ASIAN ECONOMIC INTEGRATION REPORT 2022

ADVANCING DIGITAL SERVICES TRADE IN ASIA AND THE PACIFIC

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Regional economic linkages remain robust despite COVID-19

**Intraregional Shares (% of total)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Trade</th>
<th>FDI</th>
<th>Equity</th>
<th>Debt</th>
<th>Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>59%</td>
<td>54%</td>
<td>21%</td>
<td>19%</td>
<td>35%</td>
</tr>
<tr>
<td>2019</td>
<td>58%</td>
<td>56%</td>
<td>20%</td>
<td>18%</td>
<td>35%</td>
</tr>
<tr>
<td>2001</td>
<td>53%</td>
<td>47%</td>
<td>12%</td>
<td>8%</td>
<td>43% (2000)</td>
</tr>
</tbody>
</table>

FDI = foreign direct investment (flows data). Equity = equity asset holdings (stock data). Debt = debt asset holdings (stock data). Migration is based on outbound data. Note: Where data are not available, the latest year for available data is indicated in parentheses.

Sources: 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; United Nations Department of Economic and Social Affairs Population Division; United Nations World Tourism Organization; World Bank; and national sources.
Asia is highly integrated and on multiple dimensions compares well to EU

Trade, investment, infrastructure and digital connectivity has improved since 2006.

Asia performed similarly well with EU in regional trade, investment, and value chain participation.

Asia subregions continue to display wide-ranging performance across dimensions.

Notes: Worldwide normalization is used for all estimations, where the indicators are normalized using global maximum and minimum values across all regions. Higher values denote greater regional integration. Source: ADB. Asia-Pacific Regional Cooperation and Integration Index Database (accessed October 2021).
Financial Conditions Overview

Accommodative policy support and vaccine rollout buoyed financial market conditions in H1 2021, heightened uncertainties in H2 2021 pose risks.

COVID-19 = coronavirus disease; GFC = global financial crisis; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KOR= Republic of Korea; PHI = Philippines; PRC = People’s Republic of China, SIN = Singapore; THA = Thailand; US = United States.

Sources: ADB calculations using data from Bloomberg; CEIC; Haver Analytics; the International Monetary Fund. International Financial Statistics. (accessed October 2021); and methodology by Park and Mercado (2014).
The region faces renewed fears of capital flow reversals, exchange rate volatility, and financial instability in the second half of 2021.

Asia’s merchandise trade dipped less and recovered faster than global trade in 2020 and 2021

Monthly Trade Volume Growth
(%, y-o-y, 3-month moving average)

Monthly Trade Value Growth
(%, y-o-y, 3-month moving average)

Notes: Trade volume growth rates were computed using volume indexes. For each period and trade flow type (i.e., imports and exports), available data include indexes for Japan and the People’s Republic of China, and aggregate indices for selected Asian economies, namely, (i) Advanced economies excluding Japan, which include Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China; and (ii) Emerging economies excluding PRC, which include India; Indonesia; Malaysia; Pakistan; the Philippines; Thailand; and Viet Nam. To come up with an index for Asia, trade values were used as weights for the computations. On the other hand, trade value levels and growth rates were computed by aggregating import and export values of the same Asian economies.

High-frequency indicators suggest logistics bottlenecks and pursuant rising shipping costs

Drivers
- Inputs for shipping transportation (bunker fuel, labor)
- Integrated logistics
- Alternative modes of transport
- Quarantine requirement

Impact
- Bottleneck of supply chain
- Slowdown in trade flows
- Failure to meet demand timely

Way forward
- Digitalization and automation
- Competition
- Investment in logistics, warehouse, inland transport

Notes: The trade value and volume growth rate is equivalent to the 3-month moving average of the year-on-year change in the index value of world merchandise trade.

Geographical concentration of production in Asia and R&D in US and Europe exposes vulnerability of semiconductor value chains

Policy responses

- Reshoring and self-sufficiency
- Diversification
- Just-in-case inventory management
- Investment in R&D
- Capital investment
- Education and training for engineers

Regional Breakdown of Semiconductor Value Chain Production (%)

EDA & Core IP (3%)  Logic (30%)  DAO (17%)  Memory (9%)  Manufacturing Equipment (12%)

Materials (5%)  Wafer fabrication (19%)  Assembly, packaging & testing (6%)

Overall Value Chain (100%)

Semiconductor Consumption

CapEx = Capital expenditure, DAO = discrete, analog and optoelectronics and sensors, EDA = electronic design automation, IP = intellectual property.

Notes: Regional breakdown on EDA, design, manufacturing equipment and raw materials based on company revenues and company headquarters location.
Regional breakdown on wafer fabrication and assembly & testing based on installed capacity and geographic location of the facilities.
Source: Varas et al. (2021).
Recent deepening of RVC is more driven by complex value chain linkages and in high and medium tech sectors.

