

ASIAN ECONOMIC INTEGRATION REPORT 2023 Trade, Investment, and Climate Change in Asia and the Pacific

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Key messages

- Asia's regional integration progresses steadily on trade, investment and finance
- The region has great potential to deepen value chains in high-tech and services industries
- Digital technologies and regional cooperation could help streamline remittance inflows and accelerate tourism recovery
- Asia has been net exporter of CO₂ emissions, spurred by its rapid economic growth and industrialization
- Transition into more services driven economy and technological advancement will help reduce carbon intensities
- The region needs to better integrate trade and investment policies into climate action

Changing Landscape of Regional Cooperation and Integration



Asia's regional integration has been resilient amid the pandemic



Intraregional Shares (% of total)

FDI = foreign direct investment.

Notes: Trade refers to exports plus imports. FDI inflows, equity and debt asset holdings, and outward migration are used. Source: ADB, Asian Economic Integration Report Database.

Asia's integration progresses steadily, and GMS outperforms other subregional initiatives on multiple dimensions



CAREC = Central Asia Regional Economic Cooperation, EU = European Union, GMS = Greater Mekong Subregion, SASEC = South Asian Subregional Economic Cooperation. Notes: Worldwide normalization is used for the left and middle panels, where the indicators are normalized using global maximum and minimum values across all regions. Estimates in the righthand panel reflect intra-subregional integration. Higher values denote greater regional (intrasubregional) integration.

Source: ADB. <u>Asia-Pacific Regional Cooperation and Integration Index Database</u> (accessed September 2022).

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Trade: High frequency data point to weakening trade environment



Note: The indexes have been normalized using z-scores. Calculated mean and standard deviation of the indexes were for the period 5 January 2018 to 23 December 2022.

Sources: Bloomberg; CEIC Data Company; Freightos. Freightos Baltic Index (FBX) accessed January 2023); and S&P Capital IQ Pro.



Manufacturing Purchasing Managers Index

•••••• World: Manufacturing PMI Stocks of Finished Goods

Notes: The PMI new export orders index for Asia and the Pacific is the weighted average of economy-level indexes for Australia, Indonesia, India, Japan, Malaysia, the People's Republic of China, the Philippines, the Republic of Korea, Taipei, China, Thailand, and Viet Nam, using export values as weights. A PMI reading over 50 indicates growth or expansion of the manufacturing sector as compared to the previous month, while a reading under 50 suggests contraction.

Sources: CEIC Data Company; and International Monetary Fund. Direction of Trade Statistics (all accessed January 2023).

FDI: The rebound in cross-border investment is tempered since 2022 amidst growing economic headwinds



FDI = foreign direct investment, p = preliminary.

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Sources: Sources: Organisation for Economic Co-operation and Development. Foreign Direct Investment Statistics: Data, Analysis and Forecasts. https://www.oecd.org/investment/statistics.htm (accessed January 2022); and United Nations Conference on Trade and Development. World Investment Report 2022 Statistical Annex Tables. https://worldinvestmentreport.unctad.org/annextables/ (accessed June 2022).



FDI = foreign direct investment, M&A = merger and acquisition.

Note: Based on firm-level greenfield FDI and M&As.

Sources: Bureau van Dijk. Zephyr M&A Database; and Financial Times. fDi Markets (both accessed October 2022).

Remittance and tourism: Remittance inflows remain resilient. While tourism recovery lags behind other regions, recent PRC's reopening can provide a positive momentum



International Tourist Arrivals (as share of 2019 level)



Note: 2022 numbers refer to Jan-Aug 2022 as share of annual 2019 data. 2022 data do not include the People's Republic of China.

Sources: ADB calculations using data from UNWTO Tourism Dashboard, https://www.unwto.org/tourism-data/unwto-tourism-recovery-tracker (accessed December 2022) and CEIC Data Company.

Note: 2022 data are estimates.

Source: ADB calculations using data from KNOMAD (Global Knowledge Partnership on Migration and Development. http://www.knomad.org/data/remittances (accessed December 2022)

Issues and Way Forward



Regional trade integration remains robust, with further room to grow



Asia and the Pacific (ex. PRC)'s Trade Share with Other Economies (% of total)



EU = European Union (27 members), PRC = People's Republic of China, UK = United Kingdom, ROW = rest of the world.

Notes: Values expressed as percentage of the region's total merchandise trade (sum of exports and imports). North America covers Canada, Mexico, and the United States. Source: International Monetary Fund. Direction of Trade Statistics. (accessed December 2022).

