ASIAN ECONOMIC INTEGRATION REPORT 2026

LEVERAGING REGIONAL COOPERATION AND INTEGRATION TO NAVIGATE GLOBAL UNCERTAINTIES

ASIAN DEVELOPMENT BANK

ADB

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In this publication, "$" refers to United States dollars, "€" refers to euros, "B" refers to baht, "NZ$" refers to New Zealand dollars, "SLRs" refers to Sri Lanka rupees, "SUM" refers to sum, and "Tk" refers to taka.

ADB recognizes "China" as the People's Republic of China, "Korea" as the Republic of Korea, "USA" as the United States, and "Vietnam" as Viet Nam.

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FOREWORD

Asia and the Pacific remains the powerhouse of global economic growth. Rapidly recovering from the scars of the pandemic, the region has sustained its growth momentum on the back of structural reforms and industrial upgrading. The year 2025, however, was marked by heightened geopolitical tensions and growing trade policy uncertainties, which posed persistent challenges for regional economies striving to adapt to shifting geopolitical dynamics and emerging global orders.

Despite these headwinds, the region's economies demonstrated remarkable resilience, supported by robust domestic consumption amid sluggish investment, as well as by strong export performance. While some economies experienced declining exports to the United States due to the new reciprocal tariffs, many maintained solid global export momentum—partly driven by front-loading of shipments to the United States and partly by export diversion and broader diversification efforts. The global boom in artificial intelligence further spurred strong demand for semiconductors and digital inputs, areas in which the region's high-income, technology-focused economies play a critical supplier role.

The challenging global policy environment underscores the need for renewed emphasis on regional cooperation and integration. Strengthened regional ties can help cushion the impact of external shocks and provide avenues to sustain growth through deeper economic linkages and expanded cross-border flows in trade, investment, human capital, and finance.

The *Asian Economic Integration Report 2026: Leveraging Regional Cooperation and Integration to Navigate Global Uncertainties* examines recent progress in regional cooperation and integration by analyzing trends in cross-border trade and global value chains, foreign direct investment, finance, migration, remittances, and tourism. The report recommends that policymakers intensify efforts to mitigate the adverse effects of global uncertainties by deepening and better implementing free trade agreements, capitalize on the momentum of cross-border digital investment, improve financial infrastructure and regional safety nets, and facilitate cross-border mobility of people—particularly for workers. These policy prescriptions, while not new, are more relevant than ever in today's context of persistent global uncertainty and can help the region navigate ongoing challenges by harnessing the tangible benefits of cooperation and integration.

The Asian Development Bank has long championed regional cooperation and integration, serving as a key development partner for many regional economies. Its forthcoming operational approach paper on regional cooperation and integration is expected to guide the next generation of its operations and thought leadership in this priority area. The analysis and recommendations in this annual report will continue to provide critical inputs for the implementation of the approach paper and will inform regional policymakers on the key issues and policy directions needed to unlock the full potential of regional integration.

Greater economic integration can flourish with enhanced cooperation across regional and subregional initiatives, supported by both the public and private sectors. We hope this report contributes to that process and supports more effective cross-border dialogue and policy action.

Albert Park
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ABBREVIATIONS

ADB	Asian Development Bank
AI	artificial intelligence
ARCII	Asia-Pacific Regional Cooperation and Integration Index
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus the People's Republic of China, the Republic of Korea, and Japan
BIMP-EAGA	Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
CAREC	Central Asia Regional Economic Cooperation
CMIM	Chiang Mai Initiative Multilateralisation
COVID-19	coronavirus disease
EU	European Union
FDI	foreign direct investment
FTA	free trade agreement
GDP	gross domestic product
GMS	Greater Mekong Subregion
GPR	geopolitical risk
GVC	global value chain
ICT	information and communication technology
IMF	International Monetary Fund
IMT-GT	Indonesia–Malaysia–Thailand Growth Triangle
M&A	merger and acquisition
MNE	multinational enterprise
MSME	micro, small, and medium-sized enterprise
OECD	Organisation for Economic Co-operation and Development
PRC	People's Republic of China

PTA	preferential trade agreement
RCEP	Regional Comprehensive Economic Partnership
RCI	regional cooperation and integration
RFA	regional financial agreement
RII	Regional Integration Index
RVC	regional value chain
SAARC	South Asian Association for Regional Cooperation
SASEC	South Asia Subregional Economic Cooperation
SMEs	small and medium-sized enterprises
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Trade and Development
US	United States
WUI	World Uncertainty Index

HIGHLIGHTS

Economic integration across Asia and the Pacific has shown steady progress and is becoming increasingly important in helping the region navigate economic and geopolitical challenges. Trade connectivity leads overall regional economic integration and economies in Asia and the Pacific have shown great resilience in trade as they adjust to the evolving trade policy environment. The region needs to strengthen policy efforts to mitigate the negative impact of geopolitical uncertainties on trade. While global investment flows into the region continue to be weak, intraregional investments remain strong. In particular, the rapid growth in digital investments offers an opportunity to leverage the global boom in artificial intelligence and digital transformation. Regional financial integration is progressing slowly. Enhancing financial infrastructure, implementing stronger risk mitigation measures, and improving cross-border payment systems could help deepen integration. Remittance and tourism inflows remain robust although high-skilled out-migrants remain concentrated in some high-income economies outside the region. To sustain tourism-related growth, the region should focus more on value creation, market diversification, improved logistics, and cross-border cooperation.

Regional integration across Asia and the Pacific has deepened over recent decades. Asian Development Bank (ADB) estimates show the region remains highly integrated economically through goods and services trade, foreign direct investment (FDI), finance, and people's mobility. Trade remains the primary driver of regional integration. Southeast Asia is the most integrated with Asia and the Pacific, while South Asia and Central Asia lag behind. Technology and digital transformation have played a critical role, including among Pacific developing economies, in strengthening subregional economic integration.

Economies in Asia and the Pacific have shown strong resilience in trade despite the reciprocal tariffs introduced by the United States, but they remain exposed to vulnerabilities in supply chains. The region's resilience has been driven by redirecting trade toward alternative markets, which has sustained export growth even as shipments to the United States (US) have declined in some economies. The region also continues to structurally upgrade within global value chains, moving into more upstream, higher value-added activities and deepening regional production networks. However, the relative concentration in production activities that rely on foreign inputs leaves economies vulnerable to supply chain disruptions. Empirical studies show geopolitical uncertainty raises trade costs and dampens exports, particularly in Asia and the Pacific. The region should thus promote product and partner diversification, deepen and effectively implement trade agreements, and strengthen trade facilitation and logistics cooperation.

While economic uncertainties have slowed global investment, digital transformation continues to drive strong investor interest. Global FDI into Asia and the Pacific declined slightly by 2% to $614 billion in 2024, with FDI in East Asia falling by 15% and Southeast Asia recording a 10% increase. In 2025, the prospects of Asia and the Pacific for FDI remained subdued, with early estimates for the first half of the year showing a 4% decline in regional inflows. Despite the lackluster overall trend, digital FDI continues to expand rapidly across the region, comprising about 35% of total inflows in 2024 and rising by 24% in value between 2023 and 2024. Artificial intelligence, data centers, and fintech investments account for about three-fourths of digital FDI in the region. Leveraging the positive economic benefits from digital FDI will require policy efforts to promote skills training, encourage effective management, and improve data governance.

Steady nonresident portfolio inflows have helped maintain regional financial market resilience amid global economic and policy uncertainties. The share of intraregional assets and liabilities in both equity and debt markets showed a slight increase in 2024. A fund flow analysis shows that stock markets remained largely resilient to rising geopolitical risks, as yield-seeking investors often drive funds to firms exposed to these risks. This contributed in part to the swift recovery of global stock markets following the US tariff announcement in April 2025. Regional financial safety nets support economic stability in uncertain times. For example, strengthening the ASEAN+3 Chiang Mai Initiative Multilateralisation system through the introduction of a paid-in capital structure could help build a more effective regional safety net.

Robust remittance inflows from Asia and the Pacific's migrant workers (up by 7.4% in 2024) will likely continue. Many of the most-skilled migrants from the region work in a few high-income economies outside the region while low- and semi-skilled migrant workers remain within Asia and the Pacific. While stringent immigration policies in some advanced economies could pose risks for certain segments of high-skilled migration, strong demand for top-tier skills continues to create opportunities for highly qualified workers. Regional cooperation, particularly in strengthening cross-border skills recognition, would benefit migrants across the skills spectrum. Digital remittances have helped reduce costs and increase efficiency. As more migrant households across the region use digital channels, improving digital financial literacy will help users navigate digital apps and avoid fraud. More efforts are needed to scale up digital infrastructure and strengthen cross-border coordination to improve interoperability and address regulatory challenges.

Strategic policies and greater regional cooperation can boost tourism and sustain its economic benefits. In 2024, international arrivals in Asia and the Pacific rebounded strongly, reaching 96.3% of pre-pandemic 2019 levels. Tourism receipts surpassed the 2019 benchmark by 5%. Tourism is shaped by the interplay of push and pull factors. Rising incomes, demographic shifts, and digital readiness spur outbound travel, while destination competitiveness, attractions, infrastructure, safety, connectivity, and visa facilitation drive arrivals. Empirical evidence shows that a 1% increase in income can boost outbound travel by 4%–10%, whereas restrictive visa policies can reduce arrivals by up to 52%. To sustain tourism's economic benefits, Asia and the Pacific must focus on value creation, enhancing visitor experience, diversifying markets, easing travel constraints, and advancing regional cooperation to improve connectivity and develop multi-destination tourism options.

EXECUTIVE SUMMARY

Regional integration across Asia and the Pacific has deepened steadily over the past 2 decades.[1] Asian Development Bank (ADB) estimates on trade, investment, finance, and people's mobility show the region is highly integrated economically. Trade in goods and services remains the primary impetus, followed by the movement of people and foreign direct investment (FDI). Among the dimensions measured, financial integration remains weakest, lagging behind the European Union plus the United Kingdom (EU+UK). By subregion, Southeast Asia is most integrated with Asia and continues ahead of South Asia and Central and West Asia. Stronger regional cooperation and integration offers a buffer against the impact from external shocks and will likely be increasingly important in helping navigate the region's economic and geopolitical challenges.

Integration within subregions has also progressed along with their integration with Asia. The Central Asia Regional Economic Cooperation (CAREC) Program is the exception as it is more deeply integrated outside Asia. Nevertheless, there has been substantial progress in subregional integration, with the share of goods traded among CAREC members rising from 22% to more than 30% with investment roughly doubling over the past 2 decades. Technology and digital connectivity consistently strengthen subregional integration. Beyond better mobile connectivity and internet access, there is steady growth in collaborative research and trade in information and communication technology goods. There is also deeper integration among Pacific developing economies due to improved digital connectivity and stronger institutional linkages. Overall, Asia's subregional initiatives boost cross-border connectivity and harmonize policies, allowing economies to work together toward digital transformation, private sector development, and environmental sustainability.

Trade and Global Value Chains

Despite the new and varied reciprocal United States (US) tariffs imposed in 2025, Asian economies have shown great resilience in trade as they adjusted to the ever-evolving environment. While exports from the People's Republic of China (PRC) to the US were slashed by 19.8% in 2025 from 2024 based on latest available data, PRC global exports still grew by 4.6% as shipments to other regions expanded—up by 10.3% to other Asian economies and 7.9% to the EU+UK. Similarly, although Japan's exports to the US declined by 3.4% and those from the Republic of Korea by 3.8%, they still grew globally by increasing exports within Asia and to other regions. Most Association of Southeast Asian Nations (ASEAN) economies maintained robust export momentum—including to the US. Taipei,China's global export growth was highest at 35%, including 78% growth in US exports mainly from accelerating demand for semiconductors amid the global artificial intelligence boom.

[1] Asia and the Pacific (or Asia) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

Within global value chains, Asia has gradually shifted from mostly downstream, assembly-based products to more upstream, higher value-added activities. The region is also gradually building stronger forward linkages and shows a clear trend of deepening regional value chain networks. While medium- and high-technology sectors retain high backward linkages, they also maintain even higher forward linkages, underscoring Asia's systemic importance in providing intermediate inputs to the rest of the world. At the same time, diversification indicators are asymmetric. Asia is relatively diversified across sectors in forward value chain linkages, being a source of inputs to global value chains (GVCs) across a range of sectors. Asia's backward GVC linkages are more concentrated than those of any region in the world, however, potentially leaving Asia's production networks exposed to possible disruptions from a limited set of suppliers.

Rising global economic and policy uncertainty is both more frequent and synchronized, posing persistent challenges to the region. ADB empirical analysis shows that the uncertainties exporters face, both domestically and externally, raise outward trade costs and reduce exports, particularly for economies in Asia. The damage is more evident in the forward GVC routes and common in both intermediate and final goods exports. Greater diversification across products, partners, and sectors—as well as deeper, better-implemented trade agreements—could mitigate this by spreading risk and anchoring expectations. Thus, the region should consider adopting three complementary policy priorities: (i) promote export and partner diversification along with product upgrades and innovation; (ii) strengthen and deepen trade agreements to enhance its stabilizing role; and (iii) invest in regional cooperation, including for trade facilitation and improved logistics.

Cross-Border Investment

Early estimates suggest that FDI inflows to Asia in 2025 remain subdued, despite a stabilization of new investments in 2024 following a sharp decline in the previous year. Asia remains an important driver of global FDI, accounting for about 40% of global inflows and outflows. Balance of payments data show Asia attracted $614 billion of FDI in 2024, down 2% from 2023, when it fell by 17%. East Asia saw a 15% decline in 2024, while Southeast Asia grew by 10%. Meanwhile, intraregional investment has intensified over the past 5 years, accounting for an average 58% of Asia's FDI inflows and steeply increasing in 2024. Asia's prospects for FDI in 2025 appear subdued, with early estimates for the first half of 2025 showing a 4% decline in regional inflows. Persistent geopolitical uncertainty and a slowdown in global economic growth are downside risks that continue to weigh on investor sentiment. Leveraging inflows into the region's rapidly growing digital economy and renewable energy sectors, supported by effective investment policies, can help stabilize FDI growth into the region.

Across Asia, digital FDI is vibrant. Advancements in digital technology continue to drive growth and investment, which currently represents about 20% of global output. Firm-level data suggest increasing opportunities for international investment in the digital economy—or digital FDI—which accounts for 31% of global inflows and 35% of inflows to Asia in 2024. Digital FDI expanded rapidly, growing by 25% in 2024 both globally and in Asia. Nearly 30% of Asia's digital FDI went to the Pacific, particularly Australia, followed by 26% to Southeast Asia, highlighting the geographic concentration of digital investment within the region. Emerging areas such as artificial intelligence, fintech, and data centers attracted 75% of digital investments in 2024. Investments in data centers have begun to surpass those in financial services, attesting to their growing importance within Asia's digital transformation.

Multinationals play an important role in shaping how digital technology is adopted, with varying effects depending upon firm characteristics and transmission channels. An empirical analysis of the Republic of Korea shows that outward-oriented firms—particularly local multinationals with foreign subsidiaries—are more likely to adopt

digital technologies than foreign firms, with stronger effects in services. Multinationals can also have positive impact locally—a greater presence of domestically owned multinationals within a sector significantly increases digital adoption among purely domestic firms. This positive impact could be strengthened through enhanced absorptive capacity, more skilled labor, effective management practices, and policies that support digital skills and data governance.

Finance

Regional financial markets remain resilient to global economic and policy uncertainties. Nonresident portfolio investments into the region returned their positive momentum in 2025 after retreating during the fourth quarter of 2024. The intraregional share of portfolio debt assets posted a modest increase by 0.5 percentage points to 22.2% in 2024. Portfolio equity assets followed a similar pattern, increasing from 21.1% in 2023 to 21.5% in 2024. On the liabilities side, the intraregional share of both portfolio debt and equity rose by 2 percentage points, reaching 31% and 22% in 2024, respectively. The larger increase in intraregional shares for portfolio liabilities relative to portfolio assets highlights the growing role of regional markets for financing. Strengthening the regional institutional investor base, expanding hedging instruments, and promoting regulatory harmonization could further deepen financial integration across the region.

Geopolitical risks influence fund's investment flows as portfolios adjust. Increasing geopolitical risks will likely influence how investors view the rates of expected returns and portfolio performance. Fund flow analysis shows that stock markets have remained largely resilient to the impact of higher geopolitical risks. A search-for-yield motivation tends to drive funds into firms facing higher geopolitical risks, partially cushioning the negative impact of the heightened risk, helping ease financial market volatility. This partly explains the quick recovery in global stock markets following the US reciprocal tariffs announced on 2 April 2025. Depending on the concentration of firms more prone to geopolitical risk and its breadth and depth, different economies may see different types of short-term capital flow changes. This requires closely monitoring capital flow trends and assessing the impact on macroeconomic performance and financial markets.

Regional financial safety nets are crucial for safeguarding economic stability in times of heightened uncertainty. By pooling resources, regional economies can better access international capital and benefit from countercyclical financing during periods of stress, helping avoid the pitfalls of limited market access, fire-sale asset losses, and prohibitively high borrowing costs. Current efforts by ASEAN+3 (ASEAN plus the PRC, Japan, and the Republic of Korea) to strengthen the Chiang Mai Initiative Multilateralisation system through, for example, a paid-in capital structure, should enhance the effectiveness of the regional financial safety net. The region must remain vigilant in safeguarding financial stability against potential volatilities stemming from heightened geopolitical risks and a global economic slowdown.

Movement of People

Asia remains a major source of global talent as demand for skilled migrants continues to rise. In 2024, Asia's outbound migrants reached 100 million, double the 50 million in 1990. Migration from Asia to destinations outside the region (61.2% in 2024) continued to exceed migration within Asia (38.8%). Asia's highly skilled migrants are concentrated in a few high-income economies outside the region, including Canada, the UK, the United Arab Emirates, and the US. About one-third of Asian migrant workers are highly skilled (tertiary educated), with about 70% concentrated in six destination economies. Within the region, mobility remains essential especially for low- and semi-skilled migrants, supported by labor

mobility arrangements with host economies such as Australia, Japan, the Republic of Korea, and New Zealand. Amid evolving migration policies in some major destination economies and shifting demand for global talent, skills recognition through regional qualification frameworks can facilitate high-skilled mobility by reducing compliance costs and increasing transparency, while low- and semi-skilled migration can be supported mainly through bilateral labor agreements and capacity building. Cross-border coordination and regional cooperation underpin these concerted policy efforts.

Despite global uncertainties, recent remittance trends to Asia have been resilient. In 2024, the region received $392.8 billion—up by 7.4% from 2023 and 43.4% of the global total—while 2025 monthly data show sustained, robust inflows to selected Asian economies. However, prolonged global uncertainties, including more stringent immigration policies in some destination economies, could damage the region's migration and remittance prospects over the long run. Digital remittances contributed to the resilience of remittance flows in recent years, particularly as digitalization lowers costs and increases efficiency. In Asia, a high level of digital use and transaction frequency (mobile money in particular) could be leveraged to reduce average remittance costs. As of 2025, they cost 5.4% in Asia, lower than the 6.5% globally but higher than the Sustainable Development Goal target of 3%. Worldwide, the share of digital remittances to total remittances doubled from 15.8% in 2020 to 32.0% in 2024, with mobile money inflows almost tripling in value. For cross-border digital remittances, improved digital financial literacy is a precursor for people to better navigate digital applications and avoid fraudulent transactions. In addition to scaling up digital infrastructure, better coordination is needed to tackle cross-border interoperability and regulatory challenges. Remittance-dependent economies can also leverage their financial inclusion strategies to strengthen digital financial literacy, especially in migrant communities.

Tourism remains an important economic driver in Asia, contributing $3.2 trillion (8.4% of regional gross domestic product) and supporting 200 million jobs in 2024. International arrivals in the region rebounded strongly, reaching 96.3% of 2019 levels, with tourism receipts surpassing the 2019 benchmark by 5%. Subregional results were varied, with Central and West Asia showing the fastest growth—its share of regional arrivals rose from 18.6% in 2014 to 23.2% in 2024. While East Asia and Southeast Asia remain the region's largest destinations, their shares have fallen slightly over time. Tourism flows depend on the interplay of push-pull factors. Between 2019 and 2023, the source of Asia's tourism markets further diversified, with Europe a growing source. Nonetheless, intraregional travel remained dominant at 65.8% in 2023.

Supportive policy measures and cross-border coordination could help boost tourism flows. Tourism is affected by economy pull factors (destination economies) and global push factors (source economies). Rising incomes, demographic shifts, and digital readiness stimulate outbound travel, while a destination's competitiveness—attractions, infrastructure, safety, connectivity, and visa facilitation—drives inbound arrivals. Empirical evidence shows that a 1% increase in income can raise outbound travel by 4%–10%. Conversely, restrictive visa policies reduce tourist arrivals by 32%–52% depending on subregion. Going forward, converting tourism's growth into broader and lasting economic gains requires Asia to prioritize value creation, quality employment, and industrial resilience of all tourism-related activities. This means visitor spending should increase alongside tourist volumes by enriching visitor experience; diversifying source markets; easing destination travel constraints; and strengthening workforce skills and involving more micro, small, and medium-sized enterprises. Expanding tourism beyond gateway cities, improving data systems for real-time information gathering, and advancing regional cooperation to scale connectivity and multi-destination tourism solutions need to be pursued.

1 Regional Cooperation and Integration Remains Vital in the Face of Geoeconomic Fragmentation

Risks of geoeconomic fragmentation are rising in Asia and the Pacific.

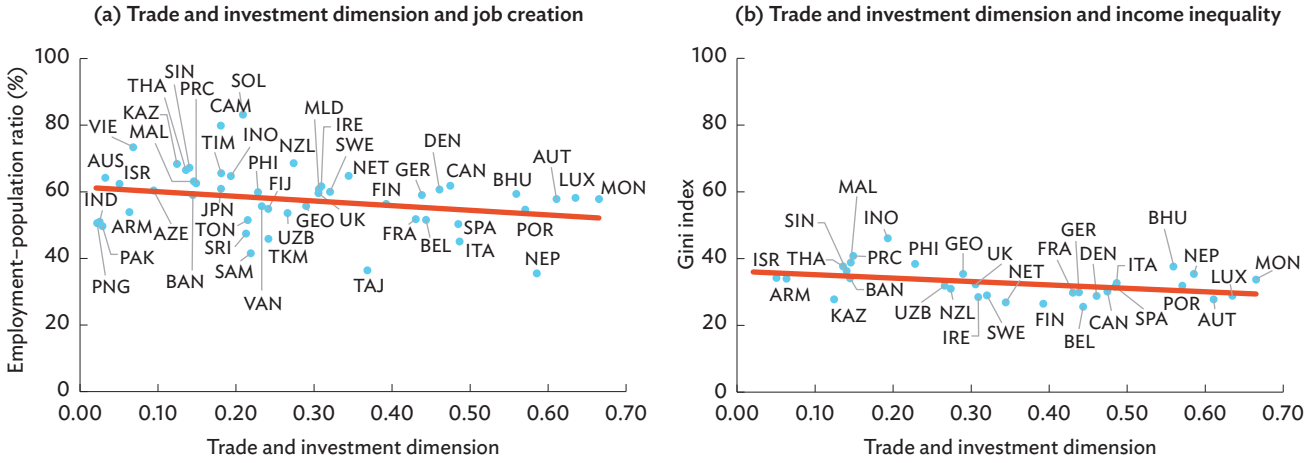
Early signs of trade fragmentation were observed even before the coronavirus disease (COVID-19) pandemic, pandemic, notably when trade tensions between the United States (US) and the People's Republic of China (PRC) increased in 2018. With the pandemic slowing economic activities across the world, these pressures were amplified following the Russian invasion of Ukraine, which further disrupted global supply chains and increased geopolitical uncertainty. In 2025, US reciprocal tariffs and protection measures reinforced this trend. Regardless of the economic impact, these developments have accelerated a shift toward prioritizing domestic production and ensuring national security in policymaking (Baur et al. 2025; IMF 2022).

Stronger regional cooperation and integration (RCI) is crucial for Asia and the Pacific,[1] though regional measures need to be complemented with domestic reforms to enhance the sharing of benefits more uniformly among economies and subregions (Box 1.1). Indeed, by deepening intraregional partnerships and diversifying markets, economies can reduce reliance on uncertain global circumstances. Restructuring supply chains that are regionally embedded enhances resilience against external shocks. Regional collaboration also fosters innovation and technology transfer, especially in clean energy, digital transformation, and climate resilience—which are particularly critical for smaller economies with limited resources. However, the impact of cooperation could also be influenced by complementary factors such as institutional quality, human capital, governance structures, and regional political dynamics. More importantly, the success of regional initiatives is dependent on strong national policies that drive shared interests.

Trade openness and foreign direct investment (FDI) are core components of RCI. Initiatives like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership or the Regional Comprehensive Economic Partnership (RCEP) have potential to enhance competitiveness and strengthen regional integration by encouraging businesses to strengthen supply chains among participating economies. Trade and investment under RCI have been shown to be associated with lower income inequality—as shown by the Gini Index (Figure 1.1b)—whereas their association with job creation, measured by the employment-population ratio, is a lot weaker (Figure 1.1a). This suggests that the inequality-reducing effects of these core components could be amplified if backed by other enabling factors, such as a well-aligned education system and robust skills development program (Han, Ocal, and Aslan 2022). Sector dynamics also influence outcomes. For instance, tourism-led growth can help alleviate poverty but may simultaneously widen inequality. This underscores the importance of complementary investments in labor productivity investments (Mahadevan, Amir, and Nugroh 2017). Moreover, strategic investments in infrastructure and governance are essential to mitigate regional disparities, particularly between urban and rural regions.

[1] Asia and the Pacific (or Asia) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

Figure 1.1: Relationship Between the ARCII Trade and Investment Dimension and Job Creation and Income Inequality, 2022



ARCII = Asia-Pacific Regional Cooperation and Integration Index, ARM = Armenia, AUS = Australia, AUT = Austria, AZE = Azerbaijan, BAN = Bangladesh, BEL = Belgium, BHU = Bhutan, CAM = Cambodia, CAN = Canada, PRC = People's Republic of China, DEN = Denmark, FIJ = Fiji, FIN = Finland, FRA = France, GEO = Georgia, GER = Germany, IND = India, INO = Indonesia, IRE = Ireland, ISR = Israel, ITA = Italy, JPN = Japan, KAZ = Kazakhstan, LUX = Luxembourg, MAL = Malaysia, MLD = Maldives, MON = Mongolia, NEP = Nepal, NET = Netherlands, NZL = New Zealand, PAK = Pakistan, PNG = Papua New Guinea, PHI = Philippines, POR = Portugal, SAM = Samoa, SIN = Singapore, SOL = Solomon Islands, SPA = Spain, SRI = Sri Lanka, SWE = Sweden, TAJ = Tajikistan, THA = Thailand, TIM = Timor-Leste, TKM = Turkmenistan, TON = Tonga, UK = United Kingdom, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.

Note: The trade and investment dimension refers to one of the key components of ADB's ARCII that measures intraregional connections.

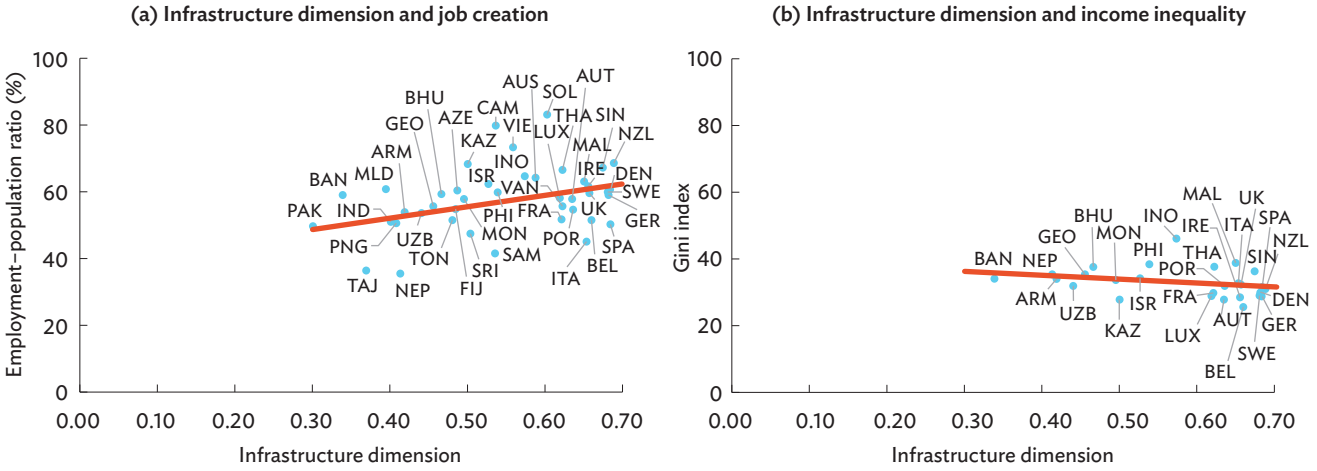
Sources: ADB calculations using data from ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii; UNU Wider. World Income Inequality Database. https://www.wider.unu.edu/project/wiid-world-income-inequality-database; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed October 2025).

Infrastructure provides both physical and institutional linkages for RCI. Investment in economic and social infrastructure, spanning energy, transport, information and communication technology (ICT), health, and education, has been associated with reductions in inequality. For instance, investments in education and health care infrastructure are particularly effective in underserved areas, while ICT infrastructure narrows urban–rural gaps especially when combined with digital financial inclusion. In Asia, large-scale infrastructure projects supported by RCIs such as the Belt and Road Initiative, Association of Southeast Asian Nations (ASEAN) connectivity programs, and ADB's Greater Mekong Subregion corridors have improved regional competitiveness and reduced trade costs (De and Kumarasamy 2024; Li et al. 2024; Lynch, Perdiguero, and Rush 2017; Zolfaghari, Kabiri, and Saadatmanesh 2020). Figure 1.2 illustrates that the infrastructure dimension of RCI is associated with higher job creation and a reduction in income inequality. This underscores the importance of strategic infrastructure investments, not only for economic efficiency but also for inclusive development.

Digital cooperation is a relatively recent but increasingly vital component of RCI. A strong digital infrastructure supports digital trade and e-commerce, resulting in job creation and expanded economic opportunities. At the same time, digital financial inclusion broadens access to secure transactions and enables wider economic participation. Citing one example, digitalization in South and Southeast Asia enhances international trade by enabling small firms to access global markets. Similarly, RCEP-driven digital trade between the PRC and Southeast Asia has been associated with lowered transaction costs and higher exports. While digital cooperation can help expand opportunities, the benefits are highly dependent on the quality of infrastructure, regulatory frameworks, and investments in human capital (Banerjee, Bose, and Siddiqui 2022; Ji, Gao, and Liang 2023; Suhrab, Chen, and Ullah 2024; Tian 2023; Wang et al. 2024).

Strengthening the foundation of social linkages through people-to-people connectivity calls for greater regional cooperation. Mobility and cross-border social interactions through tourism, professional exchanges,

Figure 1.2: Relationship Between the ARCII Infrastructure Dimensions and Job Creation and Income Inequality, 2022



ARCII = Asia-Pacific Regional Cooperation and Integration Index, ARM = Armenia, AUS = Australia, AUT = Austria, AZE = Azerbaijan, BAN = Bangladesh, BEL = Belgium, BHU = Bhutan, CAM = Cambodia, DEN = Denmark, FIJ = Fiji, FRA = France, GEO = Georgia, GER = Germany, IND = India, INO = Indonesia, IRE = Ireland, ISR = Israel, ITA = Italy, KAZ = Kazakhstan, LUX = Luxembourg, MAL = Malaysia, MLD = Maldives, MON = Mongolia, NEP = Nepal, NZL = New Zealand, PAK = Pakistan, PNG = Papua New Guinea, PHI = Philippines, POR = Portugal, SAM = Samoa, SIN = Singapore, SOL = Solomon Islands, SPA = Spain, SRI = Sri Lanka, SWE = Sweden, TAJ = Tajikistan, THA = Thailand, TON = Tonga, UK = United Kingdom, UZB = Uzbekistan, VAN = Vanuatu, VIE = Viet Nam.

Note: The infrastructure dimension refers to one of the key components of ADB's ARCII that measures intraregional connections.

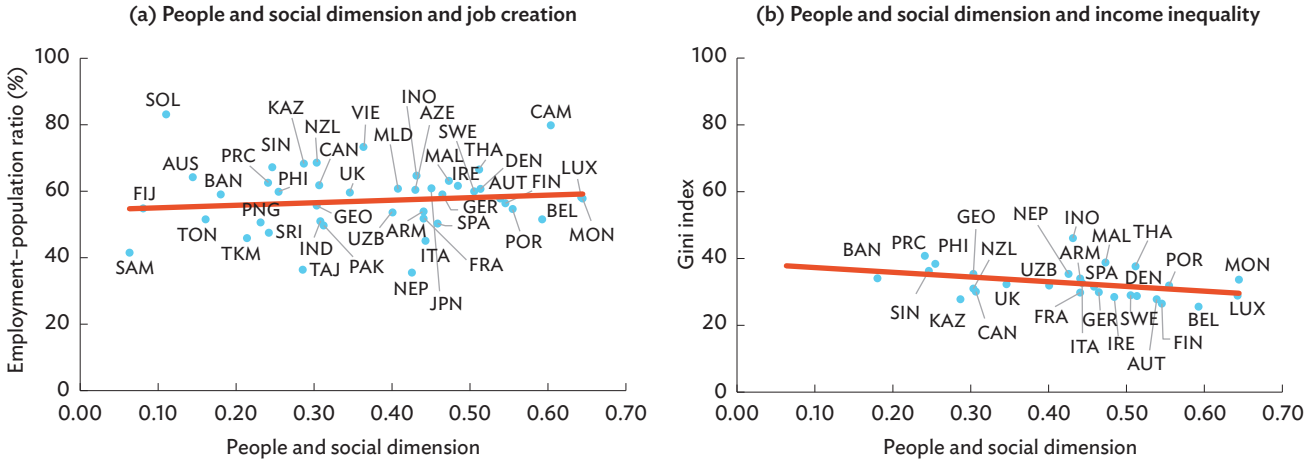
Sources: ADB calculations using data from ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii; UNU Wider. World Income Inequality Database. https://www.wider.unu.edu/project/wiid-world-income-inequality-database; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed October 2025).

and business travel are examples of activities that drive growth by strengthening investment ties, generating employment, and facilitating technology transfer. In addition, educational exchanges, including through student mobility and collaborative research, enhance human capital development and innovation. These forms of linkage nurture trust and mutual understanding, reduce cultural barriers among economies, and advance shared regional goals. Figure 1.3 suggests that the people and social dimension of ARCII is associated with intraregional job creation. This highlights the importance of investing in inclusive and accessible mobility frameworks to strengthen regional integration.

Institutional cooperation provides the governance architecture necessary to ensure the efficient and effective implementation of RCI activities. The establishment of the ASEAN Economic Community demonstrates how harmonized trade policies, regulations, and standards can reduce barriers and expand market access (ADB 2020; Brunner 2016; Lynch, Perdiguero, and Rush 2017). Institutional cooperation also facilitates alignment of shared interests in delivering regional public goods, such as transport corridors, energy grids, and digital platforms, which require collective oversight to operate efficiently (ADB 2023). In the context of rising geopolitical tensions, stronger governance frameworks built on transparency, accountability, and peer learning are essential to sustaining inclusive growth and development across the region. Figure 1.4 indicates that the institutional cooperation, on average, has a modest positive association on job creation, while contributing to a reduction in intraregional income inequality. This highlights the role of stronger institutional mechanisms to maximize the social and economic benefits of regional integration.

The following section discusses the trends in regional integration in Asia. It explores the evolution of RCI components—trade, investment, finance, people's mobility, connectivity, and environment—in Asia. It assesses ADB's subregional initiatives in advancing regional integration. It highlights how these initiatives support member priorities in digital transformation, private sector development, and environmental sustainability, with applications across sectors. The chapter concludes with targeted policy recommendations for regional policymakers.

Figure 1.3: Relationship Between the ARCII People and Social Dimension and Job Creation and Income Inequality, 2022

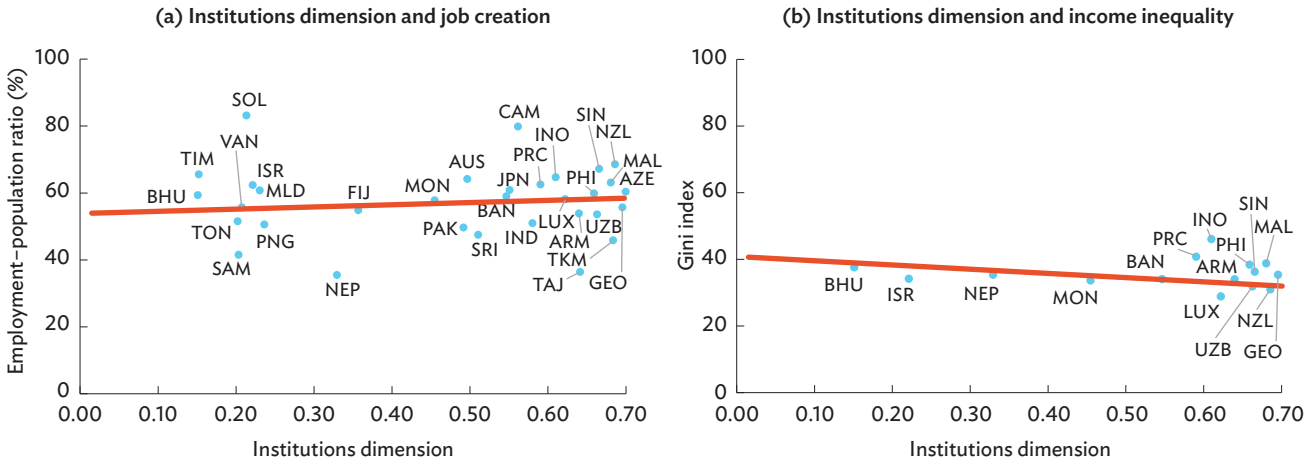


ARCII = Asia-Pacific Regional Cooperation and Integration Index, ARM = Armenia, AUS = Australia, AUT = Austria, AZE = Azerbaijan, BAN = Bangladesh, BEL = Belgium, CAM = Cambodia, CAN = Canada, PRC = People's Republic of China, DEN = Denmark, FIJ = Fiji, FIN = Finland, FRA = France, GEO = Georgia, GER = Germany, IND = India, INO = Indonesia, IRE = Ireland, ITA = Italy, JPN = Japan, KAZ = Kazakhstan, LUX = Luxembourg, MAL = Malaysia, MLD = Maldives, MON = Mongolia, NEP = Nepal, NZL = New Zealand, PAK = Pakistan, PNG = Papua New Guinea, PHI = Philippines, POR = Portugal, SAM = Samoa, SIN = Singapore, SOL = Solomon Islands, SPA = Spain, SRI = Sri Lanka, SWE = Sweden, TAJ = Tajikistan, THA = Thailand, TKM = Turkmenistan, TON = Tonga, UK = United Kingdom, UZB = Uzbekistan, VIE = Viet Nam.

Note: The people and social dimension refers to one of the key components of ADB's ARCII that measures intraregional connections.

Sources: ADB calculations using data from ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii; UNU Wider. World Income Inequality Database. https://www.wider.unu.edu/project/wiid-world-income-inequality-database; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed October 2025).

Figure 1.4: Relationship Between the ARCII Institutions Dimension and Job Creation and Income Inequality, 2022



ARCII = Asia-Pacific Regional Cooperation and Integration Index, ARM = Armenia, AUS = Australia, AUT = Austria, AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, FIJ = Fiji, GEO = Georgia, IND = India, INO = Indonesia, ISR = Israel, JPN = Japan, LUX = Luxembourg, MAL = Malaysia, MLD = Maldives, MON = Mongolia, NEP = Nepal, NZL = New Zealand, PAK = Pakistan, PNG = Papua New Guinea, PHI = Philippines, SAM = Samoa, SIN = Singapore, SOL = Solomon Islands, SRI = Sri Lanka, TAJ = Tajikistan, TIM = Timor-Leste, TKM = Turkmenistan, TON = Tonga, UZB = Uzbekistan, VAN = Vanuatu.

Note: The institutions dimension refers to one of the key components of ADB's ARCII that measures intraregional connections.

Sources: ADB calculations using data from ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii; UNU Wider. World Income Inequality Database. https://www.wider.unu.edu/project/wiid-world-income-inequality-database; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed October 2025).

Box 1.1: RCI Around Connectivity and Institutional Arrangements Matter for Inclusive Development

Introduction

Regional cooperation and integration (RCI) as defined by ADB, refers to international collaboration to address shared regional challenges or public goods. RCI encompasses a broad set of agendas including trade and investment, infrastructure connectivity, institutional arrangements, people mobility, value chains, environmental cooperation, and digital integration. These dimensions are tracked through the Asia-Pacific Regional Cooperation and Integration Index (ARCII), a multidimensional measure developed in 2007 and revised in 2021. The importance of RCI has grown in the context of rising geopolitical tensions, global trade uncertainties, and emerging challenges such as climate change and digital transformation. RCI is increasingly seen as a strategy for inclusive development. However, its effectiveness depends on economy-specific characteristics, institutional quality, and governance.

Study Objectives and Methodology

An empirical analysis was undertaken to deepen understanding of how different dimensions of RCI affect inclusive development, particularly in job creation and income inequality. It builds on existing empirical literature (e.g., Huh and Park 2020; Park and Claveria 2018) and contributes new insights by analyzing ARCII data across 173 economies from 2006 to 2023.

The study distinguishes between intraregional and interregional RCI impacts. It focuses on four ARCII dimensions with sufficient data coverage: trade and investment, infrastructure, institutions, and people mobility. The analysis further uses panel data covering 173 economies over 2006–2023, with fixed effects and controls for endogeneity through instrumental variable (IV) regression using a two-stage least squares (2SLS) approach. The summarized results of the empirical exercise are presented in the following table.

RCI and Job Creation

The study finds that RCI positively influences job creation (measured by the employment–population ratio) in Asia and the Pacific, especially through interregional cooperation. Infrastructure is the most significant intraregional driver, enhancing supply chain efficiency and digital connectivity. Trade and investment also support employment across regions, though with mixed impact. People's mobility contributes notably to job growth interregionally by enabling skill transfers and labor integration. Institutional arrangements show varied effects—interregionally they reduce transaction costs and uncertainty, fostering jobs; intraregionally, inefficiencies and lack of harmonization may hinder employment. Interestingly, regional value chains have a weak negative

Summary Results Showing Impact of RCI Dimensions on Job Creation and Income Inequality

	Job Creation		Income Inequality
ARCII Dimensions	**(1)**	**(2)**	**(3)**
Trade and Investment	+	+	-
Infrastructure	+***	+**	+
People Mobility	+	+**	+**
Institutions	-**	+***	-***
Regional Value Chains	-*	+	+
Technology and Digital Connectivity	+	+	-

ARCII = Asia-Pacific Regional Cooperation and Integration Index, GDP = gross domestic product, RCI = regional cooperation and integration.

Notes:

1. "+" indicates a positive effect of RCI on job creation and income inequality, while "–" indicates a negative effect of RCI on job creation and income inequality.
2. The results for RCI impact on intraregional income inequality are positive but insignificant, hence only RCI impact results for interregional income inequality are presented.
3. The dimensions are tracked through ARCII, a multidimensional measure developed in 2017 and revised in 2021.
4. (1) refers to impact of intraregional ARCII on job creation. (2) and (3) refer to impacts of interregional ARCII on job creation and income inequality.
5. ***, **, and * denote statistically significant results at the 1%, 5%, and 10% significance levels, after being controlled for endogeneity using an instrumental variable approach.
6. The potentially endogenous regressor—logged ARCII subindexes—is instrumented using its own second- and third-order lags.
7. Additional control variables in the analysis include real GDP per capita, secondary school enrollment, inflation rate, investment rate (% of GDP), government consumption (% of GDP), trade openness (as % of GDP), control of corruption, labor regulation, age dependency, and regulatory quality.

Sources: ADB calculations using data from ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii; UNU Wider. World Income Inequality Database. https://www.wider.unu.edu/project/wiid-world-income-inequality-database; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed October 2025).

continued on next page

Box 1.1: continued

impact on intraregional job creation, likely due to core-periphery fragmentation, where high-value activities are concentrated in developed economies, leaving developing economies in low-margin roles. These findings highlight the nuanced role of RCI in promoting inclusive employment.

RCI and Income Inequality

The impact of RCI on income inequality (measured by the Gini Index) is complex and varies across dimensions. Interregional institutional cooperation is most effective, promoting labor standards, social safety nets, and inclusive policies that help reduce inequality. Trade and technology also show potential to lower inequality, though the evidence is statistically weak. In contrast, intraregional RCI may exacerbate inequality where it creates competitive pressures and regulatory races to the bottom, particularly in labor and environmental standards. These findings suggest that RCI's role in reducing inequality is conditional and requires targeted policy interventions.

Existing literature highlights ways that RCI influences development outcomes. Infrastructure and connectivity enhance supply chain efficiency and digital access, boosting employment (Donaldson 2018). Institutional arrangements reduce transaction costs and uncertainty, encouraging investment and job creation (ADB 2021; Hufbauer and Schott 1994). Trade and investment expand markets and facilitate technology spillovers and skill upgrading, though competitive pressures may offset gains (Acemoglu et al. 2016; Scott 2011). People's mobility supports cross-border skill transfers and labor integration. However, regional value chains may reinforce inequalities if developing economies are confined to low-value segments (Gereffi, Cattaneo, and De Backer 2019). On inequality, institutional cooperation helps harmonize regulations and support small and medium-sized enterprises, promoting inclusive growth. Yet intraregional competition may erode labor protections and environmental standards, increasing inequality.

These insights highlight the need for targeted policies to ensure RCI supports both employment and equity.

Sources: Acemoglu et al. 2026; ADB 2021; Basu Das and Sen forthcoming; Donaldson 2018; Gereffi, Cattaneo, and Backer 2019; Hufbauer and Schott 1994; Huh and Park 2020; Park and Claveria 2018; and Scott 2011.

Trends in Regional Integration in Asia and the Pacific

Asia remains highly integrated economically through goods and services trade, FDI, finance, and movement of people.

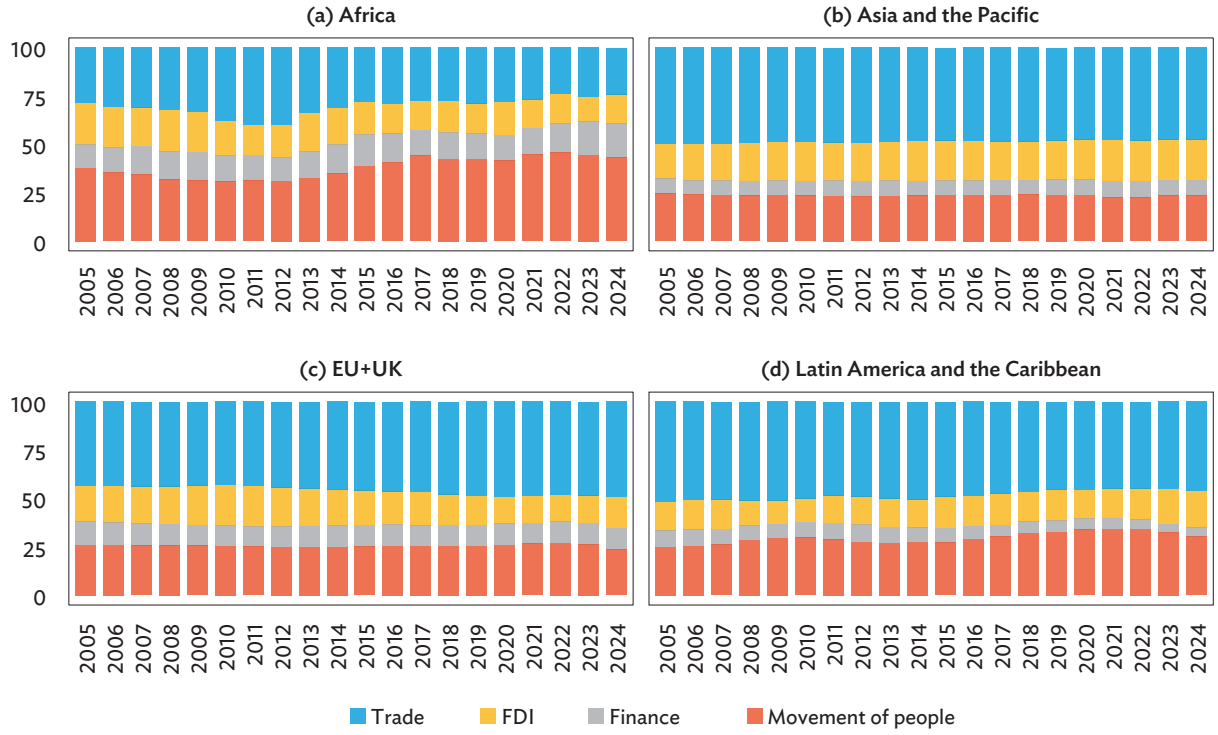
Trade is the most dominant driver of integration in most regions, particularly in Asia, where it accounts for the largest share of the overall Regional Integration Index (RII) of ADB (Figure 1.5).[2] Movement of people and FDI contribute moderately, while financial integration remains the weakest dimension. These patterns suggest that regions have made substantial progress in facilitating trade and people mobility within their respective regions, but deeper financial integration remains a challenge.

Based on dimensional regional integration indexes—measured as the ratio of the number of strong intraregional connections relative to the sum of strong intraregional and extraregional connections, Asia leads in all dimensions of regional integration—trade, FDI, and movement of people—except finance, where the EU+UK maintains the highest level of intraregional integration (Figure 1.6). Asia consistently dominates regional trade integration across all years, reflecting deep and sustained intraregional trade ties. FDI integration in Asia has strengthened steadily over time, underscoring the region's growing role as both a source and destination for investment. In finance, Asia lags Europe throughout the period. Meanwhile, Asia consistently leads in the movement of people, highlighting robust intraregional travel and migration flows.

Figure 1.7 shows the absolute degree of integration within each region and with economies outside the region, providing a direct measure of integration. Even in absolute terms, Asia's trade connections remain predominantly intraregional, far outweighing extraregional ties. This strong intraregional bias has persisted over the past 2 decades,

[2] For the detailed methodology in estimating the RII, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b).

Figure 1.5: Dimensional Shares to Overall Regional Integration Index (%, by world regions)

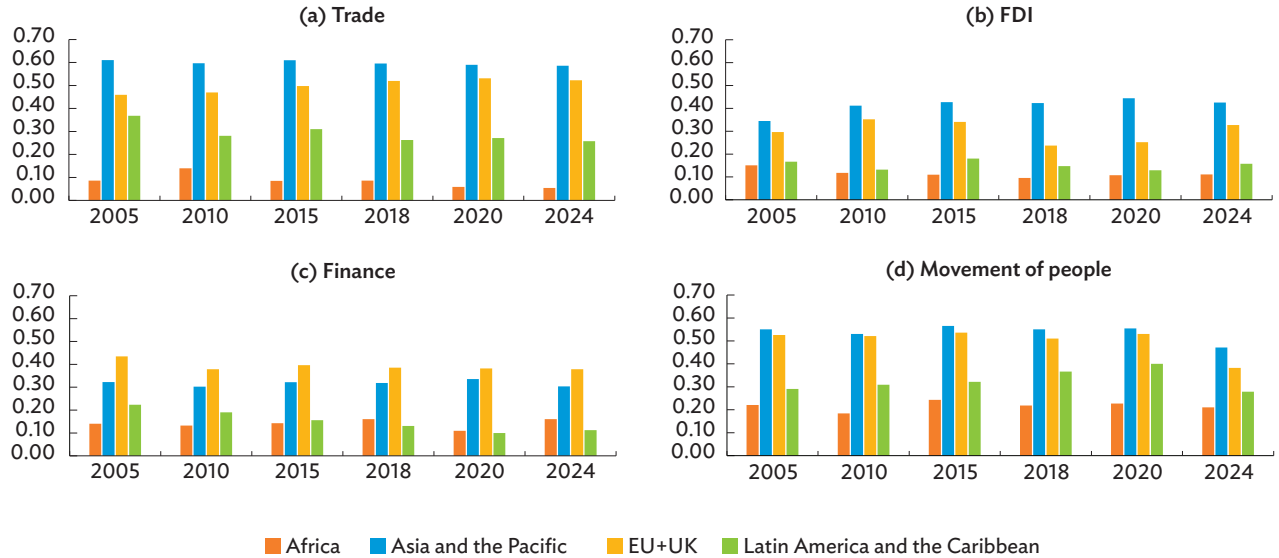


EU = European Union (27 members), FDI = foreign direct investment, RII = Regional Integration Index, UK = United Kingdom.

Notes: Based on ADB's Regional Integration Index, estimated using Bayesian state-space model, the overall RII is the weighted average of the dimensional indexes for trade in goods and services, movement of people, FDI, and finance. For the detailed methodology, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b).

Source: ADB calculations using ADB's Regional Economic Integration Index Database.

Figure 1.6: Regional Integration Index by Dimension—Asia and the Pacific Versus Other Regions



EU = European Union (27 members), FDI = foreign direct investment, UK = United Kingdom.

Notes: Based on ADB's Regional Integration Index estimates, the values for each dimension represent the ratio of the number of strong intraregional connections relative to the sum of strong intraregional and extraregional connections. For the detailed methodology, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b).

Sources: ADB calculations using data from ADB. Bilateral Economic Integration Index Database.

with only a slight dip during the COVID-19 pandemic, and continues to exceed the level of strong connections observed within the EU+UK. Notably, Asia's trade links with economies outside the region have also remained stable during the pandemic, underscoring the region's ability to maintain external connectivity while deepening intraregional trade integration.

FDI within Asia has remained relatively stable over time, underscoring the region's consistent investment linkages. However, 2024 recorded a modest dip compared to 2023. In financial integration, however, Asia's intraregional ties have consistently been significantly lower than its extraregional connections. Since 2021, these intraregional links have declined further, while extraregional ties have edged upward.

Although Asia's dimensional index on movement of people has surpassed that of the EU+UK (Figure 1.6), the absolute intraregional connection remains lower given that cross-border mobility within Europe is far more seamless, supported by open borders and harmonized travel policies. Despite this structural difference, Asia has shown notable resilience since the pandemic, signaling stronger regional ties. This contrasts with the EU+UK, where such connections have declined in recent years.

The level of Asian economic integration remains uneven across subregions.

Based on overall RII, Southeast Asia ranks highest in integration with Asia, followed by the Pacific, and East Asia; while South Asia and Central and West Asia

Figure 1.7: Number of Strong Bilateral Connections Within and Outside Each Region

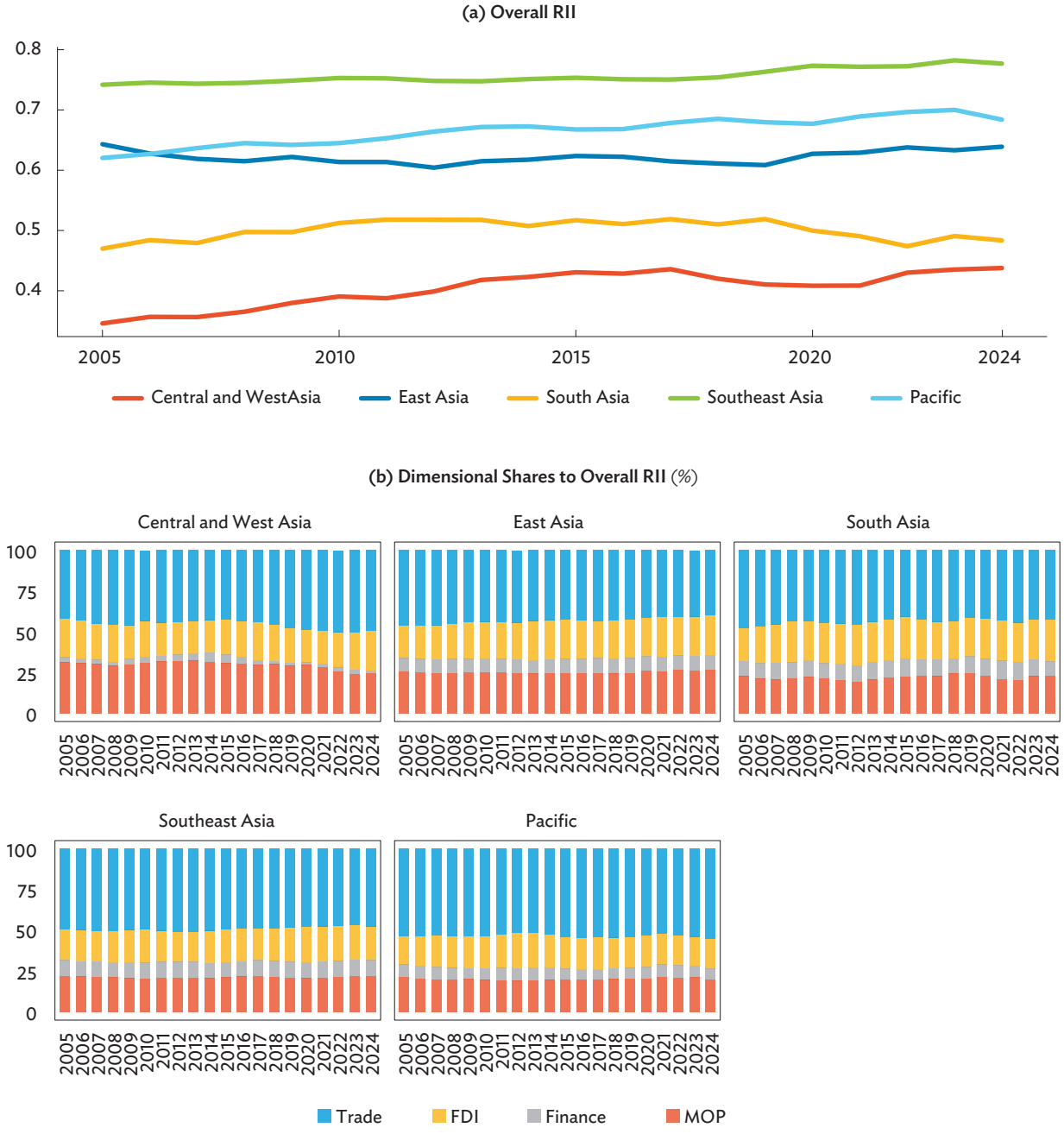
EU = European Union (27 members), FDI = foreign direct investment, MOP = movement of people, UK = United Kingdom.

Notes: For the detailed methodology, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b).

Sources: ADB calculations using data from ADB. Regional Economic Integration Index Database.

remain at the lower end (Figure 1.8). Integration has strengthened in Southeast Asia, East Asia, and even Central and West Asia, though recent years have seen a decline in the Pacific as well as in South Asia. Trade remains the dominant driver of integration, with its contribution rising in most subregions except East Asia, where it has plateaued. In East Asia, FDI has grown in importance, while financial integration continues to be the weakest contributor across all subregions, particularly in Central and West Asia and the Pacific.

Figure 1.8: Overall Regional Integration Index and Dimensional Shares—Asian Subregions



EU = European Union (27 members), FDI = foreign direct investment, MOP = movement of people, RII = regional integration index, UK = United Kingdom.

Notes: Based on ADB's RII estimates, the values for each dimension represent the ratio of the number of strong intraregional connections relative to the sum of strong intraregional and extraregional connections. For the detailed methodology, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b). The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from ADB. Regional Economic Integration Index Database.

Looking at the absolute measure of integration by showing strong bilateral connections within and outside each Asian subregion, Southeast Asia consistently demonstrates the highest intraregional linkages, especially in trade, which remains the dominant driver of integration (Figure 1.9). East Asia exhibits a more balanced mix of intraregional and extraregional ties, reflecting its global supply chain linkages, while South Asia and Central and West Asia maintain far fewer intraregional connections. Since the pandemic, intraregional mobility links have grown in Southeast Asia and East Asia, contrasting with declines in the Pacific and South Asia. Financial integration remains weak across all subregions, with intraregional ties declining since 2021 and extraregional links edging upward. FDI connections are relatively stable in East Asia and Southeast Asia, though 2024 saw a modest dip, while Central and West Asia and South Asia continue to lag in both intraregional and extraregional investment ties.

Figure 1.9: Number of Strong Bilateral Connections Within and Outside Each Asian Subregion

FDI = foreign direct investment, MOP = movement of people.

Notes: For the detailed methodology, indicators used per dimension, and data sources, refer to Box 1.1 of ADB (2025b). The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from ADB. Regional Economic Integration Index Database.

Asia-Pacific Regional Cooperation and Integration Index on Subregional Initiatives

Across subregional initiatives, trends from 2006 to 2023 indicate intraregional integration has risen, while extraregional integration shows more varied trends.

For economies in the Central Asia Regional Economic Cooperation (CAREC) Program, extraregional integration (integration outside of Asia) remains stronger overall, particularly in trade and investment and money and finance. On average, extraregional FDI inflows accounted for about 60% of total FDI received by CAREC economies in 2023, compared to 40% from intraregional sources. Within CAREC, the PRC is the largest recipient of FDI, with the US constituting its single largest source of inflows. The Russian Federation also emerges as one of the largest extraregional source of investment. In the money and finance dimension, equity and bond liabilities show a clear dominance of extraregional linkages. Despite this, intraregional integration has strengthened in recent years, and some areas, especially institutional and social integration, are led by intraregional linkages. Notably, intraregional trademark applications make up more than half of total filings on average, compared with 36% for extraregional applications.

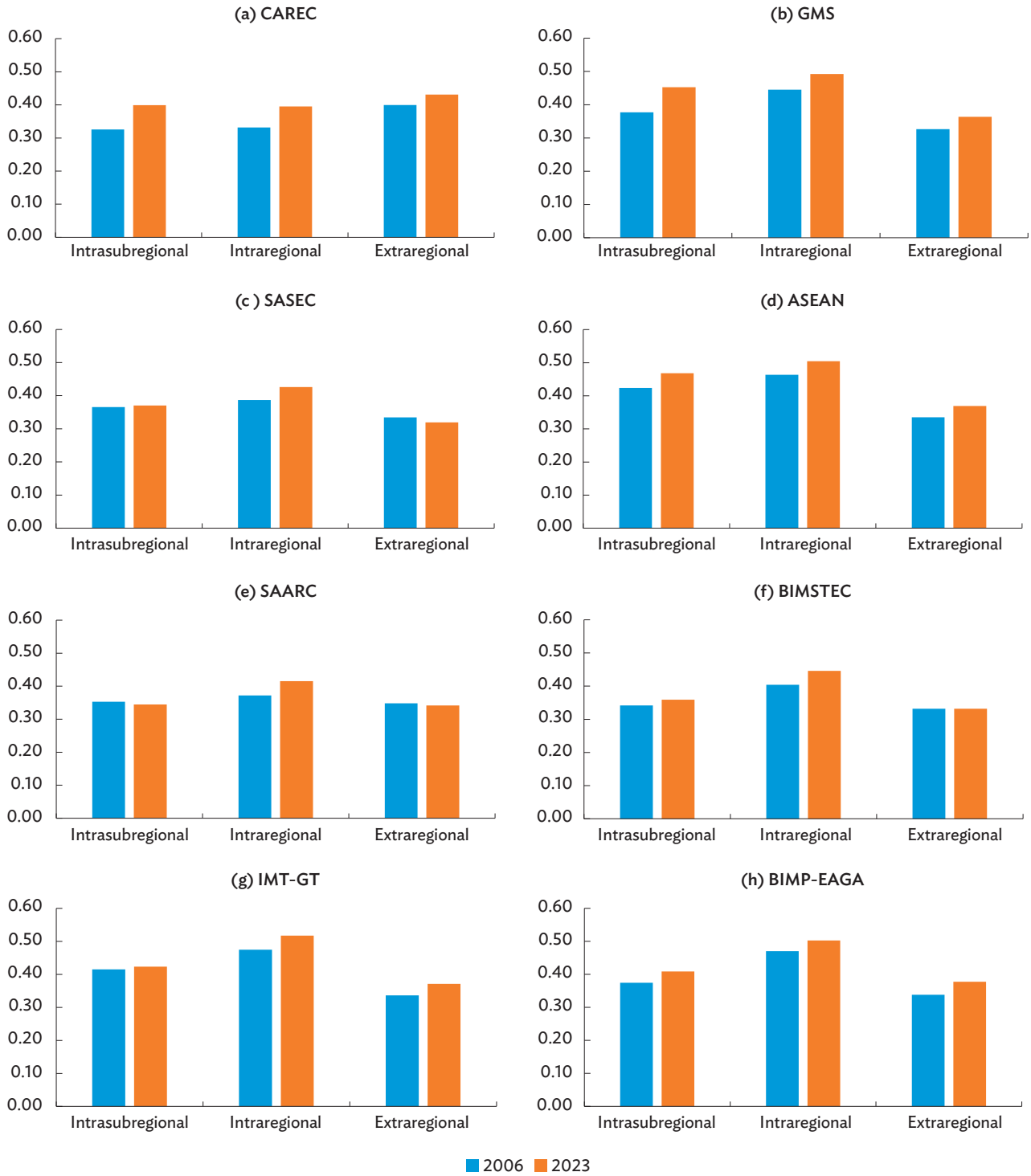
Subregional initiatives in Southeast Asia—the Greater Mekong Subregion (GMS), the Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (BIMP-EAGA), and the Indonesia–Malaysia–Thailand Growth Triangle (IMT-GT)—have established stronger intraregional linkages across most dimensions, except in money and finance, where intraregional and extraregional integration are nearly at par. Intraregional integration is particularly robust in trade and investment, people and social integration, and infrastructure and connectivity. In trade and investment, indicators show that, on average, about two-thirds of goods trade and FDI in GMS take place within Asia. Likewise, under people and social integration, intraregional ties dominate, with intraregional remittances accounting for more than 90% of total inflows for several Southeast Asian economies. The subregion's strong transport and logistics networks reinforce these patterns, with lower intraregional trade costs and better liner shipping connectivity among GMS members, supporting deeper economic and social linkages.

For South Asian initiatives, comprising South Asia Subregional Economic Cooperation (SASEC), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), and the South Asian Association for Regional Cooperation (SAARC), intraregional integration has increased between 2006 and 2023 and now surpasses extraregional integration, while extraregional linkages have slightly declined. Growing integration with Asia is driven by gains in money and finance and institutional arrangements. Among SASEC economies, the average share of intraregional cross-border equity liabilities rose markedly from 18.5% in 2006 to 37.1% in 2023. Progress in institutional arrangements is reflected in a wider network of free trade agreements (FTAs) and diplomatic representation. On average, SASEC members had FTAs with 22% of economies in 2006, increasing to 28% in 2023, and maintain embassies in 28% of economies in 2006, rising to 32% by 2023 across Asia. Figure 1.10 summarizes the findings across subregional initiatives.

Integration within Asia's subregional initiatives has been strengthened by advancements in technology, digital connectivity, and institutional linkages.

Intrasubregional integration varies significantly across subregional initiatives and dimensions (Figure 1.11). In trade and investment, progress remains mixed. South Asian initiatives show lower integration in 2023 compared to 2006, while smaller Southeast Asian initiatives post limited improvement. CAREC, however, demonstrates clear gains. Its intrasubregional goods trade share rose from 22% in 2006 to more than 30% in 2023, and intrasubregional investment roughly doubled over the same period. For smaller initiatives such as IMT-GT and BIMP-EAGA, lower trade, investment, and social integration levels are expected given their small membership base.

Figure 1.10: Intrasubregional, Intraregional, and Extraregional Integration, by Subregional Initiative

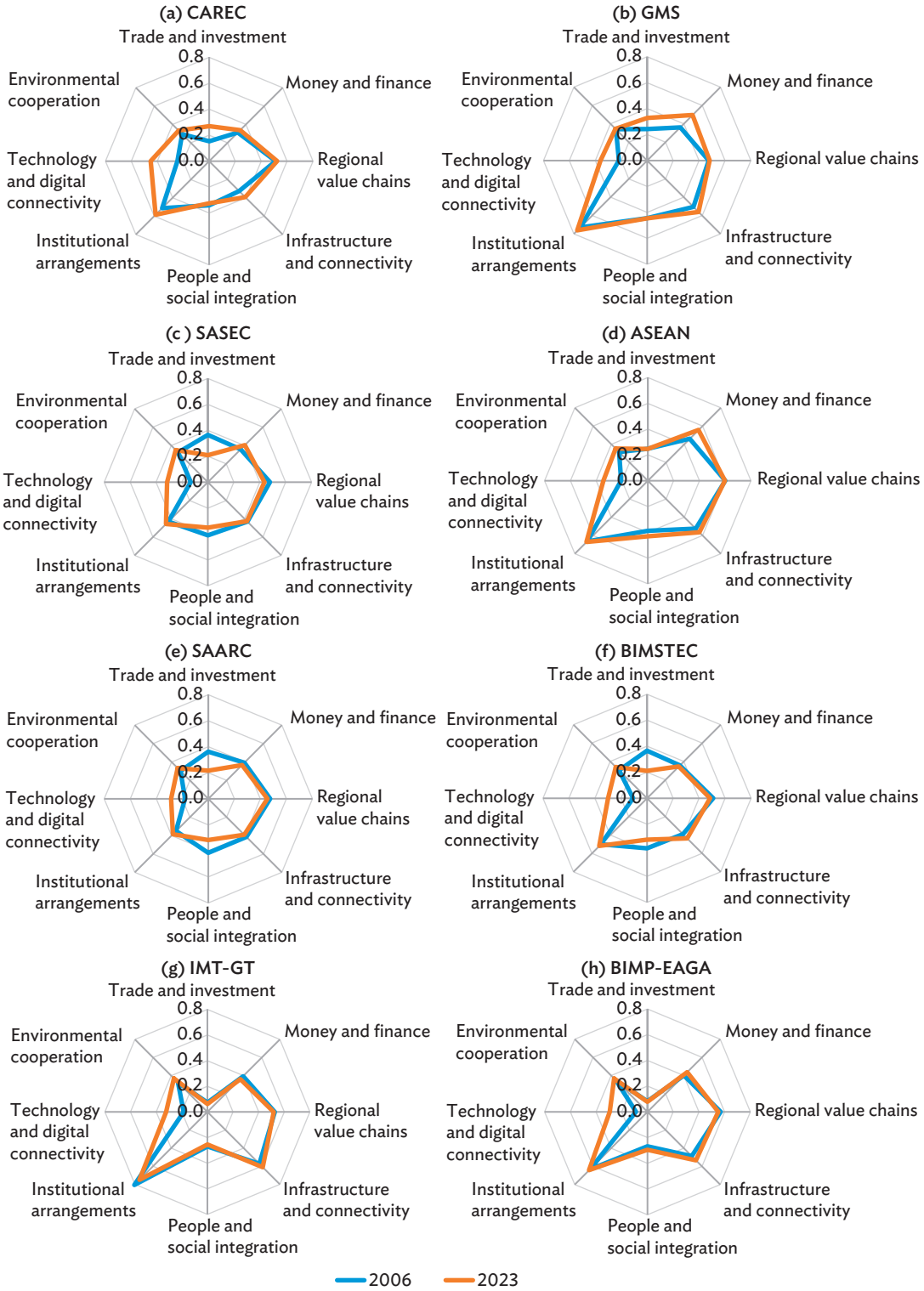


ASEAN = Association of Southeast Asian Nations, BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, BIMSTEC = Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, IMT-GT = Indonesia–Malaysia–Thailand Growth Triangle, SAARC = South Asian Association for Regional Cooperation, SASEC = South Asia Subregional Economic Cooperation.

Note: For the GMS, the entire People's Republic of China is used as a proxy due to data limitations, although the initiative covers only Yunnan Province and Guangxi Zhuang Autonomous Region. Higher index estimates denote greater regional integration. Intraregional integration represents integration with Asia, while extraregional integration represents integration outside of Asia. Intrasubregional integration is measured within members of the same subregional initiative.

Source: ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

Figure 1.11: Intrasubregional Integration by Dimension, 2006 and 2023



ASEAN = Association of Southeast Asian Nations, BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, BIMSTEC = Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, IMT-GT = Indonesia–Malaysia–Thailand Growth Triangle, SAARC = South Asian Association for Regional Cooperation, SASEC = South Asia Subregional Economic Cooperation.

Note: GMS estimates based on national People's Republic of China data, while the initiative includes Yunnan Province and Guangxi Zhuang Autonomous Region. Intraregional integration represents integration with Asia, while extraregional integration represents integration outside of Asia. Intrasubregional integration is measured within members of the same subregional initiative.

