Economic and Social Survey of Asia and the Pacific 2024

Boosting affordable and longer-term financing for governments

국가채무

公共债务

deuda pública

public debt

หนี้สาธารณะ

мемлекеттік борыш

dette publique

Государственный долг

ESCAP
Economic and Social Commission for Asia and the Pacific

*The shaded areas of the map indicate ESCAP members and associate members.**

The Economic and Social Commission for Asia and the Pacific (ESCAP) is the most inclusive intergovernmental platform in the Asia-Pacific region. The Commission promotes cooperation among its 53 member States and 9 associate members in pursuit of solutions to sustainable development challenges. ESCAP is one of the five regional commissions of the United Nations.

The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity-building services in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

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Foreword

Our world is engulfed in a perfect storm. The ongoing effects of the cost-of-living crisis are joined by multiple conflicts, geopolitical tensions, rising mistrust, and the triple planetary crisis of climate change, biodiversity loss and pollution.

The Sustainable Development Goals are at risk of slipping away, with vital systems to address hunger, poverty and inequality being starved of urgently needed investment.

The *Economic and Social Survey of Asia and the Pacific 2024* reminds us that a lack of financial support for developing countries is at the core of these crises.

Governments of developing countries across Asia and the Pacific are victims of an unjust, outdated and dysfunctional global financial architecture. They face fiscal constraints, rising borrowing rates with shorter loan maturity, and heavy debt burdens. Up to half of low-income countries in the region are already in, or at high risk of, debt distress, forced to choose between servicing debt or investing in education, health and social protection for their people.

There are signs of hope. At the SDG Summit in 2023, world leaders endorsed the SDG Stimulus to provide more affordable long-term financing for developing countries and the need to reform the global financial architecture – work that must move from words to action.

This report highlights ways in which countries across Asia and the Pacific can strengthen access to financing. This includes working with donors, multilateral development banks and credit rating agencies to boost affordable financing and investment pathways in sustainable transitions, and making vital improvements to public-revenue collection and domestic savings.

The United Nations will continue standing with countries across Asia and the Pacific in their calls for justice, and as they invest in a better, more prosperous and peaceful future for the 4.7 billion people who call this extraordinary region home.

António Guterres
Secretary-General of
the United Nations

Preface

The 2024 edition of the *Economic and Social Survey of Asia and the Pacific* depicts a mixed picture of the region's economic landscape.

While there has been an upturn in the average economic growth rate in 2023 and projected steady growth for 2024 and 2025, showcasing the region's robust economic resilience, the rebound was uneven, limited to a few large economies.

High inflation and interest rates, coupled with weak external demand and heightened geopolitical uncertainty, are casting shadows over near-term economic prospects. Moreover, despite the appearance of relatively steady economic growth, there are underlying issues, such as subdued job creation, weakened purchasing power and increased poverty and socioeconomic inequalities across the region.

Beyond managing near-term macroeconomic challenges, Governments of countries in the region have a major task at hand. At the current pace of implementation, there will be a staggering 32-year delay before the Sustainable Development Goals have been achieved. To significantly accelerate progress towards achieving these Goals, more investment is urgently needed in such transformative areas as energy, digital connectivity, social protection and climate change.

As the *Survey* for 2024 underscores, enhancing the availability of affordable and long-term financing for Governments is pivotal in this endeavor.

It is crucial to dispel the misconception that higher public debt levels inevitably lead to higher debt distress. In fact, strategic deployment of public debt to invest in the Sustainable Development Goals not only benefits people and the environment but also contributes to lowering public debt as a percentage of gross domestic product over the long term.

Addressing persistent challenges requires innovative solutions. For example, to enhance public revenue collection, policymakers can, in addition to digitalizing tax administration, explore how behavioural science can raise society's willingness to pay taxes. Fiscal schemes to leverage the increase in land values brought about by better public infrastructure also offer untapped resources.

International development partners must adopt fresh perspectives to better align their efforts with evolving needs. Official development assistance should prioritize countries with wider development financing gaps and higher vulnerability to shocks. Multilateral development banks should weigh the need to maintain their top-notch credit ratings with the growing development needs of developing countries by providing more lending out of the existing capital base. Credit rating agencies should adopt a longer-term lens and appreciate that public investments in sustainable development raise sovereign creditworthiness over time. Meanwhile, debate continues on whether Asia and the Pacific needs a new credit rating agency that better understands the region's development context.

In this context, ESCAP can play an important role in achieving these domestic and multilateral policy actions by facilitating dialogues and knowledge-sharing within the region and beyond. As we gear up for the eightieth session of the Economic and Social Commission for Asia and the Pacific and the Summit of the Future in 2024, it is time to act collaboratively to revive optimism for multilateralism. Only multilateral solutions can address the changing global financial and development context and challenges.

Armida Salsiah Alisjahbana
Under-Secretary-General of the United Nations
and Executive Secretary of ESCAP

Executive Summary

Steady economic performance amid increasing poverty and inequality concerns

Relatively steady economic growth and moderating inflation in 2023

Average economic growth in the developing Asia-Pacific region picked up from 3.5 per cent in 2022 to 4.8 per cent in 2023. The rebound was concentrated in only a few large economies though, such as in China after it lifted COVID-19 pandemic restrictions and in the Russian Federation due to higher military-related investments. Meanwhile, India has become the world's fastest-growing major economy in 2023 amid strong household consumption and public investment in infrastructure.

Elsewhere in the region, output growth in most economies moderated in 2023. Export-oriented countries faced weak external demand, especially from China and Europe. International tourist arrivals in the region stood at only 62 per cent of pre-pandemic levels compared with the global average of 87 per cent. On the domestic front, although global commodity prices have receded from their 2022 peaks, household consumption remained restrained due to a relatively high average rate of inflation at 5.2 per cent in 2023. The subsequent monetary policy tightening, necessary to tame inflation, has contributed to rising debt servicing burdens. This situation, together with subdued external demand and considerable uncertainty due to geopolitical tensions, suppressed capital investment.

Subdued job creation and risk of rising poverty and inequality remain concerning nonetheless

High inflation, including of food items, in developing Asia-Pacific economies in the past few years have eroded people's purchasing power and deepened food security concerns. Many Governments have instituted fiscal measures, such as cash transfers and food vouchers, to help people cope with the high cost of living, but room for sustained support is limited amid Governments' tighter fiscal positions. At the same time, creation of formal and decent jobs remains subdued, while informal and vulnerable employment has increased somewhat. Moreover, as many more women are informal workers with no access to social protection, this situation is deepening gender inequality.

New estimates by ESCAP show that the pandemic and the cost of living crisis may have pushed almost 42 million more people in the region into extreme poverty in 2022. Income inequality is also likely to widen, as the real value of national minimum wages for several countries have declined between 2020 and 2022. This further weakens the ability of lower-income groups to cope with job losses and high food prices.

Near-term economic prospects are clouded by downside risks

Economic growth in the developing Asia-Pacific region is projected to decline somewhat to 4.4 per cent in both in 2024 and 2025. The moderation is most notable in East and North-East Asia, in contrast to an expected economic rebound in South-East Asia and a relatively stable trend in other subregions. Overall, supported by declining inflation, household consumption would continue to drive output growth in the near term amid weak external demand.

Inflation is projected to decrease to still relatively high levels of 4.8 and 3.8 per cent in 2024 and 2025, respectively. As such, policy interest rate cuts may not be instituted as soon and their scale not be as large as desired in many economies. Concerns regarding capital outflows, exchange rate volatility and overall financial stability in the wake of higher interest rates in the United States of America are also likely to delay interest rate reductions in the region. As with the monetary policy stance, the fiscal conditions are expected to remain rather tight given rising public debt distress and sovereign debt servicing costs.

The baseline projections are subject to several downside risks, such as uncertainty relating to inflation trends, including the impact of El Niño phenomenon, and thus the monetary policy stance, the depth and duration of China's economic slowdown and escalation of geopolitical tensions and trade fragmentation within the Asia-Pacific region and beyond. The challenging economic outlook has direct implications for the ability of countries in the region to achieve the Sustainable Development Goals.

The need for affordable and long-term financing for Governments

Realizing a global agenda, articulated in the Secretary-General's SDG Stimulus to Deliver Agenda 2030, in Asia and the Pacific

The United Nations Secretary-General proposed the SDG Stimulus in February 2023, calling for immediate actions to reduce government borrowing costs and make debt longer term. He also called for an increase in financing for sustainable development and reforms to the international financial architecture. During the High-level Political Forum on Sustainable Development under the auspices of the General Assembly in September 2023, world leaders declared their commitment to advancing the SDG Stimulus.

While a strong and fair taxation system and efficient and effective public spending should remain the backbone for financing essential public investments, Governments will need to borrow in order to finance large sustainable development investment needs. As these investments offer notable socioeconomic and environmental benefits but with low or zero financial returns, government borrowing costs should be kept at a low level. Lending to Governments should also be for a longer period, as analyses in recent issues of the *Survey* show that the benefits of investing in the Sustainable Development Goals, including a lower public debt level, take at least 15-20 years to become clearly visible. If government debt must be repaid before these payoffs materialize, fiscal positions will remain weaker, thus discouraging public investments for a brighter future.

Lending to Governments in the Asia-Pacific region remains expensive and short term

For Asia and the Pacific, the share of external public debt owed to official creditors dropped from 54 per cent in 2010 to 35 per cent in 2022. As such, private creditors, bondholders in particular, have now become the main creditors for countries in the region.

The increasing reliance on loans from private creditors matters because they charge higher interest rates and offer shorter maturity. The region's average interest rate on new external public debt committed in 2022 from private creditors increased from 3.9 to 5.0 per cent during the period 2017-2021. The same rate from official creditors remained at about 2.1 per cent throughout the years 2020-2022. Meanwhile, the average maturity period of new external public debt commitments from private creditors dropped to a decade-low of eight years in 2022. Although the maturity of loans by official creditors is much longer at about 22 years currently, a declining trend has been observed since 2018.

Amid rising public debt levels and interest rates, sovereign debt service payments have trended upward in recent years. In such countries as Bhutan, the Lao People's Democratic Republic, Maldives, Mongolia and Sri Lanka, these payments reached 8-10 per cent of GDP in 2022.

National policy actions for cheaper, longer-term financing for Governments

Strengthening tax collection and boosting domestic savings are critical

A new quantitative analysis by ESCAP shows that macroeconomic fundamentals, such as inflation, exchange rate volatility, fiscal position, sovereign credit rating and capital market liquidity, are key in influencing government borrowing costs in several Asia-Pacific economies. This edition of the *Survey* argues that strengthening tax revenue collection and boosting domestic savings are particularly important.

The developing Asia-Pacific region has recorded notable progress in tax revenue mobilization, with the average tax-to-GDP ratio increasing from 13.0 per cent in 2001 to 17.8 per cent in 2011 before moderating to 15.7 per cent in 2021 amid the pandemic. This improvement has been broad-based, with three quarters of the region's economies experiencing an increase in tax ratios. Despite this encouraging development, the tax ratio remains below 10 per cent in such countries as Afghanistan, Bangladesh, Micronesia (Federated States of), Myanmar, Sri Lanka, Timor-Leste and Turkmenistan.

New estimates by ESCAP show that, after considering a country's specific characteristics, such as GDP per capita, trade openness, the size of the agricultural sector and perceived corruption level, developing Asia-Pacific economies collected between 56 and 94 per cent of their potential tax revenue levels during the period 2017-2019. Closing such tax collection gaps could produce additional revenues of at least 5 per cent of GDP in Bhutan, the Islamic Republic of Iran and Malaysia, and at least 2 per cent of GDP in China, Indonesia, Kyrgyzstan, the Philippines and Viet Nam.

Narrowing the tax collection gaps will benefit from both conventional and emerging policy ideas

Good practices on improving tax administration and thus closing the tax collection gaps are relatively well established. Examples include greater autonomy of tax authorities, having in place digitalized tax administration processes and rationalized tax structure and reducing wasteful tax exemptions. Over time, these initiatives lower the perceived fiscal risks and thus the cost of borrowing. Governments in Asia and the Pacific will benefit from more financial resources, enhanced technical capacity and stronger political will to implement these policy initiatives.

Together with an effort to increase tax collection, Governments should also ensure that collected revenues are used effectively to benefit the people. This helps people appreciate the societal value of taxation and increases their willingness to pay taxes. Leveraging emerging insights from behavioural science, more public campaigns to boost self-esteem and peer pressure in fulfilling social duties and catching tax avoidance offenders should be explored.

Increasing and channeling domestic savings for development financing

Policies that are aimed at increasing the income of most people in societies serve the dual purposes of increasing domestic savings and reducing socioeconomic inequalities. Research shows that enhancing labour productivity through better education, creating decent jobs and higher spending on research and development helps increase peoples' incomes and savings in a sustainable manner. To reduce the extent of precautionary savings by the people, Governments should ensure universal access to old-age health care and social protection. At the same time, policymakers can raise people's savings rates by providing them with an array of adequate options for storing their savings and by improving financial literacy and consumer protection.

The absence or underdevelopment of domestic capital markets in many Asia-Pacific countries is a major factor limiting the use of available savings for development purposes, including by Governments. To build a foundation for effective capital markets, Governments and financial market regulators need to widen the investor base, increase the liquidity of secondary markets, improve mechanisms for risk transfer and protect investors' rights.

Multilateral development cooperation for cheaper, longer-term financing for Governments

While developing countries should continue to actively work on improving macroeconomic fundamentals, narrowing the tax collection gaps and increasing domestic savings, this will take some time to accomplish. As several Asia-Pacific countries are already facing sustainable investment gaps together with elevated debt distress risk, support from the international community is urgently needed.

Concessional financing: honouring overdue commitments while matching allocations with needs

The pledge made in 1970 of providing 0.7 per cent of gross national income (GNI) as official development assistance (ODA) is being met by only a few donor countries. Estimates show that undelivered ODA exceeded $6.5 trillion globally between 1970 and 2021. In addition to meeting this long overdue commitment, any climate finance provided by donors should not be counted as part of their ODA commitment; otherwise, addressing climate change will come at the expense of support for improving socioeconomic outcomes. South-South cooperation can also be strengthened as an additional source of development finance.

Bilateral ODA, which is two thirds of the total, is largely determined by historical and political factors rather than the income level of recipient countries. In any case, there is increasing awareness that considering income alone is a poor measure of a country's socioeconomic well-being and its exposure to climate and economic shocks. In this context, the United Nations-led initiative to develop and adopt a multidimensional vulnerability index provides a more consistent and systematic approach to allocating concessional financing.

Addressing underutilized resources and capacities of multilateral development banks

Fresh injections of equity capital by shareholders are urgently needed to make the capital base of multilateral development banks catch up with the growing development investment needs of developing countries. In the meantime, to better leverage the existing capital base, easing the capital adequacy frameworks of multilateral development banks, which are conservative by design in order to preserve their exceptionally strong credit ratings, can help boost their lending capacity. ESCAP estimates that additional lending of $33 billion to the Asia-Pacific region can be unlocked by the International Bank for Reconstruction and Development and the Asian Infrastructure Investment Bank.

Multilateral development banks can also lower lending rates and lengthen loan maturity through shifts in their business models. Examples include increasing lending in local currencies and reducing administrative burdens borne by borrowing countries, such as complex procurement and financial management rules. Stronger collaboration among such banks can also yield greater development impacts. ESCAP can facilitate such collaboration at the Asia-Pacific level by co-hosting events at its intergovernmental platforms to share good practices and monitor progress achieved.

More development-aligned and long-term sovereign credit ratings

Beyond revising rating assessments to help unleash the lending potential of multilateral development banks, credit rating agencies should seek to address several methodological shortcomings that have direct implications for the cost of government debt. Examples include limited transparency, including the use of subjective information, conflict of interest as Governments pay credit rating agencies to rate their bonds and the so-called "investment-grade cliff effect" when securities are downgraded by just one notch but turn from investment-grade to junk status, leading to a sharp increase in borrowing costs thereafter.

To increase rating transparency, credit rating agencies should clearly distinguish ratings that purely reflect objective factors and those that also incorporate judgement. They should seriously consider recent calls for more long-term, development-aligned sovereign rating methodologies to reflect the potential impacts of demographic shifts, climate risks and public investment in sustainable development on sovereign creditworthiness. Stepping up their dialogues with Governments can also help reduce perceived rating bias against smaller developing countries. More broadly, there are proposals to set up publicly owned credit rating agencies that focus on long-term sovereign ratings. ESCAP can facilitate the organization of dialogues with Governments and the sharing of experiences with regard to setting up regional and/or national credit rating agencies.

Bigger picture: fiscal policymaking amid global megatrends

In addition to securing more affordable and long-term financing, fiscal policymakers in Asia and the Pacific need to be fully aware of the fiscal implications of global megatrends – demographic shifts, climate change and technological advancements. If Governments fail to leverage the opportunities and mitigate the risks arising from these megatrends, cheaper and longer-term financing alone may not suffice.

Demographic shifts

Driven by both an increasing number of older persons and declining birth rates, persons aged 65 years or more will account for one in five people in Asia and the Pacific by 2050. By that time, every 3.2 working-age persons (aged 15-64 years) would need to support one old-age person, down from 6.2 persons estimated for 2025.

For government revenue, a shrinking workforce and lower labour productivity among older workers could hamper personal income tax collection and social security contributions. For fiscal spending, shifts towards old-age health care, social protection and lifelong learning will become increasingly important. To benefit from policy synergies, education that promotes healthy lifestyles also enables old-age workers to remain productive. Meanwhile, fiscal policy could become less effective, as consumption by older people is less responsive to fiscal incentives.

The impact on inflation of rapid population ageing is likely to vary across countries. An increase in longevity is deflationary in nature due to less demand for durable goods, while a decline in birth rates could be inflationary as it reduces a country's productive capacity. The net inflation impact would influence long-term interest rates, which together with changes in fiscal space, affect government borrowing costs and public debt sustainability.

Climate change and environmental degradation

Both climate-induced natural disasters and slow-onset events, such as rising temperatures and sea level, have vast implications for fiscal positions. Fiscal revenue could be lower as a country's productive capacity decreases due to water shortages, soil degradation and lower labour productivity. At the same time, sizeable fiscal spending will increasingly be needed to rebuild post-disaster economies, invest in climate and renewable energy projects and promote food security.

In pursuing green fiscal policy, Governments will need to balance environmental benefits with unintended socioeconomic impacts. For example, while carbon taxes help generate public revenue, low-income populations would be affected by higher domestic energy prices. Given large climate financing needs on top of other development needs, Governments also need to determine which green projects offer greater synergies or environmental outcomes relative to financial costs.

