

ASIAN ECONOMIC INTEGRATION REPORT 2022

ADVANCING DIGITAL SERVICES TRADE
IN ASIA AND THE PACIFIC

FEBRUARY 2022



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On the cover: Fast-paced digitalization has been spurring the growth of services trade in recent years, with the COVID-19 pandemic accelerating this process. Digitally deliverable services are growing in importance, underscoring the need for enabling policies and regulations, especially in Asia and the Pacific.

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FOREWORD

Testing times in the first year of the coronavirus disease (COVID-19) pandemic continued through 2021, restricting life and livelihoods in Asia and the Pacific. While in some ways economic recovery has exceeded expectations, especially for merchandise trade and cross-border investment, its uneven pace amid varying progress of vaccine rollouts and the constant threat from virus mutations tempers prospects. Moreover, many hard-won gains in reducing poverty are still lost.

This double-edged reality gives greater reason to focus on the continuing achievements and potential of regional economic integration and cooperation to boost inclusive economic growth. Another year into the pandemic, the Asian Economic Integration Report (AEIR) 2022 describes a region that has more experience in tackling pandemic hardships, better data showing positive integration trends, and greater confidence in the power of cooperation to address shared concerns. Regional initiatives are navigating the health crisis and significant issues like climate change, while holding course for promoting inclusive economic growth through partnerships in trade, investment, finance, movement of people, and the benefits of digitalization. The updated Asia-Pacific Regional Cooperation and Integration Index also shows continued positive trends of regional cooperation efforts, including in areas of new technology and digital connectivity and environmental sustainability.

The report's theme chapter explores the implications for developing Asia from the acceleration of digital services during the pandemic, focusing on services delivered across borders and the promise of regional cooperation to boost participation in digital services trade and spread its benefits evenly. Mobility restrictions and physical distancing policies have jolted firms into leveraging digital technologies in ways that arguably are bringing more and faster changes to economies in Asia and the Pacific than other regions, and intensifying Asia's first-mover advantage in such sectors as business processing and outsourcing. With this, the cost of services trade is falling, opening the window of opportunity for disadvantaged groups to access affordable new services delivered digitally.

To maximize the economic gains from digital services trade, economies need to make their people better equipped with digital skills and knowledge, expand information and communication technology infrastructure, and nurture enabling environments through policy and regulatory reforms. Regional cooperation can bring together national efforts to reduce barriers to digital services trade by harmonizing rules and standards—with free trade agreements offering pivotal support—while strengthening consumer protection and cybersecurity, closing digital divides, and facilitating data flows.

An encouraging sign amid global economic slowdown is regional trade linkages and value chains holding strong, buoyed in part by the early recovery of the People's Republic of China and deepening industrial interlinkages in high and medium technology sectors.

Tourism, so vital for many economies, remains challenging amid the dearth of arrivals. Effective worldwide vaccination campaigns will be key to gradual reopening and tourism recovery. Health and safety protocols such as cross-border travel requirements will need to intensify to manage tourism flows safely, while regional cooperation is also a priority to ensure secure reopening of travel routes.



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DEFINITIONS

The economies covered in the Asian Economic Integration Report 2022 (AEIR 2022) are grouped by major analytic or geographic group.

- Asia and the Pacific refers to the 49 regional members of the Asian Development Bank. It includes Australia, Japan, and New Zealand, in addition to the 46 developing members.
- Subregional economic groupings are listed below:
 - Central Asia comprises Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
 - East Asia comprises Hong Kong, China; Japan; Mongolia; the People’s Republic of China; the Republic of Korea; and Taipei, China.
 - South Asia comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
 - Southeast Asia comprises Brunei Darussalam, Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.
 - The Pacific comprises the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Nauru, Niue, Papua New Guinea, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.
 - Oceania includes Australia and New Zealand.

Unless otherwise specified, the symbol “\$” and the word “dollar” refer to the United States dollars, and percent changes are year-on-year.

