Measuring progress and impact of RCI Trends and links to economic corridor development

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### Why having a RCI index?



Planning and policy reform

Input in policy planning and national budgeting process

Provide insights in project selection and prioritization

RCI dashboards to track performance and spillovers in key policy areas



Gauge progress in economic integration and regional performance

Compare integration of an economy at the indicator or dimension level

Assess performance against set goals

Understand regional vs. extraregional linkages and associated risks



#### Changing needs

Energy flows

Value chain participation

Services trade

International migration

Carbon content of trade

#### Asia's regional integration has been resilient amid the pandemic

## Intraregional shares Developing Asia (% of total)

	2022	2006
Trade	47%	43%
<b>FDI</b>	61%*	40%
ICT goods	58%*	54%
Air transport	41%*	57%
Intermediate goods	70%*	63%

#### Notes:

#### **Enhanced ARCII framework**





- ICT goods trade
- Intraregional research outputs
- Intraregional patents
- Mobile subscriptions
- Bandwidth traffic



- Environmental goods trade
- Int. environmental agreements
- Environmental health score
- Ecological footprint

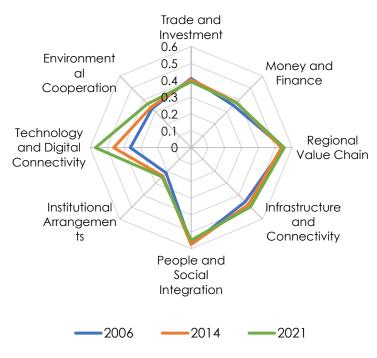
#### **New dimensions**

<sup>\*</sup>Data as of 2021

<sup>\*\*</sup>Values represent intraregional shares for developing Asia

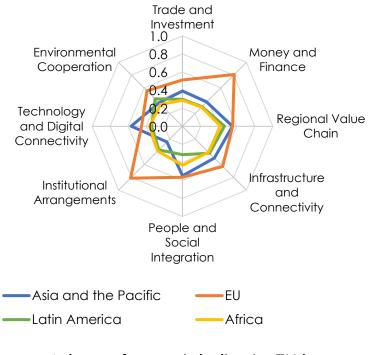
# Integration in Asia and among subregional initiatives progressed steadily in key dimensions

## Integration in Asia and the Pacific, 2006, 2014, 2021



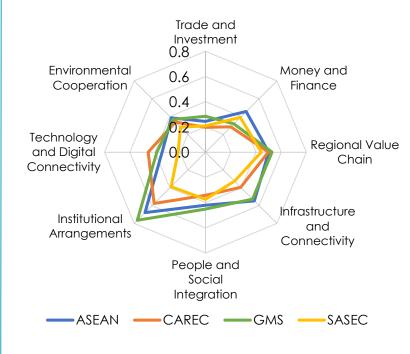
Asia's integration in multiple dimensions has improved since 2006.

## Integration in Asia and the Pacific vs. other regions, 2021



Asia performed similar to EU in regional trade, investment, and value chain participation

## Intrasubregional integration by dimension, 2021



Integration within initiatives differs across dimensions

# Drivers of RCI in Asia and subregions underscore several areas for improvement

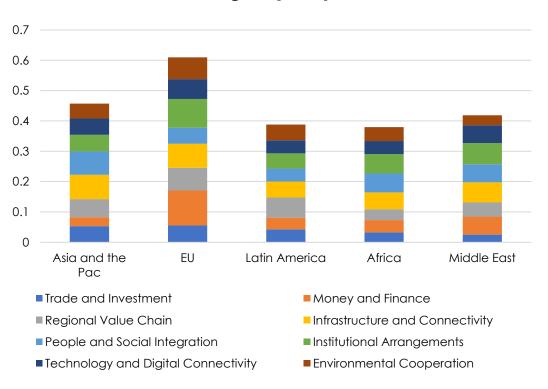


Infrastructure and connectivity and people and social integration sustained integration in Asia in 2021

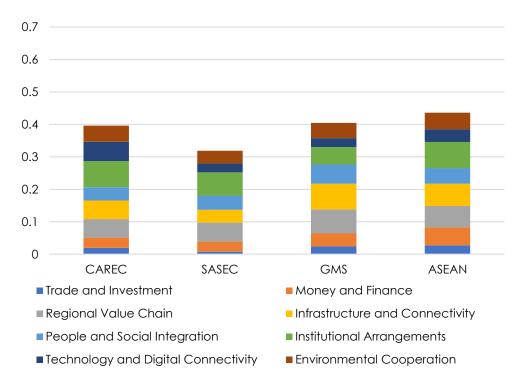


RVCs, infrastructure and connectivity and institutional arrangements are the largest contributing dimensions to RCI among subregional initiatives