Climate change can push up inflation, thus government borrowing costs, through lower crop yields and natural disasters that wipe out agricultural output. Removal of fuel subsidies, higher production costs due to green technologies and requirements and a surge in green investments are also likely to be inflationary.

Technologies and digitalization

Technologies and digitalization create new economic sectors, goods and services, such as digital trade and commoditization of data. Digital technologies also alter the form and location of employment. Given that traditional tax systems are based on the tangibility and physical location of goods and services, shifts in tax policy design and stronger capacity of tax authorities are needed to tax the increasingly digitalized Asia-Pacific economies. To this end, multilateral tax cooperation, such as through exchanges of data and information on best policy practices, should also be strengthened. ESCAP can support such cooperation.

Digital tools have immense potential to enhance the efficiency and effectiveness of fiscal policy management. Among others, electronic filing of tax returns helps increase tax payment compliance, data analytics tools improve fiscal risk management and electronic public procurement systems reduce corruption. While more Asia-Pacific countries are benefiting from digitalized fiscal management systems, many others are lagging. More financial and technical assistance from development partners is needed.

In conclusion, while macroeconomic conditions in Asia and the Pacific seem challenging and Governments are facing distressed fiscal and debt positions, several policy options, both at the domestic and international levels, are available that can make development financing affordable and longer term. What is needed is stronger political will and multilateral cooperation for their implementation.

Infographics

BOOSTING AFFORDABLE AND LONG-TERM FINANCING FOR GOVERNMENTS AMID GLOBAL MEGATRENDS

Public investment for a brighter future is increasingly difficult

Large financing needs

Surging borrowing rates

Shorter loan maturity

National policy actions

Fiscal revenue mobilization

Sizeable household savings

Functioning capital markets

Multilateral development cooperation

Donors

Multilateral development banks

Credit rating agencies

Broader picture: Fiscal policymaking amid global megatrends

Demographic shifts

Climate change

Technological advancements

Seizing the opportunities and managing the risks

New policy solutions

Policy synergies

Agile policymaking

NAVIGATING MACROECONOMIC CHALLENGES WHILE FOSTERING AN INCLUSIVE AND SUSTAINABLE FUTURE

Pandemic scarring + High cost of living + Rising interest rates

Impacts on people and Governments

- Wider income inequality
- Malnutrition and food insecurity
- Rising vulnerable employment
- Higher public debt level

42 million more people pushed into extreme poverty

Government interest payments at almost 40% of health spending

Policy considerations

Domestic policies

- Ensure inflation control
- Enhance fiscal revenue mobilization
- Boost domestic demand
- Mainstream gender issues into policymaking

International policies

- Long-term financing for developing countries
- New international debt relief mechanisms

FISCAL REVENUES AND DOMESTIC SAVINGS ARE THE BACKBONE OF AFFORDABLE AND LONG-TERM FINANCING

Keeping government borrowing rates at a low level requires

Macroeconomic and price stability

Low fiscal risks

Financial market liquidity

Greater tax effort and efficiency bring countries closer to their tax potentials

Closing tax gaps can boost fiscal revenues by 2.6% of GDP

Expanding tax potential requires broader policy effort

- Higher incomes
- Better education
- Less inequality
- Lower corruption

Stronger tax morale for better tax compliance

- Intrinsic values
- Sense of reciprocity
- Peer and societal pressures
- Induced perceptions

Boosting and channeling of domestic savings

- Raise labour productivity
- Expand provision of basic public services
- Improve financial access and literacy
- Support capital market development

INTERNATIONAL COMMUNITY NEEDS NEW PERSPECTIVES TO ENSURE AFFORDABLE AND LONG-TERM FINANCING FOR GOVERNMENTS

Donors: honour development assistance commitments and match allocations with needs

Provision + Allocation

ODA
Only half is met

Climate finance
ODA
Should be additional to ODA

Bilateral
Political interest and historical ties

MVI
Adopt Multidimensional Vulnerability Index

Multilateral development banks: address underutilized resources

Boost lending capacities

- Fresh capital injections
- Balance sheet optimization

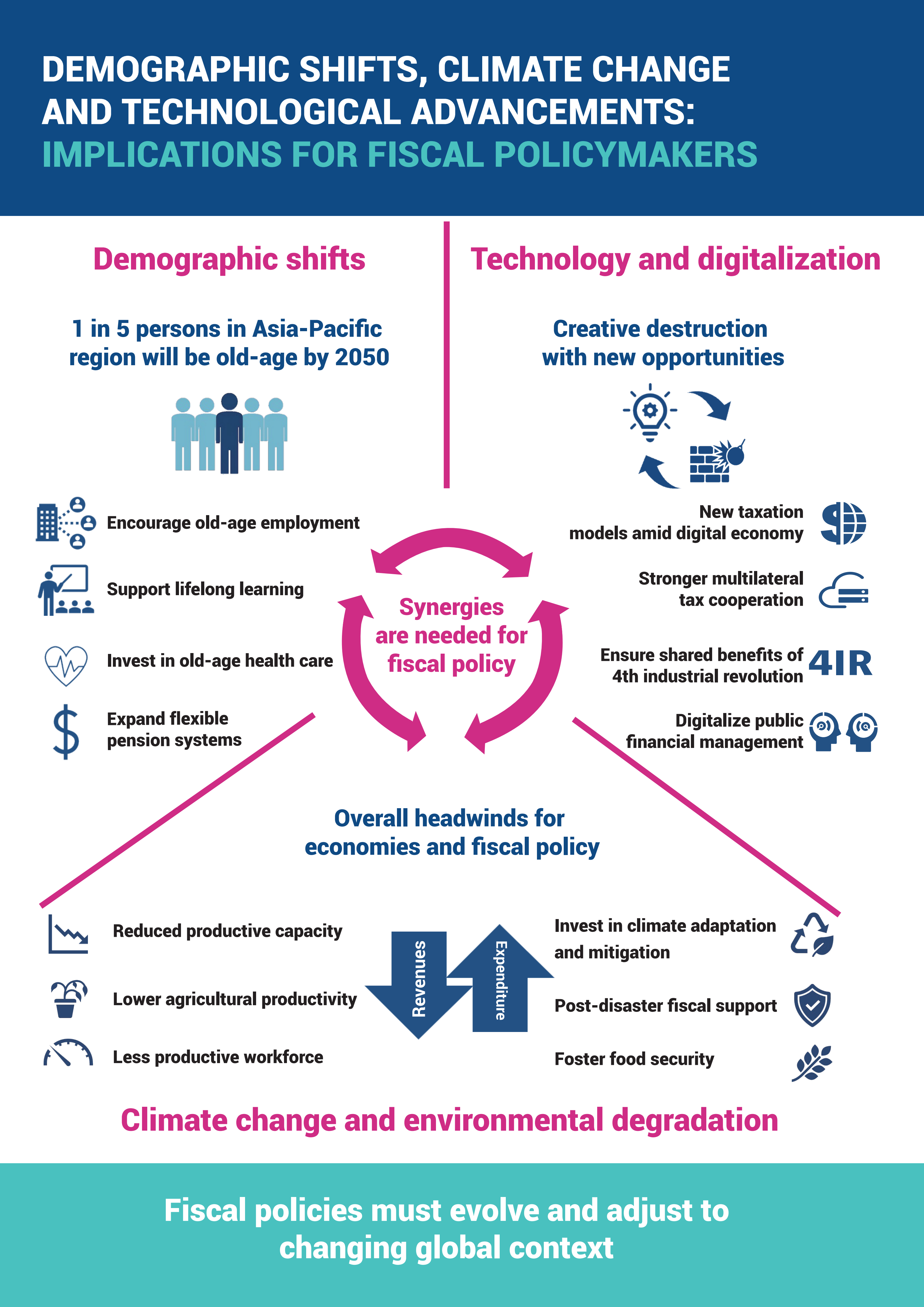
Strengthen systemic coordination

Improve lending terms

- Increase lending in local currencies
- Reduce administrative burdens

Sovereign credit rating: towards long-term, development-aligned approaches

- More transparent rating approaches
- Incorporate long-term issues into assessments
- Reduce mechanistic reliance on ratings
- Increase dialogues with debtor countries



DEMOGRAPHIC SHIFTS, CLIMATE CHANGE AND TECHNOLOGICAL ADVANCEMENTS:
IMPLICATIONS FOR FISCAL POLICYMAKERS
Demographic shifts
1 in 5 persons in Asia-Pacific region will be old-age by 2050
Encourage old-age employment
Support lifelong learning
Invest in old-age health care
Expand flexible pension systems
Technology and digitalization
Creative destruction with new opportunities
New taxation models amid digital economy
Stronger multilateral tax cooperation
Ensure shared benefits of 4th industrial revolution
4IR
Digitalize public financial management
Synergies are needed for fiscal policy
Overall headwinds for economies and fiscal policy
Reduced productive capacity
Lower agricultural productivity
Less productive workforce
Revenues
Expenditure
Invest in climate adaptation and mitigation
Post-disaster fiscal support
Foster food security
Climate change and environmental degradation
Fiscal policies must evolve and adjust to changing global context

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Explanatory notes

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Groupings of countries and territories/areas referred to in the present issue of the *Survey* are defined as follows:

- ESCAP region: Afghanistan; American Samoa; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Cook Islands; Democratic People's Republic of Korea; Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Pakistan; Palau; Papua New Guinea; Philippines; Republic of Korea; Russian Federation; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Türkiye; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam.
- Developing ESCAP region: ESCAP region excluding Australia, Japan and New Zealand.
- Developed ESCAP region: Australia, Japan and New Zealand.
- East and North-East Asia: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia; and Republic of Korea.
- North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan.
- Pacific: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
- Pacific island developing economies: All those listed above under "Pacific" except for Australia and New Zealand.
- South and South-West Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka and Türkiye.
- South-East Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam.
- Least developed countries: Afghanistan, Bangladesh, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste and Tuvalu. Note: Bhutan, Maldives, Samoa and Vanuatu were least developed countries prior to their graduation in 2023, 2011, 2014 and 2020, respectively.
- Landlocked developing countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan and Uzbekistan.
- Small island developing States: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Singapore, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu.

Owing to the limited availability of data, selected small island developing States are excluded from the analysis. For the purpose of this *Survey*, Singapore is not considered to be a small island developing State due to its high level of development and high-income status.

Bibliographical and other references have not been verified. The United Nations bears no responsibility for the availability or functioning of URLs.

Many figures used in the *Survey* are on a fiscal year basis and are assigned to the calendar year which covers the major part or second half of the fiscal year.

Growth rates are on an annual basis, except where indicated otherwise.

References to dollars ($) are to United States dollars, unless otherwise stated.

The term “billion” signifies a thousand million. The term “trillion” signifies a million million.

In the tables, two dots (..) indicate that data are not available or are not separately reported; a dash (–) indicates that the amount is nil or negligible; and a blank indicates that the item is not applicable.

In dates, a hyphen (-) is used to signify the full period involved, including the beginning and end years, and a stroke (/) indicates a crop year, fiscal year or plan year.

Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AI	artificial intelligence
AIIB	Asian Infrastructure Investment Bank
ASEAN	Association of Southeast Asian Nations
ASEAN+1 FTAs	ASEAN-plus-one free trade agreements
CEIC	CEIC Data, part of ISI Emerging Markets Group
CAF	capital adequacy framework
CIT	corporate income tax
COVID-19	coronavirus disease 2019
CRA	credit rating agency
DAC	Development Assistance Committee
EIB	European Investment Bank
ENEA	East and North-East Asia
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
ESG	environmental, social and governance
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
G7	Group of Seven
G20	Group of Twenty
GCI	general capital increase
GDP	gross domestic product
GNI	gross national income
GST	goods and services tax
IBRD	International Bank for Reconstruction and Development
ICT	information and communications technology
IDA	International Development Association
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
ILOSTAT	ILO Department of Statistics
IMF	International Monetary Fund
LDC	least developed country
LLDC	landlocked developing country

Acronyms

LVC	land value capture
MDB	multilateral development bank
NCA	North and Central Asia
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PICs	Pacific island countries
PIT	personal income tax
PMI	Purchasing Managers' Index
SDGs	Sustainable Development Goals
SEA	South-East Asia
SEEA	System of Environmental-Economic Accounting
SIDS	small island developing States
SSWA	South and South-West Asia
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value added tax
WFP	World Food Programme

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1 MACROECONOMIC PROSPECTS, CHALLENGES AND POLICIES

1. Introduction

Macroeconomic conditions in the developing Asia-Pacific region continue to remain challenging, despite higher GDP growth and moderating inflation. Average economic growth in the region picked up from 3.5 per cent in 2022 to 4.8 per cent in 2023; however, the rebound was concentrated in only a few large economies. In other developing Asia-Pacific economies, economic growth remained moderate in 2023. On the external front, countries that rely on merchandise exports faced weak external demand, especially from China and Europe. On the domestic front, although global commodity prices have receded from their 2022 peaks following the outbreak of war in Ukraine and international sanctions related to that war, average inflation in the Asia-Pacific region remained relatively high, thus repressing household consumption.

The deep socioeconomic scars left by the COVID-19 pandemic and the cost of living crisis in 2022 may have pushed millions more people in Asia and the Pacific into extreme poverty. A surge in inflation has eroded the purchasing power of poor and vulnerable populations, thus likely widening income and gender inequalities further. Higher interest rates implemented to tame inflation have also raised sovereign debt servicing costs at a time when Governments in the Asia-Pacific region are already facing large development spending needs and rising risks of public debt distress.

Economic growth in the developing Asia-Pacific region is projected to soften slightly to 4.4 per cent both in 2024 and 2025. Uncertainty related to inflation trends and thus monetary policy stance, both in the region and beyond, the extent of economic slowdown in China and rising geopolitical tensions and trade decoupling represent the main downside risks.

The challenging economic outlook has direct implications for the ability of countries in Asia and the Pacific to achieve the Sustainable Development Goals. Even prior to the pandemic, the region was off track to achieve the Goals by 2030. The cost of living crisis in 2022 likely reversed progress towards achieving Goal 1 (ending poverty). For Goal 2 (zero hunger), the increase in food prices has exacerbated food insecurity and the risk of increased hunger and malnutrition. For Goal 8 (economic growth and decent work), weak employment conditions in certain economic sectors due to the pandemic are persisting, with declining real wages (ESCAP, 2023a). Progress towards Goal 10 (reducing inequalities) also was negatively affected, with poor and vulnerable populations suffering more as wage earners than the rich for whom financial assets account for a larger share of income.

To cope with these challenges on a sustained basis, Governments will need to undertake domestic initiatives to ensure both macroeconomic stability and support economic growth and development ambitions. In terms of monetary policy, caution continues to be required from monetary authorities in terms of deciding the path of monetary policy to ensure that inflation is effectively tamed in the region. On the fiscal side, there is scope to increase revenue generation, especially through increasing progressive income taxation, as well as by improving public spending efficiency and reallocating non-developmental budgetary spending, such as on defence. Improving debt management practices, in line with international best practices, can also help. However, for some low-income countries and for those already in debt distress and facing high debt servicing costs, such domestic policies though necessary may not be sufficient. The support of the international community will be required to bridge the growing gap between developmental needs and government resources. This should consist of both greater concessional funding by multilateral financing institutions as well as establishment of a new international debt resolution mechanism which frees up resources for development for developing countries.

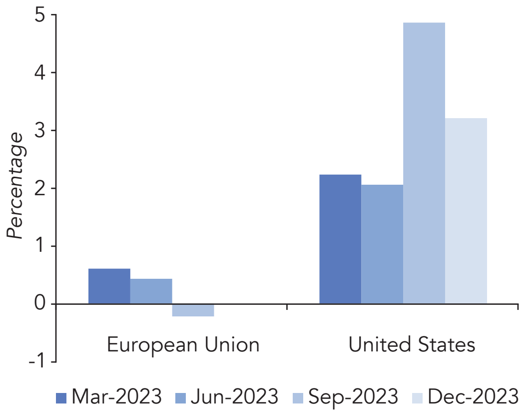
2. Global economic developments and prospects

2.1. Global economic performance in 2023 was somewhat surprising in both positive and negative aspects

Global economic performance in 2023 was somewhat surprising compared with earlier expectations (ESCAP, 2023b), both in positive and negative aspects. Global economic growth in 2023 remained unexpectedly strong at 2.4 per cent, although it was slower than the high growth witnessed in 2022 partly due to the base effect of the bounce-back from pandemic restrictions. The upside surprise came from the United States of America, where apprehension about the possibility of a recession in 2023 due to aggressive monetary tightening proved unfounded (figure 1.1a). The labour market continued to remain buoyant, and private consumption remained relatively strong. The economies of the European Union followed more expected trajectories in 2023. Tight monetary policy in response to the strong impact of the war in Ukraine on energy prices and subsequently on overall inflation had substantial impacts on economic growth. The divergence in growth performance as compared with that in the United States was also reflected in the relative depth of contraction in manufacturing production sentiments (figure 1.1b). Nevertheless, for both the United States and the European Union, there has been a general trend of recovery in both consumer and business sentiments since the depths of the cost of living crisis in late 2022 (figure 1.1c and 1.1d).

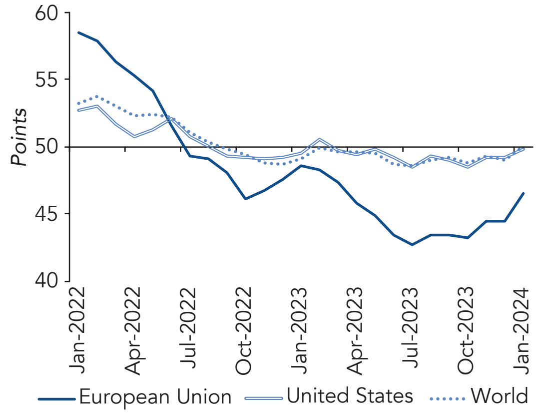
Figure 1.1 GDP growth and Purchasing Managers' Indices (PMI) of global major developed economies

A. Real GDP growth



Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

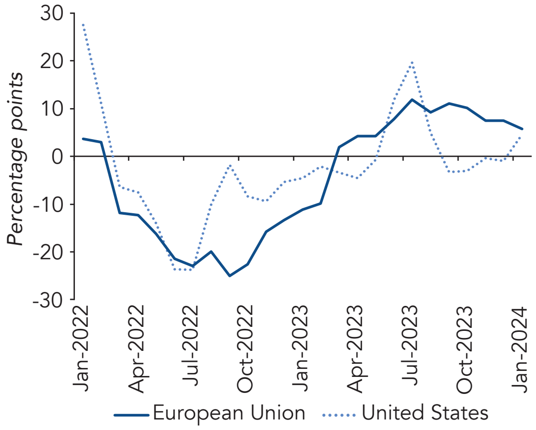
B. Manufacturing PMI



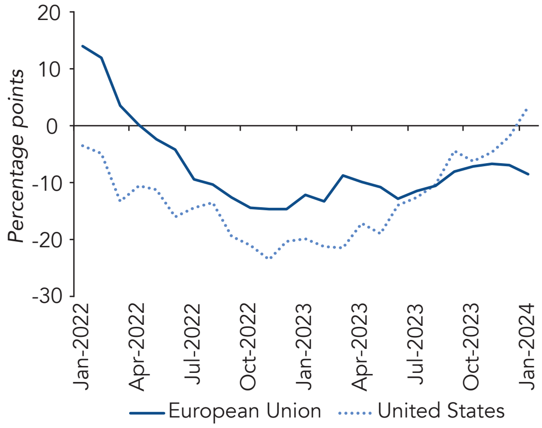
Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Note: Purchasing Managers' Index (PMI) readings above 50 indicate expansion; readings below 50 indicate contraction; and a reading at 50 indicates no change.

