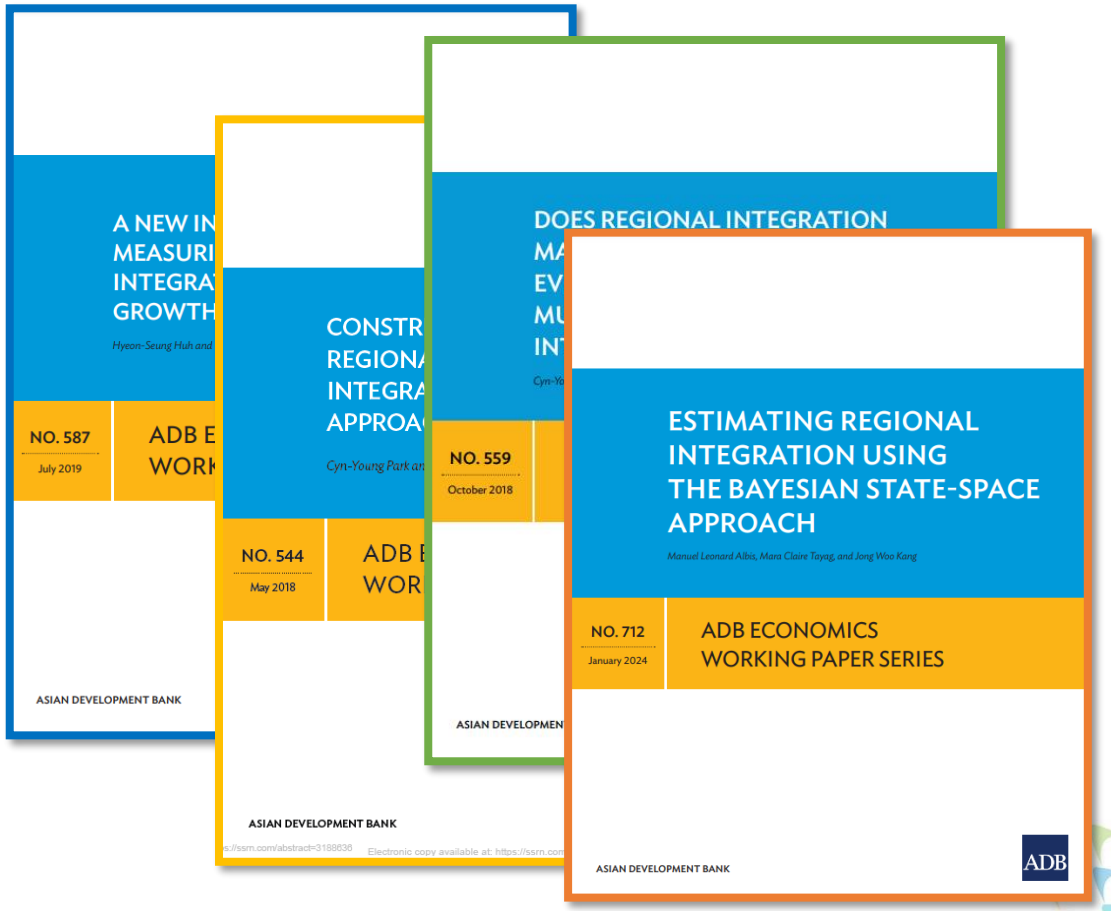
The Global Integration Index (GII) highlights this intracity by assessing regional contributions to the global measure. With 43 indicators across eight dimensions, the GII offers a comprehensive framework for understanding globalization. The eight dimensions include: trade and investment, money and finance, global value chains, people and social integration, infrastructure and connectivity, institutional arrangements, technology and digital connectivity, and environment. A Regional Integration Index (RII) compatible with the GII is also produced to assess how economies fare in both regional and global integration on the same footing.

Information from *Measuring Globalization Framework, Analysis, And Implications*. Access full report here.