Source: ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

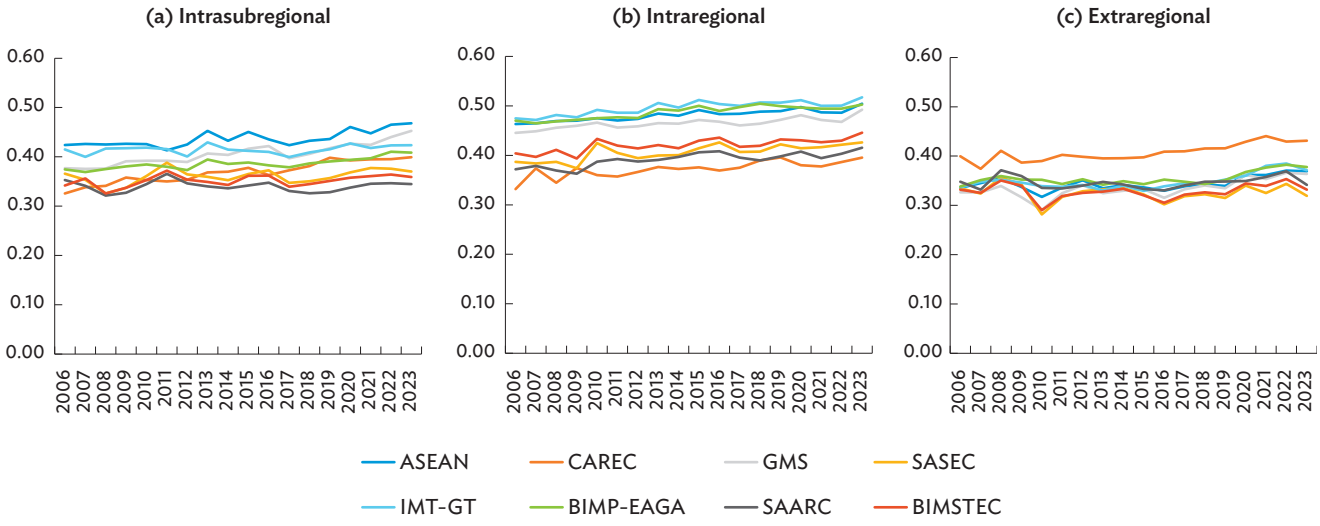
In contrast, technology and digital connectivity consistently emerge as strong areas of intrasubregional integration. Beyond improvements in mobile connectivity and internet access, indicators on research collaborations and ICT goods trade show expansion. For instance, intrasubregional research collaborations (as a share of total) in BIMP-EAGA rose from 5% in 2006 to 17% in 2023. Institutional arrangements remain a key pillar, particularly through FTAs, as most economies now maintain FTAs with economies in their respective subregional initiatives.

Regional value chain (RVC) and environmental cooperation show modest progress. Indicators on trade complementarity and concentration have seen minimal gains across most initiatives. In some cases, intermediate goods trade declined slightly between 2006 and 2023. Environmental goods trade within subregions also remains marginal, although participation in environmental agreements has increased across most initiatives.

Asian subregional initiatives show distinct patterns of regional engagement.

In both intraregional and intrasubregional integration, Southeast Asian initiatives such as GMS and IMT-GT demonstrate the strongest regional linkages, while CAREC and South Asian initiatives like SASEC and SAARC exhibit weaker ties (Figure 1.12). Overall, intraregional integration has increased across most initiatives, reflecting stronger regional ties. On the other hand, extraregional integration is higher in CAREC, underlining its expanding connections outside the region. These trends suggest deepening regional integration within subregions, alongside more moderate and varying external engagement.

Figure 1.12: Intraregional and Extraregional Integration Indexes by Subregional Initiative



ASEAN = Association of Southeast Asian Nations, BIMP-EAGA = Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area, BIMSTEC = Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, IMT-GT = Indonesia–Malaysia–Thailand Growth Triangle, SAARC = South Asian Association for Regional Cooperation, SASEC = South Asia Subregional Economic Cooperation.

Note: For the GMS, the entire People's Republic of China is used as a proxy due to data limitations, although the initiative covers only Yunnan Province and Guangxi Zhuang Autonomous Region. Intraregional integration represents integration with Asia, while extraregional integration represents integration outside of Asia. Intrasubregional integration is measured within members of the same subregional initiative.

Source: ADB. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

A key feature of the ARCII is its flexibility for index customization.

The customized framework allows for the inclusion or exclusion of specific indicators and to undertake more granular comparisons of the economic integration trajectory against a benchmark of economies or a subregion. By tailoring the components of the framework, three main objectives can be achieved.

First, indicators can be selected based on their relevance to a particular economy grouping or subregion, with less relevant indicators being excluded. For example, a customized index for Central and West Asia may emphasize rail and road transport indicators rather than liner shipping connectivity, reflecting the region's limited access to maritime transport and its reliance on land-based connectivity.

Second, customization enables indicators with substantial data gaps to be substituted with suitable alternatives. This is particularly important for smaller economies, such as in the Pacific, where statistical systems are often underdeveloped and data coverage is limited. The substitution of indicators helps ensure broader economy representation and more robust measurement.

Third, a customized ARCII can be used to capture emerging economic priorities within specific subregions, supporting analysis of both historical RCI trends and future economic trajectories. For instance, ASEAN economies are increasingly focused on strengthening energy connectivity through initiatives such as the ASEAN Power Grid. Incorporating indicators related to electricity trade or cross-border energy networks would allow the customized ARCII to better reflect the evolving landscape of regional integration in Southeast Asia.

While index customization enhances the specificity and relevance of RCI assessments, it involves some trade-offs. Whereas the standard ARCII facilitates comparability across regions, subregions, and initiatives, a customized ARCII prioritizes depth and contextual relevance by focusing on selected indicators, policy priorities, or economy groupings.

A customized ARCII index was implemented for the Pacific developing economies to generate better estimates of regional cooperation and integration.

The Pacific is home to small, remote islands that share similar economic and cultural characteristics such as small economy sizes, remoteness from major markets, geographic dispersion, dependence on remittances and development assistance, and vulnerability to climate change and natural disasters. Over the years, development in the Pacific developing economies can be grouped into two main streams: gains from tourism and remittances benefit the economies of the Cook Islands, Fiji, Niue, Palau, Samoa, Tonga, and Vanuatu; while resource rent-based economies comprise Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Papua New Guinea, the Solomon Islands, and Tuvalu. Gross domestic product is projected to grow by 4.1% in 2025 and 3.4% in 2026, as economies continue to recover post-pandemic (ADB 2025a).

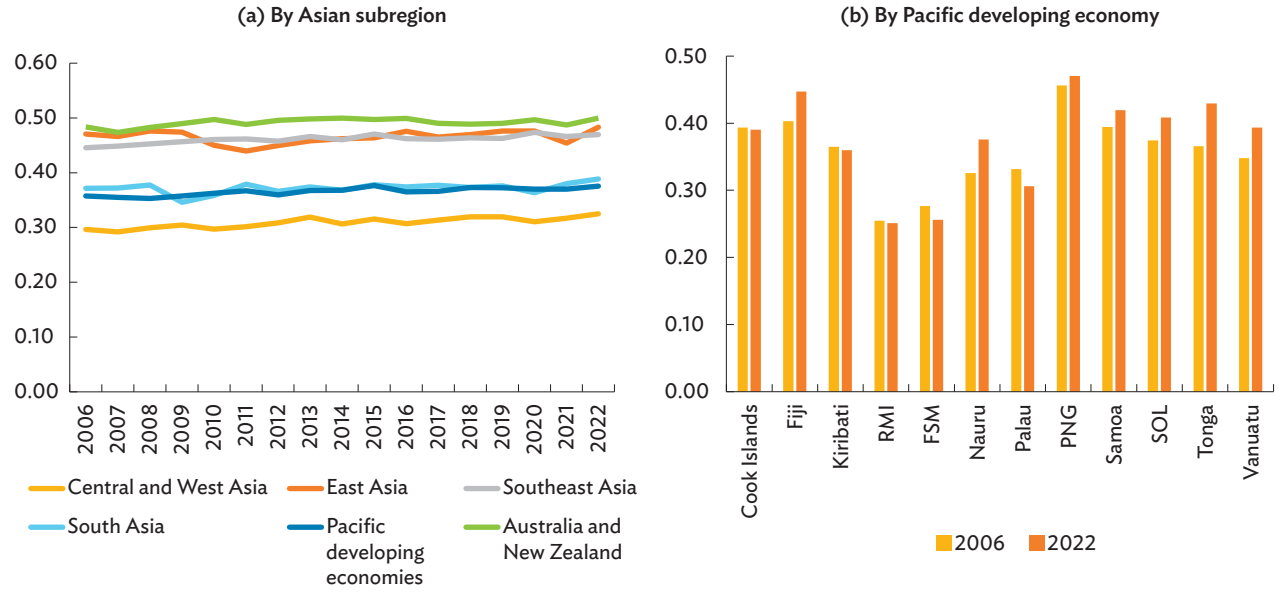
Regional integration among the Pacific developing economies, therefore, is influenced by the subregion's unique economic profile and shared vulnerabilities. To measure RCI in the Pacific developing economies, the ARCII was customized to include measurable indicators that reflect the economies' RCI agenda. New indicators introduced to the ARCII framework were trade in fish products, trade in wood products, changes in correspondent banking, the international investment position, and subsea cable connectivity. Meanwhile, indicators deemed irrelevant to the Pacific developing economies' RCI space and those that have largely missing data coverage were excluded. With these iterations, the customized ARCII generated RCI estimates for 12 Pacific developing economies (excluding Niue and Tuvalu).

Results from the estimation find that the overall regional integration of the Pacific developing economies increased modestly from 2006 to 2022, with a 5.1% increase (Figure 1.13). Trade and investment, RVC, and infrastructure connectivity are the strongest drivers of integration, while institutional integration is the weakest. Additionally, linkages in digital connectivity and environmental cooperation have seen the biggest gains since 2006. Intrasubregional integration (among Pacific

developing economies) has likewise recorded moderate gains, with integration estimates broadly on par with the Caribbean but still below those for ASEAN (Figure 1.14). The top drivers of intrasubregional integration are infrastructure and connectivity, RVC, and people and social movement.

In terms of integration with selected partners (Figure 1.15), the Pacific developing economies have maintained strong relations with Australia and New Zealand, while the PRC has shown growing engagement in these economies in recent years. Integration estimates with the PRC

Figure 1.13: Intraregional Integration Using Customized ARCII for the Pacific Developing Economies

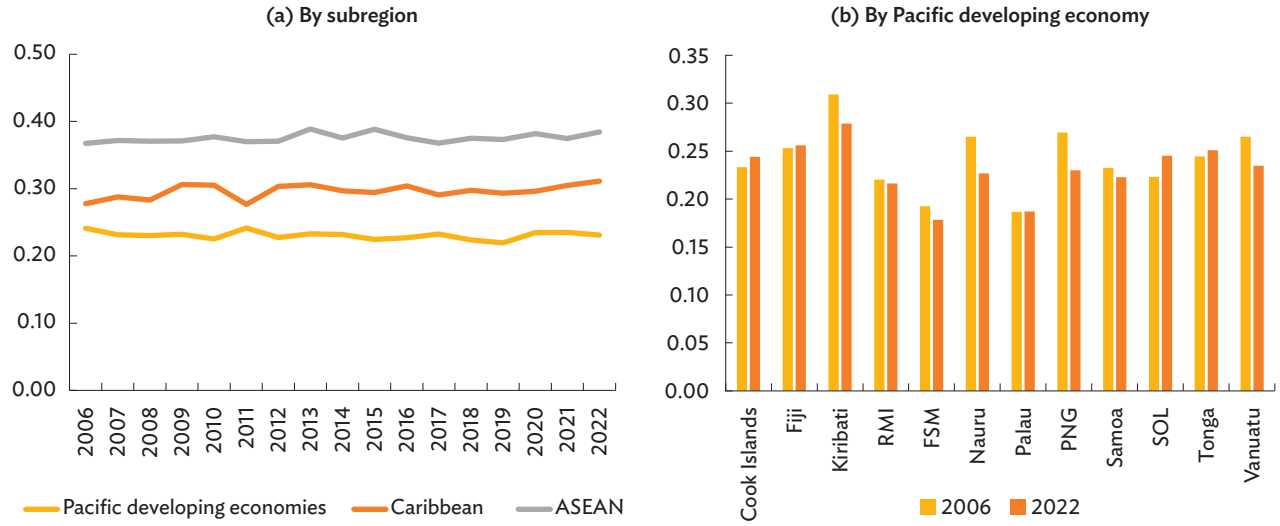


ARCII = Asia-Pacific Regional Cooperation and Integration Index, RMI = Republic of the Marshall Islands, FSM = Federated States of Micronesia, PNG = Papua New Guinea, SOL = Solomon Islands.

Note: The estimates in Panel A reflect integration of Asian subregions with Asia and the Pacific using indicators from the customized framework for the Pacific developing economies.

Source: Asian Development Bank. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

Figure 1.14: Integration Among Pacific Developing Economies Using Customized ARCII



ARCII = Asia-Pacific Regional Cooperation and Integration Index, ASEAN = Association of Southeast Asian Nations, RMI = Republic of the Marshall Islands, FSM = Federated States of Micronesia, PNG = Papua New Guinea, SOL = Solomon Islands.

Note: The estimates in Panel A reflect integration among economies within each subregion. For example, the Pacific developing economies, Caribbean, and ASEAN estimates capture integration within their respective subregions, measured using indicators from the customized framework for the Pacific developing economies.

Source: Asian Development Bank. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

increased by 11.5% between 2006 and 2022, notably surpassing the Pacific developing economies' integration with the US, which has remained relatively stable. Social integration primarily drives integration with Australia plus New Zealand (AUS+NZL) and the US, which is likely influenced by overseas remittances. Meanwhile, trade and investment with the PRC is growing steadily particularly in merchandise trade which rose from 4.3% in 2006 to 17% in 2022.

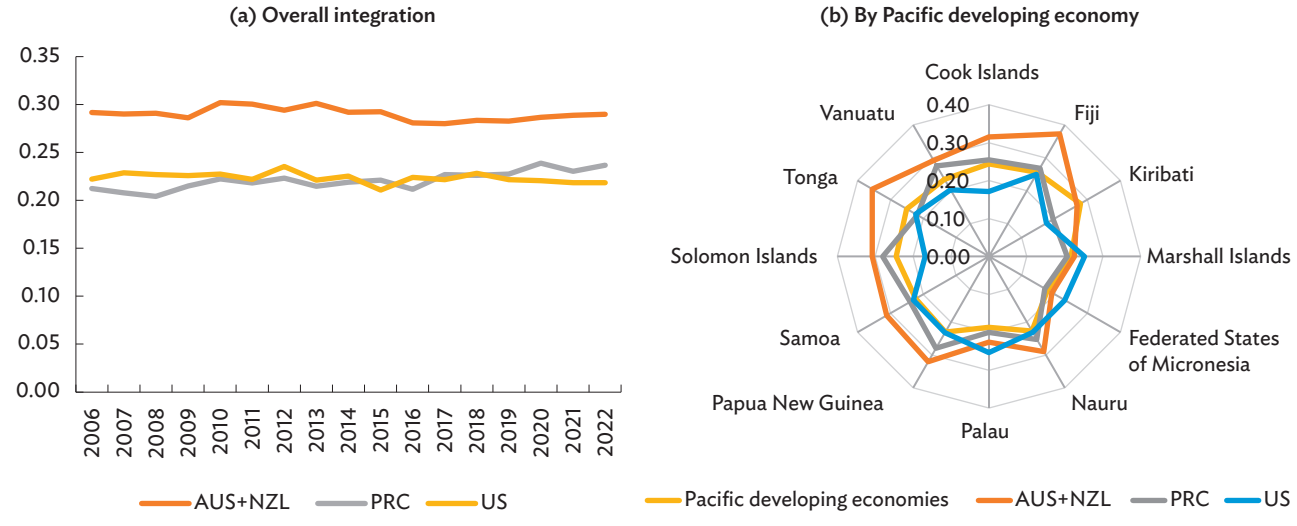
The customized ARCII framework provides measurable indicators and integration estimates that can inform regional policies and strategies, including the 2050 Blue Pacific Strategy and the Pacific Roadmap for Economic Development, toward deeper RCI in the Pacific developing economies. In this regional strategy, the role of RCI is highlighted through increased trade and investment, harmonized regulatory frameworks, trade diversification, and improved financial integration and literacy.

One final advantage of customization is the flexibility to incorporate indicators aligned with evolving economic integration agendas, thereby producing estimates that better capture emerging RCI priorities. These results are particularly valuable for policymakers in making informed decisions and shaping policy strategies around nascent areas of cooperation. The analysis can inform regional development strategies, as well as national development plans and country partnership strategies. Finally, the customized ARCII provides a set of measurable indicators that can be part of monitoring and evaluation frameworks for better tracking of RCI progress.

Subregional Cooperation Initiatives in Asia and the Pacific

ADB's commitment to RCI has led to shared economic benefits in Asia. These benefits include closer and integrated trade and transport, more efficient intraregional supply chains, stronger financial interconnectedness, and more coordinated responses to cross-border challenges such as climate change, pandemics, and financial shocks. The subregional cooperation initiatives seek these same benefits and leverage RCI to achieve them. The initiatives include those led and monitored by ADB such as CAREC, GMS, and SASEC. Government-led subregional programs include the IMT-GT, BIMP-EAGA, SAARC, BIMSTEC, and the Pacific Islands Forum.

Figure 1.15: Pacific Developing Economies' Integration with External Partners Using Customized ARCII



ARCII = Asia-Pacific Regional Cooperation and Integration Index, AUS = Australia, PRC = People's Republic of China, NZL = New Zealand, US = United States.

Source: Asian Development Bank. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025).

Subregional cooperation initiatives have advanced digital transformation across Asia.

The CAREC Program, involving countries from the Central and West Asia and East Asia, has made notable progress. The CAREC Digital Strategy 2030 strengthened regional cooperation using digital technologies, particularly in trade facilitation. Participating countries have adopted paperless trade and digital customs procedures while exploring ways to improve efficiency through emerging technologies such as blockchain and artificial intelligence. Georgia and Mongolia have implemented pilot projects to leverage these emerging digital technologies in streamlining trade processes.

In 2025, ADB initiated a scoping study to assess the feasibility of the CAREC Digital Corridor Project to enhance digital connectivity, reduce data transmission delays, and improve access to global digital services across the region. In addition, CAREC is supporting startup digital ecosystem and is preparing a facility to mobilize venture capital through a regional fund of funds.

In South Asia, BIMSTEC has advanced digital transformation by enhancing awareness and generating understanding on benefits of paperless trade and digital payments. Similarly, interests have grown among SASEC countries to embed digitalization across sectors, including energy and transport. Initiatives like smart grid integration and electronic cargo tracking systems are increasingly being discussed and implemented in the member countries.

Moving to Southeast Asia and East Asia, the GMS Digitalization Action Plan (2025–2027) promotes actions that balance individual economy priorities with a shared vision for regional digital empowerment, initially targeting agriculture, tourism, and trade. In addition, the GMS Innovation Strategy for Development 2030 identifies digitalization as one of three strategic pillars, alongside the green transition and connectivity. BIMP-EAGA has a Digital Cluster and the private sector led Digital Alliance leading efforts to promote digital transformation. Member economies have made notable progress in strengthening ICT connectivity under BIMP-EAGA Vision 2025. Brunei Darussalam and Malaysia's Federal Territory of Labuan nearly achieved target of 100% broadband coverage, followed by Indonesia at 97.5%, Sabah at 95.3% and Sarawak at 91.9%, and the Philippines at 74%. Micro, small, and medium-sized enterprises (MSMEs) are trained in digital tools to boost resilience and competitiveness, through the Go Digital ASEAN initiative and related programs. IMT-GT has elevated digital transformation as a strategic focus area under the Implementation Blueprint 2022–2026 to unlock inclusive growth and competitiveness.

In the Pacific, digital connectivity and cooperation is pursued through a regional agenda of climate finance and health surveillance, helping to address the geographic and institutional challenges. For example, through the Systems Strengthening for Effective Coverage of New Vaccines in the Pacific project, a regional approach has been adopted to improve immunization outcomes by introducing three vaccines in Samoa, Tonga, Tuvalu, and Vanuatu, thereby supporting these countries by (i) pooling procurement of the human papillomavirus (HPV), pneumococcal conjugate vaccine, and rotavirus vaccines through the United Nations Children's Fund (UNICEF), (ii) strengthening the delivery of vaccination programs, and (iii) increasing community awareness.

Private sector development was supported through e-mobility pilots, public–private partnerships models, and green finance facilities.

The CAREC program supports its member countries in mobilizing private sector participation to advance intercity e-mobility solutions. A key example is the ongoing initiative to introduce electric bus (e-bus) services between Almaty in Kazakhstan and Bishkek in the Kyrgyz Republic.

A number of capacity-building events helped BIMSTEC member states to design and implement effective public–private partnerships models to attract private investment in regional infrastructure; deepened skills on advanced trade facilitation measures; and strengthened BIMSTEC customs authorities' ability to roll out authorized economic operator programs. The proposed SASEC Green Finance Facility aims to mobilize long-term low-cost financing for clean energy projects, with a strong emphasis on private sector-led investments in solar, wind, and hydropower. In transport, discussion is ongoing on how to address challenges and develop strategies to finance private sector green vessels to

accelerate uptake by improving the bankability of vessels and unlocking private capital.

In the GMS, the GMS Economic Cooperation Program Strategic Framework 2030 (GMS 2030) emphasizes leveraging private sector expertise, resources, and innovation to drive the subregion's development and address regional development challenges more effectively. In this regard, the "Private Sector Engagement in the GMS" was endorsed in November 2025 and aims to enhance private sector participation in the subregion through a structured set of entry points, involving institutional arrangements, networking mechanisms, capacity building, policy dialogue, identification of investment opportunities, and support for innovation. The strategy provides a road map for implementing these entry points, and includes clear timelines and division of labor among key stakeholders. Examples of specific actions under the entry points include formalizing roles for private firms in sector working groups, holding investment and project roundtables, conducting innovation competitions, and organizing high-level business forums.

IMT-GT also supports MSMEs through e-commerce platforms, smart energy and transport systems under the Sustainable Urban Development Framework (SUDF) citywide initiatives, and digital tourism innovations. Similarly, BIMP-EAGA advances MSME empowerment through initiatives focused on capacity building, market access, and digital adoption. To further facilitate MSME integration into regional markets, BIMP-EAGA promotes streamlined cross-border trade regulations and corridor-based supply chains, with 149 SMEs participating as of December 2025. Investment promotion activities and digital business centers also help connect local enterprises to regional and global markets, completing 29 trade and investment promotion initiatives with 21 realized business ventures.

The Pacific Islands Forum leaders approved the Pacific Quality Infrastructure Principles which include local content, value for money, climate resilience, responsible borrowing and governance, social and environmental safeguards, inclusivity, and private sector investment.

Environmental sustainability was addressed through climate action plans, disaster-risk financing, and green city initiatives.

CAREC is supporting its member countries in building resilience and financial preparedness against climate change and disaster events through innovative regional disaster-risk financing solutions. A CAREC working group on agricultural development and food security was established in May 2025, which discussed regional strategy, measures, and potential projects to promote agriculture production and modernization, food trade, food traceability systems for livestock exports, climate-smart agriculture, food security information sharing, and regional food reserves. To translate the CAREC Climate Change Vision into concrete actions and implementable regional initiatives and projects across CAREC clusters, the CAREC members endorsed the CAREC Climate Change Action Plan 2025–2027. As a regional framework, it will enhance climate action focusing on four areas: Climate Risk and Health, the Water–Energy–Food Security Nexus, Low-Carbon Growth, and a CAREC Climate Platform, supported by the newly established CAREC Climate and Sustainability Project Preparatory Fund.

In South Asia, regional dialogue on Inclusive and Pro-Poor Growth was held with the help of United Nations Economic and Social Commission for Asia and the Pacific. It featured sustainable and climate-resilient development models from ASEAN and BIMSTEC, emphasizing integrated approaches to environmental and social inclusion. A capacity development program on carbon market, trading, and accounting was conducted in April 2025 in Thimphu, Bhutan to enhance BIMSTEC member states' understanding of carbon markets, trading mechanisms, and accounting frameworks.

SASEC's regional cooperation agenda is strongly aligned with climate resilience and low-carbon development. The Regional Sustainable Tourism Program and Sector Management Framework study will integrate environmental and cultural sustainability into infrastructure planning and destination development.

The GMS program developed a comprehensive and evolving framework that integrates and accelerates economy-level commitments on climate resilience,

greenhouse gas mitigation, biodiversity conservation, and environmental sustainability. This framework is carried out through the GMS 2030 Strategic Framework for Accelerating Climate Action and Environmental Sustainability, and the GMS Climate Change and Environmental Sustainability Program, which also provides capacity building that tackles plastic pollution and advancing the circular economy, and leveraging digital technologies to strengthen environmental sustainability, accelerate climate action, and enhance climate resilience.

BIMP-EAGA has an environment cluster leading all efforts to promote environmental sustainability, which is central to BIMP-EAGA's long-term growth strategy. These efforts include the green cities initiative, climate resilience initiative, clean technologies initiative, biodiversity conservation and the sharing of best practices, and a sustainable approach to ecotourism and agriculture and fisheries.

IMT-GT puts great emphasis on sustainable urban development, natural resources management, and biodiversity conservation in its environment cooperation agenda. The IMT-GT SUDF 2019–2036 is centered on developing green cities which are predominantly located in coastal areas of the subregion. The objectives of the IMT-GT Blueprint 2022–2026 environment strategy are (i) to increase the number of cities adopting the SUDF and implementing Green City Action Plans; and (ii) to sustainably manage and conserve the subregion's natural resources and protected areas—especially forests, water, and wildlife. The fifth strategic component of the IMT-GT Blueprint 2022–2026 emphasizes adopting a green, blue, and circular economy to help the subregion build back better post COVID-19 pandemic.

The Pacific region continues to prioritize climate change and environmental concerns, exemplified by ongoing initiatives such as the design of a loss and damage fund, as agreed in November 2022 during United Nations Framework Convention on Climate Change talks. The Pacific Resilience Facility stands as a testament to the commitment to building resilience against climate-caused disasters. Climate change and environmental concerns hold significant prominence within regional dialogue. These, along with other regional priorities, find expression in the Blue Pacific Strategy 2050 framework, and exhibit a strong alignment with ADB's Pacific Approach.

Digital transformation, environmental sustainability, and inclusive growth are embedded in subregional cooperation across trade, energy, tourism, and regional public goods.

In trade, CAREC, BIMSTEC, SASEC, and GMS promoted digital customs, paperless trade, and e-commerce platforms. BIMP-EAGA and IMT-GT supported MSMEs through digital tools and cross-border commerce. Meanwhile, energy cooperation focused on clean energy integration and transition. CAREC supported hydropower and green corridors, BIMSTEC developed a Grid Interconnection Master Plan, and SASEC promoted renewable energy and green hydrogen. GMS launched an Energy Transition Taskforce and supported regional interconnections. BIMP-EAGA and IMT-GT integrated smart grids and decarbonization strategies.

Tourism initiatives emphasized sustainability and inclusivity. CAREC developed tourism clusters, BIMSTEC promoted thematic circuits, and SASEC proposed a Regional Centre for Sustainable Tourism. GMS implemented the Tourism Strategy 2030 and Tourism Infrastructure for Inclusive Growth Project, while BIMP-EAGA and IMT-GT supported ecotourism and cultural and heritage tourism.

Regional public goods were advanced through climate action plans, health initiatives, and environmental conservation. CAREC launched the Climate Change Action Plan and Glaciers to Farms program. BIMSTEC and SASEC supported climate-smart agriculture and regional pandemic recovery and resilience. GMS promoted circular economy and sustainable agriculture, while BIMP-EAGA and IMT-GT focused on biodiversity and green infrastructure. Pacific initiatives addressed sanitation, climate finance, and regional health security.

ADB's support has evolved from infrastructure-focused assistance to strategic partnerships emphasizing digitalization, climate resilience, trade, and inclusive growth.

CAREC recalibrated its strategies post-midterm review, focusing on transport, trade, and digital sectors.

BIMSTEC transitioned to institutionalized cooperation with a memorandum of understanding outlining key areas. SAARC received support for climate studies, sustainable development goal contextualization, and energy cooperation.

SASEC expanded its portfolio to include energy, tourism, and digital transformation, with 233 projects in the pipeline between 2024 and 2026. GMS developed the GMS 2030 Strategy and Innovation Strategy, supporting regional public goods and upstream analytics. BIMP-EAGA's project pipeline grew to 217 and finalizing its new BIMP-EAGA Vision 2035 strategy and adopting an integrated economic corridors approach. IMT-GT increased investments in green infrastructure and maritime connectivity, preparing the next Implementation Blueprint.

Pacific initiatives, guided by the Pacific Approach and Blue Pacific Strategy 2050, emphasized ocean health, climate resilience, and regional collaboration. ADB supported coral reef restoration, regional vaccine procurement, and climate finance platforms. Future plans include expanded engagement with regional organizations, digitalization, and climate action through coordinated platforms and programmatic approaches.

Progress in trade policy and regulatory alignment focused more on strengthening digital infrastructure and regional economic integration. However, challenges persist, including varying levels of digital readiness within CAREC economies. Meanwhile, the BIMP-EAGA and the IMT-GT are focused on accelerating connectivity and addressing regulatory issues affecting trade, while Pacific developing economies aim to streamline trade processes but face market access issues. Progress in the GMS is affected by broader global trade dynamics and geopolitical fragmentation. Guided by CAREC 2030 and CAREC Integrated Trade Agenda (CITA) 2030, the launch of the negotiations for the CAREC Trade and Investment Facilitation (CARTIF) Partnership Agreement will facilitate trade in goods and services, promote regulatory transparency and cooperation, encourage investment through better policies, and support digital trade and inclusive participation (e.g., small and medium-sized enterprises, women).

Subregional cooperation initiatives have been the cornerstone for RCI in Asia.

Subregional initiatives serve as foundational platforms for countries to collaborate over shared challenges, unlock economic opportunities, and promote sustainable development. By fostering cross-border connectivity, harmonizing policies, and facilitating knowledge exchange, these initiatives have enabled participating countries to collectively pursue goals such as digital transformation, private sector development, and environmental sustainability. Programs like CAREC, GMS, SASEC, BIMSTEC, IMT-GT, and BIMP-EAGA have not only enhanced trade and transport linkages but also strengthened institutional capacities, encouraged innovation, and mobilized investments in critical sectors. Their evolution reflects a growing recognition that regional cooperation is essential for achieving inclusive growth, resilience, and long-term prosperity in a rapidly changing global landscape.

Policy Recommendations

Recent developments have emphasized the importance of regional cooperation in helping Asian economies to navigate the impacts of emerging global tensions and tackle crosscutting industry challenges especially in climate change, health and education, food security, energy connectivity. As discussed, trade in goods and services remains an integral driver of economic growth in Asia. Harmonizing digital standards and regulatory frameworks will enable seamless cross-border e-commerce, paperless trade, and digital financial inclusion. Alongside investment, cooperation in these areas should aim to reduce intraregional inequality while ensuring economies gain in terms of human capital, productivity, and resilience. RCI initiatives facilitate transfer of technology and knowledge sharing, which strengthen public goods such as food security and supply chains for essential goods and critical minerals, and build systemic resilience against nontraditional security challenges such as climate-aggravated food security risks and transboundary water stress.

In line with this, ADB continuously invested in advancing RCI. In 2024, under operational priority 7 on fostering RCI, key achievements included $4.12 billion in financing cross-border cargo transport and energy transmission; $2.92 billion to facilitate trade and investment across borders, and 92 regional public goods initiatives which successfully mitigated cross-border environmental and health risks and expanded access to education services regionally (ADB 2025c).

Regional integration indexes show modest growth in institutional cooperation within the region. However, it is essential to generate more jobs and reduce inequality. Institutional cooperation is critical for policy harmonization and capacity building. Regional platforms for sharing best practices in infrastructure development, digital innovation, and climate adaptation would enhance the impact of RCI initiatives. Both intrasubregional and intersubregional cooperation should be strengthened to align policies and regulations across borders. This includes investment treaties, customs regulations, and data flow regulations to improve economies of scale and strengthen business enabling environment. Policies that improve the bankability of regional projects and mitigate risks to mobilize private investment in infrastructure, logistics, and digital platforms must be encouraged. Public–private partnerships should be prioritized.

The customized ARCII for the Pacific developing economies also revealed encouraging results of progressive linkage in digital connectivity and environmental cooperation, which are unique challenges for small island developing states. This shows that shared institutional priorities and targeted investments improve RCI regional integration outcomes, especially when tailored to the specific vulnerabilities and cultural and development needs of the region. Strengthening these linkages not only enhances resilience and inclusivity but also supports long-term economic sustainability through improved access to services, climate adaptation, and digital innovation.

Further, intraregional connectivity projects such as the ASEAN Power Grid, the ASEAN highway network, CAREC, and SASEC transport corridors should be promoted. Interregionally, greater cooperation should be pursued between ADB subregions (e.g., Southeast Asia, East Asia, and South Asia) to strengthen connectivity and economic relations across subregions. Development of integrated economic corridors that combine transport, logistics, and industrial clusters will reduce transaction costs, improve efficiency, and attract private sector participation.

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2 Trade and Global Value Chains

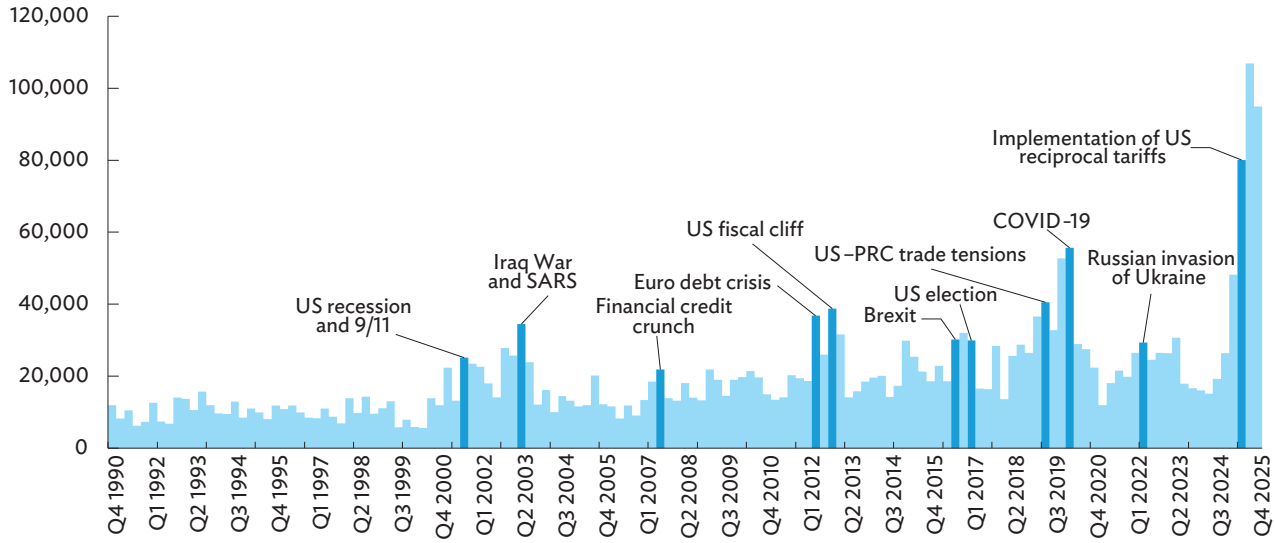
Introduction

Rising Uncertainty and Economy Dynamics Define Trade Frictions

Rising uncertainty—whether triggered by geopolitical tensions, shifting economic policies, pandemics, or climate shocks—has intensified the risks faced by firms, investors, and policymakers. Economies in Asia and the Pacific, deeply integrated into global value chains (GVCs) and dependent on stable trade flows, are especially sensitive to these fluctuations.[1] Understanding the evolution of economic uncertainty is therefore critical for assessing trade performance and resilience in the region.

This chapter examines how rising economic uncertainty affects trade and GVC participation in the region. Figure 2.1 uses the World Uncertainty Index (WUI)—

Figure 2.1: Average of the World Uncertainty Index



PRC = People's Republic of China,, COVID-19 = coronavirus disease, Q = quarter, SARS = severe acute respiratory syndrome, US = United States.

Notes: The index is constructed for 143 economies and reflects the frequency of the word "uncertainty" (and its variants) in Economist Intelligence Unit reports for each economy multiplied by 100,000.

Source: Ahir, Bloom, and Furceri (2022).

[1] Asia and the Pacific (or Asia) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

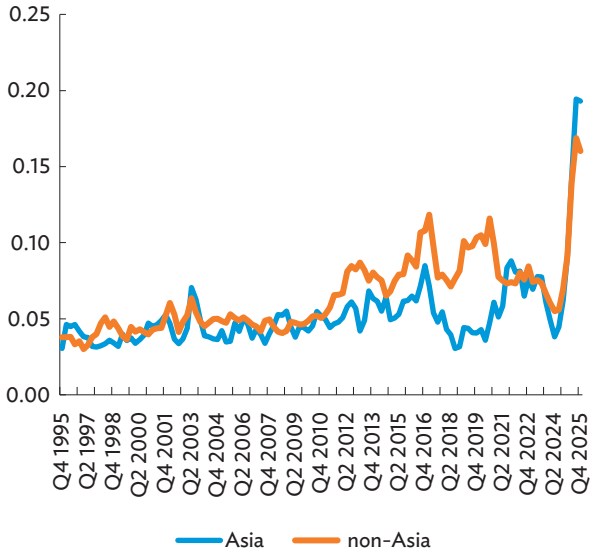
a globally comparable measure of economy-level economic uncertainty based on textual analysis of economy reports—to provide an initial indication of the evolving global dynamics of uncertainty. The WUI has documented clear surges in uncertainty during major global events, including trade tensions between the People's Republic of China (PRC) and the United States (US), the coronavirus disease (COVID-19) pandemic, and more recent geopolitical conflicts. These episodes not only heighten the risk of market volatility but also the likelihood of changes in the behavior of firms, investors, and consumers across borders.

Global Shocks Are Increasingly Synchronized, While Exposures Differ

Asia has historically experienced lower uncertainty than other regions. Comparing Asia to the rest of the world, Figure 2.2 shows that, for most of the period considered, Asia recorded lower average uncertainty than the rest of the world, especially during the 2010s. Nonetheless, spikes in uncertainty in Asia tend to coincide with spikes in the rest of the world, indicating that many uncertainty shocks are global rather than specific to Asia. Since COVID-19 pandemic, the uncertainty index for Asia, based on WUI, has tracked the global pattern more closely, suggesting that recent increases in uncertainty are affecting Asia in line with worldwide trends.

Subregional dynamics within Asia reveal heterogeneous exposure to uncertainty. Figure 2.3 illustrates the trends in uncertainty index across ADB subregions, with values normalized to 100 in 1995 and gross domestic product (GDP)-weighted across economies. The figure reveals heterogeneous dynamics across Asian subregions. Central and West Asia, as well as East Asia, have experienced relatively stable uncertainty, aside from temporary spikes such as COVID-19 pandemic in East Asia. Southeast Asia has maintained moderate stability until recent years, whereas South Asia and developed economies in Asia exhibited higher and more volatile uncertainty over the period. South Asia experienced rising uncertainty from the late 1990s, with persistent high levels since the early 2010s. Developed Asia faced elevated uncertainty from 2000 to 2015, associated with events such as the dotcom bust, the global financial crisis, and the 2011 Tōhoku earthquake.

Figure 2.2: Developments in Uncertainty Index for Asia and Pacific and the Rest of the World



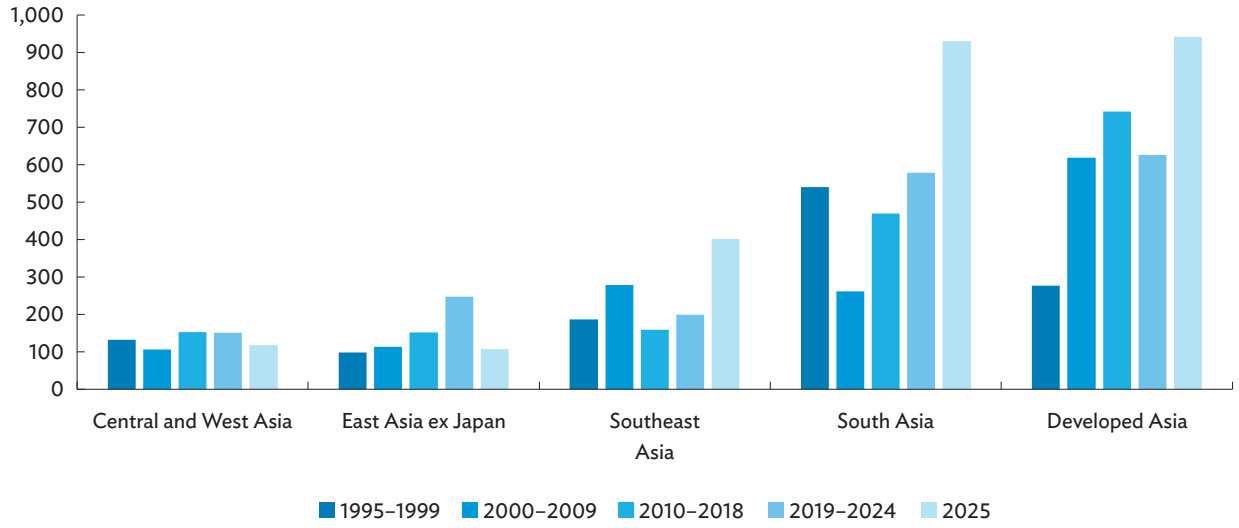
Q= quarter.

Notes: Asia refers to Asia and the Pacific. Based on the World Uncertainty Index, which computes on the relative frequency of the word "uncertain" (and its variants) in the text of Economist Intelligence Unit economy reports, expressed per 1,000,000 words in each report. The index thus captures the intensity of uncertainty-related language within an economy's report, not the volume of coverage. For smaller or less frequently reported economies, the measure may be noisier due to limited textual data. The indicator here is the three-quarter weighted moving average of the World Uncertainty Index calculated as follows: 1996Q4 = (1996Q4 x 0.6) + (1996Q3 x 0.3) + (1996Q2 x 0.1). Data for the two subsamples are based on an unweighted average. In the Asia and Pacific sample, data are unavailable for Brunei Darussalam, Bhutan, the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Maldives, the Marshall Islands, Nauru, Niue, Palau, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu, and Samoa.

Source: Ahir, Bloom, and Furceri (2022).

Institutional quality, integration, and exposure to external shocks can help explain these regional differences. The observed differences and similarities in uncertainty are likely to be driven by divergent forces. In East Asia, that uncertainty can persist without destabilizing trade is likely a reflection of strong institutions, policy continuity, and deep GVC integration, which collectively provide economic predictability. In Central and West Asia relative stability may arise from limited financial market integration or lower exposure to global economic fluctuations. Export commodities such as gold, copper, and hydrocarbons serve as buffers against the global economic fluctuations in key economies of Central and West Asia. In contrast, higher and more volatile uncertainty in South Asia likely stems from domestic

Figure 2.3: Developments in Uncertainty Index by ADB Subregion



GDP = gross domestic product, Q = quarter.

Notes: Based on the World Uncertainty Index, which computes the relative frequency of the word "uncertain" (and its variants) in the text of Economist Intelligence Unit economy reports, expressed per 1,000,000 words in each report. The index thus captures the intensity of uncertainty-related language within an economy's report, not the volume of coverage. For smaller or less frequently reported economies, the measure may be noisier due to limited textual data. The indicator here is the three-quarter weighted moving average of the World Uncertainty Index calculated as follows: 1996Q4 = (1996Q4 x 0.6) + (1996Q3 x 0.3) + (1996Q2 x 0.1). Data for ADB subregions are then weighted by GDP and set equal to 100 in 1995Q1. Developed Asia includes Australia, Japan, and New Zealand. Pacific developing economies are excluded due to lack of data.

Source: Ahir, Bloom, and Furceri (2022).

political instability, policy unpredictability, and external vulnerabilities such as commodity price fluctuations or climate events. In Asia's developed economies, elevated uncertainty during 2000–2015 reflected both global crises and region-specific shocks.

The implications of uncertainty for trade are significant and regionally differentiated. Lower and more stable uncertainty in subregions like East Asia and Southeast Asia may help support sustained trade flows by encouraging investment, facilitating participation in regional value chains, and reducing the cost of cross-border transactions. In contrast, higher uncertainty in South Asia and some developed Asian economies can deter investment, increase risk premiums, and disrupt supply chains, potentially limiting trade integration and responsiveness to global demand shifts. To the extent that these mechanisms are at work, they underscore the potential value of regional policy coordination—through trade facilitation, macroeconomic stability, and institutional reforms—in reducing uncertainty and strengthening trade-driven growth.

Recent Developments in Trade and Global Value Chains in Asia

Understanding Trends Is Essential for Assessing the Impact of Uncertainty

Before turning to the analysis of policy uncertainty, this section reviews key developments in trade volumes, regional integration, and GVC linkages across Asia. It highlights how the region's trade patterns have evolved in response to shifting demand, technological change, and structural transformation in the global economy. By outlining these broad dynamics, the section sets the stage for examining how rising uncertainty interacts with ongoing changes in the structure and resilience of trade.

Recent data show that trade in Asia has been shaped by a series of sharp fluctuations—first the COVID-19 shock, then a post-pandemic recovery, and more recently a moderation in trade growth. Figure 2.4 reports information on the growth rates of quarterly

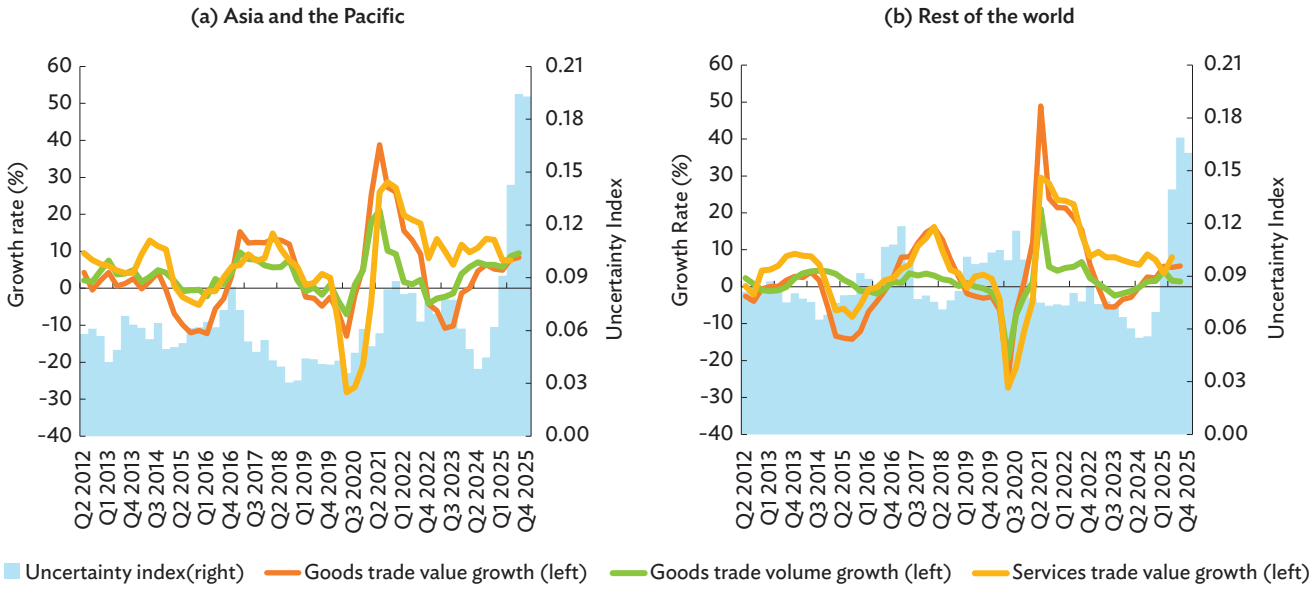
merchandise trade in value and volume terms over 2016–2025 for both Asia and the rest of the world. The figure highlights the effect of the COVID-19 pandemic on the region, with negative trade growth throughout much of 2019 and 2020, followed by a recovery beginning in late 2020. The often large differences in growth rates in value and volume terms during that period reflect the impact of high inflation in the immediate post-pandemic recovery. Following the rebound, trade growth in the region turned negative again in late 2023 but has remained positive since early 2024. In the most recent period (since May 2025), however, both value and volume growth have slowed, with the deceleration in the PRC being more pronounced than the region as a whole.

The evolution of services trade shows similar patterns (Figure 2.4). Services trade has been more resilient than merchandise trade since the COVID-19 pandemic, albeit with declining growth rates in the most recent period. The pandemic had a large negative impact on services trade throughout the world, with the effect on services trade growth in Asia being more pronounced than for merchandise trade. Recovery from the pandemic was also rapid, however, with services trade maintaining higher growth rates than merchandise trade since early 2021. While growth rates of services trade have remained positive since 2021, the most recent period has seen reductions in growth rates both in Asia and the rest of the world.

Policy Volatility May Be Associated with Short-Term Swings in Trade Performance

With both the uncertainty index and trade growth showing high volatility, it is difficult to draw strong conclusions (Figure 2.4). Nonetheless, preliminary patterns from the data do seem to suggest a correlation between policy uncertainty and trade growth, with periods of lower uncertainty generally corresponding to stronger trade performance, and episodes of heightened uncertainty aligning with slower or negative trade growth.

Figure 2.4: Recent Developments in Merchandise and Services Trade



PRC = People's Republic of China, Q = quarter.

Notes: Left axis shows trade growth rate while the right axis shows the uncertainty index, based on the World Uncertainty Index estimates. For each period and trade flow type (i.e., imports and exports), available data include indexes for the PRC and Japan, and aggregate indexes for selected economies in Asia and the Pacific: (i) advanced economies, excluding Japan; and (ii) emerging market economies, excluding the PRC. The frequency of the goods trade data was originally monthly then it was aggregated to fit with World Uncertainty Index and services trade data.

Sources: ADB calculations using data from Ahir, Bloom, and Furceri (2022); CPB Netherlands Bureau for Economic Policy Analysis. World Trade Monitor. https://www.cpb.nl/en; and International Monetary Fund (all accessed January 2026).

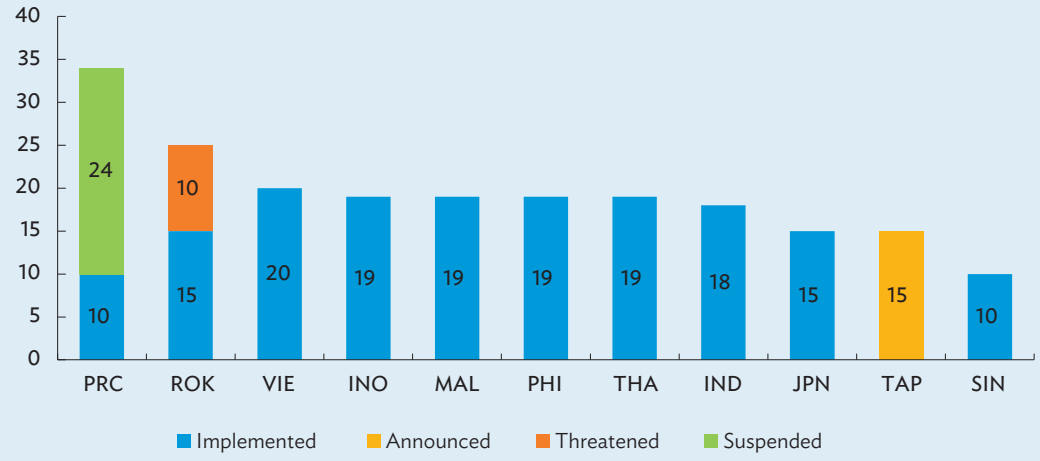
Despite heightened uncertainty in the first half of 2025, Asian economies continued to show notable trade resilience, even as shifting US tariff measures in 2025 added another layer of policy-driven volatility (Box 2.1). Most major Asian economies faced uneven reciprocal tariffs ranging from 10% to 34%, with Japan and the Republic of Korea securing lower 15% rates through investment commitments and the PRC a delayed 34% rate. These measures targeted key industrial inputs—especially metals—which raised production costs while extending risks to pharmaceuticals and semiconductors. Asian economies nonetheless showed strong export resilience, largely by increasing shipments within Asia and to other regions. This redirection helped many economies, led by Taipei,China, maintain solid export growth despite softer US demand. Although some East Asian economies saw exports to the US decline, front-loading ahead of the August tariff hikes temporarily boosted early-year shipments, supporting overall momentum through market diversification and flexible supply-chain adjustments.

Box 2.1: Evolution of Asia's Trade Performances Post-United States Reciprocal Tariffs

Most major Asian economies faced United States (US) reciprocal tariffs implemented in August 2025. Box figure 1 highlights the wide variation in US tariffs applied to Asian economies in 2025, spanning from 10% to 34%. Both Japan and the Republic of Korea secured relatively lower tariffs of 15% on selected products, but this came at the cost of committing billions of dollars in US investments. Meanwhile, the People's Republic of China (PRC) faces the steepest proposed tariff of 34%, which remains under review.

Sector-based US tariffs sharply targeted critical industrial inputs, with aluminum, steel, and copper among the hardest hit at 50% ad valorem rates. These measures, aimed at protecting domestic manufacturing, may have already raised costs for inputs in key sectors such as automotive and heavy machinery. At the same time, the possibility of tariffs on pharmaceuticals and semiconductor products still lingers. The box table highlights the breadth of tariff coverage—from metals and vehicles to wood products.

1: United States Tariffs on Selected Asian Economies as of February 2026, Ad Valorem Rates *(%)*



PRC = People's Republic of China; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; MAL = Malaysia; PHI = Philippines; SIN = Singapore; TAP = Taipei,China; THA = Thailand; US = United States; VIE = Viet Nam.

Notes: Implementation of the 34% tariff on the PRC was suspended, only 10% is currently implemented. US tariffs on Japan and ROK include 15% for all products with a Column 1 Duty Rate < 15%, while 0% for all products with a Column 1 Duty Rate ≥ 15%. The US recently threatened to increase the tariff on ROK from 15% to 25%.

Source: Lowell et al. 2025. Trump 2.0 Tariff Tracker. https://www.tradecomplianceresourcehub.com/2025/11/20/trump-2-0-tariff-tracker/ (accessed February 2026).

continued on next page

Box 2.1: continued

United States Reciprocal Tariffs Ad Valorem Rates on Selected Products Globally

Date	Products	Ad Valorem (%)	Status
18 Feb	Pharmaceuticals, pharmaceutical ingredients, and derivative products	100	Announced
12 Mar	Aluminum articles and derivative products	50	Implemented
12 Mar	Steel articles and derivative products	50	Implemented
3 Apr	Automobiles	25	Implemented
3 May	Automobile parts	25	Implemented
1 Aug	Copper	50	Implemented
6 Aug	Semiconductors and chips	100	Announced
14 Oct	Selected wood furniture products	25	Implemented
14 Oct	Softwood timber and lumber	10	Implemented
1 Nov	Medium- and heavy-duty vehicles and parts	25	Implemented
1 Nov	Buses	10	Implemented

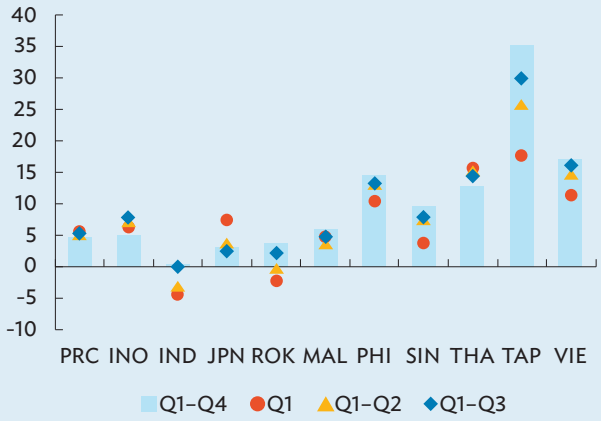
Source: Lowell et al. 2025. Trump 2.0 Tariff Tracker. https://www.tradecomplianceresourcehub.com/2025/11/20/trump-2-0-tariff-tracker/ (accessed December 2025).

Asian economies exhibited strong export resilience amid US tariff hikes, largely by increasing shipments within Asia and to other regions. US tariff hikes in 2025 compelled exporters to reassess their market strategies, weighing options between absorbing higher costs, diversifying markets, or leveraging tariff-exempt routes. In response, economies considered three main strategies: (i) continuing exports to the US despite tariffs, (ii) redirecting trade toward other economies or regions, and (iii) using tariff-exempt economies such as Canada and Mexico as intermediary destinations through the United States–Mexico–Canada Agreement.

Despite the tariffs, most major Asian economies still recorded positive overall export growth rates in 2025 (box figure 2). Taipei,China recorded the strongest performance with total exports rising 35% year-on-year, followed by Viet Nam (17%), the Philippines (15%), and Thailand (13%). The Republic of Korea started with negative export growth rates in the first quarter but cumulative growth rates gradually increased, particularly in the latter half of 2025. Similar upward quarterly momentum was observed in Taipei,China and across most Southeast Asian economies.

Exports to the US declined for a few Asian economies in 2025, but remained positive for most others (box figure 3). The decline was concentrated in East Asia, with the PRC posting a 20% contraction, Japan declining by 3%, and the Republic of Korea falling by 4%. For the PRC, falling exports to the US was driven mainly by reduced shipments of computers, phones, and other electronics, while declines for Japan and the Republic of Korea resulted mostly from weaker automobile exports. In contrast, Taipei,China was the only East Asian economy to record positive—and indeed the highest—export growth to the US, expanding by 78% in 2025 on strong demand for computers and semiconductors. Most Southeast Asian economies also sustained robust export momentum to the US, largely supported by similar products.

2: Selected Asian Economies' Export Growth to the World (%, year-on-year)



PRC = People's Republic of China; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; MAL = Malaysia; PHI = Philippines; Q = quarter; SIN = Singapore; TAP = Taipei,China; THA = Thailand; VIE = Viet Nam.

Source: ADB calculations using data from CEIC Data Company (accessed January 2026).

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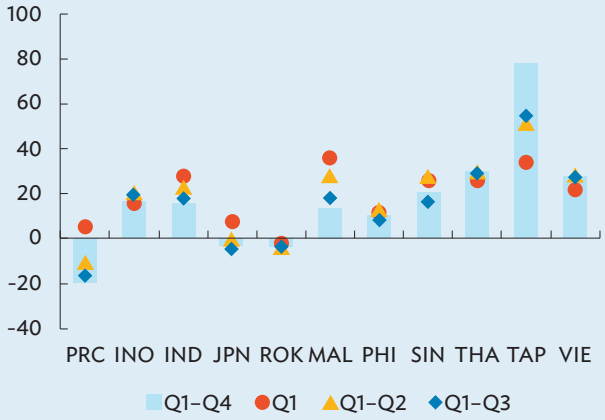
Box 2.1: continued

These patterns were further shaped by the timing of shipments. Ahead of the August 2025 tariff increases, US buyers appear to have front-loaded imports, as reflected in sharper export growth for several Asian economies in the first half of the year. As this front-loading subsided, export growth to the US generally eased in the second half, although it remained positive overall for many economies.

3: Selected Asian Economies' Export Growth to the United States (%, year-on-year)



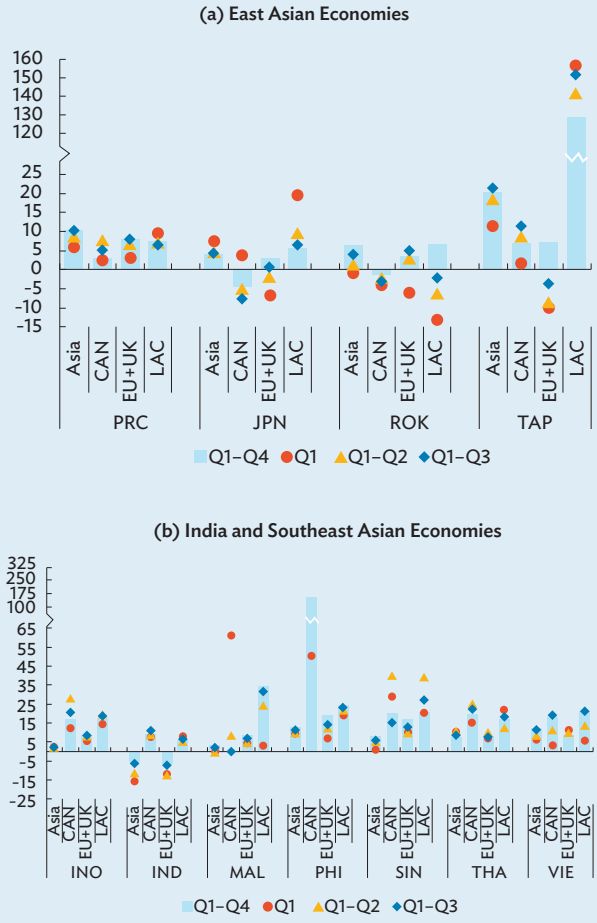
PRC = People's Republic of China; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; MAL = Malaysia; PHI = Philippines; Q = quarter; SIN = Singapore; TAP = Taipei,China; THA = Thailand; VIE = Viet Nam.

Source: ADB calculations using data from CEIC Data Company (accessed January 2026).

Asian exporters compensated for weaker US demand by redirecting shipments within Asia and to other global markets, maintaining the region's overall positive export performance. The PRC, for example, increased exports toward Asia, Canada, and the European Union plus the United Kingdom, posting mostly positive growth in these markets (box figure 4). Taipei,China not only achieved the strongest gains in exports to the US but its exports to Latin America and other Asian economies also expanded, driven by computers and semiconductors shipments. Several other Asian economies—including Japan, the Republic of Korea, Indonesia, Malaysia, Singapore, and Viet Nam—also recorded higher export growth to Latin America and other Asian economies compared to other regions. Meanwhile, the Philippines benefited mostly from stronger demand from Canada, particularly for integrated circuits.

Source: Asian Development Bank.

4: Selected Asian Economies' Export Growth to Other Regions (%, year-on-year)



CAN = Canada; PRC = People's Republic of China; EU = European Union; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; LAC = Latin America and the Caribbean; MAL = Malaysia; PHI = Philippines; Q = quarter; SIN = Singapore; TAP = Taipei,China; THA = Thailand; UK = United Kingdom; VIE = Viet Nam.

Notes: Asia includes the People's Republic of China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei,China; Thailand; and Viet Nam. These economies represent around 80% of Asia and the Pacific's total trade.

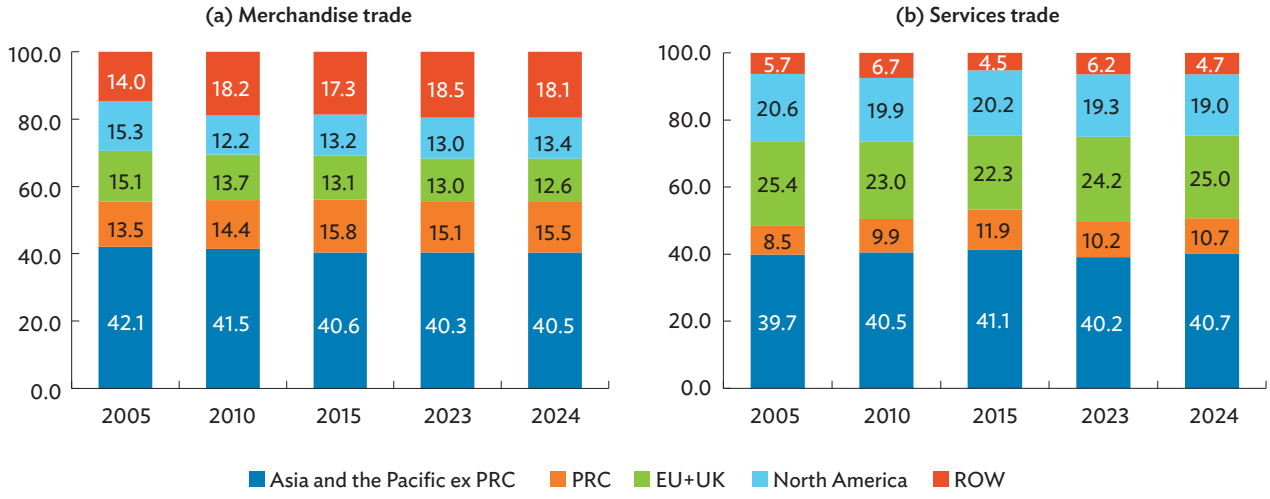
Source: ADB calculations using data from CEIC Data Company (accessed January 2026).

Trade Within Asia Continues to Dominate Moves Toward Economic Integration

Asia's trade has a strong regional component (Figure 2.5), and its evolution underscores the importance of intraregional linkages and the PRC's growing centrality in regional trade flows. In 2005, 55.6% of Asia's merchandise trade took place within Asia, with the PRC accounting for 13.5% of total merchandise trade. The intra-Asia share has remained relatively stable over time, with the share in 2024 at 55.9%. The major change, therefore, has been the increase in the share of total Asia merchandise trade accounted for by the PRC, which rose from 13.5% in 2005 to 15.5% in 2024, with the share of Japan falling from 9.3% to 4.7% over the same period. The other notable change in the structure of Asia's merchandise trade has been the reduction in the shares accounted for by the European Union plus the United Kingdom (EU+UK) (falling from 15.1% in 2005 to 12.6% in 2024) and North America (falling from 15.3% in 2005 to 13.4% in 2024), with an increased share of the rest of the world (notably Brazil, the Russian Federation, and the United Arab Emirates). While this may reflect policy changes and increasing geopolitical fragmentation, it may also reflect shifts in relative demand, with other regions growing relatively rapidly and accounting for a higher share of global demand. Moreover, in the first 4 months of 2025, trade shares within the region decreased as its shares with the EU+UK and North America increased.

A similar pattern of regional concentration is observed in services trade (Figure 2.5), with intra-Asian flows expanding modestly and the PRC playing an increasingly significant role. In 2005, intra-Asia services trade accounted for 48.3% of the total, with the PRC accounting for 8.5% of the total. In 2024, the share of intra-Asia services trade had risen to 51.3%, with the PRC accounting for 10.7% of the total. While shares of the EU+UK (falling from 25.4% to 25.0% between 2005 and 2024) and North America (falling from 20.6% to 19.0% between 2005 and 2024) did decline, these reductions were relatively small. Moreover, there was little change in the contribution of the rest of the world to Asia's services trade.

Figure 2.5: Geographic Structure of Trade in Asia and the Pacific *(%)*



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

Notes: Values expressed as percentage of the region's total trade value (sum of exports and imports). North America covers Canada, Mexico, and the United States.

Sources: ADB calculations using data from International Monetary Fund. Direction of Trade Statistics. https://data.imf.org/dot; and Organisation for Economic Co-operation and Development (OECD). OECD–World Trade Organization Balanced Trade in Services—BPM6. https://www.wto.org/english/res_e/statis_e/trade_datasets_e.htm (both accessed January 2026).

While Asia Remains Deeply Integrated in International Production, Linkages Are Shifting

Considering patterns of GVC participation across regions and time, Figure 2.6 reports recent developments for backward, forward, and overall GVC participation rates. As reported in ADB (2024), backward GVC participation rates in Asia are above the rates for forward participation, emphasizing the region's role in downstream production activities. Backward participation rates in Asia expanded relatively rapidly immediately after the COVID-19 pandemic but have since stabilized. In contrast, forward participation rates have shown steady increases since the pandemic, with the gap between backward and forward participation rates thus falling in the most recent period.

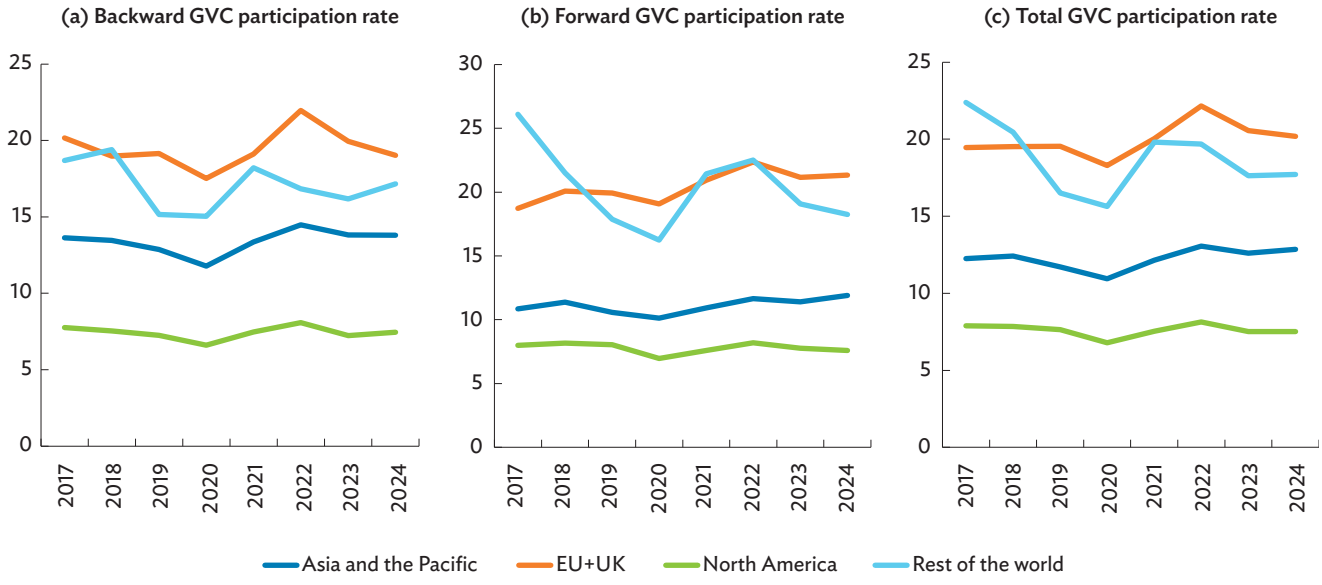
In comparison to other regions, Asia's GVC participation rates have been quite robust. Its overall participation rate has increased from 12.1% in 2021 to 12.8% in 2024 (0.7 percentage points). This increase has been driven largely through the increase in forward participation, with backward participation increasing only marginally.

In contrast, overall GVC participation rates have declined in the rest of the world (by 2.1 percentage points) and have been stagnant in both North America and the EU+UK.

Asia Is Moving from Downstream Production to Higher-Value, Upstream Activities

Traditionally, Asia has been considered to be involved in GVCs primarily through backward linkages, with downstream assembly activities an important component of its GVC integration. This can be seen in Figure 2.7, which reports the relative position of different regions in GVCs. Higher values of the positioning index are associated with relatively stronger backward linkages, with Asia reporting the largest value of this index over the entire period covered. While the positioning index is lower when the PRC is excluded, it remains larger than all other regions throughout the period. Over that time, however, evidence suggests that Asia's GVC positioning is moving more upstream, with relatively stronger forward relative to backward linkages, especially since

Figure 2.6: Overall, Backward, and Forward Global Value Chain Participation Rates *(%)*

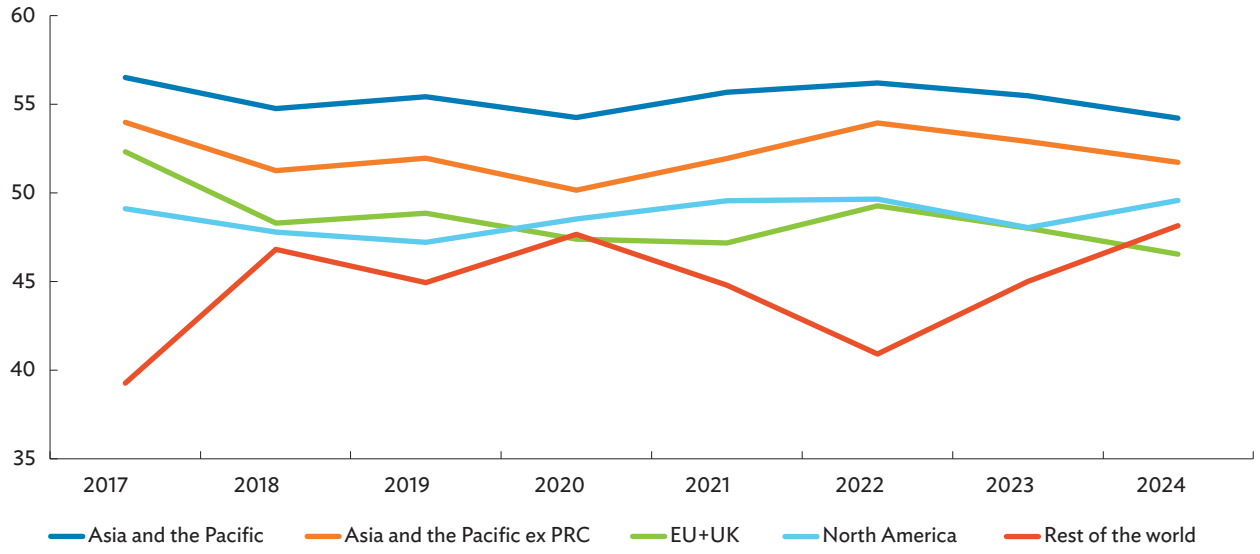


EU = European Union (27 members), GVC = global value chain, UK = United Kingdom.

Notes: Participation rates are calculated as the share of forward global value chain activity in total value-added in the case of forward linkages and as the share of backward global value chain activity in final production in the case of backward linkages. The total participation rate is calculated as the average of the forward and backward indicator.

Sources: ADB calculations using data from ADB Multiregional Input–Output Database; and methodology by Wang et al. (2017).

Figure 2.7: Global Value Chain Position Index



PRC = People's Republic of China, EU = European Union (27 members), GVC = global value chain, UK = United Kingdom.

Note: GVC position index is calculated as backward GVC activity divided by the sum of forward and backward GVC activities, then multiplied by 100.

Sources: ADB calculations using data from ADB Multiregional Input–Output Database; and methodology by Wang et al. (2017).

the end of the pandemic. In contrast, both the rest of the world and the EU+UK have shifted toward more downstream GVC integration in the most recent period.