C. Consumer confidence



D. Business sentiment



Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Despite increasing intraregional trade in Asia and the Pacific, which now accounts for up to 40 per cent of the region's exports, the United States and the European Union remain sizeable export markets for the Asia-Pacific region. Each destination accounts for about 15 per cent of total exports from the region. Furthermore, it is estimated that almost 80 per cent of intraregional trade in Asia and the Pacific involves production of intermediate goods (Romao and Bernardo, 2023), which eventually cater to final demand outside the region.

With the war in Ukraine continuing to exert socioeconomic impacts on Asia and the Pacific, a new external risk is the hostilities in Gaza and Israel, which commenced in October 2023. The ongoing war in Ukraine has already put a strain on supply chains around the world, especially on food security. With the new conflict in the Middle East, there is risk of trade disruptions through critical transport channels in that region and commodity price supply shocks from major energy producers, if the conflict persists.

In terms of other major global developments, the year 2023 has highlighted worsening socioeconomic impacts of climate change. The world recorded the warmest temperatures in history, making the need to urgently address climate change ever more obvious to Governments (WMO, 2023). The world is also likely to surpass, by the early 2030s, the 1.5°C total rise by 2100 allowed under the Paris Agreement (IPCC, 2023a). The impact of climate change on key macroeconomic variables is not fully understood and represents an element of uncertainty regarding economic prospects.

3. Economic performance in developing Asia-Pacific economies in 2023

3.1. Economic performance of Asia and the Pacific shows resilience, despite external challenges

While discussing economic performance through the lens of GDP growth dynamics is important, it is necessary to be cognizant of the limitations of such an approach. Because GDP does not adequately capture the well-being of the people and environmental sustainability, policymakers in Asia and the Pacific must attempt to go "beyond GDP" in assessing development progress and challenges. In this vein, there is growing awareness of the need to complement measurement and assessment of GDP growth with other measures of progress. One promising approach is the System of Environmental-Economic Accounting (SEEA), which brings together economic and environmental information into a common framework (box 1.1).

Average GDP growth in 2023 for developing Asia-Pacific economies remained resilient at an estimated 4.8 per cent. This is higher than the 3.5 per cent growth recorded in 2022 and the earlier forecast of 4.2 per cent highlighted by ESCAP in the *Survey* for 2023. This GDP growth performance was driven by resilient domestic demand and recovering tourism exports. The contribution of manufacturing exports was weak, however. Overall, the economic performance varied across the subregions (figure 1.2). Subregions more dependent on domestic demand, namely South and South-West Asia, saw relatively better performance than subregions more dependent on external demand, such as East and North-East Asia and South-East Asia. This highlights the importance of focusing on domestic demand in the region, both within individual economies and within-region through trade, for assessing economic performance and formulating policies.

Average export growth of the Asia-Pacific region was somewhat muted, due to moderate demand from extraregional developed economies as well as less than expected intraregional demand recovery from China. The United States and the European Union experienced a decline of 3.8 and 2 per cent respectively in their import volumes during the first half of 2023 (figure 1.3) (WTO, 2023a). In China, post-pandemic GDP

Box 1.1 Application of the System of Environmental-Economic Accounting for policymaking in Asia and the Pacific

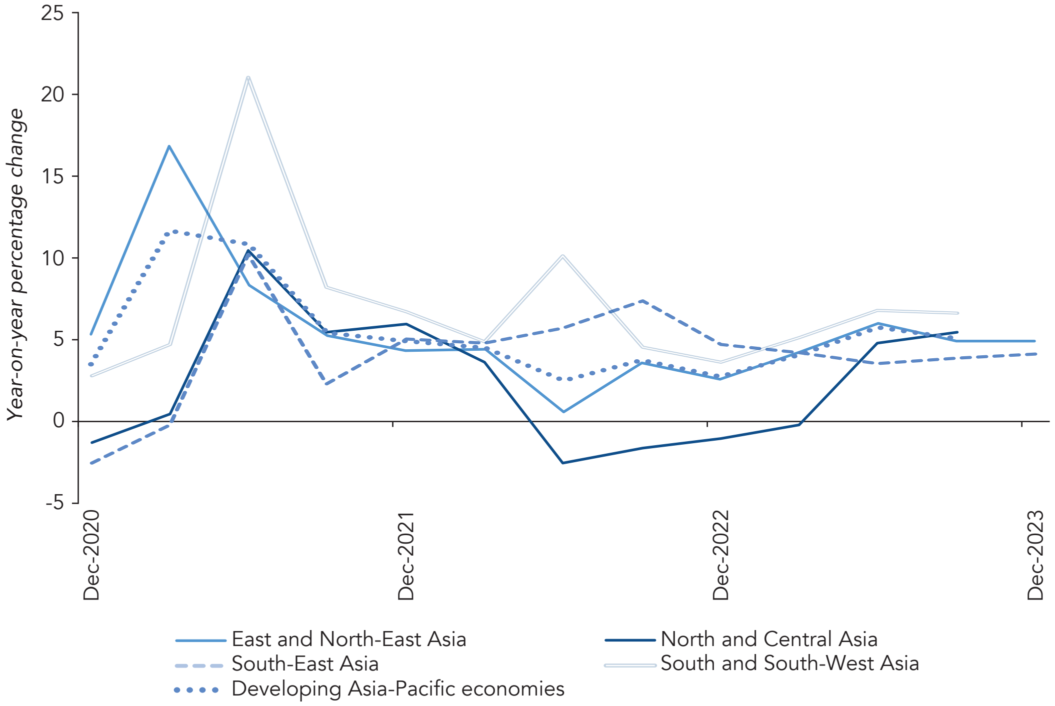
The *Survey* for 2023 noted that the integration of the System of Environmental-Economic Accounting (SEEA)[a] into the national accounting system is one of the approaches to measuring a country's economic progress that goes beyond GDP. The report includes information on Asia-Pacific countries that compiled SEEA-based accounts, with Indonesia topping the list of countries: it has 16 accounts compiled to its credit.

The system for environmental accounts has been used in Indonesia since 1997. BPS-Statistics Indonesia compiled those accounts using its Integrated System of Economic and Environment Accounts (SISNERLING). Line ministries of the Government also collected data of a similar nature. Gradually, SEEA-based accounts were integrated to broaden the coverage of SISNERLING (Firdaus, 2022). Evidently, the contribution has come in the form of mainstreaming the environmental-economic accounts and generating a comprehensive set of environmental-economic accounting information. The initiative also enhances institutional coordination within Indonesia, improves the data infrastructure and provides the ministers and their agencies with empirical evidence for planning and decision-making purposes.

The SEEA-based energy flow accounts and air emissions accounts provide information on the supply and use of energy, including energy intensity, air emissions released into the environment resulting from environmental and economic activities. Indonesia is currently the eighth largest emitter in the world. Given the size of the Indonesian economy and population (the fourth most populous in the world), energy needs will continue to increase because of economic activities. In 2021, Indonesia set an ambitious plan to achieve net zero emissions by 2060. The use of SEEA-based accounts – energy flow accounts and air emission accounts – provides information that can play an important role in getting the country moving forward towards that goal.

a The System of Environmental-Economic Accounting is a framework that integrates economic and environmental data to provide a more comprehensive and multipurpose view of the interrelationships between the economy and the environment and the stocks and changes in stocks of environmental assets, as they bring benefits to humanity. For more information, see https://seea.un.org/.

Figure 1.2 Quarterly real GDP growth, developing Asia-Pacific subregions, 2020-2023



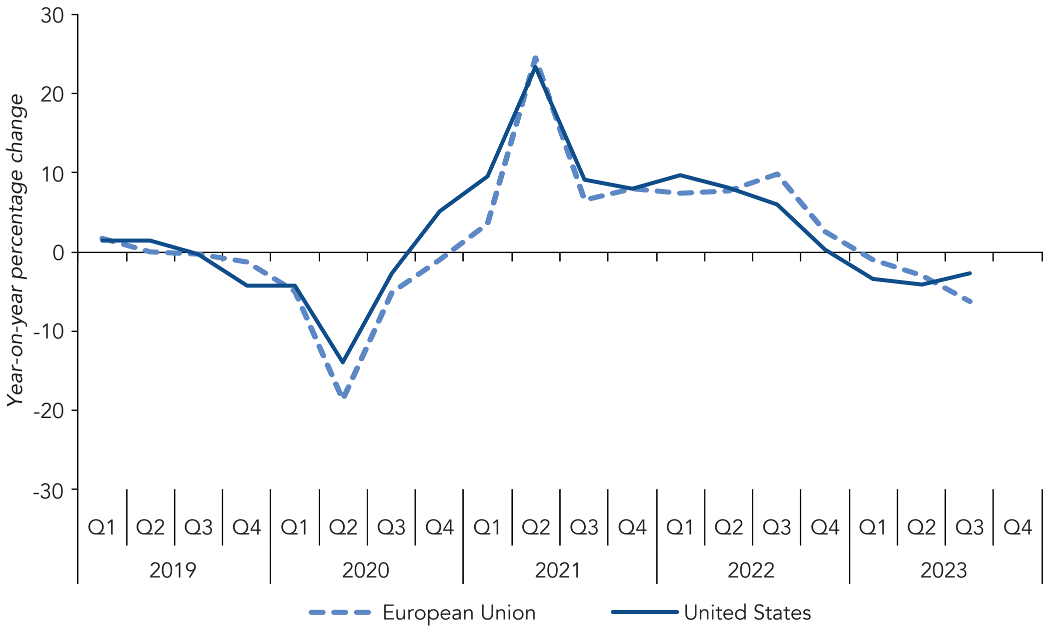
Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Note: Subregional aggregates are weighted averages, based on 28 economies in Asia and the Pacific for which quarterly GDP data are available.

growth recovery was weaker compared with earlier expectations, as a slowdown in the property sector and youth unemployment concerns kept investment and private consumption constrained. As China's demand for the exports of regional economies has expanded significantly since 2000, compared with that from the major developed economies (figure 1.4), its economic performance is increasingly important for Asia-Pacific exporting economies.

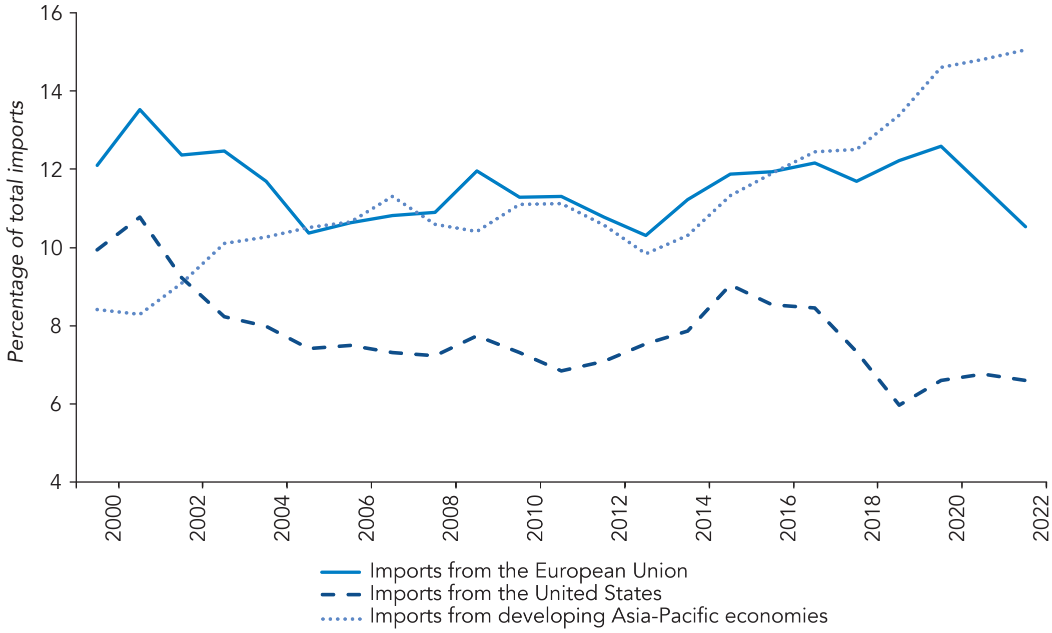
It was expected earlier that China would see a strong bump in GDP growth after emerging from an extended pandemic lockdown. Among other reasons, this has not happened because the economy is witnessing a slump in its property sector, which contributes about 30 per cent of

Figure 1.3 Import volume growth, United States and European Union, 2019-2023



Source: World Trade Organization Statistics. Accessed on 15 February 2024.

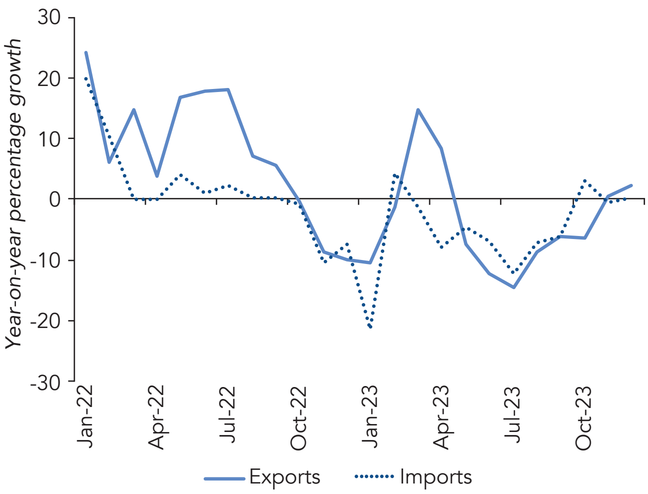
Figure 1.4 Percentage share of China's imports from developing Asia-Pacific economies, European Union and the United States, 2000-2022



Source: ESCAP, based on data from CEIC. Accessed 15 February 2024.

total GDP (Rogoff, 2023). On the consumer side, many people have relied on property investment as a key source of wealth generation, and thus falling prices are also leading consumers to spend less to counter the negative impact on their wealth. Moreover, slow output growth in developed economies has had adverse impacts on China, given its role as the world's largest manufacturing exporter. Exports from China increased only slightly in November 2023 after negative monthly growth over the preceding six months (figure 1.5).

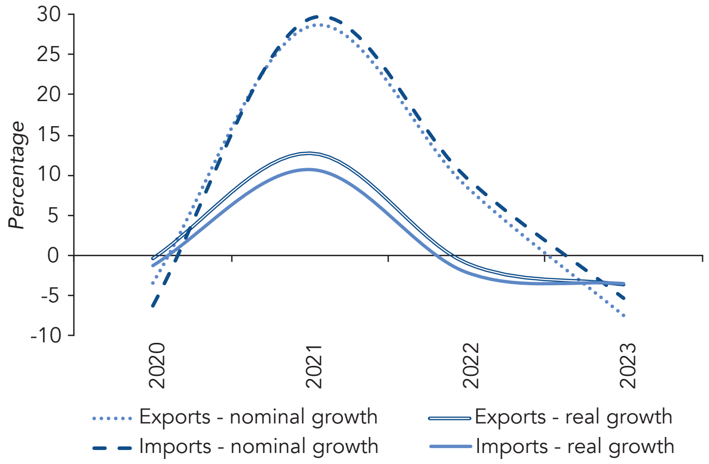
Figure 1.5 Export and import growth of China, 2022-2023



Source: CEIC. Accessed on 15 February 2024.

The impact of moderate growth in developed economies and China with regard to manufacturing export economies in the region became more evident during 2023 (figure 1.6). For example, the Republic of Korea experienced the longest period of manufacturing production decline in 50 years. Sluggish domestic demand in China also had adverse impacts on commodity exporters, tourism-dependent economies and regional manufacturing exporters producing for domestic demand in China. In terms of supplying China's final domestic demand, Asia's exports tend to be more sensitive to changes in China's investment demand, especially in property construction, than to consumption and retail sales (Varma and Toh, 2023).

Figure 1.6 Export and import growth, developing Asia-Pacific economies, 2020-2023



Source: ESCAP (2023c).

On the positive side, global services trade particularly in tourism has seen an uptick with the continuing recovery from pandemic restrictions on travel (ESCAP, 2023c). Tourism recovery strengthened in 2023 with arrivals in the Asia-Pacific region rising on average to about 62 per cent of pre-pandemic levels. Tourist arrivals have climbed back to pre-pandemic levels in Armenia, Fiji, Georgia, Kyrgyzstan, Maldives, Türkiye and Uzbekistan. In tourism-dependent countries in South-East Asia, the return of arrivals has reached approximately 70 per cent of pre-pandemic levels (figure 1.7). In the Pacific, tourism has been a key driver of GDP growth, particularly for Cook Islands, Fiji, Palau and Samoa.

