# ASIAN ECONOMIC INTEGRATION REPORT 2021

## MAKING DIGITAL PLATFORMS WORK FOR ASIA AND THE PACIFIC

FEBRUARY 2021

ASIAN DEVELOPMENT BANK

ADB

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# FOREWORD

The coronavirus disease (COVID-19) pandemic disrupted both supply and demand sides of an interconnected world economy during 2020. Asia and the Pacific was not immune. Lockdowns and travel and trade restrictions affected nearly all aspects of cross-border economic activity. Trade was hit hard as demand fell. Global supply chains were forced to adapt. Foreign direct investment slowed. Financial vulnerabilities were heightened. Overseas migration and worker remittances were severely disrupted. And tourism, important to many of the region's economies, was particularly hard hit.

The *Asian Economic Integration Report (AEIR) 2021* examines the initial impact on trade, investment, finance, and people's mobility across the region as the pandemic struck. The report looks at how regional economies individually or collectively respond to the crisis by, for example, leveraging rapid technological progress, digitalization, and increasing services trade to reconnect and recover. Although the pandemic is not over yet, the Asia and Pacific region has demonstrated a great deal of resilience, due in part to authorities' swift policy responses and regional cooperation efforts. And it suggests how better managing globalization and regional integration could help seize the potential opportunities as economies gradually recover in a post-COVID-19 environment.

The report also uses ADB's Asia-Pacific Regional Cooperation and Integration Index (ARCII) to help explain the state of regional cooperation and integration in Asia, across subregions, and in comparison to other regions in the world. Reflecting the growing importance of the digital economy and environmental sustainability for the region's cooperation efforts, this year's ARCII adds two new dimensions to the index: (i) technology and digital connectivity, and (ii) environmental cooperation and regional public goods. It also analyzes how a country's geographic position influences its level of regional integration.

This year's AEIR theme chapter is on digital platforms and how they can accelerate digital transformation across the region. Digital platforms continue to transform the way we work, socialize, and create economic value. While digital transformation shows great speed and adaptability during the pandemic, new risks and challenges such as digital divide and cybersecurity issues come to light. This underscores the importance and urgency for policies and regulations that can manage the disruptions and maximize gains from the digital economy. These range from widening access to promoting digital inclusion, e-health, and online learning, to ensuring data privacy and security, fighting cybercrime, and preventing cyberattacks, among others. While coordination among national agencies is critical, regional cooperation needs will only grow in importance on critical issues such as data transfer, taxation, and the financing needed to boost support for sustainable and inclusive digital development.

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# DEFINITIONS

The economies covered in the *Asian Economic Integration Report 2021* (AEIR 2021) are grouped by major analytic or geographic group.

- Asia refers to the 49 Asia and Pacific members of the Asian Development Bank (ADB), which includes Japan and Oceania (Australia and New Zealand) in addition to the 46 developing Asian economies.

- Subregional economic groupings are listed below:

  - Central Asia comprises Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
  - East Asia comprises the People's Republic of China; Hong Kong, China; Japan; the Republic of Korea; Mongolia; 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 US dollars, and percent changes are year-on-year.

# ABBREVIATIONS

| | |
|---|---|
| ABEC | Almaty-Bishkek Economic Corridor |
| ADB | Asian Development Bank |
| AEIR | Asian Economic Integration Report |
| AMRO | ASEAN+3 Macroeconomic Research Office |
| APTA | Asia-Pacific Trade Agreement |
| 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 |
| BIS | Bank for International Settlements |
| BIT | bilateral investment treaty |
| BOP | balance of payments |
| CAREC | Central Asia Regional Economic Cooperation |
| CITA | CAREC Integrated Trade Agenda |
| COVID-19 | coronavirus disease |
| CMIM | Chiang Mai Initiative Multilateralization |
| CPIS | Coordinated Portfolio Investment Survey |
| CPMM | CAREC corridor performance measurement and monitoring |
| CPTPP | Comprehensive and Progressive Agreement for Trans-Pacific Partnership |
| CTC | change of tariff classification |
| CWRD | Central and West Asia Department |
| DVA | domestic value added |
| EARD | East Asia Department |
| ECD | economic corridor development |
| EU | European Union (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, Sweden, and the United Kingdom) |
| EUA | euro area (Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia, and Spain) |
| FDI | foreign direct investment |
| FSI | financial stress index |
| FVA | foreign value added |
| FTA | free trade agreement |
| GATT | General Agreement on Tariffs and Trade |
| GDP | gross domestic product |
| GFC | global financial crisis |
| GMRA | Greater Mekong Railway Association |
| GMS | Greater Mekong Subregion |
| GVC | global value chain |