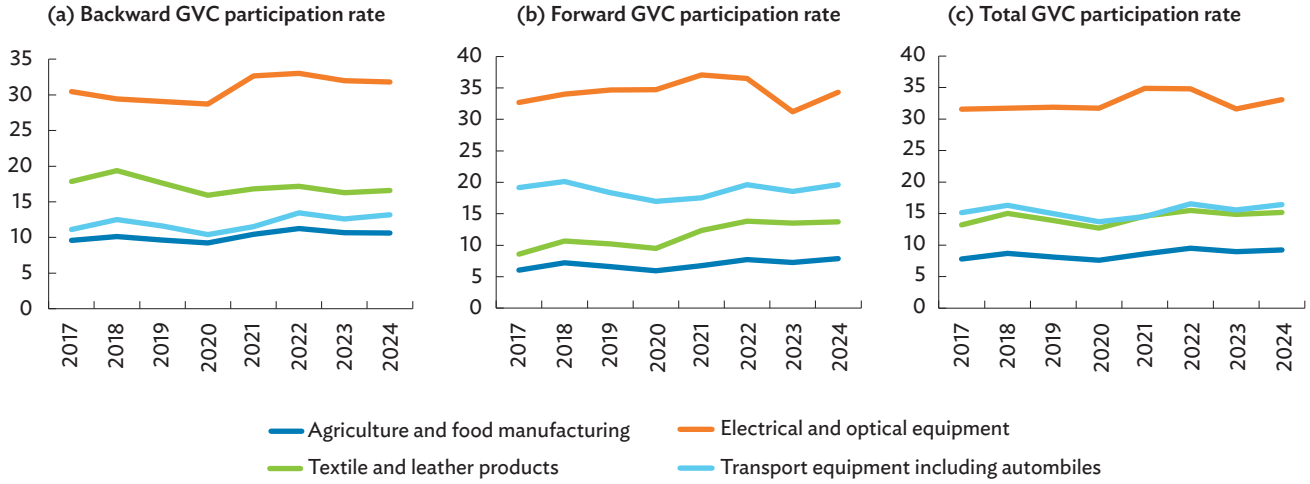
Sector GVC Trends Highlight Differences in Technological Sophistication

Sector trends in GVC participation reveal how Asia's production structure is evolving across industries with different levels of technological sophistication. Focusing on a set of traditional GVC sectors, Figure 2.8 provides additional insights into the dynamics of Asia's integration into GVCs. While backward GVC participation rates in the medium- and high-tech sectors—transport equipment and electrical and optical equipment—remain high relative to other traditional GVC sectors, they have stagnated in the most recent period. In contrast, backward participation in lower-tech sectors such as agriculture and food manufacturing and textiles and leather products has increased in recent years (though from a lower base). Forward participation rates in electrical and optical equipment and transport equipment are also high relative to other sectors. However, in most sectors except electrical and optical equipment, forward participation has risen, indicating a broader shift toward more upstream production across traditional GVC sectors.

Assessing Diversity in GVC Trade Helps Gauge Asia's Capacity for Resilient Integration

Figures 2.9 and 2.10 compare the diversification of Asia's GVC linkages with that of other regions over 2017–2024, distinguishing between forward and backward GVC participation. Figure 2.9 focuses on sector diversification, capturing how dispersed Asia's forward and backward GVC linkages are across industries. Figure 2.10 focuses on economy-level diversification, showing how widely economies source intermediate inputs from, or supply value-added to, different trading partners. Together, these figures indicate how concentrated or diversified Asia's GVC relationships have become—offering insights

Figure 2.8: Global Value Chain Participation Rates of Asia and the Pacific, by Selected Sectors (%)



GVC = global value chain.

Notes: Participation rates are calculated as the share of forward GVC activity in total value-added in the case of forward linkages and as the share of backward GVC activity in final production in the case of backward linkages. The total participation rate is calculated as the average of the forward and backward indicator.

Sources: ADB calculations using data from ADB. Multiregional Input–Output Database; and methodology by Wang et al. (2017).

into the region's vulnerability to partner or sector-specific shocks and its ability to adapt to structural changes in global production.

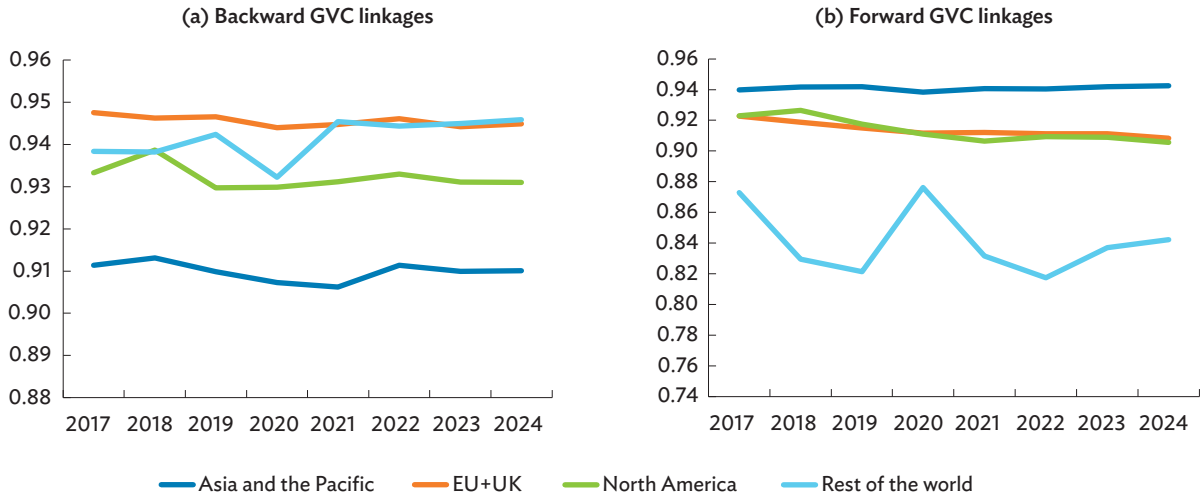
Sector diversification within Asia's global value chain participation reveals an important asymmetry between how the region sources inputs and how it contributes value-added to global production. In the case of sector diversification, there is a striking contrast between Asia's forward and backward GVC linkages (Figure 2.9). While Asia's backward GVC diversification—reflecting how widely economies source intermediate inputs across sectors—is the lowest among all regions throughout the period, its forward diversification—reflecting how broadly economies supply value-added to the exports of other economies—is the highest.

This asymmetry underscores Asia's distinctive position in global production networks: the region remains highly specialized in certain input-intensive manufacturing activities while playing an increasingly diverse role as a supplier of value-added to downstream industries globally. In practice, this means that while Asian firms rely heavily on a relatively narrow set of sectors for imported intermediates, their output feeds into a wide range of global industries, enhancing the region's systemic importance within GVCs. However, the relatively limited diversification on the input side also signals potential vulnerability—suggesting that supply disruptions concentrated in a few key sectors could reverberate widely through Asia's production networks. Strengthening diversification of the domestic supply base and promoting cross-sector innovation could therefore help bolster the region's resilience to such shocks.

Diversification Across Trade Partners Reveals Both GVC Progress and Structural Gaps

In the case of diversification across trade partners, Asia has experienced notable shifts since 2017. For backward GVC linkages, which capture how widely economies source intermediate inputs from abroad, diversification has increased steadily over 2017–2024, suggesting a gradual broadening of Asia's supplier base. Nevertheless, the region's diversification is not as pronounced as in the EU+UK and the rest of the world, indicating continued dependence on a relatively concentrated set of trading

Figure 2.9: Diversification Index of Global Value Chain Activity Across Sectors, by Region



EU = European Union (27 members), GVC = global value chain, UK = United Kingdom.

Note: The Diversification Index is constructed as the inverse Herfindahl–Hirschman Index using shares of sectors in regional backward and forward linkages.

Sources: ADB calculations using data from ADB. Multiregional Input–Output Database; and methodology by Wang et al. (2017).

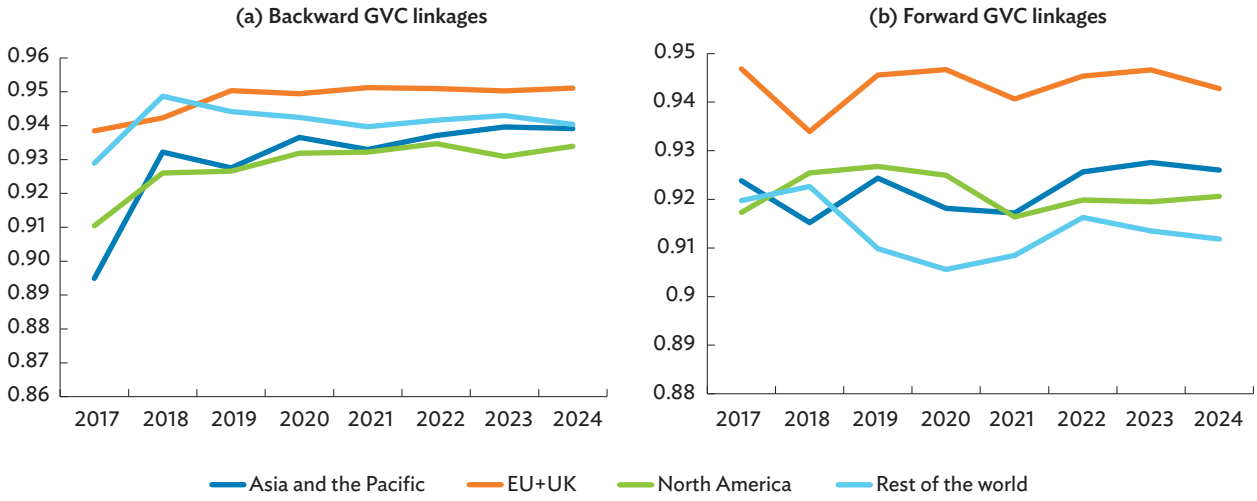
partners for inputs. For forward GVC linkages, which measure the dispersion of value-added supplied to other economies' exports, diversification has fluctuated over time but remains broadly unchanged from 2017. Despite this stability, Asia's forward diversification exceeds that of North America and the rest of the world, though it still trails behind the more diversified structures of the EU+UK. These patterns suggest that Asia's production networks have become somewhat more outward-looking and resilient, yet further progress in broadening trade relationships—particularly in upstream sectors—could strengthen the region's ability to absorb shocks and maintain its pivotal role in global production.

Regional Value Chain Analysis Reveals Asian Economies' Position in Production Networks

Regional value chains (RVCs) encompass production activities that occur primarily within a specific geographic region, rather than globally. By concentrating production within the region, economies can leverage regional linkages to enhance competitiveness, move into higher value-added activities, and capture greater benefits from economic upgrading. Rising prosperity within Asia amplifies the potential of RVCs to contribute to industrial and trade competitiveness. In addition, RVCs can help create more resilient supply chains by shortening production networks and reducing complexity, thereby mitigating exposure to global shocks and uncertainty.

To assess the relative role of regional versus global value chain integration, Figure 2.11 reports the initial (2017) share of overall GVC activity taking place entirely within Asia for each economy. Following ADB (2025), the analysis adopts a hypothetical extraction approach to capture the value-added trade that occurs purely within Asia, defining an RVC as production that is solely within the region. This method provides a clear perspective on the prominence of regional production networks and their contribution to trade and value chain dynamics.

Figure 2.10: Diversification Index of Global Value Chain Activity Across Economies, by Region



EU = European Union (27 members), GVC = global value chain, UK = United Kingdom.

Note: The Diversification Index is constructed as the inverse Herfindahl–Hirschman Index using shares of different economies in regional backward and forward linkages.

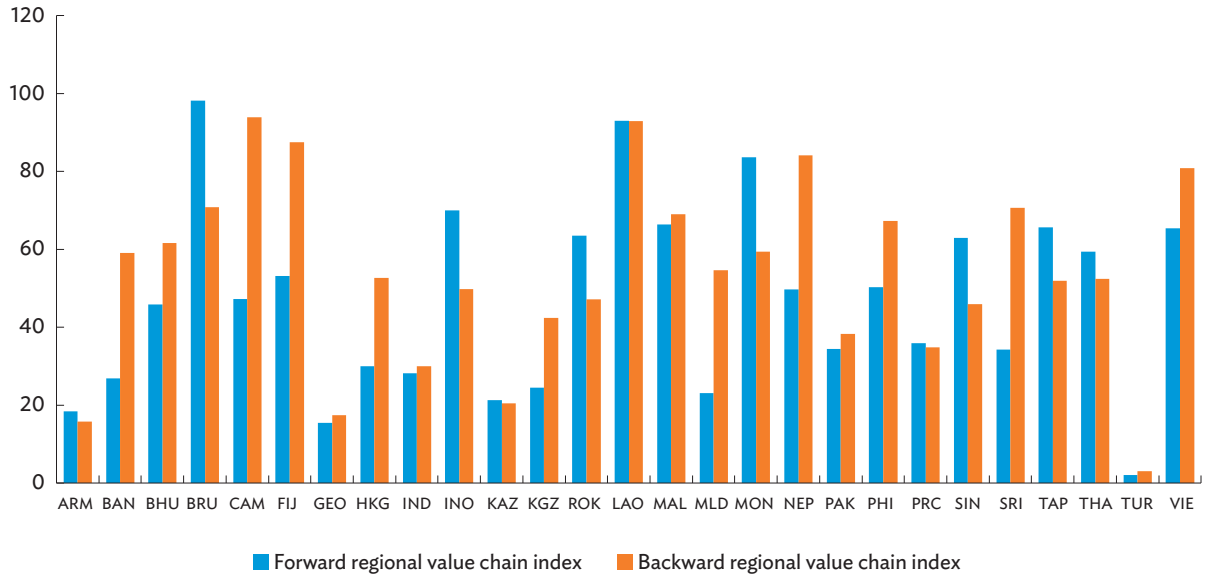
Sources: ADB calculations using data from ADB. Multiregional Input–Output Database; and methodology by Wang et al. (2017).

Integration Patterns Since 2017 Highlight Complexity Sparked by Global Trade Tensions

Figure 2.11 shows that economies such as Brunei Darussalam, the Lao People's Democratic Republic (Lao PDR), and Viet Nam exhibit relatively high shares of RVC activity in both forward and backward linkages. Several economies display asymmetries across dimensions: Cambodia, Fiji, and Nepal report higher RVC shares in backward GVC linkages, while Indonesia, Mongolia, and Singapore have relatively high forward RVC shares. A geographic pattern also emerges, with economies on the periphery of Asia and closer to the European Union—Armenia, Georgia, Kazakhstan, and Türkiye—tending to have lower RVC shares. These patterns suggest that geographic proximity, domestic industrial structure, and integration into global networks shape the extent of regional trade activity.

Figure 2.12 shows that most economies experienced increases in both forward and backward RVC shares over this period, including the PRC, which contrasts with long-term trends from 2000 to 2023 reported in ADB (2025). These patterns may reflect a combination of regional industrial upgrading and a response to geopolitical fragmentation and heightened trade tensions. Some economies increased their RVC share along only one dimension: Georgia, Malaysia, and Mongolia saw rises in forward linkages while backward shares declined, whereas the Kyrgyz Republic, Pakistan, the Philippines, Singapore, and Thailand increased backward RVC shares while forward shares fell. In contrast, Brunei Darussalam, Cambodia, Fiji, the Lao PDR, and Sri Lanka experienced reductions in both forward and backward RVC shares, potentially reflecting increased global integration or a shift of production toward the rest of the world. These diverse trajectories underscore that RVC development is shaped not only by domestic policies and capacities but also by external shocks, supply chain adjustments, and evolving global trade patterns.

Figure 2.11: Regional Value Chain Index by Economy, 2017 (%)



ARM = Armenia; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; CAM = Cambodia; PRC = People's Republic of China; FIJ = Fiji; GEO = Georgia; GVC = global value chain, HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; ROK = Republic of Korea; LAO = Lao People's Democratic Republic; MAL = Malaysia; MLD = Maldives; MON = Mongolia; NEP = Nepal; PAK = Pakistan; PHI = Philippines; RVC = regional value chain; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; THA = Thailand; TUR = Türkiye; and VIE = Viet Nam.

Notes: The RVC indicators are calculated using hypothetical extraction, wherein trade in value-added with no trade in intermediates between Asian economies is compared with the scenario allowing trade in intermediates between Asian economies. Participation rates are calculated as the share of forward GVC activity in total value-added in the case of forward linkages and as the share of backward GVC activity in final production in the case of backward linkages.

Sources: ADB calculations using data from ADB. Multiregional Input–Output Tables; and methodology by Los and Timmer (2018).

Uncertainty, Trade, and Global Value Chains

Broad and Tangible Effects Are Aparent Across Regions and Sectors

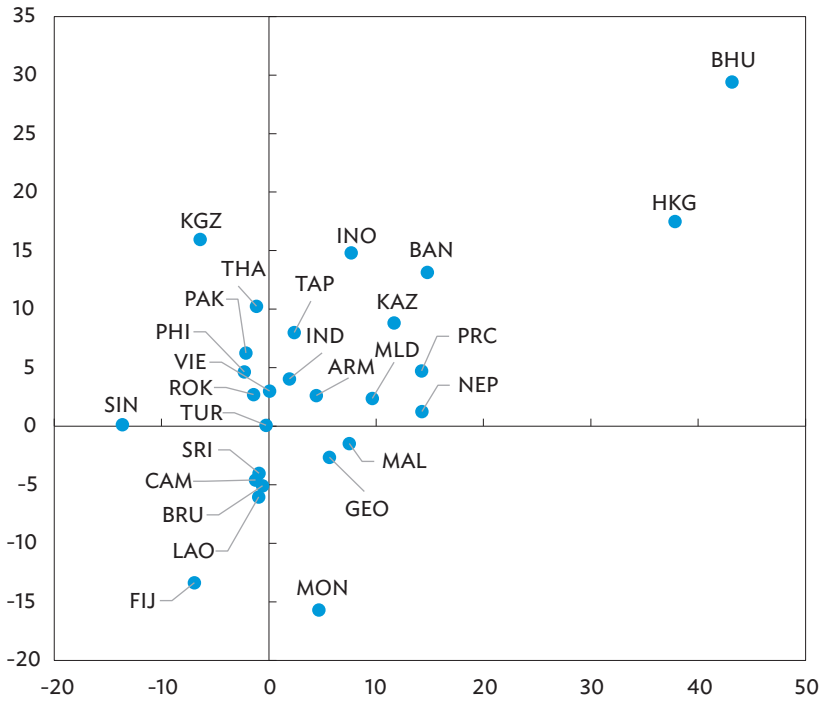
Rising economic and policy uncertainty can reduce trade volumes, delay investment decisions, and complicate supply chain planning. These effects are likely to be particularly pronounced in sectors closely linked to capital goods and intermediate inputs, where timing and predictability are critical, and in perishable goods industries, where even short disruptions can lead to losses. Firms embedded in GVCs often respond to heightened uncertainty by diversifying suppliers, reshoring production, or investing in digital and operational resilience—all of which can reshape established trade patterns and affect overall trade dynamics.

Using detailed trade data and GVC indicators, this section documents the relationship between economic uncertainty and trade performance globally and within Asia. The analysis identifies how trade flows vary in their responsiveness to uncertainty across sectors and economies, further examining whether regional integration has helped buffer some of these effects. It also points to a range of policy strategies that can enhance resilience, including improvements in trade facilitation, logistics infrastructure, and regional coordination mechanisms.

Multilateral Resistance Terms Measure the Sensitivity of Trade Costs

While much discussion around policy uncertainty focuses on its correlation with trade flows, a critical question is how uncertainty translates into actual trade frictions.

Figure 2.12: Change in Forward and Backward Regional Value Chain Integration by Economy, 2017–2024 (%)



ARM = Armenia; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; CAM = Cambodia; PRC = People's Republic of China; FIJ = Fiji; GEO = Georgia; HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; ROK = Republic of Korea; LAO = Lao People's Democratic Republic; MAL = Malaysia; MLD = Maldives; MON = Mongolia; NEP = Nepal; PAK = Pakistan; PHI = Philippines; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; THA = Thailand; TUR = Türkiye; and VIE = Viet Nam.

Notes: The regional value chain indicators are calculated using hypothetical extraction, wherein trade in value-added with no trade in intermediates between Asian economies is compared with the scenario allowing trade in intermediates between Asian economies. Participation rates are calculated as the share of forward global value chain (GVC) activity in total value-added in the case of forward linkages and as the share of backward GVC activity in final production in the case of backward linkages.

Sources: ADB calculations using data from ADB. Multiregional Input–Output Tables; and methodology by Los and Timmer (2018).

In theory, uncertainty can raise the costs of exporting and importing, delay investments in trade-related infrastructure, and discourage firms from entering foreign markets. These effects are, however, difficult to measure directly without a structural framework.

To address this, this section estimates outward and inward multilateral resistance terms derived from the gravity model of trade (Box 2.2). Outward resistance captures the average difficulty an economy faces in accessing foreign markets, while inward resistance reflects the challenges of sourcing goods from abroad. By examining how these estimated terms co-move with indicators of trade policy uncertainty, we can assess whether higher uncertainty systematically raises trade costs and generates broader frictions in the global economy.

Examining multilateral resistance reveals deeper structural effects beyond bilateral trade slowdowns. This approach is especially valuable amid rising geopolitical and policy volatility. Traditional gravity models of trade often include multilateral resistance terms as fixed controls, but in reality, these terms evolve over time, reflecting shifts in risk perceptions, global trade policy, and macroeconomic shocks. If uncertainty increases multilateral resistance, it implies that its effects are not limited to short-term trade slowdowns but operate through deeper structural channels that influence economy-wide trade costs.

Focusing on multilateral resistance also allows for capturing the broader impact of uncertainty on firms integrated into complex GVCs, where changes in one

market's risk profile can ripple through global supply chains. This framework further enables comparisons across groups of economies—such as Asia versus the rest of the world—highlighting how institutional frameworks, regional integration, and exposure to global uncertainty shocks shape trade resilience.

Box 2.2: The Gravity Model and the Impact of Trade Policy Uncertainty

The gravity model of international trade is grounded in the analogy to Newton's law of gravity, which posits that the gravitational force between two objects is directly proportional to their masses and inversely proportional to the square of the distance between them. In the trade context, the model suggests that the volume of trade between two economies is positively related to their size—often proxied by gross domestic product (GDP)—and negatively related to the geographic distance between them. The larger the economies, the greater their capacity to produce and consume goods; the farther apart they are, the higher the costs of trade, including transportation and information costs.

The theoretical foundations of the gravity model have evolved over time. Initially, the model was empirical and atheoretical, used simply because it fit the data well. However, later developments in trade theory laid the microeconomic foundations for the gravity structure. In particular, models based on monopolistic competition (e.g., Krugman 1980) and models incorporating firm heterogeneity (e.g., Melitz 2003) derived the gravity equation from first principles. These models show that when economies trade differentiated products and face trade costs, the gravity equation naturally emerges as an equilibrium outcome of firms' and consumers' optimizing behavior.

Further theoretical support comes from the Armington assumption, which treats products as differentiated by economy of origin. In models with constant elasticity of substitution preferences and iceberg trade costs, the gravity equation describes bilateral trade flows as a function of exporter and importer GDP, trade costs (often proxied by distance or tariffs), and multilateral resistance terms. These multilateral resistance terms, introduced formally by Anderson and van Wincoop (2003), reflect how trade between two economies is affected not just by their bilateral trade barriers but by their trade relationships with all other economies.

While there are several channels through which uncertainty might affect trade flows, the approach in this chapter follows the recent approach of Matzner, Meyer, and Oberhofer (2023) who follow Anderson and van Wincoop (2003) in expressing bilateral trade flows (X) between exporter i and importer j as:

$$X_{ij} = \frac{Y_i E_j}{Y}\left(\frac{t_{ij}}{\Pi_i P_j}\right)^{1-\sigma}$$

The first term on the right-hand side of this equation relates to the size of the two economies, with Y_i representing the production of exporter i and E_j representing the production of the importer j (and with the product of these two being normalized by global production). The second term on the right-hand side accounts for trade costs and includes bilateral trade costs (t_{ij}) and both the outward (i.e., exporter) and inward (i.e., importer) multilateral resistance terms, Π_i and P_j. The term σ represents the elasticity of substitution between goods from different economies. The multilateral resistance terms capture trade costs with all trade partners and are the solution to the system of trade equations for all potential trade partners:

$$\Pi_i^{1-\sigma} = \sum_j \left(\frac{t_{ij}}{P_j}\right)^{1-\sigma}\frac{E_j}{Y}$$

$$P_j^{1-\sigma} = \sum_j \left(\frac{t_{ij}}{\Pi_i}\right)^{1-\sigma}\frac{Y_i}{Y}$$

The outward and inward multilateral resistance terms are interpreted as average trade barriers, since they measure trade costs relative to the origin and destination price indices.

Following Matzner, Meyer, and Oberhofer (2023), and as suggested by Head and Mayer (2014) and Kinzius, Sandkamp, and Yalcin (2019), the approach adopted in this report involves focusing on the impact of uncertainty on the outward and inward multilateral resistance terms—i.e., the average trade barriers of the exporter and importer. This is justified since uncertainty is economy (and time) specific. The approach proceeds in two steps. First, using trade data (including internal trade) from the Asian Development Bank's multiregion input–output tables, the following gravity model is estimated using the pseudo-Poisson maximum likelihood estimation:

$$X_{ij} = \exp\left(\lambda_{it} + \psi_{jt} + \mu_{ij} + w_{ijt}\alpha\right) + v_{ijt}$$

Where λ_{it} are exporter-time fixed effects, ψ_{jt} are importer-time fixed effects, μ_{ij} are economy-pair fixed effects, w_{ijt} are bilateral time-varying variables (and include a dummy variable for the presence of a preferential trade agreement and time-varying border indicators), α refer to parameters associated with the bilateral time-varying variables, and v_{ijt} is an error term.

continued on next page

Box 2.2: continued

The second step involves regressing the log of the estimated multilateral resistance terms on the log of the indicator of policy uncertainty, economy-specific control variables (log of GDP and log of population) (C), and both economy (γ_i) and time (ω_t) fixed effects.

$$\ln \hat{\lambda}_{it} = \alpha_1 + \delta_1 \ln TPU_{it} + C_{it}\beta_1 + \gamma_i + \omega_t + \varphi_{it}$$
$$\ln \hat{\psi}_{jt} = \alpha_2 + \delta_2 \ln TPU_{jt} + C_{jt}\beta_2 + \gamma_j + \omega_t + \eta_{it}$$

With φ_{it} and η_{it} being error terms (including any error introduced from the estimation of the importer-time and exporter-time fixed effects). The multilateral resistance terms are constructed by normalizing the inward multilateral resistance term for the United States to be one.

In additional analysis, the share of an economy's exports or imports that take place within a preferential trade agreement is further introduced into the model, with the interaction between this variable and the trade policy uncertainty index capturing the possibility that the effects of trade policy uncertainty on trade costs may be mitigated if more of an economy's trade occurs under the certainty of trade agreements.

Source: ADB.

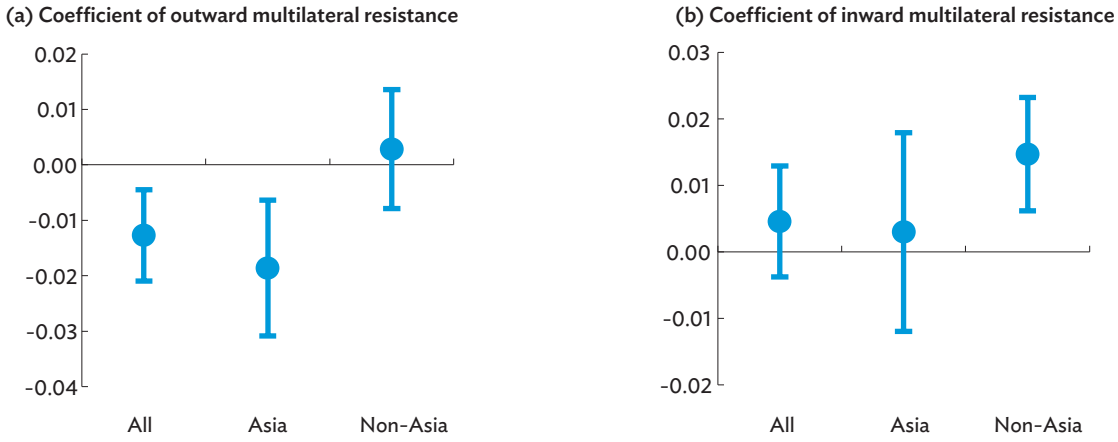
Exporter Uncertainty Raises Trade Costs and Reduces Exports

Using ADB's multiregion input–output tables and the approach described in Box 2.2, Figure 2.13 presents the estimated effect of policy uncertainty on both outward and inward multilateral resistances. The outward multilateral resistance term captures the average trade costs faced by exporters. The results on the outward multilateral resistance term shows that a 10% increase in policy uncertainty in the exporting economy lowers exports by 0.13%. In other words, higher domestic uncertainty is associated with increased exporter trade costs, effectively making the exporting economy appear more "remote" in global trade. When the sample is split into Asia and the rest of the world, the effect is larger for Asia: A 10% increase in exporter uncertainty reduces exports by 0.19%. For the rest of the world, the estimated effect is not statistically significant, with a 10% increase in uncertainty associated with a negligible 0.02% increase in exports. These results suggest that exporters respond primarily to uncertainty originating in their own domestic policy environment, and that developing economies in Asia are particularly sensitive.

Importer Uncertainty Has Limited or Mixed Effects on Imports

Figure 2.13 also reports the effects of increased importer uncertainty on inward multilateral resistance, reflecting average trade costs faced by importers. Across the full sample, the relationship between importer uncertainty and imports is not statistically significant, with a 10% increase in uncertainty associated with a small positive effect of 0.04% on imports. This pattern aligns with the findings of Matzner, Meyer, and Oberhofer (2023), who suggest two possible explanations. First, inward multilateral resistance can be interpreted as a price index; higher uncertainty may raise domestic prices relative to trading partners, increasing demand for imported goods. Second, heightened uncertainty may disrupt domestic production, prompting substitution toward foreign products. When examining Asia and the rest of the world separately, the effects remain positive in both cases, though only statistically significant for the rest of the world.

Figure 2.13: Estimated Impact of Policy Uncertainty on Multilateral Resistance



Asia = Asia and the Pacific.

Note: The figure reports the estimated responsiveness of either exports or imports to a 1 percentage increase in policy uncertainty (the dot), along with the 95% confidence interval of that estimate (the whiskers).

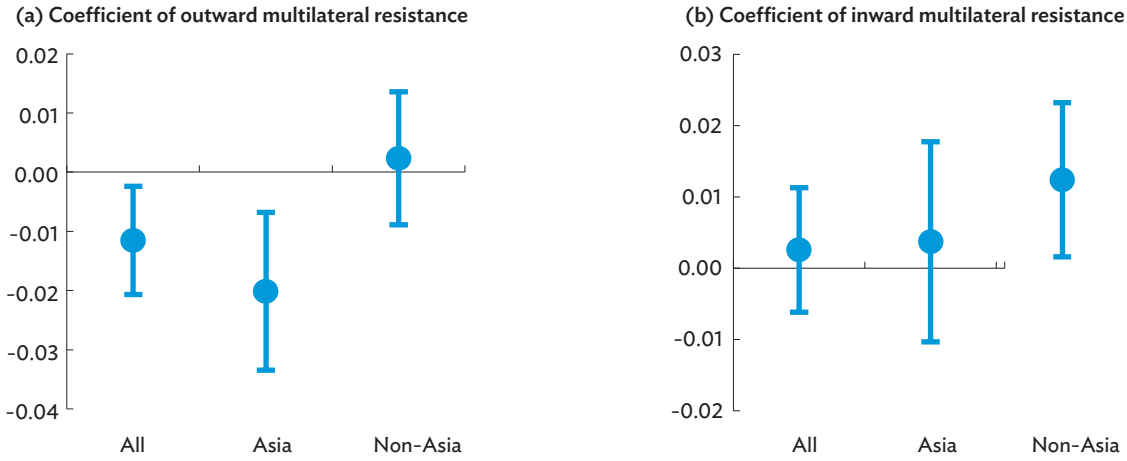
Source: ADB calculations.

How GVCs Transmit Shocks to Production Networks Varies by the Type of Trade

Extending the analysis to value-added trade reveals that the adverse effects of policy uncertainty are concentrated in Asia's forward GVC linkages. Moving beyond gross trade flows, Figure 2.14 reports similar results when estimating the gravity model on value-added trade flows, with forward GVC linkages being analogous to exports and backward GVC linkages being analogous to backward GVC linkages. Results are largely similar to results using gross trade flows, with no significant impact of policy uncertainty on backward GVC linkages but a negative impact of uncertainty on forward GVC linkages, with these effects being limited to Asia.

Disentangling the effects of uncertainty on different types of trade provides important insights into how global value chains transmit shocks through production networks. Figure 2.15 distinguishes between exports of intermediate and final goods to assess whether policy uncertainty affects different stages of production in similar ways. This distinction is especially relevant in the context of GVCs, where intermediate goods trade reflects the dense web of cross-border production linkages that underpin modern manufacturing. The results show that policy uncertainty exerts a negative influence on both intermediate and final goods exports, though the effect is somewhat smaller for intermediate goods—suggesting that established supply relationships may offer a partial buffer against uncertainty. Once again, these effects are statistically significant for Asia, while the rest of the world shows either insignificant or slightly positive effects, underscoring Asia's particular sensitivity to shifts in the global policy environment.

Figure 2.14: Estimated Impact of Uncertainty on Value-Added Trade (coefficient)

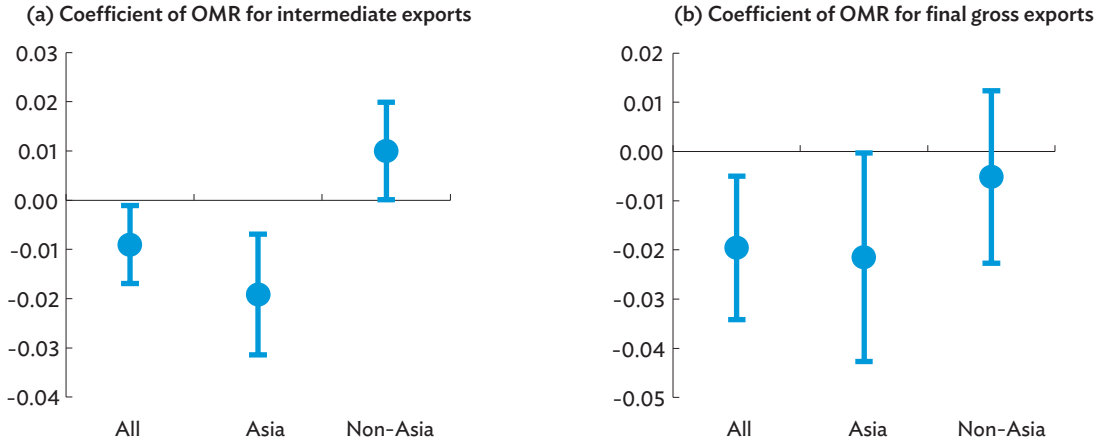


Asia = Asia and the Pacific.

Note: The figure reports the estimated responsiveness of either forward or backward global value chain linkages to a 1 percentage increase in policy uncertainty (the dot), along with the 95% confidence interval of that estimate (the whiskers).

Source: ADB calculations.

Figure 2.15: Estimated Impact of Exporter Trade Policy Uncertainty on Outward Multilateral Resistance for Intermediate and Final Gross Exports (coefficient)



Asia = Asia and the Pacific, OMR = outward multilateral resistance.

Note: The figure reports the estimated responsiveness of either intermediate or final goods exports to a 1 percentage increase in policy uncertainty (the dot), along with the 95% confidence interval of that estimate (the whiskers).

Source: ADB calculations.

Mitigating the Effects of Policy Uncertainty on Trade

Mechanisms Are Needed to Strengthen Resilience and Reduce Exposure

The analysis reported in this chapter suggests that periods of heightened policy uncertainty can dampen trade activity by raising risks and reducing the predictability of cross-border transactions. When firms face uncertainty about future market access, tariffs, or regulatory regimes, they may delay investment and scale back export commitments—effects that can accumulate to slow trade growth. These risks are particularly acute when economies' exports are concentrated in a limited set of products or destinations, or when trade relies heavily on partners with volatile policy environments. Two policy avenues can help mitigate these effects. First, greater diversification—across products, sectors, or trading partners—can reduce exposure to economy or sector-specific shocks and make export performance more resilient to swings in domestic policy uncertainty. Second, deepening engagement in trade agreements can provide institutional stability and predictable market access, which partially insulates firms from policy-driven uncertainty. Strengthening both diversification strategies and rule-based trade integration may thus represent a pragmatic policy response to growing uncertainty in the global trading environment.

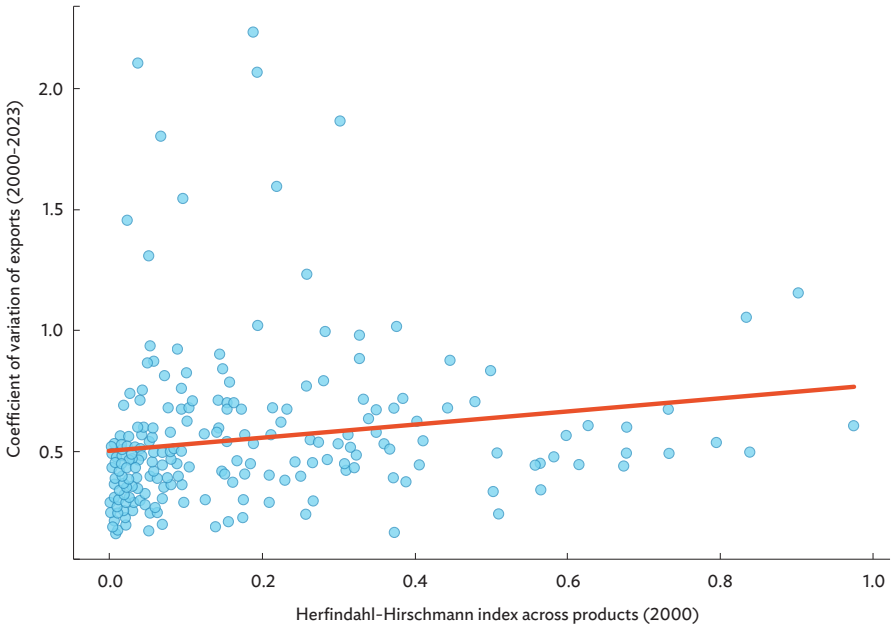
Rising domestic policy uncertainty can dampen export performance by increasing the risks and costs faced by firms when entering and maintaining foreign markets. The results presented above are largely consistent with recent findings (e.g., Matzner, Meyer, and Oberhofer 2023) and indicate that higher domestic policy uncertainty is associated with lower exports. This suggests that exporters respond primarily to uncertainty stemming from their own institutional and policy environment. Elevated domestic uncertainty raises perceived risks and the fixed costs of entering and maintaining foreign markets, discouraging firms from committing resources to export activity (Constantinescu, Ruta, and Mattoo 2019; Handley and Limão 2015). In an environment of rising and more volatile policy uncertainty, economies that rely heavily on a narrow set of export products or markets are particularly exposed.

Trade Diversification Is an Important Buffer

Diversification—across products, markets, and regions—can offer protection against the trade-suppressing effects of policy uncertainty. Diversifying export destinations and product lines can therefore serve as a form of insurance—helping to stabilize export revenues and reduce exposure to domestic shocks that inhibit exports. Indeed, descriptive evidence suggests that economies that are more specialized across both products and partners have more volatile export flows. This can be seen in Figures 2.16 and 2.17. Figure 2.16 reports a scatterplot of the 2000 level of export product concentration, calculated using the Herfindahl–Hirschmann Index, against an indicator of the volatility of export values over 2000 to 2023. The figure reveals a positive association between these two variables, indicating that economies with an initially more concentrated export structure tend to have higher levels of export volatility. Figure 2.17 reports a similar set of results but rather than focusing on the concentration of exports by products, it considers concentration by trade partner. Despite this difference, the pattern of results remains, with those economies that are more specialized in terms of trade partners in 2000 tending to report subsequently higher levels of export volatility.

Taken together, the observed rise in the level and volatility of policy uncertainty, coupled with its negative effect on trade, underscores the importance of diversification as a policy response. Efforts to broaden export bases—across products, markets, and regions—can mitigate the trade-suppressing effects of uncertainty and strengthen resilience in an increasingly unstable global environment.

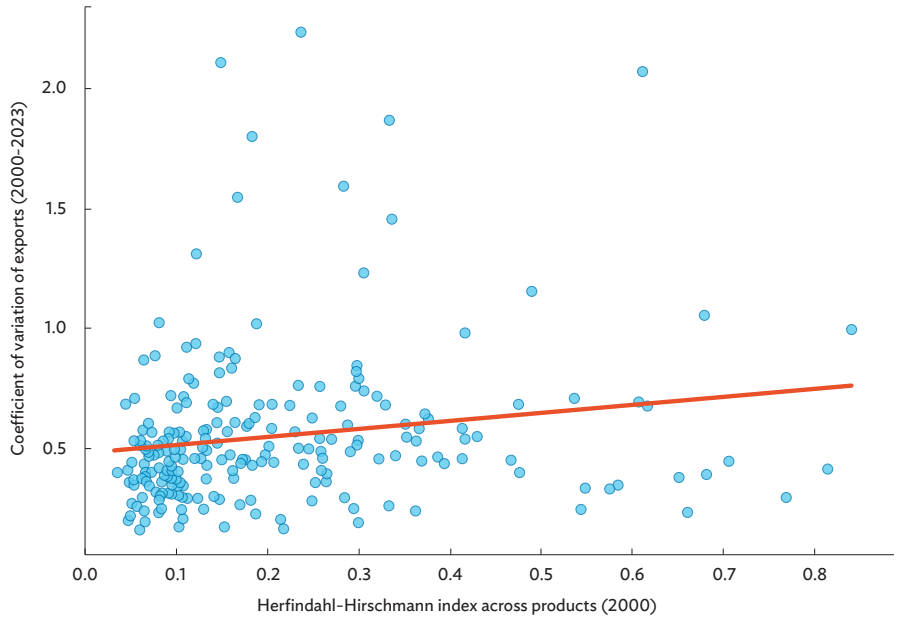
Figure 2.16: Relationship Between Initial Concentration of Exported Products and Subsequent Export Volatility



Notes: The figure includes all economies reported in the BACI database for which data are available. Concentration across products in 2000 is measured using the Herfindahl-Hirschmann index while the coefficient of variation ($CV = \frac{sd}{mean}$) is used to measure the volatility of export values over the period 2000–2023, with *mean* being the average value of exports over the period 2000–2023 for each economy and *sd* being the standard deviation of export values around that mean.

Source: ADB calculations using data from Centre d'Études Prospectives et d'Informations Internationales (CEPII). Base pour l'Analyse du Commerce International (BACI) Database. https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37 (accessed August 2025).

Figure 2.17: Relationship Between Initial Concentration of Exports by Partner and Subsequent Export Volatility



Note: The figure includes all economies reported in the BACI database for which data are available. Concentration across partners in 2000 is measured using the Herfindahl-Hirschmann index while the coefficient of variation ($CV = \frac{sd}{mean}$) is used to measure the volatility of export values over the period 2000–2023, with *mean* being the average value of exports over the period 2000–2023 for each economy and *sd* being the standard deviation of export values around that mean.

Source: ADB calculations using data from Centre d'Études Prospectives et d'Informations Internationales (CEPII). Base pour l'Analyse du Commerce International (BACI) Database. https://www.cepii.fr/CEPII/en/bdd_modele/bdd_modele_item.asp?id=37 (accessed August 2025).

Trade Agreements

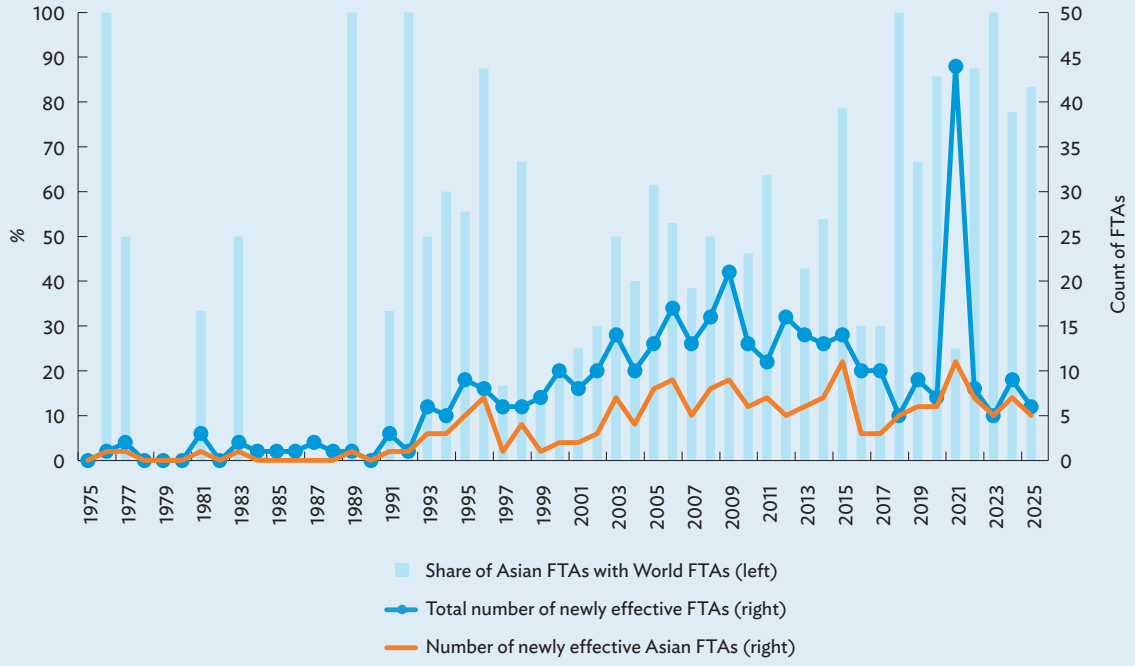
Preferential Deals May Shield Economies from Uncertainty

Periods of heightened policy uncertainty can increase the perceived risks and costs of exporting, discouraging firms from entering or maintaining foreign markets. These effects raise an important policy question: can institutional frameworks such as trade agreements help offset the negative impact of uncertainty on trade? Preferential trade agreements (PTAs) are designed to do just that—by embedding trade relationships within predictable, rules-based systems. Through tariff commitments, dispute settlement procedures, and clearer regulatory coordination, PTAs reduce the scope for sudden or arbitrary policy changes, giving firms greater confidence to trade and invest across borders. Despite rising geopolitical tensions, PTAs also remain an important avenue for Asian economies to integrate both regionally and globally (Box 2.3).

Box 2.3: Trade Policy Developments

Despite—or perhaps because of—growing geopolitical and trade tensions, Asian economies continue to deepen and diversify their network of trade agreements, both within and beyond the region, seeking not only to secure market access, but more importantly to anchor predictability in an increasingly uncertain global environment. Since late 2024, a further 13 agreements involving Asian economies have either been signed or entered into force. The majority of these have been signed with partners outside the region.

Newly Effective Free Trade Agreements—Asia and the Pacific



FTA = free trade agreement.

Notes: Trends for 1975–2023 derived using the World Trade Organization's Regional Trade Agreement Information System. The number of FTAs in 2024 is derived using the Asia Regional Integration Center FTA Database and various sources. The share of Asian FTAs is the ratio between the number of newly effective FTAs including at least one Asian economy and the total number of newly effective FTAs.

Sources: ADB calculations using data from ADB. Asia Regional Integration Center FTA Database. https://aric.adb.org/database/fta; and World Trade Organization. Regional Trade Agreement Information System. http://rtais.wto.org (both accessed January 2026).

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Box 2.3: continued

Within Asia, the trade agreement between Uzbekistan and Turkmenistan entered into force in early 2025, while Thailand concluded a new deal with Bhutan. Extraregionally, the United Kingdom joined the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP); Thailand signed a free trade agreement with the European Free Trade Association; India concluded a comprehensive economic partnership agreement (CEPA) with the United Kingdom; and Indonesia advanced CEPA negotiations with the European Union.

As highlighted in the *Asian Economic Integration Report 2025*, trade agreements can serve as a vital instrument to preserve open trade, sustain confidence, reduce policy uncertainty, and enhance resilience amid fragmentation. They do so by locking in market access commitments, anchoring investor expectations, and providing a transparent and rules-based environment that mitigates the costs of sudden policy shifts.

However, the stabilizing effects of trade agreements ultimately depend on credible implementation and complementary reforms that make commitments enforceable, accessible to firms, and coherent with trade facilitation and regulatory frameworks. These qualities are shaped from the outset—during the negotiation and drafting process, when clear, well-defined, and realistic commitments are critical to ensure that agreements can be implemented effectively. Looking ahead, the challenge will be to ensure that new agreements are negotiated and drafted in a transparent and predictable manner, remain inclusive of smaller firms and economies, and continue to deliver the predictability and resilience essential for sustaining Asia's trade-led growth in an uncertain global environment.

Name	Type	Status (Date)
Intraregional		
Uzbekistan–Turkmenistan FTA	FTA	In force (25 Feb 2025)
Thailand–Bhutan FTA	FTA	Signed (3 Apr 2025)
Extraregional		
Viet Nam–Israel FTA	FTA	In force (17 Nov 2024)
United Kingdom–CPTPP Accession	FTA	In force (15 Dec 2024; applies vis-à-vis Australia from 24 Dec 2024)
Thailand–European Free Trade Association (EFTA)	FTA	Signed (23 Jan 2025)
Singapore–Pacific Alliance FTA	FTA	In force (3 May 2025)
Eurasian Economic Union–[Islamic Rep. of] Iran FTA	FTA	In force (15 May 2025)
India–United Kingdom CEPA	CEPA	Signed (24 Jul 2025)
Indonesia–Peru CEPA	CEPA	Signed (11 Aug 2025)
New Zealand–United Arab Emirates	FTA	In force (28 Aug 2025)
Indonesia–European Union CEPA	CEPA	Signed (23 Sep 2025, planned)
Australia–United Arab Emirates	FTA	In force (1 Oct 2025)
India–EFTA, FTA	FTA	In force (1 Oct 2025)
India–Oman CEPA	CEPA	Signed (18 Dec 2025)

CEPA = comprehensive economic partnership agreement, FTA = free trade agreement.

Source: ADB compilation based on information available as of January 2026.

If trade agreements create a more stable and predictable trading environment, then economies that conduct a larger share of their trade within PTAs should be less exposed to the negative effects of policy uncertainty. In contrast, economies that depend heavily on nonpreferential trade or on partners outside formal institutional arrangements may remain vulnerable to shifts in domestic or global policy uncertainty. To assess

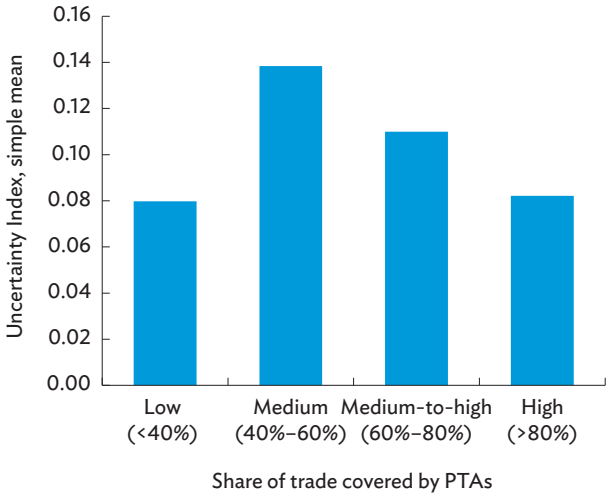
this possibility, the analysis proceeds to explore how the relationship between uncertainty and exports changes depending on the share of an economy's trade that takes place within trade agreements. Put simply, it asks whether trade conducted under the umbrella of PTAs is more resilient to uncertainty than trade conducted outside them.

Asian Economies with High PTA Coverage Are More Resilient

The average uncertainty index among Asian economies with high trade shares within PTAs in 2024 were relatively lower during the first 2 quarters of 2025 than in economies with lower shares of trade covered by PTAs (Figure 2.18). This contrast can be seen by the examples of Singapore and Australia with Türkiye and Sri Lanka. Singapore and Australia have trade shares covered by PTAs of 97% and 79%, and corresponding uncertainty scores of 0.06 and 0.02. In contrast, the share of trade covered by PTAs in Türkiye and Sri Lanka is lower at 53% and 44%, with corresponding uncertainty scores of 0.14 and 0.12. There are exceptions to this pattern, with low shares of trade within PTA for Turkmenistan (10%) and Kazakhstan (3%) being matched with low values of the uncertainty score—0.04 for Turkmenistan and 0.05 for Kazakhstan. Such outcomes may reflect the generally lower reliance on trade in these economies.

The impact of uncertainty on trade depends on the institutional environment in which firms operate. The adopted empirical approach can help capture how institutional structures can shape the response of trade to uncertainty. The impact of rising policy uncertainty is unlikely to be uniform across economies or over time. Instead, it depends on how much stability and predictability firms can rely on from the trading system itself. By conditioning the effects of uncertainty on PTA coverage, the analysis allows for a more nuanced understanding of how institutional depth and network ties can cushion economies from policy-driven disruptions. This is particularly relevant in today's environment, where global uncertainty remains high, but PTA membership and coverage continue to expand across regions.

Figure 2.18: Preferential Trade Agreement Coverage and Uncertainty—Asia and the Pacific



PTA = preferential trade agreement.

Notes: Based on World Uncertainty Index, which is dated first half of 2025 while PTA coverage are dated 2024; 32 Asian economies were included in the chart.

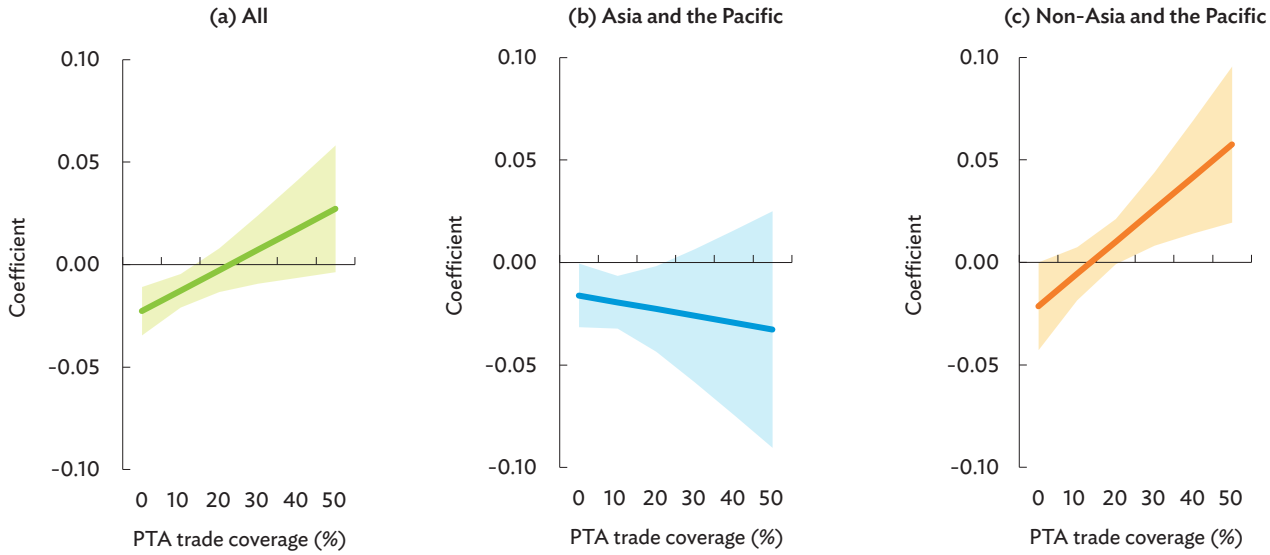
Sources: ADB calculations using data from Ahir, Bloom, and Furceri (2022); International Monetary Fund. Direction of Trade Statistics. https://data.imf.org/dot; and World Bank. Deep Trade Agreements Database. https://datatopics.worldbank.org/dta/table.html (all accessed September 2025).

Empirical Results Show How the Trade-Deal Cushion for Exports Varies by Region

For all economies included in ADB multiregion input–output tables, a 10% increase in policy uncertainty is associated with a 0.23% decline in exports for economies that have no exports taking place within trade agreements (Figure 2.19). As the share of exports conducted within trade agreements rises, however, this negative effect weakens. With 10% of exports under trade agreements, the impact of uncertainty declines to −0.13%, and with 20% of exports covered, it falls further to −0.03%. Beyond a share of about 23%, the effect becomes statistically insignificant.

In the rest of the world, the pattern is even stronger, with the negative effect of uncertainty disappearing at an export share of around 14% within trade agreements. In contrast, in Asia, the negative effect of uncertainty on exports persists, even as the share of trade conducted within agreements rises, although this effect becomes statistically insignificant at higher levels of PTA participation.

Figure 2.19: Marginal Effect of Policy Uncertainty on Exports at Varying Levels of PTA Trade Coverage



PTA = preferential trade agreement.

Note: The figure reports the estimated response of gross exports to a 1% increase in uncertainty for different values of the share of exports taking place within trade agreements.

Source: ADB calculations.

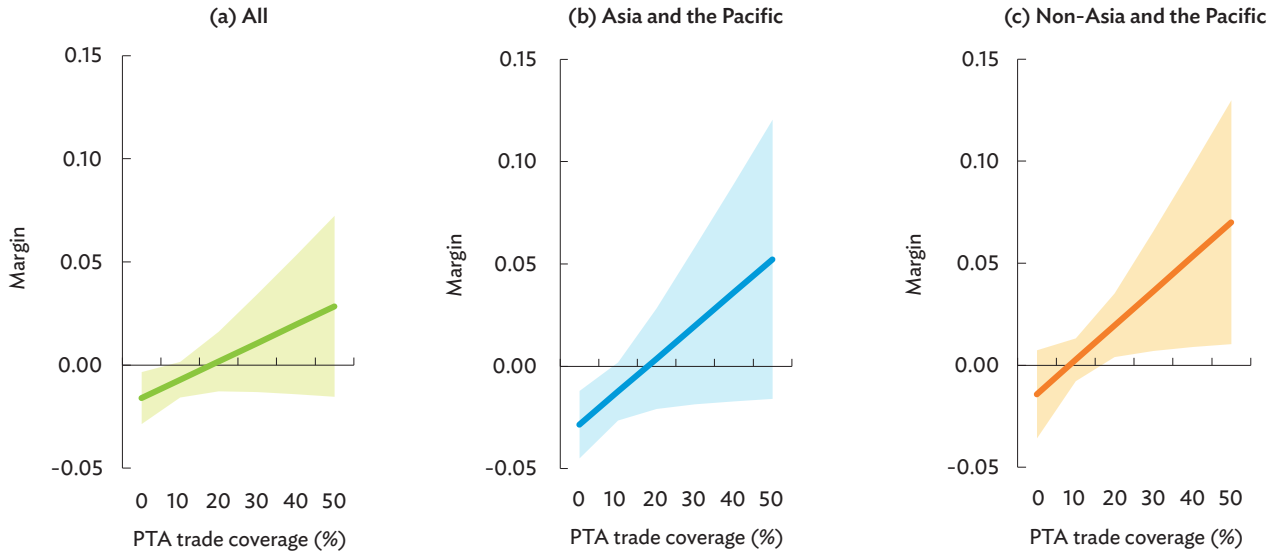
Trade agreements appear to play a crucial role in cushioning the impact of policy uncertainty on forward GVC linkages. In the case of value-added exports, a 10% increase in policy uncertainty is associated with a 0.16% reduction in forward GVC linkages for economies with no forward GVC trade taking place within trade agreements (Figure 2.20). However, this negative effect diminishes markedly as the share of GVC trade covered by trade agreements rises—falling to 0.07% when 10% of forward linkages occur within such agreements and turning positive once the share reaches 20%. The stabilizing influence of trade agreements is even more pronounced for Asia: for those with no forward GVC trade under agreements, the estimated effect of uncertainty is −0.29%, declining to −0.12% when 10% of forward linkages are covered. These results highlight how deeper regional and bilateral trade integration can mitigate the adverse effects of global policy uncertainty on value-added trade flows.

These results highlight the potential of trade agreements to buffer economies from policy uncertainty—but also reveal regional differences in their effectiveness. Taken together, the findings suggest that trade agreements can help insulate economies from the dampening effects of policy uncertainty on exports, but that this benefit depends on the depth and effectiveness of the agreements themselves. For many Asian economies, where trade agreements tend to be shallower or less comprehensive (ADB 2025), the stabilizing role of PTAs may still be limited. Strengthening the institutional quality and implementation of trade agreements could, therefore, represent an important policy lever for enhancing resilience in an era of heightened uncertainty.

Policy Responses to Evolving GVC Dynamics and Rising Uncertainty

Heightened policy uncertainty can suppress trade activity, particularly in economies with concentrated export structures. The analysis highlights several critical insights into how uncertainty affects trade performance and the mitigating role of PTAs. Higher policy uncertainty raises exporters' trade costs and suppresses export volumes, deterring firms from entering export markets, delaying investment, and increasing the perceived risks of

Figure 2.20: Marginal Effect of Policy Uncertainty on Value-Added Exports at Varying Levels of PTA Trade Coverage



PTA = preferential trade agreement.

Note: The figure reports the estimated response of value-added exports to a 1% increase in uncertainty for different values of the share of exports taking place within trade agreements.

Source: ADB calculations.

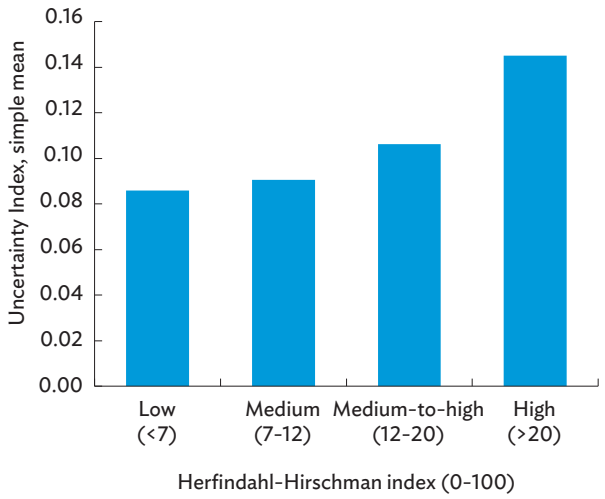
participation in global trade. These effects are particularly damaging for developing economies, where firms tend to be smaller, face financing constraints, and operate in less-diversified export markets. As shown in earlier results, economies that depend heavily on a narrow range of products or trading partners experience more volatile export flows—suggesting that diversification across both products and destinations provides insurance against domestic or global uncertainty.

Export Diversification

Diversification spreads risk and reduces exposure to domestic or partner-economy shocks. Broadening their range of exports allows economies to mitigate the effects of policy uncertainty through two main channels: by reducing the dependence of export revenues on a few sectors or destinations, and by broadening firms' adaptive capacity when uncertainty arises. Economies with more diversified export structures are better able to offset downturns in specific sectors or markets, stabilizing overall export performance and reducing the volatility of foreign exchange and fiscal revenues. This risk-spreading function becomes particularly important in times of heightened policy or geopolitical uncertainty, when demand conditions or regulatory environments can change abruptly. The empirical evidence presented earlier confirms that economies with higher export concentration tend to experience more volatile export growth, reinforcing the case for diversification as a key policy objective.

Indeed, Asian economies that showed greater diversification in their trade partners in 2024 reported lower values of uncertainty in the first 2 quarters of 2025. Figure 2.21 shows a positive association between the uncertainty index and an index of the concentration of trade across trade partners, the Herfindahl–Hirschmann Index. Economies with low concentration, such as the PRC (4 points in the index), tend to report relatively low uncertainty scores, with the PRC recording a WUI uncertainty score of 0.08 in early 2025. Meanwhile, those with higher concentration levels, such as Mongolia (39 points) and the Lao People's Democratic Republic (Lao PDR) (24 points), tend to have higher scores, with Mongolia and the Lao PDR both reporting WUI uncertainty scores of 0.13.

Figure 2.21: Trade Concentration and Uncertainty—Asia and the Pacific



Notes: The Herfindahl–Hirschman index (HHI) measures trade partner concentration. The World Uncertainty Index is used, with data from the first half of 2025, while for the HHI it is for 2024; 32 Asia and Pacific economies were included in the chart.

Sources: ADB calculations using data from Ahir, Bloom, and Furceri (2022); International Monetary Fund. Direction of Trade Statistics. https://data.imf.org/dot; and World Bank. Deep Trade Agreements Database. https://datatopics.worldbank.org/dta/table.html (all accessed September 2025).

Encourage diversification

Policies that promote diversification can make trade more resilient to uncertainty and sustain long-term competitiveness. Achieving diversification is not automatic—it requires deliberate, coordinated policy interventions. Industrial and trade policies can help firms expand into new markets and products by lowering barriers to entry, improving competitiveness, and facilitating access to information and finance. Export promotion agencies can play a key role by supporting market intelligence, certification, and marketing in underexplored destinations. Investment in logistics and trade facilitation—such as efficient customs procedures, transport connectivity, and digital trade infrastructure—can make it easier for firms to reach new markets, especially for small and medium-sized enterprises.

Support innovation

At the same time, industrial policies that encourage innovation and upgrading can help shift production toward higher value-added activities, thereby broadening the product base. Supporting participation in GVCs, through regional production networks or supply chain integration, can also foster diversification indirectly by connecting firms to new buyers and technologies. These policies are mutually reinforcing: economies that are more diversified are less exposed to uncertainty, while stable and predictable trade conditions encourage further diversification.

Trade Agreements

Trade agreements can create an institutional buffer that stabilizes trade amid rising uncertainty. Globally, economies with a larger share of trade conducted within trade agreements are found to experience weaker—or even absent—negative effects of uncertainty on exports. This pattern suggests that institutionalized trade relationships, through tariff commitments, dispute settlement mechanisms, and regulatory coordination, help reduce ambiguity about future trade conditions. By making trade rules more predictable, PTAs encourage firms to sustain and expand their international operations even in periods of heightened global risk. Figure 2.19 illustrated this relationship, showing that as the share of exports covered by PTAs increases, the adverse effect of uncertainty on exports declines and eventually disappears.

Structural impediments

Even with these potential advantages, the evidence suggests that the stabilizing role of trade agreements is weaker in Asia. Several structural and institutional characteristics of the region's PTA landscape may explain why. First, the depth of many Asian PTAs remains limited relative to those in Europe or the Americas, often focusing on tariff reductions while leaving services, investment protections, and regulatory cooperation underdeveloped. Second, the region's "noodle bowl"

of overlapping bilateral and subregional agreements increases complexity and compliance costs, diluting the stabilizing benefits that come from clear and coherent frameworks. Third, weak institutional enforcement and limited use of dispute resolution mechanisms can undermine the credibility of commitments, particularly during periods of economic or policy turbulence. Finally, if the benefits of PTAs are captured primarily by larger firms, small and medium-sized enterprises—which form the backbone of many Asian economies—may remain exposed to uncertainty even in PTA-covered markets.

Regional Cooperation and Integration

Regional cooperation and integration is central to policy responses that emerge from this analysis, including for increasing the effectiveness of trade agreements in mitigating the effects of uncertainty and the following recommended actions.

Strengthen trade agreements, support business resilience

Deepening and broadening PTA commitments—especially in services, investment, and digital trade—would enhance their credibility and reduce uncertainty about future market access. Consolidating and streamlining existing regional agreements or deepening engagement through frameworks such as the Regional Comprehensive Economic Partnership (RCEP) could reduce fragmentation and promote more predictable trade rules. Improving dispute resolution and enforcement mechanisms would also strengthen confidence in the stability of trade relationships, encouraging firms to make long-term investments. Strengthening negotiation capacity and legal drafting quality—to avoid ambiguous or conflicting provisions—can materially improve implementation ability and the certainty firms derive from agreements.

Promote complementary measures

Enhancing trade facilitation and customs transparency—through digitization, risk-based inspections, and greater predictability at the border—can shield exporters from policy volatility even when uncertainty is high. At the firm level, governments can help small and medium-sized enterprises manage risk through export finance, trade credit insurance, and information tools that reduce the costs of operating in uncertain environments. Coordinating trade policy with macroeconomic stability policies—such as exchange rate and fiscal management—can further reduce the volatility that amplifies trade uncertainty. Finally, improving transparency and communication around trade policy decisions, including stakeholder consultations, can prevent policy surprises and strengthen market confidence.

Deepen institutional engagement and coordination

Reducing the trade-suppressing effects of uncertainty will require progress in both respects. Trade uncertainty is not evenly distributed across regions or sectors, and Asia has experienced particularly high and volatile uncertainty in recent years. While PTAs have the potential to buffer against these effects, their effectiveness depends on their scope, credibility, and integration with broader institutional reforms. Policymakers should therefore focus not only on expanding the number of agreements, but also on improving their quality, simplifying their architecture, and strengthening enforcement. Enhanced regional coordination—especially in managing shared risks related to global shocks, supply chain disruptions, or climate events—would further reinforce trade stability. Taken together, these measures would help ensure that trade remains a reliable and resilient driver of growth in an increasingly uncertain global environment.

Asia's evolving position in global and regional value chains presents both new opportunities for growth and important policy challenges. The gradual shift toward more upstream and diversified production, combined with the expansion of RVCs, points to growing

opportunities to capture higher value-added activities within the region. At the same time, the heterogeneity in RVC integration—where some economies have increased their forward linkages while others have strengthened backward linkages, and a few have seen reductions in both—highlights new sources of exposure to external shocks and potential vulnerabilities in regional trade networks.

Policies that facilitate technological upgrading, strengthen regional supply networks, and promote open and predictable trade environments can help economies sustain integration while managing these risks. Enhancing logistics and digital infrastructure, improving trade facilitation, and deepening regional cooperation—particularly through frameworks such as the RCEP—can further bolster resilience. As both global and regional GVC structures become increasingly complex, ensuring transparency, coordination, and adaptability will be critical for maintaining Asia's competitiveness and supporting stable, high-value trade in an uncertain global environment.

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3 Cross-Border Investment

Key Trends in Foreign Direct Investment

Asia and the Pacific remains the main destination of investment flows.

Global foreign direct investment (FDI) inflows saw modest growth in 2024 with inflows reaching $1.5 trillion, 4% higher than receipts in 2023.[1] However, growth for the past 2 years had been inflated by activity in European economies with large conduit flows, hinting at some volatility and weakness in FDI activity. Excluding these conduit economies, global FDI inflows fell by 11% (UNCTAD 2025).[2]

Asia and the Pacific remained a significant recipient of foreign investment, attracting about 40% of global flows (Figure 3.1a).[3] After experiencing a sharp decline in 2023, inflows to the region showed signs of stabilizing with a modest 2% decline, amounting to $614 billion in 2024. East Asia is the primary destination of inflows in the region, amassing $285 billion in FDI, followed by Southeast Asia ($225 billion) (Figure 3.1b).

In 2024, Singapore emerged as the top destination of foreign investment in Asia, overtaking Hong Kong, China and the People's Republic of China (PRC). Singapore received $143 billion in investments in 2024, almost twice as much as inflows a decade ago and 6% more than receipts in 2023 (Figure 3.2a). Large gains in investments between 2023 and 2024 from the United Kingdom (UK) (up $11 billion), Canada (up $8 billion), and Japan (up $7 billion) contributed to Singapore's rise in rank. In the same period, investments in Hong Kong, China increased by 3% from 2023 as receipts increased from the PRC (up $52 billion); Singapore (up $16 billion); and Taipei,China (up $15 billion).

Meanwhile, inflows to the PRC in 2024 declined by nearly 30%, with the largest losses in investment from Hong Kong, China (down $37 billion), followed by British Virgin Islands (down $3 billion) and the Netherlands (down $3 billion). As a result, Singapore's share in total regional inflows increased from 14% in 2014 to 23% in 2024, while the PRC's share slid significantly from 24% in 2014 to 19% in 2024 (Figure 3.2b).

Investment from multinational enterprises dipped in 2024, globally and in Asia.

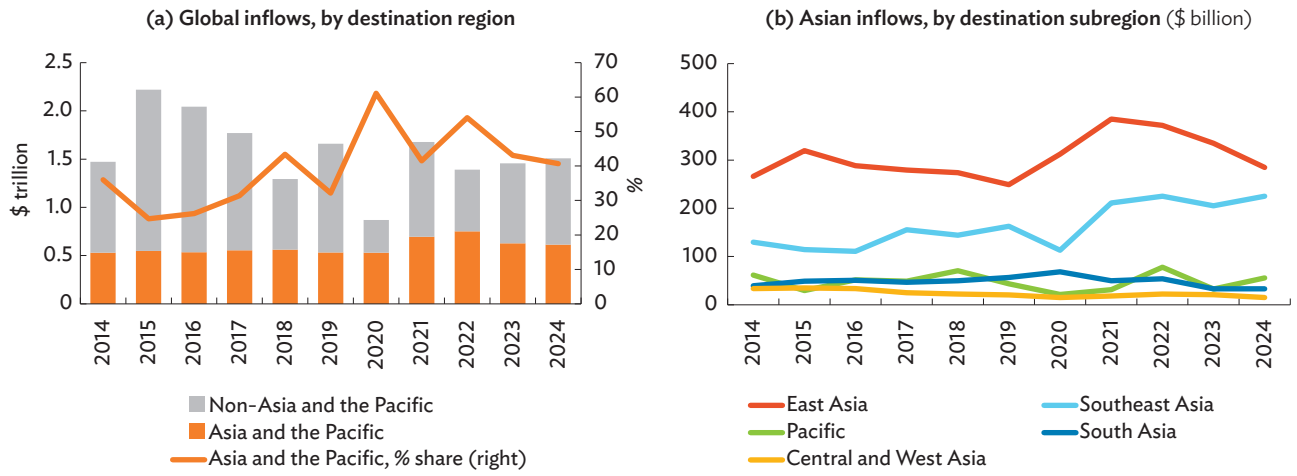
Investment from multinational enterprises (MNEs), often seen as a leading indicator, hint at a slowdown in cross-border investment activity. Global FDI inflows from MNEs dipped by 2% in 2024, marking a second consecutive year of decline. Asia, the European Union (EU) and the UK, and North America remain the largest

[1] For discussions on recent FDI trends, this chapter analyzes standard balance of payments data along with firm-level data by mode of entry (greenfield investment and mergers and acquisitions).