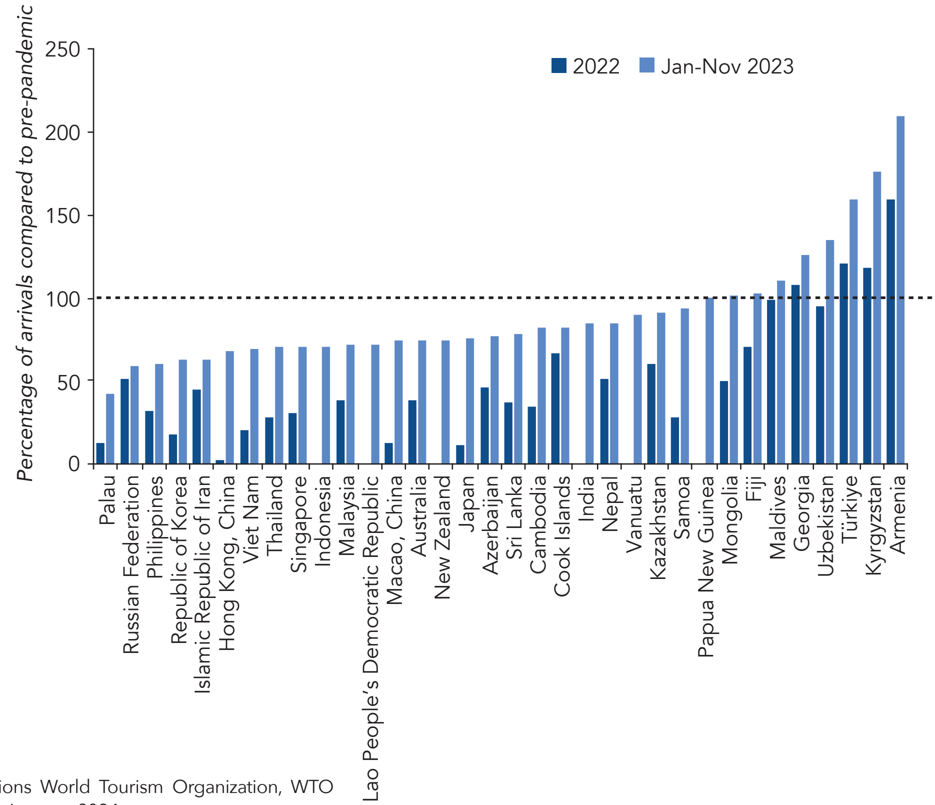
Box 1.2 Emerging signs of trade decoupling between China and G7 countries

An important ongoing concern for the region's GDP growth performance is trade decoupling between China and the G7 countries. The year 2023 witnessed a further imposition of restrictions on the production of high-technology goods, such as semiconductors in China, with concerns about tensions continuing in the near future. These developments may lead to substantial spillovers for other economies in the region. One aspect of this may be a trend of companies from developed economies switching supply chains to suppliers based in allied countries rather than the most efficient supplier (WTO, 2023b). Indeed, foreign direct investment (FDI) to Asia and the Pacific in strategically important industries, such as leading-edge semiconductors, certain pharmaceuticals and battery-related technologies, started to decline in 2019; by the last quarter of 2022, Europe received about twice as much such investment as did the Asia-Pacific region. Within the overall decline of global FDI by almost 20 per cent in the post-pandemic period, Asia and the Pacific lost market share, both as a source and host of FDI, as compared with almost all other regions (IMF, 2023a).

There are nevertheless some regional economies viewed favourably by G7 countries that may have gained from this reshoring trend. There are some signs of relocation of production from China to neighbouring countries. For example, while China experienced a more than 4-percentage point drop in its share of imports into the United States during the period 2018-2022, with the largest decline being in the electronics industry, such economies as Indonesia, Thailand and Viet Nam increased their share of imports into the United States, also mainly in electronics (Khanna, 2023).

Despite these push factors, the attraction of a large domestic market also is likely to remain a pull factor for continued manufacturing production in China. Thus, a possible emerging trend highlighted in recent surveys of foreign companies based in China is a "China for China" policy where existing operations are divided into export and domestic components, with only new investments in the former being moved to some extent outside the country (Yuan and Nilsson, 2023).

Figure 1.7 International tourist arrivals compared with pre-pandemic levels, developing Asia-Pacific economies, 2022-2023

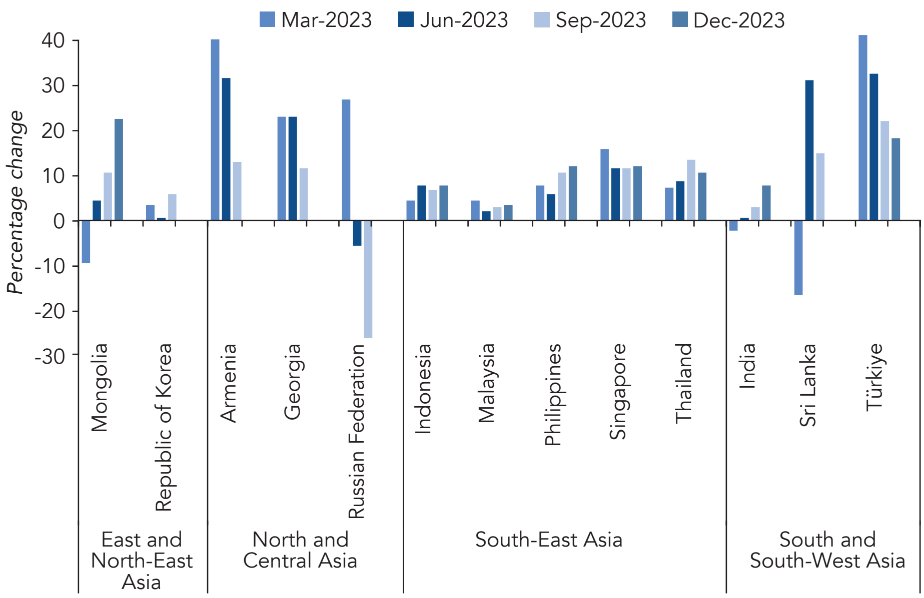


Source: United Nations World Tourism Organization, WTO Tourism Barometer, January 2024.

The key factor that has enabled economies in the region to maintain resilient GDP growth has been the strength, to varying degrees, of their domestic demand (figure 1.8). Strong domestic consumption has been supported by a drawdown of pandemic-related savings by consumers and businesses, and moderating inflationary pressure.

A bright spot for the region is India, which was the fastest growing major developing economy in the world in 2023. In that year, the economy grew by 6.8 per cent, and formal unemployment

Figure 1.8 Private consumption growth, selected developing Asia-Pacific economies, 2023



Source: CEIC. Accessed on 15 February 2024.

Box 1.3 Subregional economic developments in 2023

East and North-East Asia

Economic growth picked up in 2023 due to a rebound in private consumption and a gradual increase in tourist arrivals. As **China** is the growth engine for this subregion and the second largest economy in the world, concerns revolve around developments in that country as it grapples with sluggish economic recovery. The **Republic of Korea** registered a 1.3 percentage point decline in GDP growth in 2023 compared with 2022 due to lower contributions from private consumption and exports. Meanwhile, **Japan**'s output growth, which had stagnated for years, showed signs of revival in 2023 at an estimated 2 per cent. Domestic demand increased in line with wage hikes. **Mongolia**'s economic growth remained robust at 6.1 per cent in the third quarter of 2023 as tourism numbers, and coal and copper export sales to China continued to increase. Inflation declined substantially over the course of 2023, yet remains above target in Mongolia and the Republic of Korea.

North and Central Asia

Economic growth rebounded from a contraction of 0.4 per cent in 2022 to growth of 4 per cent in 2023 due to robust output expansion, particularly in the **Russian Federation** as sanctions appear to have had limited impacts on its economy. Increased military spending, strong investment and consumption, and increased oil and gas exports to China and India supported the Russian Federation's recovery to positive GDP growth. **Kazakhstan**'s economic growth rate increased to 5.1 per cent in 2023, driven by oil production, expansion in construction, private consumption and investments amid an expansionary fiscal policy. The economic growth of **Tajikistan**, **Turkmenistan** and **Uzbekistan** in 2023 steadied at rates comparable to those of the previous year. Meanwhile, economic growth in **Armenia** and **Georgia** continued to be supported by their vibrant tourism sector and the inflows of capital and labour force supply from the Russian Federation. A slowdown in gold production led to an economic growth decline in **Kyrgyzstan** from 7 per cent in 2022 to 3.7 per cent in 2023. Lower energy prices, declining oil production and moderation in the non-oil sector resulted in GDP growth declining by almost 4 percentage points in **Azerbaijan**.

South and South-West Asia

Overall, economic growth moderated slightly from 6 per cent in 2022 to 5.5 per cent in 2023 amid weaker exports and consumption due to high inflation. **India** registered an economic growth rate of 6.8 per cent in FY2023 supported by government spending on infrastructure and strong growth in manufacturing, mining and construction, which offset lower agricultural output. In **Bangladesh**, rising inflation dampened private consumption and investments. In **Nepal**, lower GDP growth was underpinned by reduced fixed investment and weak industrial activity amid import restrictions and subdued export orders. In **Türkiye**, strong growth in the first half of 2023 was driven by private consumption and pre-election fiscal spending. However, higher interest rates and renewed price pressures in the latter half of the year suppressed private consumption. In **Pakistan**, the economy faced political unrest that had adverse impacts on business and consumer sentiment while a massive flood disrupted agricultural production. **Sri Lanka**'s economy shrank by 2.3 per cent in 2023 after a 7.4 per cent contraction in 2022. Improved supply conditions and higher tourist arrivals supported the economy. In **Maldives**, tourist arrivals returned to pre-pandemic levels in 2023, contributing to economic growth along with construction investments. In **Bhutan**, a cut in the daily sustainable development fee supported the tourism sector and overall economic pickup despite a drop in hydropower output. **Afghanistan**'s economy remained fragile, relying heavily on external support. Relaxed sanctions on the **Islamic Republic of Iran**'s energy sector supported the economy.

South-East Asia

While supported by increased household spending and tourist arrivals, economic growth moderated in 2023 due to a slowdown in exports. In **Indonesia** and **Malaysia**, exports contracted in 2023 by 10 and 7 per cent, respectively. Although **Viet Nam** also recorded weak exports, the country is expected to benefit from a shift in global manufacturing supply chains. Meanwhile, **Singapore**'s benchmark non-oil domestic exports grew in November 2023 after 13 straight months of contraction. Output growth in **Timor-Leste** fell slightly in 2023 driven by lower government spending after recent elections. **Myanmar**'s economy has been stagnant, as rising conflict, trade and logistics disruptions, currency volatility and high inflation have dampened business and household sentiments. **Brunei Darussalam**'s economic growth declined due to oil and gas infrastructure maintenance. Inflationary pressures eased in most countries but in the **Lao People's Democratic Republic** it remained high at 32 per cent in 2023 due to currency depreciation.

Box 1.3 (continued)

Pacific islands

Economic growth moderated in 2023 relative to 2022, with tourism and public infrastructure investment being major economic drivers. **Papua New Guinea**, the largest Pacific island economy, recorded slower output growth in 2023 amid lower gold production. **Fiji** posted higher-than-expected growth in 2023 due to higher levels of visitor arrivals and associated tourism and hospitality activities, accompanied by stronger domestic consumption. Similarly, tourist arrivals picked up in **Cook Islands**, **Palau**, **Samoa** and **Tonga**. Shortage of skilled labour and infrastructure capacity, higher fuel and food prices and vulnerability to natural disaster events will pose downside risks to economic growth in the Pacific subregion in 2024.

was at a 12-year low of 4.1 per cent. India's performance has been helped by its lack of external exposure, both to the developed world and to China. Instead, the growth drivers for the country are primarily domestic. Gross fixed capital formation increased by 9 per cent in the final quarter of FY23 to reach a share of 34 per cent of GDP, the highest since 2012-2013.

3.2. Inflation moderation increases the likelihood of an easing of monetary policy

Average inflation for developing Asia-Pacific economies saw a significant reduction in 2023 to an estimated 5.2 per cent from an average of 7.5 per cent in 2022 (figure 1.9). The 2023 reading was also lower than the earlier forecast of 5.9 per cent highlighted by ESCAP in the *Survey* for 2023. The main forces which led to the spike in global inflation in 2022 – war in Ukraine and unprecedented monetary and fiscal measures to cope with the pandemic – moderated over the course of 2023. Increased interest rates by central banks across the region and lower global commodity prices also contributed to a reduction in overall inflation. The food price index of the Food and Agriculture Organization of the United Nations (FAO) showed a steady decline of almost 25 per cent between April 2022 and November 2023 (Vos and others, 2023). Similarly, the Brent oil price averaged $83 per barrel in 2023 compared with $101 in 2022 (EIA, 2023), while the gas price in Europe dropped by half over 2023.

Figure 1.9 Headline, core and food inflation, developing Asia-Pacific economies, monthly, year-on-year, 2021-2024

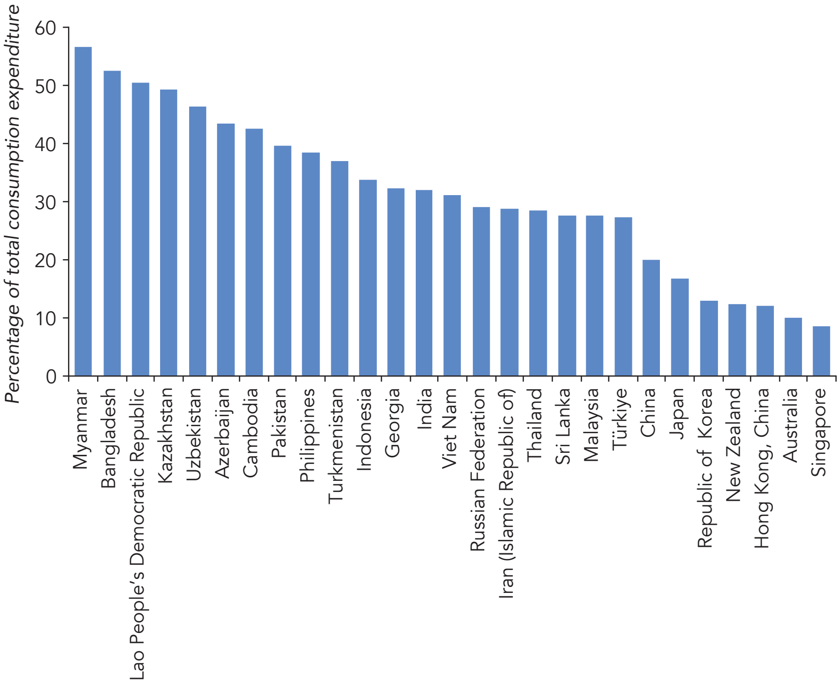
Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Note: Headline and food inflation are based on a median of 28 countries, and for core inflation, on 18 countries.

Secular decline in food and energy prices as well as tight monetary policies mean that headline inflation has come under control in much of the region. For example, headline inflation is back to target in Indonesia, Thailand and Viet Nam, and is fairly close to target in the Philippines and the Republic of Korea. Furthermore, core inflation, while still rather high in many countries in 2023, has also been on a downward trajectory. Yet, although the region's overall inflation trended downward in 2023, it remained generally high in South and South-West Asia where the average price of goods and services was about 64 per cent higher than it was in 2020, compared with 17 per cent for the developing Asia-Pacific region.

While most economies in the region have sought to reduce inflation, China has been a notable outlier in struggling with the threat of deflation. The future direction of prices is unclear as some of the reasons for recent declines were due to such one-off factors as a steep decline in pork prices. However, more concerning is weak domestic demand as

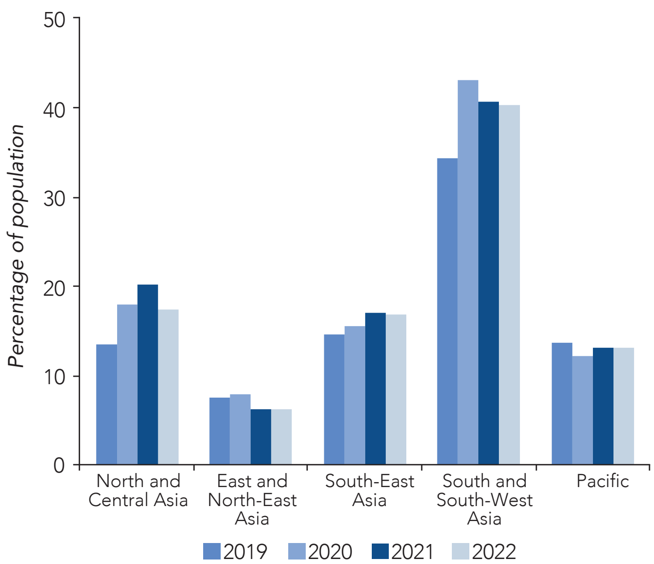
Figure 1.10 Food as percentage share of total consumer expenditure in 2021, developing Asia-Pacific economies



Source: Our World in Data, based on the Economic Research Service of the United States Department of Agriculture.

Note: Food expenditure includes only food bought for consumption at home. Out-of-home food purchases, alcohol and tobacco are not included. These data are expressed in United States dollars per person. They are not adjusted for inflation or for differences in the cost of living between countries.

Figure 1.11 Prevalence of moderate or severe food insecurity, developing Asia-Pacific subregions, 2019-2022



Source: FAO and others (2023).

well as the risk that temporary deflation itself can translate into delayed spending and thus become entrenched. The extent of stimulus measures to revive sluggish demand will be important in influencing the course of inflation in China.