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| HPV | human papillomavirus |
| IATA | International Air Transport Association |
| ICT | information and communication technology |
| IIA | international investment agreement |
| IIP | international investment position |
| ILO | International Labour Organization |
| IMAR | Inner Mongolia Autonomous Region |
| IMF | International Monetary Fund |
| ISD | investor–state dispute |
| IT | information technology |
| KNOMAD | Global Knowledge Partnership on Migration and Development |
| Lao PDR | Lao People's Democratic Republic |
| M&A | merger and acquisition |
| MSMEs | micro, small, and medium-sized enterprises |
| MW | megawatt |
| NPL | nonperforming loan |
| OECD | Organisation for Economic Co-operation and Development |
| PARD | Pacific Department |
| PCV | pneumococcal conjugate |
| PRC | People's Republic of China |
| RCEP | Regional Cooperation Economic Partnership |
| RCI | regional cooperation and integration |
| RDV | returned domestic value-added |
| RIF | regional investment framework |
| RKSI | Regional Knowledge Sharing Initiative |
| ROW | rest of the world |
| RVA | regional value chain |
| SARD | South Asia Department |
| SASEC | South Asia Subregional Economic Cooperation |
| SASEC OP | SASEC Operational Plan |
| SMEs | small and medium-sized enterprises |
| SEZ | special economic zone |
| SPS | sanitary and phytosanitary |
| TA | technical assistance |
| TAD | temporary admission document |
| UK | United Kingdom |
| UN | United Nations |
| UNWTO | United Nations World Tourism Organization |
| US | United States |
| VII | Vaccine Independence Initiative |
| VIX | volatility index |
| WTO | World Trade Organization |

# HIGHLIGHTS

## Managing Globalization and Regional Integration Post-COVID-19

- **The coronavirus disease (COVID-19) pandemic has weighed heavily on health and economic systems worldwide; it severely disrupted Asia's cross-border trade and economic activities, and exposed vulnerabilities of global supply chains.**[a] Yet, Asia immensely benefited from open trade and investment, with the region's export-driven growth strategy and attractiveness to foreign direct investment (FDI) lifting millions out of poverty over half a century. The ongoing pandemic also highlights the benefits of rapid technological progress, digitalization, and increasing services trade in connecting the global economy even closer and providing new forms of global linkages. Intensifying these structural changes can be the basis of robust, resilient, and sustainable economic recovery. More so, the crisis creates an opportunity for greater global and regional cooperation to (i) contain and suppress COVID-19; (ii) strengthen global supply chains for essential commodities (including food, medical supplies, and vaccines); and (iii) make the world safer from natural hazards and pandemics by investing in projects with high social impact and economic returns.

## The Challenging Trade Environment and Changing Global Value Chain Landscape

- **Asia's trade growth was hit hard by the pandemic amid contracting global demand; nevertheless, recent high frequency data indicate a tempered yet gradual recovery.** Having peaked in 2017, Asia's trade growth began to slow down in the second half of 2018. This came in the wake of rising trade tensions between the United States (US) and the People's Republic of China (PRC) along with continued moderation in global economic growth. Asia's merchandise trade volume already contracted 0.5% in 2019 after growing by 4.1% in 2018—a deeper slump than the 0.1% global trade contraction in 2019 (from 2.9% growth in 2018). By May 2020, Asia's trade in volume had contracted by 10.1% year-on-year (y-o-y). Nevertheless, high frequency indicators—such as global shipping and packaging indexes and port calls—and recent monthly trade data suggest Asia's trade growth could recover faster than anticipated. However, the persistent pandemic and risk of a double-dip recession could weigh on a sustained recovery. The region's intraregional trade share remained stable at 57.5% in 2019, above the 56.5% average over 2012–2018. This remains higher than North America (40.9%) and lower than the European Union (EU) (63.2%).