Knowledge products

Reports

Research papers



Current and future areas of work

Customization and extension of new dimensions according to specific needs of subregions or economic blocks

Understanding different patterns of integration in economies and factors influencing their socio-economic and environmental outcomes

Empirical research on i) the **mechanisms** of international and regional cooperation and their **impact** on growth and development (e.g. expansion of GVCs and RVCs)

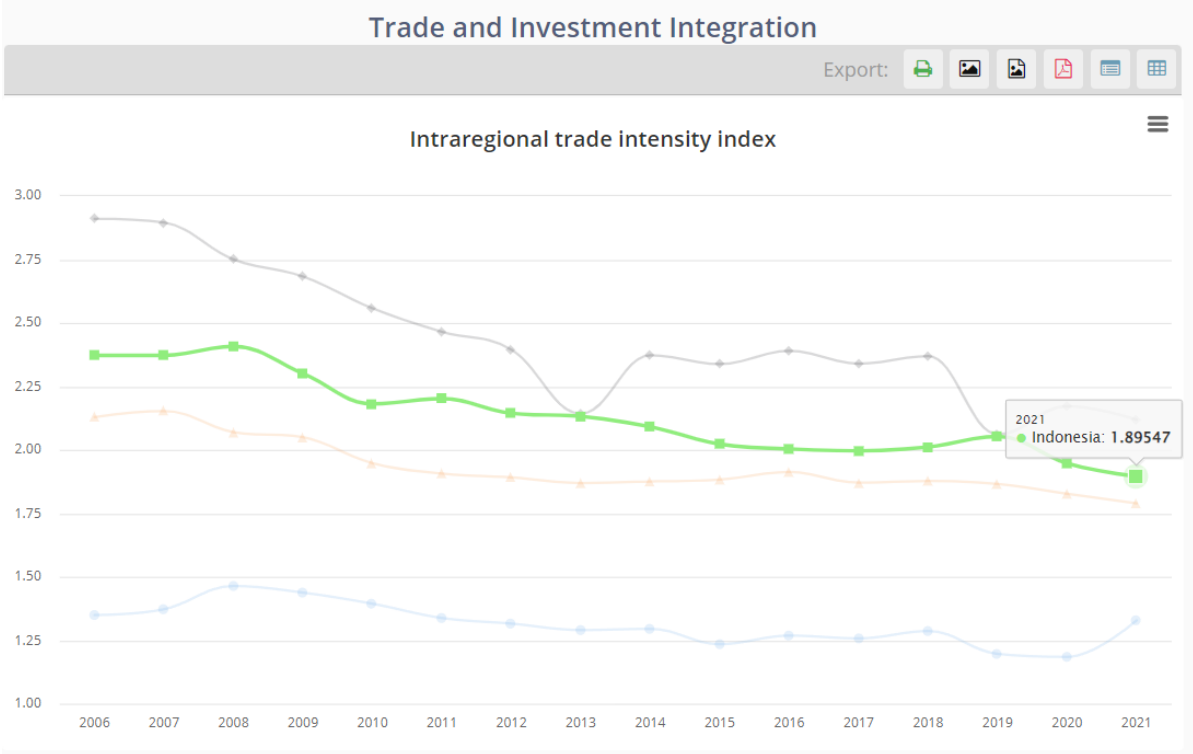
Effectiveness of institutional arrangements (e.g., BITs, FTAs, labor agreements, air services agreements) in enhancing global and regional integration.

Thank you

Proposed extensions

- Customizing and improving the current frameworks measure global and regional integration
  - Specific regions: Eurasia, Pacific, Subregional initiatives
  - Adding new dimensions and indicators
- Empirical research analyzing the mechanisms of international and regional cooperation and their impact on growth and development
  - Zoom in on specific dimensions, such as GVCs and RVCs – what is the role of regional and global cooperation in GVC and RVC expansion?
  - What is the role of institutional agreements (e.g., bilateral investment agreements, free trade agreements) in deepening global and regional integration?

Comparisons at indicator-level



Bangladesh, Fiji, Indonesia, and Thailand show a downtrend in intraregional trade intensity index.

Singapore has experienced a comparatively larger increase in environmental goods trade

Global risks highlight the need for a stronger regional cooperation

Multiple, simultaneous crises highlight the need for **stronger regional cooperation and integration**.

- COVID-19 pandemic
- Climate change
- Geopolitical crises (e.g. Russian invasion of Ukraine)

Source: Um, Woochong (2022, August 23-25). "Strengthening Regional Cooperation and Integration for a New Era of Collective Action" [Keynote Address]. Regional Cooperation and Integration Conference 2022, Bangkok, Thailand.