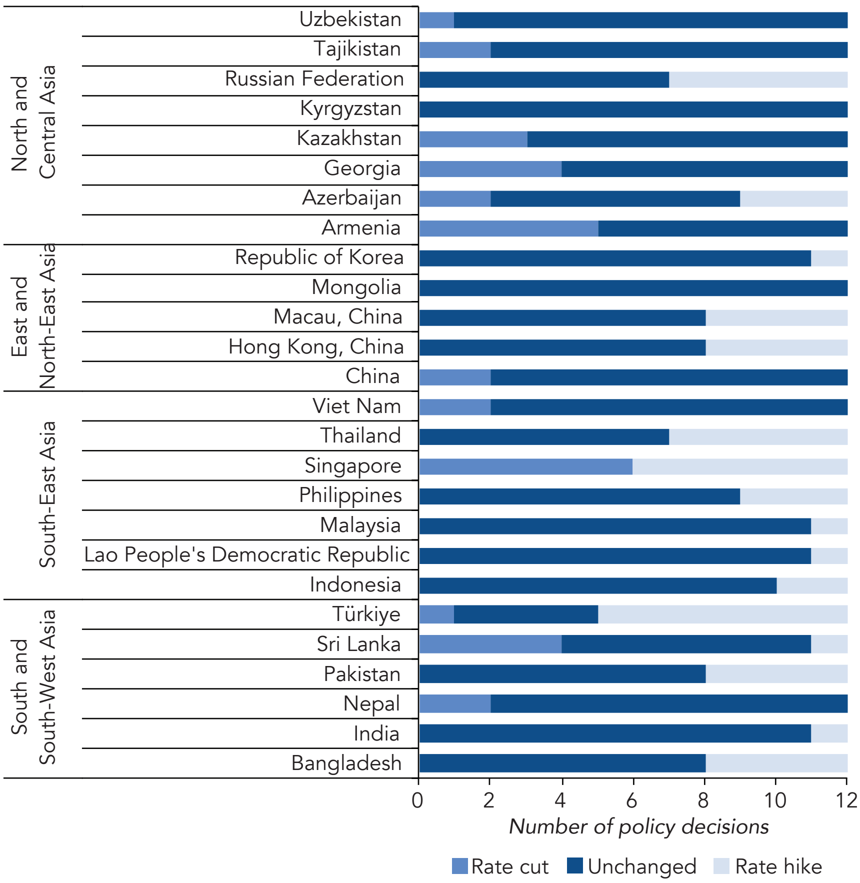
More recent developments are exerting new pressures on food prices in the region. For example, global sugar and rice prices have increased by double digits since July 2023 due to El Niño-related weather disruptions and the impact of India's temporary ban on some categories of rice exports in July 2023. Understanding the impact of the El Niño phenomenon is important because food prices account for a large portion of the consumption basket for many developing countries, including more than 50 per cent in such countries as Bangladesh, the Lao People's Democratic Republic and Myanmar (figure 1.10).[1]

The importance of food prices goes far beyond headline inflation numbers as they directly affect citizens' well-being. This is reflected in the region's limited progress in achieving Goal 2 (zero hunger), which encompasses malnutrition and food insecurity concerns. The region is home to almost 371 million malnourished people and accounts for half of the world's severe food insecurity (FAO, 2023). Food insecurity has the heaviest impacts on South and South-West Asia, with close to half of the population in that subregion suffering from moderate or severe food insecurity (figure 1.11).

Despite declining domestic inflation, central banks in the region are still cautious and continued to maintain a relatively unchanged interest rate stance during 2023 (figure 1.12). While weaker inflation and sluggish GDP growth prompted monetary easing in Armenia,

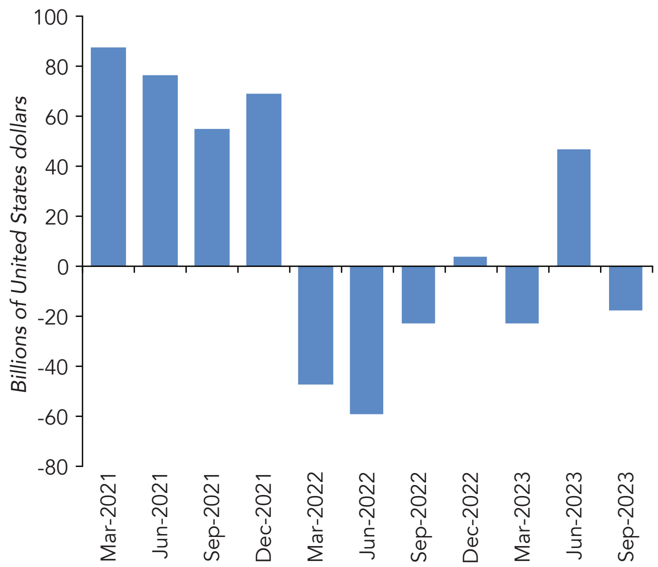
1 The El Niño phenomenon, which generally occurs every two to seven years, is a warming of the surface temperature of the Pacific Ocean; it is associated with drought-like conditions in other parts of the region. It is expected to peak in early 2024, but its economic impacts are likely to last much longer.

Figure 1.12 Policy interest rate decisions, developing Asia-Pacific economies, 2023



Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Figure 1.13 Foreign portfolio investments, net inflows, developing Asia-Pacific economies, quarterly, 2021-2023



Source: CEIC. Accessed on 15 February 2024.

Georgia, Nepal, Sri Lanka, Tajikistan, Uzbekistan and Viet Nam, several countries continued to raise interest rates in the first half of 2023. Meanwhile, China introduced further easing in its monetary stance to boost household consumption and the ailing property sector, including through lowering of mortgage rates.

Apart from ensuring that domestic inflation is securely tamed, central banks are also maintaining a relatively tight monetary policy stance because of high interest rates in developed economies. This approach helps preserve interest rate differentials and dissuades portfolio capital outflows from the region and thus avoids exchange rate depreciation pressure. Portfolio outflows from Asia-Pacific emerging markets were seen over most of 2023, which exerted pressure on local currency, and equity and bond markets (figure 1.13).

Excessive and sustained financial outflows and depreciation of currencies are unwelcome as they contribute to inflation and concerns about financial stability, and adversely affect foreign currency denominated debt of sovereigns and the corporate sector. Overall, currencies in developing Asia-Pacific countries depreciated moderately against the United States dollar in 2023, although large depreciations were seen in a few countries in the region due to idiosyncratic factors, such as high inflation in the Lao People's Democratic Republic and economic and political instability in Pakistan (figure 1.14).

While central banks' main priorities are to keep inflation low and stable and ensure financial stability, which benefits the poor, their actions with regard to interest rates can also have distributional implications and thus have adverse impacts on the poor. Elevated interest rates, including to prevent currency depreciation, contribute to higher debt servicing costs, which are paid by people, businesses and Governments, and such rates constrain GDP growth and mitigate employment prospects. Thus, while a higher interest rate contributes to keeping inflation low, which benefits the poor, it has adverse impacts on their income prospects as it curtails employment opportunities.

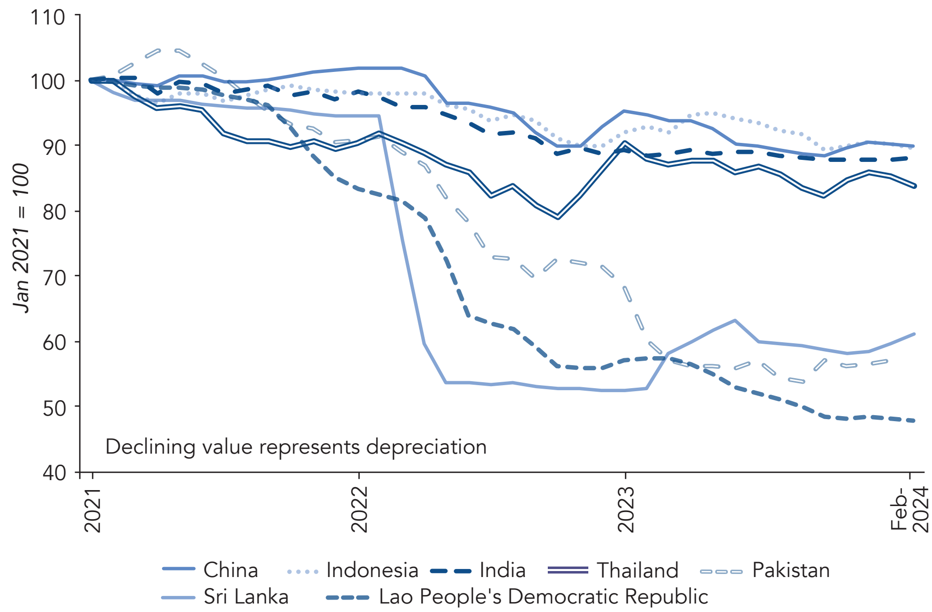
3.3. Impacts of the pandemic and cost of living crisis on employment, poverty and inequalities are persisting

Despite resilient GDP growth and moderating inflation in the region in 2023, the adverse lingering socioeconomic impacts of the COVID-19 pandemic and the cost of living crisis on the prospects for implementing the 2030 Agenda and thus achieving sustainable development are becoming increasingly evident in terms of jobs, poverty and inequality outcomes.

In considering jobs and earnings, worrying trends can be seen regarding various aspects of Goal 8 (decent work and economic growth). The pandemic, with its multifaceted impacts on the economy and labour markets, disrupted some promising pre-crisis trends. As of the third quarter of 2023, employment in most sectors of the economy had only just returned to pre-pandemic levels seen at the end of 2019 (figure 1.15). This is the case, for example, in the critical area of manufacturing, which is highly dependent on demand from developed economies and China. An important emerging trend is the strong growth in employment in the information and communications technology (ICT) sector, which shows the potential opportunity for economies to move towards newer technologies.

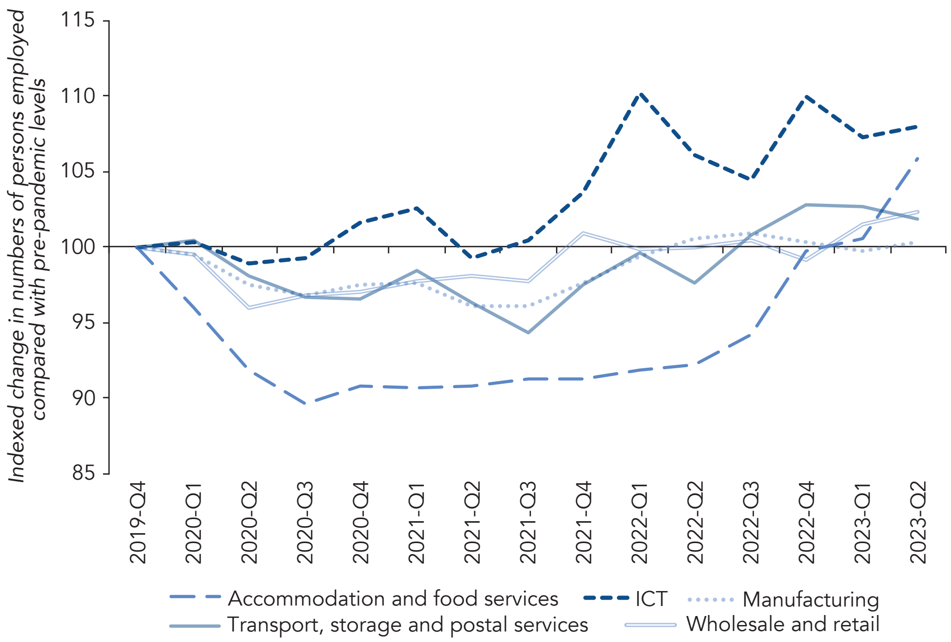
Divergent sectoral performance in employment recovery shows a worrying trend: sectors with sluggish recovery include more low-skilled ones, such as food and retail services, which are also primarily sectors where the majority of informal workers are concentrated. Weak employment growth in these sectors affects disposable income of these low-

Figure 1.14 Exchange rate depreciation against United States dollar, selected developing Asia-Pacific economies, 2021-2024



Source: CEIC. Accessed on 15 February 2024.

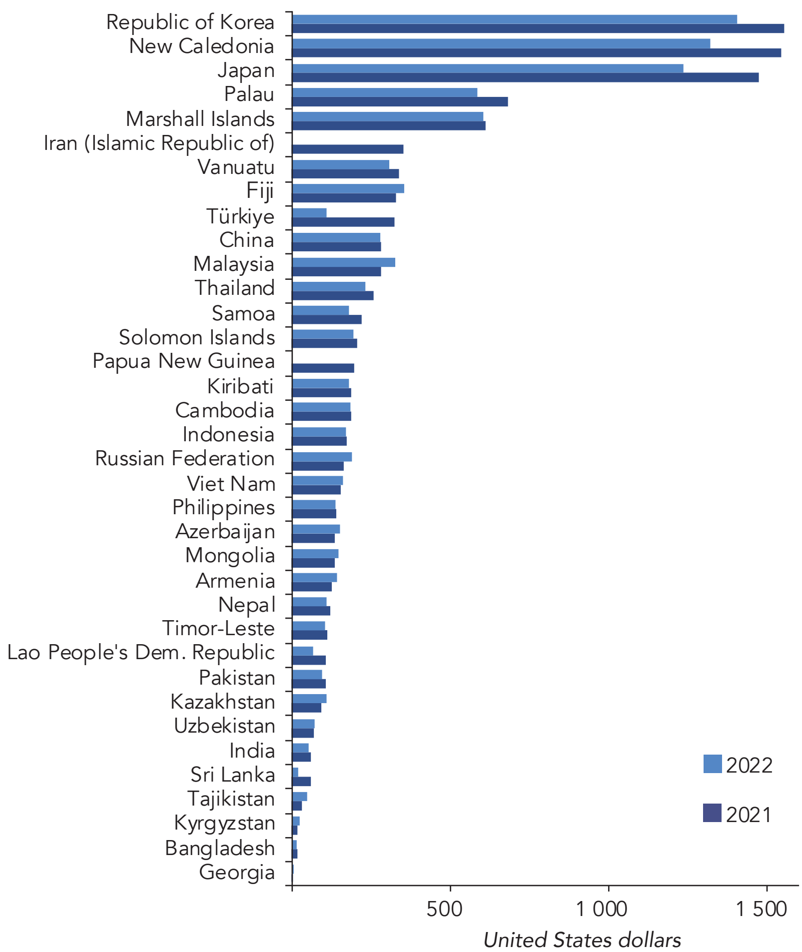
Figure 1.15 Change in employment across sectors, selected developing Asia-Pacific economies, 2019-2023



Source: ESCAP, based on data from CEIC. Accessed on 15 February 2024.

Note: Based on available data for 10 countries.

Figure 1.16 Real value of national minimum wage, developing Asia-Pacific economies, 2021 and 2022



Source: ILOSTAT database. Accessed on January 2024.

skilled workers, which in turn affects their spending on food, health care, education and other necessities, thus having adverse impacts on progress in achieving the Sustainable Development Goals in these areas.

Another concern is the ability of workers to support their well-being in the wake of the declining real value of their earnings, as nominal wage increases have not kept up with the spike in inflation. The real value of national minimum wages, the wage rates which are most relevant to the poor, declined between 2021 and 2022 in many Asia-Pacific economies (figure 1.16) (ILO, 2023a). Although 2023 saw some decline in inflation in the region, the overall challenge remains for workers in contrast with pre-COVID times.

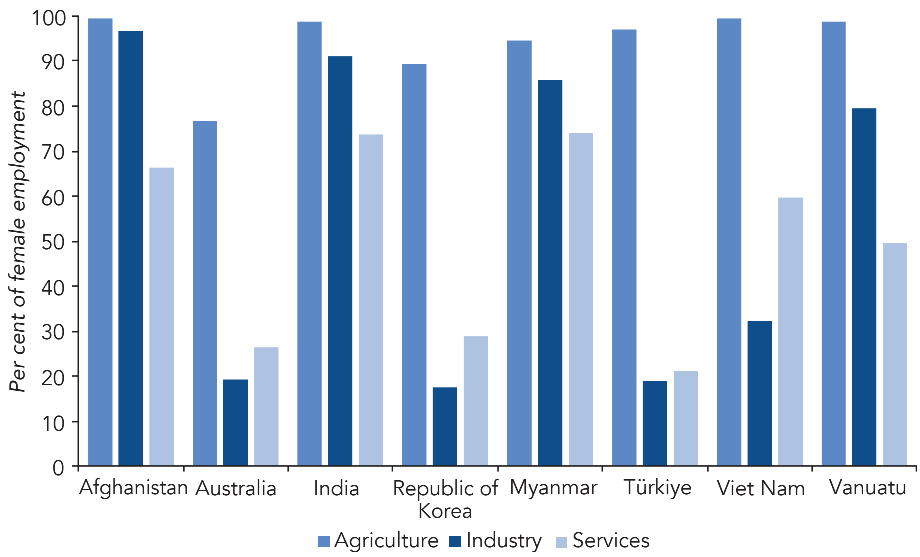
The recent crises have also had important negative impacts on informal and vulnerable work in the region. For instance, the gradual decline in the number of persons in informal employment at the regional level until 2019 was reversed during the pandemic, as was the decline in vulnerable employment (ILO, 2023b). Furthermore, women's continued high representation in informal employment across all sectors is a key driver of gender inequalities (figure 1.17). Primarily, women's informal employment increases women's vulnerabilities due to their lack of inclusion in social protection and decent work provisions, such as minimum wage protections and health care.

High inflation, weak employment conditions and the lingering effects of the pandemic may have pushed many people in Asia and the Pacific back into poverty. ESCAP estimates that, compared with the expected pre-shock levels, an additional 42 million people in the region have been pushed back into extreme poverty in 2022, based on the $2.15 per day threshold. The estimates rise to 156 million people at the $3.65 per day line and 155 million people at the $6.85 line (Tateno and Zoundi, 2021).[2] This aggravates the poverty concerns in the region at a time when the number of poor people in South Asia have already increased and the decline in poverty in East Asia was halted in 2021.

In addition to poverty, the impact of the pandemic and high cost of living on income inequality is also concerning. As wage earners, poor and vulnerable populations suffer from lower purchasing power. In contrast, wealthier individuals earn a greater proportion of their income from financial assets, which have performed relatively well in recent years. From the expenditure side, adverse impacts on the poor have also been more severe than on the rich owing to high inflation, as the poor spend a greater proportion of their income on food and energy, both of which have recorded steep price increases since 2022.

Post-pandemic income inequality has widened in many Asia-Pacific economies and is likely to deepen in the near term. Between the pre-pandemic year of 2019 and the latest available data for 2022, the income shares of the poorest 50 per cent of the population dropped in 21 of 38 economies in the region (figure 1.18). In countries such as Armenia, Azerbaijan and Maldives, such decreases are notable at between 5 and 6 percentage points. In contrast, the income shares of the richest 10 per cent jumped in several economies during this period, including an increase of almost 20 percentage points in Maldives. Across Asia and the Pacific, the income shares of the poorest 50 per cent of the populations of those economies remained below 15 per cent in most countries. Although data for 2023 are not yet available, income inequality is likely to have deepened in several regional economies due to high inflation and sluggish employment in low-skilled sectors during the year.