ABBREVIATIONS

ADB	Asian Development Bank
AEIR	Asian Economic Integration Report
AI	artificial intelligence
APEC	Asia-Pacific Economic Cooperation
APSI	Action Plan of SASEC Initiatives
APVAX	Asia Pacific Vaccine Access Facility
ARCII	Asia-Pacific Regional Cooperation and Integration Index
ASEAN	Association of Southeast Asian Nations (Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam)
ASEAN+3	ASEAN plus Japan, the People's Republic of China, and the Republic of Korea
ATIGA	ASEAN Trade in Goods Agreement
BaTIS	Balanced Trade in Services
BIS	Bank for International Settlements
BOP	balance of payments
CapEx	capital expenditure
CAREC	Central Asia Regional Economic Cooperation
CGE	computable general equilibrium
CGFS	Committee on the Global Financial System
COVAX	COVID-19 Vaccines Global Access
COVID-19	coronavirus disease
CPIS	Coordinated Portfolio Investment Survey
CPRO	Countercyclical Support Facility COVID-19 Pandemic Response Option
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CWRD	Central and West Asia Department
DEA	Digital Economy Agreement
DEPA	Digital Economy Partnership Agreement
DST	digital services taxes
DSTRI	Digital Services Trade Restrictiveness Index
DVA	domestic value added
EARD	East Asia Department
ESCC	Energy Sector Coordinating Committee
EU	European Union (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden)
FDI	foreign direct investment
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product

GDPR	General Data Protection Regulation
GMRA	Greater Mekong Railway Association
GMS	Greater Mekong Subregion
GST	goods and services taxes
GVC	global value chain
HS	Harmonized System
ICT	information and communication technology
ILO	International Labour Organization
IMF	International Monetary Fund
IT	information technology
KNOMAD	Global Knowledge Partnership on Migration and Development
Lao PDR	Lao People's Democratic Republic
M&A	merger and acquisition
MFN	most-favored nation
MRIOT	Multi-Regional Input–Output Tables
NIE	newly industrialized Economy
NPL	nonperforming loan
OECD	Organisation for Economic Co-operation and Development
PRC	People's Republic of China
PSRO	product-specific rules of origin
RCA	revealed comparative advantage
R&D	research and development
RCEP	Regional Cooperation Economic Partnership
RCI	regional cooperation and integration
RIF	regional investment framework
ROO	rules of origin
ROW	rest of the world
RTA	regional trade agreement
RVC	regional value chain
SASEC	South Asia Subregional Economic Cooperation
SDG	Sustainable Development Goal
SPS	sanitary and phytosanitary
TA	technical assistance
TBT	technical barriers to trade
TISMOS	Trade in Services data by Mode of Supply
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNWTO	United Nations World Tourism Organization
US	United States
USMCA	United States–Mexico–Canada Agreement
VAT	value-added tax
VIX	volatility index
WHO	World Health Organization
WTO	World Trade Organization