## Dimensional Contributions to RCI index by Region (2021)



## Dimensional Contribution to Intrasubregional Integration (2021)



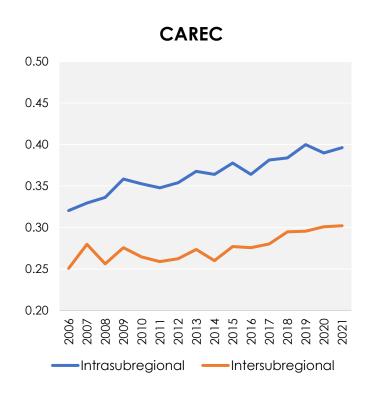
Note: Dimensional contributions are computed as the weight of a dimension (indicator) multiplied by the dimensional index (indicator). The totals represent overall integration within the subregional initiatives.

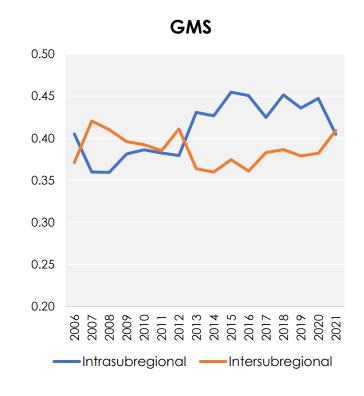
Source: Asian Development Bank. Asia-Pacific Regional Cooperation and Integration Database. https://aric.adb.org/database/arcii (accessed August 2023).

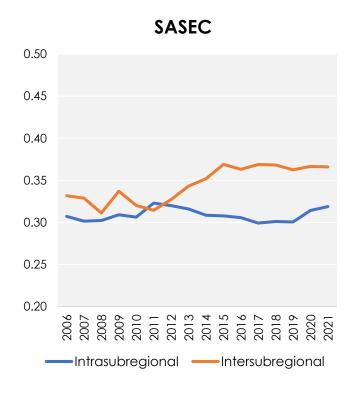
## Subregional clusters show different trajectories in RCI

Intra-subregional integration offers economies of scale while inter-subregional integration encourages diversification

#### Intra-subregional vs Inter-subregional Integration





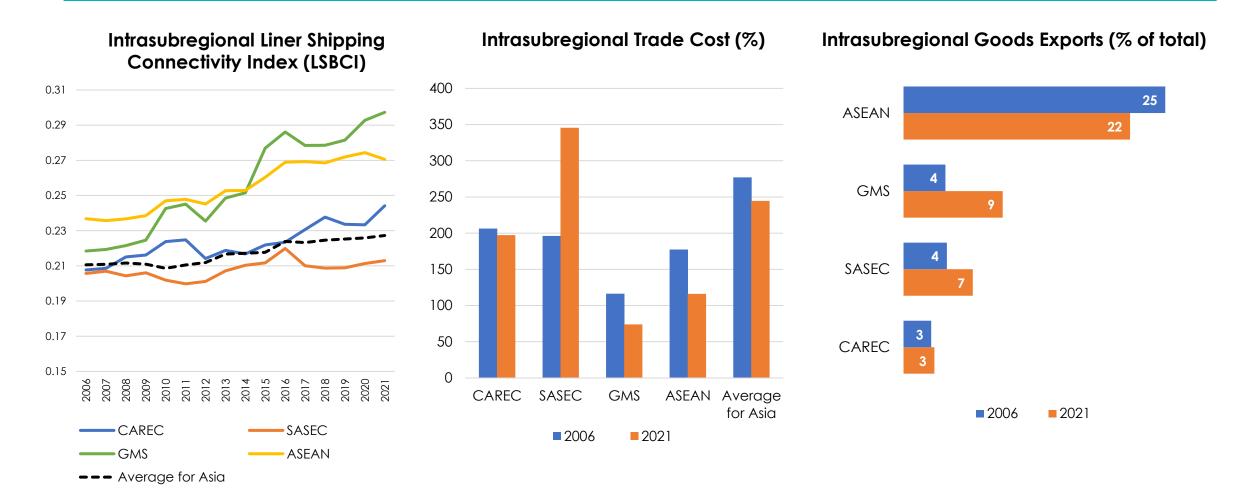


**Notes:** Worldwide normalization is used for all estimations, where the indicators are normalized using global maximum and minimum values across all regions. Estimates represent integration within the subregional initiative (intrasubregional) and with other Asian economies outside the subregional initiative (intersubregional). Higher values denote greater regional integration. Source: ADB. <u>Asia-Pacific Regional Cooperation and Integration Index Database</u> (accessed August 2023).