[2] Conduit foreign investment flows are investments that go through an intermediary economy before reaching their destination (i.e., investment from economy A goes through economy C before being deployed in economy B). Investment in conduit economies are typically purely financial and are not usually productive in the conduit economy. Investments of this nature are also referred to as pass-through capital (Casella 2019).

[3] Asia and the Pacific (or Asia) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

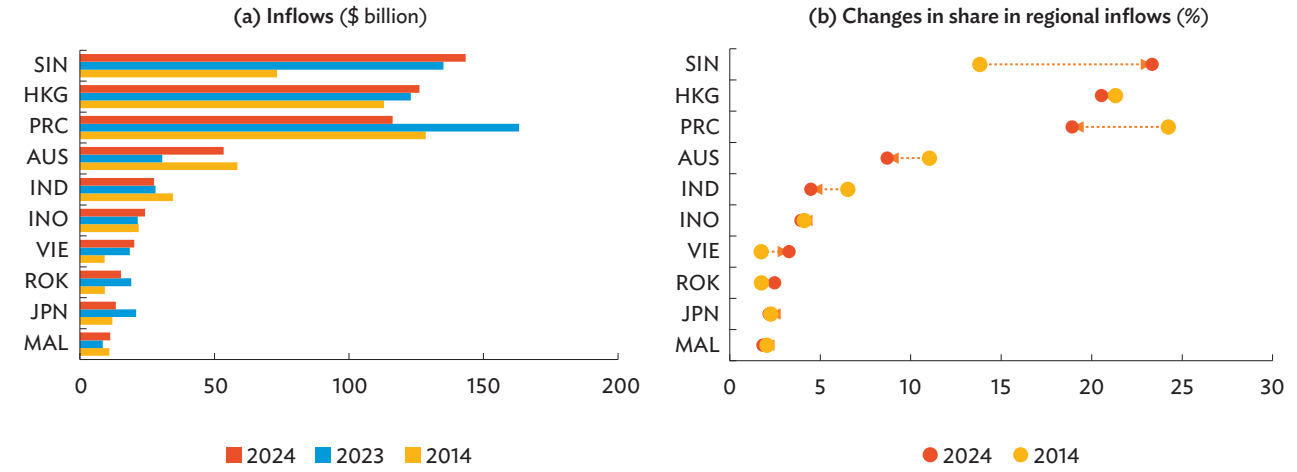
Figure 3.1: Global Foreign Direct Investment Inflows—Balance of Payments



Note: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Source: ADB calculations using data from UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

Figure 3.2: Destinations of Foreign Investment in Asia and the Pacific—Balance of Payments



AUS = Australia; PRC = People's Republic of China; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; MAL = Malaysia; SIN = Singapore; and VIE = Viet Nam.

Source: ADB calculations using data from UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

recipients of MNE investment, with the three regions accounting for more than 80% of total inflows. Asia is the preferred destination for greenfield investments, attracting roughly a third of global inflows in 2024 (Financial Times 2025). Meanwhile, EU+UK is the primary destination of mergers and acquisitions (M&As), also garnering about a third of global M&As by value in 2024.

Despite Asia's momentum as a preferred destination, MNE investment in the region declined by 12% in 2024 as transactions in both greenfield projects and M&As lost steam (Figure 3.3a). Greenfield investment declined by 12% to just under $400 billion in 2024, while M&A deal values dipped by 11% to $311 billion. Much of the decline in Asia's greenfield investment is due to a slip in manufacturing, with greenfield investments in those industries dipping by 26% between 2023 and 2024. Meanwhile, M&A deal receipts declined in both primary (down 36%) and manufacturing (down 23%) industries in the same period, with modest growth in tertiary industries (up 3%) unable to cushion the deceleration. By share, Asia remains a service-oriented region, with 58% of MNE investments in 2024 flowing into service industries. Manufacturing is still a significant sector in the region, with 36% of inflows heading toward the sector (Figure 3.3b).

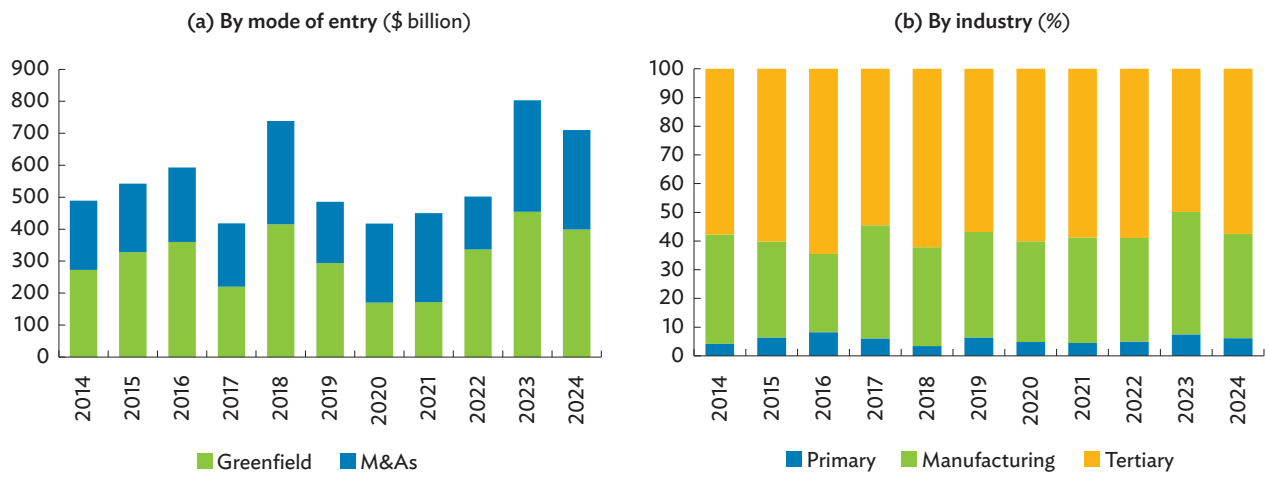
Investors continued to diversify their greenfield investments, as other destinations continued to emerge in 2024 (Figure 3.4a). Lead investors in Asia were the United States (US) with $68 billion (Box 3.1), as well as other Asian economies such as the PRC ($38 billion) and Singapore ($36 billion). By sector, metallic and electronic products manufacturing saw the largest inflows ($61 billion) followed by utilities ($17 billion) and information ($10 billion). Major recipients of greenfield FDI were Australia ($47 billion), the PRC ($37 billion), and Japan ($31 billion).

Metallic and electronic products manufacturing remains the largest sector by value among greenfield projects in Asia (Figure 3.4b). The sector received $138 billion in funds in 2024, with about $40 billion heading into computer and electric product manufacturing, $37 billion in primary metal manufacturing, and $23 billion in electrical equipment. Greenfield investments in the utilities ($75 billion) and information ($65 billion) sectors were also substantial.

In terms of business activity, which focuses on the actual function of the operation and features upstream and downstream activities prioritized by MNEs, greenfield investments confirm the growing importance of digital transformation (Figure 3.5). In 2024, information and communication technology (ICT) and internet infrastructure activities garnered $54 billion in greenfield receipts, 4.5 times the receipts in 2014 ($12 billion). Renewable energy also remained a significant driver of investment in the region, with receipts of about $38 billion in 2024.

Australia was the largest destination of M&A deals by value, with $158 billion of inflows in 2024 (Figure 3.6a). Over half of these receipts were from the US ($87 billion), followed by Japan ($30 billion) and Canada ($16 billion). Australia's information sector saw the most deals by value, receiving over $30 billion in 2024, followed by mining, quarrying, and extraction ($24 billion); professional,

Figure 3.3: Firm-Level Investment in Asia and the Pacific

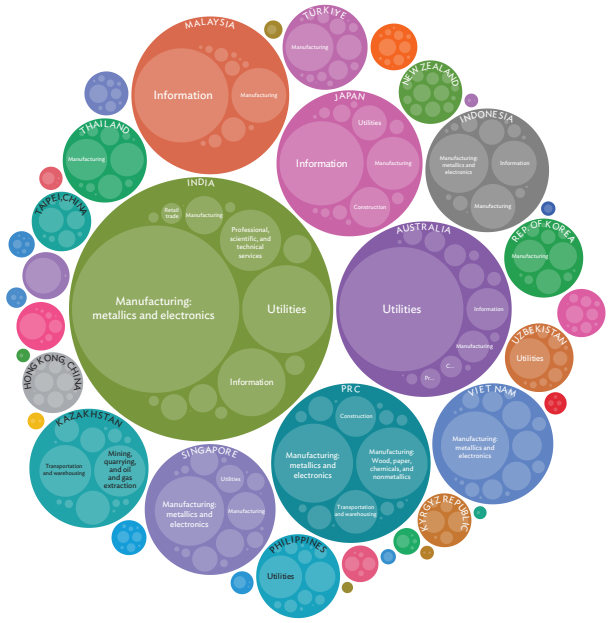


M&A = merger and acquisition.

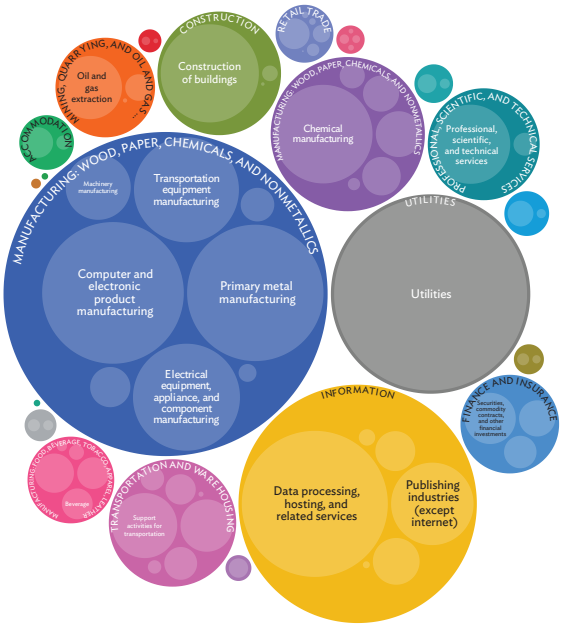
Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025).

Figure 3.4: Destinations of Greenfield Investment in Asia and the Pacific, 2024

(a) Top destinations



(b) Top sectors

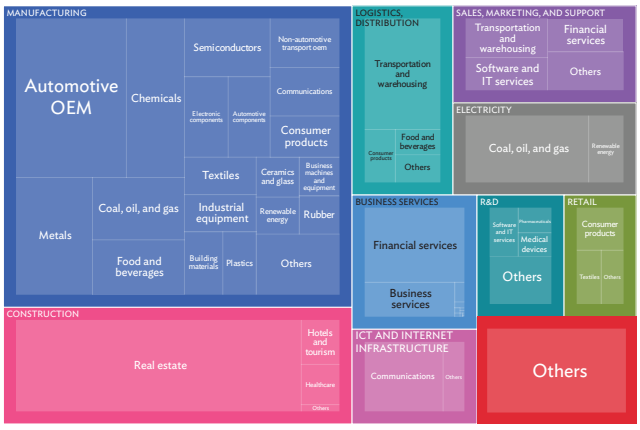


PRC = People's Republic of China.

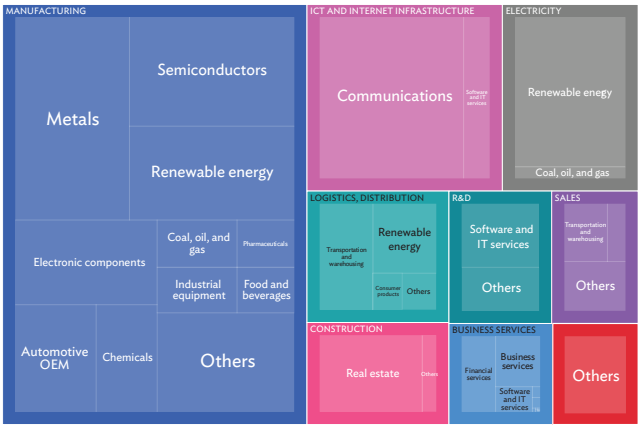
Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025).

Figure 3.5: Greenfield Investment in Asia and the Pacific, by Business Activity

(a) 2014



(b) 2024



ICT = information and communication technology, IT = information technology, OEM = original equipment manufacturing, R&D = research and development.

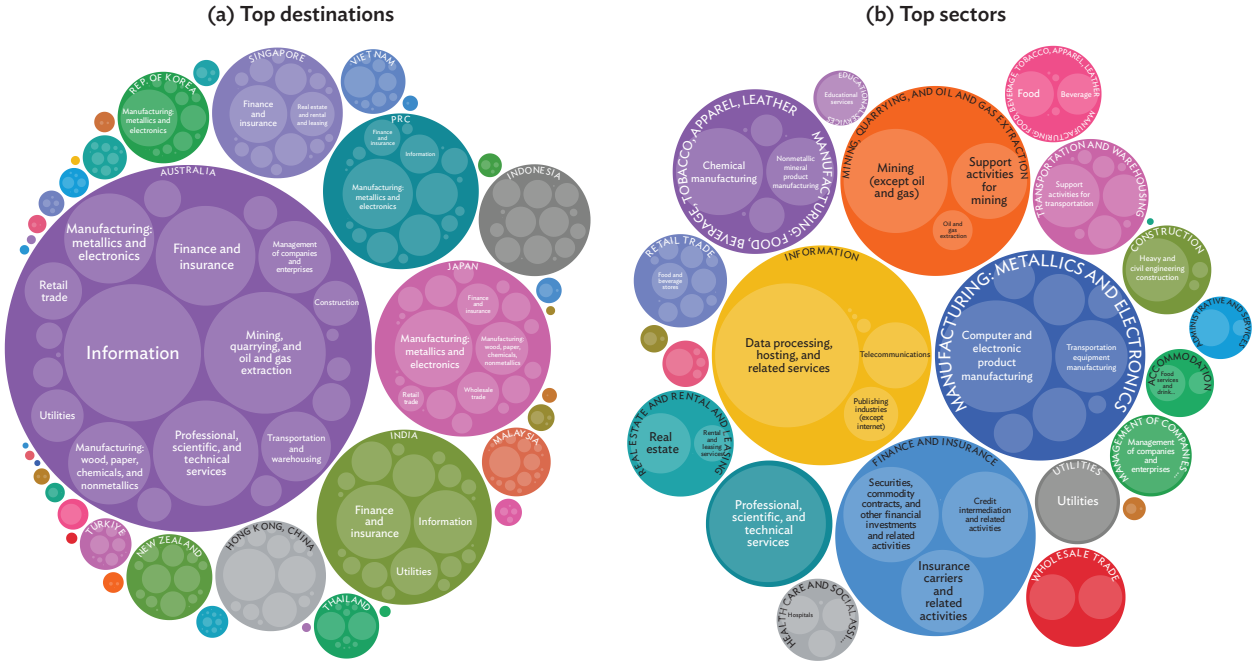
Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025).

scientific, and technical services ($18 billion); and finance and insurance ($16 billion). Other prime Asian destinations included Japan ($31 billion) and the PRC ($23 billion).

M&A deals also underscore the growing role of digitalization in Asia, with the information sector gaining foothold alongside metallic and electronic products manufacturing (Figure 3.6b). In 2024, M&A deals in the information sector amounted to almost $50 billion, more than double those in 2023. Data processing, hosting, and related services earned the most in investment, with more than 70% of deal receipts in the information sector.

In contrast to the dominant trend over the past 5 years, investments in strategic sectors declined globally (down 15%) and in Asia (down 22%) between 2023 and 2024. While equipment for green energy transition still garnered the highest investment among strategic sectors, large losses were observed in this sector, globally and in Asia. Meanwhile, ICT sectors continued to gain importance in Asia, with about $50 billion in inflows to related sectors. This hints at the role of ICT sectors and the digital economy in driving investments into the region (Figure 3.7).

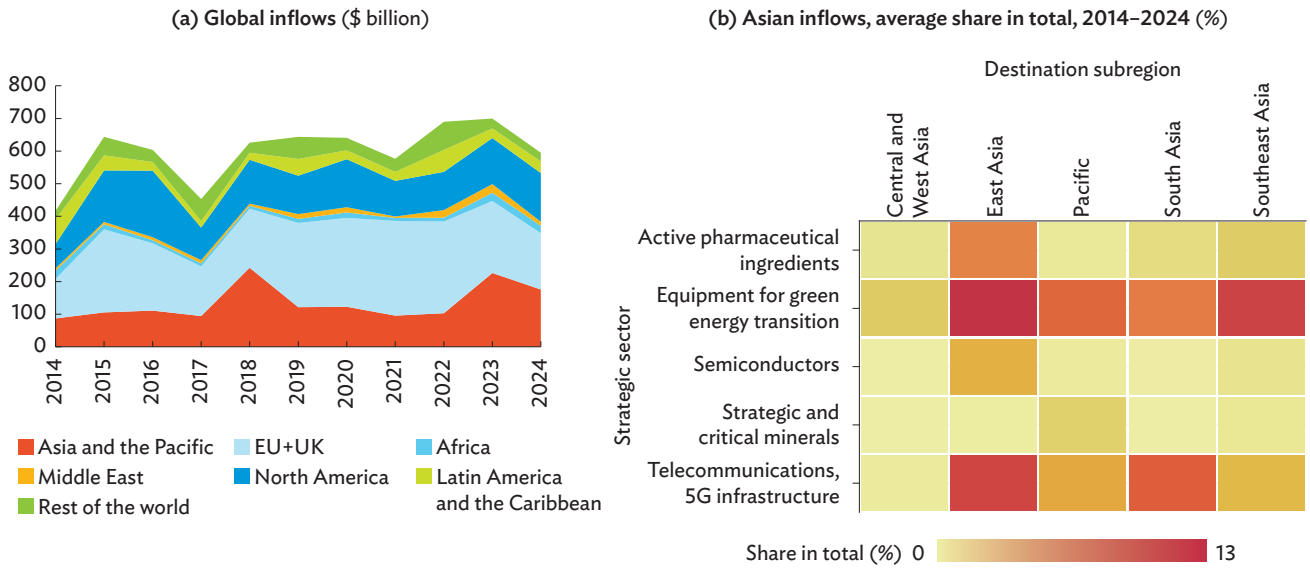
Figure 3.6: Destinations of Mergers and Acquisitions in Asia and the Pacific, 2024



PRC = People's Republic of China.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025).

Figure 3.7: Investment in Strategic Sectors by Destination—Firm-Level Investment



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

Note: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

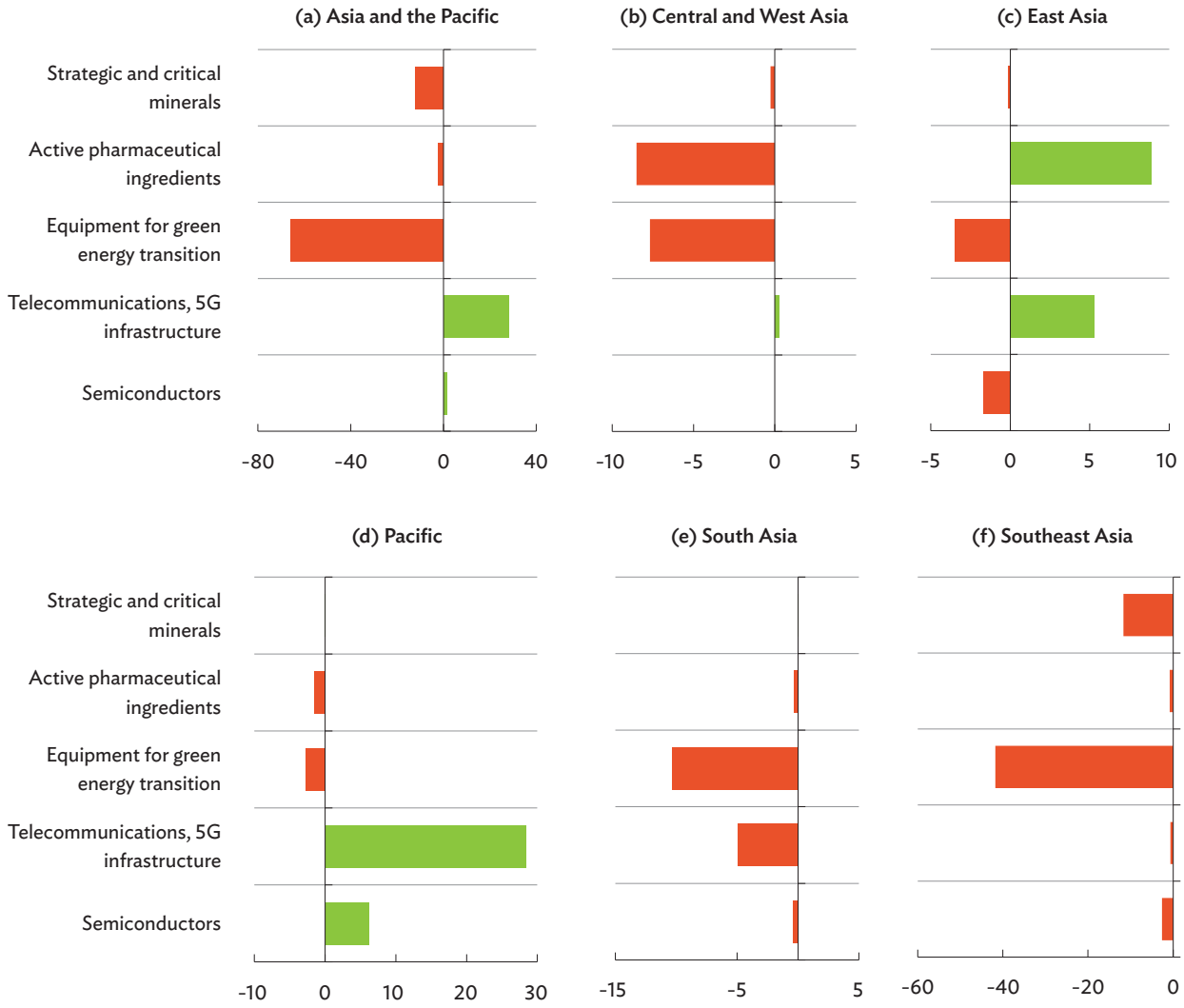
Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025); and methodology from Atlantic Council (2022) and International Monetary Fund (2023).

Large investment losses were observed in various strategic sectors across subregions, with the largest in Southeast Asia's green energy transition equipment, likely due to foreseen scaled down climate commitments, especially from some large investors. Meanwhile, telecommunications and 5G infrastructure saw large gains in the Pacific, primarily from investments in Australia and New Zealand (Figure 3.8).

Investment outflows from Asia remained strong in 2024, with Japan emerging as the second-largest source of investment globally.

Global investment outflows reached $1.6 trillion in 2024, with about 40% from Asian economies. This confirms the important role of former net recipients of FDI, such as the Republic of Korea and the PRC, which have become major investors both within

Figure 3.8: Change in Investment in Strategic Sectors by Destination—Firm-Level Investment 2023–2024 ($ billion)



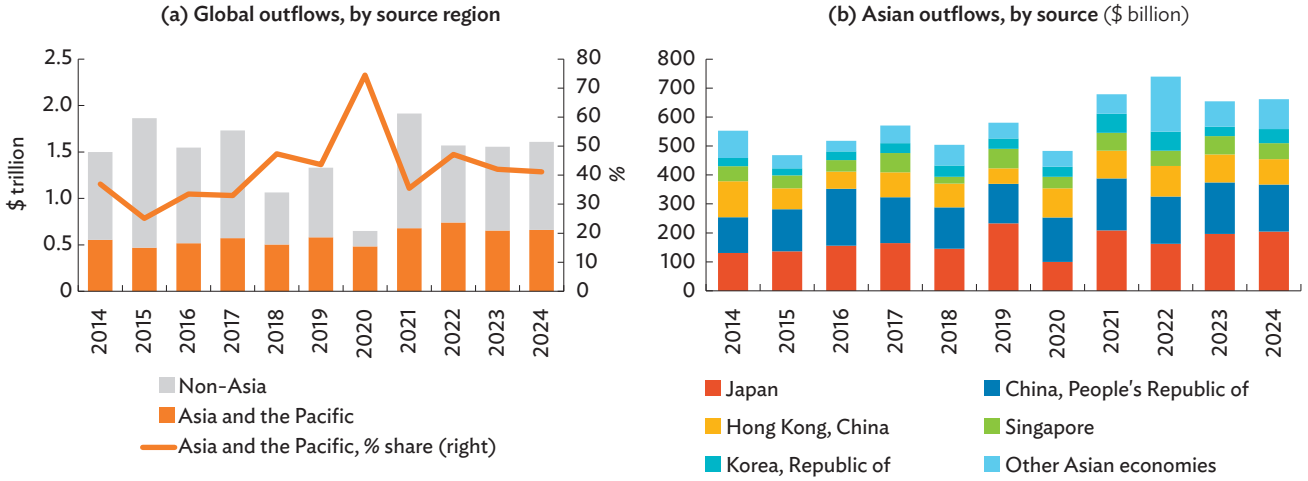
Note: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025); and methodology from Atlantic Council (2022) and International Monetary Fund (2023).

the region and globally. Japan remained the largest Asian investor overall in 2024, posting $204 billion in outflows. The PRC ($163 billion); Hong Kong, China ($87 billion); Singapore ($55 billion); and the Republic of Korea ($49 billion) were also among major sources of investment in 2024 (Figure 3.9).

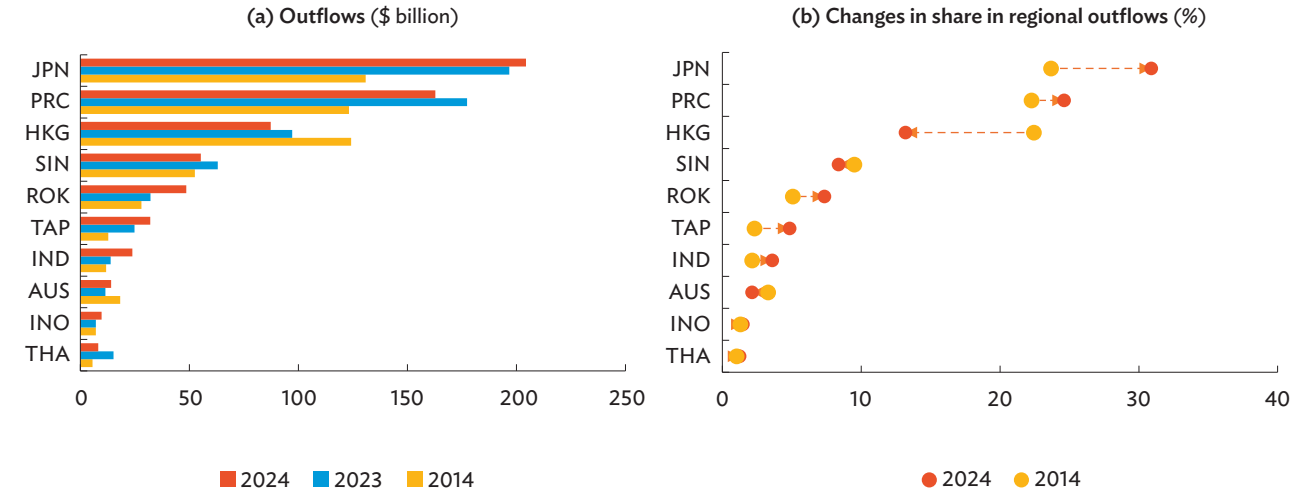
While Asian investors appear relatively unchanged in the last 10 years, minor shifts in ranking are apparent, with the PRC overtaking Hong Kong, China as the second-largest source of FDI among Asian economies, attesting to the PRC's global strategy to expand market access and enhance participation in global production networks (Figure 3.10).

Figure 3.9: Global Foreign Direct Investment Outflows—Balance of Payments



Source: ADB calculations using data from UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

Figure 3.10: Sources of Investment from Asia and the Pacific—Balance of Payments



AUS = Australia; PRC = People's Republic of China; FDI = foreign direct investment; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; ROK = Republic of Korea; SIN = Singapore; TAP = Taipei,China; THA = Thailand.

Source: ADB calculations using data from UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

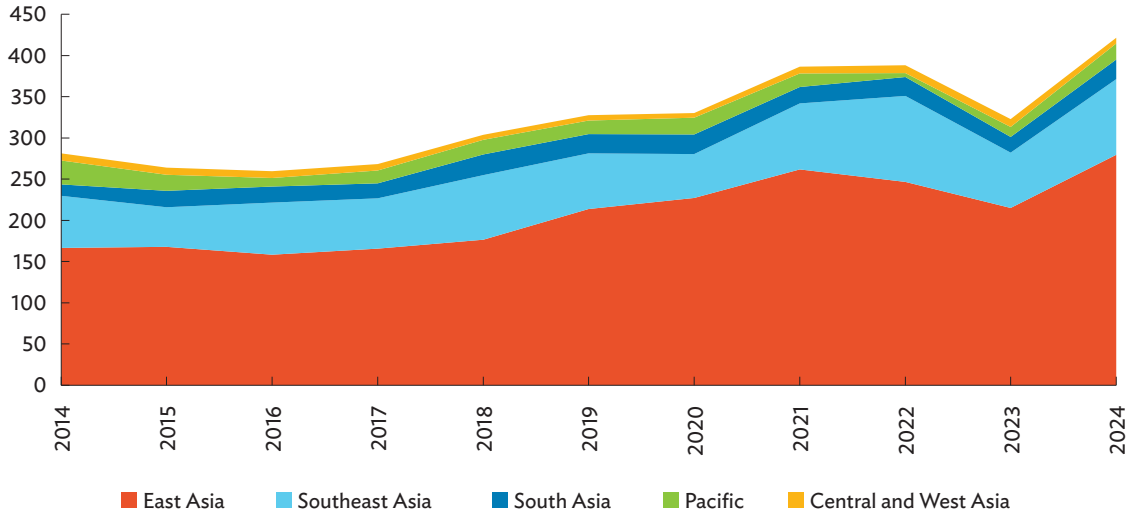
Intraregional linkages are an important source of investment, especially in times of volatility.

Based on balance of payments data, intraregional investment has intensified over the last 5 years, accounting on average for 58% of Asian inflows from 2020 to 2024. Investment gains among Asian economies were particularly large between 2023 and 2024 as intraregional shares rose from 52% to 69% (Figure 3.11). East Asia remains the largest destination of intraregional investments. Links between the PRC and Hong Kong, China favored some of the largest intraregional investments in 2024, as the PRC invested $101 billion in Hong Kong, China. On the flip side, the PRC saw about $74 billion in receipts from Hong Kong, China.

Meanwhile, MNE investments hint at some intraregional reshuffling, with Southeast Asian economies emerging as prime destinations for investment from Asian firms, and the subregion overtook East Asia as early as 2022 (Figure 3.12a). In 2024, Southeast Asia took $98 billion (36%) of intraregional receipts, followed by the Pacific (20%) and South Asia (19%). By sector, metallic and electronic manufacturing, as well as information, saw large intraregional flows. In particular, intraregional investment seemingly favored ICT-adjacent sectors, with large receipts in computer and electronic product manufacturing (16%) and data processing, hosting, and related services (12%) (Figure 3.12b).

While Asia historically has fostered strong intraregional linkages through investment, sustaining these linkages remains essential, especially during times of heightened uncertainty and volatility, including trade tensions and other shocks such as pandemics. Maintaining regional platforms that enable investment, embracing investment facilitation strategies, and modernizing investment agreements, particularly in key and emerging areas such as the digital economy and renewable energy, should remain among Asia's priorities.

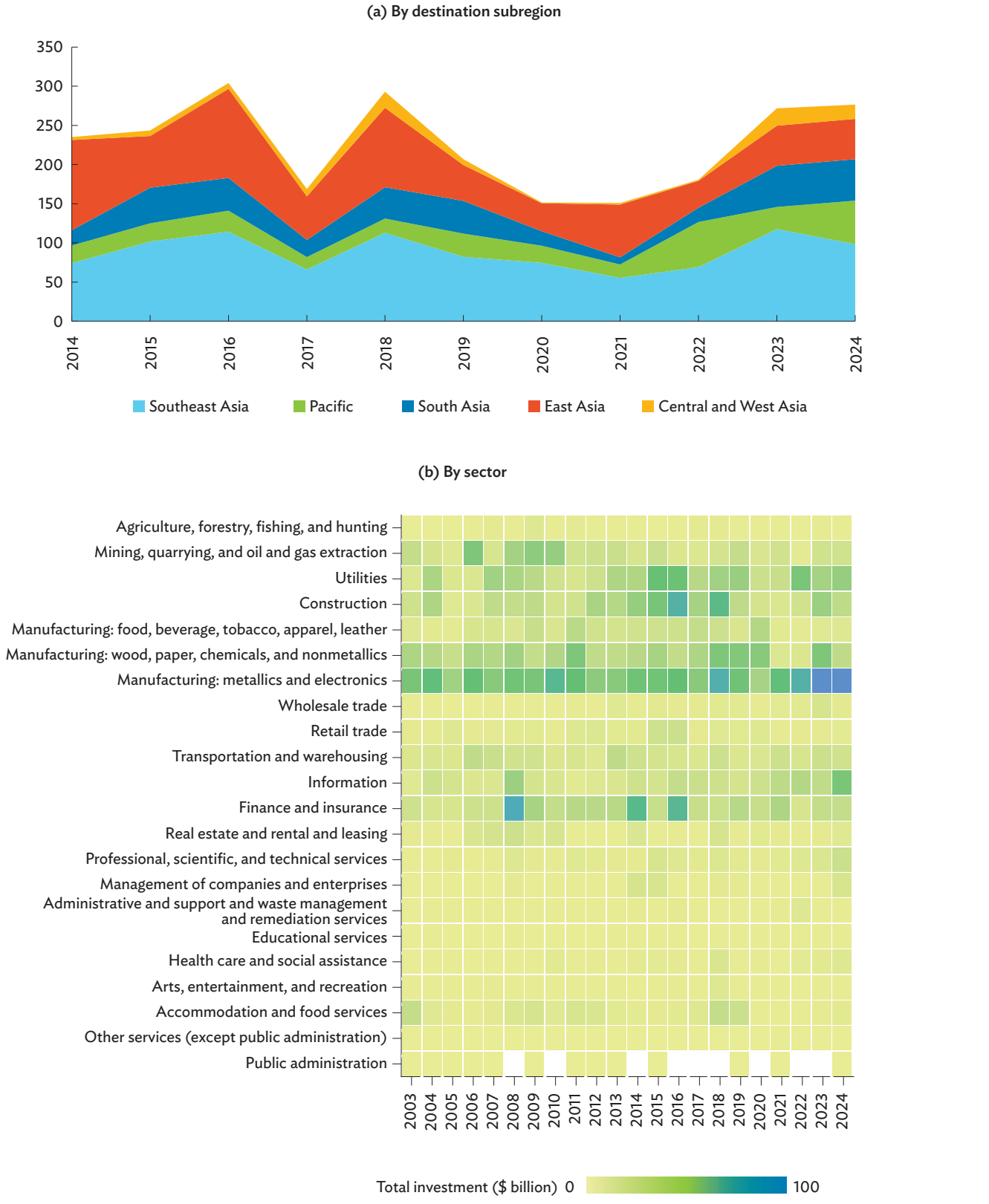
Figure 3.11: Intraregional Investment Flows in Asia and the Pacific—Balance of Payments ($ billion)



Note: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from the ASEAN Secretariat. ASEANstats Data Portal. https://data.aseanstats.org (accessed July 2025); CEIC Data Company; Eurostat. Balance of Payments. https://ec.europa.eu/eurostat (accessed July 2025); International Monetary Fund. World Economic Outlook Database, April 2025. https://www.imf.org/en/Publications/WEO/weo-database/2025/April (accessed April 2025); and UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

Figure 3.12: Intraregional Investment Flows in Asia and the Pacific—Firm-Level Investment ($ billion)



Note: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand. For panel (b), white cells indicate no data for given years and sectors.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025).

Foreign investment activity globally and in Asia and the Pacific faces multiple uncertainties.

With a myriad of headwinds, the outlook for global FDI continues to be negative in the near term. Macroeconomic conditions are expected to weaken in the following year or so, with global output projections, investor sentiment, and financial stability on the downtrend. Moreover, policy uncertainty around reciprocal tariffs and ongoing geopolitical tensions continue to muddy the waters.

Overall, Asia remains an important engine for FDI growth both as a destination and source of global investment. Despite this, the outlook for the region's investment activity is bleak, with early estimates for the first half of 2025 indicating a 4% decline. Persistent geopolitical risks, especially trade tensions, may continue weighing on investment activity and investor sentiment; however, strong inflows into the region's ICT sectors and renewable energy can serve as drivers for growth.

Box 3.1: Mapping Global Ultimate Ownership in FDI in Asia and the Pacific

Conventional bilateral foreign direct investment (FDI) statistics, which record flows based on the immediate investing economy, often have limited information for tracing the true origin of capital. This is largely due to complex corporate ownership structures, the use of intermediary jurisdictions, and the growing role of special purpose entities (SPEs). International FDI data sources, such as those from the United Nations Trade and Development (UNCTAD), the International Monetary Fund (IMF), and the Organisation for Economic Co-operation and Development (OECD), face challenges due to inconsistent reporting practices and limited ability to distinguish genuine productive investments from financial or portfolio flows (Ahmad et al. 2025). Guvenen et al. (2022) highlight how accounting practices like profit shifting among United States (US) affiliates distort aggregate indicators of investment and production. Some official data sources, including the US Bureau of Economic Analysis, rely on firm surveys that can introduce measurement errors. As a result, the recorded bilateral FDI positions frequently misstate both the actual source of capital and the economies that exert real control over foreign enterprises.

Recent studies have sought to address these gaps by accounting for SPEs and tracing the ultimate ownership of cross-border investments. Using ORBIS, Ahmad et al. (2025) developed the Multinational Revenue, Employment, and Investment Database to distinguish between greenfield investments, defined as new affiliate establishments abroad, and mergers and acquisitions (M&A), which involve parent-firm takeovers of foreign entities. By leveraging the Global Ultimate Owner (GUO) variable, they refine the attribution of investment flows to the actual controlling entities. Likewise, Damgaard and Elkjaer (2017) constructed a unique global FDI Network using the IMF's Direct Investment Positions (DIP), applying adjustment ratios to trace investment positions back to the true ultimate investors, bypassing intermediary SPEs. Dall'Olio et al. (2022) combined Orbis and IMF DIP data to create a four-dimensional matrix that maps FDI by host, immediate, ostensible ultimate, and true ultimate investing economies. These studies aim to enhance the accuracy of global FDI measurement by uncovering the real geography of investment control and ownership.

ADB's analysis builds on the approach of Ahmad et al. (2025), using firm-level data from Orbis, which contains ownership linkages and financial information for over 425 million firms worldwide. Ownership networks are reconstructed using company-level identifiers to identify ultimate investors. Given the heavy computational load, the analysis focuses on the top 25 FDI destinations, based on their 2014–2024 average balance-of-payments FDI positions. For each destination, the scope is limited to the top 25 FDI source economies, ensuring a manageable yet representative coverage of global investment flows.

Preliminary estimates suggest that even after accounting for GUO and removing intermediary investments, offshore financial centers continue to play a significant role in greenfield investment. In particular, firms headquartered in these jurisdictions exhibit comparable assets as greenfield investors compared with firms from standard financial hubs or OECD economies that are not typically classified as offshore centers. This pattern suggests that the prominence of offshore financial centers is not solely driven by temporary financial intermediation, but also reflects the widespread use of offshore holding companies as legally established entities, rather than merely as pass-through locations for investment flows.

Source: ADB compilation.

Special Topic: Recent Developments in Digital FDI

The past decade has seen unprecedented advancements in technology, with digitalization and digital transformation becoming a key component in the production and consumption of goods and services. Thanks to the integration of digital tools in economic activity, the digital economy is considered today a key growth driver, and has, at times, outpaced growth of the rest of the economy. In a survey conducted by the Digital Cooperation Organization (2024), the global digital economy was expected to grow by 8.5% in 2025, about three times faster than the global economy. This translates to a value of $24 trillion or about 20% of global output. Asia's digital economy has also been thriving. In Southeast Asia alone, it is estimated to surpass $300 billion in gross merchandise value in 2025, about 2% higher than in 2024 (Google, Temasek, and Bain and Company 2025).

Despite the importance of the digital economy, no universal definition of the concept exists. As digital technologies evolve, the industrial classification of the digital economy is also changing. Most often, two main conceptual frameworks for measuring the digital economy have been considered: (i) bottom-up—where the digital economy is regarded as an "aggregate of a specific indicator (e.g., the sum of value added, the number of employed people)" for a set of industries or sectors; and (ii) top-down—which involves the "identification of broad trends at play in the digital transformation and define the digital economy as the result of their combined impact, including trends enabled by the [...] adoption of digital technologies." While the range of definitions and frameworks is broad, all emphasize the growing importance of digital sectors and transformation in sustainable development (Table 3.1).

On the role of foreign investment on the digital economy, several definitions and frameworks have also been proposed (G20 2025; OECD 2020; UNCTAD 2025). Among these, there is now more consensus on defining a three-tiered approach for the digital economy based on three levels: core, narrow, and broad scope.

The core digital economy includes digital infrastructure (i.e., ICT manufacturing, software, and data centers) and digital services such as telecommunications, data services, and cloud services. The narrow scope builds on this and includes platform-based activities, e-commerce, fintech, and artificial intelligence (AI) automation and services. The broad scope includes these sectors and other applications and digitally enabled sectors such as agriculture, disaster risk management, and health

Table 3.1: Selected Frameworks on the Measurement of the Digital Economy

Framework	Key Features
ADB	• Contribution to GDP of any economic transaction involving both digital products and digital industries • Identifies five main activity groups: hardware, software publishing, web publishing, telecommunication services, and specialized and support services
OECD	• Encompasses all economic activities that rely on digital technologies • Emphasizes the role of data as an economic asset • Highlights the transformative impact of digital platforms, e-commerce, and innovation
ITU	• Digital economy empowered by telecommunications, digital data, and digital technologies • Examines connectivity and broadband access, highlighting digital inclusion and economic participation
World Bank	• Development-focus on how digital economy drives inclusive and sustainable growth • Concentrates on digital financial services, e-governance, and infrastructure development
UNCTAD	• Defines digital economy in terms of production, distribution and consumption of goods and services enabled by digital technologies • Outlines three tiers: core, narrow, and broad scope. Flexible definition for investment analysis

ADB = Asian Development Bank, GDP = gross domestic product, ITU = International Telecommunication Union, OECD = Organisation for Economic Co-operation and Development, UNCTAD = United Nations Trade and Development.

Source: ADB compilation.

Table 3.2: Adopted Framework for Measuring Digital FDI

Broad Scope	**Narrow Scope: Digital Economy**	**Core Scope**	**Foundational Infrastructure** Wired telecommunications activities Wireless telecommunications activities Satellite telecommunications activities Other telecommunications activities
			Digital Services and Solutions Software publishing Computer programming activities Computer consultancy and computer facilities management activities Other information technology and computer service activities E-commerce Financial services Transit services
			Industrial Development Manufacture of electronic components and boards Manufacture of computers and peripheral equipment Manufacture of communication equipment Manufacture of consumer electronics Manufacture of magnetic and optical media Wholesale of computers, computer peripheral equipment, and software Wholesale of electronic and telecommunications equipment and parts Web portals Repair of computers and peripheral equipment Repair of communication equipment
		Digital Adoption	Data processing, hosting, and related activities
	Digitalized agriculture Digitalized manufacturing Digitalized services		

FDI = foreign direct investment.

Source: ADB compilation using OECD (2011), UNCTAD (2020), and UNCTAD (2025).

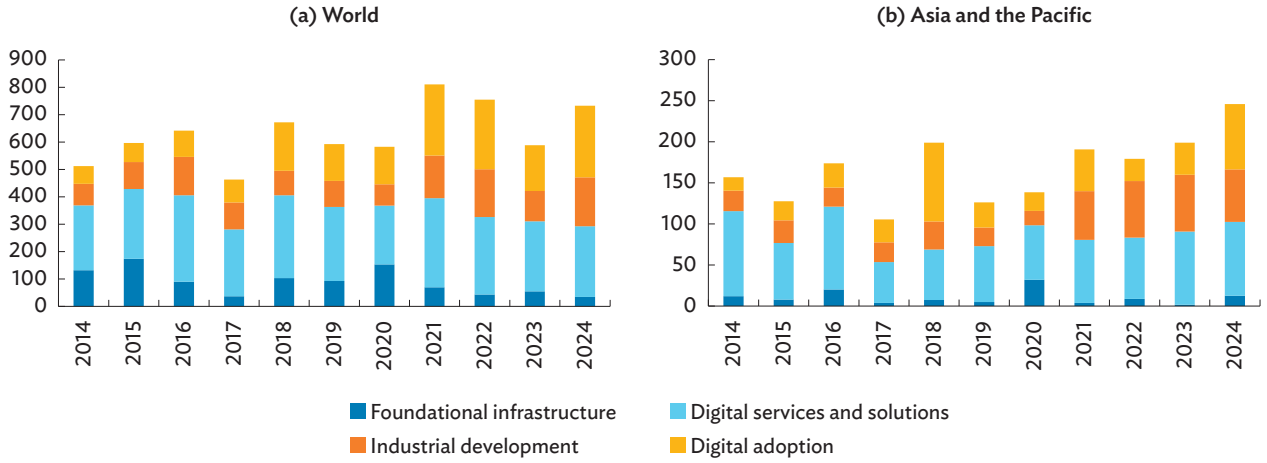
care. This chapter adopts this three-layer framework in quantifying investments in the digital economy, specifically for MNE investments (Table 3.2).

The rationale for adopting a layered framework for measuring digital FDI responds to several objectives. On one hand, robust digital infrastructure is gradually positioning itself as one of the engines of Asia's next economic development phase. On another hand, digitalization has also shown potential for exacerbating divides among populations and social groups, and bridging these gaps will require significant investments. Indeed, the International Telecommunication Union (ITU) estimates for the global needs to close the digital divide and achieve digital connectivity are $1.6 trillion (ITU 2025).

Based on the narrow scope of the framework, FDI into the digital economy—or digital FDI—expanded in 2024, growing about 25% in 2024 both globally and in Asia. The digital economy saw $732 billion in MNE investment globally, with 34% of this volume going to Asia (Figure 3.13). Digital services and solutions and digital adoption attracted about 70% of digital economy investments both globally and in Asia.

By region, Asia and the EU+UK have attracted two-thirds of global investments in the digital economy in the past decade (Figure 3.14a). North America is also a significant destination, attracting about one-fifth of global investments, on average. It is noticeable that digital FDI grows faster than other segments, posting average annual growth of 8% in the past decade

Figure 3.13: Total Investment Inflows by Digital Segment—Firm-Level ($ billion)



Notes: Total investment refers to the sum of receipts from the two modes of entry—greenfield and mergers and acquisitions. Classification is adapted from UN Trade and Development's World Investment Report 2025 framework on the digital economy. For these estimates, the digital economy covers the narrow scope, which includes digital adoption and core scope. Core scope is composed of foundational infrastructure, digital services and solutions, and industrial development. See Annex 3A for details on sector correspondence.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025); and methodology based on UNCTAD (2025).

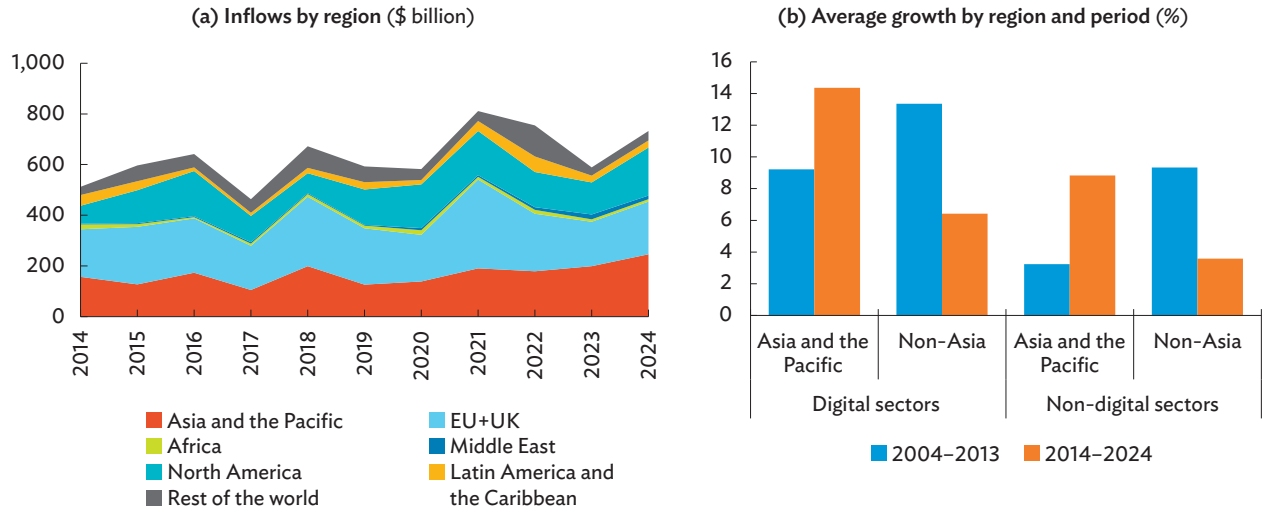
compared with 4% in other segments globally. However, for non-Asian economies, digital FDI appears to have lost some steam in 2014–2024 compared with 2004–2013. In contrast, digital sectors accelerated in Asia, growing an average of 14% in 2014–2024 compared with 9% in 2004–2013 (Figure 3.14b).

Data centers are concentrating a large part of digital FDI in the region. Data processing, hosting, and related services—which encompass the data centers sector—are drawing large investments in the digital economy, overtaking financial services globally. In 2024, Asian economies received about $80 billion of MNE investments in these activities. Meanwhile, financial services still drew significant inflows, with $51 billion in investments in the same period.

Investment in data centers is increasingly a key component of digital infrastructure. Cloud computing MNEs have a significant role in this space. In general, top investors are using corporate funds, rather than project finance structures, to finance data center projects. This is why most of these investments are only captured in international project finance statistics and not in domestic projects. Another prominent feature of investment in data centers is its high concentration. About 90% of investments in data centers in developing Asia are concentrated in the top four recipients. Amazon, for example, concentrates its investments in economies in South Asia and Southeast Asia (UNCTAD 2025).

With AI widely regarded as a key component in digital transformation, demand for AI and other cloud computing technologies has risen, particularly through greenfield investments. In 2024, global greenfield investment in AI and data centers almost quadrupled from 2023, reaching almost $108 billion from $28 billion in 2023. This represents about 8% of all greenfield investments in 2024. Asia and the Pacific's trajectory follows the same trend, as greenfield investments in AI and data centers doubled in the region from 2023 to 2024, representing about 9% of regional greenfield inflows (Figure 3.15). Apart from the sheer magnitude of greenfield investments in these segments, investors appear to be investing more per project in AI and data centers. Average investment per AI or data center project tripled globally from $51 billion in 2023 to $156 billion in 2024. In Asia, the average AI investment project almost doubled.

Figure 3.14: Global Investment Inflows in the Digital Economy—Firm-Level

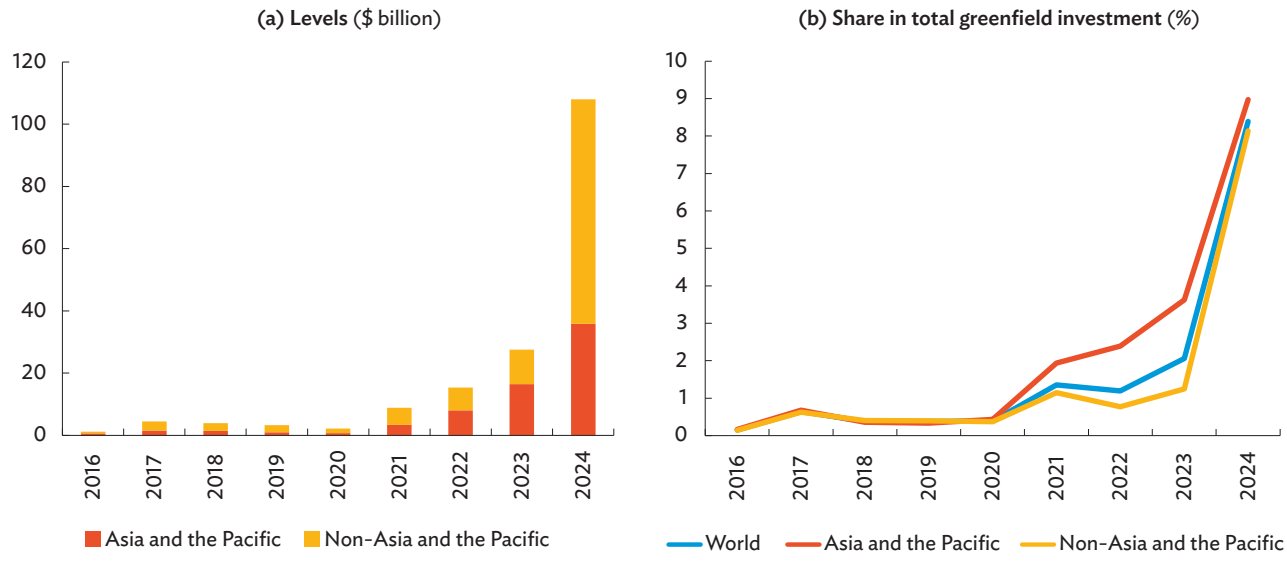


EU = European Union (27 members), UK = United Kingdom.

Notes: Total investment refers to the sum of receipts from the two modes of entry—greenfield and mergers and acquisitions. Classification is adapted from UN Trade and Development's World Investment Report 2025 framework on the digital economy. For these estimates, the digital economy covers the narrow scope, which includes digital adoption and core scope. Core scope is composed of foundational infrastructure, digital services and solutions, and industrial development. See Annex 3A for details on sector correspondence.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025); and methodology based on UNCTAD (2025).

Figure 3.15: Greenfield Investment in Artificial Intelligence and Data Centers



Note: Estimates are computed from greenfield projects tagged with data centers, artificial intelligence, or both.

Source: ADB calculations using data from Financial Times. fDi Markets (accessed November 2025).

A closer glance at Asia reveals the evolution of digital economy investments. In 2014, over half of digital FDI was concentrated in East Asia and largely invested in financial services. Come 2024, other subregions have emerged as preferred destinations for digital investments, with financial services taking a backseat

Figure 3.16: Investment Inflows in the Digital Economy by Destination and Sector—Firm-Level, Asia and the Pacific ($ billion)

(a) By subregion and segment, 2014

	East Asia	Pacific	Southeast Asia	South Asia	Central and West Asia
Financial services	60.6	10.1	9.2	4.9	2.8
Data processing and related activities	8.8	2.8	1.2	3.5	0.1
Electronic components manufacturing	10.2	0.0	1.1	0.2	0.0
Software publishing	3.9	2.8	1.4	1.4	0.1
Wireless telecommunications activities	1.5	0.9	1.3	4.1	0.3
Other digital sectors	8.5	1.3	9.2	4.6	0.2

(b) By subregion and segment, 2024

	Pacific	East Asia	Southeast Asia	South Asia	Central and West Asia
Data processing and related activities	26.1	22.0	20.2	10.2	0.9
Financial services	18.0	10.4	10.9	10.9	0.9
Electronic components manufacturing	6.0	15.9	13.1	14.1	0.0
Software publishing	2.6	2.7	8.5	4.9	0.1
Computer programming	10.2	1.1	1.4	4.2	0.3
Other digital sectors	9.0	6.7	9.4	4.0	1.1

(c) By economy and segment, 2014

(d) By economy and segment, 2024

PRC = People's Republic of China.

Notes: The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand. Total investment refers to the sum of receipts from the two modes of entry—greenfield and mergers and acquisitions. Classification is adapted from UN Trade and Development's World Investment Report 2025 framework on the digital economy. For these estimates, the digital economy covers the narrow scope, which includes digital adoption and core scope. Core scope is composed of foundational infrastructure, digital services and solutions, and industrial development. See Annex 3A for details on sector correspondence.

Sources: ADB calculations using data from Financial Times. fDi Markets; and Moody's Analytics. Orbis M&A (formerly Zephyr M&A Database) (accessed June 2025); and methodology based on UNCTAD (2025).

to data processing, hosting, and related activities (Figures 3.16a and 3.16b). By economy, major recipients were Asian financial centers such as Hong Kong, China; the PRC; and Japan in 2014, again invested in these economies' financial service sectors. However, in 2024, investors appeared to favor data processing, hosting,

and related services and opted to invest in economies such as Australia and Japan (Figures 3.15c and 3.15d). Digital services and solutions remain important areas of investment for digital FDI. Developing Asia is estimated to attract one-third of global investments in digital services and solutions (UNCTAD 2025). Likewise, investments in ICT manufacturing remain high in developing Asia, concentrated in Malaysia, Viet Nam, and Singapore.

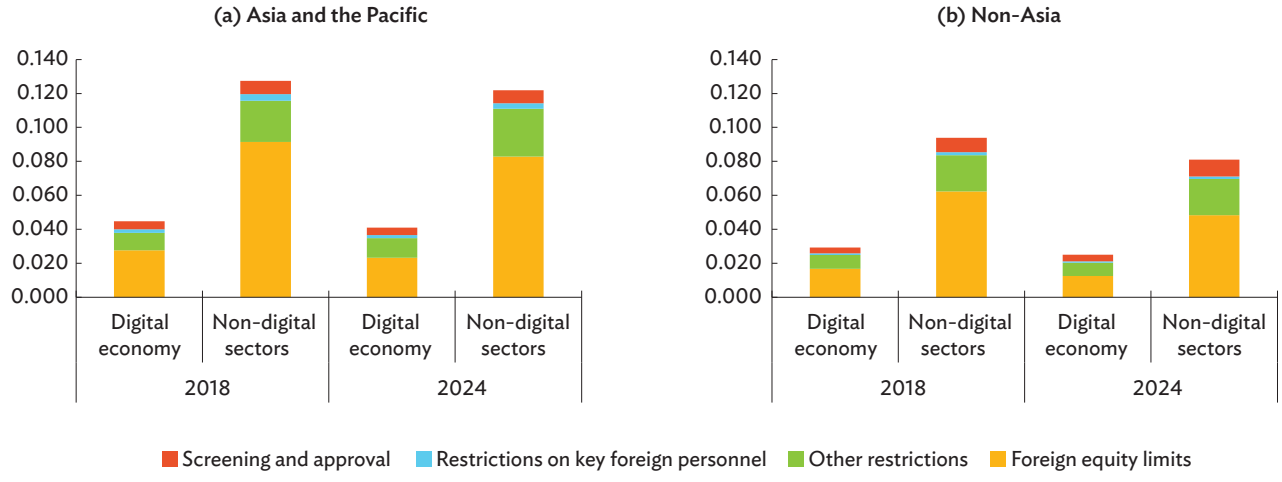
FDI Policy Developments in Digital Sectors

From a regulatory angle, Asian economies are more actively engaging in upgrading legislation pertaining to the digital economy. Domestic policies are being considered or have been implemented in most economies to address core areas of digital regulations including data privacy, cybersecurity, consumer protection, and digital identity. At the same time, more Asian economies are participating in regional or plurilateral agreements with digital elements, to varying degrees (Avendano and Crivelli 2025).

Investment restrictiveness in digital sectors has decreased gradually from 2018 to 2024, both globally and in Asia. However, in relative terms, digital-related sectors, as measured by international metrics such as the OECD FDI Regulatory Restrictiveness Index or European University Institute's digital trade integration, remain more stringent among Asian economies than those outside the region (Figure 3.17). Regulatory restrictiveness also appears to vary between developing and developed economies in Asia, with developed Asian economies showing more open regimes. By restriction type, foreign equity limitations typically factored highest among the main policy categories, regardless of region and economic segment.

While overall restrictiveness appeared broadly stable in Asia between 2018 and 2024, some economies have made significant progress in reducing regulatory barriers to foreign investments in the digital economy. Indonesia, for example, saw significant improvement in policy openness between 2018 and 2024, as it eased foreign equity limitations and foreign personnel restrictions. Similar policy changes were also observed in the Philippines during this period, with a 32% fall in the Regulatory Restrictiveness Index from 2018 to 2024.

Figure 3.17: Foreign Direct Investment Regulatory Restrictiveness Index—By Economic Segment, Policy Category, and Region



Notes: The Regulatory Restrictiveness Index measures statutory restrictions on foreign direct investment in 22 sectors and across time and economies. The index considers restrictions on four main areas: foreign equity limitations, screening and approval, foreign employment restrictions in key personnel, and other restrictions. The index ranges in value from 0 to 1, with 0 being more open and 1 being more closed.

Sources: ADB calculations using data from Organisation for Economic Co-operation and Development (OECD). OECD Data Explorer. https://data-explorer.oecd.org/ (accessed October 2025); and methodology based on UNCTAD (2025).

Overall, the landscape of foreign investment in digital sectors remains stable in Asia and the Pacific and calls for further efforts to enhance regulatory convergence.

Cross-Border Investment and Digital Technology Adoption

A crucial question for policymakers when considering the trade-offs of digital FDI is on the potential spillovers of digital FDI. The impact of FDI on technology transfer has been well studied (with Keller 2004 providing a review). Inward FDI can raise productivity and encourage technology transfer in host economies. Local firms learn from foreign investors through competition, absorption, and supply chain links (Damijan and Knell 2005; Kokko 1994). Indeed, industries with high levels of foreign participation are more productive (Aitken and Harrison 1999), although these effects are contingent on local "absorptive capacity" (Keller 2004). Cultural transfer within multinational firms' networks and to local companies have also been reported in the context of Asian economies (Tang and Zhang 2021).

Indirect spillovers may also exist as domestic firms supply the foreign firms or use their goods as intermediate inputs (Javorcik 2004; Kee 2015). A growing literature also posits that workers learn while employed at multinationals and then transfer this knowledge as they transition to domestic firms (Poole 2013). Recent firm-level studies explore the mechanisms and find that domestic firms located nearby become more productive, especially if they have skilled workers or do some innovation (Gong 2023). Overall, this literature suggests that inward FDI may help domestic firms upgrade their technologies, but the benefits are not automatic.

The impact of outward FDI on the source economy's technology adoption has been less explored. In principle, offshoring allows firms to specialize in different tasks, increasing productivity and technological upgrading (Grossman and Rossi-Hansberg 2008). These effects can spread across supply chains (Park, Santos-Paulino, and Trentini 2022). Overall, outward FDI can help or hurt firms at home depending on how they manage information and technology flows between their domestic and foreign branches (Box 3.2).

Employment and FDI in Digital Sectors

Discussions on the impact of digital FDI have generally focused on productivity and growth, whereas the role of these investments on other inclusion dimensions, such as employment, has been less explored. Employment stocks in MNEs considering all entry modes (greenfield projects and M&As) suggest that digital and non-digital sectors follow broadly similar regional patterns (Figure 3.18). The EU+UK recorded the largest number of jobs in both categories, followed by Asia. In the EU+UK, total employment rose sharply from 2010 to around 2018–2019.

In Asia and the Pacific, employment in non-digital sectors remains more dominant, while digital-sector jobs have gradually increased in recent years. Information, together with finance and insurance, account for most digital-sector jobs in the region. Other industries, such as legal services, also experienced notable growth, particularly after 2015, indicating a wider diffusion of digital-intensive activities beyond traditional ICT domains. Overall, these trends suggest that digital-intensive investments have become an increasingly important driver of employment generated through inward FDI.

Box 3.2: Foreign Direct Investment and Technology Adoption in the Republic of Korea

The Republic of Korea offers a prime setting with which to study the impacts of cross-border investment on technology adoption. As a top source of regional foreign direct investment (FDI), the Republic of Korea is one of the world's most digitally connected economies with a high adoption of artificial intelligence (AI), cloud services, big data, and industrial robotics. Relying on rich administrative firm-level data from the Republic of Korea, Poole et al. (forthcoming) consider the implications of cross-border investment on digitalization across parent economies and subsidiary locations. Authors assess the role of FDI on technology adoption both for foreign or Korean-owned multinational enterprises (MNEs) and consider potential spillovers on domestic firms and the underlying mechanisms behind.

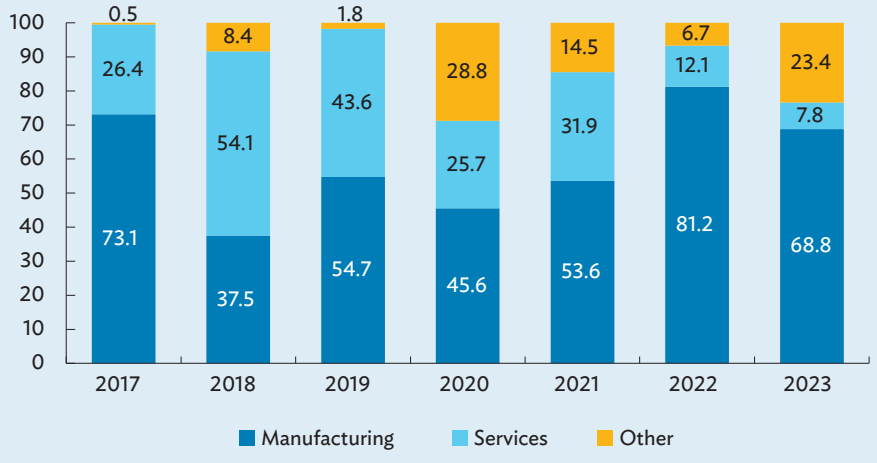
Building on evidence of management practices being transplanted by MNEs (Bloom and van Reenen 2010), the evidence for the Republic of Korea suggests that FDI flows have improved productivity and wages, although effects differ by sector and size (Poole et al. forthcoming). Digital transformation has opened new ways for technology to spread in the Republic of Korea. Evidence on next-generation digital technologies suggests that firms often adopt several technologies together—AI, the Internet of Things, cloud computing, and big data—and that companies with more research and development and intangible assets are more likely to do so (Cho et al. 2023). In sum, digital tools can improve productivity when paired with skilled workers and good management.

The Republic of Korea's Survey of Business Activities provides detailed information on each firm's ownership structure. About 27% of all firms have a parent company, more so for service firms (34%) than manufacturing firms (20%). About 9% of firms are majority-owned by a foreign parent, while 18% are owned by a domestic parent. On the subsidiary side, 44% of firms have at least one subsidiary, and roughly one in four maintains a foreign subsidiary. Foreign subsidiaries are more common in manufacturing (35%) than in services (19%), reflecting the outward orientation of manufacturing activities.

In terms of technology adoption, about 14% of firms report having adopted at least one technology, with adoption rates. Among different categories, data creation and data use technologies are the most commonly adopted, while application of technologies such as 3D printing, robotics, and AR/VR remain relatively limited. Within data creation technologies, the use of big data and the Internet of Things is most prevalent. In data use technologies, cloud computing and AI are components of digital transformation, though adoption remains modest overall.

The empirical analysis is conducted in two parts: first, we investigate whether multinationals in the Republic of Korea bring new technology from headquarter nations to their subsidiaries in the economy and whether Korean firms with foreign subsidiaries upgrade their technological capabilities (direct effect). Next, we consider whether those firms with cross-border investment flows (either inward or outward) can support the spread of digital technologies to purely domestically operating Korean firms (indirect effect).

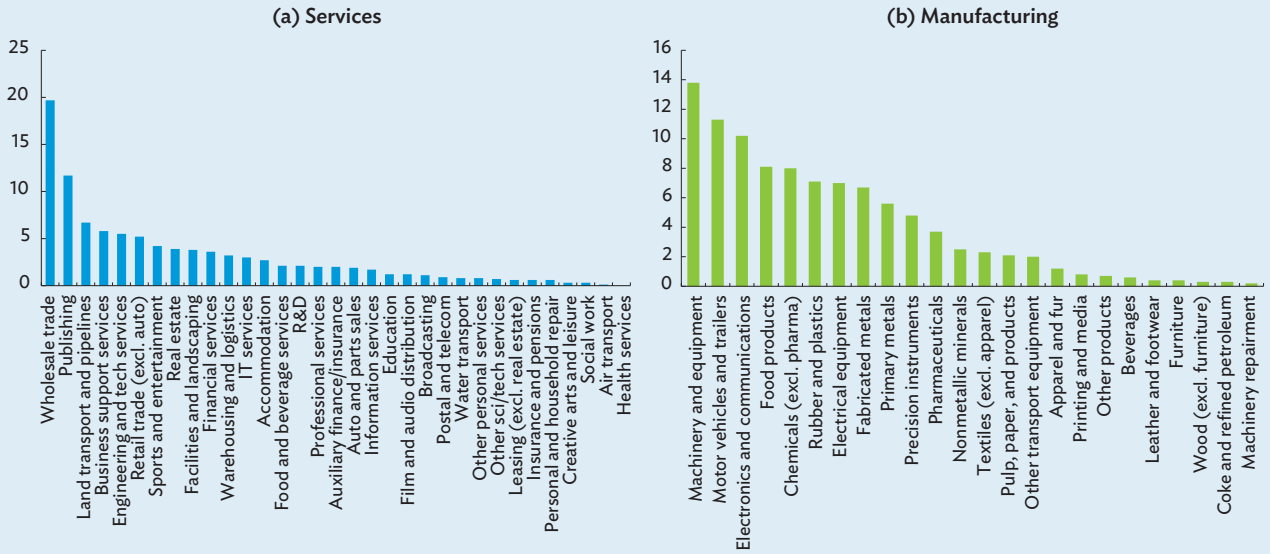
1: Sector Decomposition of Greenfield Investment Projects, 2017–2023—Republic of Korea *(%)*



Note: "Other" includes agriculture, forestry, fishing, mining, construction, and utility sectors.

Source: Authors' calculations using data from Financial Times. fDi Markets (accessed June 2025).

2: Firm Distribution Across Services and Manufacturing Subsectors, 2023—Republic of Korea *(%)*



IT = information technology, R&D = research and development.

Source: Authors' calculations.

Foreign Ownership and Digital Adoption

The first step is to estimate the extent to which the adoption of digital technology is influenced by cross-border investment flows across firms. The baseline equation to be estimated is as follows:

$$y_{jt} = \beta_1 FOREIGN_{jt} + \beta_2 KMNE_{jt} + \theta X_{jt} + \delta_{kt} + \varepsilon_{jt}$$

where *j* indexes the firm, *k* indexes the firm's subsector, and *t* corresponds to 2017–2023 in our sample. The variable $FOREIGN_{jt}$ equals one if the firm is owned by a parent firm outside of the Republic of Korea, while the variable $KMNE_{jt}$ equals one if the Korean parent firm owns a subsidiary outside of the Republic of Korea.[a]

The core outcome variable in our primary regressions is a dummy variable equal to one if the firm adopted any of the nine digital technologies.

Estimations report a positive association between operating a foreign subsidiary and any technology adoption (column 2), consistent with the theory in Grossman and Rossi-Hansberg (2008). Korean multinationals are around 0.057 percentage points more likely to adopt digital technologies compared to purely Korean operating firms (without foreign ownership or foreign subsidiaries), even after controlling for firm size. The positive association between digitalization and ownership of foreign subsidiaries is stronger in service sectors than in manufacturing.

Preliminary results also suggest a negative association between inward foreign direct investment and the adoption of AI tools in manufacturing and primarily digital manufacturing sectors. Foreign-owned manufacturing firms in the Republic of Korea are estimated to be less likely to adopt AI than their purely domestic counterparts. As the Korean economy is at the frontier of technology development, one potential hypothesis is that purely domestic Korean firms are in fact more technologically advanced than the foreign parent counterparts.

Spillovers in Domestic Firms

The second part of the analysis focuses on whether local exposure to internationally engaged firms can encourage the digitalization of purely domestic firms with no cross-border investment. The following equation is estimated:

$$y_{jt} = \beta_1 FOREIGN_{kt} + \beta_2 KMNE_{kt} + \theta X_{jt} + \delta_t + \varepsilon_{jt}$$

where the main regressors of interest now reflect the proportion of firms within firm *j*'s subsector *k* that report ownership by a foreign parent ($FOREIGN_{kt}$) or ownership of a foreign subsidiary ($KMNE_{kt}$). Importantly, we restrict the sample of firms to only those purely domestic firms.

Initial results suggest that, across all firms, a strong presence of Korean multinational firms within the domestic firm's subsector is positively associated with increased digital

continued on next page

Box 3.2: continued

technology adoption. As Korean firms sit at the frontier of technology adoption around the world, we explore the potential for MNEs to support new digital technologies among those firms least likely to already rely on these technologies.

The following tables present the core spillovers regressions excluding domestic firms operating in subsectors identified as digital sectors. Given the advanced stage of the Korean technology sector, the spillovers associated with MNEs are stronger for firms that are not already at the technology frontier. A higher share of Korean-owned MNEs in a firm's subsector is associated with a stronger probability of digital technology adoption among domestic Korean firms. This association is also robust to broader categorizations of digital technologies. As the share of Korean multinational firms increases, domestically oriented services firms increase their adoption of data creation and data use technologies. All pure domestic firms, however, are more likely to adopt applied technologies, like robotics, for enhancing production techniques.