- **Asia has relatively strong regional value chain linkages—as measured by the regional value chain to global value chain intensity ratio.** After peaking in 2011–2013, global value chain expansion has been stagnating in recent years. The reshoring of supply chain networks to domestic economies, while only partial, could significantly reduce international trade compared with the status quo. By reshoring production networks, a country usually intends to decrease reliance on intermediate goods imports and outsourcing of production and process them locally instead.

[a] Asia refers to the 49 Asia and Pacific members of the Asian Development Bank (ADB), which includes Japan and Oceania (Australia and New Zealand) in addition to the 46 developing member economies.

Based on simulations using ADB's Multi-Regional Input–Output Tables—which can trace spillover impacts across trade supply chains—global trade is estimated to contract by 13%–22% when 10%–20% of overseas supply chains are reshored. The pandemic likely prompting an impetus to reengineer or diversify the existing supply chains, strengthening regional trade integration could help regional economies navigate the shifting global trade landscape to sustain trade growth. Against this backdrop, the region needs to embrace stronger trade liberalization and facilitation efforts, which includes pursuing trade agreements, in particular regional and mega trade deals.

## Riding the Pandemic Tide in Cross-Border Investments

- **Inward FDI to Asia slid by 7.7% in 2019 compared with 2018—at $510.5 billion, while global FDI increased by 3.0%; investment flows both globally and to the region will likely fall further in 2020.** The drop in Asia's inward FDI in 2019 resulted mainly from weakening global demand for electronics and automotive products, as well as persistent trade tensions between the US and the PRC. Yet in 2019, Asia's intraregional FDI share remained stable at 51.7%. An expected decline in reinvested earnings during the pandemic—accounting for about half of 2019 global FDI—will likely reduce FDI inflows in 2020. Asian economies were among the hardest hit globally in reduced FDI inflows during the first quarter of 2020. Greenfield investments and mergers and acquisitions (M&As) in the region declined by 35.2% and 27.8% y-o-y, respectively (compared with global contractions of 27.0% and 49.2%). Globally, as well as regionally, investments in coal, oil, and gas plunged significantly in the first quarter of 2020, as did investments in hotels and tourism. This was followed by real estate, leisure, entertainment, and transportation. Nevertheless, recent firm-level activity in M&As in the region shows signs of recovery during the second quarter, as countries started to reopen and ease some pandemic-related restrictions.

- **Asia's outward investment rose 4.3% in 2019—at $531.4 billion, it accounted for 40.5% of global outward investments; outward investment dropped in the first quarter of 2020.** Japan was the top source of global FDI in 2019, investing in the US, Australia, and Thailand, among others. Other top regional sources of global FDI were the PRC; Hong Kong, China; the Republic of Korea; and Singapore. Asia's outward investment was not immune to the pandemic impact. Firm-level data show Asia's outward greenfield investment and M&As declined y-o-y by 27.0% and 64.3%, respectively, in the first quarter of 2020. The PRC's investment in cross-border projects in transportation and warehousing, chemicals, and electronic components declined, as did Japan's M&A in pharmaceuticals. Nevertheless, Asia's outward FDI showed signs of a rebound in the second quarter of 2020, in particular for M&As. Globally, some countries have tightened FDI screening measures to safeguard key sectors from possible predatory takeovers amid the pandemic. While some were also intended to protect national security and public interest, FDI regulatory restrictions could hinder global FDI flows. While policy makers should be cognizant about potential investor–state disputes over policy measures taken in response to exceptional circumstances such as the pandemic, bilateral investment treaties could open more windows for new FDI inflows.

## Heightened Financial Vulnerabilities amid the Pandemic

- **COVID-19-induced economic slowdowns in the first quarter of 2020 led to a shift in investor risk appetite and increased financial volatility; this resulted in a flight to safety and tightened liquidity conditions for emerging market economies.** COVID-19 unraveled global financial markets in the first quarter of 2020, testing Asia's financial resilience. As liquidity conditions tightened and financial market stress emerged, by mid-March 2020 regional equity prices plunged by around 30% in several markets from their January values. Several of the region's currencies also weakened, while portfolio equity flows reversed—leaving an outflow of $57 billion—in the first

quarter of 2020. However, swift policy responses by authorities across the region (and globally) helped ease liquidity conditions and restored investor sentiment by June 2020. Nevertheless, the risks of tighter liquidity and waning investor risk appetite remained large in the latter half of 2020 amid the rising numbers of infections globally.