HIGHLIGHTS

Fragile, Uneven Recovery amid the Pandemic

- **Asia and the Pacific saw fragile, uneven recovery in cross-border economic activities and movement of people in 2021, and the recovery momentum has weakened due to the Omicron variant.** Merchandise trade, cross-border investment, capital flows, and international remittances have improved markedly since the latter half of 2020. But trade in services, particularly non-digital services, and movement of people are still sluggish due to the ongoing pandemic and emergence of new coronavirus disease (COVID-19) variants. Although ramped up across the region and elsewhere, the varying progress of vaccination underlies the uneven pace of recovery in cross-border transactions, investments, and movement of people. Sustained economic recovery post-COVID-19 requires stronger regional cooperation particularly through information sharing and other health control measures (such as cross-border travel requirements, and vaccinated travel lanes) to prevent flare-ups. Revamping social and economic infrastructure in such areas as health care, supply chains, and mitigation of climate change risks will be priority agendas for an inclusive and sustainable recovery.
- **The latest regional integration estimates suggest that regional integration trends in Asia and the Pacific remain positive.** The region reported a 7% increase from 2006 to 2019 in the Asia-Pacific Regional Cooperation and Integration Index. In the new technology and digital connectivity dimension, Asia and the Pacific displays the highest performance among all regions, reflecting wider internet penetration, increased information and communication technology (ICT) goods trade and research collaboration. Asia's performance in environmental cooperation is comparable with other developing regions, with the estimated level now close to three-quarters of the European Union (EU) and North America, the top performing regions. In 2019, people and social integration, regional value chains, and infrastructure and connectivity dimensions were the main drivers of regional cooperation and integration (RCI) progress in Asia and the Pacific. The region's performance is similar to the EU in areas of regional trade, investment, and value chain participation, while gaps remain for money and finance. RCI performance continues to vary widely across the Asian subregions, with East Asia and Southeast Asia showing the highest integration. Subregional gaps in trade and investment, infrastructure and connectivity, and people and social integration remain high, while the divide in technology and digital connectivity within the region has narrowed.

Trade and Global Value Chains

- **Asia's merchandise trade continued to grow rapidly in 2021, after demonstrating strong resilience amid the pandemic in 2020.** After bottoming out in mid-2020 during the first wave of the pandemic, Asia's merchandise trade recovered faster than expected in 2021. Trade growth accelerated at double-digit rates, reaching 19.7% by June before settling down to 9.7% in September 2021. The steep rebound was underpinned by the release of pent-up demand supported by macroeconomic stimulus programs and economic recovery around the globe along with gradual progress in vaccine rollout in the region. The relatively early success of containing the pandemic in several major Asian economies also helped the region to become the supply hub of medical supplies and consumer

goods and boosted its merchandise exports to the world. Yet, the uneven pace of vaccine rollout across the region and the spread of new virus variants remain a significant downside risk to continued trade recovery. Amid such persistent uncertainties, the region should intensify efforts to embrace liberal trade and investment regimes. The Regional Comprehensive Economic Partnership (RCEP), the largest mega trade agreement, is expected to help spur the region's trade growth. To magnify its trade creation effect, policy makers could also consider activating the built-in work plan of the agreement. This can cultivate RCEP's potential as a "living document" by deepening its commitment and expanding its coverage further in the future.

- **The pandemic has not slowed the deepening of intraregional trade linkages and regional value chains.** The region's intraregional trade share rose to 58.5% in 2020 from 57.5% in 2019. This was driven mainly by the early recovery of the People's Republic of China (PRC) from the pandemic, which led to a surge in its exports and spilled over to other economies in the region with strong trade linkages with the PRC. Excluding the PRC, the region's intraregional share rather slipped to 38.2% in 2020 from 38.4% in 2019. At the subregional level, intraregional trade linkages strengthened for East Asia, South Asia, and the Pacific and Oceania, with South Asia demonstrating the largest increase in its intraregional trade share to 40.5% in 2020 from 38.9% in 2019. Asia's global value chain (GVC) participation declined in 2020 in tandem with the similar decline of the world's GVC participation. Nevertheless, its regional value chain linkages strengthened further in 2020 during the pandemic thanks to its supply chain linkages with the PRC and deepening value chain linkages in high- and medium-technology sectors.
- **Supply chain bottlenecks associated with partial disruptions in production capacity and logistics logjams during the pandemic continue to weigh on the global and regional trade outlook.** Global shipping costs have risen sharply since mid-2020 due to excess demand for manufacturing goods, rising input costs, flawed performance of integrated logistics functions including inland trucking, and quarantine requirements for port workers. Proactive solutions such as operationalizing tracking technologies and the digitized trade and transport management system, expanding competition in port operations, and making systemwide investments throughout the logistics chain, from ports to warehouses to inland transport, can help ease the problems. While semiconductors are an essential component of electronic devices, enabling communications, computing, health care, transportation, clean energy, and countless other applications, their production capacities are highly specialized and geographically concentrated, exposing the sector to extreme vulnerabilities to potential supply chain disruptions. Further diversification of their supply chains and utilization of just-in-case inventory management are becoming increasingly popular among businesses. To meet ever growing demand for semiconductors, governments should nurture an enabling environment for the expansion of research and development (R&D) and capital investments, and skills development for materials scientists and electronic engineers.