1: Firm Type and the Likelihood of Technology Adoption

	Adopted Any Technology = 1				
	(1)	(2)	(3)	(4)	(5)
	All Firms	All Firms	Manufacturing Firms	Services Firms	Digital Sectors
Owned by foreign parent = 1	0.026***	0.007	0.004	0.008	-0.018
	(0.008)	(0.008)	(0.011)	(0.010)	(0.028)
ROK multinational = 1	0.090***	0.057***	0.031***	0.094***	0.079***
	(0.005)	(0.005)	(0.006)	(0.010)	(0.014)
Subsector x year FE	Yes	Yes	Yes	Yes	Yes
Firm controls	No	Yes	Yes	Yes	Yes
Observations	86,232	86,232	43,128	43,104	14,940
R-squared	0.131	0.151	0.066	0.207	0.169

FE = fixed effect, ROK = Republic of Korea.

Notes: Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

Source: Poole et al. (forthcoming).

2: Spillover Effects and Technology Adoption, Unweighted, no ICT Sector

	Adopted Any Technology = 1			
	(1)	(2)	(3)	(4)
	All Firms	All Firms	Manufacturing Firms	Services Firms
Share of foreign-owned firms	0.157***	0.198***	-0.019	-0.024
	(0.079)	(0.066)	(0.199)	(0.060)
Share of ROK MNE firms	0.091***	0.102**	0.182**	0.518***
	(0.041)	(0.045)	(0.086)	(0.091)
Subsector x year FE	Yes	Yes	Yes	Yes
Firm controls	No	Yes	Yes	Yes
Observations	48,604	48,604	21,822	26,782
R-squared	0.012	0.019	0.018	0.032

FE = fixed effect, ICT = information and communication technology, MNE = multinational enterprise, ROK = Republic of Korea.

Notes: Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

Source: Poole et al. (forthcoming).

continued on next page

Box 3.2: continued

This research offers policymakers guidance in supporting the adoption of digital technologies and in facilitating linkages between multinational and domestic firms.

Results suggest that investment facilitation tools can support knowledge sharing and collaboration between firms. Domestically, firms need to develop digital infrastructure and digital skills for the workforce to enhance absorptive capacity. Higher intellectual property protections and data governance are also central to encourage technology spillovers.

3: Spillover Effects and Technology Adoption, Unweighted, No ICT Sector

	Adopted Data Creation Technologies = 1			
	(1)	(2)	(3)	(4)
	All Firms	All Firms	Manufacturing Firms	Services Firms
Share of foreign-owned firms	0.137**	0.169***	-0.119	0.001
	(0.067)	(0.058)	(0.076)	(0.058)
Share of ROK MNE firms	0.000	0.009	0.080	0.349***
	(0.031)	(0.035)	(0.050)	(0.082)
Subsector x year FE	Yes	Yes	Yes	Yes
Firm controls	No	Yes	Yes	Yes
Observations	48,604	48,604	21,822	26,782
R-squared	0.006	0.014	0.011	0.024

FE = fixed effect, ICT = information and communication technology, MNE = multinational enterprise, ROK = Republic of Korea.

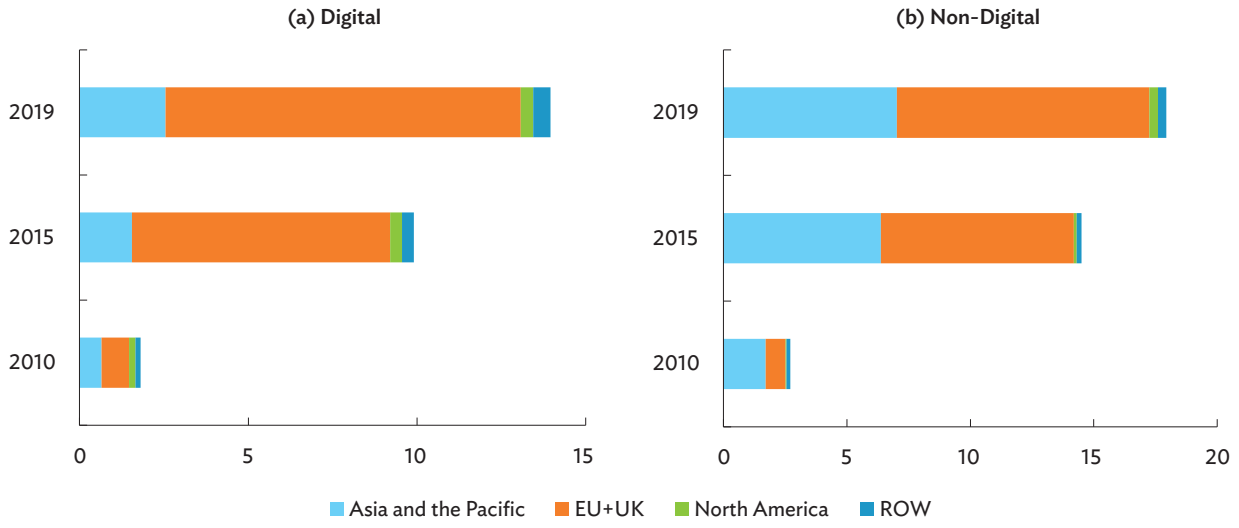
Notes: Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

Source: Poole et al. (forthcoming).

[a] The main estimation also includes the firm's log of employment as an indicator to capture general firm size and productivity effects, as the main time-varying, firm-level control (X_{jt}), as well as subsector-by-year fixed effects to account for the sector-specific trends in investment and technology adoption.

Source: Poole et al. (forthcoming).

Figure 3.18: Total Employment Stock in Multinational Enterprises—Digital Versus Non-Digital (million)



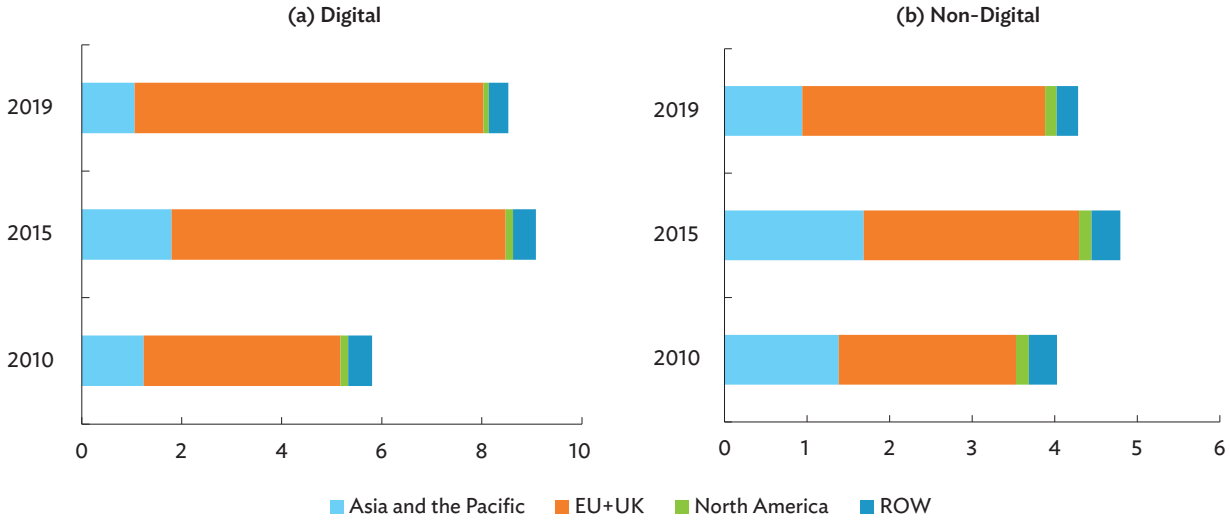
EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom.

Note: Employment figures reflect the total number of employees in all affiliates.

Source: Authors' calculations based on Government of the United States, United States International Trade Commission. Multinational Revenue, Employment, and Investment Database. https://www.usitc.gov/data/gravity/mreid.htm (accessed November 2025).

Employment trends (flows) in greenfield and mergers and acquisitions (M&A) projects reveal distinct patterns in job creation across digital and non-digital sectors (Figures 3.19 and 3.20). As in the case of stocks, the EU+UK generates the largest number of jobs in greenfield projects, followed by Asia and the Pacific. Asia shows a more balanced distribution between the digital and non-digital jobs across MNEs. Employment from

Figure 3.19: Employment in Greenfield Projects—Digital Versus Non-Digital ('000)

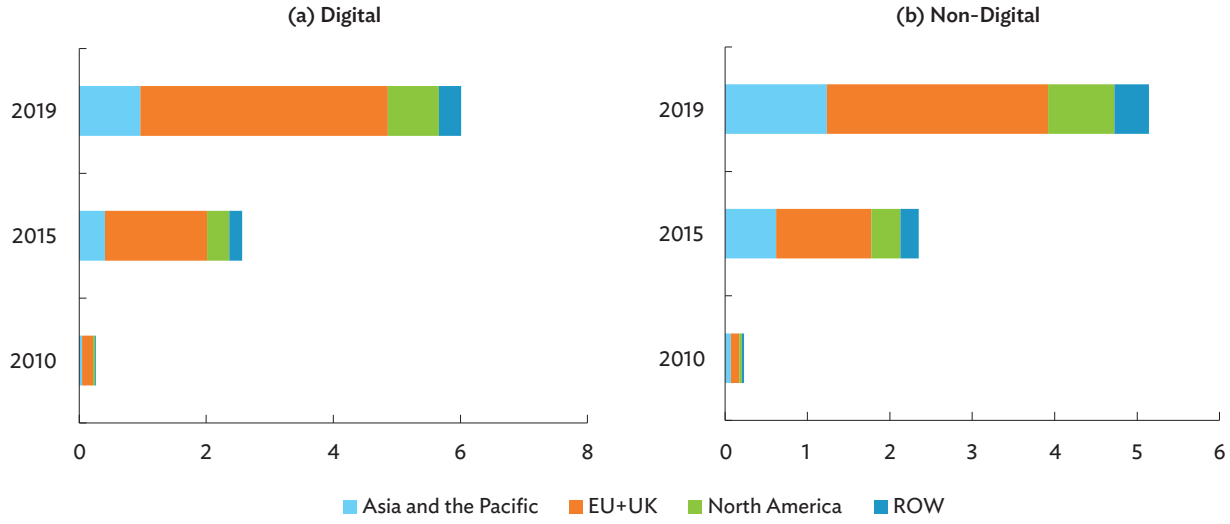


EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom.

Note: Employment figures represent the total number of employees in new greenfield affiliates.

Source: Authors' calculations based on Government of the United States, United States International Trade Commission. Multinational Revenue, Employment, and Investment Database. https://www.usitc.gov/data/gravity/mreid.htm (accessed November 2025).

Figure 3.20: Employment in Mergers and Acquisitions—Digital Versus Non-Digital ('000)

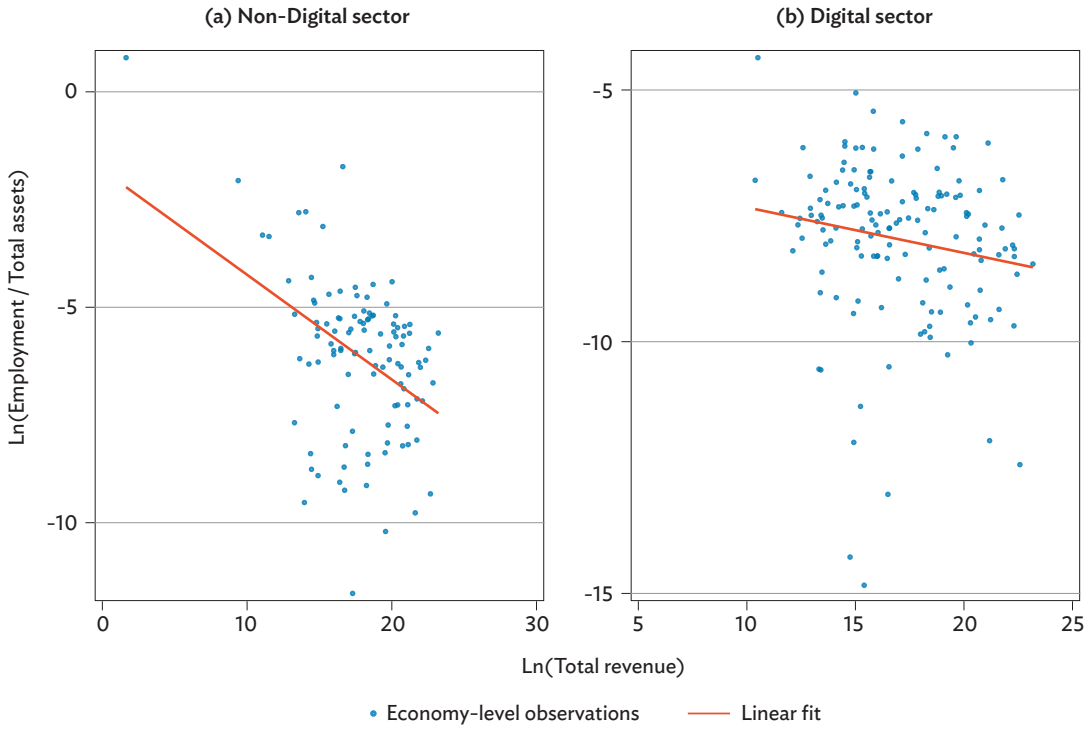


EU = European Union (27 members), M&A = merger and acquisition, ROW = rest of the world, UK = United Kingdom.

Note: Employment figures represent the total number of employees in new M&A affiliates.

Source: Authors' calculations based on Government of the United States, United States International Trade Commission. Multinational Revenue, Employment, and Investment Database. https://www.usitc.gov/data/gravity/mreid.htm (accessed November 2025).

Figure 3.21: Correlation Between Revenue and Employment-to-Asset Ratio, Digital Versus Non-Digital



Ln = natural logarithm.

Note: Each dot represents an economy, with values aggregated across foreign affiliates.

Source: Authors' calculations based on Government of the United States, United States International Trade Commission. Multinational Revenue, Employment, and Investment Database. https://www.usitc.gov/data/gravity/mreid.htm (accessed November 2025).

new greenfield projects surpassed that of M&A activity until around 2020. Greenfield-related employment peaked in the early 2010s and tapered off after 2016–2017, particularly in the EU+UK and Asia, suggesting a slowdown in new project-based job creation. In contrast, employment associated with M&A activity has risen steadily across most regions, with the EU+UK showing the strongest and most sustained increase, especially in digital industries. This divergence points to a structural shift in employment patterns: while earlier gains were driven by the establishment of new digital operations, more recent growth reflects consolidation and acquisition-led expansion within the digital economy.

As firms expand and generate higher revenues, this does not necessarily coincide with proportional increases in employment. Figure 3.21 shows a negative association between revenue and the employment-to-asset ratio across economies, based on aggregates of foreign-invested enterprises. This relationship is steeper in non-digital sectors, which may reflect greater reliance on capital (machinery, technology, or process efficiency) as revenues increase, rather than labor expansion. In digital sectors, the association remains negative but is noticeably flatter, reflecting that these sectors are already less labor-intensive and rely more heavily on scalable intangible assets, such that changes in employment play a more limited role in driving revenue growth. Overall, these patterns suggest that firm growth, especially in non-digital sectors, is increasingly supported by capital and efficiency gains rather than labor.

Policy Recommendations

While national digital strategies have gained traction in the region, there are still challenges in integrating the investment dimension into industrial development strategies. For example, intellectual property agreements

Box 3.3: Competition and Digital Foreign Direct Investment

Competition policy remains an important area for foreign direct investment (FDI) in the digital economy, especially today when digital regulatory regimes are more divergent.

Traditional competition frameworks rely on existing laws (e.g., privacy and consumer protection) or adopt targeted regimes for digital platforms. A strong, rule-based competition policy is vital for attracting multinational activity. There are trade-offs when considering the role of competition policy and FDI. On the one hand, increasing FDI screening in digital and technology sectors may deter investment (OECD 2024). On the other, competition can contribute to control for competitive distortions, such as subsidization of selected sectors or firms or incentives in the digital sector (e.g., Malaysia data centers and tax expenditure programs).

Preventative regulations such as the Digital Markets Act of the European Union (EU) aim to capture practices harmful to competition. Merger oversight is another important area of competition in the digital economy, focusing on revising notification thresholds, preventing killer acquisitions by domestic or foreign companies and enhancing enforcement and improving transparency. Cases on competition policy have increasingly intersected with FDI policy issues in Asia. One such example, from Japan, involves cases on e-commerce platforms (e.g., Amazon, Rakuten) over potential abuse of position against sellers in the marketplace. As a result, FDI rules were tightened to require prior notification. In the People's Republic of China, Alibaba's case for abuse of dominant position resulted in delayed foreign technology mergers and acquisitions under national security and data privacy grounds.

International investment agreements (IIAs) (bilateral investment treaties and investment chapters in free trade agreements) can also overlap with domestic competition law in the context of the digital economy. IIAs are designed to protect foreign investors against discriminatory treatment, in the same way competition policy prevents anticompetitive practices. These agreements often contain nondiscrimination provisions (national treatment, fair and equitable treatment, most-favored-nation treatment), which complement domestic competition law. A growing number of IIAs contain dedicated chapters on competition, which require effective competition laws, procedural requirements, and cooperation for enforcement action. Telecommunications chapters add dedicated disciplines on network access use, interconnectivity, universal services obligations, and the prevention of anticompetitive practices. Some agreements encourage the parties to cooperate in the development of competition laws for the digital economy. Evidence for Asia also suggests that a strong regulatory authority raises the establishment cost for foreign affiliates while at the same time lowering the cost of operations (Nordås and Avendano forthcoming). These examples underscore that competition and investment policy on digital markets will be more entwined in the future, and policy coherence on the scope and objectives of domestic and international frameworks is needed.

Source: ADB compilation based on Organisation for Organisation for Economic Co-operation and Development, Korea Policy Center, and Asian Development Bank. "Antitrust Enforcement and Regulation in Digital Markets" (workshop, Republic of Korea, 4–5 September 2025).

are rarely considered to be part of digital strategies (UNCTAD 2025), highlighting the need for more investment-oriented digital policies.

Leverage policy instruments. Established FDI policy instruments such as international investment agreements (IIAs) can leverage more and better digital FDI. International investment agreements can contribute to attract quality FDI into digital sectors. Provisions on cooperation for promoting skills development, digital literacy, and ICT can support economies in attracting FDI or in favoring technology transfer. Commitments on AI, digital payments, data flows, and cybersecurity are still novel in the region but more common globally. Yet, more can be done to promote digital skills training, small and medium-sized enterprises support, and digital infrastructure development. Increasingly, competition policy and its interaction with FDI policy is important for the digital sector (Box 3.3).

Strengthen national digital strategies. National digital strategies remain a pillar for enhancing FDI into digital sectors. Evidence from industrialized economies in their ICT/digital frameworks (classified as Generation 4 by the ITU in the ICT Regulatory Tracker) highlights the importance of adopting national digital strategies early on. These have improved significantly in quality and sophistication, featuring new instruments (i.e., techno parks, incubators, special economic zones, clusters for technological development).

Support regional strategies. Regional digital strategies have also been important in promoting higher cross-border investment, by aligning standards and interoperability. The most prominent regional strategy in Asia is that of the Association of Southeast Asian Nations (ASEAN), which began with ICT-focused master plans to expand infrastructure. The ASEAN Digital Masterplan 2025 and the Bandar Seri Begawan Roadmap promote cross-border digital trade, e-commerce, digital payments, and cybersecurity. The ASEAN Digital Economy Framework Agreement aims at establishing a legally binding framework for a regional market.

Commit to data governance. Data governance is shaping investments in digital sectors. Data governance initiatives have represented the highest share of digital policy measures in recent years. They focus on data protection and governance. Cross-border data flows remain an important area. In recent years, the adoption of data localization requirements has increased. These include data localization requirements, approval, or prior notification before data transfers, adequacy decisions, standard contractual clauses or model contractual clauses, binding corporate rules, and others.

Enhance intellectual property legislation. Another area of increasing importance is robust and transparent intellectual property laws. Digital technologies are generally protected through patents. Most advanced economies have ratified the World Intellectual Property Organization internet treaties that ensure these mechanisms are functional. Developing economies have adopted a more flexible approach to intellectual property.

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Annex 3A: Sector Correspondence—Digital Economy

Digital Economy Component		UNCTAD/OECD/ ISIC Rev. 4		NAICS 2017		fDi Markets
Narrow Scope: Digital Economy	Core Scope	**Foundational infrastructure**				
		6110	Wired telecommunications activities	517311	Wired telecommunications carriers	Wired telecommunication carriers
		6120	Wireless telecommunications activities	515111	Radio networks	Radio and television broadcasting
				515112	Radio stations	
				515120	Television broadcasting	
				515210	Cable and other subscription programming	Cable and other subscription programming
				517312	Wireless telecommunications carriers (except satellite)	Wireless telecommunication carriers
		6130	Satellite telecommunications activities	517410	Satellite telecommunications	Satellite telecommunications
		6190	Other telecommunications activities	517911	Telecommunications resellers	Other telecommunications
				517919	All other telecommunications	
				812990	All other personal services	n.d.
		Digital services and solutions				
		5820	Software publishing	511210	Software publishers	Software publishers, except video games
						Video games, applications, and digital content
		6201	Computer programming activities	541511	Custom computer programming services	Custom computer programming services
		6202	Computer consultancy and computer facilities management activities	541512	Computer systems design services	Computer systems design services
				541513	Computer facilities management services	Computer facilities management services
		6209	Other information technology and computer service activities	541519	Other computer-related services	Other computer-related services
		4791	Retail sale via mail-order houses or via the internet	454110	Electronic shopping and mail-order houses	Nonstore retailers
		K	Financial and insurance activities	52	Finance and insurance	Financial services
			Transit services	485	Transit and ground passenger transportation	Transit and ground passenger transportation
		Industrial development				
		2610	Manufacture of electronic components and boards	334412	Bare printed circuit board manufacturing	Other (semiconductors) Semiconductors and other electronic components
				334413	Semiconductor and related device manufacturing	
				334416	Capacitor, resistor, coil, transformer, and other inductor manufacturing	
				334417	Electronic connector manufacturing	

continued on next page

Annex 3A: continued

Digital Economy Component		UNCTAD/OECD/ ISIC Rev. 4		NAICS 2017		fDi Markets
Narrow Scope: Digital Economy	Core Scope	2610	Manufacture of electronic components and boards	334418	Printed circuit assembly (electronic assembly) manufacturing	
				334419	Other electronic component manufacturing	
		2620	Manufacture of computers and peripheral equipment	334111	Electronic computer manufacturing	Computer and peripheral equipment
				334112	Computer storage device manufacturing	
				334118	Computer terminal and other computer peripheral equipment manufacturing	
		2630	Manufacture of communication equipment	334210	Telephone apparatus manufacturing	Communications equipment
				334220	Radio and television broadcasting and wireless communication equipment manufacturing	
				334290	Other communication equipment manufacturing	
		2640	Manufacture of consumer electronics	334310	Audio and video equipment manufacturing	Audio and video equipment (consumer electronics)
						Audio and video equipment (electronic components)
				339930	Doll, toy, and game manufacturing	Dolls, toys, and games
		2680	Manufacture of magnetic and optical media	334613	Blank magnetic and optical recording media manufacturing	Magnetic and optical media
		4651	Wholesale of computers, computer peripheral equipment, and software	423430	Computer and computer peripheral equipment and software merchant wholesalers	Wholesale trade (consumer goods)
		4652	Wholesale of electronic and telecommunications equipment and parts	423610	Electrical apparatus and equipment, wiring supplies, and related equipment merchant wholesalers	
				423690	Other electronic parts and equipment merchant wholesalers	
		6312	Web portals	519130	Internet publishing and broadcasting and web search portals	Internet publishing and broadcasting and web search
		9511	Repair of computers and peripheral equipment	811212	Computer and office machine repair and maintenance	n.d.
		9512	Repair of communication equipment	811211	Consumer electronics repair and maintenance	n.d.
				811213	Communication equipment repair and maintenance	n.d.
	Digital Adoption	6311	Data processing, hosting, and related activities	5182	Data processing, hosting, and related services	Data processing, hosting, and related services

AI = artificial intelligence, ICT = information and communication technology, ISIC = International Standard Industrial Classification of All Economic Activities, n.d. = no data, NAICS = North American Industry Classification System, OECD = Organisation for Economic Co-operation and Development, UNCTAD = United Nations Trade and Development.

Notes: AI, automation, and services; digital contents may be covered by some core sectors.

Sources: ADB compilation based on Financial Times; Government of the United States, Census Bureau; OECD; and UNCTAD.

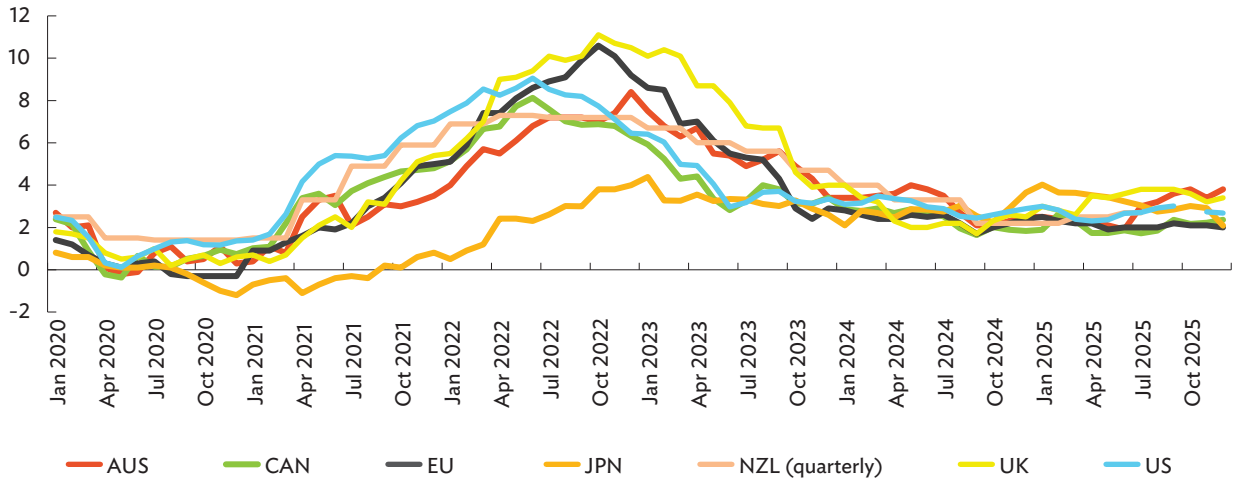
4 Financial Integration

Financial Resilience and Integration Amid Global Uncertainties

With Inflation Pressures Moderating, Policy Rate Differentials Influence Regional Capital Flows

Regional capital markets performed well in the first half of 2025, partly supported by the resumption of net nonresident portfolio inflows following net outflows toward the end of 2024. Following the central bank policy rate cut cycle in 2024, the United States (US) Federal Reserve maintained its policy rate at 4.37% throughout the first half of 2025. In September, it began lowering its policy rate, reaching a target range of 3.50%–3.75% in December after cutting the Fed Fund rate three times. With inflation gradually easing in advanced economies (Figure 4.1), the Reserve Bank of Australia, Bank of Canada, European Central Bank, Reserve Bank of New Zealand, and Bank of England also lowered benchmark interest rates. Central banks in developing Asia mirrored the easing trajectory, but at varying paces depending on domestic economic conditions and consideration of the potential impact of external economic uncertainties. This differentiated approach underscored the need for policymakers to balance internal economic objectives with external risks linked to global trade developments.

Figure 4.1: Inflation—Selected Advanced Economies *(%)*



AUS = Australia, CAN = Canada, EU = European Union (27 members), JPN = Japan, NZL = New Zealand, UK = United Kingdom, US = United States.

Note: Inflation refers to the year-on-year change of the consumer price index. US inflation data for October 2025 is not available.

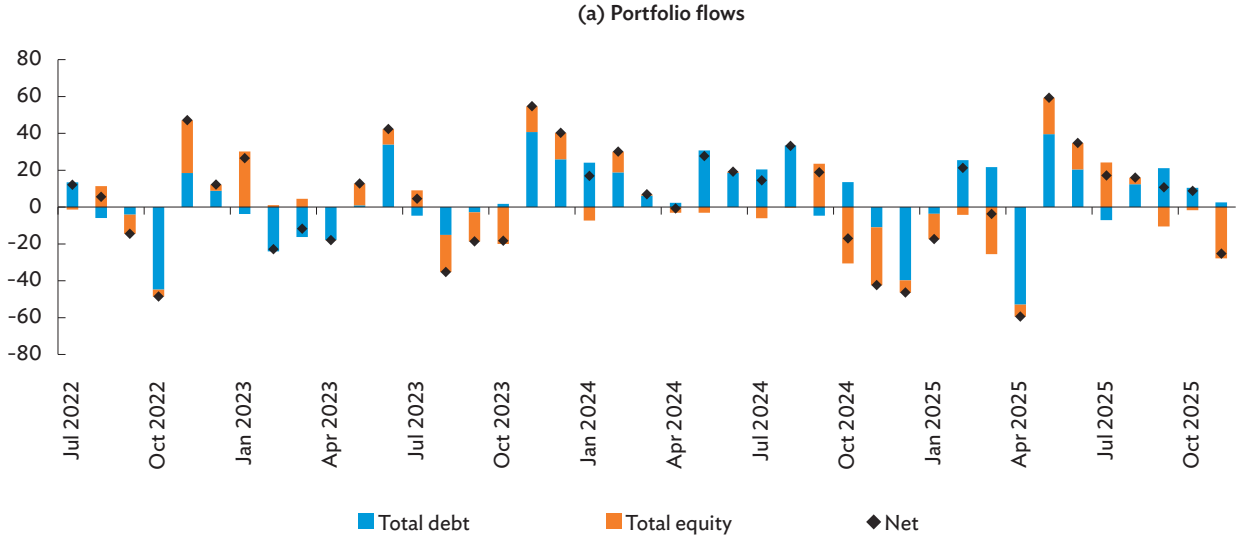
Source: CEIC Data Company (accessed January 2026).

Capital flows to Asia and the Pacific responded to changing policy uncertainties in global markets.[1] The region recorded portfolio outflows in the first quarter of 2025, given higher-for-longer interest rates in the US and elevated uncertainty around its trade policy. Portfolio inflows resumed in May 2025 with the announcement of a 90-day pause on the new US import tariffs introduced on 2 April, and as trade negotiations started. In the meantime, the Republic of Korea, the People's Republic of China (PRC), and Türkiye posted the region's highest net portfolio inflows until November 2025 (Figure 4.2a). Positive inflows into the PRC in the first half of 2025 were driven by foreign direct investment (FDI), while equity market sentiment improved following the government's stimulus package, including fiscal and monetary stimulus and capital-market support. These inflows were partly offset by outflows in the third quarter of 2025 (Figure 4.2b). Overall, positive policy rate differentials between the US and Asian economies continued to support the search for yield motive in Asia (Figure 4.3). The US dollar depreciated by 1.3% against a weighted average of Asian currencies in 2025 (ADB 2025). The depreciation supported local currency assets' rising valuations in US dollar terms, attracting capital inflows into the region although the recent strength of the US dollar has unwound the trend of strengthening local currency values in the region to some extent.

Regional Financial Markets Remain Resilient

Variations in equity and bond returns reflected greater sensitivity to global than regional shocks (Figure 4.4). The US tariff announcement on 2 April triggered losses in regional markets of 10.4% for equities and 1.24% for bonds on a market-weighted basis. As investor

Figure 4.2: Nonresident Capital Flows—Selected Asian Economies ($ billion)

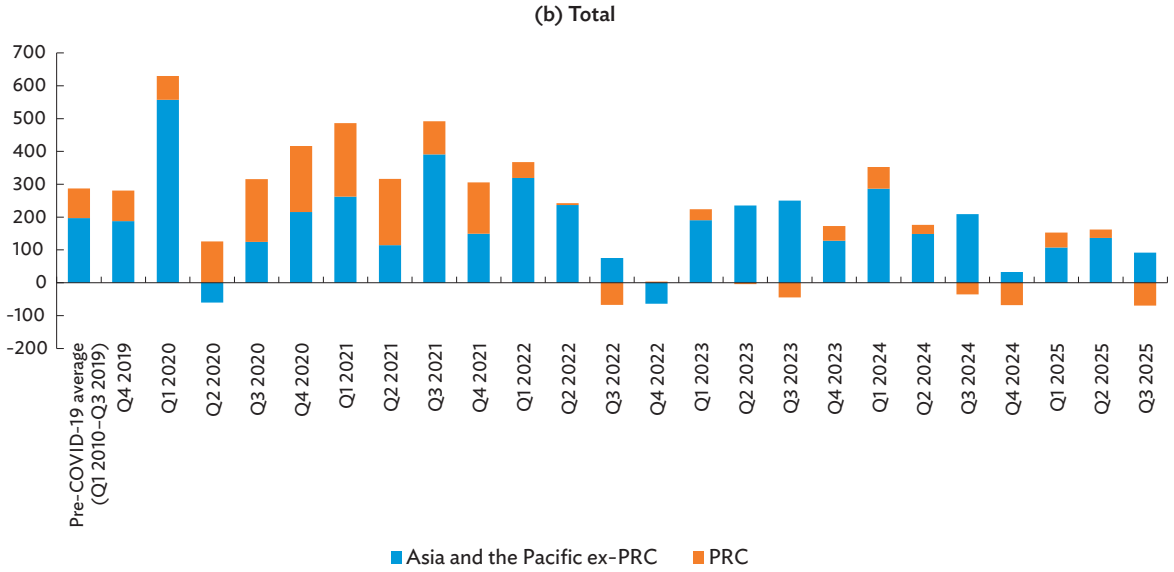


Notes: Positive values denote net inflows, negative values denote net outflows. Selected Asian economies include India; Indonesia; the Republic of Korea; Malaysia; Mongolia; Pakistan; the Philippines; Sri Lanka (equity only); Taipei,China; Thailand; Türkiye; and Viet Nam (equity only).

Source: ADB calculations using data from the Institute of International Finance. Capital Flows Tracker. https://www.iif.com (accessed January 2026).

[1] Asia and the Pacific (or Asia) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

Figure 4.2: continued



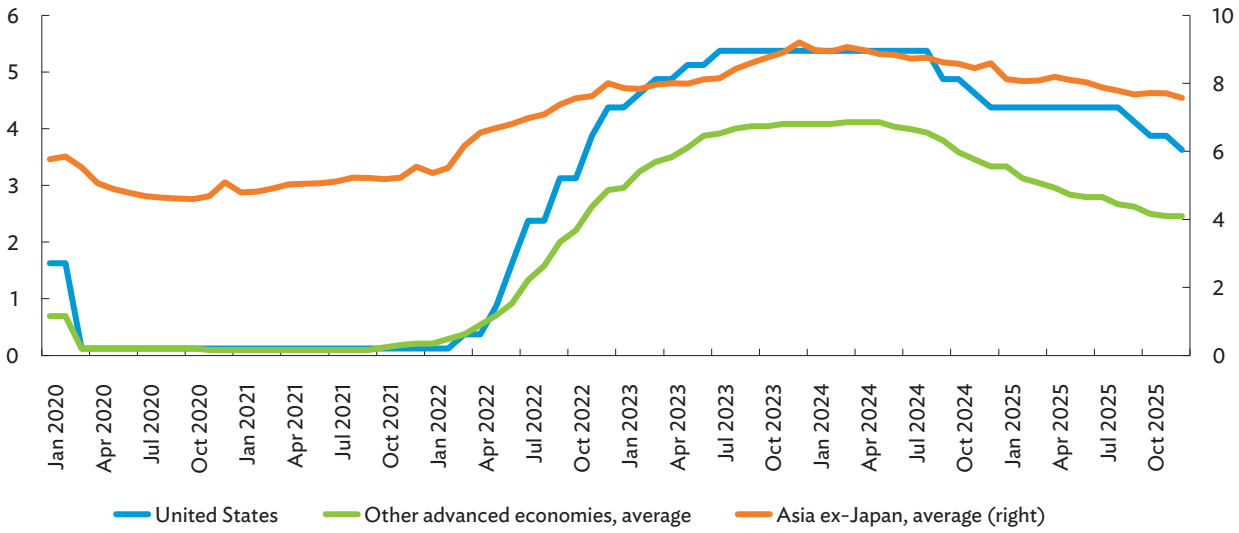
PRC = People's Republic of China, COVID-19 = coronavirus disease, Q = quarter.

Notes:

(i) Nonresident capital flows are composed of foreign direct investment, portfolio equity and debt flows, and other investment flows. Other investment flows include currency and deposits; insurance, pension, and standardized guaranteed schemes; loans; other accounts payable; other equity; special drawing rights; and trade credit and advances.
(ii) Positive values denote net inflows; negative values denote net outflows.
(iii) Selected Asian economies refer to Armenia; Azerbaijan; Bangladesh; Cambodia; the People's Republic of China; Fiji; Georgia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; Pakistan; the Philippines; Samoa; Tajikistan; Taipei,China; Thailand; and Uzbekistan.

Source: ADB calculations using data from the International Monetary Fund. Balance of Payments and International Investment Position Statistics. Accessed from CEIC Data Company (accessed January 2026).

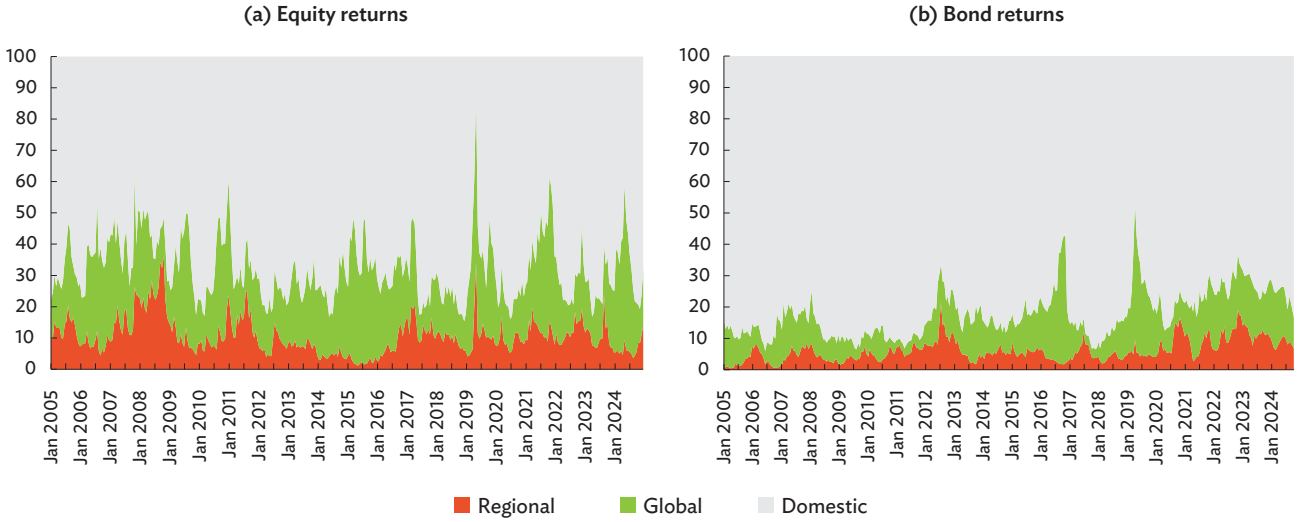
Figure 4.3: Monetary Policy Rates *(%)*



Notes: Advanced economies include Australia; Canada; euro area; Japan; New Zealand; and the United Kingdom. Asian economies include Armenia; Azerbaijan; Bangladesh; the People's Republic of China; Georgia; Hong Kong, China; India; Indonesia; Kazakhstan; the Republic of Korea; the Kyrgyz Republic; the Lao People's Democratic Republic; Malaysia; Mongolia; Nepal; Pakistan; the Philippines; Singapore; Sri Lanka; Taipei,China; Tajikistan; Thailand; Türkiye; Uzbekistan; and Viet Nam.

Source: ADB calculations using data from CEIC Data Company (accessed January 2026).

Figure 4.4: Variance Decomposition of Equity and Bond Returns—Asia *(%)*



Notes: Asia includes Australia; Bangladesh (equities only); Cambodia (equities only); the People's Republic of China; Georgia (equities only); Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; the Kyrgyz Republic (equities only); the Lao People's Democratic Republic (equities only); Malaysia; Mongolia (equities only); Nepal (equities only); New Zealand (equities only); Pakistan (equities only); the Philippines; Singapore; Sri Lanka (equities only); Taipei,China; Thailand; Uzbekistan (equities only); and Viet Nam.

Sources: ADB calculations using data from Bloomberg; CEIC Data Company (both accessed January 2026); and methodology by Lee and Park (2011) using 1-year rolling window estimations.

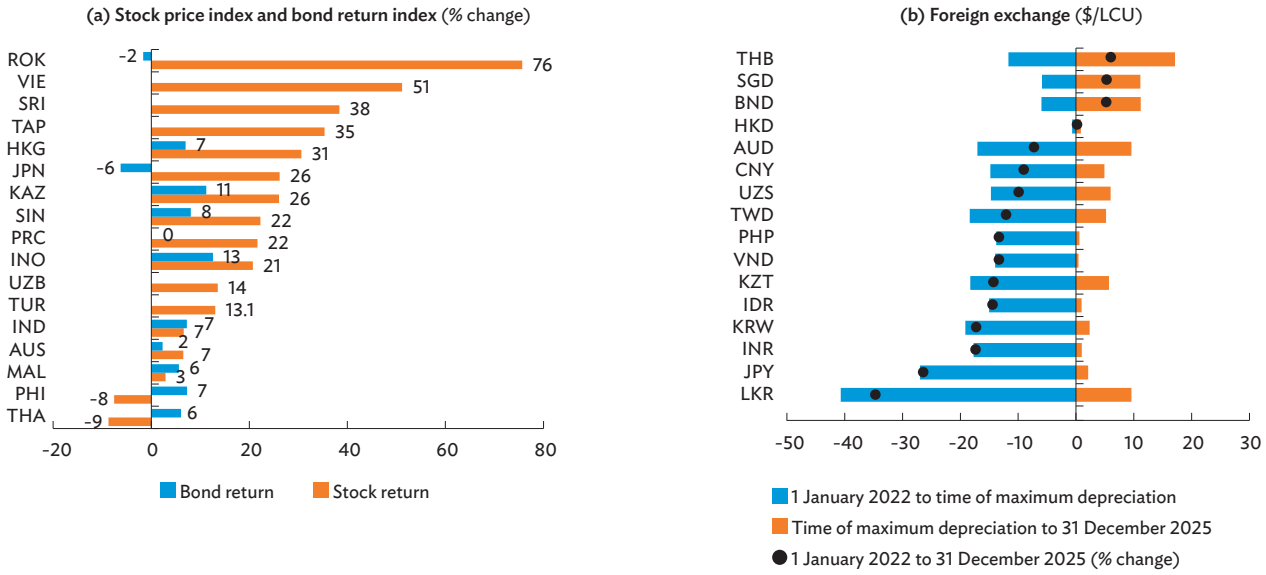
sentiment improved with the announcement of a 90-day pause in tariff implementation, markets recovered such that average regional stock prices gained 22.0% and bond prices increased by 5.0% by the end of the year. Stock price gains were the highest in the Republic of Korea, Viet Nam, and Sri Lanka (Figure 4.5a). The heightened trade uncertainty initially weakened local currencies in the first half of 2025, which was followed by a swift recovery in the second half of the year, led by the Thai baht and the Singapore dollar. Many currencies, however, have struggled to recover from the broad-based depreciation against the US dollar even after the US Fed began lowering the benchmark interest rate in 2024. Meanwhile, domestic economic pressures drove the depreciation of local currency values in some economies, such as the Sri Lankan rupee and the Philippine peso (Figure 4.5b). On the price front, the impact of global factors on equity returns intensified in 2024, while the impact of regional factors increased toward the end of the year. Meanwhile, bond returns became less sensitive to both regional and global factors while in terms of magnitude, the impact of regional factors does not lag far behind that of global factors, as depicted in the variance decomposition exercise in Figure 4.4 (see Box 4.1 for a detailed explanation of the methodology).

Intraregional Exposures Increased Slightly in 2024

Asia's intraregional share of cross-border assets remained at 36%, while the share for cross-border liabilities rose by 1 percentage point to 37%. On the assets side, the intraregional share of portfolio debt posted a modest increase by 0.5 percentage points to 22.2% in 2024. Portfolio equity followed a similar pattern, increasing from 21.1% in 2023 to 21.5% in 2024. In absolute terms, estimates show that intraregional portfolio debt expanded from $1.1 trillion in 2023 to $1.2 trillion in 2024. Likewise, portfolio equity grew by $0.2 trillion to $1.6 trillion over the same period (Figure 4.6). On the liabilities side, the intraregional share of both portfolio debt and equity rose by 2 percentage points, reaching 31% and 22% in 2024, respectively. A slight increase in absolute values was also recorded, with portfolio debt rising to $1.2 trillion and portfolio equity to $1.6 trillion in 2024 (Figure 4.7).

The larger increase in intraregional shares for portfolio liabilities relative to portfolio assets indicates the growing role of regional markets for financing. Further

Figure 4.5: Year-to-Date Change—Selected Asian Economies (as of 31 December 2025)



AUD = Australian dollar; AUS = Australia; BND = Brunei dollar; PRC = People's Republic of China; CNY = yuan; HKD = Hong Kong dollar; HKG = Hong Kong, China; IDR = rupiah; IND = India; INO = Indonesia; INR = Indian rupee; JPN = Japan; JPY = yen; KAZ = Kazakhstan; ROK = Republic of Korea; KRW = won; KZT = tenge; LCU = local currency unit; LKR = Sri Lanka rupee; MAL = Malaysia; PHI = Philippines; PHP = peso; SGD = Singapore dollar; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; THA = Thailand; THB = baht; TUR = Türkiye; TWD = NT dollar; UZB = Uzbekistan; UZS = sum; VIE = Viet Nam; VND = dong.

Source: ADB calculations using data from Bloomberg and CEIC Data Company (both accessed in January 2026).

Box 4.1: Methodology for Variance Decomposition

Regional and the global variance decompositions are computed using the following formulas:

$$VR^{EA}_{c,t} = \frac{\left(\beta^{EA}_{c,t}\right)^2 \sigma^2_{EA,t}}{\sigma^2_{c,t}} \quad VR^{G}_{c,t} = \frac{\left(\beta^{G}_{c,t}\right)^2 \sigma^2_{G,t}}{\sigma^2_{c,t}}$$

where $VR^{EA}_{c,t}$ and $VR^{G}_{c,t}$ are the regional and global variance of economy c, at time t, respectively. $\beta^{EA}_{c,t}$ and $\beta^{G}_{c,t}$ are the economy-specific sensitivity to the regional and global beta at time t, respectively. These were obtained from the following equation:

$$\varepsilon_{c,t} = \alpha_{c,t} + \beta^{EA}_{c,t}\varepsilon_{EA,t} + \beta^{G}_{c,t}\varepsilon_{G,t}$$

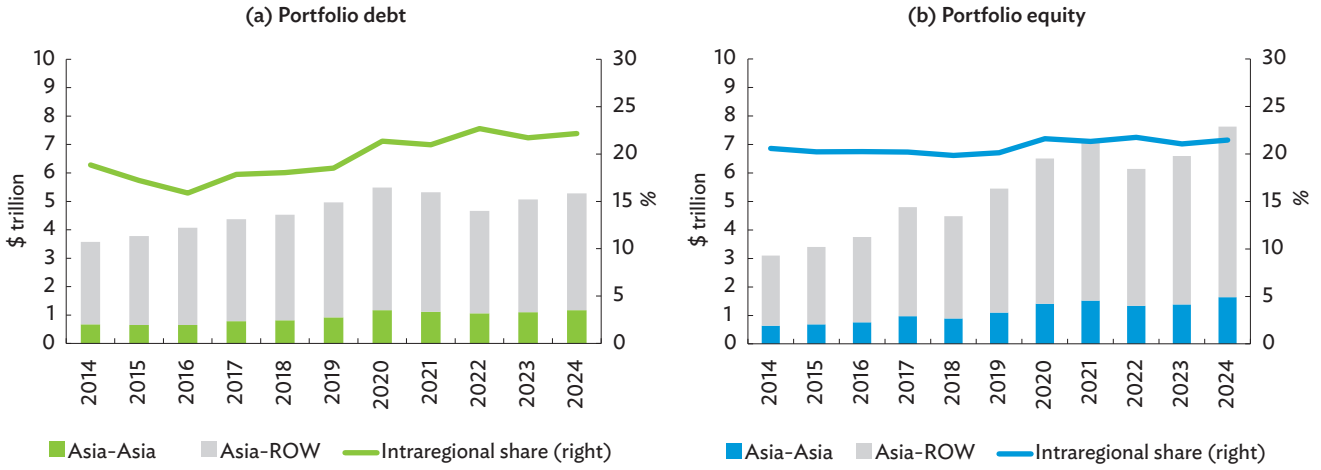
The formula was applied on a rolling basis, with 52 weekly data points. $\sigma^2_{EA,t}$ and $\sigma^2_{G,t}$ are the regional conditional variance and global conditional variance, estimated from the equation above. They are assumed to follow a standard asymmetric GARCH (1, 1) process. $\varepsilon_{EA,t}$ and $\varepsilon_{G,t}$ are the unexpected components of equity (bond) market returns, which are proxied by the error terms obtained from the regression equation where $r_{c,t}$ is the weekly equity (bond) returns of each individual economy.

$$r_{c,t} = \delta_{0\,c,t} + \delta_{1\,c,t-1} r_{c,t-1} + \varepsilon_{c,t}$$

The "Asia index" or regional component of each economy is created using the weighted sum of the index of individual economies, excluding the economy considered. Current gross domestic product in United States dollars is the weight for the Asia indexes.

Source: Lee and Park (2011).

Figure 4.6: Cross-Border Assets—Asia and the Pacific, by Type

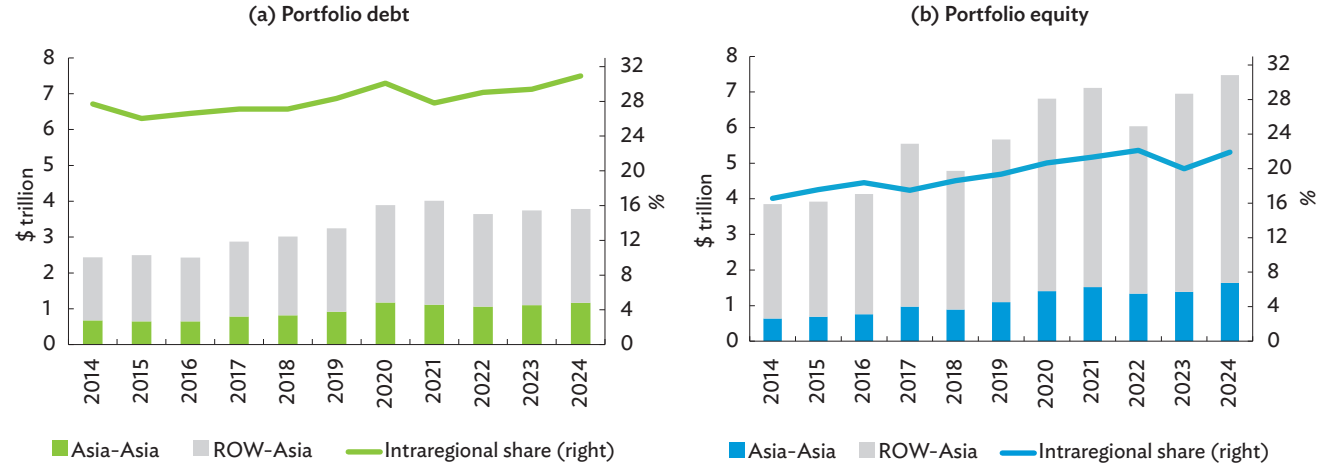


ROW = rest of the world.

Notes: Estimates are as of December 2025. Asia refers to Asia and the Pacific, which includes ADB regional members for which data are available. The gray bars represent actual values of portfolio debt and equity from Asia to the rest of the world, while the colored bars (green and blue) show the actual values of intraregional assets. The lines indicate the intraregional shares of Asia relative to the total.

Source: ADB calculations using data from International Monetary Fund. Portfolio Investment Position. https://data/imf.org/en/datasets/IMF.STA:PIP (accessed November 2025).

Figure 4.7: Cross-Border Liabilities—Asia and the Pacific, by Type



ROW = rest of the world.

Notes: Estimates are as of December 2025. Asia refers to Asia and the Pacific, which includes ADB regional members for which data are available. The gray bars represent actual values of portfolio debt and equity from the rest of the world to Asia, while the colored bars (green and blue) show the actual values of intraregional liabilities. The lines indicate the intraregional shares of Asia relative to the total.

Source: ADB calculations using data from International Monetary Fund. Portfolio Investment Position. https://data/imf.org/en/datasets/IMF.STA:PIP (accessed November 2025).

improvements in financial infrastructure should underpin the progress in financial integration. Existing impediments to regional cross-border financial flows include regulatory heterogeneity and underdeveloped payment and settlement linkages, among others.

FDI accounts for the largest share of cross-border assets and liabilities for Asia.

The share of FDI in cross-border assets and liabilities has remained broadly stable. As FDI is less sensitive to short-term global capital market gyrations, it could help reduce capital flow volatility. The share of Asian investors' regional FDI out of total intraregional assets slipped marginally from 39% in 2023 to 38% in 2024 (Figure 4.8a). Meanwhile, the share of FDI from regional investors out of total intraregional liabilities remained unchanged at 44% over the same period (Figure 4.8b). Meanwhile, the share of portfolio debt and bank flows in cross-border assets and liabilities has declined over time since 2024, whereas that of portfolio equity has been increasing gradually.

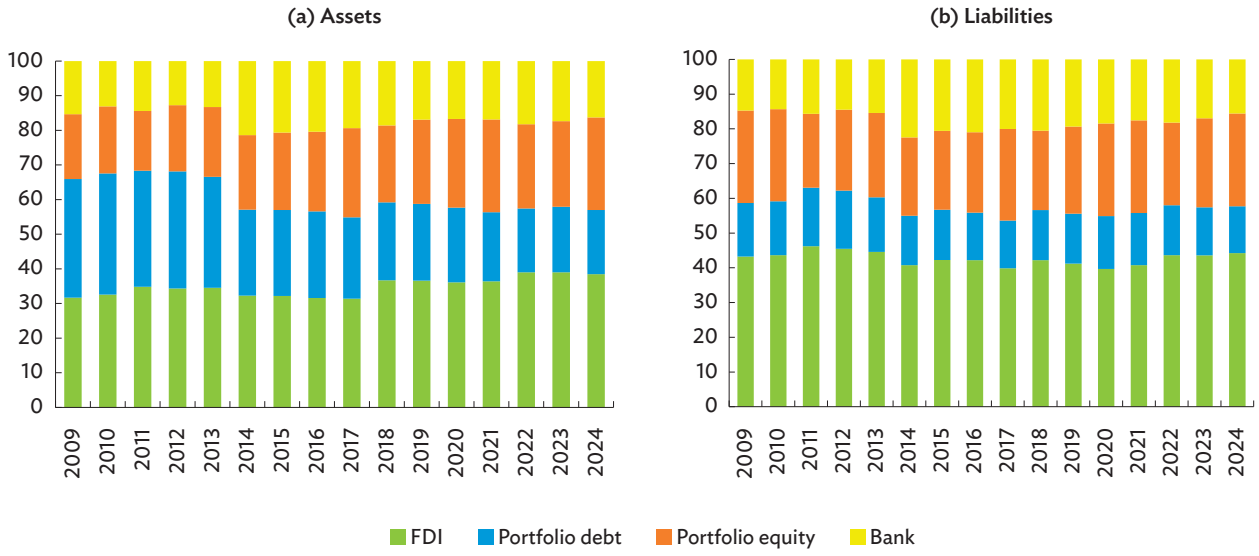
Geopolitical Risks and Investment Flows

Geopolitical Risks Affect Investment Fund Flows and Economy-Level Portfolio Allocations

Geopolitical risks (GPR) weigh on economic activities by undermining the predictability of economic prospects. In finance, rising geopolitical risks are also expected to be factored into investor sentiment, expected rates of return, and pursuant portfolio adjustments of investment. Whether this holds true, and if so to what extent, remains an empirical question. This section attempts to open up discussion based on two empirical exercises; one on how investment funds adjust their portfolios, and the other on the flow of investment between economies.

Fund flows analysis shows that stock markets have been largely resilient to the impact of higher GPRs. Using monthly frequency data, the model estimates the growth

Figure 4.8: Intraregional Cross-Border Investment—Asia and the Pacific, by Type (% of total)



FDI = foreign direct investment.

Notes: Estimates are as of December 2025. FDI assets refer to outward FDI holdings, while FDI liabilities refer to inward FDI holdings. Bank claims and liabilities are limited to bank loans and deposits. Asia and the Pacific includes ADB regional members for which data are available.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm; CEIC Data Company; International Monetary Fund (IMF). Direct Investment Positions. https://data/imf.org/en/datasets/IMF.STA:DIP; IMF. Portfolio Investment Position. https://data/imf.org/en/datasets/IMF.STA:PIP; United Nations Trade and Development. UNCTADstat Data Centre. https://unctadstat.unctad.org/datacentre/dataviewer/US.GDPTotal; and World Bank. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators (all accessed January 2026).

in an investment fund's portfolio shares in terms of firm-level GPR exposures. The study identifies more risk-taking investment behaviors by investment funds, as higher GPR induces funds to load up on greater risks through increased investments into more GPR-exposed firms. This reallocation is unrelated to the industry a firm belongs to or the location of the firm. The key motivation of this portfolio reallocation turns out to be a search for yield as the pivot into GPR-exposed firms is mainly driven by the opportunity to buy their stock at cheaper prices (Box 4.2).

Box 4.2: Geopolitical Risks and Investment Funds—Security-Level Evidence

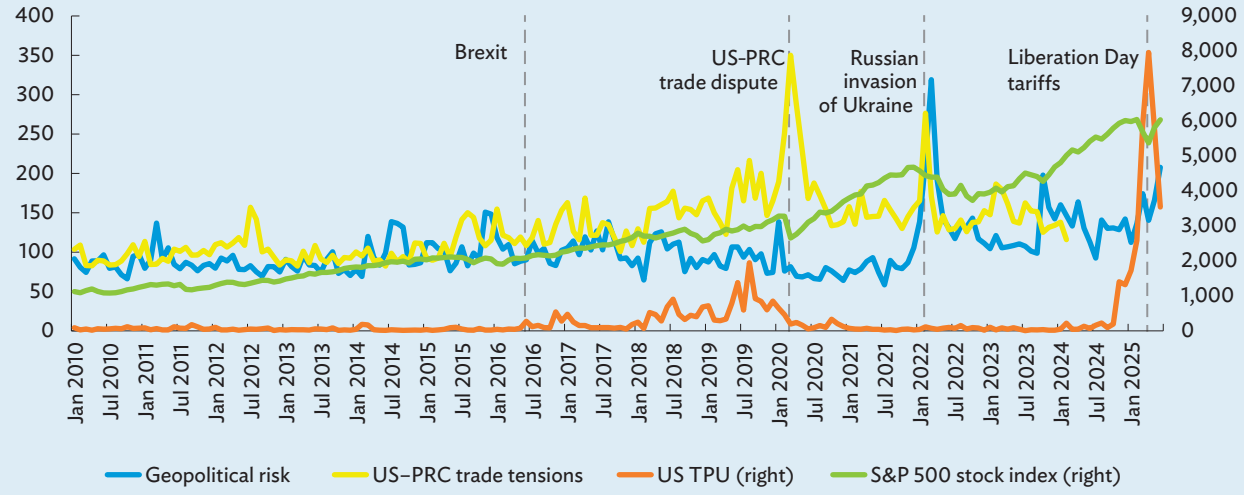
Geopolitical risks (GPR) have risen markedly in recent history, with the most prominent shocks occurring after the Russian invasion of Ukraine and the United States (US) Liberation Day on tariffs. However, stock markets hardly reacted to increases in GPR, as shown in the first box figure.

The way investors react to GPR shocks could explain the muted response of markets: Stock prices have been shown to fall in response to such shocks (Hirshleifer, Mai, and Pukthuanthong 2024; IMF 2025; Yilmazkuday 2024). Given lower valuations of assets susceptible to such shocks—e.g., due to disrupted supply chains—investors may recognize an opportunity to acquire these otherwise healthy assets at a low cost. The higher demand for GPR-exposed assets would swiftly stabilize valuations, leaving financial markets seemingly calm. This increased demand for GPR-exposed assets should be detectable in investor portfolios pivoting toward GPR-exposed assets as shocks materialize.

te Kaat, Liu, and Raabe (forthcoming) confirm this hypothesis for professional investors' reaction to GPR shocks, notably for investment fund managers. They model the growth in an investment fund's portfolio shares in stocks as a function of (i) an index measuring global GPR intensity by Caldara and Iacoviello (2022), interacted with (ii) the GPR exposure of the firm issuing the stocks. For this, the authors use detailed data covering some 10,000 investment funds' holdings in about 45,000 stocks at monthly frequency from 2011 to the end of the first quarter of 2025 (January 2011 to March 2025), obtained from the data provider Emerging Portfolio Fund Research. Firm-level GPR exposure is approximated by the share of relevant keywords in firms' earnings call reports. The empirical framework further controls for fund size, past performance, and valuation changes. These metrics are important for identifying investment funds' active portfolio reallocations. A rich set of fixed effects absorbs potential confounders.

The study shows that investment funds pivot into stocks issued by more GPR-exposed firms as GPR shocks realize (depicted in the box figure below). A two-standard deviation increase in the GPR index leads funds to raise the portfolio shares in stocks of relatively more GPR-exposed firms by 3 basis points. This impact corresponds to one-fifth of the median portfolio share in the sample. During exceptionally high GPR risk spikes such as the 2 April 2025 US Tariff "Liberation Day," the effect can reach 4 to 5 basis points.

Muted Market Reaction to Geopolitical Risks and Policy Uncertainty



PRC = People's Republic of China, TPU = trade policy uncertainty, US = United States.

Source: Baker, Bloom, and Davis (2016); Caldara and Iacoviello (2022); and Rogers, Sun, and Sun (2024).

continued on next page

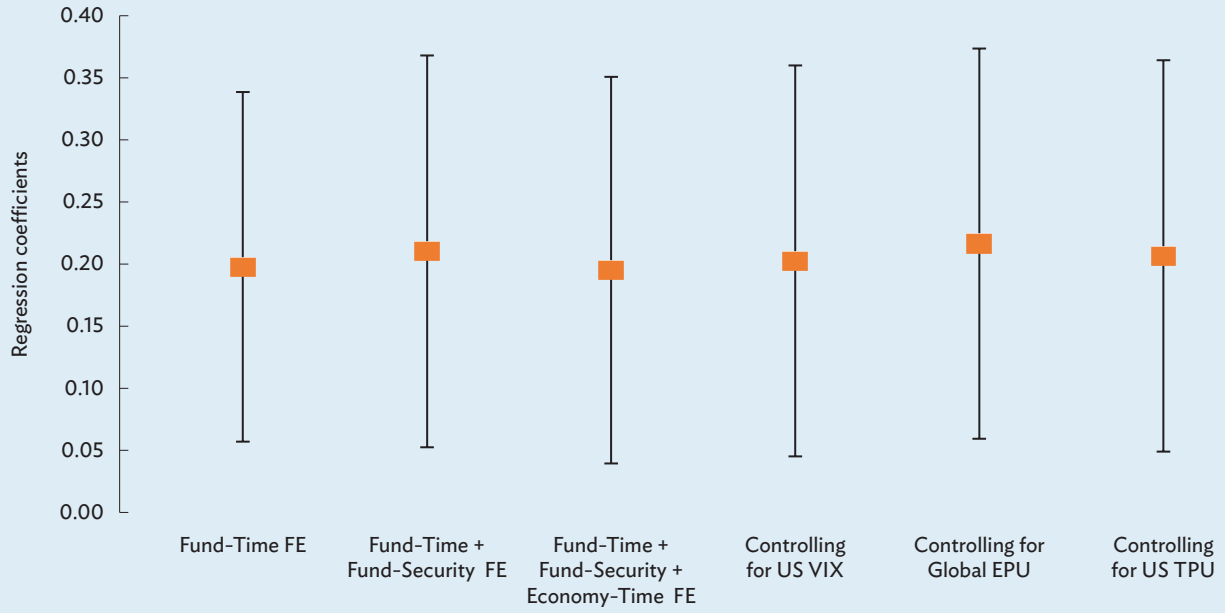
Box 4.2: continued

Results hold even when accounting for financial and macroeconomic risk as measured by financial market volatility (the VIX), global economic policy uncertainty, and US trade policy uncertainty. Results are also robust to a range of fixed effects absorbing variation within fund-stock pairs as well as time-varying factors for each economy that firms are located in. Dynamics in specific industries such as defense or the manufacturing of dual goods—which may see higher demand due to GPR shocks—do not drive the results. Large fund domiciles like the US and Luxembourg, firms headquartered in any particular economy or funds belonging to large asset management companies do not account for the results either.

The authors further corroborate that funds' pivot into GPR-exposed stocks is indeed driven by falling stock prices as GPR shocks unfold, promising higher returns in the future. Less performing investment funds are more likely to chase higher returns by investing in GPR-exposed stocks. Higher risk-taking capacity, measured by fund size, cash buffers, and increased inflows prior to GPR shocks, also induces funds to allocate into GPR-exposed stocks.

The study suggests that investment funds can help stabilize stock markets after GPR-injected volatility. While this may make markets seem calm, funds' portfolio reallocations can still trigger significant cross-economy spillovers. In fact, economies with higher concentrations of highly GPR-exposed firms may experience larger increases in funds' portfolio allocations, and thus capital inflows. Inversely, economies with lower concentrations can experience sudden outflows.

Effect of Firm-Level Geopolitical Risk Exposure on Investment Fund Portfolio Shares



EPU = economic policy uncertainty, FE = fixed effects, TPU = trade policy uncertainty, US = United States, VIX = Volatility Index.

Notes: This figure plots the coefficients from a regression of the 1-month change in investment funds' portfolio shares on firm-level geopolitical risk exposure interacted with the Caldara and Iacoviello (2022) global geopolitical risk index, controlling for stock price changes and fund-security, fund-time, and economy-time FE depending on the specification. Selected specifications control financial market volatility (the VIX), global EPU, and US TPU.

Source: ADB calculations using data from Emerging Portfolio Fund Research (accessed August 2025).

Source: te Kaat, Liu , and Raabe (forthcoming).

This suggests that commercial incentives to maximize investment returns could help ease GPR-led market volatility. Investment funds' adjustment in the portfolio, weighing more on GPR-exposed firms could help soften the market jitter or blow to the market from GPR-induced volatility and help safeguard the stability of the stock market under the recurring GPR-related risks. However, the funds' portfolio reformulation could also lead to significant cross-economy capital flows, depending on how much an economy is exposed to the concentration of GPR-prone firms amid heightened GPRs. Potential market-stabilizing effects, notwithstanding, a deeper and prolonged impact of GPR could upend this channel, leading to negative impacts on the overall market sentiment and performance.

Geopolitical Affinities Drive Investment Reallocation During Shocks

Using monthly data on investment funds' allocations, funds' portfolio shares across economies are estimated in terms of global GPR intensity and an economy's geopolitical bloc alignment, where geopolitical alignment is characterized into US-aligned, PRC-aligned, and non-aligned, with the categorization determined by an economy's latent foreign policy preferences derived from roll-call votes at the United Nations General Assembly (Box 4.3). The analysis shows that investment funds reallocate portfolios in alignment with geopolitical blocs when GPR rises.

Economies' geopolitical affinity seems to affect investment capital reallocations in response to GPR shocks. Reallocation of the funds largely tilt toward PRC-aligned economies relative to US-aligned economies as GPR rises. This effect is more pronounced for equity funds and for the funds domiciled in US-aligned economies. Unlike investment fund reallocations, however, there seems to be no clear evidence for price discount as a potential channel for the reallocations as the prices in PRC-aligned markets do not fall much around GPR shocks. The results also do not support the notion of a global fragmentation of financial flows through an increase in intra-bloc investments.

Both fund-level and economy-level reallocation of investments indicate a significant impact of GPR on global financial flows

Although stock markets have sizable resilience to the shocks from GPRs, changing patterns of investment flows warrant attention from policymakers. Depending on the concentration of GPR-prone firms or characteristics of geopolitical alignment, different economies may experience different types of capital flow changes, which require close monitoring of the capital flow trends and assessing their impact on macroeconomic performance and financial markets. The heightened level of GPRs recently and more frequent incidences of such risks call for policymakers in the region to stay vigilant regarding the financial market situation.

Strengthening Financial Safety Nets

No Economy Is Immune to Spillover Effects of Financial Crises

Most economies rely on their own international reserves as a first line of defense against financial crises. When domestic resources prove insufficient, nations have traditionally turned to the International Monetary Fund (IMF), the global lender of last resort. While IMF support can provide critical financial assistance, it typically comes with significant policy conditions such as requiring substantial fiscal reforms.

In the wake of the 2007 global financial crisis, bilateral central bank swap lines gained importance as an additional layer of financial safety. This was particularly important for the economies facing dollar shortages (Koosakul and Miksjuk 2024). These arrangements allow central banks to exchange currencies and provide much-needed liquidity to ease market stress. For example, when the US Federal Reserve established a swap line with the Bank of Korea in 2008, it quickly eased funding pressures and restored market confidence, even though the facility was not fully utilized. However, access to swap lines is often limited to close political or economic partners, or to economies with strong fundamentals—often excluding those most in need during a crisis.

Box 4.3: Geopolitical Risks and Investment Funds—Economy-Level Evidence

Rising geopolitical risk (GPR) may reshape established global economic structures. As investors become more attuned to such risks (as discussed in Box 4.2), markets are likely to reallocate capital globally, with profound repercussions for financial stability. Zooming in on portfolio capital, Ciminelli, Raabe, and Zhao (forthcoming) investigate how investment funds reallocate capital across economies in response to GPR shocks. In particular, the authors study whether such shocks lead investment funds to align portfolios along the geopolitical blocs identified by United Nations (UN) voting patterns.

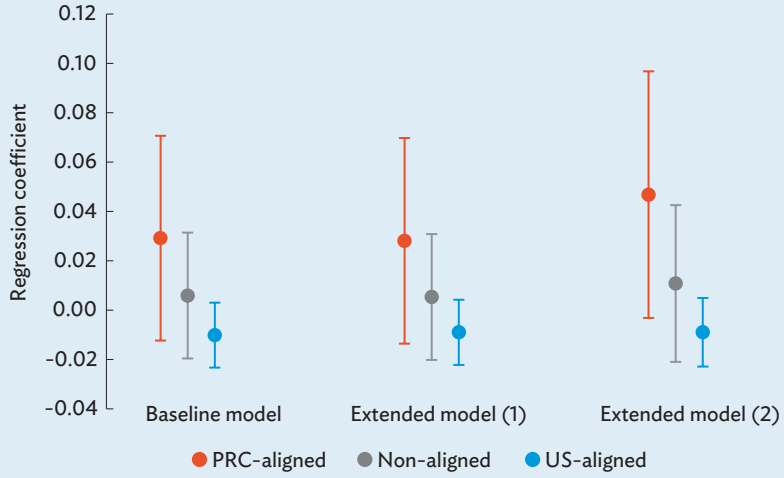
The study draws on monthly data on some 30,000 investment funds' allocations across economies from Emerging Portfolio Fund Research over the period July 2017 to June 2025. The authors model funds' portfolio shares in various economies as a function of (i) a measure of global GPR intensity, interacted with (ii) an economy's geopolitical bloc alignment, controlling for past portfolio allocations, fund size, and performance as well as macroeconomic developments. Fixed effects absorb potential confounders within fund-economy pairs.

The authors use the BlackRock Geopolitical Risk Indicator (BGRI) to measure GPR intensity, summarizing markets' attention and sentiment to geopolitical shocks as extracted from brokerage reports and financial news. Geopolitical alignment is categorized into United States (US)-aligned, People's Republic of China (PRC)-aligned, and non-aligned, and based on ideal points, which score an economy's latent foreign policy preferences as derived from UN General Assembly roll-call votes (Bailey, Strezhnev, and Voeten 2017). Sorting into these three blocs is based on the difference between any economy's ideal point and the ideal point of the US and the PRC. Following Gopinath et al. (2024), economies in the top quartile closest to the US and the PRC are labeled US-aligned and PRC-aligned. Non-aligned denote the remainder. Bloc assignments are time-varying, allowing to capture shifts in alignment.

The study shows that investment funds reallocate portfolios in alignment with geopolitical blocs as GPR shocks materialize. Specifically, as GPR rises, fund portfolios tilt toward PRC-aligned economies, relative to US-aligned economies. A one-standard deviation increase in GPR raises portfolio shares in PRC-aligned economies by 3.7 basis points (box figure below). Portfolio shares in non-aligned economies do not rise. Effects are stronger for equity funds and those domiciled in US-aligned economies, suggesting increased inter-bloc investments.