- **Asia's cross-border asset holdings and liabilities increased in 2019, following a slight dip in 2018; the region's investors continued to hold considerably more assets and liabilities outside the region than within Asia.** Faced with common global uncertainties and concurrent policy responses, the contribution of global shocks to variations in Asia's asset price returns rose sharply and remained larger than the share of regional shocks. Nevertheless, the extent to which external (both global and regional) shocks explain the variations of the local asset returns were relatively small compared with the 2008–2009 global financial crisis. As of the end of 2019, Asia's investors continued to hold considerably more non-regional assets and liabilities than regional ones, with two-thirds held in economies outside the region. This highlights the region's elevated financial market exposure to external growth prospects, investment sentiments, and liquidity conditions. Moreover, almost half of Asia's international asset holdings are denominated in US dollar, and 25% of its external liabilities are in US dollar. Focusing on debt stocks, the share of US dollar denomination is higher at 63% of the region's international assets and 50% of its liabilities. This reflects the dominance of the US dollar in the international financial system and the region's reliance on the US dollar for its cross-border trade and financial transactions.

- **The pandemic has revealed several looming financial risks that policy makers in the region should guard against to safeguard regional financial stability.** Although early financial market jitters were quickly quelled through swift and aggressive policy interventions, globally as well as regionally, the region's policy makers need to remain vigilant and monitor potential economic and financial risks. Policy responses, led by aggressive fiscal support during the pandemic—although necessary and appropriate—could accelerate debt accumulation across economies. This could possibly lead to a deterioration of debt quality post-pandemic. Risks associated with credit growth and debt accumulation by households and nonfinancial institutions could also threaten regional banking stability and undermine economic recovery. Furthermore, the pandemic exposed the Asian banking sector's structural vulnerability given the liquidity mismatches associated with increased international activity and a reliance on US dollar funding by non-US banks. These looming risks call for strengthening regional financial cooperation to safeguard the region's financial stability and resilience. While it is important to broaden and deepen local currency capital markets, the region needs to pursue further reforms and intensify efforts to strengthen financial safety nets.

## People Mobility Hampered by the Pandemic and Virus Containment Measures

- **The health and socioeconomic impact of the pandemic and virus containment measures are hurting cross-border migration. The international migrant stock increased to 271.6 million in 2019 from 248.9 million in 2015, of which Asia accounted for about one-third (90.3 million).** The pandemic upended the trend in 2020. Migrants from top source countries in Asia—including India, the PRC, Bangladesh, Pakistan, and the Philippines—were hit hard while job and income losses had dire consequences for their families back home. Mobility and travel restrictions in major destination countries—including the US, the Russian Federation, and Middle East countries—hampered economic activity and led to massive repatriation of unemployed migrants. There were also the concurrent challenges to traveling back home. Outward migration from Asia had steadily increased, with 64.8% of Asian migrants heading outside the region in 2019. This was led by migrants from South Asia (45.3%) and Southeast Asia (24.2%), especially among the region's skilled migrant workers, who continue to prefer developed countries and the Middle East over regional host economies. Meanwhile, intraregional migration remains an important source of international migration, especially for migrants in East Asia, Southeast Asia, Oceania, and the Pacific.

- **The pandemic breaks the growth momentum of international remittance inflows. Global remittance inflows reached $716.7 billion in 2019, up by $21.9 million over 2018.** Asia received $315.3 billion in 2019. Asia's largest remittance sources were the Middle East ($100.4 billion), North America ($78.0 billion), and Europe ($45.6 billion). As these face major economic downturns, recipient countries are bracing for the consequences of lower remittances in 2020—inflows are estimated to decline by 7.4%. The impact is acute—particularly for the economies in Central Asia and the Pacific that rely heavily on remittances, and those who receive the largest remittances in terms of absolute value, including India, the PRC, and the Philippines. Despite the expected drop due to the pandemic-induced global downturn and adverse impact on migrant workers, remittance inflows will likely remain the key source of external financing in Asia, along with other types of financial flows such as FDI and tourism receipts, which are expected to decline more.