Cross-Border Investment

- **Despite the pandemic's impact on global foreign direct investment (FDI), inward FDI to the region has been relatively resilient.** Global FDI declined by 34.7% in 2020 based on balance of payments data—even lower than at the height of the global financial crisis. FDI into Asia and the Pacific, however, slipped by only 1.3% in 2020. The region remains an attractive investment destination, accounting for 53.6% of global FDI. East Asia and Southeast Asia were the largest recipients in the region, attracting roughly 80% of Asia's inward FDI. Nevertheless, greenfield projects, which are typically aimed at input and labor-intensive activities such as in primary and manufacturing sectors, were hit hard by the pandemic. Greenfield FDI into Asia and the Pacific declined by 37.9% in 2020, driven by a 75.8% drop in the primary sector. In contrast, deal values for mergers and acquisitions (M&As) in Asia posted 38.7% annual growth, boosted by M&As in manufacturing and services which increased 51.0% and 31.2%,

respectively. The first half (H1) of 2021 saw slow recovery in greenfield investment and a steady improvement in M&As in the region. Meanwhile, Asia's outward FDI also dipped, falling 14.2% in 2020 over the previous year. The recovery prospects for inward FDI remain uncertain as announced greenfield investments continue to decline. Supply chain disruptions due to recurrent pandemic waves and restrictive FDI measures may hamper FDI growth. As such, phasing out the restrictive investment policies enacted during the pandemic may allow the region to counter these challenges.

- **FDI is increasingly important for fostering digital services trade in the region.** Digitalization is fundamentally transforming how firms, in particular digitally intensive multinational enterprises, operate and invest overseas with less need for physical presence and faster speed of business transactions. Asia and the Pacific stands out as an important hub of digital services FDI, particularly for financial and insurance services; information, computer, and telecommunications; and other business services. The trend is increasingly driven by investments in fintech, digital payments, data processing and hosting, cloud computing, professional and technical services, among others. On average, 24% of FDI into the region from 2003 to 2020 went into digital services, with East Asia and South Asia the main destinations. Greenfield FDI in Asia's digital services was particularly resilient during the pandemic, contracting by 9.7% in 2020 compared with the 57.9% plunge in FDI for non-digital services and 28.6% for manufacturing FDI. Restrictions on FDI in Asia's digital services sectors, such as legal and professional services, remain stricter than for non-digital services, mostly in the form of limitations on foreign equity and ownership. This, together with differences in FDI regulations across Asia and the Pacific, may hamper foreign firms' investment decisions in the region. To encourage FDI in digital services sectors, Asian economies should embed investment policy frameworks in national digital plans and services development strategies. Relevant investor criteria, such as digital infrastructure, digital regulatory barriers, ICT skills, and investment protection in regard to intellectual property rights, should be incorporated in FDI strategies for digital services. Investment promotion agencies, digital clusters, and digital special economic zones fit this purpose.