ADB, in its **2021 Development Effectiveness Review**, found that the pandemic has set back climate change efforts and past regional progress on poverty reduction, food security, education, and women's empowerment.

However, the foundations for regional cooperation have improved, with intraregional trade links and regional value chains continuing to deepen.

ADB's Work in Regional Cooperation and Integration

Highlights from RCI operations in 2021

$227 million in **cargo & energy** transmitted across borders

11 measures on cross-border **environmental cooperation**

$1.08 billion in **investments in trade** facilitated

6 measures to develop **economic corridors** supported

Source: ADB. 2021 Development Effectiveness Review

Subregional cooperation initiatives: Key progress in 2020/2021

CAREC INSTITUTE

- 213 projects worth $39.3 billion as of end 2021. with Transport (75%) and energy (22%)
- CAREC 2030 implementation for post-pandemic recovery

SASEC

- Over 73 projects worth $17.43 billion.
- Multimodal transport corridor development strengthened
- Clean energy and subregional power transmission

Greater Mekong Subregion

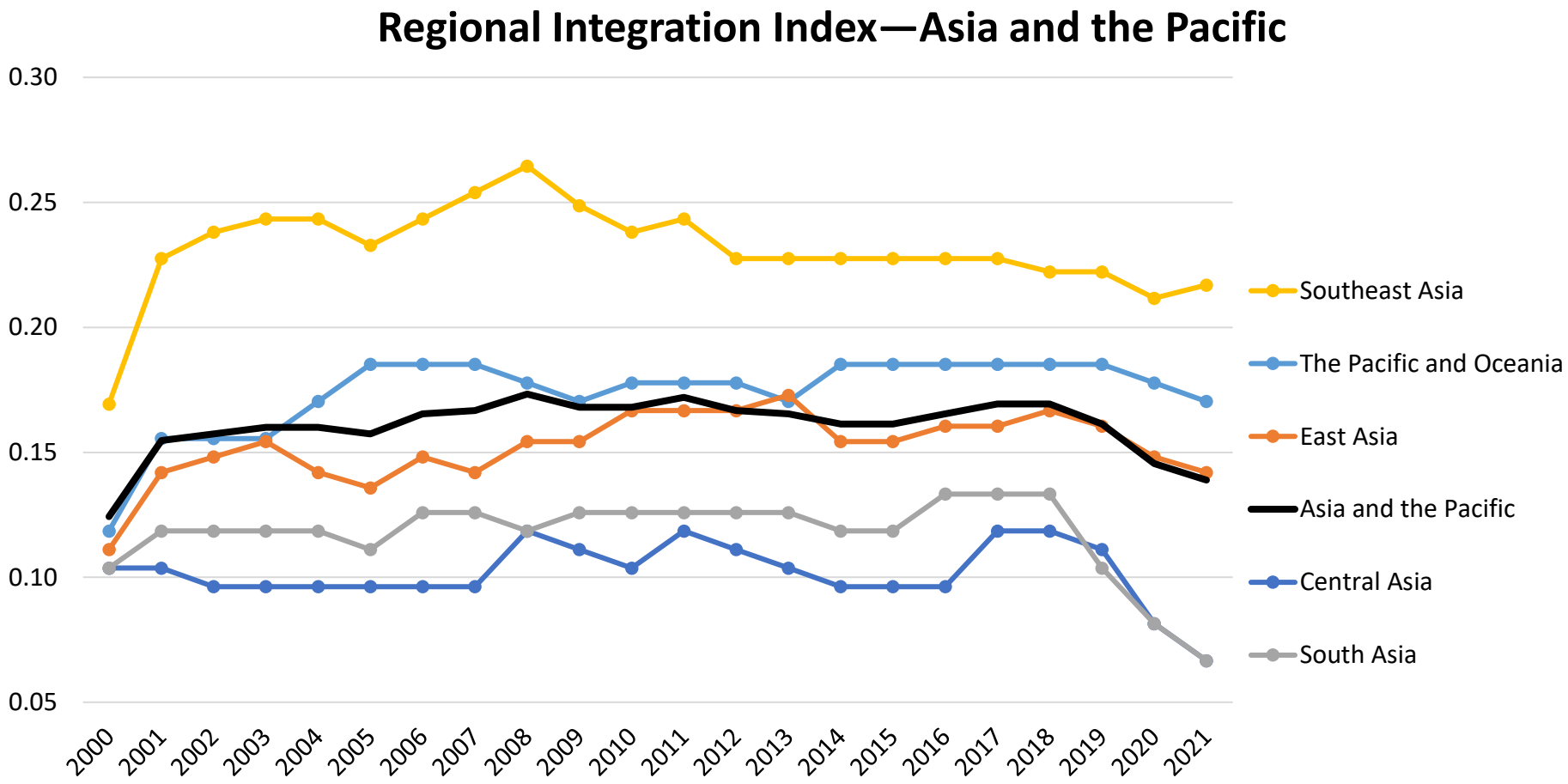
- 109 projects worth $27.7 billion.
- 12,000 kilometers of new or upgraded roads; about 700 km of railway lines installed
- 3000 megawatts of electricity generated and 2600 km transmission lines installed