The findings suggest that economies' geopolitical affinities affect portfolio capital reallocations as GPR shocks occur. However, the results do not support the notion of a global fragmentation of financial flows through an increase in intra-bloc investments. This contrasts with trade flows, which have been shown to intensify within geopolitical blocs (Alfaro and Chor 2023; Qiu, Xia, and Yetman 2025). The study underscores how geopolitical blocs are increasingly shaping cross-border capital allocation.

Effect of Economies' Geopolitical Alignment on Investment Fund Portfolio Shares



BGRI = BlackRock Geopolitical Risk Indicator, PRC = People's Republic of China, US = United States.

Notes: This figure plots the coefficients from a regression of investment funds' portfolio shares at the economy-level on economies' geopolitical bloc alignment interacted with the BGRI index, controlling for past portfolio allocations, fund size and performance, and fund-economy fixed effects. The three coefficient sets differ by the scope of controls. The baseline model controls for fund assets and returns, and the dependent variable lagged by one period; the first extended model adds the dependent variable lagged by two periods; and the second extended model adds real gross domestic product growth, inflation, unemployment rate, the sovereign rating and the volatility index.

Source: ADB calculations using data from Emerging Portfolio Fund Research (accessed August 2025).

Source: Ciminelli, Raabe, and Zhao (forthcoming).

Importance of Regional Response and Arrangements

Regional financial arrangements (RFAs) have emerged as an important source of emergency liquidity. This layer of the global financial safety net is typically anchored by deep regional expertise. By pooling financial resources, RFAs can provide timely crisis support with any conditionality tailored to the region's needs, allowing for greater flexibility and willingness to provide liquidity support. The European Stability Mechanism for the euro area and the Chiang Mai Initiative Multilateralisation (CMIM) for the Association of Southeast Asian Nations Plus the People's Republic of China, the Republic of Korea, and Japan (ASEAN+3) are examples of RFAs. Although the RFAs play a crucial role in safeguarding regional financial stability and resilience, such arrangements also raise questions about their long-term sustainability and the equitable sharing of risks and responsibilities among participating members. To maintain the credibility and effectiveness of these regional safety nets over time, it is important to ensure robust governance and clear rules for resource mobilization and disbursement.

Multilayered Regional Responses Safeguard Stability

Regional financial safety nets are crucial for safeguarding economic stability in times of heightened economic risks and the buildup of vulnerabilities. When shocks hit, timely and decisive action can prevent localized problems from escalating into broader instability. Often, the mere presence of robust financial backstops—demonstrated by visible, pooled resources—can reassure markets and deter speculative attacks, reducing the likelihood that emergency measures will need to be deployed.

Well-designed RFAs offer several key advantages over the other components of the global financial safety net. By pooling resources, economies can secure access to international capital on better terms and benefit from countercyclical financing during periods of stress, helping them avoid the pitfalls of limited market access, fire-sale asset losses, and prohibitively high borrowing costs in a crisis. Importantly, RFAs can provide rapid support with fewer constraints than global mechanisms, helping economies weather shocks before they deteriorate into full-scale crises (Baran 2020). Another key strength of RFAs is their grounding in the local context, which makes support more tailored and responsive to economy-specific circumstances.

Evolution of Regional Financing Arrangement in ASEAN+3

In strengthening the regional financial safety net, two recent advances deserve emphasis. First, members of ASEAN+3 agreed to develop more flexible, faster-deploying instruments, notably a rapid financing facility (RFF) as a new component of CMIM to provide quickly disbursing liquidity. The RFF is designed to help members cover urgent balance of payments needs caused by exogenous shocks (e.g., pandemics, physical hazard-driven disasters, commodity price spikes, or sharp reversals of capital inflows) without the long lead times and heavy conditionality typical of standard crisis programs.

Second, ASEAN+3 policymakers endorsed the exploration of a paid-in capital structure to complement the current commitment-based model of the CMIM. Under paid-in capital, resources could be pre-positioned, shortening activation time, improving market credibility, and allowing more flexible instruments. Both steps directly address long-standing operational bottlenecks and would improve the CMIM's ability to deliver timely support during regional shocks. They are expected to enhance regional resilience by offering members timely access to emergency financing during urgent balance of payments needs.

Swap Arrangements Need Broadening

In addition to reforming the CMIM, Asia should also enhance the other pillars of global financial safety nets. It is critical to expand multicurrency and local currency swap arrangements so as to enlarge the size and effectiveness of regional financial safety nets. The 2007 global financial crisis demonstrated the critical role that

central bank swap lines can play in calming markets and providing timely liquidity. However, the experience since then has shown that such arrangements are typically concentrated among economies with strong fundamentals, leaving more vulnerable economies with limited or no access to these crucial backstops. This is not only the case for swap lines established with leading central banks such as the US Federal Reserve and the European Central Bank, but also within the region. Despite substantial growth in bilateral swap lines within ASEAN+3, access remains concentrated among stronger, larger economies, while smaller and lower-income members are largely excluded. This concentration leaves the most vulnerable economies without reliable liquidity backstops. Further efforts are necessary to make the swap arrangements more inclusive, and—crucially—ensure they can be activated quickly and reliably when financial stress emerges, giving all members greater confidence in their regional safety net.

Local Currency Bond Markets Enhance Stability

To strengthen Asia's regional financial safety net, it is essential to develop deep and liquid local currency bond markets. The Asian Bond Markets Initiative (ABMI), which was launched in December 2002 and adopted in August 2003 at the ASEAN+3 Finance Ministers' Meeting, aims to foster the development of local currency bond markets and also aims to recycle vast savings within the region to support needed infrastructure investments. Through market development, ABMI promotes regional financial cooperation and integration to reduce the region's vulnerability to the sudden reversal of capital flows and to strengthen its financial resilience and stability.[2] Well-functioning local currency bond markets in fact are a cornerstone of the region's financial stability. They reduce reliance on volatile external finance, lower currency-mismatch risk, and give governments room to respond when global liquidity recedes. This should entail expanding local currency issuance and building out the market infrastructure: active market makers, reliable benchmark yield curves, robust repo and hedging tools, and a broader domestic and regional investor base. With this ecosystem in place, funding would remain resilient when global conditions tighten, and regional safety nets can deliver support that is better aligned with members' actual currency exposures. By promoting the issuance and active trading of local currency bonds, policymakers can reduce the region's vulnerability to external shocks. Deep regional bond markets provide governments and firms with more stable financing options, support countercyclical policy, and make it easier to mobilize resources quickly in a crisis.

Regional Financial Cooperation: A Cornerstone of Financial Stability and Resilience

Vigilance to Geopolitical Risks Requires Well-Coordinated Action

Rising geopolitical tensions and uncertainties are fundamentally reshaping the global financial landscape. As a result, the coverage and effectiveness of existing financial safety nets could face unexpected challenges. Financial turbulence has underscored that the economies most in need often struggle to access prompt and adequate support, while regional mechanisms confront challenges from scale, risk-sharing, and currency mismatches. For Asia—now a central node in global trade and finance—this shift is a call to action: adapt safety nets to a changing financial environment by strengthening regional arrangements, building local currency capacity, and coordinating more closely with global backstops.

Geopolitical risks, a potential slowdown of the global economy, and changes from accelerating digital finance could all produce volatility in financial markets. While digital finance offers greater opportunities for economic efficiency and inclusiveness, it also poses growing challenges to putting in place appropriate regulatory regimes, narrowing the digital divide, and addressing new types of financial vulnerability. Geopolitical risks

[2] Asian Development Bank. AsianBonds Online. https://asianbondsonline.adb.org/about.php (accessed December 2025).

will likely continue to be the potential shock factor to the financial market. Depending on the trajectory of the global economy, the solvency and liquidity conditions of some businesses might worsen, with a negative impact on the asset quality of banks and nonbank financial institutions. Detecting potential signals of looming risks, employing proper macroprudential policies, and exercising timely actions to resolve the sources of strains through appropriate policy measures cannot be overemphasized.

It is important for Asian economies to work together to enhance regional cooperation and strengthen cross-border financial systems. A more resilient multicurrency framework and deep, liquid regional capital markets are critical components of Asia's economic development. Looking ahead, policymakers should prioritize the strengthening of regional safety nets. ADB can serve as a key partner, supporting resource mobilization, technical capacity building, and the development of innovative financial solutions along with other international organizations.

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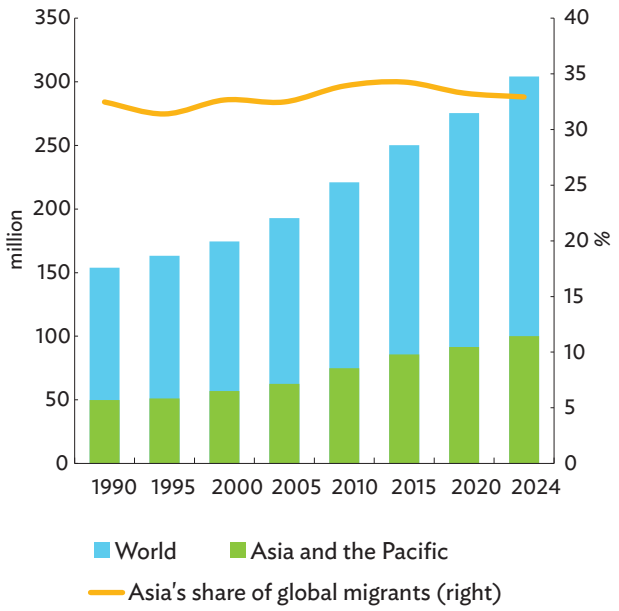
5 Movement of People

Migration

Cross-Border Migration from Asia and the Pacific Continues to Increase

The number of international migrants reached 304.0 million globally in 2024, a 28.7 million increase from 275.3 million in 2020. About 56% of the new migrants during that period came from Asia (8.5 million) and Europe (7.5 million).[1] The period saw the number of outbound migrants from Asia reach 100 million, and the region accounting for one in every three global migrants (Figure 5.1). Although Asian migrants had doubled in number between 1990 (50 million) and 2024 (100 million), non-Asian migrants living in the region during the same period reached only 17.2 million in 2024 from 11.7 million in 1990. This implies that Asia remains a net exporter of migrant labor, suggesting that more opportunities remain outside the region, including for highly skilled and educated workers (Hazan et al. 2024; Struyven, Shan, and Milo 2022; Spaan, Hillmann, and van Naerssen 2005).

Figure 5.1: Number of International Migrants



Source: ADB calculations using data from United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2024. https://www.un.org/development/desa/pd/content/international-migrant-stock (accessed May 2025).

More Asian migrants move outside of the region than within it, signifying a regional challenge to enhance labor mobility, migrant skills, and competitiveness.

The number of extraregional outbound Asian migrants (61.3 million) eclipses that of intraregional migrants (38.8 million), as Europe, the Middle East, and North America continue to be Asia's top regional destinations (Figure 5.2). The United States (US), Saudi Arabia, the United Arab Emirates, Canada, and the Russian Federation have been among Asia's top destination economies for the past 2 decades. Relative to 2020, the economies in Figure 5.3 have hosted more Asian migrants in 2024, except for the Russian Federation.[2]

[1] Asia (or Asia and the Pacific) refers to the 50 regional members of the Asian Development Bank (ADB), comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the *Asian Economic Integration Report*, Türkiye is included among the developing member economies. For further details, refer to the note in Chapter 6: Statistical Appendix.

[2] Data in 2024 indicate that the Russian Federation had hosted 1.7 million less Asian migrants over the past 2 decades. Between 2020 and 2024, migrants from Central and West Asia were down by 16.7%, with the number of migrants dropping to 3.7 million from 4.5 million.

Figure 5.2: Outbound Asian Migrants by Regional Destination in 2024

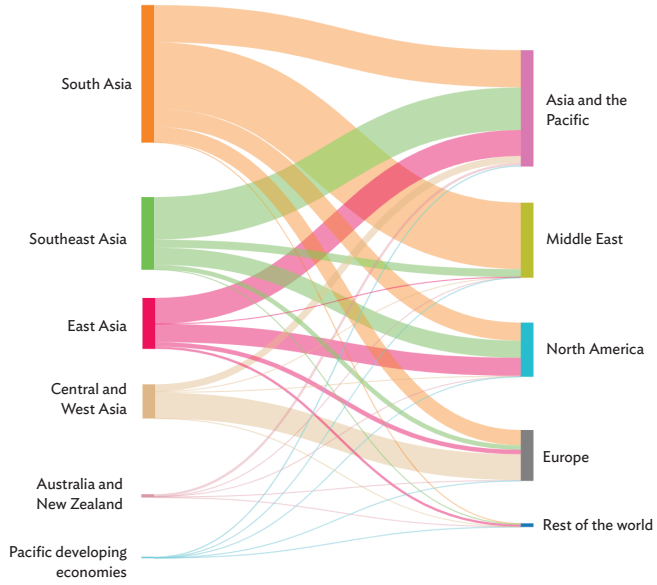
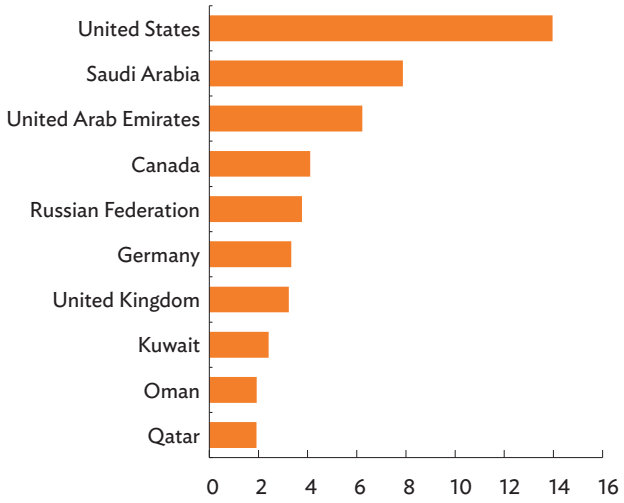


Figure 5.3: Top Extraregional Destination of Asian Migrants in 2024 (million)



Source: ADB calculations using data from United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2024. https://www.un.org/development/desa/pd/content/international-migrant-stock (accessed May 2025).

The US remains the top destination of global migrants; it hosted an average of 18% of total migrants since 1990, and about 14 million Asian migrants in 2024.

Over the past decade, migration policies in these top destinations have opened up more sectors and occupation groups to foreign labor, supporting the growth of Asian migration to these high-income economies (ADBI, OECD, and ILO 2024). Canada uses its migration policy as a strategic tool to its human resource requirements to support medium- and long-term development plans (Government of Canada 2024).[3] Canada's strategy of attracting global talent through its Temporary Foreign Worker Program (TFWP) and International Mobility Program (IMP) Global Skills Strategy granted work permits to about 900,000 migrant workers in 2024 (Figure 5.4). In the United Kingdom, the past decade saw the liberalization of legal migration routes for citizens from outside the European Union (EU) and several policy and legislative tweaks that launched, for instance, the New Global Talent category for "exceptionally talented and exceptionally promising applicants" in specific sectors, the Skilled Worker route, and the Global Business Mobility route for various types of intercompany worker transfers (Government of the United Kingdom, Home Office 2025).

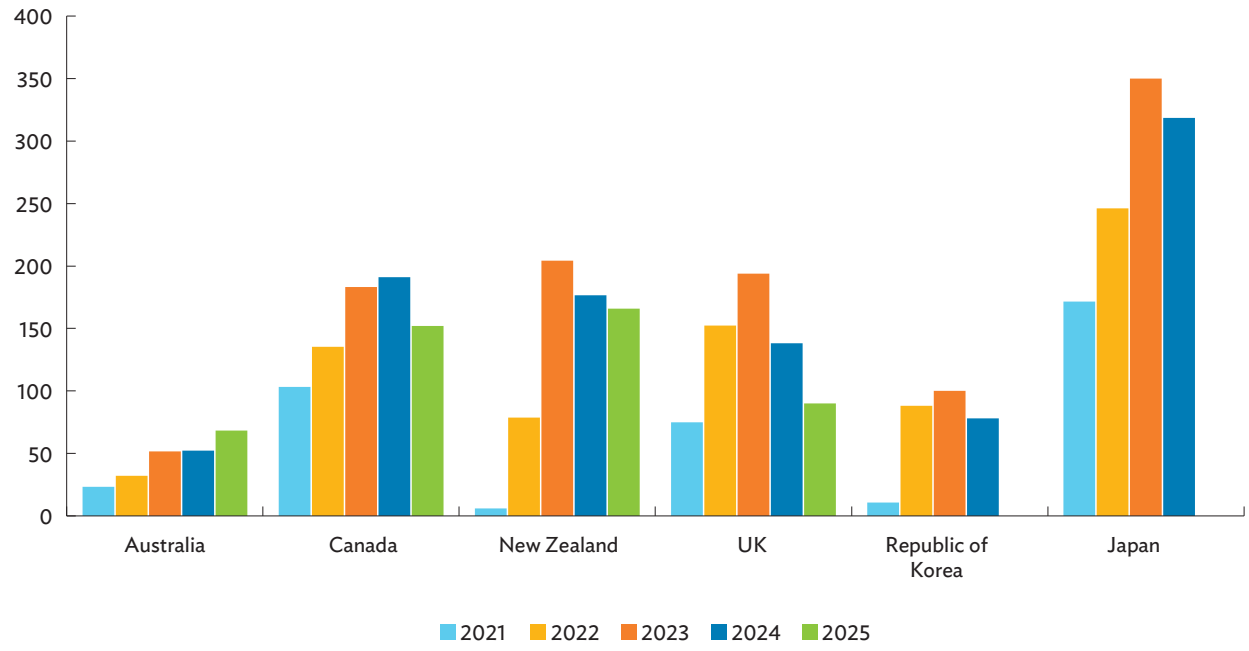
Asia is also the largest source of top-tier high-skilled migrants to the US and the EU.

The H-1B visa issued by the US has been instrumental in the employment of highly skilled and educated Asian migrants in industries that the US government deems essential for technological superiority and global competitiveness. H-1B visas issued to working migrants from Asia accounted for 70% of the global total in 2000, but this jumped to an average of 90% since 2017 (Figure 5.5; Box 5.1).

In the EU, special work and residence permits are issued to highly qualified non-EU nationals. Known as the *Blue Card*, it is part of the EU's strategy to attract

[3] For the period 2025 to 2027, Canada's immigration levels plan will include controlled targets for both temporary and permanent residents, while addressing sustainable growth, tempering gaps in housing supply while managing its capacity to support its population. A cap has been imposed on the number of international students, as well as on employers hiring workers under the Temporary Foreign Worker program, and on limiting work permits for the spouses of temporary residents (Government of Canada 2024).

Figure 5.4: Number of Work Visas Issued by Host Economy ('000)



Q = quarter, UK = United Kingdom.

Notes:

(i) Australia data refer to primary visas granted under the 457/482 programs—2025 data are up to June 30.
(ii) Data for Canada refer to Temporary Foreign Worker Program permit holders only—2025 data are up to Q3.
(iii) New Zealand data refer to the arrival of work visa holders. 2025 data are up to November.
(iv) UK data in 2025 are up to Q3.
(v) For the Republic of Korea, the Employment Permit System is mainly for manufacturing, agriculture, and construction; numbers include those under E9 visas; up to 4 years and 10 months.
(vi) For Japan, the Technical Intern Training Program is mainly for manufacturing, construction, and agriculture; up to 5 years.

Sources: ADB calculations using data from the Government of Australia, Department of Home Affairs. https://www.homeaffairs.gov.au/ (accessed January 2026); Government of Canada, Open Government Canada. https://open.canada.ca/data/en (accessed January 2026); Government of the United Kingdom, Home Office. https://www.gov.uk/government/organisations/home-office (accessed January 2026); Government of Japan. Organization for Technical Intern Training. https://www.otit.go.jp/system/research/statictics/ (accessed January 2026); Immigration New Zealand, https://www.immigration.govt.nz/about-us/research-and-statistics/statistics/ (accessed January 2026); Korean Statistical Information Service. Statistical Database. https://kosis.kr/eng/ (accessed January 2026).

highly skilled workers from non-EU countries, with the aim of addressing labor and skill shortages, enhancing productivity, and gaining economic strength (European Commission, Migration and Home Affairs 2025). While the Blue Card provides an EU-wide framework, individual member states also maintain their own national schemes and discretionary policies for admitting skilled workers. Among Asian subregions, South Asian migrants receive the highest number of EU Blue Cards (Figure 5.6). As a result of the extraregional direction of out-migrants from Asia, backed by employment opportunities outside the region and mobility facilitation tools, there were 2.2 million more Asian migrants in Europe and North America between 2020 and 2024.

Meanwhile, despite heightened global uncertainty, the deployment of lower- and middle-skilled workers has been robust in recent years (Figure 5.7).

The Middle East hosted 3.1 million more Asian migrants in 2024 (a 13.9% increase relative to 22.0 million in 2020), with South Asians accounting for around 93% of the change. Between 2020 and 2024, bilateral agreements, technical internships, and training also saw at least significant increases in South Asian and Southeast Asian migrants to Australia, while Japan hosted more migrants from Indonesia, Nepal, Sri Lanka, and Viet Nam (Faber 2024; Government of Sri Lanka, Ministry of Foreign Affairs 2023; Katano 2025; Lavenia 2025).

Figure 5.5: H-1B Visa Issued by the United States ('000)

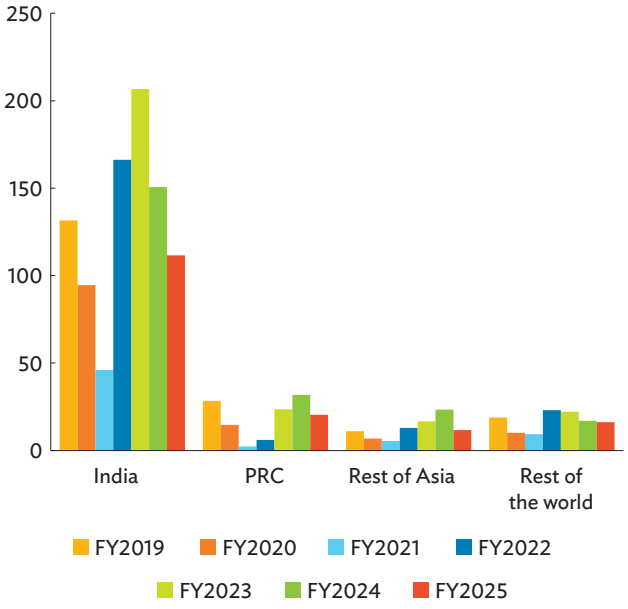
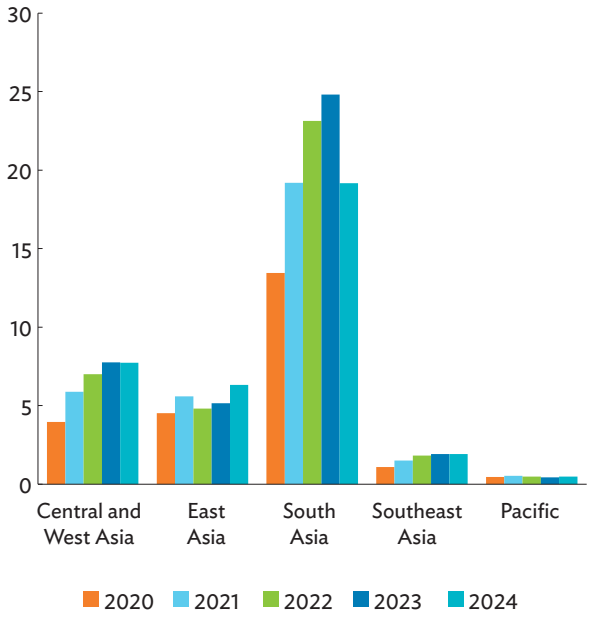


Figure 5.6: European Union Blue Card Issuances ('000)



PRC = People's Republic of China, FY = fiscal year, US = United States.

Note: US H-1B visas data for FY2025 cover October 2024 to May 2025 only. The Pacific includes the Pacific developing member economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from the Government of the United States, Department of State, Bureau of Consular Affairs. https://travel.state.gov/ (accessed January 2026); and Eurostat. https://data.europa.eu/data (accessed January 2026).

Box 5.1: Temporary Work Visas and Asian Migrants in the United States

Many Asian migrants on temporary visas are employed in industries critical to United States (US) innovation and productivity— technology, education, sciences, engineering, and medical fields. The H-1B visa program, a cornerstone of the US immigration system for skilled workers, allows American employers to tap into a global talent pool for specialized occupations, granting temporary work authorization to these individuals without conferring permanent resident status (Gowder 2023). Asia's share of H-1B, L-1, and F-1 visas issued by the US rose to 73% of the global total by FY2024 from 57% in FY2020. During this period, across subregions, South Asia stands out for their significant share, accounting for 41%, followed by East Asia for 24% and Southeast Asia for 6%, as of 2024.

The most recent change affecting access to the H1-B visa is the introduction of a $100,000 fee for new H-1B applications, effective 21 September 2025. Whereas this fee hike does not apply to existing H-1B visa holders—renewals, extensions, transfers between employers, and reentries with valid visas remain exempt from the fee hike—employers and hiring strategies would be impacted by the increased cost of foreign talent which used to average only between $2,500 to $5,000 (USCIS 2025; VisaVerge 2025). Many of the H1-B visa holders are college graduates working in the information technology sector where the median wage is about $92,600. The new $100,000 fee could, therefore, deter firms from hiring lower-wage skilled immigrants and concentrate instead on hiring highly skilled, high-wage specialists whose expected value to the firm exceeds the added cost.[a] Affected firms could pivot to other countries, such as Canada or the People's Republic of China, where operations could be deployed at lower expense (The Economist 2025; Gao 2025; Morales 2025; Wong and Woods 2025).

With the H-1B fee hike in effect only since late September 2025, comprehensive data on the number of approved H-1B visas for fiscal year 2026 have yet to be available. Statistics indicate that there were 25% fewer H-1B applications for this fiscal year, the lowest in the past 4 years on account of stricter fraud detection and prevention measures, while the annual cap of 85,000 visas remains unchanged (Singh 2025; VisaVerge 2025).

continued on next page

Box 5.1: continued

Selected United States Nonimmigrant Work Visas Issued

Asian Subregion	H-1B Visa		L-Visa		F1 Visa		H-1B, L, and F1 Visas (as share of global total)	
	FY2000	FY 2024	FY2000	FY2024	FY2000	FY2024	FY2000	FY2024
Central and West Asia	1,318	1,129	198	704	9,005	9,161	2.2%	1.6%
East Asia	16,539	36,839	9,723	13,218	99,033	117,050	26.5%	24.0%
South Asia	65,234	153,661	9,545	19,190	25,861	111,075	21.3%	40.8%
Southeast Asia	6,997	7,100	1,826	2,746	18,800	32,296	5.8%	6.1%
Pacific	2,318	681	2093	1,081	1,928	2,934	1.3%	0.7%
Asia and the Pacific	92,406	199,410	23,385	36,939	154,627	272,516	57.3%	73.2%

FY = fiscal year, US = United States.

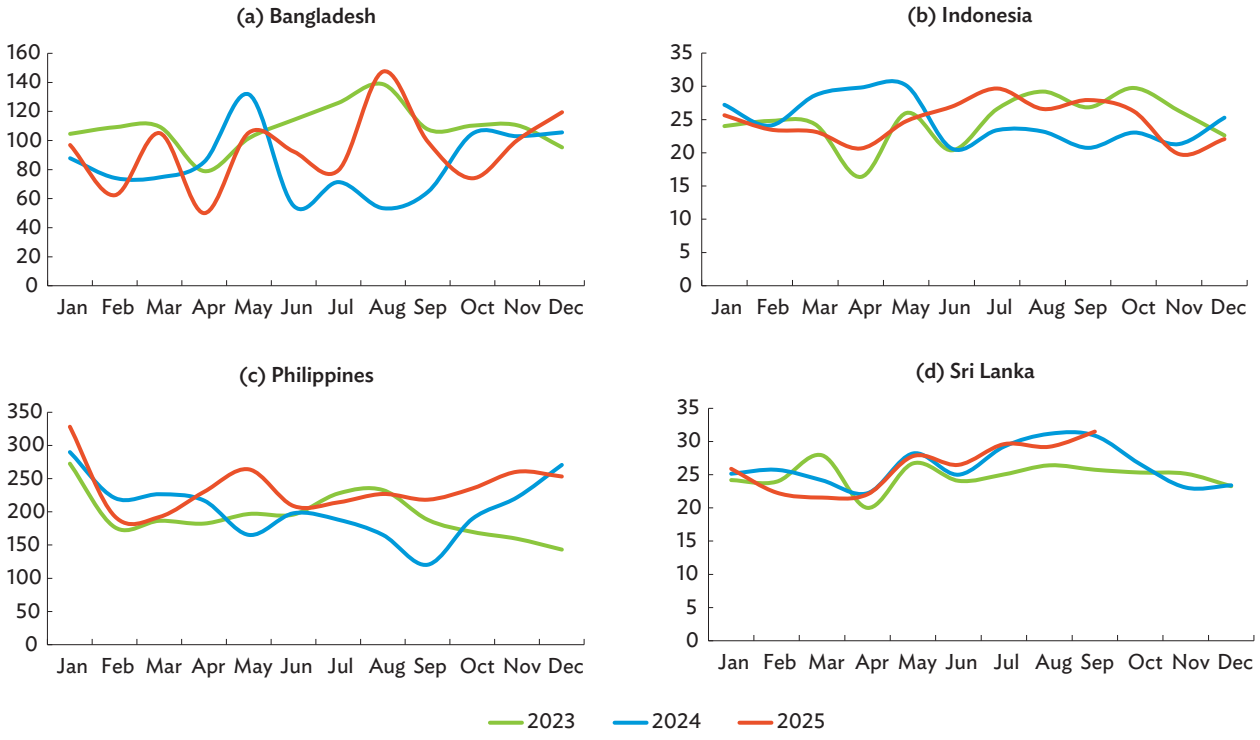
Note: The L1 visa is for intracompany transferees while the F1 visa is for students. The Pacific includes the Pacific developing member economies of ADB plus advanced economies, Australia and New Zealand.

Source: ADB calculations using data from the US Department of State—Bureau of Consular Affairs and US Citizenship and Immigration Services. https://www.uscis.gov/ (accessed December 2025).

[a] Morales (2025) cited that firms hiring H1-B visa workers "break-even" at $225,000, hence the regulation imposing $100,000 in fees would slash the number of H1-B visa hires, most of whom earn less than $100,000 a year.

Sources: ADB (2024a); Asare (2024); Campos (2025); Gao (2025); Gooding (2025); Gowder (2023); Latif and Sultana (2025); Lim and Morshed (2015); Morales (2025); Pacheco (2025); Singh (2025); The Economist (2025); The Philox (2024); US Department of State—Bureau of Consular Affairs and US Citizenship and Immigration Services. https://www.uscis.gov/; Wong and Woods (2025); and Visa Verge (2025).

Figure 5.7: Outflow of Migrant Workers from Asian Economies ('000)



Sources: Central Bank of Sri Lanka. https://www.cbsl.gov.lk/en/statistics/statistical-tables/external-sector; Government of Bangladesh, Overseas Employment Platform. https://www.oep.gov.bd/reports/country-clearance; Government of Indonesia, Ministry of Migrant Workers Protection. https://kp2mi.go.id/dashboard-publik; and Government of the Philippines, Department of Migrant Workers. https://dmw.gov.ph/statistics/overseas-employment-statistics (all accessed February 2026).

Intraregional mobility remains vital in Asia, especially for low- and semi-skilled migrants, bolstered by opportunities from labor facilitation agreements.

Amid rising migration out of the region, Asia's intraregional migration remains an important facet of the mobility structure of cross-border workers. Bilateral labor agreements across the region largely facilitate the movement of low- and medium-skilled workers, with economy experiences reflecting differing labor market needs and uptake levels (ADB 2025a). Over time, while some subregions such as East Asia and South Asia have pursued more extraregional migration corridors, migrants from Southeast Asia have pivoted more to other subregions, while Pacific developing economies has strengthened its ties to Australia and New Zealand (Figures 5.8 and 5.9). This underscores the importance of proximity, commonalities in culture, language and religion, and diplomatic ties as cross-border mobility considerations (Lee, H. A. 2025).

Asia's High-Skilled Migration is Concentrated in a Few High-Income Destinations Outside the Region, Amid a General Shift Toward More Skilled Workers

The World Bank (2023) reported that of the 85 million Asian migrant workers in 2020, a third (27 million) were high-skilled with tertiary education—about 70% of these workers were concentrated in just six destination economies, including the US, United Arab Emirates, Canada, and the Russian Federation (Figure 5.10). Within Asia, the Republic of Korea and Australia stand out in their high shares of high-skilled migrants, while Malaysia and Thailand have low proportions. Singapore also shows a low share of high-skilled Asian migrants. In 2024, several of these high-income destinations either maintained or even increased their shares of migrants with advanced education and high skills (Figure 5.11a, 5.11b). The demand for skilled workers remains robust.

Figure 5.8 Intraregional Migration (%)

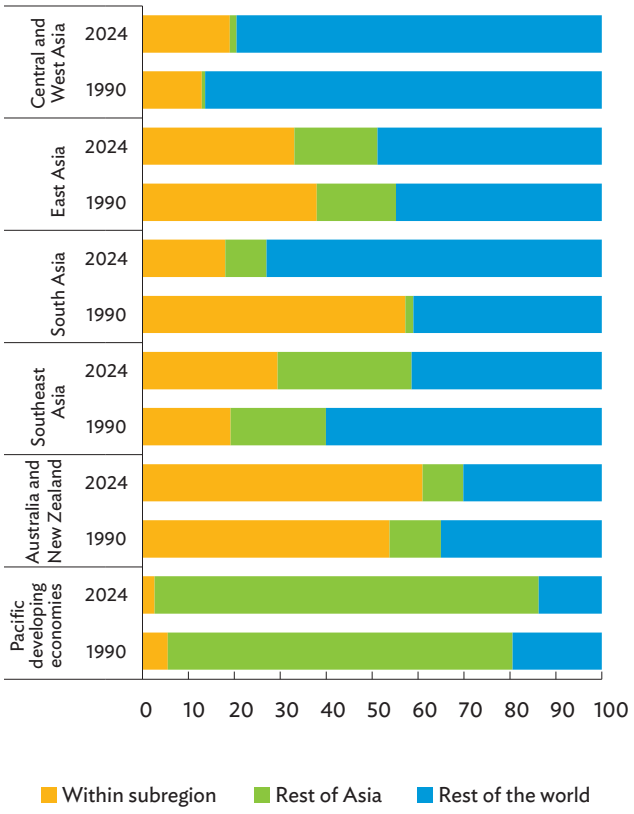
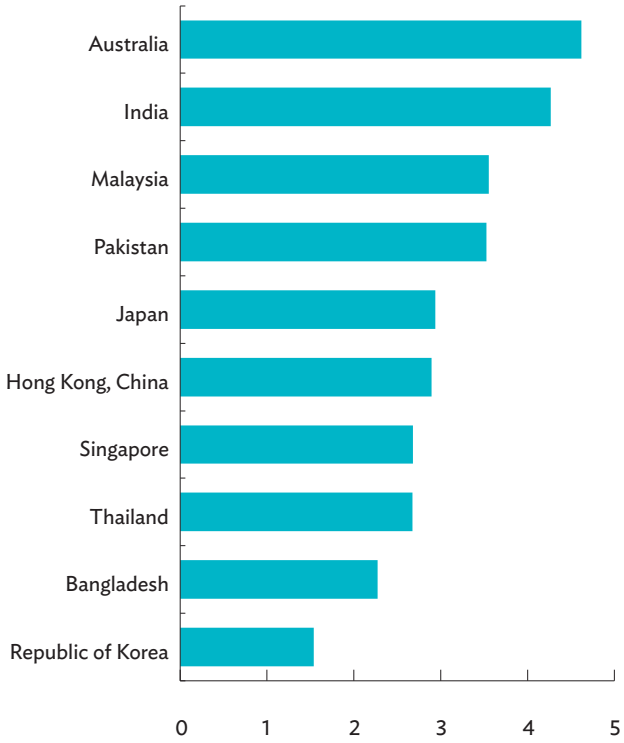
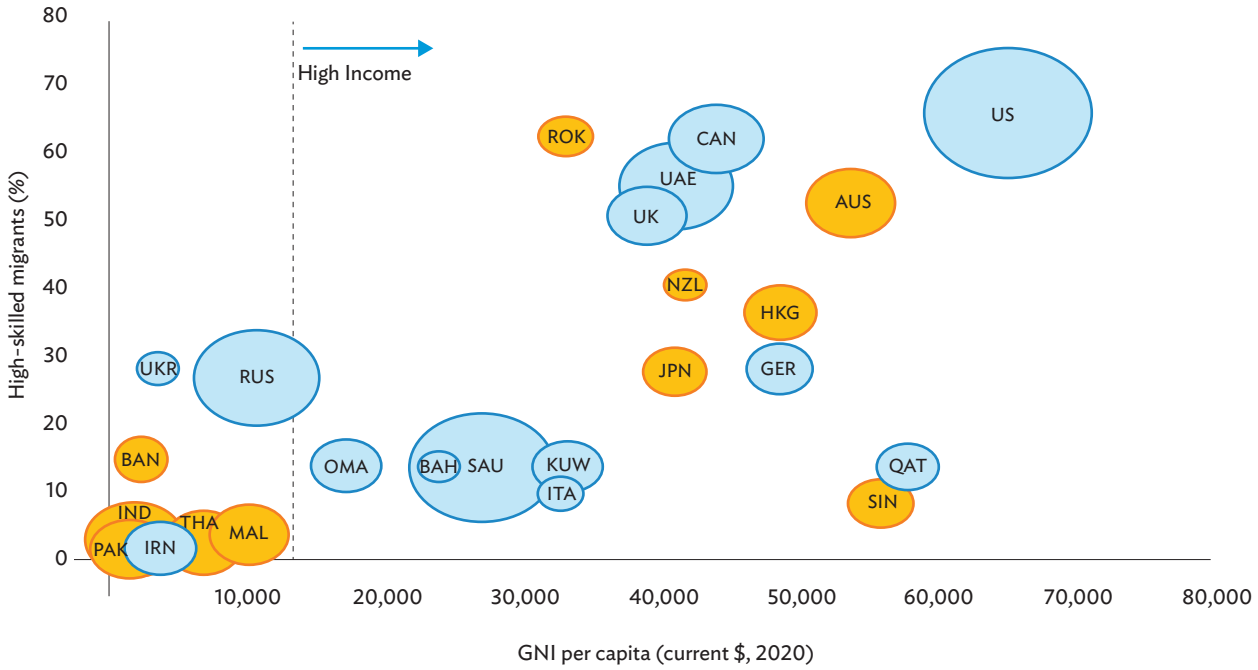


Figure 5.9: Top Intraregional Destinations in 2024 (million)



Source: ADB calculations using data from United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2024. https://www.un.org/development/desa/pd/content/international-migrant-stock (accessed May 2025).

Figure 5.10: Share of High-Skilled Migrants Versus Gross National Income per Capita, by Major Destination of Asian Migrants



GNI = gross national income; AUS = Australia; BAH = Bahrain; BAN = Bangladesh; CAN = Canada; GER = Germany; HKG = Hong Kong; China; IND = India; IRN = Iran; ITA = Italy; JPN = Japan; ROK = Republic of Korea; KUW = Kuwait; MAL = Malaysia; NZL = New Zealand; OMA = Oman; PAK = Pakistan; QAT = Qatar; RUS = Russian Federation; SAU = Saudi Arabia; SIN = Singapore; THA = Thailand; UAE = United Arab Emirates; UK = United Kingdom; UKR = Ukraine; and US = United States.

Notes: The share of high-skilled migrants is calculated based on the proportion of migrants with tertiary education. Circle size reflects the total number of Asian migrants received by each economy. Yellow circles represent economies in Asia and the Pacific. In 2020, the World Bank classified economies by income using GNI per capita (Atlas method), with the threshold for high income at $12,536 or above.

Source: ADB calculations using data from World Bank (2023).

For instance, it is estimated that the US needs about 1 million more science, technology, engineering, and mathematics (STEM) professionals from 2023 to 2033, underscoring persistent labor shortages and opportunities for Asian migrants with fields of STEM expertise (Thornton 2025). In Europe, migrants account for at least 20% of growing occupations in health care and STEM (Reiche 2024). These developments reflect growing policy efforts to rein in global talent that will help boost long-term economic growth and the competitiveness of industry.

Amid evolving migration policies, shifting demand for global talent, and challenges to labor and skills mobility persist.

Limited cross-border skills mobility. Skills mobility ensures that workers can fully apply their qualifications and experience when they move, leading to better job matching, fairer wages, and higher productivity. It also enhances labor mobility across all skills levels. When skills are portable, migrants can be more effective in filling skills gaps where their expertise is essential, improving the usability of their talents, and reducing their vulnerability to irregular migration and exploitation. Evidence shows that skills mismatch is more common and persistent among migrants than for native workers, with migrants having a 10% higher likelihood of being overeducated (Visintin, Tijdens, and van Klaveren 2015). Without trusted and transparent recognition systems, workers at all skill levels risk being underemployed or downgraded when migrating.

Governments in the Association of Southeast Asian Nations (ASEAN) prioritized the creation of Mutual Recognition Arrangements (MRAs) to facilitate the mobility of high-skilled workers and professionals and later supplemented it with the ASEAN Qualifications Reference Framework. However, ASEAN MRAs cover

Figure 5.11: Employment Distribution of Migrants in Destination Economies (%)

AUS = Australia, CAN = Canada, DEN = Denmark, FRA = France, GER = Germany, ITA = Italy, SAU = Saudi Arabia, SPA = Spain, SWE = Sweden, THA = Thailand, UK = United Kingdom, US = United States.

Sources: ADB calculations using data from International Labour Organization Statistical Database (ILOStat). https://ilostat.ilo.org/data/ and https://ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation/ (accessed May 2025); Government of Canada, Statistics Canada. https://open.canada.ca/data/en/dataset (accessed January 2026); and Government of Saudi Arabia, General Authority for Statistics. https://www.stats.gov.sa/en/ (accessed January 2026).

only eight occupations, accounting for a mere 5% of jobs in the region. Inconsistencies in implementation and complex barriers to recognizing and certifying qualifications across ASEAN member economies continue to constrain the effective operation of MRAs. MRAs must also create sufficient incentives for ASEAN professionals to actually want to work overseas (Paweenawat and Vechbanyongratana 2019). Of the 206 bilateral labor agreements (1990–2020) with Asian signatories, only 10% included skills recognition provisions.

Restrictions in the movement of highly skilled workers in the context of regional trade agreements also constrain services trade liberalization and hinder positive spillover effects for goods and other services trade. For instance, the Regional Comprehensive Economic Partnership has limited commitments to Mode 4—which covers the movement of natural persons—due to concerns over local labor market impacts, regulatory complexities, and migration sensitivities (Crivelli, Marand, and Pascua 2022).

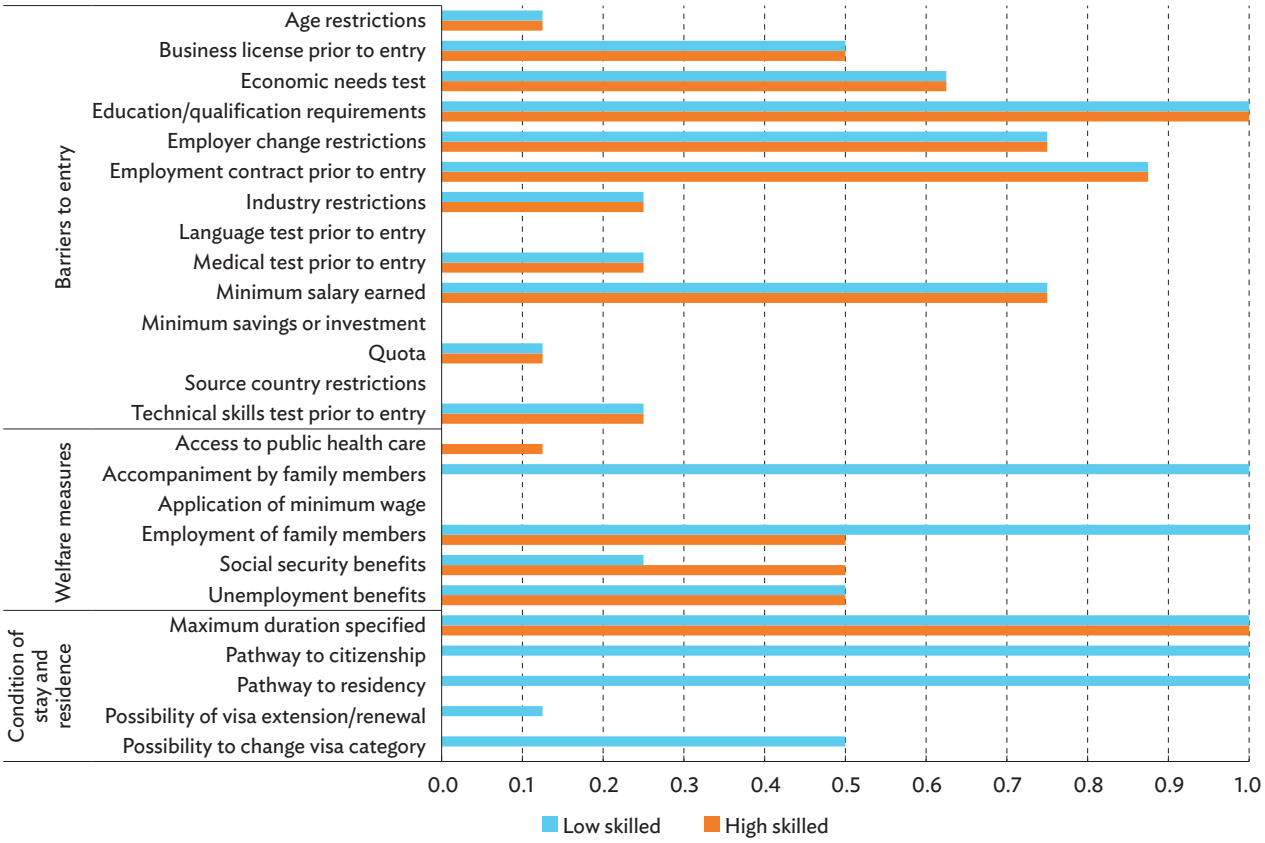
Skills mobility partnerships (SMPs) hold potential for further expansion.[4] In Asia, SMPs can be important channels for strengthening the region's workforce by enhancing skills training, empowering workers and businesses, facilitating regional cooperation and integration, and strengthening regional governance mechanisms for the development and movement of human capital. Examples of SMPs are the Pacific Australia Skills, the ASEAN-Republic of Korea Technical and Vocational Education and Training Mobility Program, and, at the bilateral level, the Indonesia–Australia Skills Development Exchange, and the Philippines–Republic of Korea Employment Permit System.[5] Despite the benefits of SMPs, their full implementation comes with significant hurdles related to costs, skills recognition, and coordination (ADB 2025a). Governments of the origin and destination economies could face resource constraints to their SMP support, while the development of skills for the long term might be less of a priority for firms whose focus is on learning skills to help address immediate labor gaps.

Migration systems and policy variation. In Asia, migration systems continue to evolve, with ongoing efforts to streamline processing, adjust visa requirements, and expand pathways for secure and longer-term migration. Policies also reflect the different roles migrants play in labor markets. For example, in major Asian migrant destinations such as Japan, the Republic of Korea, Malaysia, and Singapore, low-skilled migrants generally face more policy requirements than high-skilled migrants (Figure 5.12). Entry conditions for low-skilled migrants often include minimum savings, business licenses, quotas, and restrictions placed by source countries, whereas high-skilled migrants typically face merit-based requirements such as educational qualifications and technical skills assessments. During their stay, high-skilled migrants are more likely to benefit from flexible visa terms and clearer pathways to residency or citizenship. In terms of welfare, low-skilled migrants often have limited access to family accompaniment and employment for family members, while high-skilled migrants tend to receive broader social security and health-care benefits.

[4] Skills mobility partnerships, also known as labor mobility partnerships, are agreements between economies and institutions designed to facilitate the development, recognition, and movement of skills across borders. They can vary in form, modality, specific objectives and sectors, targeted skill level, included type of mobility (temporary, long term), as well as the level of stakeholder involvement (International Organization for Migration 2023).

[5] The Pacific Australia Skills was built on the success of the Asia Pacific Training Coalition that was concluded in March 2025. The ASEAN–Republic of Korea Technical and Vocational Education and Training Mobility Program was intended to help ASEAN member states address the growing mismatch of skills in the region by leveraging technical and vocational education and training. The Indonesia–Australia Skills Development Exchange pilot project enables "appropriately skilled individuals to travel between Indonesia and Australia" to undertake short-term work for skills training with businesses or other organizations in specified sectors.

Figure 5.12: Migration Policy Measures by Level of Migrant Skills



Notes: Data represent unweighted average restrictiveness (or requirements) scores for temporary labor migration visas in Japan, the Republic of Korea, Malaysia, and Singapore, where the objective is to address labor shortages. Values closer to 1.0 denote higher levels of restrictiveness or requirements.

Source: ADB calculations using data from World Bank (2025).

Policy Ways Forward and Implications for Regional Cooperation and Integration

The global competitiveness of Asia's skilled workers presents opportunities for the region.

Developing economies in Asia, many of which have stayed in the middle-income range, require high-skilled workers to support economic upgrading and diversify into knowledge-intensive sectors, while advanced economies increasingly depend on such workers to offset labor shortages caused by population aging.

The growing pool of highly skilled Asians, both within the region and abroad, can facilitate knowledge exchange, investment, and innovation. High-skilled staffing could fuel innovation and high skill-intensive industries, ensuring employability and economic growth (Lim et al. 2023). High-skilled migrants are carriers of knowledge that help transfer knowledge across borders and create spillovers elsewhere (Ozden et al. 2017).

The potential of Asia's skilled workforce can be harnessed when supported by appropriate policies and incentive structures, through return migration and mobility programs that align with the incentives of individuals and labor markets.[6] For instance, in

[6] OECD (2024) estimates that on average 20% to 50% of immigrants leave within 5 years after their arrival, either to return home or to move on to a third economy.

Thailand, tax incentives for 2023 to 2025 were extended in connection with the migration of foreign investors. These are intended to help these firms hire highly skilled and highly qualified personnel and so enhance company competitiveness (Government of Thailand, Board of Investment 2023). The Republic of Korea in March 2025 launched a top-tier visa to attract highly skilled professions especially in the technology and research sectors (Lee, S. J. 2025). Supportive policies are required to fully realize the developmental potential of high-skilled return migration. Wahba (2023) highlights the need for reducing red tape for business registration, offering information on investment opportunities, improving labor market reintegration mechanisms, creating a stable and investor-friendly macroeconomic environment, and lowering the cost of remittance transfers.

Skills recognition can promote efficient deployment of labor when supported by domestic policies and implementation capacity. Skills recognition is the foundation of skills mobility. Without trusted and transparent recognition systems, workers at all skill levels risk being underemployed or downgraded when migrating. Achieving this requires compatible qualification frameworks, quality-assured certification systems, and agreements between governments to mutually accept skills and credentials.

Cross-border recognition can provide a common foundation and transparency, while mobility still depends on domestic needs, policies, and effective implementation—integration into migration and labor agreements. Strengthening skills mobility requires both policy alignment and practical implementation capacity. In ASEAN, for instance, the commitment to build a unified and integrated community is embodied in the ASEAN Economic Community, a "single market and production base" with an unimpeded flow of skilled labor, among other things (ASEAN Secretariat 2007). It also called for cooperation, including on the recognition of professional qualifications. ASEAN's experience suggests that strong regional frameworks, if supported by investment in skills development and aligned with migration governance tools, have potential to bridge gaps between labor market needs and migration policies. Enhancing cross-border mobility for workers and ensuring education and training systems remain responsive to technological and structural changes are important for making skills mobility a driver of effective labor migration.

Skills development, assessment, and certification systems can complement skills mobility. This includes strengthening technical and vocational education and training and skills development programs, with specific attention to evolving labor market demands driven by technological advancements, just transition, and other structural changes. The Vientiane Declaration is supported by a voluntary checklist to help ASEAN member states assess progress, identify gaps, and guide action in skills mobility, recognition, and development (ASEAN Secretariat 2024). The checklist also encourages technical assistance from international organizations such as the International Labour Organization and the International Organization for Migration to help governments in ASEAN conduct self-assessments, take responsive actions, and implement the regional action plan.

Regional cooperation could generate synergies to strengthen human capital, facilitate labor mobility, promote skills portability mechanisms while addressing gaps in migration policy enforcement and coordination. From a multilateral resource standpoint, ADB can boost regional cooperation initiatives by enabling more economies to commit and engage ardently in skills mobility programs and by leveraging its institutional strength to help member economies ease and dismantle mobility barriers that members may find challenging to address on their own, through its country partnership strategies. At the same time, ADB's knowledge products and knowledge-sharing initiatives can be instruments to encourage member economies to fine-tune their migration strategies and monitoring mechanisms to abide by the pillars of the Global Compact for Migration, with the view to maximizing the development benefits of migration and elevating its social impacts.

ADB is also well-positioned to engage in more technical assistance and funding programs, in collaboration with other international development organizations and multilateral stakeholders, to help regional economies refine their labor market policies to facilitate more

skills-centric bilateral and/or regional labor agreements. With an unwavering intention to transform pledges into action made during roundtable discussions and high-level conferences, regional cooperation backed by ADB's institutional strength could promote resilience among migrant-sending economies and migrant-destination industries while boosting regional competitiveness.

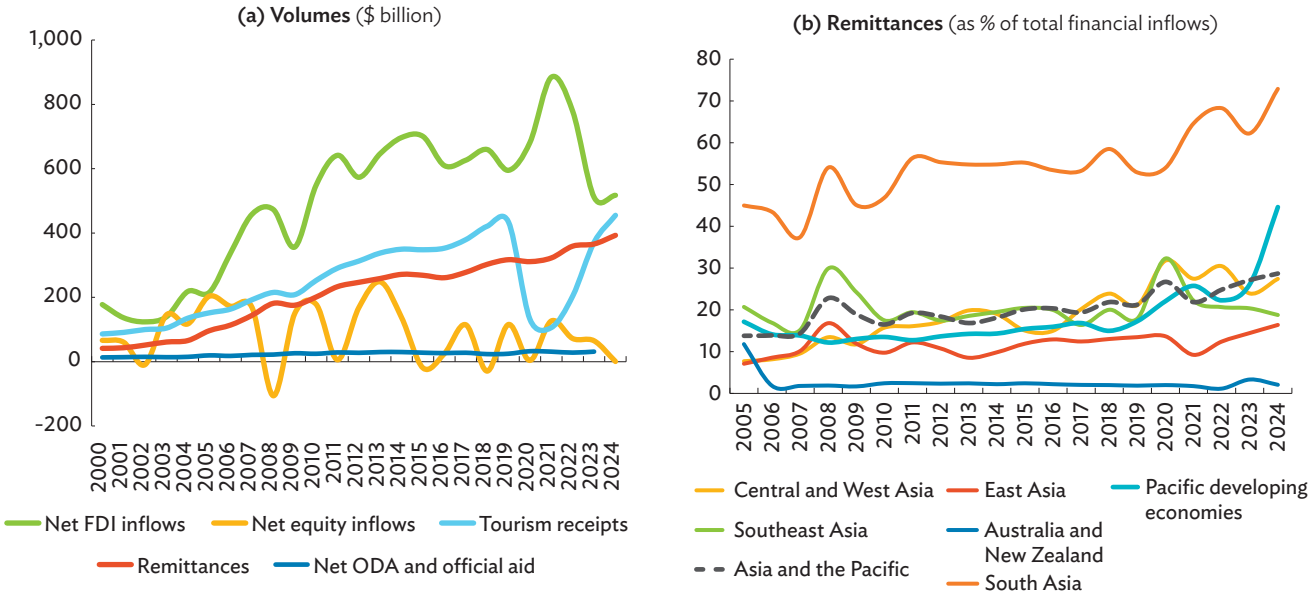
Remittances

Despite Global Uncertainties, Remittances Continue to Demonstrate Resilience

Remittances to Asia are estimated to have reached $392.8 billion in 2024, around 43.4% of the global total of $904.5 billion. Inflows to the region have gained importance in the past 2 decades since relative to other resource inflows, remittances have taken a sustained steady upward path, exceeding portfolio equity inflows and net official development assistance and official aid since 2014, as well as tourism receipts from 2020 to 2022 (Figure 5.13a). A key source of foreign exchange and a lifeline to many households in Asia, the remittances received—and how their volumes hold up relative to other inflows—vary across subregions, with economies in the South Asia and Southeast Asia accounting for 75% (Figures 5.13b and 5.14). These remittances have been greatly enabled with the rapid uptake of internet and technology-driven payment infrastructure in the past 2 decades, which has made their flow easier, faster, more reliable, and safer than before (Gates Foundation 2013).

In 2025, monthly remittance flows data suggested remittance flows to selected Asian economies continue to be robust (Figure 5.15). Overseas workers from the Philippines buoyed inflows in 2024 and 2025—remittances from Filipino workers abroad brought in monthly average inflows of $3.2 billion during the period. In Central and West Asia, year-on-year inflows to Armenia rose by 2.4% and by 16.8% in the Kyrgyz Republic. Meanwhile, Tonga's inflows from January to November 2025 registered a 7.3% growth year-on-year.

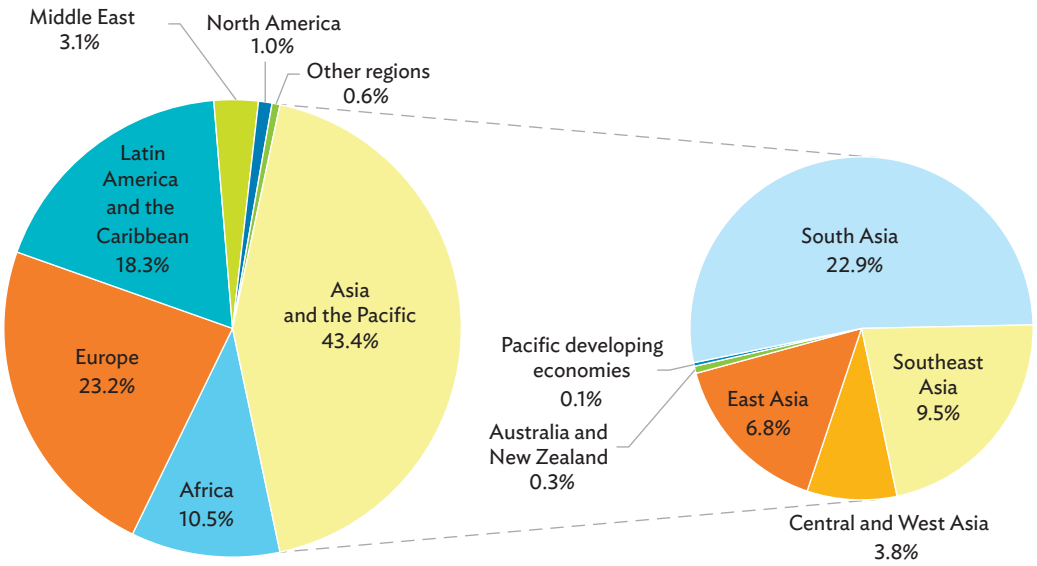
Figure 5.13: Financial Inflows to Asia and the Pacific



FDI = foreign direct investment, ODA = official development assistance.

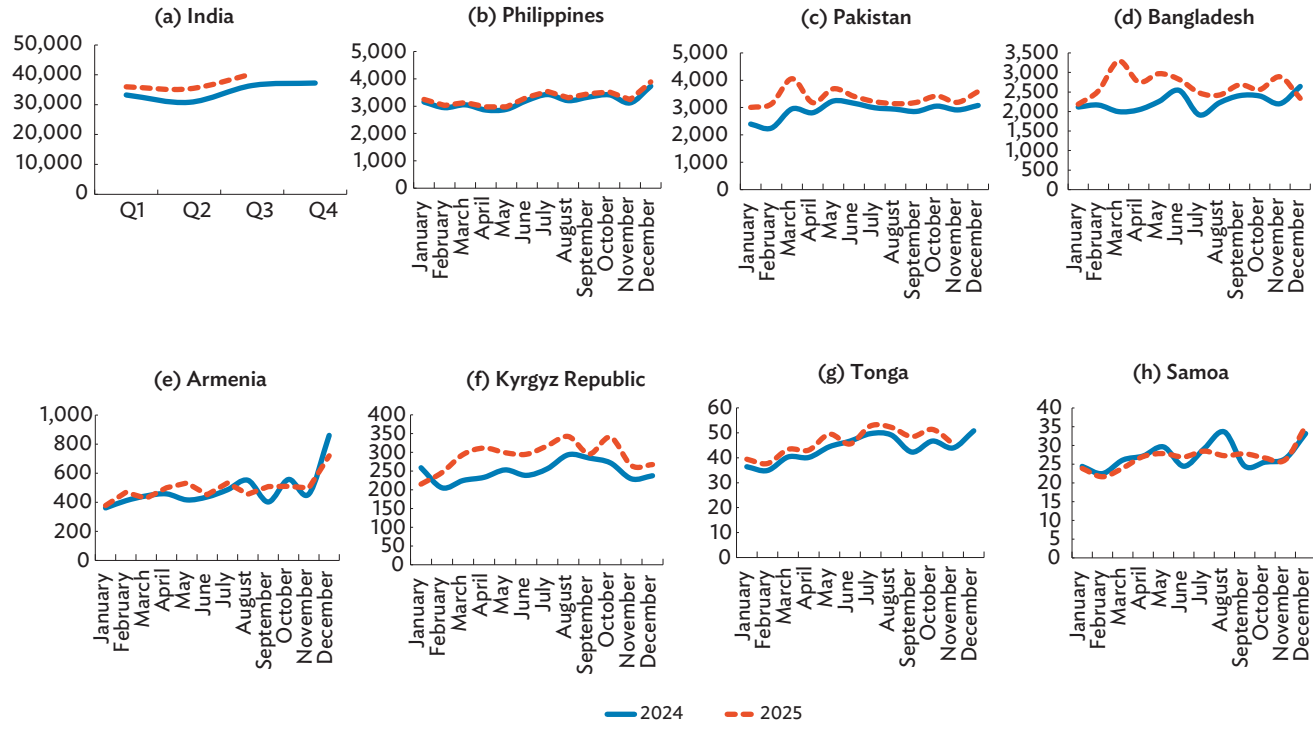
Sources: ADB calculations using data from Ratha, Plaza, and Kim (2024); UN Tourism Dashboard. https://www.untourism.int/tourism-data/un-tourism-tourism-dashboard (accessed October 2025); and World Bank. World Development Indicators Database. https://databank.worldbank.org/ (accessed December 2025).

Figure 5.14: Remittance Inflows by Region and Asian Subregions, 2024



Source: ADB calculations using data from Ratha, Plaza, and Kim (2024).

Figure 5.15: Remittance Inflows to Selected Economies in Asia and the Pacific ($ million)



Q = quarter.

Source: ADB calculations using data from CEIC Data Company and respective central banks (accessed February 2026).

Rising uncertainty may weigh on remittance inflows in the long term, but digital remittances continue to grow at speed.

Table 5.1 shows the volume and shares of inflows from the US to some Asian economies. Despite the significant levels of remittances as a proportion of gross domestic product (GDP) for some Asian economies, initial estimates suggest the remittance tax will have modest impact on GDP, even in remittance-dependent Pacific economies (ADB 2025b). Whereas the long-term effects of policy changes on the cost of hiring foreign labor and remitting funds have yet to unfold, soft measures that raise the cost of labor dampen demand while policies that add to the cost of remittances will affect remitting behavior.

Cost and Convenience Spur the Growth and Benefits of Mobile Money

Simple design and user-friendly interfaces make mobile money a popular choice for transactions. Globally, the share of digitally enabled remittance to total remittances doubled from 15.8% in 2020 to 32.0% in 2024, with inflows through mobile money nearly tripling in value (Figure 5.16).[7] Mobile money's low basic payment infrastructure requirements have enabled it to provide access to digital transaction services for unbanked populations, especially in rural and underdeveloped areas of the world. In Asia, where 88.0% of the population aged 15 and above own a mobile phone, around 63.2% have used it for digital transactions (Klapper et al. 2025). Given their widespread use and high value and frequency of transactions, digital remittance channels (and mobile money in particular) could reduce the average total cost of remittances and increase the chances of making the United Nations' Sustainable Development Goal for remittances to cost less than 3% per transaction achievable by 2030 (Ravindran 2025).[8]

The prevalence of mobile money is improving in Asia, aided by enabling regulations that support its growth.[9] Financial development strategies across the region

Table 5.1: Remittance Inflows from the United States and the World

	Remittance Inflows, January to September ($ million)					
	US Inflows		Total inflows		Inflows from the US as % of total	
Remittance Recipient Economy	2021	2025	2021	2025	2021	2025
India	11,378.4	30,905.2	64,285.0	111,571.0	17.7%	27.7%
Philippines	9,439.1	10,510.9	25,698.5	28,973.7	36.7%	36.3%
Pakistan	2,180.8	2,732.8	23,464.3	29,989.3	9.3%	9.1%
Bangladesh	2,574.3	2,864.0	17,240.9	24,138.3	14.9%	11.9%
Armenia	418.6	451.9	1,536.8	4,252.4	27.2%	10.6%
Georgia	210.0	501.4	1,706.1	2,691.4	12.3%	18.6%
Kyrgyz Republic	33.1	72.9	2,032.3	2,618.3	1.6%	2.8%
Tonga	136.2	144.6	361.0	411.9	37.7%	35.1%
Samoa	27.8	42.5	175.2	235.1	15.9%	18.1%

US = United States.

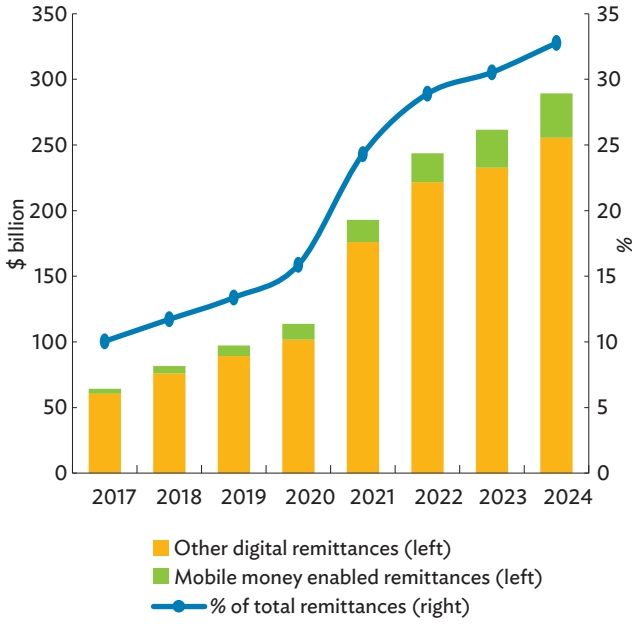
Sources: ADB calculations using data from CEIC Data Company; Ratha, Plaza and Kim (2024); and respective central banks (accessed January 2026).

[7] ADB (2024a) refers to digital remittances as "the electronic transfer of money from one person or entity to another, typically across international borders. The transfers are made through online platforms, mobile apps, and other digital channels that allow individuals to send and receive money quickly and securely."

[8] The infrastructure of mobile money resembles a basic bank account, enabling deposits, withdrawals, and transfers, but lacks features such as interest payments, credit, or automated services. Since deposits and withdrawals occur through agents, their network is crucial in establishing trust and expanding the reach of mobile money. Technically, mobile money is backed by e-money, which maintains a one-to-one parity with physical currency (Suri et al. 2023).

[9] The GSMA defines prevalence in the context of the Mobile Money Prevalence Index—a composite index that considers mobile money adoption, activity, and accessibility at country level in order to facilitate comparisons between markets. The purpose of the index is to enable third parties to gauge whether engagement would lead to expected impact. The index is meant to support decision-making for public, private, and nongovernment organization stakeholders alike.

Figure 5.16: Share of Digital Remittances in Total Remittances



Notes: Other digital remittances refer to the electronic transfer of money from one person or entity to another, typically across international borders. The transfers are made through online platforms, mobile applications, and other digital channels that allow individuals to send and receive money quickly and securely.

Sources: ADB calculations using data from Ratha, Plaza, and Kim (2024); Raithatha and Storchi (2025); and Statista. https://www.statista.com/outlook/dmo/fintech/digital-payments/digital-remittances/worldwide (accessed September 2025).

underscore measures to promote digital channels to leverage the remittances as a macroeconomic anchor and pillar of financial sovereignty. Australia, New Zealand, and economies in East Asia have been at the forefront of mobile money development but setting digital payment systems in place are gaining traction in some emerging Asian markets. For instance, the National Bank of Cambodia introduced the Cambodia Shared Switch, online banking, the Bakong system, and its Financial Technology Development Policy 2023–2028 as guide in driving innovation in the finance sector (Cambodia Investment Review 2024b, Fintech News Singapore 2023). The Bakong Payment System, Cambodia's digital payment platform, supported digital transaction volumes of $492 billion in 2023 and $54.8 billion in the first half of 2024 (B2B Asia News 2024, Cambodia Investment Review 2024a). In March 2025, collaboration between the National Bank of Cambodia and UnionPay International evolved Bakong into a cross-border payments platform, initially between Cambodia and the PRC (National Bank of Cambodia 2025). In Viet Nam, the government similarly promoted mobile money as an alternative to cash through its National Digital Transformation Programme (Open Development Vietnam 2023). Viet Nam's mobile money program has been piloted the past 4 years to promote cashless payments and expand access to digital financial services to unbanked and disadvantaged groups and will soon have an official legal framework (VietNamNews 2025).

Domestic digital remittances offer valuable insights for improving cross-border remittance systems.

While remittances are often viewed through the lens of international transfers, digital transfers or remittances among domestic users—particularly through mobile money—have transformed financial access for unbanked and underbanked populations. Easy-to-use and intuitive apps, lower (and transparent) transaction costs, and quick real-time transfers are but some of the essential features of domestic remittances which users also expect to find in cross-border remittances. Mobile technology's transaction-tracking ability improves remittance data capture and aids in monitoring formal inflows and improving data integrity, while enhancing transparency and efficiency (Global Partnership for Financial Inclusion 2024). These factors demonstrate how technology, regulation, and trust can combine to deliver low-cost, fast, and inclusive payment services.

Mobile money has reached unbanked and rural populations effectively and rapidly.

Simple designs and evolving user-friendly interfaces have made mobile money a popular choice for transactions in the Philippines, Paraguay, and sub-Saharan Africa. The affordability, speed, and security of mobile money have also made it an essential tool for domestic remittance transfers (Gates Foundation 2013), contributing significantly to poverty reduction and strengthening economic resilience in developing economies. In Kenya, for instance, the adoption of M-PESA reduced poverty by about 2 percentage points, stabilized household expenditures on food, health, and education, and empowered women to transition from agriculture to entrepreneurial activities (Batista and Vicente 2021; Jack and Suri 2016).

The success of mobile money in domestic remittance systems rests on several factors. A robust telecommunications infrastructure, a dense and trustworthy agent network, and the removal of traditional entry barriers have supported rapid and widespread adoption (Heyer and Mas 2009; Mas and Ng'Weno 2010; Vaughan, Fengler, and Joseph 2013). Interoperability and the absence of minimum balance requirements have further encouraged usage. Central to mobile money's expansion is the network effect: as more users join, the system becomes increasingly valuable, enhancing liquidity, competition among agents, and consumer trust (Mas and Radcliffe 2011). Together, these elements create a reinforcing cycle that strengthens both user participation and provider sustainability.

Despite these achievements, mobile money systems continue to face challenges that limit their universal adoption and effectiveness.

Common barriers include low financial literacy, limited access to mobile devices, overcharging by agents, and relatively high transaction costs (Lee et al. 2021; Suri et al. 2023). Adoption also remains deeply gendered—women tend to remit less frequently and in smaller amounts than men, largely due to lower income levels, limited phone ownership, and social norms restricting financial autonomy. Furthermore, the scarcity of female agents, in certain cultural context, diminishes women's comfort and trust in using these services (Ravindran 2025). Although training programs and transaction-fee discounts have raised awareness, many potential users still perceive mobile money as expensive or complex (Cruces et al. 2020). At the same time, strict and costly "know your customer" (KYC) regulations, combined with migrants' lack of documentation, and the difficulty of expanding rural agent networks continue to hinder remittance service providers from extending digital financial access to underserved populations (Sohst 2024).

Increasing digitalization has also heightened exposure to fraud, scams, and cybercrime—risks that are accelerating with advances in artificial intelligence. In 2023 alone, financial fraud led to estimated losses of up to $37 billion in East Asia and Southeast Asia (UNODC 2024), with Singapore and Japan reporting particularly high losses. Developing Asian economies also face added vulnerabilities from predatory lending, which can increase indebtedness.

The broader economic impacts of domestic remittances facilitated through digital platforms have been substantial.

Evidence demonstrates that rural households using mobile money experience, on average, 7.5% higher consumption expenditures, a 42% reduction in extreme poverty, and nearly threefold increases in savings (Lee et al. 2021). Greater financial stability reduces reliance on borrowing and encourages investment in self-employment and small businesses. Moreover, increased remittances have enabled the migration of additional household members, and so amplifying income opportunities and resilience to economic shocks.

Post-adoption studies reveal that mobile money fundamentally reshapes remittance and spending behaviors. In one South Asian economy, for instance, training interventions resulted in a 26% increase in the total value of remittances sent and a higher share of income remitted, without altering the frequency of transfers (Lee et al. 2021). Men's use of digital remittances grew more sharply in value, while women's adoption rose proportionally but remained tied to household obligations. Users also displayed more intentional financial behaviors, often directing remitted funds toward specific nonconsumption purposes such as education or savings (Lee at al. 2025), suggesting that mobile remittance channels foster more disciplined and goal-oriented financial decision-making.