**Asia Regional Value Chain Participation Rates (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-RVC</th>
<th>Simple RVC</th>
<th>Complex RVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>35.4</td>
<td>32.5</td>
<td>29.9</td>
</tr>
<tr>
<td>2007</td>
<td>41.1</td>
<td>41.9</td>
<td>42.7</td>
</tr>
<tr>
<td>2008</td>
<td>42.7</td>
<td>42.4</td>
<td>41.4</td>
</tr>
<tr>
<td>2009</td>
<td>41.2</td>
<td>41.6</td>
<td>40.9</td>
</tr>
<tr>
<td>2010</td>
<td>42.5</td>
<td>42.6</td>
<td>41.4</td>
</tr>
<tr>
<td>2011</td>
<td>44.4</td>
<td>43.0</td>
<td>42.8</td>
</tr>
<tr>
<td>2012</td>
<td>31.6</td>
<td>31.1</td>
<td>33.4</td>
</tr>
<tr>
<td>2013</td>
<td>32.3</td>
<td>32.1</td>
<td>32.4</td>
</tr>
<tr>
<td>2014</td>
<td>33.5</td>
<td>33.4</td>
<td>33.4</td>
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<tr>
<td>2015</td>
<td>32.3</td>
<td>32.4</td>
<td>32.4</td>
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<tr>
<td>2016</td>
<td>32.5</td>
<td>32.1</td>
<td>32.4</td>
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<tr>
<td>2017</td>
<td>32.3</td>
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<tr>
<td>2018</td>
<td>31.6</td>
<td>31.1</td>
<td>33.4</td>
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<tr>
<td>2019</td>
<td>31.1</td>
<td>31.1</td>
<td>33.4</td>
</tr>
<tr>
<td>2020</td>
<td>31.1</td>
<td>31.1</td>
<td>33.4</td>
</tr>
</tbody>
</table>

**RVC-GVC Intensity – Major Sectors in Asia**

GVC = global value chains; RVC = regional value chains

Notes: Gross RVC participation is the share of Asia’s intraregional value chain exports to its intraregional gross exports but excluding all non-Asian third economies in gross exports. Non-GVC refers to final goods exports. Simple GVCs are intermediate goods exports that cross borders only once or absorbed by the direct importer economy. Complex GVCs are intermediate exports that cross borders at least twice.

Sources: ADB calculations using data from ADB. Multi-Regional Input–Output Tables; and methodology by Wang, Wei, and Zhu (2013, revised 2018).
Global inward FDI slipped in 2020 while recovery is expected in 2021 and 2022

Global Inward Foreign Direct Investment

$ trillion


Inward FDI to Asia (left) Inward FDI to ROW (left) Inward FDI to Asia (% of GDP, right)

f = forecast, FDI = foreign direct investment, GDP = gross domestic product, ROW = rest of the world.
Notes: Bars for 2021 and 2022 represent estimates from the United Nations Conference on Trade and Development’s World Investment Report 2021. Estimate for 2021 is based on a forecasted 10% increase from 2020 levels, with 2022 based on a forecasted 15% increase from 2021 levels.
Asia emerges a strong destination for digital services FDI, which shows resilience amidst the pandemic.

**Inward FDI in Digitally Deliverable Services by Region, 2020 ($ billion)**

- **North America**
- **EU + UK**
- **Asia**
- **Rest of the World**
- **Middle East**
- **Africa**
- **Latin America**

**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 (both accessed May 2021).
Digital services FDI is associated with higher tradability in these sectors, but it faces higher restrictions in Asia.

FDI Regulatory Restrictiveness Index in Digitally Deliverable Services, 2020

FDI = foreign direct investment.
Remittance inflows to the region fell 2% in 2020; several factors explain the resilience

Factors Affecting the Resilience of Inflows to Asia

- Altruistic motivation to support families' needs in home economies
- Fiscal stimulus in developed migrant-host economies, specifically cash transfers
- Greater use of digitally-enabled remittance transfers accelerated the capture of remittance data
- Tax and related incentives improved the use of formal remittance channels

The pandemic continues to take its toll on international tourism

Tourist arrivals remain deeply stunted in Asia and other major tourism regions.

Access to Asia remains restricted by partial-to full lockdowns, resulting in poor performance.

International Travel Restrictions


The decline in tourism receipts severely affects tourism-dependent economies including Pacific DMCs

Source: UNWTO Tourism Dashboard and UNWTO International Tourism and COVID-19 (accessed September 2021); Maldives Monetary Authority Statistical Database; Pacific Tourism Organization; International Monetary Fund, World Economic Outlook; and United Nations Department of Economic and Social Affairs, Population Division.
THEME CHAPTER

Advancing Digital Services Trade in Asia and the Pacific
Key Messages

- Asia’s trade in digital services has grown rapidly but its share remains below other regions due to low productivity and high regulations.

- The ability to unlock its potential hinges on investment in human and physical capital, digital connectivity, and policy environment (e.g., freer access to internet and data flows).

- Liberalization and deregulation of digitally deliverable services can raise real income and help strengthen GVC participation across the board.

- The need for safeguarding cybersecurity, data protection and privacy should be weighed against supporting freer data flows.

- Economy-level regulatory reforms should be complemented by bilateral and regional cooperation.
Policy Recommendations

- Investments in human capital (digital capacity), ICT infrastructure and connectivity
- Services sector deregulation and trade liberalization
- Balancing between data protection/privacy and data flows
- International cooperation for transparent, fair and harmonized regulations, taxations, and liberalization through Regional Trade Agreement and Digital Economy Partnership Agreement
- Possible differential impacts and trade-offs, for example for skilled vs. unskilled workers, or in urban vs. rural area
- Governments’ role in fostering competitiveness of digital services across society and addressing digital divide and distributional impact