Financial Integration

- **An accommodative macroeconomic policy environment and broadening vaccine rollouts buttressed the economic recovery and stable financial conditions in 2021, but considerable uncertainties remain.** Financial markets were much calmer in H1 2021 than throughout 2020. Supportive fiscal and monetary policy measures and vaccination rollout lifted growth prospects for the region and kept financial conditions favorable. However, risks loom as high inflation will prompt advanced economies including the United States (US) to normalize monetary policy earlier than expected, which could tighten global liquidity conditions and trigger capital outflows from emerging and developing economies, including those in Asia and the Pacific. A sudden large capital flow reversal and weakening of the region's currencies could instigate financial instability. The ongoing financial woes of the PRC property and housing sector add to the concern given uncertainties over the risk of domestic and cross-border financial spillovers. The emergence of the Omicron variant and its possible impact on the global economy also poses a significant risk to financial stability.
- **In 2020, Asian investors continued to invest more outside the region than inside.** Around two-thirds of Asia's asset and liability holdings were placed in economies outside the region. In addition, almost half of Asia's international debt liabilities were denominated in US dollars as of the end of 2020, while 63% of the region's debt assets are denominated in US dollars. The greenback's dominance in Asia's cross-border investment holdings and liabilities could lead to several risks including the impact of US monetary policy spillover effects on global liquidity, as well as balance sheet and welfare effects of large exchange rate fluctuations between the US dollar and local currency.

- **Foreign capital inflows in Asia and the Pacific continued to increase in 2021.** Nonresident capital inflows in the region increased in 2020 to \$1.6 trillion from \$1.2 trillion in 2019, mainly due to increases in other accounts payable, currency and deposits, as well as debt inflows including portfolio debt and loans. In contrast, equity inflows including FDI and portfolio equity decreased by 30% in 2020, compared with 2019. Extraordinary policy support in the region and elsewhere strengthened this rebound in nonresident capital inflows in 2020, following foreign capital outflows at the onset of the pandemic. However, the volatility of capital inflows inched higher in 2020 as volatilities for loans and portfolio inflows intensified. Nonresident capital inflows continued to increase in 2021, reaching around \$372 billion for selected Asia and Pacific economies in the second quarter (Q2) of 2021, a 175% increase from Q2 2020. Nonetheless, volatility of nonresident capital inflows for selected economies in the region increased slightly in H1 2021 compared with H1 2020. Emerging trends and patterns of capital inflows and their compositions offer the key to assessing the likely impact of changes in capital flow drivers and forging policy responses.

Movement of People

- **The COVID-19 pandemic continues to transform international migration and the mobility of people.** The pandemic did not alter the upward trajectory of the global stock of migrants, which increased to 280.6 million in 2020 from 248.0 million in 2015—migrants from Asia and the Pacific reached 93.0 million. However, the economic repercussions of the pandemic curtailed the flow of migrant workers out of the region, especially from Central Asia and South Asia. Intraregional migration, accounting for one-third of total migrant movement in Asia and the Pacific, is especially prevalent for Asian migrants in East Asia, the Pacific and Oceania, and Southeast Asia. As economies reconfigure their approach to post-pandemic cross-border mobility, it is important to accelerate the pace of vaccination rollout, scale up disaster-preparedness initiatives, and leverage regional cooperation initiatives on migration facilitation through bilateral and regional labor agreements. These could help capitalize on migrants' contribution to global and regional economic recovery.
- **Remittance inflows to Asia and the Pacific declined by only 2.0% in 2020 and are estimated to grow by 2.5% in 2021.** Global remittance inflows reached \$705.5 billion in 2020, a 2.3% decline from \$722.2 billion in 2019—Asia and the Pacific received \$314.4 billion in 2020. Remittance inflows to all subregions declined by varying degrees in 2020, except the Pacific and South Asia which grew by 14.4% and 5.2%, respectively. Along with altruism, factors including fiscal stimulus in migrant host economies, tax- and related incentives, increased use of digital channels, and local currency depreciation in home economies encouraged migrants to remit amid the pandemic. Facilitation of the use of formal channels also enhanced the capture of remittance data. In 2020, Bangladesh, India, Pakistan, the Philippines, and the PRC were among the top remittance recipients in Asia and the Pacific, and globally, accounting for \$225.4 billion or 32.0% of global and 71.7% of total regional remittance inflows when combined. Remittances as a share of gross domestic product (GDP) is significantly high in some economies in Central Asia and the Pacific such as Georgia, the Kyrgyz Republic, Tajikistan, Tonga, and Samoa. The average cost of remitting to Asia and the Pacific has been declining but remains higher than the Sustainable Development Goal of less than 3% to be reached by 2030 at 5.9%. Data for H1 2021 showed continued recovery in remittance flows to the region. Remittances to all subregions except East Asia are expected to register a 2.5% growth in 2021.
- **The pandemic has hit tourism in Asia and the Pacific hard, and establishing recovery momentum remains challenging given the recurrent outbreaks.** The last 2 years have seen the pandemic wreak havoc on global tourism. International tourism arrivals dropped by 72.6% globally in 2020 over 2019, which snowballed into a \$1.3 trillion loss in tourism revenues and over \$2 trillion decline in global GDP. In Asia and the Pacific, international arrivals dropped 82.8% and tourism revenues by 66.4%, relative to the pre-pandemic average in 2015 through 2019.