Figure 1.17 Proportion of females in informal employment, by sector, selected Asia-Pacific economies

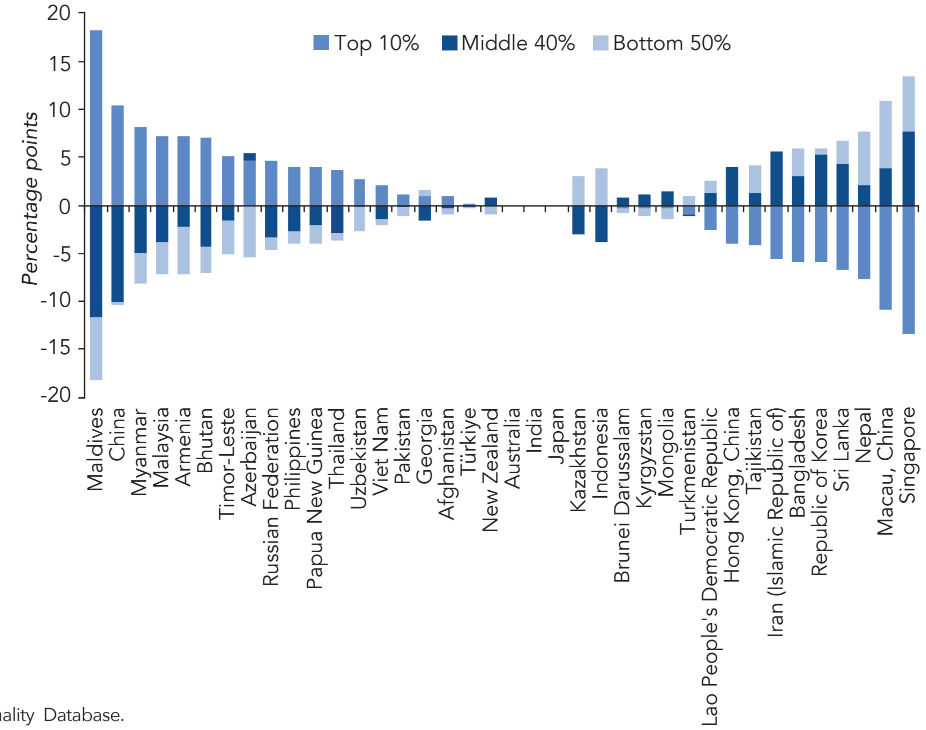


Source: ILO Modelled Estimates (ILOEST database).

Note: Republic of Korea and Vanuatu data are from 2019; those for Myanmar are from 2020; Afghanistan and Australia data are from 2021; and data for India, Türkiye and Viet Nam are from 2022.

2 Based on the latest data and forecasts available for 22 developing Asia-Pacific economies. For methodology, see Tateno and Zoundi (2021).

Figure 1.18 Change in income shares in Asia-Pacific economies between 2019 (pre-pandemic) and 2022 (post-pandemic)

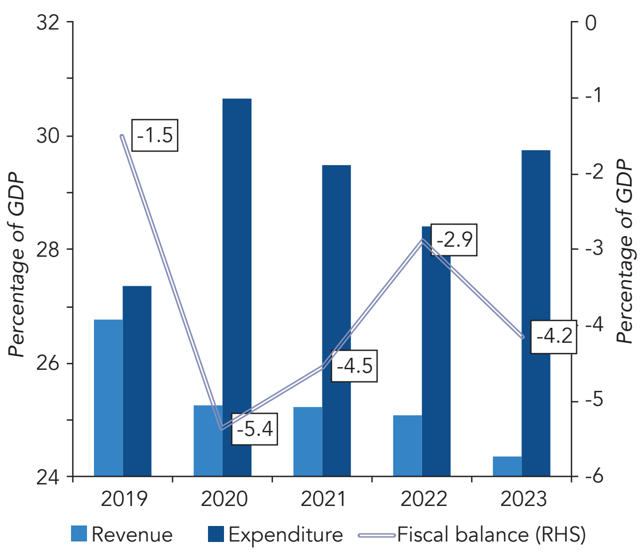


Source: World Inequality Database.

3.4. Elevated debt servicing costs are having adverse impacts on economic prospects and the ability of Governments to spend on achieving the Sustainable Development Goals

After two years of narrowing fiscal deficits, the gap widened in 2023. The deterioration in fiscal positions has come both from the revenue side, with impacts caused by sluggish GDP growth, and from the expenditure side due to fiscal policy measures to support people and businesses to cope with high inflation. Government revenues, on average, have been on a declining trend since before the pandemic and are estimated to have dropped below 25 per cent of GDP in 2023. Government expenditures also seem to have been increasing again in 2023 after declining somewhat in the previous two years (figure 1.19). Taken together, the median fiscal deficit in 2023 for developing Asia-Pacific economies is estimated to have increased to 4.2 per cent in 2023 from 2.9 per cent in 2022.

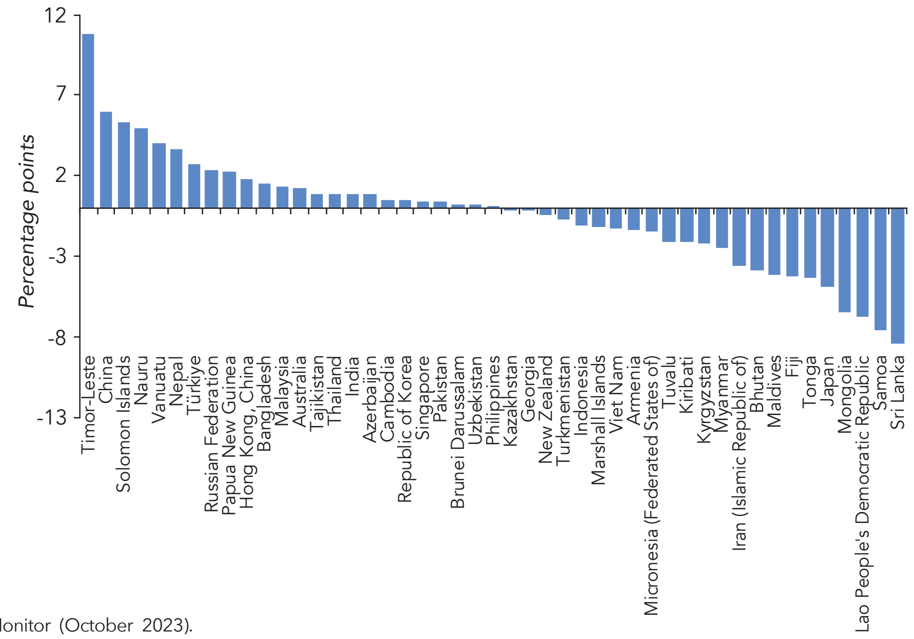
Figure 1.19 Fiscal balance, revenues and expenditures in developing Asia-Pacific economies, 2019-2023



Source: IMF Fiscal Monitor (October 2023).

In line with larger fiscal shortfalls in 2023, public debt levels continued to rise in many developing Asia-Pacific economies. Although the average public debt-to-GDP ratio for the region has declined somewhat from the pandemic peak of 50.1 per cent to 48.9 per cent in 2023, approximately half of the economies recorded a rise in their public debt ratio (figure 1.20). The increases were more notable in the least developed countries and small island developing States in the Pacific, many of which are already facing a high risk of debt distress.

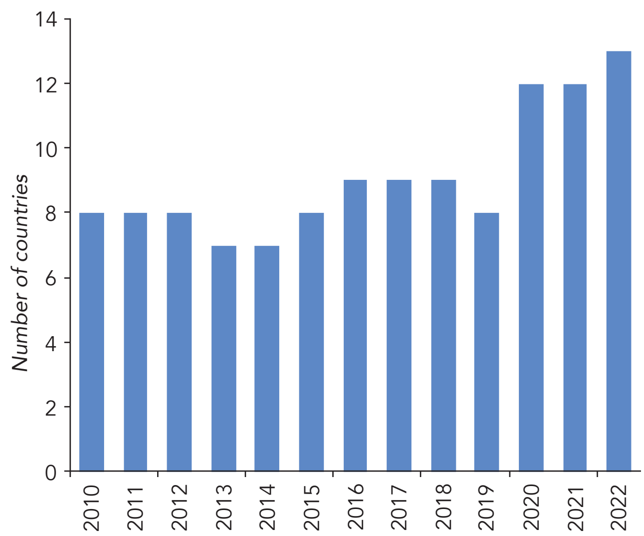
Figure 1.20 Change in public debt to GDP ratio of developing Asia-Pacific economies between 2022 and 2023



Source: IMF Fiscal Monitor (October 2023).

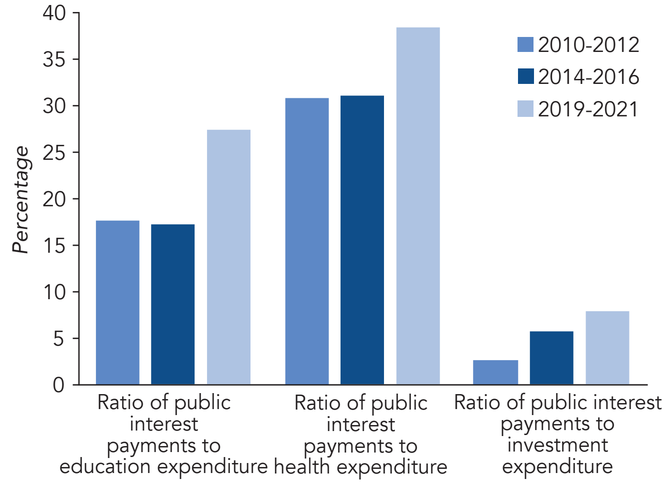
In the wake of higher interest rates, the main fiscal concern and challenge for the region is increasing public debt servicing costs. Debt service payments (defined as principal repayments and interest on government debt to domestic and foreign creditors) as a share of GDP have shown a rising trend in Asia and the Pacific in the past few years, from an average of 1.6 per cent in 2017 to 2.1 per cent in 2022. In such countries as Maldives and Mongolia, this ratio in 2022 was much higher at more than 8 per cent. Over the past decade, the number of Asia-Pacific countries has doubled where government interest payments took away more than 10 per cent of government revenue (figure 1.21). The rising trend of public debt servicing costs is particularly worrying when compared with government spending on essential development areas. During the period 2019-2021, the amount that Governments in the region spent on interest payments was equivalent to about 28 and 38 per cent of their spending on education and health care, respectively (figure 1.22). Lower borrowing costs would free up significantly more fiscal resources for essential development purposes.

Figure 1.21 Number of developing Asia-Pacific economies with interest expenditure exceeding 10 per cent of government revenues



Source: UNCTAD, A World of Debt.

Figure 1.22 Ratio of public interest payments on developmental and investment expenditures in developing Asia-Pacific economies



Source: UNCTAD, A World of Debt.

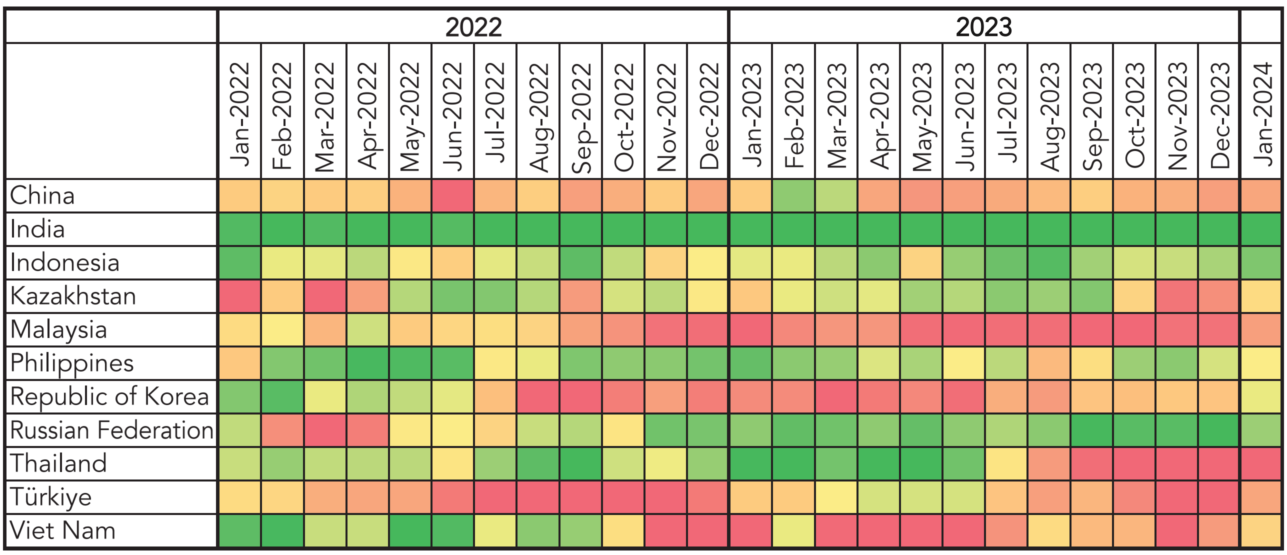
In the context of overall fiscal pressure across the region, countries such as Pakistan and Sri Lanka have resorted to external assistance from IMF. In the case of Pakistan, the country secured an IMF agreement in mid-2023 which would help, with further assistance from such bilateral partners as China, Saudi Arabia and the United Arab Emirates. Sri Lanka, already under an IMF programme, also regained some macroeconomic stability during 2023. Essentially, both economies are undergoing fiscal adjustments to restore fiscal sustainability through the use of various measures, such as restructuring domestic debt in Sri Lanka (Fitch Ratings, 2023) and removing subsidies for the power sector in Pakistan. While Bangladesh also turned to IMF for assistance, the situation is different as the request for extra funding was precautionary in nature rather than due to looming financial needs.

4. Economic outlook for developing economies in Asia and the Pacific, 2024-2025

4.1. Developing Asia-Pacific countries are expected to broadly maintain current growth trends

The average GDP growth rate in Asia-Pacific developing economies is projected to decline slightly to 4.4 per cent in both 2024 and 2025, compared with an estimated 4.8 per cent in 2023 (table 1.1). This outlook takes into account a projected GDP growth moderation in China from 5.2 per cent in 2023 to 4.7 per cent in 2024. The region's GDP growth is likely to be supported largely by strong domestic demand and to drive approximately 64 per cent of global GDP growth. On the other hand, the region's key export markets are projected to face subdued economic prospects, with a projected decline in GDP growth in the United States from 2.4 per cent in 2023 to 1.5 per cent in 2024; the European Union is projected to record a slight increase from 0.5 per cent to 1.2 per cent during the same period (United Nations, 2024). This may constrain export prospects and weigh on production activities and new business investments. Meanwhile, manufacturing purchasing managers' indices (PMIs) in most Asia-Pacific economies remained weak towards the end of 2023 (figure 1.23). Similarly, while tourist arrivals will

Figure 1.23 Manufacturing Purchasing Managers' Indices in selected developing Asia-Pacific economies, 2022-2024



Source: CEIC. Accessed on 15 February 2024.

Note: Cells that range from yellow to red indicate contraction in the manufacturing sector (<50) and those from light to dark green indicate expansion in the manufacturing sector (>50).

Table 1.1 Real GDP growth and inflation in Asia and the Pacific

	Real GDP growth				Inflation[a]			
(Percentage)	2022	2023	2024[b]	2025[c]	2022	2023	2024[b]	2025[c]
Total Asia-Pacific region	3.2	4.3	3.9	3.9	6.8	4.9	4.5	3.5
Developing Asia-Pacific economies[d]	3.5	4.8	4.4	4.4	7.5	5.2	4.8	3.8
Developed Asia-Pacific economies[e]	1.7	1.9	1.3	1.4	3.6	4.0	3.0	2.2
East and North-East Asia[f]	2.4	4.3	3.8	3.6	2.3	1.1	1.5	1.6
East and North-East Asia (excluding Japan)[f]	2.8	4.9	4.5	4.3	2.3	0.6	1.2	1.6
China	3.0	5.2	4.7	4.5	2.0	0.2	1.0	1.5
Democratic People's Republic of Korea	..	..	..	..	..	..	..	..
Hong Kong, China	-3.5	3.2	2.9	3.1	1.9	2.1	2.3	2.5
Japan	1.0	1.9	1.2	1.1	2.5	3.3	2.6	1.8
Macao, China	-26.8	85.0	28.0	14.5	1.0	0.9	1.7	1.7
Mongolia	5.0	7.1	6.2	6.1	15.2	10.4	8.6	8.0
Republic of Korea	2.6	1.3	2.1	2.2	5.1	3.6	2.5	2.0
North and Central Asia[f]	-0.4	4.0	2.3	2.3	13.7	7.2	5.5	4.4
North and Central Asia (excluding Russian Federation)[f]	4.9	5.1	4.7	4.8	13.5	11.4	7.2	5.5
Armenia	14.2	9.1	5.2	4.7	8.6	2.0	2.3	2.5
Azerbaijan	4.6	0.9	2.6	2.8	13.8	9.0	6.0	4.0
Georgia	10.0	7.5	4.9	5.0	11.9	2.6	2.5	2.5
Kazakhstan	3.2	5.1	4.3	4.5	15.0	14.7	8.0	6.0
Kyrgyzstan	7.0	3.7	3.9	5.5	13.9	10.9	7.5	6.0
Russian Federation	-2.1	3.6	1.5	1.5	13.8	5.9	5.0	4.0
Tajikistan	8.0	8.3	6.0	5.5	6.6	3.5	4.0	3.8
Turkmenistan	6.2	6.3	6.0	6.0	15.9	10.3	8.0	7.0
Uzbekistan	5.7	5.7	5.8	5.6	11.4	10.0	7.6	5.7
Pacific[f]	3.6	1.8	1.7	2.2	6.7	5.6	3.3	2.8
Pacific island developing economies[f]	6.1	3.6	4.8	3.9	5.4	5.3	4.5	4.0
Cook Islands	10.5	14.5	9.1	9.0	4.2	13.0	2.3	2.0
Fiji	20.0	8.2	3.4	3.1	4.3	2.3	3.0	2.8
Kiribati	1.2	2.4	2.6	2.5	5.0	6.0	3.0	2.5
Marshall Islands	-0.9	2.2	2.5	2.0	3.3	3.7	3.7	3.5
Micronesia (Federated States of)	2.0	4.1	0.5	2.0	5.0	3.6	0.4	1.5
Nauru	2.8	1.6	1.6	2.0	1.0	5.5	4.2	4.0
Palau	-1.0	3.8	6.5	6.0	10.2	8.0	5.0	4.0
Papua New Guinea	5.2	2.7	5.3	4.1	5.3	5.3	4.8	4.4
Samoa	-5.3	8.0	4.2	3.8	8.8	12.0	5.3	4.3
Solomon Islands	-4.1	3.0	2.6	3.2	5.5	5.5	3.6	3.1
Tonga	-2.0	2.8	2.5	2.2	8.5	10.3	4.5	4.1
Tuvalu	0.7	3.0	2.5	2.5	12.2	6.2	3.3	3.0
Vanuatu	1.8	1.3	3.2	3.5	7.0	8.9	5.2	3.5
Developed countries in the Pacific subregion[f]	3.6	1.8	1.6	2.2	6.7	5.6	3.3	2.8
Australia	3.7	2.0	1.7	2.3	6.6	5.6	3.3	2.8
New Zealand	2.7	0.5	1.3	1.5	7.2	5.8	3.3	2.6