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Regional value chains weighted more in primary and low-tech sectors, with greater potential for growth in high-tech and services industries



RVC-GVC Intensity by Major Sector—Asia

GVC = global value chain, RVC = regional value chain.

Notes: RVC–GVC intensity is the ratio of RVC participation and GVC participation rates. Sectoral classification is based on <u>ADB (2015)</u>. Business services includes personal and public services. Sources: ADB calculations using data from ADB. Multi-Regional Input–Output Tables; and methodology by Borin and Mancini (2019).

Cooperation is crucial for food and energy security



Source: ADB calculations using Laborde, D. and A. Mamun. Food Export & Fertilizer Restrictions Tracker. https://public.tableau.com/app/profile/laborde6680/viz/ExportRestrictionsTracker/FoodExportRestrictionsTracker (accessed January 2023).

Policy Recommendations

- Prohibiting export restrictions through international cooperation to ensure seamless flow of essential goods
- Streamlining of supply chain through trade facilitation and exploration of alternative transportation routes
- Promoting multilateral cooperation for public stockholding
- Providing targeted income subsidies to vulnerable groups

FDI concentrations by investor and sector have been declining, yet varying degree of concentration exists across economies



EU = European Union, FDI = foreign direct investment, UK = United Kingdom.

Notes: The FDI concentration index was computed using the Herfindahl-Hirschman market concentration index, as featured in Lapid, et al. (2021). Values range from 0 to 1, with 0 indicating low concentration and 1 indicating high concentration. Based on current consensus, values larger than 0.25 already indicate a high concentration.

¹³ Sources: ADB calculations using data from Bureau van Dijk. Zephyr M&A Database; Financial Times. fDi Markets (both accessed March 2022); and Lapid, et al (2021).

Digitalization could help lower transaction costs of remittance (< 3%: SDG goal)

Policy responses and cooperation are crucial for the recovery of tourism back to pre-pandemic level

Mode of Transfer and Payment Instrument, Q2 2022

(% of transaction amount)



MTO = money transfer operator.

Source: World Bank, Remittance Prices Worldwide (accessed November 2022).

Top 3 obstacles to tourism recovery

- Economic reasons (such as global economic slowdown, high travel cost due to inflation etc)
- Ease of cross-border travel and border restrictions
- Tourist confidence

Key policy priorities

- Regional cooperation on border openings to accelerate tourism recovery
- Forming bilateral partnership and diversifying tourist source economies
- Expanding investments in tourism infrastructure
- Harnessing digital technology to promote sustainability and evidence-based policy making

Theme Chapter: Trade, Investment, and Climate Change in Asia and the Pacific



Video Presentation



Asia's CO2 emissions embodied in production has exceeded consumption as major provider of products to meet global demand



Production- and Demand-Based CO₂ Emissions

CO2 = carbon dioxide.

Notes: Aggregate for Asia includes Australia; Bangladesh; Brunei Darussalam; Cambodia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Lao People's Democratic Republic; Malaysia; New Zealand; Pakistan; the People's Republic of China; the Philippines; the Republic of Korea; Singapore; Taipei, China; Thailand; and Viet Nam. The shaded areas in the graph represent the absolute difference between productionbased (CO² emissions based on production, i.e. emitted by economies) and demand-based (CO₂ emissions embodied in domestic final demand, i.e. consumed by economies) CO₂ emissions. Source: ADB calculations using data from Organisation for Economic Co-operation and Development. Carbon dioxide emissions embodied in international trade (TECO2) dataset.

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In spite of steep declines in the carbon footprint of Asia's trade, the region remains the most carbon intensive exporter and importer



 CO_2 = carbon dioxide.

Note: Emission intensity of exports (imports) are CO₂ emissions per export (import) value. In tonnes CO₂ per \$ million. Source: ADB calculations using data from Organisation for Economic Co-operation and Development. Carbon dioxide emissions embodied in international trade (TECO₂) dataset.

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Asia's industrial structure matters for overall carbon intensity outcomes





Industry Shares in Exports (%)



 CO_2 = carbon dioxide, EU = European Union (27 members), UK = United Kingdom.

^a Includes air conditioning and water supply; sewerage, waste management and remediation activities.

^b Includes repair and installation.

° Includes optical products and electrical equipment.

^d Includes leather and footwear.

Source: Kang, Gapay, and Quizon (2022) using data from Organisation for Economic Co-operation and Development. Carbon dioxide emissions embodied in international trade (TECO2) dataset (accessed December 2021).