Major revenue losses due to low tourist arrivals were led by the Pacific, East Asia, and Southeast Asia, though other subregions were also badly hit. Tourism indicators in 2021 suggest that arrivals remain deeply stunted, but there are signs of optimism as vaccination programs pick up and economies cautiously reopen borders at a varying pace. Government support in particular, restoring travel confidence and use of technology to facilitate travel and follow health protocols could support the recovery of tourism. In some economies, government assistance focused on jump-starting the industry as the pandemic prolonged. Priority was therefore put on the resumption of domestic tourism prior to opening borders to international visitors. Restoring travel confidence among domestic tourists and potential international visitors with emphasis on hygienic health-care protocols is the new norm. Use of big data to formulate tourism policy and technological innovations for contactless tourism services are becoming popular to safely manage tourism flows in an economy. Regional cooperation across all these areas is important to overcome challenges in systematic planning and implementation toward recovery and greater resilience of the tourism sector.

Theme Chapter: Advancing Digital Services Trade in Asia and the Pacific

- **Rapid digitalization is bringing down barriers to services trade.** Globalization of the services sector in recent decades supported by the so-called third unbundling offers new opportunities for international division of labor with major implications for labor markets. Intensification of digitalization since the COVID-19 pandemic began has accelerated this phenomenon. Digital technology has also allowed access to a new range of products and services. This process may not be fully reversed post-pandemic and represents a structural shift in services transactions for the region and globally.
- **Digital services trade has expanded thanks to the digitization of a wide range of services with the support of ICT applications and data-driven solutions.** Digitally deliverable services are gaining traction compared with trade in services based on face-to-face interactions, with the help of rapidly developing digital technologies and the growing prevalence of “untact” transactions (without face-to-face encounters) in the provision of cross-border services.
- **Asia and the Pacific is at the forefront of digital services trade with the highest regional growth.** From \$403.4 billion worth of digitally deliverable services trade in 2005, the region has witnessed its trade more than tripled, achieving over \$1.4 trillion in 2020. The region is also a substantial and growing digital services partner with other regions. The region is also showing rapid growth in the relative share of digital services trade in total services trade. The data confirm a fast-growing share of digital services in Asia’s total services export basket from 36% to 48% and from 34% to 39% for imports between 2005 and 2019. An empirical analysis suggests digital services trade could contribute to the growth of both GDP and gross national income per capita.
- **The region has yet to narrow the gap with respect to the global average.** Cross-economy analysis reveals the region is still far behind other advanced economies such as the EU and North America in the share of digital services exports out of total goods and services exports, which translates into lower revealed comparative advantage for the region. While some economies in South Asia and Southeast Asia excel other regional peers for industrial competitiveness in such sectors as business process outsourcing and information technology (IT) and telecommunication services, many economies in the region are still at a nascent stage of developing financial, professional, and business services.
- **In closing the gap with advanced economies in the competitiveness of digital services trade, the region needs to focus particularly on policy reforms.** Among others, (i) human capital development, (ii) digital