- **Tourism has been particularly hard hit by the pandemic; extensive travel restrictions and the fear of infection led to a sharp fall in international tourist arrivals in Asia.** Assuming that most travel restrictions will remain in place until the end of 2020, ADB estimates that international tourist arrivals in Asia will be 82% below 2019 levels. For highly tourism-dependent economies, the sudden fall in tourist arrivals is having severe economic and social consequences, within and beyond the tourism sector. As the recovery to precrisis levels is expected to take years, the survival of large parts of the sector is at risk. Prior to the pandemic, tourism was one of Asia's most vibrant and promising industries and an important driver of growth. Asia's tourism sector outperformed all other regions in the world. While global tourist arrivals increased at an average annual rate of 5.3% from 2010 to 2018, arrivals to Asia grew at an average of 7.2%. Increasing regional integration has also given Asia's tourism sector a strong intraregional component, with the share of Asian visitors traveling within the region rising from 74.0% in 2010 to 79.1% in 2018. Rebuilding tourism will likely follow a staged approach: first promoting domestic tourism, then establishing green corridors to allow safe travel between close partners, and finally a complete reopening to international travel.

## Regional Integration Moving Ahead as Measured by Integration Index

- **Latest ARCII estimates indicate that regional integration in Asia rose slightly in 2018, mainly due to a rebound in the money and finance dimension.** Three dimensions of the Asia-Pacific Regional Cooperation and Integration Index (ARCII)—the movement of people, infrastructure and connectivity, and trade and investment—continued to drive regional integration in the region. In 2018, overall regional integration increased for most Asian subregions, with Southeast Asia remaining the most integrated, driven by trade and investment and movement of people. Performance across subregions varied. While weak infrastructure and connectivity weighed on regional integration in the South Asia Subregional Economic Cooperation and Central Asia Regional Economic Cooperation subregions, accelerated infrastructure developments in transport, trade facilitation, and energy trade are poised to spur deeper future integration. Worldwide, Asia remains highly integrated, only less than the EU. The new ARCII framework adds two new dimensions: (i) technology and digital connectivity, and (ii) environmental cooperation and regional public goods. Overall, trends in technology sharing (including regional collaboration in research outputs and patent applications), and digital connectivity (including internet penetration and bandwidth), have improved in Asia over the past 15 years.

- **Geographic factors play a role in how integrated Asian economies are with other economies in the region. Spatial analysis using ARCII suggests that geographic position influences a country's level of regional integration.** An economy's level of regional integration is positively associated with its neighbors' level of regional integration and with its income. In Asia, high levels of regional integration are concentrated in Southeast Asia, whereas clusters of low levels of regional integration are found in geographically disadvantaged economies, such as

landlocked countries in Central Asia and sea-locked countries in the Pacific. The significant influence of a neighbor's level of regional integration underscores the importance of positive synergies and spillovers in pursuing regional integration—and calls for closer cross-border coordination and cooperation.

## Theme Chapter: Making Digital Platforms Work for Asia and the Pacific

- **Digital platforms are transforming how we work, socialize, and create economic value. A digital platform creates a virtual place for communities to interact and exchange information, goods, and services.** Examples of successful digital platforms include social media such as Facebook, Instagram, LinkedIn, TikTok, and Twitter; search engines and marketing platforms such as Google, Yahoo!, and Baidu; video sharing and music streaming platforms such as YouTube and Spotify; e-commerce such as Amazon and Alibaba; and service-sharing platforms such as Airbnb, Grab, Uber, and GrubHub. These digital platforms use data, search engines, and algorithms to (i) reduce the cost of acquiring and applying information, (ii) bypass intermediaries, (iii) reduce trade barriers, and (iv) use idle assets to lower production and distribution costs.

- **With the rise of digital platforms, new business models have proliferated, offering enormous economic opportunities.** In 2019, digital platform business-to-consumer revenues reached $3.8 trillion, equivalent to 4.4% of global GDP.[b] Asia accounted for about 48% ($1.8 trillion; equivalent to 6% of regional GDP), the US accounted for 22% ($836.7 billion; 3.9%), and the euro area 12% ($445.3 billion; 3.3%). Asia will continue its rise as a major player in the global digital platform market as wider access reaches more users and generates higher revenue growth.