## Can high-level RCI indicators capture RCI spillovers?

RCI spillovers	Example of ARCII indicators
Funding and technology transfer through FDI	FDI flows, intrareg. research outputs
Improved transport and communications	Trade costs, liner shipping, LPI
Agglomeration effects through linking of urban centers	Air transport, SEZs, migration/tourism flows
Economies of scale through specialization	Value chain participation, trade concentration, trade intensity
Mitigation of cross-border environmental and public health risks	Environmental goods trade, env. health score
Institutional support for regional collaboration	FTAs, IGOs, BITs

# RCI indicators can inform or complement the assessment of economic corridors



Note: Lines represent averaged intrasubregional values of indicator. The value for trade cost is in ad valorem equivalent form (%). The LSBCI reflects scores on connectivity between two economies.

Source: ADB calculations using data from UNESCAP-World Bank Trade Cost Database (accessed August 2023); UNCTADSTAT (accessed July 2023); and IMF Direction of Trade Statistics (accessed August 2023).

## Economic corridors facilitate regional integration

#### **Intraregional integration index – 2022**



- Location. Geography affects economies' ability/potential to forge linkages with other economies.
- Network effects. Degree of regional integration is influenced by neighbors, but channels can vary across clusters.

#### Emerging trends

- Supply chain reconfiguration
- Harmonization of regulatory frameworks
- Alignment with NDPs and subnational strategies

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#### Global integration linkages increasingly impact development outcomes

#### Assessing the impact of global economic integration



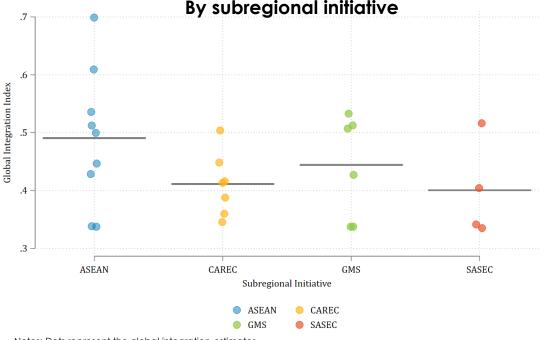


Induces income inequality in several income groups



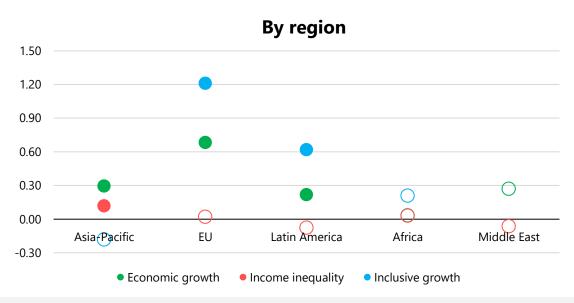
Fosters inclusive growth for high income group

# Global Integration Estimates (2021), By subregional initiative



Notes: Dots represent the global integration estimates.

#### Estimated impact of Global Integration on growth, inequality and inclusive growth



Notes: Dots describe regression coefficients assessing the association of global integration index with GDP growth, income inequality (using the Gini Index developed by the World Inequality Database) and inclusive growth (defined by growth adjusted for income inequality). Hollow dots denotes coefficients not significant at 10% level. \*Upper and lower-middle income: \*\*Lower-middle and low income

#### Conclusion

- Standardized RCI measures across economies and dimensions, beyond infrastructure, can strengthen RCI strategies
- New metrics can help inform rationale, support assumptions and robustness of economic analysis of RCI projects
- Conversely, project-level indicators capture important spillovers (e.g. agglomeration) of RCI initiatives, especially at subregional level
- Extraregional linkages are increasingly relevant to explain RCI (e.g. value chains). How to ensure alignment with ECD?
- Incrementally use more granular indicators (e.g. RCI economic analysis, CPMM) in customization to reflect RCI progress and synergies among dimensions (institutional arrangements and trade)