connectivity, (iii) ICT investment, and (iv) an enabling policy and regulatory environment all underpin the competitiveness of digital services. The length of education is associated with greater trade in digital services. The importance of upskilling and reskilling the workforce cannot be overstated, especially considering the skill-contingent barriers to the uptake of digital technology. Digital technologies are also the bedrock of fostering innovation among small and medium-sized enterprises to help them become competitive providers of digital services. Developing Asia's digital services exports hinge largely on the availability, accessibility, and affordability of high-quality broadband services. The region's rapid growth of mobile penetration bodes well on this front. Finally, supportive internet regulations could enable economies even with low digitalization to better reap the benefits of digital services trade.

- **Scenario (or policy) analysis points to clear positive impact on digital services trade from trade liberalization and deregulation of digital services.** Lowering trade barriers and deregulation lead to gains in both backward and forward GVC participation in manufacturing and services. More importantly, both policy moves could increase real incomes in regional economies, with deregulation generating much larger gains. From a welfare perspective, this implies the importance of considering nondiscriminatory regulatory reduction measures in addition to international trade policy reforms. Efforts to liberalize the policy environment should therefore embrace reforms in the domestic market.
- **There are many potential synergies between digital services trade and other sectors of the economy.** Growth in e-commerce for merchandise goods creates opportunities for digital services exports such as financial services and logistics. Manufacturing growth provides opportunities for embedding digital services and applications in manufacturing exports, enabling indirect exports of digital services. Given the prevalence of cross-border business-to-business (B2B) activity in digital services, access to digital services imports, including from foreign digital platforms, could still be a significant future facilitator of digital services exports, both directly and indirectly embedded in merchandise exports.
- **Data-related policies could also have significant impact on digital services trade.** Using a unique data set that traces the development of the policy measures in 64 economies, this chapter assesses which of the restrictions on (i) data localization policies, (ii) local storage requirements, and (iii) conditional flow regimes are driving the identified negative impact of trade in digital services for Asia and the Pacific and the rest of the world. The results show that data localization and local storage requirements cause negative trade results in digital services but that the role of conditional flow regimes is more complex. While many data flow restrictions are adopted and implemented from legitimate policy perspectives such as protection of privacy and personal data, and protection against the threat to cybersecurity, economies need to weigh their positive effects against their negative impact on digital trade flows.
- **Assessing the social and welfare impact of digital services trade requires examining impacts on household incomes and prices.** Expansion in digital services trade could help poverty reduction and welfare improvement given the overall positive impact on wages and cost reductions. Besides the potential replacement of traditional services jobs by technological solutions, worsening income inequality among those with different skill sets as well as potentially yawning divergence between urban and rural households remain concerns. This requires policy makers' continued attention to the sector, geographic, and gender distribution effects of the benefits from digital services trade.
- **Global trade rules and provisions in bilateral and regional trade agreements provide an emerging international regulatory framework governing trading conditions.** Although more and more digital-trade-specific trade agreements are expected to emerge, strengthened efforts are called for to come up with clearer guidelines for digital services trade and digital trade at large. World Trade Organization (WTO) negotiations also offer an opportunity for

progress on digital services market access. WTO members in Asia and the Pacific should also consider joining the WTO plurilateral Joint Statement Initiative on Services Domestic Regulation as a commitment to adopt and ensure good regulatory practice that will help cut trade costs, including for digital services.