Despite higher carbon intensity on average in global carbon intensive sectors, data show Asia could achieve lower carbon intensity



CO₂ = carbon dioxide, EU = European Union (27 members), UK = United Kingdom.

Note: First panel is for electricity, gas, steam and air conditioning and water supply; sewerage, waste management and remediation activities.

Source: Kang, Gapay, and Quizon (2022) using data from Organisation for Economic Co-operation and Development. Carbon dioxide emissions embodied in international trade (TECO2) dataset (accessed December 2021).

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With right mix of policies trade and investment can become part of climate solutions

- Facilitating trade in environmental goods and services can help bring down the cost of adopting green technologies and promote knowledge spillovers
- Combining regulations, standards, and certifications with policy incentives can be effective in reducing pollutions and accelerating switch to less-polluting production process
- Trade and investment agreements can promote greener trade and investment through environmental commitments
- Carbon pricing is crucial for efficiently curbing emissions from production and trade

I. Promoting trade in environmental goods and services

Price of Solar Modules for top producing economies 1992-2020



Sources: National Survey Report of PV Power Application: IEA-PVPS (2021). Snapshot of Global PV Markets 2021, Aisbett et al. (2022) and Taghizadeh-Hesary et al. (2018).



Potential

- Green technology adoption
- Reduction of carbon intensity
- Innovation and environmental spillovers

Way forward

- Addressing list-approach limitations
- Considering multilateral initiative for environmental services
- Targeted collaboration and certification

FDI in environmental goods and services – Asia and the Pacific



- Other (Consumer electronics)
- Wind electric power
- Other electric power generation (Renewable Energy)
- Solar electric power

Sources: ADB calculations using classification from Asia Pacific Economic Cooperation (2012) and OECD; and Financial Times. fDi Markets (accessed March 2022).



II. Nurturing green businesses



Source: ADB (2020) Greening Businesses. Challenges and opportunities for scaling up green business investments in Asia.

- A reappraisal of existing products and processes
- Environmental management systems and tools for pollution prevention and resource use efficiency
- Certification to reduce asymmetric information on environmental attributes of products
- Innovation for new technologies to lower pollution and increase efficiency.



0%

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Africa — Latin America

Share of ISO 14001 Certificates by Region (%)

Notes: ISO 14001 sets out the criteria for an environmental management system and can be certified to. It maps out a framework that a company or organization can follow to set up an effective environmental management system. "Certificates" are the documents issued by ISO when the business demonstrates conformity to the standard.

2000 2001 2002 2005 2005 2007 2007 2007 2007 2009 2009 2011 2011 2011 2016 2016 2016 2017 2018

202C 2021

Source: ISO. Committee 09: ISO Survey of Certifications to Management System Standards—Full Results

- Certification scheme with lower regulatory burden is preferable
- Mandatory certification is more likely as national emissions commitments become more stringent

III. Strengthening climate action through regional cooperation and new International Green Economy Collaborations (IGEC)

Trade

Facilitate interoperability of certification systems.



Automatic Mutual recognition



Consistent embedded emissions accounting

Mutual recognition agreement on conformity assessment



- Further negotiate and implement trade ٠ facilitation measures in RTAs.
- Incorporate separate **RTA chapter** on ٠ climate change mitigation policies for GHG reduction.

FTA = free trade agreement, RTA = regional trade agreement.



Environmental chapters in FTAs





Investment

- Introduce a model agreement or 'opt in' instrument including substantive standards on climate change
- Focus on **regulation** but also 'positive' investment areas (ie. market access, investment facilitation, green incentives) that favor climate investment as much as climate policy.



IV. Fostering carbon pricing mechanisms and cross-border carbon markets should underpin greening production and climate solutions

Risk to EU CBAM in Asia and the Pacific

	Capacity to measure emissions	Emissions	Importance of EU trade for GDP	Reliance on EU trade
Central Asia				
East Asia				
Pacific				
South Asia				
Southeast Asia				

EU CBAM = European Union Carbon Border Adjustment Mechanism. Note: Emissions refer to carbon intensity and absence of emission trading scheme and carbon tax initiatives.

Fostering cross-border carbon markets



Direct and indirect **linking** of **Emission Trading Systems** to increase liquidity, expand abatement opportunities and reduce costs



Bilateral agreements on emissions reductions and carbon storage under Article 6.2.



Regional carbon market alliances to harmonize standards and limit carbon leakage

Thank you!