Table 1.1 *(continued)*

	Real GDP growth				Inflation[a]			
(Percentage)	2022	2023	2024[b]	2025[c]	2022	2023	2024[b]	2025[c]
South and South-West Asia[f,g]	6.0	5.5	5.2	5.6	24.8	21.4	16.7	10.6
Afghanistan	-10.8	..	..	..	13.7	..	..	..
Bangladesh	7.1	6.0	5.6	5.8	6.2	9.0	7.5	6.7
Bhutan	5.2	4.2	4.0	4.0	5.7	4.5	4.2	3.8
India	7.0	6.8	6.9	7.2	6.7	5.5	4.5	4.0
Iran (Islamic Republic of)	3.8	4.5	3.7	3.3	38.2	43.0	28.0	26.0
Maldives	13.9	8.7	6.6	7.0	2.3	2.9	2.5	2.2
Nepal	5.6	1.9	4.2	5.0	6.3	7.9	6.7	6.3
Pakistan	4.7	1.7	2.0	2.3	12.1	29.1	26.0	12.2
Sri Lanka	-7.4	-2.3	1.5	3.0	50.0	19.8	5.0	4.5
Turkey	5.6	4.5	3.1	3.9	72.3	53.4	43.0	22.0
South-East Asia[f]	5.6	4.0	4.4	4.7	5.1	3.9	2.8	2.6
Brunei Darussalam	-1.6	1.3	2.5	2.0	3.7	0.4	1.4	1.0
Cambodia	5.2	5.3	6.2	6.2	5.3	2.1	3.0	3.0
Indonesia	5.3	5.1	5.0	5.2	4.2	3.7	2.6	2.6
Lao People's Democratic Republic	4.4	3.7	4.1	4.3	23.0	32.0	15.3	5.0
Malaysia	8.7	3.8	4.3	4.6	3.4	2.5	2.1	2.0
Myanmar	4.0	1.0	2.0	2.3	18.4	14.0	8.2	7.7
Philippines	7.6	5.6	6.0	6.1	5.8	6.0	3.8	3.5
Singapore	3.6	1.1	2.3	2.5	6.1	4.8	3.1	2.0
Thailand	2.5	1.9	2.7	3.3	6.1	1.3	1.2	1.9
Timor-Leste	3.9	1.5	3.1	3.1	7.0	6.0	2.6	2.1
Viet Nam	8.1	5.1	6.0	6.5	3.2	3.3	3.1	2.6
Memorandum items:								
Least developed countries	6.1	4.8	4.8	5.1	8.9	10.0	7.5	6.2
Landlocked developing countries	4.6	4.7	4.5	4.6	13.1	11.8	7.9	6.2
Small island developing States	7.0	4.1	4.9	4.2	5.1	5.1	4.4	4.0

a Changes in the consumer price index.
b Estimates.
c Forecasts.
d Developing Asia-Pacific economies consist of all countries and areas listed in the table, excluding Australia, Japan and New Zealand.
e The group of developed Asia-Pacific economies consists of Australia, Japan and New Zealand.
f Aggregate growth rate was calculated using GDP in 2015 United States dollars as weights.
g The estimates and forecasts for countries relate to fiscal years. These are defined as follows: 2023 refers to the fiscal year spanning the period from 1 April 2023 to 31 March 2024 in India; from 21 March 2023 to 20 March 2024 in Afghanistan and the Islamic Republic of Iran; from 1 July 2022 to 30 June 2023 in Bangladesh, Bhutan and Pakistan; and from 16 July 2022 to 15 July 2023 in Nepal.

continue to recover towards pre-pandemic levels, the momentum of recovery will be affected by subdued growth prospects in such source markets as China and Europe.

Average inflation in developing Asia and the Pacific is projected to decline slightly to 4.8 per cent in 2024 and 3.8 per cent in 2025, compared with an estimated 5.2 per cent in 2023. Despite a significant decline, inflation will still remain somewhat high compared with the pre-pandemic average of approximately 3.4 per cent. As such, most central banks are expected to continue to maintain a relatively tight monetary policy stance.

Public debt levels are expected to remain high in several economies, which on its own is not necessarily an issue; however, debt sustainability risks may become a concern for some countries, particularly amid the current high interest rate environment and increasing costs of debt servicing. IMF has identified Afghanistan, Kiribati, Maldives, Marshall Islands, the Federated States of Micronesia, Papua New Guinea, Samoa, Tajikistan, Tonga and Tuvalu to be at high risk of debt distress, while the Lao People's Democratic Republic is already considered to be in debt distress (IMF, 2023b).

4.2. Risks to the economic outlook

Uncertainty concerning inflation trends in Asia and the Pacific and the monetary stance of developed economies will largely shape the region's interest rate outlook. As core inflation in the United States and the Eurozone remains elevated, their central banks are likely to maintain high interest rates in the near term. This implies a high interest rate environment within the Asia-Pacific region, which will weigh on GDP growth prospects. Furthermore, this poses a financial stability risk due to high debt servicing costs, especially in countries with high government, corporate and household debt levels and weak repayment ability. Although the banking sectors in developing Asia-Pacific economies are generally well capitalized, with a capital adequacy ratio of more than 15 per cent, the proportion of default loans stood at relatively high levels of 8-10 per cent of total bank loans in mid-2023 in such economies as Bangladesh, Kyrgyzstan, Mongolia and Pakistan.

The uncertainty associated with the extent of China's economic slowdown due to a slump in the property sector may have a significant impact on the region's export and output growth. Although the Chinese authorities are determined to initiate further measures to support the property market and boost economic growth, weak export demand will constrain the country's manufacturing activity. A likely reduction in imports into China could hinder export growth in such countries as Australia, Japan, the Republic of Korea and the Russian Federation, as well as the ASEAN countries. Furthermore, countries that rely on tourist arrivals from China may face a slower recovery of their tourism industry.

Geopolitical tensions could have impacts on trade flows and commodity prices. In the case of the ongoing war in Ukraine, the key risk for the region continues to be potential renewed disruptions in the supply of key commodities, such as wheat, fertilizer and fuel. Concerns with fuel prices are also related to the ongoing conflict in Gaza and Israel due to the risk of any unilateral reduction in supplies by Middle East oil and gas producers. A cautionary lesson of history in this regard is the conflict in the Middle East some 50 years ago, when an embargo by regional oil and gas producers led to steep oil prices rises and created a major shock for the global economy. Another risk is a generalized increase in goods prices due to safety concerns and blockades in the Middle East leading to maritime disruptions through the rerouting of global shipping, which adds to transport time and costs.

Trade flows and commodity prices may also be affected by the geopolitical decoupling trends in recent years. Further decoupling of global supply chains between China and G7 countries through the continuation of incipient reshoring trends has the potential to redirect production from China and other countries in the region towards those viewed by the G7 countries as being more "friendly". Such a trend may be detrimental to the region as a whole in coming years as it may eventually result in more production being brought back to or nearer to developed countries. This reshoring is also increasingly being accompanied by a concerning trend of protectionism; an example is policies that favour domestic producers of climate-related products and services as well as semiconductors in both the United States and Europe. Such policies would disadvantage producers in the Asia-Pacific region that manufacture these products more competitively. A decoupling of global production into trading blocs would potentially lead to a decline in GDP growth and employment as such protectionism reduces global productivity, output and export demand.

The challenging economic outlook has direct implications for countries in Asia and the Pacific in their efforts to achieve the Sustainable Development Goals. Among them are moderate economic growth prospects and heightened economic uncertainty, which may lead to subdued job creation and smaller wage increases. Difficult economic conditions also constrain tax revenue collection and thus available fiscal resources to expand the coverage of social protection schemes, improve the quality of education and further invest in transport and energy infrastructure.

5. Policy considerations

5.1. Monetary policy can strive to support GDP growth and development ambitions only after ensuring inflation control and financial stability

Monetary policy actions, such as higher interest rates, helped to bring inflation under control in several economies in the region in 2023. However, the forecast average inflation for 2024 remains relatively high compared with the pre-pandemic average. Moreover, risks remain for supply-led increases in food and energy prices related to weather and geopolitical developments. Caution continues to be required from monetary authorities in terms of deciding the path of monetary policy to ensure that inflation is effectively tamed.

Nevertheless, maintaining high interest rates longer than required can have negative impacts on households and firms in terms of reducing their disposable income for social needs and business expansion. Therefore, the decision on when interest rates can be reduced can have important economic implications. The determining factor in such decisions is the near-term inflation outlook relative to the inflation target and a judgment that domestic inflation is fully under control and is no longer a concern. It is only thereafter that they can consider reducing interest rates to support GDP growth and investments in their development ambitions.

Another important consideration is to assess the interest rate level that would be most effective in controlling inflation. One concept often discussed is the "natural rate of unemployment". Reaching this level may be used as a guide to assess whether inflationary pressure has been brought under control and if interest rates can be reduced. However, the natural rate of unemployment is difficult to measure, and if an estimate is made, its relationship with inflation is not clear-cut as several factors are involved, such as demographic change, lower post-pandemic labour force participation, supply chain disruptions and realignment, distributional impacts of interest rates and technological advancement (Tarullo, 2017; Eggertson and Kohn, 2023). The better course of action for monetary policymakers in practice is to use a rule of thumb and try to keep real interest rates (nominal interest rate adjusted for inflation) in positive territory in the forthcoming 12-18 months. The range of this "positive territory" would be contingent upon country-specific features and priorities.

Even if domestic inflation is considered to have been brought under control, financial stability concerns, including those related to capital outflows, can be another factor impeding the decision to reduce interest rates. As developed economies maintain elevated interest rates, the interest rate differentials are likely to result in portfolio capital outflows from the region in search of better returns, thus spurring currency depreciation, which can further raise the cost of imports and of repaying foreign debt. One approach to determine interest rates based mainly on domestic considerations would be through the use of targeted capital controls, combined with foreign reserve accumulation, to prevent disruptive fluctuations in short-term portfolio capital flows in response to interest rate reductions. For example, a study of 45 countries from 1985 to 2019 found that such a policy regime is associated with higher growth in real GDP and total factor productivity (Bergin, Woo and Pyun, 2023).

5.2. Sustaining developmental spending amid constrained fiscal positions will be a difficult balancing act

Another balancing act for Governments is ensuring post-pandemic socioeconomic recovery and pursuing the achievement of the Sustainable Development Goals while maintaining public debt sustainability in the long term. Maintaining supportive fiscal spending is increasingly difficult for Governments amid high debt levels and debt servicing costs. To cope with this challenge, Governments should aim at increasing public revenue, especially through more progressive income taxation and the implementation of wealth and property taxes. Similarly, improving spending efficiency and reallocating non-developmental budgetary spending, such as on defence and untargeted subsidies, can support fiscal resources without incurring additional debt. Continuing an uninterrupted upward trend since at least 1989, military spending in Asia and the Pacific in 2022 accounted for 26 per cent of global spending and was 45 per cent higher than the level in 2013 (SIPRI, 2023). Finally, improving debt management practices, in line with international best practices, can also help. Such practices include enhancing fiscal-monetary policy coordination, ensuring accountable debt management offices, improving public debt reporting and dealing with public debt management risks (Singh and Sirimaneetham, 2021).

However, for some low-income countries and for those already in debt distress and facing high debt servicing costs, such domestic policies, although necessary, may not be sufficient. International financial support, such as an increase in concessional lending by multilateral development banks (MDBs), will be required to bridge the widening development financing gaps. An encouraging statistic is the increase in such support in recent years. While the early part of the past decade had seen growth in support from non-traditional bilateral donors, most notably China, recent data indicate that multilateral development banks stepped up their lending during the pandemic in tandem with a drop in official lending from China.

In 2020 and 2021, assistance of about $60 billion per year from the World Bank far outweighed bilateral support from China's main development finance institutions, which amounted to less than $5 billion (Ray, 2023).

The elements of what is necessary to boost international financial support by the multilateral development banks are fairly clear; what is now required is implementation of such a plan. Examples of actions include far greater concessional flows to the poorest countries, more equity capital in such banks, especially the World Bank, and higher leverage ratios for the multilateral development banks (G20-IEG, 2023). Many of these proposed initiatives are predicated on implementing governance reforms in the multilateral development banks, as have long been called for by developing countries.

Nevertheless, increased support by such banks will still represent an interim solution to the fundamental cause of excessive budgetary pressure on developing countries, which is reflected in their high debt servicing cost. The Global Crisis Response Group on Food, Energy and Finance recently calculated that 3.3 billion people live in countries that spend more on debt interest payments than on education or health. The Secretary-General, when launching the report entitled "A World of Debt" in July 2023, highlighted the issue: "Some of the poorest countries in the world are being forced into a choice between servicing their debt, or serving their people".

The international community needs to introduce a new debt resolution mechanism which will free up resources of developing countries. In this context, the United Nations has proposed a debt relief mechanism for developing countries that supports payment suspensions, longer lending terms and lower rates to make borrowing more affordable for poorer countries (United Nations, 2023a). Current instruments to provide debt relief for low-income countries, with the most recent being the G20 Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative, are insufficient due to a lack of coordination among creditors and reluctance among private creditors to join the Initiative as well as a lack of inclusion of middle-income developing countries. The task for Governments in Asia and the Pacific is to coordinate and act with a common voice in advocating for a new debt relief mechanism which is truly fit for purpose under the auspices of a neutral and inclusive forum, such as the United Nations.

5.3. Strengthening regional demand through supportive policies needs more attention

Policymakers in Asia and the Pacific should consider strengthening internal demand, both within and across countries, through trade in view of changing global economic and political dynamics. In the short term, demand for the region's exports from outside the region is likely to be sluggish due to the forecasted slow growth in the developed economies. In the medium term, there is also concern about regional production for extraregional exports due to trade decoupling between China and the G7 countries, leading to reshoring and near-shoring of production to developed economies.

The potential to boost domestic demand in some regional economies is largely due to favourable demographics. The region is home to 600 million youth aged 15-24 years, with some countries, such as India and several South-East Asian countries, benefiting from growing numbers of young people, a phenomenon which is expected to continue up to 2050 (King, 2023). This contrasts with some regional economies that are witnessing rapidly ageing populations, notably China, Japan and the Republic of Korea.

While positive demographic forces provide an opportunity for some countries, taking advantage of these forces will require conscious policy choices by Governments. Policies are needed to increase the productivity of this pool of young labour, if they are to match the regional demand from the shrinking labour force in advanced regional economies, which have much higher productivity. For example, the productivity of non-farm workers in advanced regional economies is about eight times that of India (Seong and others, 2023). Governments will have to increase the skills of the young through emphasis on better and more accessible education. In particular, rapid digital and green transitions mean that youth will need flexible, market-oriented skills to ensure access to the labour market. On the other hand, policies accommodative to ageing populations should focus on increase in productivity, expansion of the labour force towards old age and in particular for women, lifelong learning schemes, and rollout of flexible retirement practices (see chapter 4) (United Nations, 2023b).

Apart from increasing the size of the regional workforce, job creation through increased domestic investment is important. To this end, government policies should be focused on improving the business climate by boosting "hard" infrastructure – such as transportation, energy and telecommunications – and "soft" infrastructure – such as education and health services. Another set of policies should encourage production in the emerging industries of the future, including highly productive manufacturing and services sectors. Many less developed regional economies are transitioning from being mostly agriculture-based to predominantly service-driven, without developing a sizeable manufacturing sector, while in other countries the process of industrialization has been slowing (Qureshi, Farinha and Lanzafame, 2023). Manufacturing industries have the potential to provide large productivity gains compared with current service jobs in the region. Nevertheless, some emerging service jobs can also offer similar opportunities for productivity growth, such as in software development and digital finance. Government policy can support the efficient allocation of workers within and across sectors by reducing market distortions to productive development, including through capital market development and better credit allocation by the banking sector.

Allowing other regional economies to further benefit from those countries with growing domestic demand will require policies aimed at lowering barriers to intraregional trade. While intraregional trade has grown rapidly in recent years, with declining average trade tariffs, various non-tariff barriers remain and cross-border trade in services remains especially difficult, including in such emerging areas as digital services. These challenges can be improved through progress in multilateral trade agreements, particularly the evolving ASEAN+1 free trade agreements and the expansion of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership.

5.4. Advancing gender equality can contribute to macroeconomic performance

The advancement of gender equality is an ongoing challenge for Governments in normal times, and a challenge that is often set aside during times of crisis. To support women in all their diversity, such as older women, women in rural and remote areas and women in the informal economy, in coping with the current development and climate challenges, they should be central to the formulation and implementation of macroeconomic policy actions. Governments, multilateral development banks and bilateral trade partners can each contribute to promoting gender outcomes through setting clear analytical, implementation and outcome strategies. For example, in least developed countries where increased debt servicing will mean reduced availability of resources for education, health and social protection, there is a specific need to understand how the costs of these steps will be borne by women in such countries.

Gender-related aspects are usually not covered while formulating and analysing macroeconomic policies and their outcomes. Macroeconomic policies do not distinguish whether it is a man or a woman that is facing rising interest rates, changing exchange rates or purchasing food items at higher prices. In particular, central bank policies have gender-differentiated effects on incomes, employment, consumption and savings (Seguino, 2005). Gender asymmetries also exist in the traditional pursuit of higher interest rates to stem inflation (Kabeer and Natali, 2013; Braunstein and Heintz, 2008). Moreover, as interest rates and the gender pay gap move together, interest rate policy to curb inflation directly impacts women's income (Powell, 2023; Israel and Latsos, 2020).

The integration of gender into beyond-GDP conceptualizations of macroeconomic policies is needed. For example, macroeconomic policies can minimize women's labour market disadvantages by ensuring that such labour is recognized, counted and valued through data collection and that their integral role is properly analysed. Moreover, this accounting must be engaged by policymakers to minimize labour-based gender asymmetries in terms of care, which limit women's employment and economic futures.

Unemployment should be analysed in its disaggregated form to highlight where women or men bear the brunt. In India, for example, where the dependency ratio is projected to be among the lowest among large economies for the next two decades, deep opportunities are available to leverage women's economic and social talents as care demands may decrease in step. Women's roles in different sectors, such as manufacturing and tourism, should also be integrated into macroeconomic analysis to inform appropriate policies that initiate change.