- **The COVID-19 pandemic is accelerating the digital transformation for businesses of all sizes and across all industries.** This accelerated digital transformation can potentially boost global output, trade and commerce, and employment. For example, a 20% increase in the size of the digital sector over the baseline by 2025 will increase global output by an average of $4.3 trillion yearly from 2021 to 2025 (equivalent to 5.4% of the 2020 baseline) or a cumulative impact of $21.4 trillion in 5 years. Asia would reap an economic dividend of more than $1.7 trillion yearly (equivalent to 6.1% of the 2020 regional GDP baseline) or more than $8.6 trillion over the 5 years to 2025. Global trade will increase by roughly $2.4 trillion per year (5.5% of the 2020 global baseline trade) or $11.8 trillion impact in 5 years to 2025. Asia's trade will increase by more than $1.0 trillion per year (6.8% of the 2020 regional baseline trade) or $5 trillion increase in 5 years. There will be about 140 million additional jobs every year (5.0% of the 2020 global baseline employment)—65 million new jobs per year in Asia (or 3.9% of the region's 2020 baseline). By subregion, greater digital use will boost the Pacific island economies most, followed by Central Asian and Southeast Asian economies. The reasons include the potential for (i) digital connectivity to help developing countries overcome challenging geographies; (ii) productivity and economic gains to allow leapfrogging; and (iii) stronger digitally enabled services trade to support inclusive growth.

- **Policy support on multiple fronts can realize the potential gains from the digital economy.** The first is to improve digital infrastructure and connectivity—to deliver affordable mobile and broadband services and expand broadband internet access and coverage. While digital connectivity offers vast opportunities for developing countries to participate in international trade and move up the value chain, traditional trade and logistics related to physical connectivity can remain a significant barrier to the delivery of goods, even when digitally purchased. Notably, the gap in the logistics performance index between the best- and worst-connected countries remains wide. Continued digitization of customs clearance and border procedures is important, along with broadening access to

[b] Based on Statista data covering (i) e-commerce, (ii) online travel, (iii) transportation, (iv) advertising technology (Adtech), (v) e-services, and (vi) digital media.

safe and secure digital financial services. Investing in training for digital skills and literacy by providing access to information and communication technology devices and online teaching platforms is critical. It is important to create a smart, robust, and transparent regulatory system to protect personal data, prevent illegal activities, and strengthen cybersecurity. A coordinated regional and international response is needed to develop digital tax policies and effectively plug tax loopholes in the digital economy.

- **However, several key reform areas should ensure that appropriate policies and regulations are in place to manage undue advantage and unfair disruptions posed by the emergence of digital platforms.** Like any new technology, digital platforms present a disruptive force to existing markets and market players. As they create new ecosystems where producers, service providers, workers, and consumers interact with new distribution channels, the massive network externalities generated disrupt traditional markets and exert dominant market power. While access to unique big data and the ability to use them exclusively offer digital platforms the opportunity to innovate and create new products and services, the immense data advantage can generate monopolistic market power, often raising privacy and cybersecurity issues for users and consumers.

  - **Competition:** Digital platforms are "double-edged." While they can offer access to unprecedented opportunities for micro-businesses, they also tend to create one or very few "winners" due to strong network effects and large-scale economies. Authorities should craft policies that encourage fair competition and ease entry barriers. Authorities should promote interoperability across platforms to help market players collaborate and innovate to the benefit of consumers. Ease in multi-homing should be facilitated and switching cost ought to be lowered to enhance competition.

  - **Labor security and social protection:** As traditional labor relations and conditions no longer apply to digital platforms, online workers are often classified as contractors or self-employed, leaving them without social protection benefits. As youth employment is increasingly short-term intermittent, or involves non-standard work arrangements, the base of social security contributions is running thin. This widens coverage gaps, which could undermine the sustainability of existing social protection schemes and strain public finances as unemployed social assistance balloons. Thus, it is important to create a social protection system that is inclusive and universal, portable, linked to other initiatives, and digitally enabled. Especially in low-income countries, an unconditional cash transfer of uniform amounts to poor and vulnerable families can also help alleviate poverty, expand social protection to the socially excluded, promote social equity, and redistribute digital transformation dividends.

  - **Data access, privacy, and security:** As the data value chain rests on data access, use, and sharing, it is important that regulations foster greater transparency in using, sharing, and creating value from data. It is crucial to uphold data privacy, while ensuring that access to data and information is secure and not used to discriminate against specific groups; and that benefits are fairly and broadly distributed. Continuous cross-border policy coordination is equally important to address cybercrime.