PACIFIC

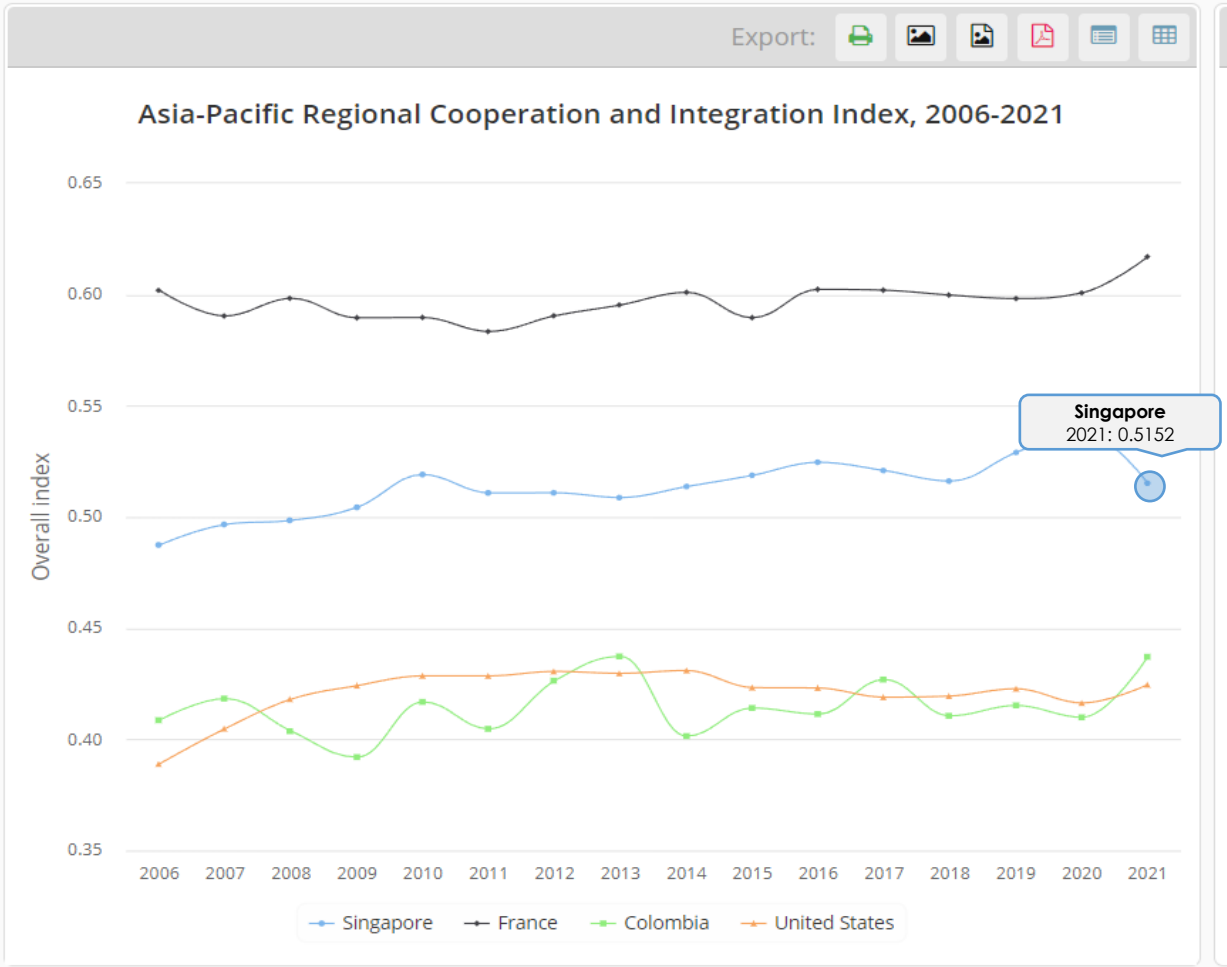
- Systems Strengthening for Effective Coverage of New Vaccines expanded to include COVID-19 vaccines
- Investments in transport connectivity, renewable energy and ICT.