Overall, the domestic digital remittance ecosystem underscores the importance of building trust through reliable agent networks, ensuring gender-sensitive access, and fostering effective collaboration among stakeholders. Strong regulatory frameworks supporting interoperability across financial service providers remain essential. Equally important is promoting financial literacy—particularly through peer-led community

initiatives—which has proven effective in reducing fraud by up to 72% and tripling adoption rates (Ravindran 2025). Collectively, these domestic experiences offer valuable lessons for global efforts to streamline cross-border remittance systems, reduce transaction costs, and advance the United Nations Sustainable Development Goal 10, to reduce inequality within and among countries. The target is to lower fees to below 3% of the remitted amount by 2030.

The Stubborn Cost of Remittances

The average cost of sending remittances across all instruments is still twice the 3% Sustainable Development Goal target.

The cost of remitting to Asia declined to 5.4% in the first quarter of 2025 from the 5.7% quarterly average in 2024, but the global average stands at 6.5% (Figure 5.17a). For legacy providers like banks in cash-dominated receiving areas, the cost remains stubbornly high at 14.5% for the global average and 10.2% in Asia (Figure 5.17b).

Remittance costs in Pacific developing economies are historically higher than the global and Asian averages—the combination of small market scale, which prevents remittance providers from scaling operations, and derisking, which reduced correspondent banking relationships by 60% between 2011 and 2022, have raised banking transaction costs, including remittance fees (ADB 2024a). Mobile money channels cost the least—3.8% in Asia—but usage of mobile money channels remains limited compared to banks and money transfer operators. Scaling digital technology applications enough to bring down the average costs of remitting through traditional channels might take the industry beyond 2030.

Even in markets where mobile-enabled remittances are starting to gain a solid foothold, cost is still an issue. A survey of 44,000 remittance senders and receivers in 20 Asian economies found digital applications to be the most popular channel for sending and receiving remittances in the region (DigiconAsia 2025). However, despite finding digital channels fast, secure, and reliable, users find digital fees to be high even in major remittance corridors and high-volume markets.

Figure 5.17: The Average Cost of Sending $200 (% of transaction value, as of Q1 2025)

(a) Quarterly trend

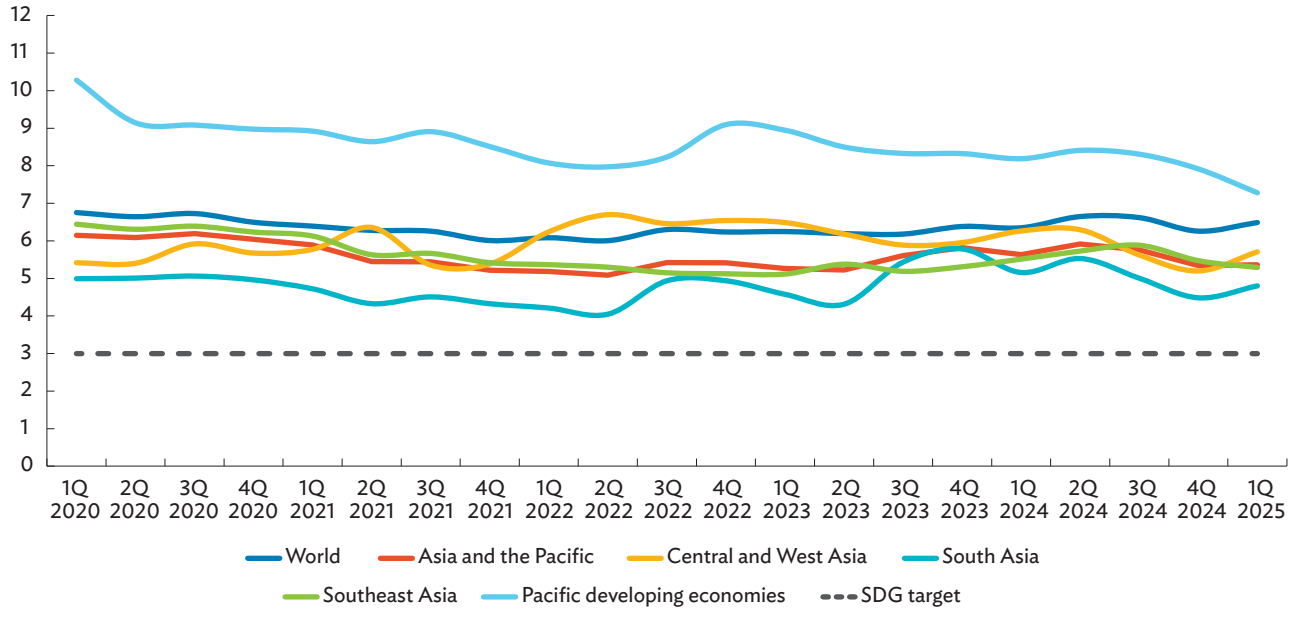


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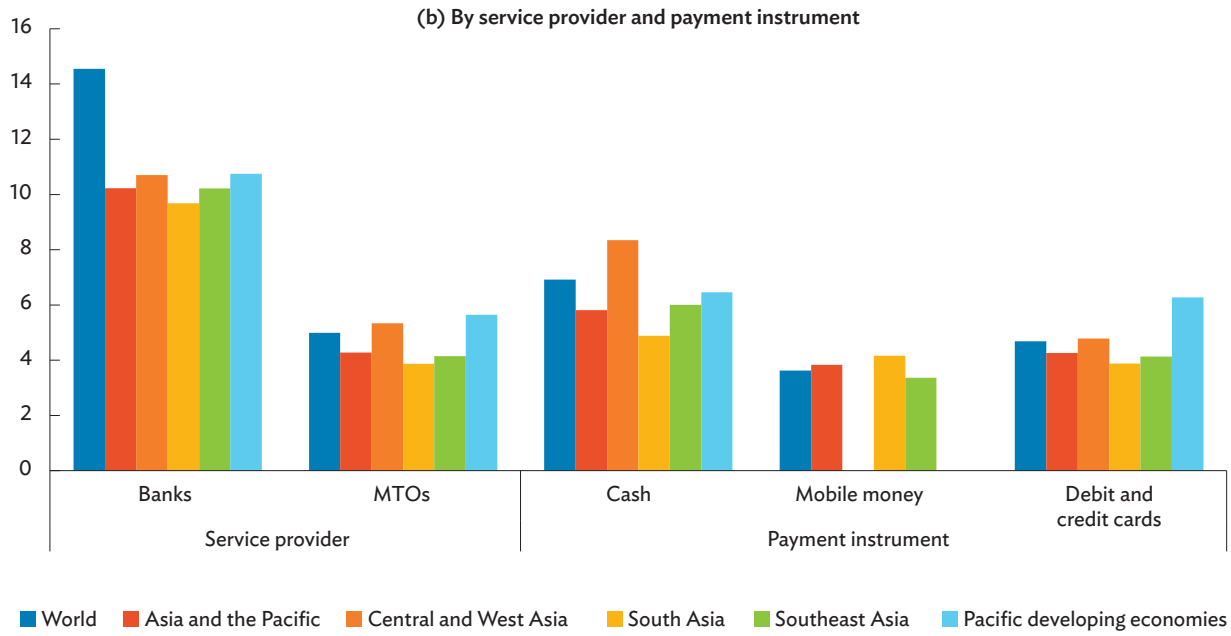
Figure 5.17: continued



MTO = money transfer operator, Q = quarter, SDG = Sustainable Development Goal.

Source: World Bank. Remittance Prices Worldwide. https://remittanceprices.worldbank.org/ (accessed January 2026).

Beyond mobile remittance channels, stablecoins have emerged as a potential means for facilitating cross-border transfers. While their use remains limited, they may offer efficiencies in cost and speed, provided that appropriate regulatory and risk management frameworks are in place (Box 5.2).

Bridging the Gap Between Financial Literacy and Digital Financial Literacy

Digital financial literacy determines the likelihood of migrants adopting and effectively using digital financial services for remittances.[10] Survey data from the Organisation for Economic Co-operation and Development (OECD) International Network on Financial Education show that in many economies, regardless of their level of development, a significant share of adults manages financial products and services online; yet only a much smaller proportion meets the minimum digital financial literacy threshold (OECD 2023) (Figure 5.18). The use of high digital service is not matched by adequate digital financial literacy. For instance, in the Republic of Korea, 58% of adults use financial services online, but only 8% are considered digitally financially literate. The data also show that digital financial literacy scores are significantly lower among older adults, those with less education, and those with lower income.

Digital financial literacy is more than what online financial service use can explain. This highlights the need for integrated policies that promote digital financial literacy by combining both digital and financial competencies. These findings suggest that in developing economies in Asia, where remittance flows play a critical role in household income and digital finance is rapidly expanding through mobile digital platforms, having little digital financial literacy can increase users' vulnerability to fraud, misunderstandings about fees or exchange rates, and difficulty in identifying secure providers. At the same time, these economies have an opportunity to embed digital financial literacy into broader financial inclusion strategies and consumer protection frameworks.

[10] Digital financial literacy is defined as the skills, knowledge, confidence, and competencies to "safely use digitally delivered financial products and services, to make informed financial decisions and act in one's best financial interest per individual's economic and social circumstance" (Alliance for Financial Inclusion and ASEAN Working Committee on Financial Inclusion 2021).

Box 5.2: Stablecoins and Cross-Border Remittances

A stablecoin is a type of digital currency designed to maintain a stable value by being pegged to a traditional fiat currency such as the United States (US) dollar or to a specified asset, or a pool or basket of assets (McKinsey & Company 2025; Financial Stability Board 2020). Unlike traditional cryptocurrencies, such as Bitcoin or Ether, which can experience drastic price fluctuations within minutes, stablecoins maintain relatively constant values, making them more suitable for savings, and cross-border and real-time payments and remittances (G7 Working Group on Stablecoins 2019). Examples of stablecoins are USDT (Tether), USDC (USD Coin), Circle (USDC), EUR CoinVertible (EURCV), and Maker's DAI.

Stablecoins can be an alternative to traditional and digital remittance systems because of their faster processing times and lower fees (Ante 2025). Sending money through traditional remittance channels (such as banks and money transfer operators) typically involves multiple intermediaries, including correspondent banks, clearing houses, and local agents, with each intermediary charging a fee and collectively driving up the total cost for the sender. In the first quarter of 2025, this would cost anywhere from 5% to 15% of the remitted amount and would take a few days to be fully processed.[a] Digital remittances cost less, around 3.6%, and are processed in real time. In contrast, stablecoin transactions are nearly instantaneous, and often cost below $0.01 per transfer, but can climb to $3–$6 during congesting (Boston Consulting Group 2025). Cross-border flows into stablecoins are found to be larger in the corridors where the cost of traditional remittances is higher (Auer, Lewrick, and Paulick 2025).

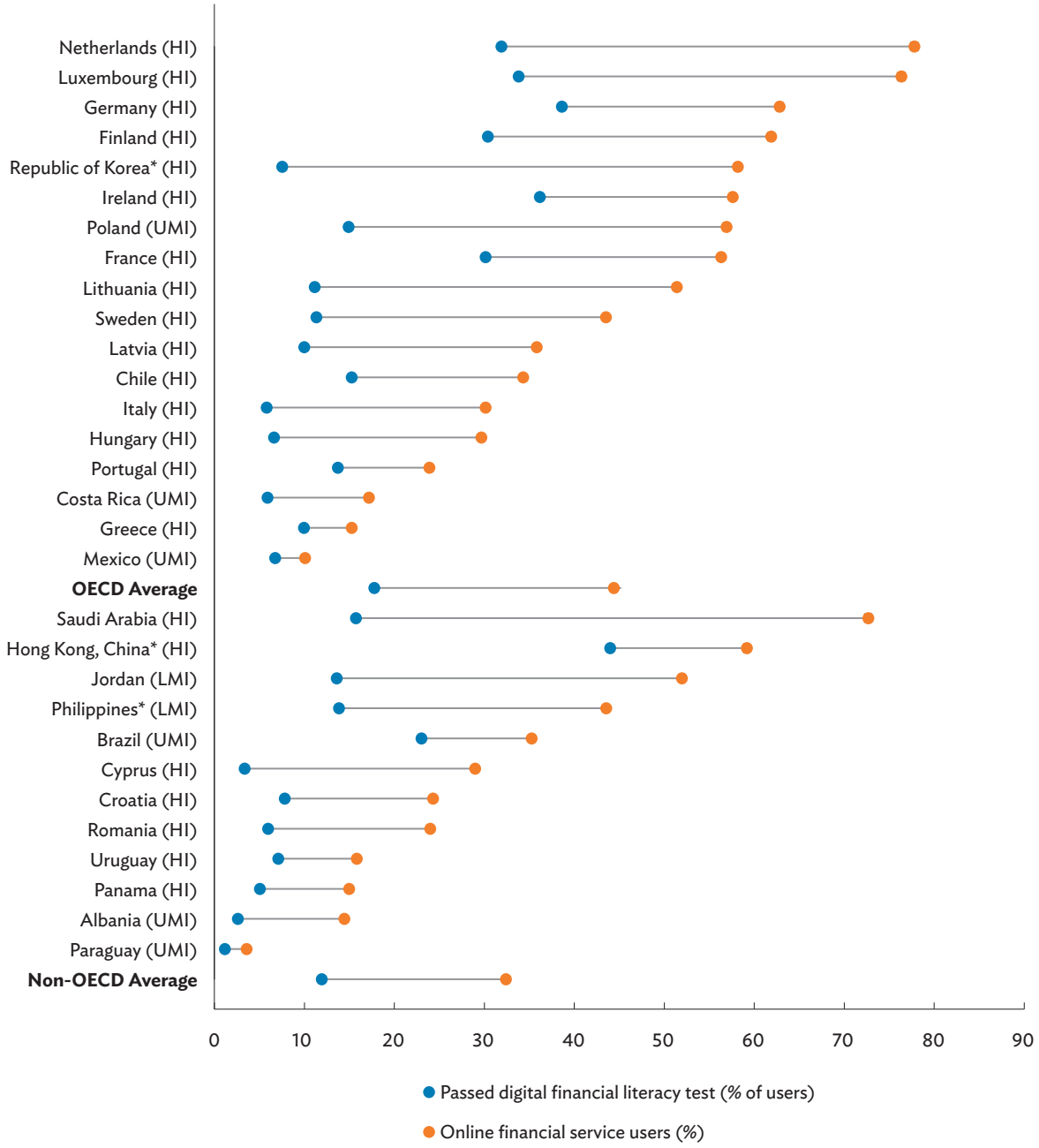
Stablecoins are gaining traction in Asia and the Pacific, particularly in economies with significant remittance flows. In the United Arab Emirates (UAE), Circle—the issuer of USD Coin (USDC)—has started to explore the integration of stablecoins into payment systems, with potential application in major corridors such as the UAE–Philippines, and UAE–Pakistan (Merani 2025). In Southeast Asia, both the Philippines and Singapore have brought stablecoins under regulatory oversight. In the Philippines, Coins.ph has launched a peso-pegged stablecoin (PHPC), with claims that its use in remittance transactions could reduce fees to as low as 0.1%–0.3% (Coins.ph 2025). In Singapore, the Monetary Authority of Singapore (MAS) finalized a regulatory framework for single-currency stablecoins in 2023, under which the StraitsX Singapore Dollar (XSGD) is issued and used in payments and digital financial services (Monetary Authority of Singapore 2023). In Viet Nam, one estimate suggests that about 7.8% of remittance inflows in the first half of 2025 were settled in stablecoins despite the absence of a legal framework (Aiden and Jo 2025), while in Thailand, Siam Commercial Bank launched a cross-border remittance service using stablecoin settlement in 2024 following a regulatory sandbox pilot (Siam Commercial Bank 2024).

Despite these promising developments, the stablecoin remittance landscape remains challenged by several structural and regulatory hurdles, the most pressing of which is regulatory fragmentation. While some jurisdictions like the US have made strides in passing stablecoin legislation and reserve requirements, many countries still lack clear frameworks for their use (Waliczek and Yeung 2025). This uncertainty makes it difficult for remittance providers to operate confidently across borders (Zetzsche, Arner, and Buckley 2020). Also, on/off-ramp infrastructure—the systems that allow users to convert stablecoins into local fiat currency—is still underdeveloped in many regions. Without reliable and affordable conversion mechanisms, stablecoin recipients may find themselves unable to use their digital funds for everyday expenses. In addition, while traditional remittance channels are widely accessible through cash and branch networks, stablecoin usage still requires smartphones, internet connectivity, and digital literacy—resources that remain unevenly distributed, especially in rural or developing countries (ITU 2023).

[a] World Bank (accessed 2025).

Sources: Aiden and Jo (2025); Ante (2025); Auer, Lewrick, and Paulick (2025); Boston Consulting Group (2025); Coins.ph (2025); Financial Stability Board (2020); ITU (2023); McKinsey & Company (2025); Merani (2025); Monetary Authority of Singapore (2023); Siam Commercial Bank (2024); Waliczek and Yeung (2025); Zetzsche, Arner, and Buckley (2020).

Figure 5.18: Online Financial Service Use and Digital Financial Literacy, 2022 (% of respondents)



HI = high income, LMI = lower middle income, OECD = Organisation for Economic Co-operation and Development, UMI = upper middle income.

Notes:

(i) "*" represents economies in Asia; online financial service users refers to "adults who manage financial products and services online."
(ii) Financially literate refers to "adults who manage financial products and services online and score the minimum target digital financial literacy score."
(iii) The OECD International Network on Financial Education 2023 Survey covered 39 economies, using the 2022 questionnaire to collect data from 68,826 adults aged 18–79.
(iv) The digital financial literacy score in the survey is designed to capture an individual's level of digital financial literacy, as a combination of knowledge, skills, attitudes, and behaviors necessary to safely use digital financial services and technologies.

Source: OECD (2023).

National strategies, including financial inclusion strategies, do not always incorporate digital financial literacy initiatives tailored to migrant communities.

While digital financial literacy (DFL) is addressed as part of broader financial education initiatives, the strategy does not specify DFL programs tailored to the needs of migrant workers or their families. Despite strong incentive for migrants and their families to use cross-border digital financial services (DFS), which typically cost much less compared to traditional channels, a lack of knowledge in digital financial education limits migrants' openness to using digital remittance avenues. In this context, there may be value in considering how DFL efforts can be aligned with the unique financial behaviors and challenges of migrant households. Table 5.2 maps the national strategy for financial inclusion of some key remittance-receiving economies in Asia, the inclusion of migrant workers as a target for such strategies, and the presence of DFL initiatives (or its lack thereof).

Table 5.2: National Strategies for Financial Inclusion and Digital Financial Literacy in Selected Asian Economies

Category	Philippines	Cambodia	Samoa	Nepal	Tajikistan
Official Document	National Strategy for Financial Inclusion 2022–2028	National Financial Inclusion Strategy 2019–2025	National Financial Inclusion Strategy 2022/2023–2025/2026	Fourth Strategic Plan 2022–2026 Financial-Literacy-Framework-2022.pdf	National Financial Inclusion Strategy 2022–2026
Lead Agency	Bangko Sentral ng Pilipinas	National Bank of Cambodia	Central Bank of Samoa	Nepal Rastra Bank	National Bank of Tajikistan
DFL Mentioned?	Yes, under Strategic Objective 2	Not in particular but digital payment systems are mentioned	Yes, under alignment with Money Pacific Goals 2025, which aims for a healthy financial life for the Pacific	Yes. It is defined in the framework and digital financial literacy is identified as part of the delivery of financial literacy (item 4.2)	Briefly, digital financial literacy was mentioned as a component of a project in conjunction with the IFC in 2019–2021
Purpose of DFL	Build informed use of DFS and consumer protection	General financial literacy aims to "increase consumer empowerment and protection, and finance sector transparency"	Enhance financial capability and consumer protection	Promote consumer safety in using digital financial services and make digital financial literacy part of the financial literacy activities and programs	No specific mention of DFL but general financial literacy is one of the four key areas of the National Financial Inclusion Strategy
Migrants and/or Their Families	Migrant workers and their families listed as underserved	"Dependents" (that is, remittance recipients) are among the target segments in Item 45 of the NFIS document	Migrants mentioned as key remittance senders; families are implied beneficiaries of remittance-linked financial inclusion efforts	Migrant workers and remittance receivers are mentioned among the target segments of Nepal's financial literacy framework	Item 70 suggested that convenient savings and loan products be developed for remittance senders and their families by better understanding remittance amounts and frequency of remittance flows
Remittances	Priority use case for DFS	The development of remittance channels is included in the plan to expand "digital payment system capabilities"	Focus sector promoting DFS	Yes, remittance recipients are among the target segments	The document recognized Tajikistan's dependence on remittance and encouraged the linking of money transfers to bank accounts "customers can take advantage of digital payment opportunities"

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Table 5.2: continued

Category	Philippines	Cambodia	Samoa	Nepal	Tajikistan
DFL Initiatives	DFL is integrated in a broader financial literacy framework that includes content on DFS safety, digital assets, and MSME financing	No specific DFL initiative but there is a plan to transition to digital transactions	DFL is integrated into broader financial literacy initiatives under Strategic Pillar 5; no stand-alone DFL program specified	DFL is included in the financial literacy programs submitted by banks and financial institutions	No specific DFL initiative
Monitoring and Evaluation Indicators for DFL	No dedicated DFL indicators; tracked through general financial literacy (% of adults with passing scores) and DFS usage	No dedicated DFL indicators	No dedicated DFL indicators; relevant aspects tracked under general financial literacy	No dedicated DFL indicators, but the framework mandates that all banks report on all the financial literacy programs conducted while NRB will evaluate financial literacy activities and programs at the macro level	No dedicated DFL indicators; relevant aspects tracked under general financial literacy
Internet penetration (%)	80.8%	73.6%	88.8%	62.8%	44.3%
Mobile subscription (per 100 people)	117.3	120.8	62.4	133.3	126.2
Remittances (% GDP)	8.5%	6.4%	25.9%	25.7%	45.4%

DFL = digital financial literacy, DFS = digital financial services, GDP = gross domestic product, IFC = International Finance Corporation, MSME = micro, small, and medium-sized enterprise, NFIS = national financial inclusion strategy, NRB = Nepal Rastra Bank.

Note: Internet penetration refers to the percentage of households with internet access at home.

Sources: Bangko Sentral ng Pilipinas; National Bank of Cambodia, Central Bank of Samoa, Nepal Rastra Bank, and National Bank of Tajikistan; Our World in Data. https://ourworldindata.org/grapher/mobile-cellular-subscriptions-per-100-people?tab=table (accessed January 2026); and International Telecommunication Union. https://datahub.itu.int/ (accessed January 2026).

Policy Implications and Conclusions

Scaling up hard and soft infrastructure across the region—including public digital and data infrastructure—through an integrated policy focus, will help widen the scope and reach of digitalization and reduce remittance costs.

The global digital economy was about $16 trillion (15% of global GDP) in 2024 (International Data Center Authority 2025). Within the region, Southeast Asia's digital economy alone is expected to grow to $300 billion by the end of 2025 from increased e-commerce in wholesale and retail goods and services, transport and tourism industries, financial services, online media, including social media, streaming, and gaming (Ng 2025). The drive to successfully serve the growing needs of consumers, enterprises, and governments requires increased investments in fiber technology and more resources to support cross-border efforts to harmonize regulatory frameworks, interoperability standards, digital governance conventions, and digital and cybersecurity capacity building (Asian Infrastructure Investment Bank 2020; International Monetary Fund 2023; Pankert et al. 2023; Tech for Good Institute 2025).

The quality of remittance statistics requires further improvement. With remittance transactions, including digital transactions, growing in importance over the past few decades, it is imperative that accurate and comprehensive data be collected on time. This will help in identifying trends, understanding the use of remittances, and developing targeted interventions to harness the positive impact of remittances on poverty reduction, economic growth, and financial inclusion. Improved data on remittances will directly support the Sustainable Development Goals indicators on reducing remittance costs and increasing the volume of remittances.

A well-defined policy program would help more Asian economies to promote digital remittance.

Coordinating policies around cross-border interoperability and regulatory challenges would expand the number of digital remittance corridors in the region. Countries around South and Southeast Asia (Malaysia, Indonesia, Singapore, the Philippines) are investing in state-led initiatives to develop interoperable infrastructure. Interoperability offers significant ease of transaction to users and positive spillover effects to providers. However, ensuring that banks, mobile network operators, and fintech companies adopt common technical standards and settlement protocols poses significant difficulties. These are exacerbated by infrastructure challenges. As usage increases, interoperable systems must overcome scaling issues: latency (transaction processing delay), higher failure rates, bottlenecks in processing between providers' back-end systems. Ensuring that all apps and banks maintain reliable uptime under high loads is also a challenge.

Wide gaps in financial literacy and digital financial literacy suggest a growing need for integrated policies that combine both competencies.

Asia's developing economies with higher dependence on remittance need to embed digital financial literacy into broader financial inclusion strategies and consumer protection frameworks. Cross-border digital financial services, such as international remittances, may require migrant workers and their families to have higher digital financial capability as they must navigate exchange rates, transfer fees, multiple service providers, regulatory differences across jurisdictions, and increasing cybersecurity risks.

Studies recommend joint design of financial literacy programs and digital product onboarding materials, with remittance service providers and local community-based organizations executing education campaigns to reach disadvantaged or digitally excluded groups (Alliance for Financial Inclusion and ASEAN Working Committee on Financial Inclusion 2021). Specifically, partnerships that enable the collection and analysis of user data (migrant demographics, pain points, digital usage rates) hold the potential to tailor financial literacy content more effectively. An example is the SentBe-United Nations Capital Development Fund toolkit developed for South Asian migrants through insights from both cross-border remittance data and local engagement (Kamau, Gonzalez-Caro, and Hossain 2023). Combining online modules (provided by remittance platforms and international agencies) with in-person neighborhood training delivered by local nongovernment organizations has proven to increase effectiveness, especially where digital access and literacy are low (Morgan, Huang, and Trinh 2020).

International Tourism

Tourism Remains a Bright Spot for Economic Growth

Tourism is vital for economic growth across Asia, driving revenues, foreign exchange earnings, employment, and livelihood opportunities. In 2024, travel and tourism contributed $3.2 trillion to the region's economies (up by 3.2% versus 2019) and supported more than 200 million jobs (1 in 10). Tourism's GDP share was 8.4% (down from 9.8% in 2019), reflecting faster growth in the broader economy and subregional variations in recovery even as output returned to levels before coronavirus disease (COVID-19) lockdowns decimated business. The sector is already on a jobs-intensive growth path. The World Travel and Tourism Council (WTTC) projects tourism to reach $6.2 trillion by 2035, about 11.2% of regional GDP, with employment rising to 260.4 million, or 12.7% of total regional employment in 2035 (Table 5.3). The next question is where momentum is strongest—and which strategic levers can propel transformation toward resilient, higher-value growth.

To understand how quickly—and where—momentum has returned since the end of the pandemic, it is useful to start with regional patterns in international arrivals and receipts. By the end of 2024, Asia reached 96.3% of 2019 arrival volumes while receipts exceeded the 2019 benchmark by 5%, signaling full recovery in value terms (Figure 5.19b) despite slightly lower visitor numbers. This makes Asia the second-most-visited region globally after Europe, with its share of worldwide arrivals recovering from a pandemic low of 13.3% (2021) to 27.4% by 2024 (Figure 5.19a).

Table 5.3: Economic Impact of Tourism in the Asia and Pacific Region

Year	GDP Contribution		Travel and Tourism Jobs	
	GDP Amount ($ trillion)	GDP Share (%)	Employment (million)	Employment Share (%)
2019	3.1	9.8	190.8	10.3
2024	3.2	8.4	200.1	10.3
2025[a]	3.6	9.1	207.0	10.6
2035[a]	6.2	11.2	260.4	12.7

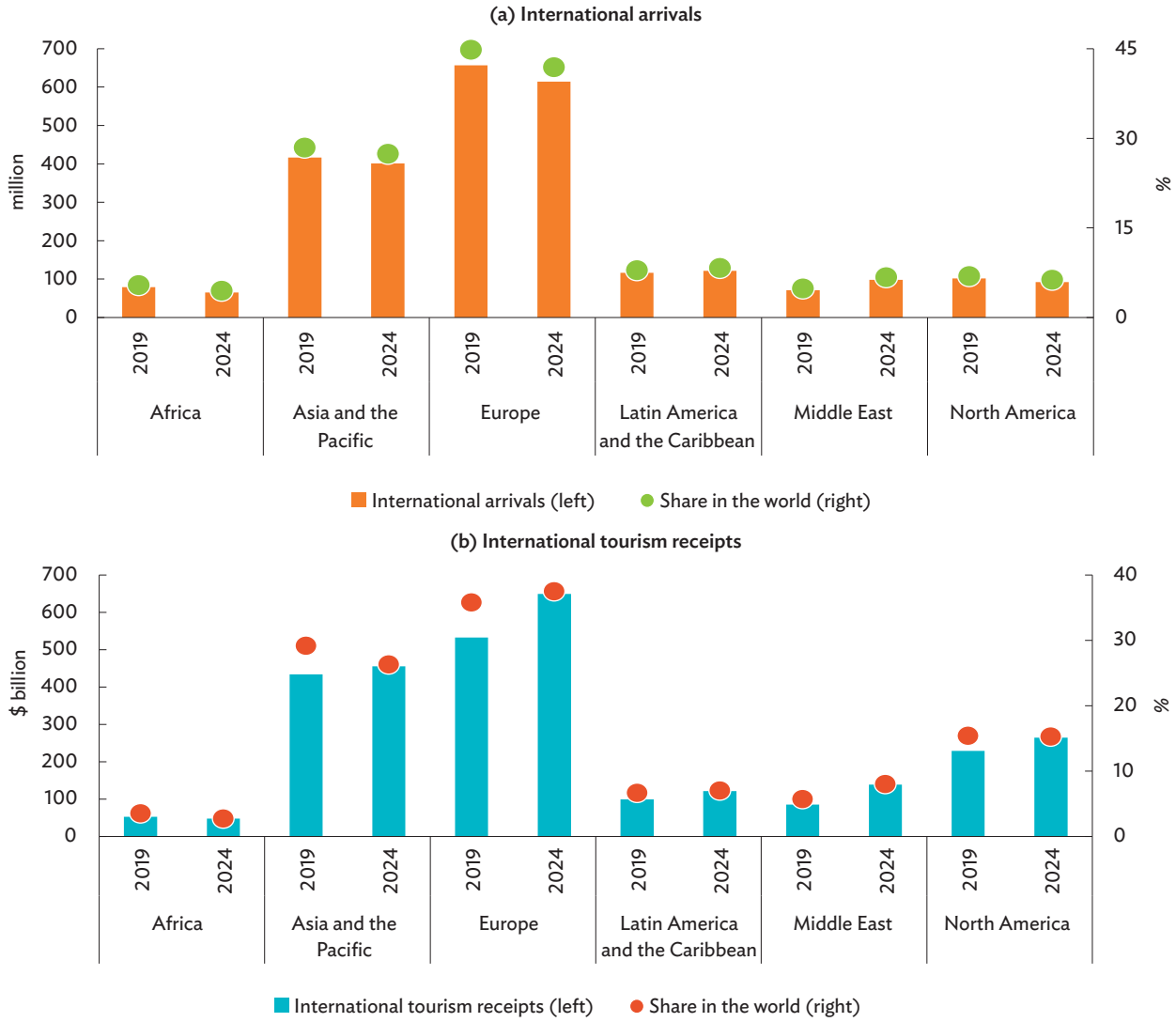
GDP = gross domestic product.

[a] = forecast

Note: The World Travel and Tourism Council only has data for Armenia; Australia; Azerbaijan; Bangladesh; Brunei Darussalam; Cambodia; the People's Republic of China; Fiji; Georgia; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; Kiribati; the Republic of Korea; the Kyrgyz Republic; the Lao People's Democratic Republic; Malaysia; Maldives; Mongolia; Nepal; New Zealand; Pakistan; Papua New Guinea; the Philippines; Singapore; Solomon Islands; Sri Lanka; Taipei,China; Tajikistan; Thailand; Tonga; Türkiye; Uzbekistan; Vanuatu; and Viet Nam.

Source: ADB calculations using data from World Travel and Tourism Council Research Hub. Interactive Economic Impact Dashboard. https://researchhub.wttc.org/dv-dashboard (accessed September 2025).

Figure 5.19: Tourism Performance by Region of Destination



Sources: ADB calculations using data from CEIC Data Company (accessed September 2025); Euromonitor Passport (accessed September 2025); UN Tourism. Compendium of Tourism Statistics data set. https://www.unwto.org/tourism-statistics/tourism-statistics-database (accessed September 2024); and UN Tourism. World Tourism Barometer, September 2025. https://doi.org/10.18111/wtobarometereng (accessed October 2025).

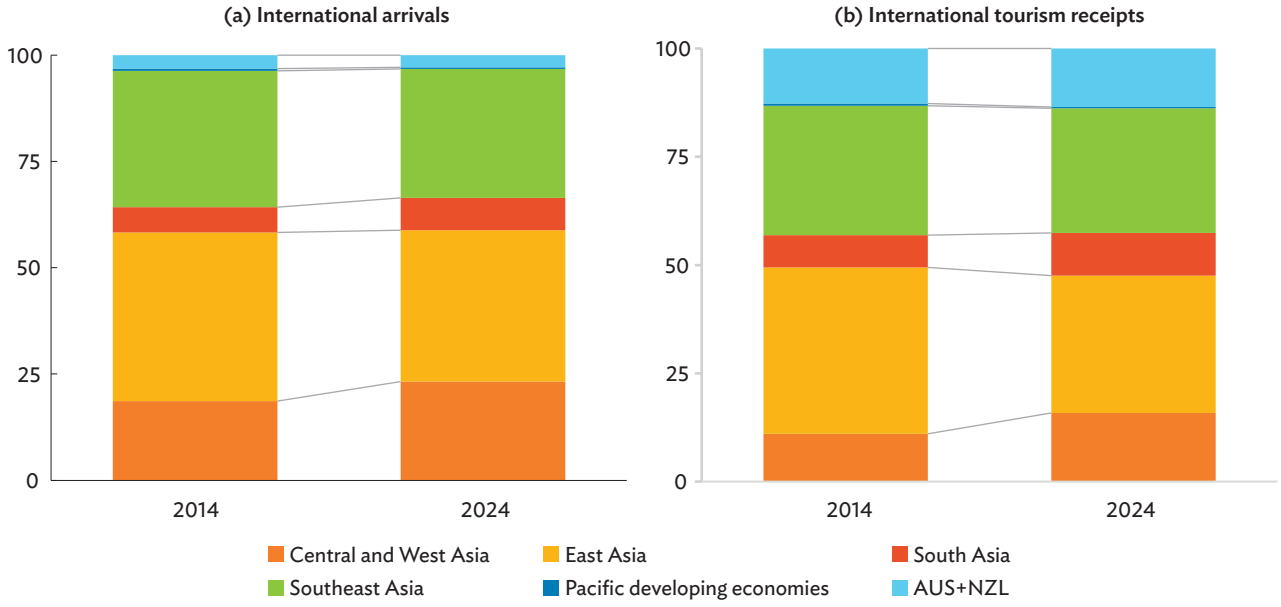
The aggregate rebound masks significant subregional variation. East Asia has historically accounted for the largest shares of both arrivals and receipts, with Southeast Asia consistently second (Figure 5.20a). Australia and New Zealand remain small in arrivals (approximately 3% of the Asia total) but command 12%–14% of tourism receipts, indicating substantially higher spending per visitor—a pattern driven primarily by high-value tourism in the two destinations (Figure 5.20b).

A notable shift has been Central and West Asia's rapid ascent. Its share of Asia's arrivals increased from 18.6% in 2014 to 23.2% in 2024, while East Asia's share declined from 39.6% to 35.6% and Southeast Asia's fell from 32.1% to 30.3% (Figure 5.20a). The pre-pandemic period (2016–2019) showed particularly strong momentum, with Central and West Asia's international tourism receipts growing at 18.0% a year and arrivals at 20.3%—double-digit gains that positioned the subregion as one of the region's fastest-growing destinations (Figure 5.21).

Strategies have diverged between different economies. Many destinations prioritized volume, expanding arrivals faster than receipts. Tajikistan and Uzbekistan recorded exceptional growth in both (each above 48% compound annual growth rate), while Australia, Japan, and New Zealand tilted toward higher yield, raising receipts per visitor even as arrival growth moderated (Figure 5.22).

Taken together—Central and West Asia's rapid rise from a modest base, Southeast Asia's durable second position, and Australia and New Zealand's small share but outsized receipts—the picture is one of differentiated performance. Having mapped where growth occurred, the next step is to understand why some destinations translate infrastructure and facilitation into arrivals and value more effectively than others, and why certain origin–destination pairs realize potential while others remain underdeveloped. This motivates the push–pull analysis in the next section.

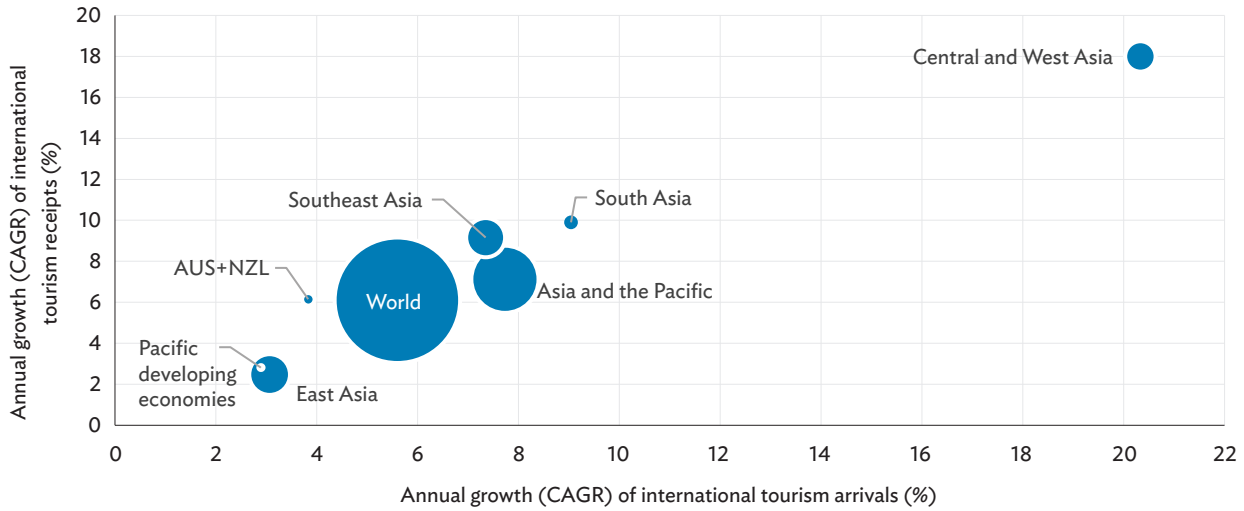
Figure 5.20: Percentage Share of Subregion to Asia and the Pacific *(%)*



AUS = Australia, NZL = New Zealand.

Sources: ADB calculations using data from CEIC Data Company (accessed September 2025); Euromonitor Passport (accessed September 2025); UN Tourism. Compendium of Tourism Statistics data set. https://www.unwto.org/tourism-statistics/tourism-statistics-database (accessed September 2024); and UN Tourism. World Tourism Barometer, September 2025. https://doi.org/10.18111/wtobarometereng (accessed October 2025).

Figure 5.21: Tourism Performance by Subregion, 2016-2019—Asia and the Pacific

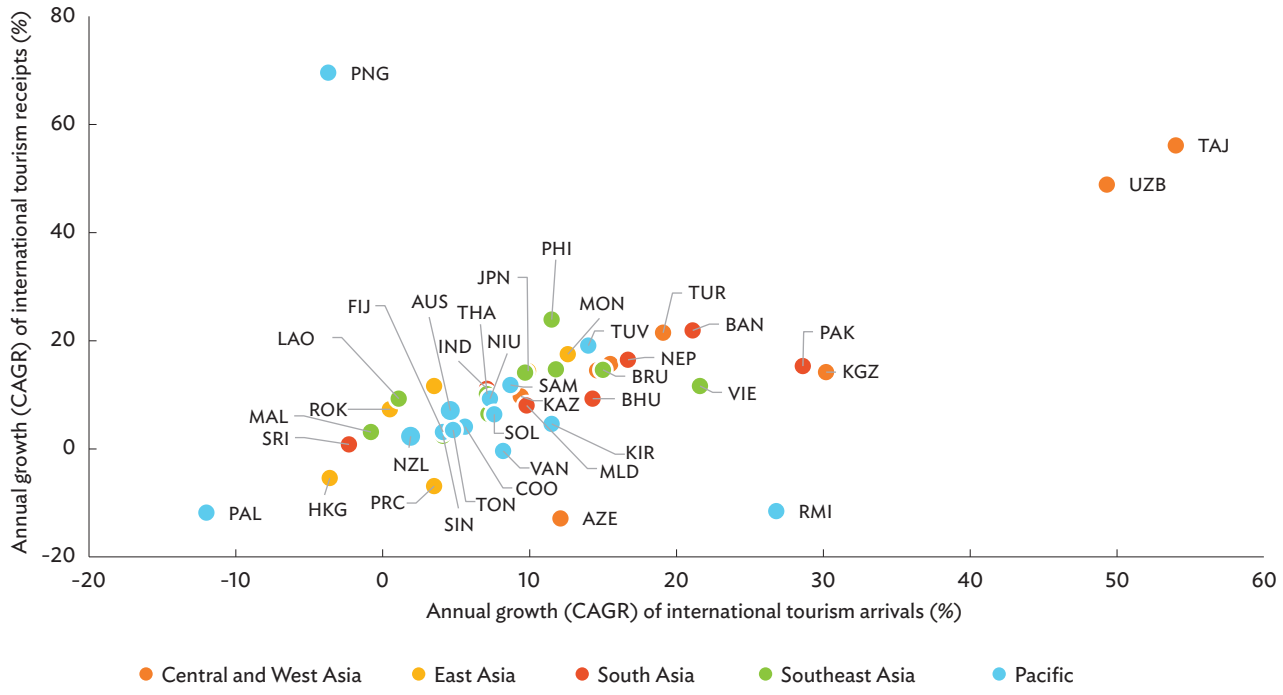


AUS = Australia, CAGR = compound annual growth rate, NZL = New Zealand.

Note: The size of the bubble represents the number of international tourism arrivals in 2019.

Sources: ADB calculations using data from CEIC Data Company (accessed September 2025); Euromonitor Passport (accessed September 2025); UN Tourism. Compendium of Tourism Statistics data set. https://www.unwto.org/tourism-statistics/tourism-statistics-database (accessed September 2024); and UN Tourism. World Tourism Barometer, September 2025. https://doi.org/10.18111/wtobarometereng (accessed October 2025).

Figure 5.22: Tourism Performance by Economy, 2016-2019—Asia and the Pacific



AUS = Australia; AZE = Azerbaijan; BAN = Bangladesh; BHU = Bhutan; BRU = Brunei Darussalam; PRC = People's Republic of China; CAGR= compound annual growth rate; COO = Cook Islands; FIJ = Fiji; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KIR = Kiribati; ROK = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; MAL = Malaysia; MLD = Maldives; RMI = Marshall Islands; MON = Mongolia; NEP = Nepal; NIU = Niue; NZL = New Zealand; PAL = Palau; PAK = Pakistan; PNG = Papua New Guinea; PHI = Philippines; SAM = Samoa; SIN = Singapore; SRI = Sri Lanka; SOL = Solomon Islands; TAJ = Tajikistan; THA = Thailand; TON = Tonga; TUV = Tuvalu; TUR = Türkiye; UZB = Uzbekistan; VAN = Vanuatu; VIE = Viet Nam.

Sources: ADB calculations using data from CEIC Data Company (accessed September 2025); Euromonitor Passport (accessed September 2025); UN Tourism. Compendium of Tourism Statistics data set. https://www.unwto.org/tourism-statistics/tourism-statistics-database (accessed September 2024); and UN Tourism. World Tourism Barometer, September 2025. https://doi.org/10.18111/wtobarometereng (accessed October 2025).

Determinants of International Tourism Flows: Push-Pull Factors

Tourism flows result from the interplay of origin-side and destination-side forces. Push factors reflect the capacity and propensity of source markets to generate outbound travel. Pull factors capture the attractiveness and readiness of destinations to convert interest into arrivals and spending. In competitiveness terms, push and pull function as the demand and supply engines of performance (Dupeyras and MacCallum 2013). Push sets the potential scale and rhythm of demand from each origin. Pull determines which origin–destination pairs realize that potential and at what value.

Push Factors—Origin Capacity and Propensity

Outbound travel depends on the conditions in the traveler's place of origin. The push factors influence the capacity and the willingness of consumers to travel. The main drivers of market potential include the following:

Income and demographics drive travel demand. Rising disposable incomes make international travel more accessible, with 1.1 billion individuals or 40% of the global population expected to afford travel by 2030 (World Travel Market London and Tourism Economics 2025). Age structure and household composition also determine trip frequency, purpose (i.e., leisure, business), travel timing, length of stay, and spending patterns. For instance, Generation Z (or individuals born between 1997 and 2012) prioritizes affordability of travel more than any other considerations compared to other age groups (World Travel and Tourism Council 2023).

Economic conditions shape travel behavior. During periods of economic slowdown, consumers adjust how they allocate their discretionary budgets. Inflation cuts into purchasing power, employment levels affect household confidence, and policy measures, such as taxes and incentives, can either stimulate or constrain outbound travel. Recent economic uncertainties have shifted travelers' priorities. While cost remains a key factor, travelers now optimize value by choosing destinations where their currency stretches further, rather than reducing their overall travel budget (World Travel and Tourism Council 2023).

Digital readiness lowers transaction costs. High internet penetration, widespread mobile adoption, and familiarity with digital platforms minimize search friction and simplify booking processes, making trip planning faster and easier. However, visa restrictions may pose challenges and narrow the gains despite rising incomes and digital readiness. Technology such as travel applications and artificial intelligence tools are increasingly vital for providing personalized experiences. This is especially critical for engaging younger travelers, who rely heavily on mobile devices for accessing travel-related services (World Travel Market London and Tourism Economics 2025).

From Structural Factors to Market-Specific Propensity

These drivers combine differently in each origin to produce distinct travel behavior. Performance shows up along two dimensions: trip propensity—how often people travel (e.g., overseas trips per 1,000 people)—and yield—spending per trip. Singapore exemplifies high-frequency propensity: residents averaged about 1,880 trips per 1,000 people in 2019—among the highest globally (Figure 5.23). Recent consumer research echoes this, with many Singaporeans trimming domestic food-and-retail outlays to preserve spending power for travel abroad (Visa 2024b).

Australia demonstrates a contrasting pattern of high-value, low-frequency propensity (458 trips per 1,000 people, $4,048 per trip): high capacity, but long distances and concentrated holiday calendars mean fewer, and longer trips with higher expenditure (7–14 days).

Outside Asia, similar patterns emerge. France, Spain, and the US pair moderate propensity with relatively high per-trip spending. Meanwhile, Germany, the Netherlands, the United Arab Emirates, and the United Kingdom exhibit high-propensity/mid-spend behavior typical of well-connected short-haul travel within Europe and the Middle East (Figure 5.23).

Why Propensity Matters for Strategy

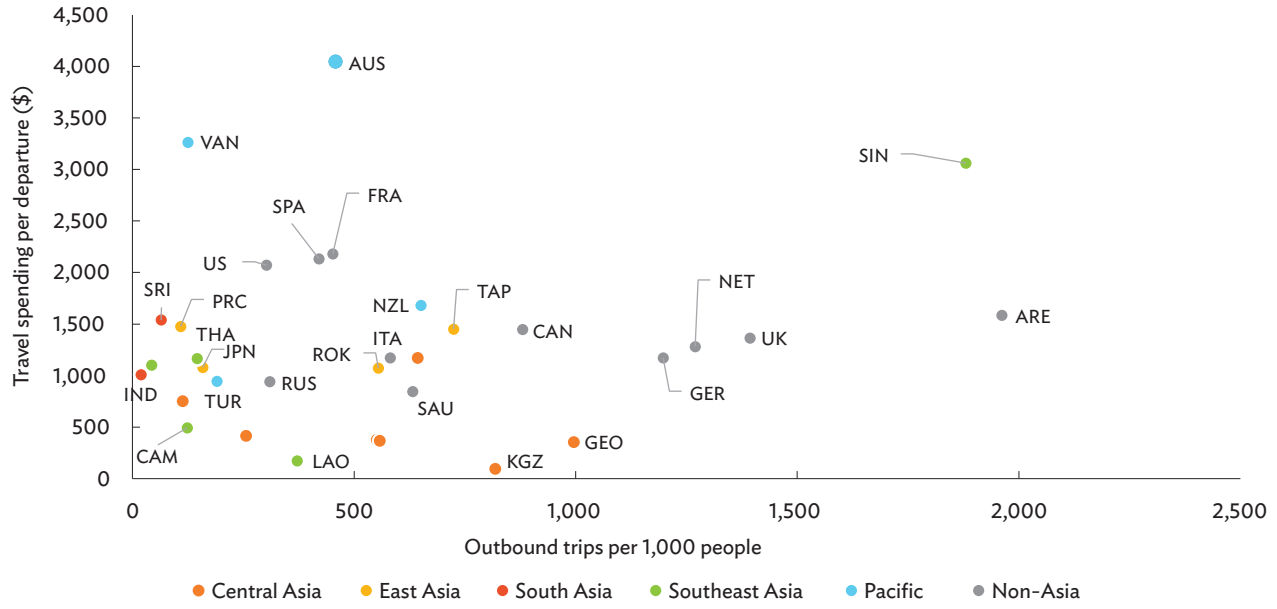
Understanding these patterns is essential because rising incomes alone do not guarantee proportional

travel growth. In 2019, Europe accounted for 40% of global outbound spending while Asia represented 29%. The World Travel and Tourism Council projects that Asia will overtake Europe by 2035, reaching 38% of the $2.7 trillion global outbound market.[11] However, this expanding origin capacity represents potential and not realized flows. Which destinations capture this demand depends on pull factors: the destination-side appeal and bilateral characteristics that convert intent into arrivals and spending.

Pull Factors—Destination-Side Features

Pull conditions determine which origin–destination pairs convert first and at highest value. The foundations—natural attractions (e.g., biodiversity, climate, landscapes), cultural assets (e.g., cuisine, festivals, heritage sites), and cultural and social experiences—create a destination's core appeal (World Economic Forum 2019). Whether appeal turns into bookings depends on enabling systems on the destination-side: overall openness and predictable border processes; air, sea, and surface connectivity that reduce total travel time; sufficient and quality tourist services (e.g., hotel rooms and supporting facilities) that shape length of stay and travel expenditure; safety and political stability that build confidence; and digital readiness and payments that lower search and booking frictions. Emerging evidence also shows that geopolitical tensions can lead to sharp declines in tourism flows, with studies documenting sizable drops in cross-border travel during periods of friction (Akram et al. 2023; and Wujie 2023).

Figure 5.23: Outbound Tourism by Select Source Markets, 2019



ARE = United Arab of Emirates; AUS = Australia; CAM = Cambodia; CAN = Canada; PRC = People's Republic of China; FRA = France; GER = Germany; GEO = Georgia; IND = India; ITA = Italy; JPN = Japan; ROK = Republic of Korea; KGZ = Kyrgyz Republic; LAO = Lao People's Democratic Republic; NZL = New Zealand; NET = Netherlands; RUS = Russian Federation; SAU = Saudi Arabia; SIN = Singapore; SPA = Spain; SRI = Sri Lanka; TAJ = Tajikistan; TAP = Taipei,China; THA = Thailand; TUR = Türkiye; UK = United Kingdom; US = United States; VAN = Vanuatu.

Note: Not all economies in Asia have data on departures.

Sources: ADB calculations using data from UN Tourism. Statistics Database, November 2023. https://www.unwto.org/tourism-statistics/tourism-statistics-database. (accessed October 2025) and World Travel and Tourism Council. Research Hub Interactive Economic Impact Dashboard. https://researchhub.wttc.org/dv-dashboard. (accessed October 2025).

[11] Values computed from World Travel and Tourism Council Research Hub Interactive Economic Impact Dashboard. Interactive Economic Impact Dashboard.

A Regional Competitiveness Snapshot

Across Asia, cultural and non-leisure assets generally match or exceed global benchmarks. The region averages 7.6 World Heritage cultural sites per economy (versus about 7.5 globally) and higher non-leisure digital demand (7.8 versus about 6.4). Natural pull is mixed. There are more World Heritage natural sites per economy (2.9 versus about 2.0 globally), but a lower protected-land share (12.8% versus 15.9%). Within the region, East Asia leads on cultural and non-leisure demand. Meanwhile, Australia and New Zealand lead on natural assets, whereas Southeast Asia, South Asia, and Central and West Asia tend to trail on one or more dimensions.[12] Southeast Asia trails on protected-land share and nature digital demand; South Asia on both protected share and online interest; Central and West Asia on World Heritage natural sites, protected share, and demand. These shortfalls reflect visibility and conservation-management gaps more than a lack of assets. Recent analysis in ADB's *Asia-Pacific Climate Report 2025: Unlocking Nature for Development* underscores how material these assets are for the region's economies, estimating that about 75% of GDP in Asia is directly or indirectly tied to nature-dependent sectors such as tourism, agriculture, and fisheries, reinforcing that natural pull is not just an amenity but a core economic asset (ADB 2025c).

Enablers such as internet penetration, mobility across borders, and transport are broadly near global norms. Internet penetration is close to parity (about 71% versus 75% globally) and mobile broadband subscriptions are similar (about 97 versus 95 per 100 people), with near-universal 3G/4G coverage. Border facilitation and overall connectivity are comparatively strong, while ground transport exceeds global averages but formal air-services agreements lag, and seaport services and hotel capacity per capita are below average. Subregional patterns are clear. East Asia leads in digital uptake and hub connectivity. Australia and New Zealand perform strongly in tourist services. Southeast Asia achieves highest visa openness. South Asia lags on internet access, while Central and West Asia shows steady improvement from a lower base.[13] These enablers are critical to turning intent into realized trips and without them, demand remains unrealized regardless of origin strength or destination appeal (ADB 2025a).

In 2024, Asia's accommodation costs remain generally below the global sample (both hotel and short-term rental prices), while fuel is higher and the composite price competitiveness score still sits above the world average. Since 2019, accommodation prices have risen across most subregions, but Asia's relative advantage persists. Variation within the region is wide: costs are typically lowest in parts of Central and West Asia, and South Asia, mixed across Southeast Asia, moderate in East Asia, and highest in Australia and New Zealand.[14]

On safety and security, the picture is broadly comparable to, and in some respects slightly stronger than, global norms, although pockets of elevated terrorism risk and organized violence persist. Within the region, perceptions of community safety are generally strongest in Australia and New Zealand, while East Asia performs steadily on conventional safety metrics, South Asia tends to report softer perceptions of night safety, and Central and West Asia shows improvement but remains uneven.[15] Gallup's Global Law and Order Index, which measures whether people feel safe walking alone at night and trust local police, shows a similar pattern: Australia and New Zealand, and several economies in Southeast Asia, and East Asia score well above the global average, while many destinations in Central and West Asia, and South Asia sit closer to or below it (Gallup 2025). The Global Peace Index similarly places many Asian economies in the upper half of global rankings, even as a subset of destinations continue to face elevated terrorism or conflict risks (Institute for Economics and Peace 2025).

[12] Summary based on World Economic Forum Travel and Tourism Development Index (WEF TTDI) indicators for natural, cultural, and non-leisure resources (2019, 2024 editions). WEF TTDI 2024.

[13] Summary based on WEF TTDI indicators for infrastructure (2019, 2024 editions). WEF TTDI 2024.

[14] Summary based on WEF TTDI indicators for price competitiveness (2019, 2024 editions). WEF TTDI 2024.

[15] Summary based on WEF TTDI indicators for safety and security (2019, 2024 editions). WEF TTDI 2024.

Bilateral Features

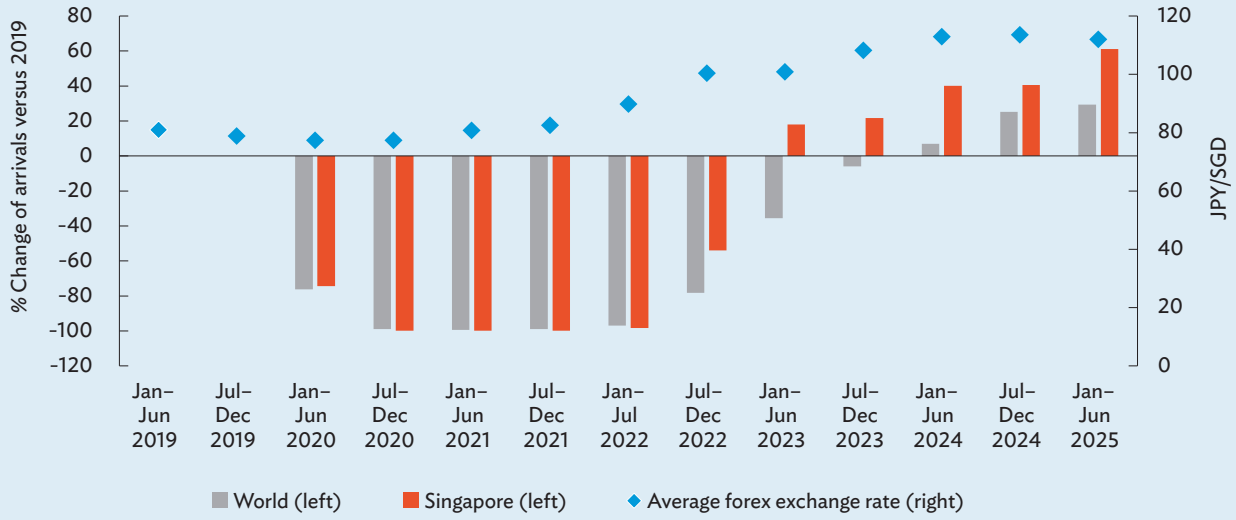
Distance, route connectivity, visa policies, and relative costs significantly influence travelers' decision-making process, independently of destination quality. Shorter distances, direct routes, and progressive visa facilitation raise booking likelihood and speed of sector's recovery, while long distances, limited connections, and restrictive requirements constrain flows even when destinations are strong. Exchange rates create additional corridor-specific variation: currency movements shift relative affordability, making the same destination appear differently priced to different origin markets (which Box 5.3 illustrates through the depreciation of the Japanese yen). Because these factors vary by origin-destination pair rather than destination characteristics alone, they create corridor-specific patterns that require targeted policy responses. Box 5.4 translates these patterns into a push-pull diagnostic map of corridor competitiveness.

Box 5.3: Exchange Rates and Tourism Recovery—Japan's Experience

Exchange rates function as bilateral-specific price mechanisms: currency depreciation makes destinations more affordable from specific origin markets. Japan illustrates this bilateral effect. The yen's 40%+ depreciation against the United States dollar from 2019 to 2024 improved affordability for foreign visitors, with inbound arrivals exceeding pre-pandemic levels by 6.9% in the first half of 2024. Yet, elasticity estimates vary by origin: 1%-yen depreciation increases arrivals from the People's Republic of China by 1.5%, but Singaporean arrivals by only 0.7% (Mastercard Economics Institute 2025).

International arrivals from Singapore recovered more rapidly than Japan's overall inbound tourism. By June 2023, inbound flows from Singapore had already surpassed the 2019 volume by 18% and by the second half of 2024, they were 40.1% higher than pre-pandemic volumes (box figure). According to Mastercard Economics Institute (2025), the appreciation of the Singapore dollar against the yen during the first half of 2024 helped offset the rise in hotel and flight prices and this contributed to a boost in arrivals from Singapore. Visa's Global Travel Intentions Study shows that 21% of Singapore travelers prefer Japan as their next destination, with local cuisine cited as the main attraction. Japan also ranked as the top destination for Singaporean spending in December 2023 (Visa 2024a). Travel from Singapore to Japan continued to increase, exceeding its 2019 arrivals by 61.2% during the first half of 2025 (box figure). Supported by favorable exchange rate and strong traveler preference, this growth trend is expected to continue.

International Arrivals to Japan by Origin and Average Foreign Exchange Rate



Source: ADB calculations using data from CEIC Data Company (accessed October 2025).

Source: ADB.

Box 5.4: From Flows to Strategy: Push–Pull Drivers of International Tourism in Asia and the Pacific

Between 1995 and 2024, subregions in Asia and the Pacific took distinct paths. Southeast Asia strengthened both traveler capacity and destination readiness, reaching high performance on both fronts. South Asia's fast-growing middle class lifted outbound demand, yet infrastructure and facilitation gaps limited conversion. Central and West Asia expanded air capacity and modernized infrastructure, but arrivals from higher-income Asian markets remained modest.

A gravity model for bilateral flows in Asia and the Pacific (1995–2024) measures contributions of origin factors (income, population, and digital access), destination factors (attractions, air connectivity, safety, and infrastructure), and bilateral corridor features—distance/travel time, visa status, shared borders, common language, and affordability captured by a bilateral real exchange rate (relative prices). Origin, destination, and year fixed effects control for unobserved traits and global shocks. Year fixed effects explain roughly 12%–25% of variation, showing that global conditions (interest-rate cycles, oil prices, recessions, pandemics) matter alongside local fundamentals.

On the origin side, a 1% increase in income generates roughly 4%–10% more outbound travel, while larger populations and better digital infrastructure (internet access, online booking platforms) also significantly lift outbound flows. On the destination side, a 1% improvement in attractions (heritage sites, natural assets) raises arrivals by 2%–5%, while better air connectivity, tourist services, and safety perceptions all demonstrate positive effects. Distance and visa restrictions reduce flows as expected, while shared borders and common language also increase flows. Visa policies have substantial effects: restrictive requirements reduce arrivals by 32%–52% depending on the subregion, with Central and West Asia, and South Asia experiencing the largest reductions.

Across roughly 30 subregional corridors, four groups could emerge from the push–pull map. Strategic priorities (high push–high pull) comprise six corridors where large, higher-income origin markets align with destinations offering strong attractions, favorable safety perceptions, robust transport connectivity, and high-quality service capacity—indicating structural readiness on both sides. East Asia to Southeast Asia exemplifies this pattern: high incomes and large populations in the People's Republic of China, Japan, and the Republic of Korea generate massive outbound capacity, while Southeast Asia's rich cultural and natural attractions, and the expansion in air transport infrastructure and tourist services infrastructure convert that demand efficiently. Nine corridors show untapped potentials (high push–low pull), where travel-ready origins (e.g., Australia, the People's Republic of China, Japan, the Republic of Korea) meet destination constraints. For example, South Asia's limited flight frequencies and safety perceptions curb the likelihood of travel from East Asia. Underutilized opportunities, defined by low push-high pull dynamics, spans nine corridors where destinations are competitive but outbound propensity at the origin is modest. The remaining six fall under long-term development (low push–low pull), with foundational constraints on both sides. Bilateral features—relative prices, flight time and direct connectivity, and visa reciprocity—then tilt outcomes within each group, explaining why seemingly similar corridors convert differently and indicating the most immediate levers (fares/fees, schedules, or visa facilitation) to unlock demand.

The push-pull diagnostic reveals that binding constraints vary systematically across corridors: some face destination infrastructure and facilitation gaps, others encounter awareness and connectivity limitations despite adequate supply readiness, while well-functioning corridors require capacity management and sustainability approaches. Like export and investment promotion agencies, well-resourced tourism promotion organizations can help materialize potential flows by targeting high-potential corridors with coordinated marketing, route development, and facilitation support. This variation suggests that tourism development strategies—and associated institutional arrangements— benefit from matching interventions to specific performance gaps in origin-destination pairs rather than applying uniform solutions across diverse contexts.

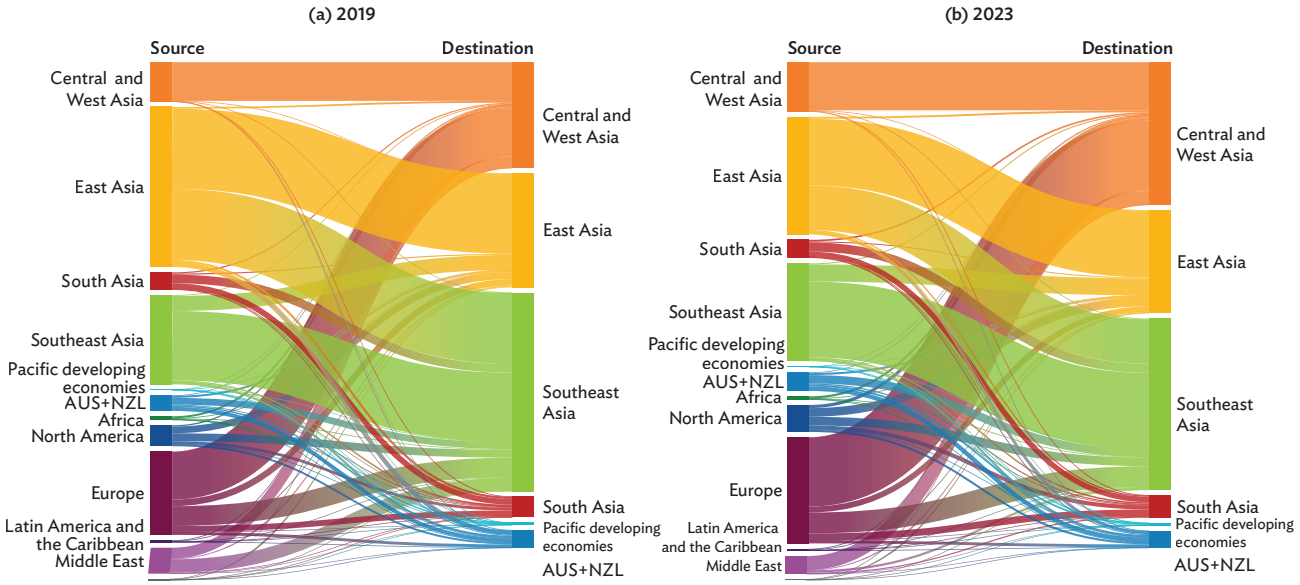
Source: Rodolfo (2025).

Concentration Risk and the Case for Diversification

Destinations that attract large volumes from a handful of nearby sources perform well but carry concentration risk. Globally, four in five tourists travel within their region (UN Tourism 2020). In Asia, 70.1% of 2019 arrivals were intraregional, with East Asia supplying 34.9% and Southeast Asia 19.4% (Figure 5.24a). Europe contributed a smaller 18.2% of arrivals but 17.5% of travel export revenues,[16] indicating a high-value profile. This concentration creates vulnerability. When these dominant origins experience shocks, exposed destinations lack alternative source markets to offset losses. During the 2022 reopening, when East Asia eased travel restrictions later than other regions, its share of arrivals to Asia dropped to 7.2% and its revenue contribution to 27.5%.[17]

Between 2019 and 2023, the inflow mix became more diversified, with Europe emerging as a growing source, although intraregional travel remained dominant at 65.8%. East Asia's dominance as a source market softened, while Central and West Asia, Southeast Asia, North America, and Europe gained share. On the destination side, Southeast Asia and East Asia's intake eased, while Central and West Asia emerged as the relative gainer (Figure 5.24b). The net effect is that intraregional travel remains the anchor, but reliance on one market has moderated—strengthening the case for diversification. This concentration is efficient in calm times but risky during times of shock. The PRC episode

Figure 5.24: Bilateral Inbound Tourism Flows to Asia (excluding the PRC)



AUS = Australia, PRC = People's Republic of China, NZL = New Zealand.

Notes: Central and West Asia includes tourism flows to Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Türkiye, and Uzbekistan. East Asia includes tourism flows to Hong Kong, China; Japan; the Republic of Korea; Mongolia; and Taipei,China. South Asia includes tourism flows to India, Maldives, Nepal, and Sri Lanka. Southeast Asia includes tourism flows to Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. Pacific developing economies include tourism flows to the Cook Islands, Fiji, Kiribati, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

Sources: ADB calculations using data from CEIC Data Company (accessed October 2025); Haver Analytics (accessed October 2025); UN Tourism Statistics Database, October 2025. https://www.e-unwto.org (accessed November 2025); and official sources (accessed October 2025).

[16] ADB calculations based on Organisation for Economic Co-operation and Development - World Trade Organization (OECD-WTO) Balanced Trade in Services data set.

[17] ADB calculations based on OECD-WTO Balanced Trade in Services data set.

illustrates how a single origin can transmit large swings to exposed destinations (Box 5.5).

Achieving diversification requires moving beyond reactive responses to strategic portfolio management. Individual economies cannot rebalance their source portfolios alone because the constraints requiring coordination span borders. Regional cooperation provides the mechanism to address these corridor-specific mismatches systematically, strengthening competitive positioning across multiple origin markets simultaneously. This portfolio approach builds structural resilience by reducing dependence on any single high-push origin. The experience of economies in the Association of Southeast Asian Nations (ASEAN) demonstrates this in practice.

Regional Cooperation as a Pull Multiplier: The ASEAN Case

Many of the most significant barriers to tourism operate across borders. Regional cooperation platforms can therefore multiply national reforms by addressing these corridor-wide bottlenecks simultaneously. ASEAN provides a practical illustration. By coordinating on travel facilitation and connectivity, the bloc has strengthened factors that pull tourists to the region, helping shift multiple corridors from "untapped potential" toward "strategic priorities" and improving resilience after disruptions.

The changes for travelers are substantial. Visa exemptions and e-visas make entry simpler. The ASEAN Single Aviation Market has expanded flights and improved schedules,

Box 5.5: Impact of Slowdown of Outbound Tourism from the People's Republic of China on Asia

The coronavirus disease (COVID-19) pandemic led to a sudden halt in cross-border travel, resulting in a drastic drop in international arrivals and tourism receipts. Many destinations in Asia and the Pacific are heavily dependent on tourists from the People's Republic of China (PRC). From 2015 to 2019, arrivals from the PRC to Asia increased from 54.5 million to 70 million but plummeted by 89.6% in 2020. Among the subregions, East Asia was the most severely affected. For instance, the PRC accounted for an average of 66.7% of total inbound arrivals of Hong Kong, China from 2015 to 2019. During the same period, travelers from the PRC accounted for more than 30% of international arrivals in Palau (45.6%), the Republic of Korea (38.5%), Mongolia (31.7%), and Viet Nam (31.2%).

The PRC is also a significant contributor to global services imports. In 2019, 13.8% of global travel imports and 3.2% of total global services imports were attributed to the PRC. A large share of the PRC's travel imports was from Asia and the Pacific. East Asia comprised at least 30% of total PRC travel imports from 2015 to 2019. Meanwhile, travel imports from Southeast Asia to the PRC are smaller, the value of travel imports increased 29% from 2015 to 2019, increasing its share from 8.7% in 2015 to 10.2% in 2019.

The PRC's outbound tourism is vital in the economies of many destinations, particularly those in East Asia and Southeast Asia. Travel restrictions due to COVID-19 pandemic emphasize the need to examine how external shocks in the tourism sector impact other industries within economies.

Using a Global Trade Analysis Project model, the study analyzes the impact of changes in the PRC's outbound tourism on Asia and the Pacific through three simulations: broader economic and sector impacts of the expansion of tourists from the PRC from 2017 to 2018; its slump in 2020; and its cautious recovery from 2021 to 2022. The findings reveal that higher volume of tourists from the PRC boost gross domestic product (GDP) and exports in all subregions in Asia, while GDP and export losses are notable when the volume of tourists declines. The slowdown in the PRC's outbound tourism resulted in a -0.05% decline in GDP of the Pacific developing economies and 0.01% in East Asia, amounting to a $526.57 million loss. Moreover, East Asia suffered steep reductions in exports of recreational services (-33.16%) and accommodation, food and beverage services (27.47%). This indicates the subregion's vulnerability to fluctuations in outbound travel from the PRC.

While the PRC remains a significant source market for many destinations in Asia, the study underscores the importance of market diversification to enhance resilience against future shocks. Dependence on a single market exposes destinations to significant risks. Thus, identifying new and emerging markets, along with strengthening domestic and regional tourism, can help economies reduce their dependence on a single or limited set of markets and build a more adaptable tourism sector.

Source: Narayanan, Domingo, and Basu Das (2025).

cutting travel time. Mutual recognition of standards has lifted quality perceptions across member economies. Shared digital infrastructure has improved how trips are discovered, booked, and paid for. Together, these interventions increase destination attractiveness while reducing bilateral frictions, raising conversion rates, encouraging longer stays, and generating higher spending per visitor.

ASEAN's tourism cooperation evolved deliberately over 4 decades. Early political commitment came with the Manila Declaration in 1987. The ASEAN Tourism Agreement in 2002 expanded collaboration across facilitation, transport, standards, and marketing. The visa exemption framework in 2006 enabled visa-free intra-ASEAN travel (ASEAN Secretariat 2012). The Single Aviation Market liberalized regional air transport, expanding capacity and lowering fares. External agreements with the PRC (ASEAN Secretariat 2010) and the EU (ASEAN Secretariat 2022) widened market access to key partner markets. The current ASEAN Tourism Sectoral Plan (2026–2030) prioritizes resilient tourism, workforce development, seamless travel, digital transformation, and sustainability toward a 2045 vision of regional leadership in quality tourism.

ASEAN's coordinated infrastructure strengthens member destinations together, sustaining performance across multiple corridors while reducing vulnerability to shocks in any single source market—directly addressing the concentration risk illustrated in Box 5.6. Regional cooperation shifts multiple corridors simultaneously from constrained potential to realized performance.