  - **Taxation:** Taxing digital platforms is challenging. There are regulatory gaps and difficulties in identifying taxable digital activities as companies develop their businesses without physical presence within a specific tax jurisdiction, among many other issues. With increasing cross-border digital transactions, it is critically important to strengthen international tax cooperation and harmonization to plug loopholes and properly capture profits generated by the digital economy.

- **Policy makers should be flexible when setting policies and regulations and work together with the private sector to build open and innovative ecosystems for platform businesses; all while ensuring adequate legislation or regulations for data privacy, consumer protection, and cybersecurity.** Regulating rapidly evolving technologies is difficult. Legislating light-touch regulatory approaches to technologies that involve data processing and data protection may be helpful. This could be in the form of best practice guidelines, warnings, and advisories, along with better communication and closer coordination with regulated sectors. This will allow governments to supervise industry development while monitoring how the new technology develops and affects consumers. There are merits in adopting and issuing rules that allow certain, prequalified entities to soft-launch products in controlled environments or regulatory sandboxes. Policies that support innovation-driven entrepreneurship can also nurture platforms and ecosystems for platform-based businesses.

- **Despite rapid advances in technology and digital platforms, large segments of the population remain left behind.** Digital inclusion is crucial for technology and digital platforms to reach all countries and all levels of society. The key is to invest in digital infrastructure and connectivity to broaden physical access to mobile and internet networks and enhance access to education, markets, and other economic opportunities. The pandemic cast a spotlight on the digital divide in many aspects including remote work and distance learning during lockdowns and school closures. There are other significant digital readiness gaps based on location, age, gender, skills, culture, and social norm. Greater efforts should be made to narrow the digital divide within the specific context of each country and community; for example, through strengthening digital literacy and skills training for the poor, rural communities, women, the elderly, and unserved segments of the population. It is important to ensure that the digital divide does not undermine the development of inclusive digital economies during the digital transformation.

- **Upgrading education and labor market policies remains crucial for reaping the benefits of digital platforms and spreading the gains from the digital economy more widely.** Digital platforms hold great promise to scale up the coverage of education and learning—especially helpful in adapting to disruptions such as COVID-19 due to which over 1.5 billion students were unable to attend face-to-face learning. With the rise of online learning amid the COVID-19 outbreak, EdTech tools and approaches can be game changers in education in many ways and it is important to ensure that EdTech can be a catalyst in raising the quality of learning and addressing lags and deficits in learning outcomes. Creating an ecosystem for digital skills development and training, especially in technical and vocational education and training (TVET), will better prepare workers for the future. Developing arrangements for online quality assurance and credentials (such as micro-credentials and digital badges, among others) will help. Digital solutions can also help to provide lifelong learning opportunities for all and facilitate workplace-based training as workers face multiple transitions between jobs.

- **Planning and coordination among key national institutions can help ensure that digital transformation benefits all.** Innovation and digital platforms require new forms of coordination across public policy space and public–private partnerships. Currently, there is scope to better coordinate within government agencies in many economies in the region. Developing and implementing national strategies, enacting laws and regulations governing digital business activities, and adopting standards are all essential. It is important to resolve ambiguity over regulatory coverage. More importantly, governments need to build relationships with various actors involved in creating, diffusing, and utilizing the innovation, data, and services from digital platforms. Coordination is critical to avoid confusion. A responsive information dissemination system can also play a pivotal role in helping micro, small, and medium-sized enterprises understand the rapidly changing digital landscape, reduce costs, and increase market reach.

- **Regional cooperation must be strengthened to better address cross-border issues and challenges.** Cooperation could focus on sharing country lessons and experience, conducting regional policy dialogues, and working together to collect data and produce knowledge products to understand how digital platforms can help or hinder inclusive and sustainable development. It is also crucial for intergovernmental forums and mechanisms to formulate regionally consistent frameworks, strategies, and regulations, especially on cross-border data transfer and international taxation. Finally, with limited fiscal and financial resources, a regional approach to raise finance for technology can support digital transformation. Generally, three key factors can help close the technology funding gap: (i) increasing the pipeline of technology projects; (ii) crowding in private capital; and (iii) mitigating the risks and costs of technology projects. Multilateral institutions can play an important role in building the trust and confidence of public, private, and personal stakeholders in this area of technological development.