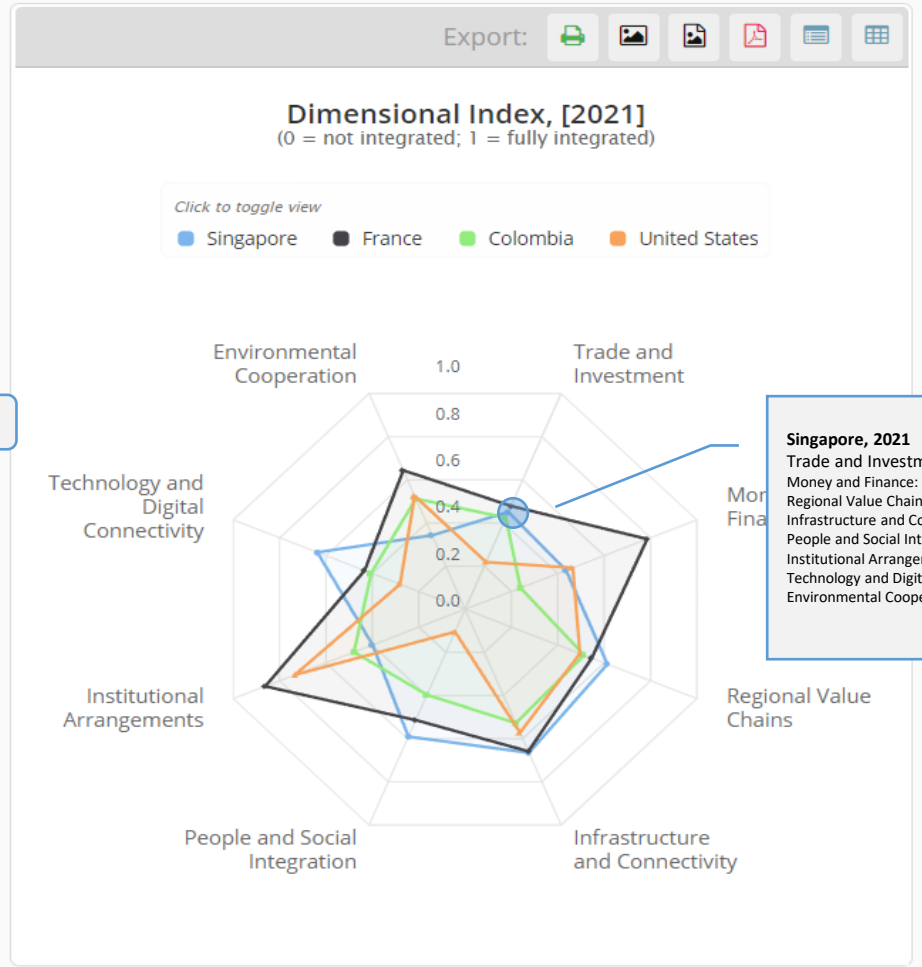
ADB

Estimating Regional Integration using the Bayesian State-Space Model



Country level analysis: GII allows comparison of a country's regional integration against that of a country in another region





Large gaps exist among the four countries selected, with France, a country in EU, being the most regionally integrated. **Singapore's** integration with Asia and the Pacific follows.

Singapore's integration with Asia exceeds that of the other countries in the **technology and digital connectivity**, **trade and investment**, **regional value chains**, and **people and social integration**.