- **Regulatory cooperation can encourage interoperability of divergent digital regulatory approaches.** By adopting common standards, economies can reduce redundant efforts, minimize technical duplication, and promote a higher level of interoperability, which could help lower trade costs. By recognizing regulatory outcomes in trading partners voluntarily or through mutual arrangement, economies can support cross-border trade in services. Mutual recognition agreements need to be designed in an open and transparent manner and should offer due process that guarantees access to any party wishing to join. Digitalization brings more convenience but could entail greater vulnerabilities in security and pursuant economic and social costs. The importance of putting in place an appropriate risk management system against cybersecurity crimes cannot be overemphasized. The interoperability of cybersecurity frameworks should be enhanced while reducing the cost of regulatory frictions.
- Governments need to continue efforts to nurture the enabling environment for digital services trade.
 - **The ability to tap export opportunities for digital services depends on having capacity to leverage specific strengths and conditions.** Partnership between government and industry is critical in this regard. Governments will need to keep pace with emerging needs in digital services sectors, investing in ICT infrastructure and specialized skills and updating regulatory regimes to fit the digital economy. Greater preparedness for experimentation, the embracing of opportunities to pilot and test applications, and adoption of a regulatory approach that encourages risk-taking can help economies to develop digital services sectors.
 - **Even if economies fall short in some areas of digital readiness, they can still succeed as digital services exporters.** This requires leveraging strengths, for example, first mover advantage in such services as IT-business process outsourcing, a well-established and vibrant IT services industry, and domestic demand for apps and solutions to develop digital services exports. Economies can also convert disadvantages such as remoteness, geography, and a small domestic market into opportunity by targeting niche markets and using those as experimentation ground.
 - **Participation in digital services trade can be a building block for social and economic convergence within and across economies.** This is attainable by creating jobs and increasing incomes, empowering less advantaged sections of society; by supporting financial inclusion; increasing access to health and education: by improving productivity; and lowering trade costs. To ensure that digital services trade makes such benefits possible, while avoiding aggravation of inequities during the process of digital transformation, it is vital that governments' overall approach to the digital economy includes dedicated focus on digital access and inclusiveness.
 - **Economy case studies highlight the scope for digital services trade to facilitate the integration of economies into global and regional markets.** Bilateral and regional agreements need to focus more on digital services in their chapters and provisions on economic and regulatory cooperation, e-commerce, R&D, investment, and mobility of people, as well as in their commitments under the General Agreement on Trade in Services (such as market access and national treatment) including in sectors such as financial and business services.
 - **Governments need to weigh carefully the pros and cons of data transfer restrictions.** Greater cooperation on standards, interoperability, and dialogue with businesses and industry associations are needed to design policies to balance national security and sovereignty concerns without undermining commercial opportunities.

As digital services trade has social and economic implications, restrictions on cross-border data transfers could have repercussions on the realization of development benefits, which needs to be properly gauged against other policy objectives.

- **The new agreement on international tax rules could pave the way for fair taxation on digital services.** Economies should consider the benefits and risks of digital services taxes and other unilateral measures, as they could trigger bilateral trade frictions and prompt compensatory measures and deter investment. In the meantime, rules to ensure effective collection of indirect taxes value-added tax or goods and services tax on imported digital services have gained traction. International cooperation will be essential to adapt and design domestic legislation, ensure the exchange of information for tax purposes, and develop mechanisms for dispute prevention on taxation for the implementation of new tax frameworks.
- **The biggest challenge ahead for digital services trade is regulation which, though evolving, lacks transparency, predictability, and appropriate scope in many economies.** Regular regulatory reviews, including in consultation with services industry stakeholders, and reforming domestic regulatory practices consistent with international benchmarks, principles, and frameworks should be undertaken.

Asian Economic Integration Report 2022

Advancing Digital Services Trade in Asia and the Pacific

Another year into the coronavirus disease (COVID-19) pandemic, this report describes an Asia and Pacific region that has more experience in tackling pandemic hardships, better data showing positive integration trends, and greater confidence in regional cooperation to address shared concerns. As rapid digitalization and the COVID-19 pandemic are spurring growth of digital services trade in Asia and the Pacific, the theme chapter explores how the region can capitalize on greater opportunities for digital services trade through structural reforms and international cooperation.

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ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.



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