Building on the analysis and enablers above, the next section outlines recommendations to translate competitive potential into gains across diverse contexts.

Recommendations for Advancing Tourism Competitiveness in Asia

Drive Recovery into Value Creation, Jobs, and Source Market Diversification

Asia's tourism sector reached $3.2 trillion in 2024, supporting 1 in 10 jobs, with projected growth to $6.2 trillion and 260 million jobs by 2035. Converting this momentum into durable gains requires raising both visitor volumes and receipts per arrival. Strategic priorities vary by context. For instance, employment-intensive economies like Indonesia, the Philippines, and Thailand should invest in workforce development and the digitization of small and medium-sized enterprises (SMEs) to capture multiplier effects across food suppliers, transport providers, and local enterprises. Tourism-dependent island economies like Fiji and Maldives need premium product development to strengthen external balances. Addressing geographic concentration, where gateway cities face overtourism while secondary destinations remain underutilized, requires improved road links, accommodation financing, and multidestination packaging that disperses visitors and creates employment in emerging areas. Enabling dispersion through secondary gateway development, improved road connectivity, accommodation financing, and multidestination packaging would generate substantial incremental employment while relieving pressure on saturated destinations. Building intrasubregional travel reduces dependence on long-haul origins and creates more resilient revenue streams.

Integrate Tourism into Macroeconomic Monitoring and Policy Response Systems

Tourism increasingly functions as a traded service sector with stabilization properties—generating foreign exchange, strengthening current accounts, and enabling faster recovery from external shocks. As a result, commitments under the General Agreement on Trade in Services (GATS) and services chapters in regional trade agreements, which shape market access and regulatory predictability for tourism and related services, form an important part of the enabling environment. Yet, real-time monitoring remains limited. Annual statistics arrive with extended lags, and most economies lack Tourism Satellite Accounts to track contributions to GDP, employment, and balance of payments. Institutionalizing satellite accounts alongside a compact dashboard that provide insights on origin market shares, receipts per arrival, and spending patterns can enable timely policy adjustments. This integration also supports proactive

management of concentration risk. Destinations drawing from balanced portfolios of Asian and extraregional sources absorbed disruptions more effectively during 2019–2023 and recovered faster, with diversified approaches dampening foreign exchange volatility. This integration supports tourism's role as contributor to external resilience and fiscal stability: reliable gateways and predictable regulatory environments sustain visitor confidence; deeper products and digital readiness raise value per visitor and extend length of stay; and diversified sources stabilize foreign exchange earnings particularly for economies where tourism is the primary services-export earner.

Resolve Destination Supply Constraints to Draw in Latent Demand

The analysis reveals systematic mismatches between origin market capacity and destination readiness. South Asia demonstrates a pronounced gap. Despite world-class heritage sites, Himalayan landscapes, and rich cultural diversity, the subregion captures modest flows from East Asia, and Southeast Asia. This represents substantial unrealized arrivals and employment potential in hospitality, transport, and tourism-linked sectors. Binding constraints include visa complexity, limited direct air connectivity, safety perceptions, and essential infrastructure gaps in water supply and sanitation facilities meeting international standards, reliable information and communication technology connectivity for digital payments and online bookings affecting visitor satisfaction. Central and West Asia demonstrates a similar untapped potentials pattern from high-capacity East Asia, and Southeast Asia. Even where infrastructure investments have been made in recent years, destination pull is constrained by limited direct connectivity from major markets, destination awareness gaps, and insufficient tourism service standards. While the subregion's arrival share grew from 17.8% in 2015 to 23.2% in 2024, actual flows remain far below potential given origin market capacity.

Evidence from tourism value-chain analysis—including ADB's multiregional input–output work and the Central Asia Regional Cooperation (CAREC) Tourism Strategy—shows that additional tourism demand can generate large multipliers in domestic economies, with most on-site spending in hotels, restaurants, and local transport sourced locally, while international airlines, online platforms, and foreign tour operators often control key distribution channels and higher-margin segments. Strengthening domestic SMEs and destination management organizations, improving standards and regulatory frameworks, and expanding access to digital tools therefore becomes vital to deepening local supplier linkages and raising the share of tourism value added captured onshore (APEC 2019; and Fujita 2018). Regional platforms can help operationalize these reforms by harmonizing facilitation procedures, supporting collective air service negotiations, aligning safety and quality standards, and cofinancing essential utilities, digital infrastructure, and skills development so that domestic firms are better positioned to participate in regional tourism value chains and capture more of the value created by growing visitor flows.

Use Regional Cooperation to Remove Cross-Border Barriers and Scale Solutions

ASEAN's experience demonstrates how coordinated action multiplies national reforms. By aligning facilitation standards, liberalizing air services, underpinned by progressively deeper services commitments in regional trade agreements, and establishing mutual recognition frameworks, the bloc strengthened destination competitiveness across all member states simultaneously. Across Asia, air services markets are more liberalized than in regions like Latin America but remain heterogeneous. In East and Southeast Asia, low-cost carriers now account for around one-third of available seat-kilometers in Asia—the highest regional share globally—and roughly 55%–60% of seat capacity on many intra-ASEAN routes following the rollout of the ASEAN Single Aviation Market, indicating relatively contestable regional markets (Wang et al. 2024). By contrast, the case of CAREC highlights that, despite the rapid growth of low-cost carriers, intrasubregional markets still suffer from limited competition, few direct links between capitals, and restrictive bilateral regimes, underscoring the role of regional open-skies–

type agreements in unlocking tourism connectivity (ADB 2024b). The model is replicable. CAREC and the South Asia Subregional Economic Cooperation can adopt phased liberalization road maps combined with co-created multidestination experience corridors (e.g., Mekong heritage routes, Silk Road circuits, Pacific island-hopping packages) that extend visitor stays from single-destination averages of 6–8 days to regional circuit averages of 10–14 days. These packages require coordinated transport schedules, unified booking platforms, and transparent pricing structures. Such cooperation addresses both supply bottlenecks and concentration risk by building network effects that individual economies cannot achieve independently.

Leverage Multilateral Development and the Private Sector for Targeted Interventions

Multilateral development banks are positioned to address the specific constraints revealed by this analysis through differentiated approaches that match economy contexts. Employment-intensive economies benefit most from investments that strengthen workforce skills, expand SME access to digital platforms, and improve booking infrastructure—interventions that translate competitive gains directly into jobs. Tourism-dependent island states face a different challenge. Sustaining revenues while building resilience against climate impacts and market shocks requires balancing infrastructure investments with source diversification strategies and flexible financing mechanisms. Emerging destinations with strong cultural and natural assets but limited current flows need foundational support—improving entry systems, ensuring reliable utilities at tourism sites, and de-risking early-stage route development where commercial financing remains cautious despite evidence of latent demand. In several contexts, technical assistance on services trade negotiations can complement these investments by helping economies use commitments under the GATS and free trade agreements to lock in facilitation gains and strengthen regulatory transparency in tourism and related services. Financial instruments—such as concessional and blended-finance loans for tourism infrastructure, partial risk guarantees and viability-gap funding for airport and port upgrades, and time-bound, performance-based incentives or risk-sharing facilities for new routes and tourism SMEs—can help unlock corridors where origin capacity and destination readiness exist but thin connections constrain conversion.

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6 Statistical Appendix

The statistical appendix comprises 10 tables of selected indicators on economic integration for the 50 Asia and Pacific members of the Asian Development Bank (ADB). These succeeding notes describe the economy groupings and the calculation procedures undertaken.

Regional Groupings

- Asia and the Pacific refers to the 50 regional members of ADB, comprising 47 developing economies as well as three advanced economies—Australia, Japan, and New Zealand. The composition of economies for Central and West Asia, East Asia (including Japan), the Pacific (developing economies plus the advanced economies of Australia and New Zealand), South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings. Beginning with this year's edition of the Asian Economic Integration Report, Türkiye is included among the developing member economies. For further details, refer to the "Technical Note: Inclusion of Türkiye as a Regional Member of ADB" (page 143).
- Developing Asia refers to ADB's regional members excluding Australia, Japan, and New Zealand.
- The European Union consists of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

Table Descriptions

Table A1: Asia-Pacific Regional Cooperation and Integration Index

The Asia-Pacific Regional Cooperation and Integration Index (ARCII) is a composite measure of the degree of regional cooperation and integration in Asia and the Pacific. It comprises eight dimensional indexes based on 41 indicators to capture the contributions of eight different aspects of regional integration: (i) trade and investment, (ii) money and finance, (iii) regional value chains, (iv) infrastructure and connectivity, (v) people and social integration, (vi) institutional arrangements, (vii) technology and digital connectivity, and (viii) environmental cooperation. The construction of ARCII follows two steps: first, the 41 indicators are weight-averaged in each of the eight dimensions to produce eight composite dimensional indexes; and second, these eight dimensional indexes are weight-averaged to generate an overall index of regional integration. In each step, the weights are determined based on principal component analysis. For more details on the methodology and to download the data, see Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii.

Table A2: Regional Integration Indicators—Asia and the Pacific (% of total)

This table provides a summary of regional integration indicators for three areas: movement in trade and investment, movement in capital, and people movement

(migration, remittances, and tourism) for Asian subregions, including Association of Southeast Asian Nations (ASEAN) plus 3 (including Hong Kong, China). Cross-border flows within and across subregions are shown, as well as total flows with Asia and the rest of the world. Table descriptions of Tables A3 and A7 (movement in trade and investment), Tables A5 and A6 (movement in capital), and Tables A8, A9, and A10 (people movement), provide additional description for each indicator.

Table A3: Trade Share—Asia and the Pacific (% of total trade)

Trade share is calculated as $T_{ij}/T_{iw} \cdot 100$, where T_{ij} is the total trade of economy "*i*" with economy "*j*", and T_{iw} is the total trade of economy "*i*" with the world. A higher share indicates a higher degree of regional trade integration.

Table A4: Free Trade Agreement Status—Asia and the Pacific

This table shows the number and status of bilateral and plurilateral free trade agreements (FTAs) with at least one of the Asian economies as signatory. FTAs only proposed are excluded. It covers FTAs with the following status: Framework agreement signed—the parties initially negotiate the contents of a framework agreement, which serves as a framework for future negotiations; Negotiations launched—the parties, through the relevant ministries, declare the official launch of negotiations or set the date for such, or start the first round of negotiations; Signed but not yet in effect—parties sign the agreement after negotiations have been completed, however, the agreement has yet to be implemented; and Signed and in effect—provisions of the FTA come into force, after legislative or executive ratification.

Table A5: Cross-Border Portfolio Equity Holdings Share—Asia and the Pacific (% of total cross-border portfolio equity holdings)

This first two cross-border tables are calculated as $E_{ij}/E_{iw} \cdot 100$ where E_{ij} is portfolio equity holdings of economy "*i*" issued by economy "*j*", and E_{iw} is the total global cross-border portfolio equity holdings of economy "*i*". Calculations are based solely on available data in the Portfolio Investment Positions (PIP) database of the International Monetary Fund (IMF). Rest of the world (ROW) includes equity securities issued by international organizations defined in the PIP database and "not specified (including confidential) category." A higher share indicates a higher degree of regional integration.

Table A6: Cross-Border Portfolio Debt Holdings Share—Asia and the Pacific (% of total cross-border portfolio debt holdings)

These shares are calculated as $D_{ij}/D_{iw} \cdot 100$ where D_{ij} is portfolio debt holdings of economy "*i*" issued by economy "*j*", and D_{iw} is the total global cross-border portfolio debt holdings of economy "*i*". Calculations are based solely on available data in the PIP database of the IMF. ROW includes debt securities issued by international organizations defined in the PIP database and "not specified (including confidential) category." A higher share indicates a higher degree of regional integration.

Table A7: Foreign Direct Investment Inflow Share—Asia and the Pacific (% of total FDI inflows)

These foreign direct investment (FDI) shares are calculated as $F_{ij}/F_{iw} \cdot 100$ where F_{ij} is the FDI received by economy "*i*" from economy "*j*", and F_{iw} is the FDI received by economy "*i*" from the world. Figures are based on net FDI inflow data. A higher share indicates a higher degree of regional integration. The bilateral FDI database was constructed using data from the United Nations Trade and Development, the ASEAN Secretariat,

Eurostat, and official sources. For missing data from 2018 onward, bilateral FDI estimates derived from a gravity model are used. All bilateral data available from 2001 until the latest year available from the data sources were utilized to estimate the following gravity equation:

$$lnFDI_{ijt} = \alpha + \beta 1 lnGDP_{it} + \beta 2 lnGDP_{jt} + \gamma X_{ijt} + \delta_i F_i + \delta_j F_j + \delta_t F_t + v_{ijt}$$

where FDI_{ijt} is the FDI from economy "j" (home) to economy "i" (host) in year t, GDP_{it} is the gross domestic product (GDP) of economy "i" in year t, GDP_{jt} is the GDP of economy "j"at year t, X_{ijt} are the usual gravity variables (distance, contiguity, common language, colonial relationship) between economies "i" and "j", and F_j, F_i, F_t, are home, host, and year fixed effects, respectively, and v_{ijt} is the error term. Data on distance, contiguity, common language, colonial relationship are from the Centre d'Études Prospectives et d'Informations Internationales (the French Research Center in International Economics) and data on GDP are from the World Development Indicators of the World Bank. For more details on methodology and data sources, see Asian Economic Integration Report 2018 online Annex 1: http://aric.adb.org/pdf/aeir2018_ onlineannex1.pdf.

Table A8: Remittance Inflows Share—Asia and the Pacific
(% of total remittance inflows)

These shares are calculated as $R_{ij}/R_{iw} \cdot 100$ where R_{ij} is the remittance received by economy "i" from partner "j", and R_{iw} is the remittance received by economy "i" from the world. Remittances refer to the sum of the following: (i) workers' remittances which are recorded as current transfers under the current account of the IMF's Balance of Payments (BOP); (ii) compensation of employees which includes wages, salaries, and other benefits of border, seasonal, and other nonresident workers and which are recorded under the "income" subcategory of the current account; and (iii) migrants' transfers which are reported under capital transfers in the BOP's capital account. Transfers through informal channels are excluded.

Table A9: Outbound Migration Share—Asia and the Pacific
(% of total outbound migrants)

These shares are calculated as $M_{ij}/M_{iw} \cdot 100$ where M_{ij} is the number of migrants of economy "i" residing in economy "j" and M_{iw} is the number of all migrants of economy "i" residing overseas. This definition excludes those traveling abroad on a temporary basis. A higher share indicates a higher degree of regional integration.

Table A10a: Inbound Tourism Share—Asia and the Pacific
(% of total inbound tourists)

These shares are calculated as $V_{ij}/V_{iw} \cdot 100$ where V_{ij} is the number of nationals of economy "i" that have arrived as tourists in destination "j", and V_{iw} is the total number of nationals of economy "i" that have arrived as tourists in all international destinations. A higher share indicates a higher degree of regional integration.

Table A10b: Outbound Tourism Share—Asia and the Pacific
(% of total outbound tourists)

These shares are calculated as $V_{ij}/V_{iw} \cdot 100$ where V_{ij} is the number of nationals of economy "i" that have traveled as tourists in destination "j", and V_{iw} is the total number of nationals of economy "i" that have traveled as tourists abroad. A higher share indicates a higher degree of regional integration.

Technical Note: Inclusion of Türkiye as a Regional Member of ADB

On 6 May 2025, ADB welcomed Türkiye as a regional member, strengthening ADB's commitment in Central and West Asia. This edition of the *Asian Economic Integration Report* has taken this inclusion into account and adjusted regional groupings and estimates accordingly (Appendix figure).

Trade and Global Value Chains

Türkiye's trade share with Asia and the Pacific rose from 18.2% in 2010 to 19.8% in 2024, with an average growth rate of 8.6% annually. Meanwhile its trade shares with the European Union and the United Kingdom went down from 41.9% in 2010 to 39.8% in 2024. Its trade shares with North America hovered around 5.9%. The economy's inclusion resulted in a minor decline of 0.5 percentage point in Asia's intraregional trade shares (from 56.4% to 55.9% in 2024) and 1.3 percentage points in Central and West Asia's intrasubregional trade shares (from 10.4% to 9.1%).

Cross-Border Investment

Foreign investment in Türkiye reached $10 billion in 2024, recovering from a 21% dip in 2023. Despite this, foreign investment flows into Türkiye remained broadly stable in the past decade, featuring a modest 1.1% annual growth on average. The economy's inclusion resulted in significant changes in Central and West Asia's intrasubregional shares (up 7 percentage points on average between 2014 and 2024) and minor differences in Asia and the Pacific's intraregional shares, hinting at Türkiye's importance as a destination for cross-border investments.

Financial Integration

Equity holdings. Cross-border portfolio equity in Asia and the Pacific, including Türkiye, reached $1.6 billion in 2024. The intraregional share of total equity flows slightly increased from 20% in 2023 to 22% in 2024. Within Central and West Asia, Türkiye accounted for 50% of intrasubregional equity flows at $1.2 billion in 2024, making it a significant contributor in strengthening Central and West Asia's capital market connectivity. Meanwhile, the inclusion of Türkiye did not result in any significant change in the intrasubregional share.

Bond holdings. The intraregional level of cross-border portfolio debt including Türkiye declined after 2021 but began to recover in 2023, rising to nearly $1.2 million in 2024. The economy is a dominant contributor to debt holdings with an 80% share of Central and West Asia's total intrasubregional level. A slight increase in the intraregional share was also observed in 2024 with the inclusion of Türkiye.

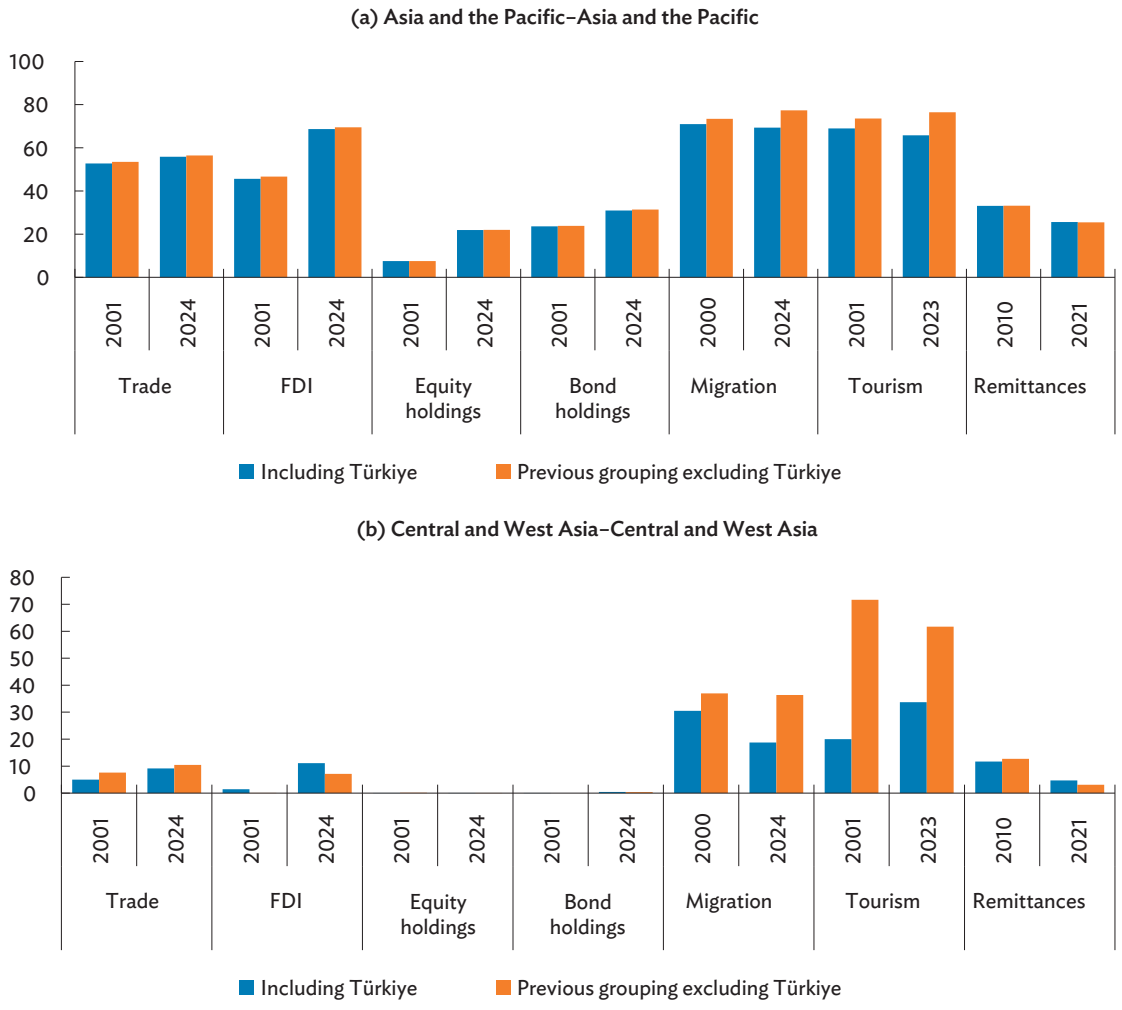
Movement of People

Migration. With Türkiye as part of Asia and the Pacific, total inbound migration to Central and West Asia was 11.7 million, a sharp increase from 5.7 million in 2010. The share of intrasubregional migration to total inbound migration to Central and West Asia declined to 18.8% in 2024 from 30.5% in 2020. This underscores the high degree of outbound migration from the subregion—for which Türkiye accounted for 38%. In comparison, total migration to Central and West Asia did not change significantly between 2010 and 2024 with Türkiye classified as a non-Asian economy. Without Türkiye, Central and West Asia displayed a stronger degree of intrasubregional migration, with shares rising to 36.4% in 2024 from 32.4% in 2010.

Remittances. Central and West Asia received a total remittance inflow of $21.7 billion in 2024—about 3% ($705 million) went to Türkiye. Between 2015 and 2021, remittance inflows to Central and West Asia had risen by $8.8 billion in aggregate, fueled by rising out-migration from the subregion. No significant differences in the intraregional and intrasubregional shares are observed with Türkiye included in Asia and the Pacific—intraregional shares differed by less than 0.5% while intrasubregional shares differed by less than 2%.

Tourism. Central and West Asia attracted 81.9 million tourists in 2023, with Türkiye accounting for 58% of these arrivals. Arrivals to Türkiye increased by 7% compared to 2022. The intrasubregional share to total inbound tourism to Central and West Asia slightly rose from 31.9% in 2013 to 33.7% in 2023. However, the inclusion of Türkiye in Asia and the Pacific significantly altered intraregional and intrasubregional dynamics. With Türkiye included, the intrasubregional share dropped sharply by 28 percentage points in 2023, while the intraregional share declined by 10.6 percentage points. This shift reflects Europe's dominant role as a source market for Türkiye's tourism industry.

Comparisons on Intraregional and Intrasubregional Shares—New Versus Previous ADB Groupings *(%)*



FDI = foreign direct investment.

Notes: Comparisons use the earliest and latest years with available data. For portfolio equity and bond holdings, intrasubregional shares range between 0% and 1%.

Sources: ADB calculations using data from ASEAN Secretariat. ASEANstats Database. https://www.aseanstats.org (accessed July 2025); CEIC Data Company; Eurostat. Balance of Payments. http://ec.europa.eu/eurostat/web/balance-of-payments/data/database (accessed July 2025); International Monetary Fund (IMF). Direction of Trade Statistics. https://data.imf.org/DOT (accessed November 2025); IMF. Portfolio Investment Positions. https://data.imf.org/en/datasets/IMF.STA:PIP (accessed November 2025); United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2020. http://www.un.org/en/development/desa/population/migration/data/index.shtml (accessed May 2024); United Nations Trade and Development. World Investment Report 2024 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025); United Nations World Tourism Organization. Tourism Satellite Accounts. http://statistics.unwto.org (accessed November 2025); and World Bank. World Bank Group. Global Knowledge Partnership for Migration and Development (KNOMAD). Bilateral Migration staff estimates (accessed June 2025).

Table A1: Asia-Pacific Regional Cooperation and Integration Index

(a) Overall Asia-Pacific Regional Cooperation and Integration Index and Dimensional Subindexes—Asia and the Pacific

		Dimensional Indexes							
Year	Overall Index	Trade and Investment Integration	Money and Finance Integration	Regional Value Chain	Infrastructure and Connectivity	People and Social Integration	Institutional Arrangements	Technology and Digital Connectivity	Environmental Cooperation
2006	0.434	0.400	0.546	0.534	0.476	0.559	0.223	0.341	0.329
2007	0.437	0.355	0.516	0.542	0.473	0.569	0.227	0.355	0.332
2008	0.428	0.379	0.386	0.530	0.476	0.559	0.234	0.352	0.332
2009	0.436	0.397	0.431	0.523	0.485	0.563	0.240	0.366	0.339
2010	0.439	0.402	0.435	0.529	0.483	0.573	0.243	0.389	0.336
2011	0.430	0.416	0.384	0.529	0.485	0.564	0.244	0.410	0.336
2012	0.436	0.425	0.419	0.530	0.489	0.577	0.246	0.403	0.336
2013	0.449	0.406	0.493	0.531	0.497	0.558	0.248	0.431	0.337
2014	0.446	0.406	0.465	0.524	0.493	0.558	0.247	0.431	0.336
2015	0.455	0.459	0.495	0.524	0.491	0.556	0.249	0.446	0.339
2016	0.453	0.430	0.465	0.547	0.498	0.555	0.250	0.448	0.342
2017	0.449	0.428	0.492	0.535	0.498	0.552	0.250	0.459	0.340
2018	0.454	0.445	0.473	0.516	0.507	0.556	0.252	0.480	0.339
2019	0.459	0.418	0.483	0.519	0.522	0.563	0.251	0.491	0.338
2020	0.452	0.399	0.468	0.522	0.522	0.564	0.250	0.501	0.345
2021	0.452	0.369	0.478	0.526	0.513	0.551	0.250	0.513	0.363
2022	0.458	0.400	0.470	0.536	0.527	0.554	0.252	0.510	0.361
2023	0.470	0.441	0.547	0.533	0.543	0.552	0.253	0.516	0.361

(b) Overall Asia-Pacific Regional Cooperation and Integration Index—Asian Subregions and Subregional Initiatives

	Central and West Asia	East Asia	Southeast Asia	South Asia	Australia and New Zealand	ASEAN	CAREC	GMS	SASEC	IMT-GT	BIMP-EAGA	SAARC	BIMSTEC
2006	0.381	0.462	0.409	0.347	0.453	0.424	0.326	0.377	0.366	0.415	0.374	0.353	0.342
2007	0.379	0.455	0.411	0.344	0.450	0.426	0.338	0.376	0.353	0.400	0.369	0.341	0.356
2008	0.387	0.462	0.418	0.327	0.451	0.425	0.341	0.376	0.326	0.417	0.375	0.321	0.326
2009	0.413	0.463	0.417	0.333	0.457	0.426	0.358	0.391	0.337	0.418	0.380	0.327	0.337
2010	0.387	0.470	0.420	0.348	0.467	0.426	0.353	0.392	0.361	0.419	0.385	0.345	0.353
2011	0.386	0.456	0.409	0.368	0.449	0.413	0.350	0.392	0.388	0.416	0.380	0.366	0.372
2012	0.393	0.465	0.415	0.351	0.456	0.425	0.353	0.390	0.364	0.401	0.373	0.346	0.354
2013	0.394	0.471	0.440	0.345	0.460	0.452	0.369	0.407	0.359	0.429	0.394	0.340	0.349
2014	0.379	0.479	0.420	0.335	0.448	0.433	0.370	0.404	0.353	0.414	0.386	0.336	0.343
2015	0.387	0.470	0.439	0.343	0.452	0.450	0.378	0.416	0.365	0.412	0.388	0.342	0.361
2016	0.393	0.480	0.424	0.349	0.453	0.435	0.363	0.422	0.373	0.410	0.383	0.347	0.362
2017	0.398	0.469	0.411	0.332	0.446	0.424	0.373	0.397	0.347	0.400	0.379	0.331	0.340
2018	0.406	0.473	0.420	0.326	0.437	0.433	0.381	0.406	0.350	0.409	0.387	0.326	0.345
2019	0.401	0.473	0.424	0.331	0.438	0.436	0.398	0.417	0.357	0.415	0.391	0.328	0.351
2020	0.415	0.473	0.448	0.338	0.447	0.461	0.393	0.426	0.368	0.427	0.394	0.338	0.357
2021	0.412	0.461	0.432	0.342	0.444	0.448	0.395	0.424	0.377	0.418	0.397	0.345	0.361
2022	0.418	0.478	0.446	0.345	0.440	0.465	0.395	0.440	0.376	0.423	0.410	0.347	0.364
2023	0.400	0.467	0.448	0.342	0.449	0.468	0.399	0.453	0.370	0.424	0.409	0.345	0.359

(c) Regional Integration Index—Asia and the Pacific and Other Regions

	Asia and the Pacific	European Union	Latin America and the Caribbean	Africa	Middle East	North America
2006	0.434	0.572	0.378	0.351	0.376	0.493
2007	0.437	0.569	0.371	0.334	0.393	0.495
2008	0.428	0.567	0.378	0.334	0.365	0.498
2009	0.436	0.582	0.377	0.327	0.372	0.496
2010	0.439	0.574	0.384	0.350	0.369	0.492
2011	0.430	0.574	0.387	0.356	0.378	0.497
2012	0.436	0.577	0.390	0.353	0.389	0.496
2013	0.449	0.573	0.399	0.351	0.387	0.497
2014	0.446	0.563	0.385	0.365	0.381	0.500
2015	0.455	0.570	0.392	0.369	0.370	0.492
2016	0.453	0.573	0.392	0.362	0.388	0.500
2017	0.449	0.571	0.392	0.359	0.384	0.499
2018	0.454	0.562	0.396	0.365	0.399	0.493
2019	0.459	0.562	0.396	0.372	0.404	0.496
2020	0.452	0.575	0.397	0.376	0.412	0.490
2021	0.452	0.568	0.399	0.376	0.407	0.496
2022	0.458	0.564	0.404	0.377	0.417	0.494
2023	0.470	0.574	0.412	0.378	0.420	0.496

ASEAN = Association of Southeast Asian Nations, BIMP-EAGA = Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area , BIMSTEC = Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, IMT-GT = Indonesia-Malaysia-Thailand Growth Triangle, SAARC = South Asian Association for Regional Cooperation, SASEC = South Asia Subregional Economic Cooperation.

Notes:

(i) The Asia-Pacific Regional Cooperation and Integration Index (ARCII) for each subregion (subregional initiative) for each year is calculated by averaging the ARCII scores for all the economies in each subregion (member economies in each subregional initiative).

(ii) The economy coverage for subregions and subregional initiatives are defined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings.

(iii) The regional integration index for each region (Table A1c) is calculated in the same method as ARCII but is based on worldwide normalization, i.e., normalizing raw indicator values using global minimum and maximum values.

(iv) Estimates for the Asian subregions and subregional initiatives represent intrasubregional and intrasubregional initiative integration, respectively.

(v) Remittance data used in Indicator V-c (Proportion of intraregional remittances to total remittances) were changed to outward remittances.

(vi) Indicator VIII-c (environmental health score) is revised in the current estimation to ensure compatibility of values across time. It was recomputed using the time series data published by the Environmental Performance Index (EPI) team. Issue categories under the environmental health policy objective which do not have good data coverage from 2006 to 2020 were excluded from the computation (e.g., waste management).

Sources: ADB. Asia Regional Integration Center. Asia-Pacific Regional Cooperation and Integration Index Database. https://aric.adb.org/database/arcii (accessed October 2025); and methodology from Park, C. Y. and R. Claveria. 2018. Constructing the Asia-Pacific Regional Integration Index: A Panel Approach. *ADB Economics Working Paper Series.* No. 544; Huh, H. and C. Y. Park. 2018. Asia-Pacific Regional Integration Index: Construction, Interpretation, and Comparison. *Journal of Asian Economics.* 54. pp. 22–38; and Huh, H. and C. Y. Park. 2017. Asia-Pacific Regional Integration Index: Construction, Interpretation, and Comparison. *ADB Economics Working Paper Series.* No. 511.

Table A2: Regional Integration Indicators—Asia and the Pacific (% of total)

	Movement in Trade and Investment				Movement in Capital				People Movement							
	Trade (%)		FDI (%)		Equity Holdings (%)		Bond Holdings (%)		Migration (%)		Tourism (%)		Remittances (%)	
	2024		2024		2024		2024		2024		2023		2021	
Within subregions														
ASEAN+3 (including HKG)[a]	44.2	▲	64.9	▲	19.7	▲	17.2	▲	42.8	▼	68.6	▲	30.3	▲
Central and West Asia	9.1	▼	11.1	▼	0.0	▼	0.7	▲	19.0	▲	33.7	▲	4.7	▼
East Asia	31.6	▲	81.5	▲	18.4	▲	11.9	▲	33.1	▼	64.8	▲	32.8	▲
South Asia	4.6	▲	0.5	▼	1.1	▲	—	▲	18.0	▼	24.4	▲	6.7	▼
Southeast Asia	21.1	▼	11.8	▼	6.8	▲	8.3	▲	29.4	▼	44.2	▼	10.8	▼
Pacific	4.8	▲	5.5	▲	3.1	▼	4.8	▲	69.7	▲	22.7	▼	42.5	▲
Across subregions														
ASEAN+3 (including HKG)[a]	13.2	▼	7.5	▲	3.6	▼	5.5	▲	13.3	▲	16.7	▼	8.9	▲
Central and West Asia	22.0	▲	35.0	▲	6.7	▼	11.0	▼	1.5	▲	9.6	▲	0.2	▼
East Asia	23.4	▼	16.8	▲	2.3	▼	7.2	▲	18.1	▲	23.6	▼	15.8	▲
South Asia	33.0	▼	70.6	▲	7.5	▲	0.0	—	9.0	▲	43.4	▲	8.9	▲
Southeast Asia	47.6	▲	28.9	▼	25.9	▼	29.4	▼	29.2	▲	45.3	▲	20.3	▲
Pacific	69.0	▼	29.6	▲	7.9	▼	11.5	▼	5.0	▼	66.7	▲	5.5	▼
TOTAL (within and across subregions)														
Asia and the Pacific	**55.9**	▲	**68.7**	▲	**21.5**	▲	**22.2**	▲	**38.8**	▼	**65.8**	▲	**25.6**	▼
ASEAN+3 (including HKG)[a]	57.4	▲	72.4	▲	23.3	▲	22.8	▲	56.1	▲	82.4	▲	39.2	▲
Central and West Asia	31.2	▲	46.1	▲	6.7	▼	11.7	▲	20.5	▲	37.3	▲	4.9	▼
East Asia	55.0	▲	98.3	▲	20.7	▲	19.1	▲	51.2	▼	84.8	▲	48.6	▲
South Asia	37.6	▲	71.1	▲	8.5	▲	0.4	▼	27.0	▼	43.0	▲	15.6	▲
Southeast Asia	68.7	▼	40.7	▼	32.8	▼	37.7	▼	58.6	▲	80.8	▲	31.1	▲
Pacific	73.7	▼	35.1	▲	11.0	▼	16.3	▼	74.7	▼	68.2	▲	48.0	▲
With the rest of the world														
Asia and the Pacific	**44.1**	▼	**31.3**	▼	**78.5**	▼	**77.8**	▼	**61.2**	▲	**34.2**	▼	**74.4**	▲
ASEAN+3 (including HKG)[a]	42.6	▼	27.6	▼	76.7	▼	77.2	▼	43.9	▼	17.6	▼	60.8	▼
Central and West Asia	68.8	▼	53.9	▼	93.3	▲	88.3	▲	79.5	▼	62.7	▼	95.1	▲
East Asia	45.0	▼	1.7	▼	79.3	▼	80.9	▼	48.8	▲	15.2	▼	51.4	▼
South Asia	62.4	▼	28.9	▼	91.5	▼	99.6	▲	73.0	▲	57.0	▼	84.4	▼
Southeast Asia	31.3	▲	59.3	▲	67.2	▲	62.3	▲	41.4	▼	19.2	▼	68.9	▼
Pacific	26.3	▲	64.9	▼	89.0	▲	83.7	▲	25.3	▲	31.8	▼	52.0	▼

— = unchanged from previous period; ▲ = increase from previous period; ▼ = decrease from previous period.

ASEAN = Association of Southeast Asian Nations; FDI = foreign direct investment; HKG = Hong Kong, China.

[a] Includes ASEAN (11 economies) plus Hong Kong, China; Japan; the People's Republic of China; and the Republic of Korea.

Notes:
(i) Trade—no data available on the Cook Islands and Niue.
(ii) Equity and Bond Holdings—based on investment from Australia; Bangladesh; the People's Republic of China; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; the Republic of Korea; Malaysia; Mongolia; New Zealand; Pakistan; Palau; the Philippines; Singapore; and Thailand.
(iii) Migration—share of migrant stock to total migrants in 2024 (compared with 2020).
(iv) Tourism—share of inbound tourists to total tourists in 2023 (compared with 2022). No data available for the People's Republic of China.
(v) Remittances—share of inward remittances to total remittances in 2021 (compared with 2019).
(vi) The Pacific includes the Pacific developing economies of ADB plus advanced economies, Australia and New Zealand.

Sources: ADB calculations using data from ASEAN Secretariat. ASEANstats Database. https://www.aseanstats.org (accessed July 2025); CEIC Data Company; Eurostat. Balance of Payments. http://ec.europa.eu/eurostat/web/balance-of-payments/data/database (accessed July 2025); Haver Analytics; International Monetary Fund (IMF). Direction of Trade Statistics. https://data.imf.org/DOT (accessed January 2026); IMF. Portfolio Investment Positions. https://data.imf.org/en/datasets/IMF.STA:PIP (accessed November 2025); United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2020. http://www.un.org/en/development/desa/population/migration/data/index.shtml (accessed May 2024); United Nations Trade and Development. World Investment Report 2024 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025); UN Tourism. UN Tourism Statistics Database. https://www.e-unwto.org/toc/unwtotfb/current (accessed October 2025); and World Bank. World Bank Group. Global Knowledge Partnership for Migration and Development (KNOMAD). Bilateral Migration staff estimates (accessed June 2025).

Table A3: Trade Shares—Asia and the Pacific, 2024 (% of total trade)

Reporter	Partner					
	Asia and the Pacific	of which		EU+UK	US	ROW
		PRC	Japan			
Central and West Asia	**31.2**	**13.7**	**0.9**	**32.7**	**4.2**	**31.9**
Armenia	23.8	9.4	0.4	7.8	1.4	67.0
Azerbaijan	34.1	7.9	0.9	42.6	3.7	19.6
Georgia	47.4	8.2	2.4	22.7	9.3	20.6
Kazakhstan	46.2	26.4	1.5	44.2	3.7	5.9
Kyrgyz Republic	58.6	35.6	0.8	13.3	1.6	26.5
Tajikistan	64.6	20.5	1.3	6.0	1.6	27.8
Türkiye	19.8	8.0	0.9	39.8	5.4	35.0
Turkmenistan	90.1	52.2	0.2	7.1	0.5	2.3
Uzbekistan	47.8	21.1	0.7	10.6	1.2	40.5
East Asia	**55.0**	**13.5**	**4.5**	**12.0**	**11.8**	**21.3**
People's Republic of China	45.9	0.0	5.0	14.3	11.2	28.6
Hong Kong, China	80.7	49.6	3.7	6.2	5.0	8.0
Japan	56.3	20.1	0.0	11.3	15.6	16.8
Republic of Korea	56.8	20.7	5.9	11.0	15.3	17.0
Mongolia	69.7	61.2	3.4	3.2	2.1	25.0
Taipei,China	70.7	27.3	7.1	7.8	14.8	6.7
South Asia	**37.6**	**12.0**	**2.1**	**14.7**	**10.4**	**37.2**
Bangladesh	48.5	17.2	3.1	24.8	9.4	17.3
Bhutan	97.9	4.2	0.4	1.4	0.1	0.6
India	35.2	10.7	2.1	13.8	10.8	40.1
Maldives	57.8	13.1	1.3	9.2	2.7	30.3
Nepal	85.2	18.0	0.3	4.1	2.1	8.6
Pakistan	40.0	20.4	1.5	16.6	8.4	35.0
Sri Lanka	52.6	14.9	1.4	17.0	10.9	19.5
Southeast Asia	**68.7**	**20.2**	**6.1**	**8.7**	**11.9**	**10.7**
Brunei Darussalam	85.8	14.3	8.6	1.5	2.1	10.6
Cambodia	63.8	27.1	3.8	11.3	18.1	6.8
Indonesia	73.8	27.2	7.1	6.6	7.7	11.9
Lao People's Democratic Republic	91.3	34.0	1.6	6.1	1.4	1.2
Malaysia	70.4	16.8	5.3	8.2	11.3	10.1
Philippines	74.6	21.1	10.1	8.3	10.1	7.0
Singapore	69.7	13.2	4.1	9.5	10.4	10.5
Thailand	64.4	19.1	8.6	8.3	12.2	15.1
Timor-Leste	87.4	12.2	2.2	4.8	2.4	5.4
Viet Nam	63.6	26.8	6.0	10.0	17.5	8.9
Pacific Developing Economies	**82.7**	**22.3**	**8.3**	**9.4**	**2.2**	**5.6**
Fiji	76.9	12.3	3.0	2.6	9.4	11.1
Kiribati	87.8	12.0	5.6	3.7	2.2	6.3
Marshall Islands	80.2	28.2	6.8	13.3	0.8	5.7
Federated States of Micronesia	54.4	14.4	4.0	0.4	14.2	31.0
Nauru	91.7	7.7	2.8	0.3	1.2	6.9
Palau	48.2	10.2	6.5	21.5	24.1	6.3
Papua New Guinea	88.0	19.0	12.6	7.9	0.9	3.2
Samoa	86.7	11.0	3.0	2.5	8.9	1.9
Solomon Islands	87.4	42.4	1.6	9.7	1.4	1.5
Tonga	79.6	8.9	8.0	0.7	13.2	6.5
Tuvalu	95.7	0.8	0.1	0.9	1.7	1.7
Vanuatu	91.1	10.6	5.1	1.6	0.7	6.7
Pacific Advanced Economies	**73.2**	**29.5**	**9.5**	**10.8**	**8.4**	**7.6**
Australia	74.1	30.4	10.0	10.5	8.0	7.4
New Zealand	66.4	23.2	5.5	12.9	11.5	9.2
Asia and the Pacific	**55.9**	**15.5**	**4.7**	**12.6**	**11.1**	**20.3**
Developing Asia	**55.1**	**14.4**	**4.9**	**12.8**	**10.8**	**21.2**

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

Source: ADB calculations using data from International Monetary Fund. International trade in goods. https://data.imf.org/en/datasets/IMF.STA:IMTS (accessed January 2026).

Table A4: Free Trade Agreement Status—Asia and the Pacific, as of December 2025

Economy	Under Negotiation		Signed But Not Yet in Effect	Signed and in Effect	Total
	Framework Agreement Signed	Negotiations Launched			
Armenia	0	5	2	13	20
Australia	0	3	2	22	27
Azerbaijan	0	1	1	10	12
Bangladesh	0	3	0	5	8
Bhutan	0	1	1	3	5
Brunei Darussalam	0	1	0	11	12
Cambodia	0	1	1	10	12
China, People's Republic of	0	9	2	23	34
Cook Islands	0	0	0	4	4
Fiji	0	0	0	6	6
Georgia	0	0	0	15	15
Hong Kong, China	0	2	0	8	10
India	0	20	3	17	40
Indonesia	0	10	3	17	30
Japan	0	6	0	21	27
Kazakhstan	0	7	2	13	22
Kiribati	0	0	0	4	4
Korea, Republic of	0	11	4	23	38
Kyrgyz Republic	0	5	2	13	20
Lao People's Democratic Republic	0	1	0	11	12
Malaysia	0	8	0	18	26
Maldives	0	1	1	2	4
Marshall Islands	0	0	0	5	5
Micronesia, Federated States of	0	0	0	5	5
Mongolia	0	1	0	2	3
Nauru	0	0	0	4	4
Nepal	0	1	0	2	3
New Zealand	0	3	1	17	21
Niue	0	0	0	4	4
Pakistan	0	6	2	11	19
Palau	0	0	0	4	4
Papua New Guinea	0	0	0	7	7
Philippines	0	3	1	10	14
Samoa	0	0	0	5	5
Singapore	0	7	4	31	42
Solomon Islands	0	0	0	6	6
Sri Lanka	0	4	1	6	11
Taipei,China	1	2	2	5	10
Tajikistan	0	0	0	8	8
Thailand	1	8	3	15	27
Tonga	0	0	0	4	4
Turkmenistan	0	0	1	6	7
Türkiye	0	12	6	23	41
Tuvalu	0	0	0	4	4
Uzbekistan	0	1	0	13	14
Vanuatu	0	0	1	5	6
Viet Nam	0	2	1	17	20

Notes:

(i) Framework agreement signed: The parties initially negotiate the contents of a framework agreement, which serves as a framework for future negotiations.
(ii) Negotiations launched: The parties, through the relevant ministries, declare the official launch of negotiations or set the date for such, or start the first round of negotiations.
(iii) Signed but not yet in effect: Parties sign the agreement after negotiations have been completed. However, the agreement has yet to be implemented.
(iv) Signed and in effect: Provisions of free trade agreement come into force, after legislative or executive ratification.

Source: ADB. Asia Regional Integration Center. https://aric.adb.org (accessed December 2025).

Table A5: Cross-Border Portfolio Equity Holdings—Asia and the Pacific, 2024 (% of total cross-border portfolio equity holdings)

Reporter	Partner					
	Asia and the Pacific	of which		EU+UK	US	ROW
		PRC	Japan			
Central and West Asia	**6.7**	**0.1**	**4.2**	**14.2**	**72.6**	**6.3**
Armenia	—	—	—	—	—	—
Azerbaijan	—	—	—	—	—	—
Georgia	—	—	—	—	—	—
Kazakhstan	7.1	0.0	4.5	14.6	71.4	6.8
Kyrgyz Republic	—	—	—	—	—	—
Tajikistan	—	—	—	—	—	—
Türkiye	0.8	0.4	0.0	8.6	89.3	—
Turkmenistan	—	—	—	—	—	—
Uzbekistan	—	—	—	—	—	—
East Asia	**20.7**	**6.0**	**1.5**	**13.3**	**35.3**	**30.7**
China, People's Republic of	61.5	—	0.9	6.7	18.4	13.3
Hong Kong, China	28.3	22.1	3.7	15.8	6.7	49.1
Japan	4.4	0.4	—	13.7	47.4	34.4
Korea, Republic of	9.2	1.5	2.9	15.3	67.7	7.9
Mongolia	49.8	2.7	0.5	15.6	19.8	14.8
Taipei,China	—	—	—	—	—	—
South Asia	**8.5**	**0.0**	**0.3**	**25.4**	**57.4**	**8.6**
Bangladesh	100.0	—	—	—	—	0.0
Bhutan	—	—	—	—	—	—
India	7.9	0.1	0.3	26.1	59.1	6.9
Maldives	—	—	—	—	—	—
Nepal	—	—	—	—	—	—
Pakistan	—	—	—	0.4	0.2	99.4
Sri Lanka	—	—	—	—	—	—
Southeast Asia	**32.8**	**8.2**	**4.6**	**12.7**	**30.9**	**23.7**
Brunei Darussalam	—	—	—	—	—	—
Cambodia	—	—	—	—	—	—
Indonesia	97.5	0.0	0.4	0.5	0.2	1.9
Lao People's Democratic Republic	—	—	—	—	—	—
Malaysia	40.7	5.6	4.0	18.5	33.0	7.8
Philippines	3.2	0.1	0.0	74.1	21.6	1.1
Singapore	32.3	9.1	5.0	10.0	31.8	25.9
Thailand	13.8	0.4	0.4	41.8	19.8	24.5
Timor-Leste	—	—	—	—	—	—
Viet Nam	—	—	—	—	—	—
Pacific	**11.0**	**1.7**	**3.3**	**11.4**	**57.5**	**20.0**
Australia	9.8	1.9	3.4	11.6	57.8	20.8
Cook Islands	—	—	—	—	—	—
Fiji	—	—	—	—	—	—
Kiribati	—	—	—	—	—	—
Marshall Islands	—	—	—	—	—	—
Micronesia, Federated States of	—	—	—	—	—	—
Nauru	—	—	—	—	—	—
New Zealand	21.7	0.5	2.7	9.6	55.0	13.7
Niue	—	—	—	—	—	—
Palau	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—
Samoa	—	—	—	—	—	—
Solomon Islands	—	—	—	—	—	—
Tonga	—	—	—	—	—	—
Tuvalu	—	—	—	—	—	—
Vanuatu	—	—	—	—	—	—
Asia and the Pacific	**21.5**	**5.7**	**2.3**	**12.9**	**37.8**	**27.8**
Developing Asia	**32.9**	**9.5**	**3.3**	**12.9**	**27.9**	**26.3**

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

Source: ADB calculations using data from International Monetary Fund. Portfolio Investment Positions. https://data.imf.org/en/datasets/IMF.STA:PIP (accessed November 2025).

Table A6: Cross-Border Portfolio Debt Holdings—Asia and the Pacific, 2024 (% of total cross-border portfolio debt holdings)

Reporter	Partner					
	Asia and the Pacific	of which		EU+UK	US	ROW
		PRC	Japan			
Central and West Asia	**11.7**	**1.0**	**1.8**	**16.5**	**45.0**	**26.8**
Armenia	—	—	—	—	—	—
Azerbaijan	—	—	—	—	—	—
Georgia	—	—	—	—	—	—
Kazakhstan	11.9	1.0	1.9	15.6	45.3	27.2
Kyrgyz Republic	—	—	—	—	—	—
Tajikistan	—	—	—	—	—	—
Türkiye	5.5	0.2	0.0	43.0	37.4	14.1
Turkmenistan	—	—	—	—	—	—
Uzbekistan	—	—	—	—	—	—
East Asia	**19.1**	**6.0**	**1.9**	**21.0**	**43.7**	**16.2**
China, People's Republic of	29.8	—	2.2	13.0	31.0	26.1
Hong Kong, China	39.9	21.2	5.8	13.7	31.2	15.2
Japan	8.5	1.5	—	26.0	51.2	14.3
Korea, Republic of	13.1	3.4	3.0	21.4	50.7	14.7
Mongolia	46.6	5.4	0.7	25.2	22.6	5.6
Taipei,China	—	—	—	—	—	—
South Asia	**0.4**	**—**	**—**	**16.8**	**79.6**	**3.3**
Bangladesh	—	—	—	—	—	—
Bhutan	—	—	—	—	—	—
India	0.3	—	—	17.4	82.3	0.1
Maldives	—	—	—	—	—	—
Nepal	—	—	—	—	—	—
Pakistan	2.6	—	—	—	—	97.4
Sri Lanka	—	—	—	—	—	—
Southeast Asia	**37.7**	**8.3**	**7.2**	**5.3**	**38.6**	**18.4**
Brunei Darussalam	—	—	—	—	—	—
Cambodia	—	—	—	—	—	—
Indonesia	92.1	0.9	0.1	-0.4	8.9	-0.6
Lao People's Democratic Republic	—	—	—	—	—	—
Malaysia	52.5	22.0	2.7	11.5	16.5	19.6
Philippines	30.4	1.1	4.5	5.6	50.8	13.2
Singapore	34.8	8.0	7.1	5.0	41.0	19.1
Thailand	62.4	8.8	19.0	8.5	14.8	14.3
Timor-Leste	—	—	—	—	—	—
Viet Nam	—	—	—	—	—	—
Pacific	**16.3**	**2.2**	**5.1**	**23.5**	**36.1**	**24.1**
Australia	14.5	2.3	5.2	24.8	35.9	24.8
Cook Islands	—	—	—	—	—	—
Fiji	—	—	—	—	—	—
Kiribati	—	—	—	—	—	—
Marshall Islands	—	—	—	—	—	—
Micronesia, Federated States of	—	—	—	—	—	—
Nauru	—	—	—	—	—	—
New Zealand	28.9	1.4	3.9	14.0	37.7	19.4
Niue	—	—	—	—	—	—
Palau	—	—	—	—	—	—
Papua New Guinea	—	—	—	—	—	—
Samoa	—	—	—	—	—	—
Solomon Islands	—	—	—	—	—	—
Tonga	—	—	—	—	—	—
Tuvalu	—	—	—	—	—	—
Vanuatu	—	—	—	—	—	—
Asia and the Pacific	**22.2**	**6.1**	**3.0**	**18.3**	**42.3**	**17.2**
Developing Asia	**34.0**	**10.3**	**5.2**	**11.4**	**35.9**	**18.7**

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

Source: ADB calculations using data from International Monetary Fund. Portfolio Investment Positions. https://data.imf.org/en/datasets/IMF.STA:PIP (accessed November 2025).

Table A7: Foreign Direct Investment Inflow Share—Asia and the Pacific, 2024 (% of total FDI inflows)

Reporter	Partner					
	Asia and the Pacific	of which		EU+UK	US	ROW
		PRC	Japan			
Central and West Asia	**46.1**	**11.4**	**3.8**	**100.4**	**0.4**	**-47.0**
Armenia	82.6	38.2	0.0	38.0	54.2	-74.8
Azerbaijan	70.7	32.9	7.5	131.7	16.7	-119.1
Georgia	26.4	2.2	3.8	56.9	7.4	9.2
Kazakhstan	-166.4	-46.7	-18.4	-343.7	34.1	576.0
Kyrgyz Republic	75.4	40.6	0.3	23.3	2.2	-0.9
Tajikistan	29.4	13.8	2.8	16.7	3.8	50.1
Türkiye	8.3	0.4	0.3	48.8	6.5	36.4
Turkmenistan	26.2	0.1	0.0	0.1	0.0	73.6
Uzbekistan	7.7	0.6	0.0	0.7	0.1	91.4
East Asia	**98.3**	**38.1**	**7.3**	**11.5**	**1.9**	**-11.7**
China, People's Republic of	80.0	0.0	1.8	7.8	2.3	9.9
Hong Kong, China	121.5	80.2	7.9	8.4	4.9	-34.9
Japan	91.6	10.1	0.0	48.1	-67.6	27.9
Korea, Republic of	61.0	7.3	40.2	25.2	34.4	-20.6
Mongolia	53.3	8.5	5.5	91.7	5.7	-50.7
Taipei,China	95.5	40.8	21.8	1.8	0.9	1.8
South Asia	**71.1**	**7.7**	**6.0**	**41.4**	**18.5**	**-31.0**
Bangladesh	110.9	50.5	8.8	27.7	6.1	-44.8
Bhutan	19.6	0.0	0.0	4.0	0.0	76.5
India	69.9	0.0	6.5	45.6	21.4	-36.9
Maldives	1.0	0.4	0.4	0.5	0.1	98.3
Nepal	172.6	78.5	14.0	36.0	11.4	-120.0
Pakistan	90.1	65.7	1.1	22.9	4.3	-17.4
Sri Lanka	57.9	20.2	4.8	22.3	4.8	15.0
Southeast Asia	**40.7**	**8.0**	**7.1**	**16.7**	**18.7**	**23.9**
Brunei Darussalam	195.2	117.0	-130.8	131.1	9.5	-235.7
Cambodia	87.7	59.3	4.2	1.6	1.0	9.8
Indonesia	86.6	10.4	6.7	6.6	2.6	4.2
Lao People's Democratic Republic	18.3	5.7	1.2	2.3	0.6	78.8
Malaysia	91.6	0.1	11.9	-14.2	22.3	0.2
Philippines	9.2	0.1	7.2	6.7	1.2	82.8
Singapore	29.8	5.4	7.3	24.0	26.0	20.2
Thailand	68.8	23.4	14.0	10.6	14.1	6.5
Timor-Leste	2.0	0.0	2.0	1.8	0.0	96.2
Viet Nam	25.0	8.9	1.7	2.8	0.7	71.6
Pacific	**35.1**	**1.2**	**22.0**	**28.7**	**17.3**	**18.8**
Australia	32.4	1.0	22.6	29.0	18.3	20.3
Cook Islands	—	—	—	—	—	—
Fiji	20.9	5.9	3.2	6.4	8.7	64.0
Kiribati	—	—	—	—	—	—
Marshall Islands	—	—	—	—	—	—
Micronesia, Federated States of	—	—	—	—	—	—
Nauru	0.0	0.0	0.0	0.0	0.0	100.0
New Zealand	110.1	1.6	0.0	23.2	-14.6	-18.7
Niue	—	—	—	—	—	—
Palau	17.7	4.9	11.3	0.0	7.4	74.9
Papua New Guinea	43.2	10.2	5.4	8.1	6.8	41.9
Samoa	—	—	—	—	—	—
Solomon Islands	125.9	37.1	21.0	19.7	32.9	-78.5
Tonga	—	—	—	—	—	—
Tuvalu	—	—	—	—	—	—
Vanuatu	134.1	51.5	27.6	73.5	60.3	-167.8
Asia and the Pacific	**68.7**	**21.4**	**8.4**	**18.8**	**10.3**	**2.2**
Developing Asia	**71.5**	**23.7**	**7.2**	**17.1**	**11.5**	**-0.1**

— = unavailable, PRC = People's Republic of China, EU = European Union (27 members), FDI = foreign direct investment, ROW = rest of the world, UK = United Kingdom, US = United States.

Sources: ADB calculations using data from the ASEAN Secretariat. ASEANstats Data Portal. https://data.aseanstats.org (accessed July 2025); CEIC Data Company; Eurostat. Balance of Payments. https://ec.europa.eu/eurostat (accessed July 2025); International Monetary Fund. World Economic Outlook Database, April 2025 https://www.imf.org/en/Publications/WEO/weo-database/2025/April (accessed April 2025); and UN Trade and Development. World Investment Report 2025 Statistical Annex Tables. https://unctad.org/topic/investment/world-investment-report (accessed July 2025).

Table A8: Remittance Inflows Share—Asia and the Pacific, 2021 (% of total remittance inflows)

Reporter	Partner				
	Asia and the Pacific	Middle East	EU+UK	US	ROW
Central and West Asia	**4.9**	**0.4**	**10.3**	**2.3**	**82.1**
Armenia	4.7	0.1	14.8	12.3	68.1
Azerbaijan	15.7	1.6	5.6	3.1	74.1
Georgia	13.1	1.1	21.9	5.0	59.0
Kazakhstan	2.1	0.3	30.0	0.9	66.7
Kyrgyz Republic	6.8	0.3	15.2	1.4	76.2
Tajikistan	6.2	0.3	7.5	1.5	84.5
Türkiye	2.7	3.0	85.6	3.8	4.9
Turkmenistan	—	—	—	—	100.0
Uzbekistan	—	—	—	—	100.0
East Asia	**48.6**	**0.2**	**11.1**	**28.1**	**12.0**
China, People's Republic of	53.0	0.2	11.1	23.9	11.8
Hong Kong, China	39.0	0.0	12.7	22.9	25.3
Japan	23.3	0.0	16.3	44.0	16.4
Korea, Republic of	37.3	0.0	5.7	48.3	8.7
Mongolia	40.9	—	35.4	—	23.7
Taipei,China	—	—	—	—	—
South Asia	**15.6**	**56.6**	**10.6**	**12.8**	**4.5**
Bangladesh	34.7	52.4	7.2	4.2	1.4
Bhutan	85.6	—	4.1	—	10.3
India	9.9	58.2	9.1	17.7	5.1
Maldives	74.1	—	18.6	—	7.3
Nepal	49.6	36.5	4.7	8.3	0.9
Pakistan	8.3	61.9	17.1	8.0	4.8
Sri Lanka	21.2	46.8	19.1	2.9	10.0
Southeast Asia	**31.1**	**19.4**	**11.1**	**30.1**	**8.3**
Brunei Darussalam	—	—	—	—	—
Cambodia	69.5	—	8.9	18.5	3.1
Indonesia	41.5	51.2	3.9	2.5	1.0
Lao People's Democratic Republic	76.0	—	5.1	17.3	1.6
Malaysia	88.9	0.0	4.7	4.2	2.3
Philippines	16.5	27.4	9.0	35.0	12.1
Singapore	—	—	—	—	—
Timor-Leste	41.6	1.9	25.6	24.1	6.8
Thailand	85.2	—	14.5	—	0.3
Viet Nam	35.7	0.0	13.6	43.7	7.0
Pacific	**48.0**	**0.3**	**22.5**	**19.8**	**9.4**
Australia	28.8	0.7	46.4	16.2	7.9
Cook Islands	—	—	—	—	—
Fiji	63.5	—	3.1	21.6	11.8
Kiribati	90.5	—	7.5	—	2.0
Marshall Islands	0.8	—	0.1	97.4	1.6
Micronesia, Federated States of	—	—	—	—	—
Nauru	—	—	—	—	—
New Zealand	78.4	0.0	12.4	6.7	2.5
Niue	—	—	—	—	—
Palau	13.1	—	8.2	—	78.7
Papua New Guinea	93.8	—	4.7	—	1.5
Samoa	68.5	—	0.8	22.5	8.2
Solomon Islands	87.1	—	12.3	—	0.6
Tonga	57.0	—	0.7	40.0	2.2
Tuvalu	—	—	—	—	—
Vanuatu	56.9	—	16.5	—	26.6
Asia and the Pacific	**25.6**	**32.0**	**10.8**	**19.5**	**12.1**
Developing Asia	**25.6**	**32.6**	**10.6**	**19.1**	**12.1**

— = unavailable, EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom, US = United States.

Source: ADB calculations using data from Ratha, Plaza, and Kim (2024).

Table A9: Outbound Migration Share—Asia and the Pacific, 2024 (% of total outbound migrants)

Reporter	Partner					
	Asia and the Pacific	of which		EU+UK	US	ROW
		PRC	Japan			
Central and West Asia	**20.5**	**0.1**	**0.1**	**34.0**	**1.5**	**44.0**
Armenia	24.1	—	—	12.6	—	63.4
Azerbaijan	44.8	0.0	—	1.6	—	53.5
Georgia	17.9	0.4	—	37.2	—	45.0
Kazakhstan	6.1	0.0	—	34.6	—	59.3
Kyrgyz Republic	30.3	—	—	1.4	—	68.3
Tajikistan	11.3	0.1	—	0.4	—	88.3
Türkiye	2.0	0.0	0.2	83.0	5.6	9.4
Turkmenistan	66.2	0.3	—	0.5	—	33.3
Uzbekistan	49.0	0.1	0.3	1.1	—	49.9
East Asia	**51.2**	**4.1**	**7.7**	**8.2**	**25.8**	**14.7**
China, People's Republic of	56.3	—	6.9	10.1	21.3	12.4
Hong Kong, China	47.7	34.0	1.1	11.5	21.7	19.2
Japan	31.3	4.0	—	2.4	54.3	12.0
Korea, Republic of	34.4	3.2	19.4	1.8	53.3	10.4
Mongolia	87.7	0.6	11.5	8.8	—	3.5
Taipei,China	42.2	20.5	7.5	1.9	48.6	7.4
South Asia	**27.0**	**0.1**	**0.8**	**10.7**	**9.7**	**52.7**
Bangladesh	31.3	0.0	0.3	6.1	4.1	58.5
Bhutan	88.9	0.2	—	1.0	—	10.1
India	21.0	0.0	0.3	10.6	17.1	51.3
Maldives	97.7	—	—	0.6	—	1.6
Nepal	63.4	0.1	7.0	1.1	10.0	25.5
Pakistan	16.3	0.1	0.4	16.6	6.5	60.5
Sri Lanka	34.4	0.0	3.3	23.0	—	42.6
Southeast Asia	**58.6**	**2.1**	**5.2**	**5.6**	**18.8**	**17.0**
Brunei Darussalam	90.5	—	—	0.1	—	9.4
Cambodia	67.2	0.8	3.2	7.7	22.0	3.1
Indonesia	78.2	0.1	4.2	3.0	—	18.8
Lao People's Democratic Republic	65.2	1.5	0.6	5.6	26.7	2.5
Malaysia	95.5	0.4	0.5	2.9	—	1.6
Philippines	20.2	0.1	4.6	7.3	32.4	40.1
Singapore	75.6	3.4	1.3	18.1	—	6.3
Thailand	54.4	0.5	5.2	11.1	26.1	8.4
Timor-Leste	97.8	—	—	2.2	—	0.0
Viet Nam	44.4	2.4	16.0	10.2	38.8	6.5
Pacific	**74.7**	**1.1**	**1.0**	**17.2**	**—**	**8.1**
Australia	38.6	3.2	2.8	49.9	—	11.5
Cook Islands	100.0	—	—	—	—	0.0
Fiji	86.5	—	—	0.0	—	13.5
Kiribati	99.7	—	—	0.1	—	0.2
Marshall Islands	23.5	—	—	—	—	76.5
Micronesia, Federated States of	4.9	—	—	—	—	95.1
Nauru	99.3	—	—	0.1	—	0.6
New Zealand	89.7	0.6	0.6	8.0	—	2.3
Niue	100.0	—	—	—	—	0.0
Palau	10.9	—	—	7.5	—	81.6
Papua New Guinea	99.8	—	—	0.1	—	0.1
Samoa	86.0	—	—	0.4	—	13.5
Solomon Islands	99.7	—	—	0.0	—	0.2
Tonga	95.8	—	—	0.0	—	4.1
Tuvalu	95.2	—	—	0.8	—	4.0
Vanuatu	69.5	—	—	0.7	—	29.8
Asia and the Pacific	**38.8**	**1.3**	**2.9**	**11.8**	**13.5**	**35.9**
Developing Asia	**38.5**	**1.2**	**3.0**	**11.7**	**13.3**	**36.5**

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

Source: ADB calculations using data from United Nations, Population Division. International Migrant Stock 2024. https://www.un.org/development/desa/pd/content/international-migrant-stock (accessed May 2025).

Table A10a: Inbound Tourism Share—Asia and the Pacific, 2023 (% of total inbound visitors)

Destination	Origin				
	Asia and the Pacific	of which PRC	EU+UK	US	ROW
Central and West Asia	**37.3**	**0.9**	**28.7**	**1.9**	**32.2**
Armenia	29.8	0.9	7.6	2.5	60.1
Azerbaijan	41.1	1.1	5.1	0.8	53.0
Georgia	52.7	0.8	7.3	0.8	39.3
Kazakhstan	66.2	2.6	1.9	0.3	31.6
Kyrgyz Republic	91.8	0.8	0.4	0.2	7.6
Tajikistan	—	—	—	—	—
Türkiye	12.3	0.5	47.4	2.8	37.5
Turkmenistan	—	—	—	—	—
Uzbekistan	95.8	0.7	2.4	0.4	1.4
East Asia	**84.8**	**29.1**	**4.7**	**6.9**	**3.6**
People's Republic of China	—	—	—	—	—
Hong Kong, China	94.2	75.1	2.1	2.5	1.2
Japan	82.6	9.9	5.8	8.3	3.3
Republic of Korea	77.9	18.4	6.4	9.9	5.8
Mongolia	56.1	21.7	4.8	2.2	36.8
Taipei,China	83.7	3.5	4.3	8.2	3.8
South Asia	**43.0**	**2.7**	**25.1**	**14.9**	**17.0**
Bangladesh	—	—	—	—	—
Bhutan	—	—	—	—	—
India	48.0	0.3	21.1	18.6	12.3
Maldives	34.8	10.2	38.6	4.1	22.6
Nepal	48.9	12.3	28.0	20.2	3.0
Pakistan	—	—	—	—	—
Sri Lanka	20.5	4.7	31.6	3.2	44.7
Southeast Asia	**79.2**	**11.9**	**10.1**	**4.6**	**6.2**
Brunei Darussalam	87.3	16.0	8.4	2.7	1.6
Cambodia	85.2	10.1	7.6	3.4	3.7
Indonesia	77.5	7.3	13.9	3.7	5.0
Lao People's Democratic Republic	91.9	19.0	3.9	1.9	2.4
Malaysia	89.4	13.6	6.7	2.1	1.8
Philippines	62.5	5.3	9.8	18.1	9.6
Singapore	81.8	10.4	9.8	4.9	3.4
Thailand	72.5	12.5	13.1	3.3	11.1
Timor-Leste	—	—	—	—	—
Viet Nam	82.6	15.3	8.4	6.3	2.7
Pacific	**68.2**	**6.6**	**14.4**	**10.2**	**7.2**
Australia	65.0	7.8	17.6	9.6	7.8
Cook Islands	95.1	0.0	0.0	3.5	1.4
Fiji	82.0	3.0	3.4	11.7	2.9
Kiribati	72.1	14.3	4.8	23.1	0.0
Marshall Islands	—	—	—	—	—
Federated States of Micronesia	—	—	—	—	—
Nauru	—	—	—	—	—
New Zealand	67.8	5.3	12.7	11.8	7.6
Niue	—	—	—	—	—
Palau	72.9	26.3	5.3	20.2	1.6
Papua New Guinea	89.4	9.9	3.9	5.3	1.3
Samoa	83.2	0.0	0.0	9.2	7.6
Solomon Islands	87.7	6.4	2.5	8.8	0.9
Tonga	80.6	3.8	2.2	16.4	0.7
Tuvalu	80.2	3.0	7.3	10.2	2.4
Vanuatu	89.9	3.3	0.0	0.0	10.1
Asia and the Pacific	**65.8**	**11.2**	**15.3**	**4.8**	**14.0**
Developing Asia	**64.0**	**11.5**	**16.3**	**4.2**	**15.4**

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

Sources: ADB calculations using data from CEIC Data Company (accessed October 2025); Haver Analytics (accessed October 2025); UN Tourism Statistics Database, October 2025. https://www.e-unwto.org (accessed November 2025); and official sources (accessed October 2025).

Table A10b: Outbound Tourism Share—Asia and the Pacific, 2022 (% of total outbound visitors)

Reporter	Partner				
	Asia and the Pacific	of which PRC	EU+UK	US	ROW
Central and West Asia	**53.4**	**—**	**39.5**	**0.5**	**6.6**
Armenia	75.7	—	5.7	1.1	17.4
Azerbaijan	8.7	—	88.9	0.0	2.3
Georgia	85.2	—	12.4	0.4	2.1
Kazakhstan	92.5	—	2.2	0.4	4.9
Kyrgyz Republic	96.3	—	0.6	0.2	3.0
Tajikistan	92.4	—	4.0	0.1	3.6
Türkiye	20.0	—	61.7	1.5	16.7
Turkmenistan	49.8	—	42.1	0.6	7.5
Uzbekistan	95.1	—	0.2	0.1	4.5
East Asia	**42.4**	**—**	**14.9**	**9.5**	**33.2**
People's Republic of China	22.9	—	12.7	3.9	60.4
Hong Kong, China	48.4	—	9.6	2.8	39.2
Japan	46.4	—	25.9	19.2	8.5
Republic of Korea	60.9	—	15.2	14.4	9.5
Mongolia	91.6	—	1.4	5.6	1.5
Taipei,China	67.8	—	11.6	10.5	10.0
South Asia	**36.7**	**—**	**12.1**	**10.2**	**41.1**
Bangladesh	39.1	—	3.4	4.5	53.0
Bhutan	17.9	—	80.9	0.6	0.6
India	43.1	—	15.4	14.1	27.4
Maldives	68.7	—	11.7	0.7	18.9
Nepal	60.8	—	19.3	9.8	10.1
Pakistan	18.0	—	5.5	3.3	73.2
Sri Lanka	67.0	—	6.3	5.3	21.4
Southeast Asia	**85.9**	**—**	**3.4**	**2.0**	**8.7**
Brunei Darussalam	96.8	—	0.1	0.2	2.9
Cambodia	98.5	—	0.2	1.0	0.3
Indonesia	69.6	—	1.9	1.5	27.0
Lao People's Democratic Republic	99.2	—	0.5	0.2	0.1
Malaysia	87.2	—	3.2	0.8	8.8
Philippines	67.0	—	10.2	8.4	14.4
Singapore	92.2	—	3.9	1.5	2.4
Thailand	99.7	—	0.2	0.0	0.1
Timor-Leste	88.5	—	4.6	1.9	4.9
Viet Nam	94.4	—	1.1	3.1	1.4
Pacific	**55.0**	**—**	**26.9**	**8.6**	**9.5**
Australia	50.2	—	30.7	8.8	10.3
Cook Islands	91.9	—	3.5	0.8	3.8
Fiji	82.5	—	0.8	12.2	4.6
Kiribati	87.3	—	2.4	4.6	5.7
Marshall Islands	30.2	—	48.5	4.0	17.3
Federated States of Micronesia	12.6	—	1.1	4.3	82.0
Nauru	93.7	—	3.7	0.9	1.7
New Zealand	72.4	—	13.2	8.1	6.3
Niue	87.7	—	3.0	0.9	8.4
Palau	33.5	—	2.8	3.8	60.0
Papua New Guinea	96.4	—	1.5	1.2	1.0
Samoa	89.6	—	0.6	7.6	2.2
Solomon Islands	88.0	—	2.8	3.6	5.6
Tonga	87.5	—	2.4	8.6	1.5
Tuvalu	79.9	—	3.0	7.5	9.7
Vanuatu	86.8	—	2.3	1.1	9.8
Asia and the Pacific	**57.8**	**—**	**20.7**	**4.5**	**16.9**
Developing Asia	**58.5**	**—**	**20.0**	**3.7**	**17.9**

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

Sources: ADB calculations using data from CEIC Data Company (accessed October 2025); Haver Analytics (accessed October 2025); UN Tourism Statistics Database, October 2025. https://www.e-unwto.org (accessed November 2025); and official sources (accessed October 2025).

Asian Economic Integration Report 2026

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