A critical step for this is to engage national statistical machineries to collect, analyse and distribute gender data so that more rigorous investigations can be conducted to improve the available evidence base for best practice macroeconomic management for gender equality. Great strides have been made to qualify the impact of unpaid care responsibilities on women's access to employment, education, food security and social protection; however, these insights remain external to policymaking. Notably, New Zealand's 2023 budget was the first to offer a "gender snapshot", which highlighted critical gender inefficiencies in transportation and technology spending, gender gaps not only in wages but in retirement savings and established clear policy evidence for increasing violence against women during and after extreme weather events (Curtin and others, 2023).

More broadly, it is also an issue that women themselves remain largely outside of macroeconomic policymaking bodies. Globally, only 11 per cent of finance ministers and central bank governors are women (Yin, 2023).

6. Concluding remarks

Developing Asia-Pacific economies have displayed resilient economic growth over the course of 2023, despite a difficult external situation, on the back of robust domestic demand and tourism exports. However, the lingering effects of the pandemic aggravated by the cost of living crisis of the past two years have exerted significant socioeconomic impacts which are affecting the region's progress towards achieving the Sustainable Development Goals. The gradual decline in the number of persons in both informal and vulnerable employment in the region until 2019 was reversed during the pandemic, with women, who are found predominantly in the informal sector, being particularly affected. New ESCAP analysis indicates that the impacts of these crises may have pushed many more people in the region into extreme poverty. Income inequality is also likely to have widened, as inflation has outpaced wage hikes while the real value of national minimum wages also declined. The crises have also had impacts on the ability of Governments to support economic growth and maintain developmental spending in pursuit of the Sustainable Development Goals, as they have pushed up debt servicing costs and concerns regarding debt vulnerabilities.

Economic growth in the developing Asia-Pacific region is projected to soften slightly in the period 2024-2025. Amid relatively high levels of projected inflation, the timing and extent of policy interest rate cuts is difficult to pin down. There is a risk that interest rate cuts may not be as soon and their scale not as large as desired in many economies. Similar to monetary policy stance, fiscal conditions are expected to remain rather constrained in the coming few years.

Amid tight fiscal and debt positions and large spending needs to achieve the Sustainable Development Goals and climate ambitions, this chapter emphasizes the need for Governments to raise fiscal revenues, increase public spending effectiveness and efficiency and improve public debt management. It also highlights how the international community can boost the availability of affordable and long-term financing for Governments and make sovereign debt restructuring more inclusive and effective. Ongoing medium-term policy considerations also highlighted in this chapter are how to further increase the role of domestic and intraregional demand as a growth driver in the face of a difficult external outlook, as well as the need to continue to advance gender equality as a key pillar for ensuring macroeconomic stability.

2 AFFORDABLE AND LONG-TERM FINANCING FOR GOVERNMENTS: DOMESTIC TAXATION AND SAVINGS

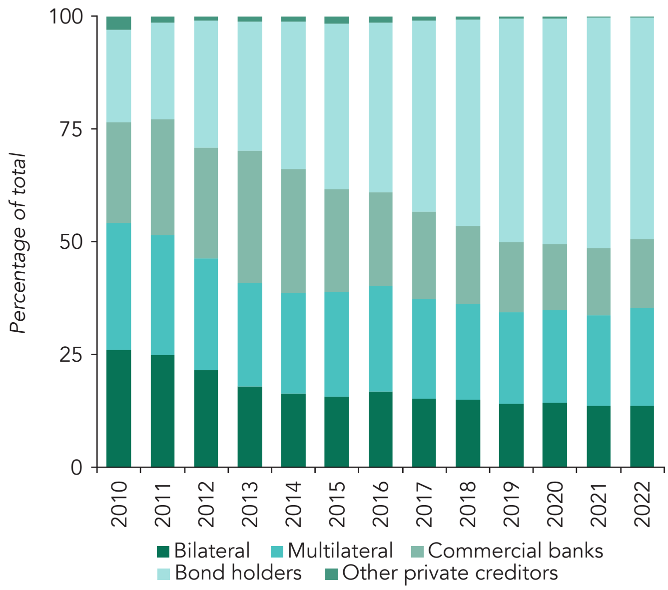
1. Introduction

Developing Asia-Pacific countries are confronted with the trillion-dollar challenge of financing effectively in order to achieve the Sustainable Development Goals. Prior to the COVID-19 pandemic, the Sustainable Development Goal financing gap in the developing countries of Asia and the Pacific was estimated at $1.5 trillion annually, or equivalent to 5 per cent of the combined GDP of economies in the region (ESCAP, 2019). This estimate is likely to have increased since then. Globally, such a financing gap in a group of 48 developing countries amounts to $2.3 trillion.[1]

Domestic resource mobilization, especially the fiscal system, will have to carry the bulk of the weight in financing to achieve the Goals. Goal-related investments are often public goods and services which have low direct financial returns and are not suitable for the profit-seeking private sector. External and private resources available for development purposes are also limited in scale and can be costly to acquire. Even with an ambitious push, external and private resources may be able to address only a third of total Goal-spending needs.[2]

The mismatch between Sustainable Development Goal financing needs and fiscal means can be an important source of chronic sovereign debt accumulation. While easier access to global financial markets and low external borrowing costs partly drove the rise in government debt in the Asia-Pacific region, the lack of fiscal means to finance sustainable development and respond to the pandemic was certainly a non-negligible factor. This is especially true for more vulnerable countries, such as least developed countries and small island developing States, with large Goal-financing gaps. While the region should not shy away from leveraging debt financing to support sustainable development, managing rising public indebtedness and borrowing costs would make doing so a difficult task for many countries.

Figure 2.1 Share of external public and publicly guaranteed debt in developing Asia-Pacific countries, by creditor and year, 2010-2022



Source: World Bank International Debt Statistics database.

In view of these challenges, **ESCAP (2023b) proposed a three-pronged strategy to support essential public spending on sustainable development while maintaining public debt sustainability.** This strategy comprises ensuring productive and efficient use of public funds, enhancing domestic public revenue mobilization and international development transfers to reduce the need for costly sovereign borrowing, and strengthening sovereign debt management and monitoring.

Building on the previous discussion, **this chapter explores domestic policy options to secure affordable and long-term financing for Governments.** After providing an overview of government borrowing costs and their determinants in the Asia-Pacific context, the chapter focuses on two policy areas. The first is improving public revenue mobilization to reduce fiscal risks, thus the cost of government debt. Second is boosting domestic savings to increase the supply of long-term domestic capital, which can be channelled into productive investments, including by Governments.

2. Government borrowing costs in Asia and the Pacific: data and determinants

2.1. More expensive and shorter-term lending for Governments in the Asia-Pacific region

The share of external public debt owed to private creditors[3] has been increasing in developing Asia-Pacific countries. In particular, the share of bondholders surged from 20 per cent in 2010 to 49 per cent in 2022 (figure 2.1). While such a share has also increased in countries in special situations, from nearly zero to 15 per cent, official creditors remain

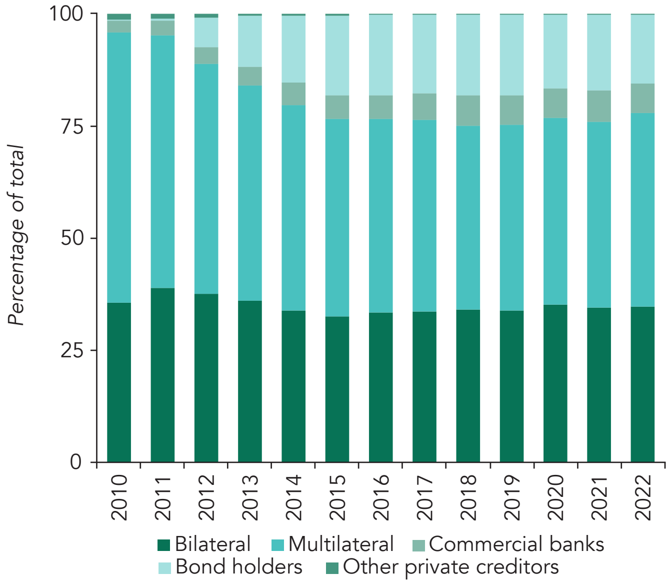
1 See the Goal-costing project of UNCTAD at https://unctad.org/sdg-costing.

2 For further information, see United Nations (2023d) and G20-IEG (2023).

3 Including commercial banks, bondholders and other private creditors.

the largest group of creditors, accounting for 78 per cent of total external debt (figure 2.2). Taken together, this means that the interest rates and maturity of loans provided by private creditors have an increasing impact on the overall borrowing cost of developing Asia-Pacific countries.

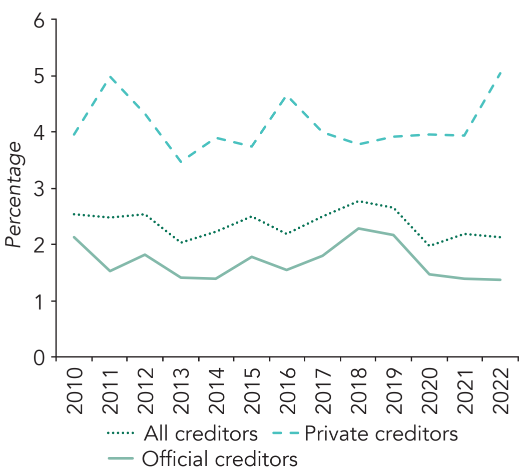
Figure 2.2 Share of external public and publicly guaranteed debt in countries in special situations, by creditor and year, 2010-2022



Source: World Bank International Debt Statistics database.

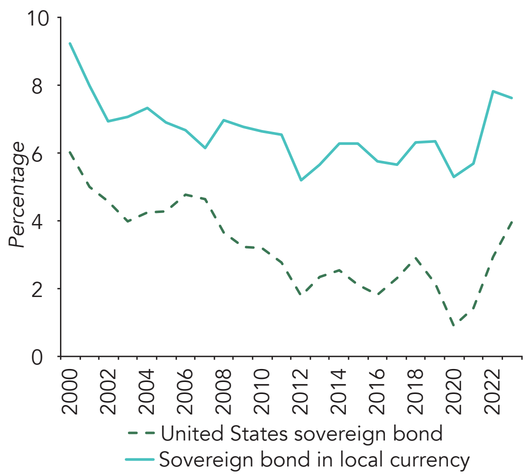
The increasing reliance on loans from private creditors matters because they charge higher interest rates and offer shorter maturity. The region's average interest rate on new external public debt committed in 2022 from private creditors increased to 5.0 per cent from about 3.9 per cent during the period 2017-2021 (figure 2.3). The same rate from official creditors stayed at about 2.1 per cent throughout the years from 2020 to 2022. At the same time, sovereign bond yields in local currencies in 18 Asia-Pacific economies increased from an average of 5.3 per cent in 2020 to 7.6 per cent in 2023 (figure 2.4). In addition to being more expensive, the average maturity period of new external public debt commitments from private creditors dropped to a decade-low of eight years in 2022 (figure 2.5). For official creditors, although the maturity of their loans is much longer at about 22 years currently, a declining trend has been observed since 2018. Meanwhile, lending provided by multilateral creditors has become less concessional, especially for landlocked developing countries (figure 2.6).

Figure 2.3 Average interest on new external debt commitments for all developing Asia-Pacific economies, by creditor and year, 2010-2022



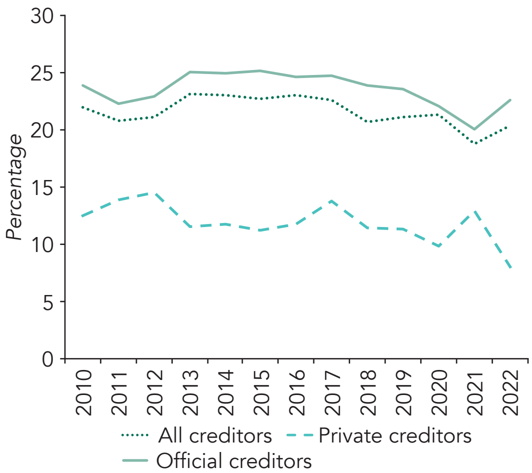
Source: ESCAP calculations, based on data from Bloomberg, covering Bangladesh; China; Hong Kong, China; India; Indonesia; Kazakhstan; Malaysia; Mongolia; Pakistan; Philippines; Republic of Korea; Russian Federation; Singapore, Sri Lanka; Thailand; Türkiye; and Viet Nam.

Figure 2.4 Average interest on local currency sovereign bonds in developing Asia-Pacific economies, 2000-2023



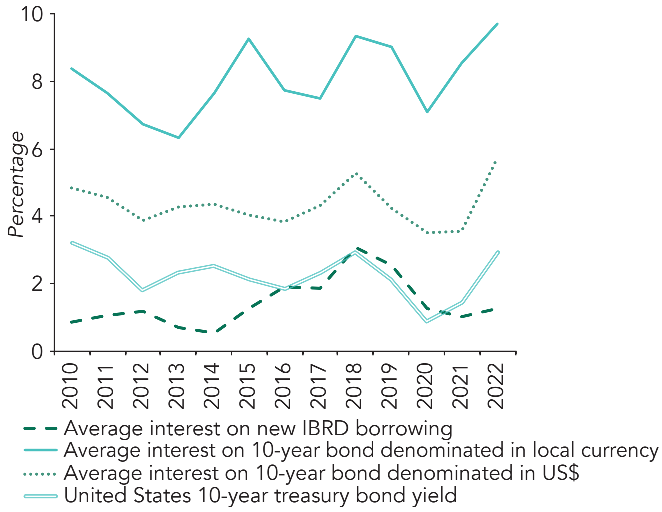
Source: ESCAP calculations, based on data from Bloomberg, covering Bangladesh; China; Hong Kong, China; India; Indonesia; Kazakhstan; Malaysia; Mongolia; Pakistan; Philippines; Republic of Korea; Russian Federation; Singapore, Sri Lanka; Thailand; Türkiye; and Viet Nam.

Figure 2.5 Average maturity (years) on new external debt commitments for all developing Asia-Pacific countries, by creditor and year, 2010-2022



Source: World Bank International Debt Statistics database.

Figure 2.7 Average interest on government bonds in selected Asia-Pacific countries, by type of borrowing and year, 2010-2023

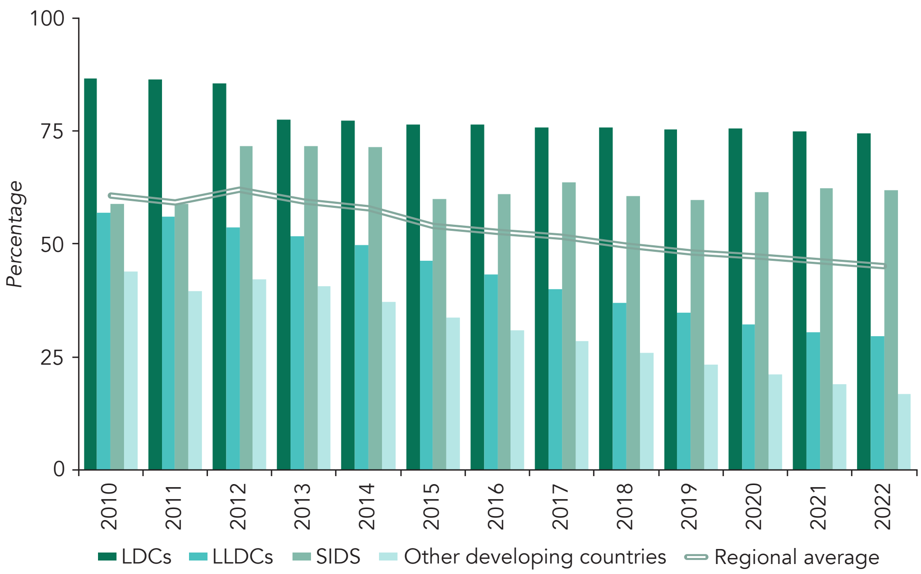


Source: ESCAP calculations, based on data from Bloomberg and World Bank International Debt Statistics database.

Abbreviations: IBRD = International Bank for Reconstruction and Development

Borrowing from multilateral development banks offers cheaper financing relative to issuing sovereign bonds. For example, while the average lending rate from IBRD for Indonesia, the Philippines, the Russian Federation and Türkiye was about 1 per cent in 2022, their average government bond yield in United States dollars stood at close to 6 per cent (figure 2.7). The average yield for these bonds denominated in local currencies was even higher at almost 10 per cent to compensate investors for bearing the foreign exchange risk.

Figure 2.6 Share of concessional loans in sovereign debt owed to multilateral creditors



Source: World Bank International Debt Statistics database.

Abbreviations: LDCs = least developed countries; LLDCs = landlocked developing countries; and SIDS = small island developing States.

2.2. Determinants of sovereign bond yields

A new analysis by ESCAP shows that macroeconomic conditions, fiscal risks and financial market liquidity mainly drive government borrowing costs in Asia and the Pacific. During the period 2000-2022, higher local currency sovereign bond yields are associated with higher policy interest rates, higher inflation and more volatile exchange rates.[4] By contrast, more favourable sovereign credit ratings and greater financial market liquidity, as measured by the bid-ask spread, help lower government bond yields. In addition to macroeconomic and price stability, these results[5] indicate that perceived fiscal risks and capital market development are key to keeping down government borrowing costs. (This informs the policy discussion in the rest of this chapter.)

The magnitude of some of these relationships is also notable. On average, a 1 per cent increase in the policy rate corresponds to an increase of about 0.62 per cent in the 10-year sovereign bond yield. On the other hand, a one-notch upgrade in the sovereign credit rating helps reduce government bond yields by about 0.42 per cent. In the case of market liquidity, a 1 per cent improvement in the bid-ask spread can reduce bond yields by 6.45 per cent.

3. Potential and policy options for enhancing public revenues

Taxation is the most important fiscal handle for developing Asia-Pacific countries. On average, it contributes close to 70 per cent of total government revenue in South and South-West Asia, and about 60 per cent in East and North-East Asia, North and Central Asia, and South-East Asia. Only in the Pacific subregion are taxes less important than non-tax revenues; they account for only some 40 per cent of total government revenue.

In contrast to taxes, non-tax revenue sources can often be partially beyond domestic policy control and may lead to unwanted economic distortions if raised artificially.[6] For instance, grants and transfers are affected by the capacity and willingness of multinational organizations and foreign Governments to provide development assistance. Incomes from resource rent or franchises are determined primarily by domestic reserves, global demand and the relative price negotiation capacity of the local government and are often locked in long-term contracts. While receipts from privatization or fines and penalties can be temporarily increased, they should not be viewed as stable sources of public revenue due to their one-off nature and strong negative impacts on economic performance and public governance[7] if not used judiciously.

Developing Asia-Pacific countries are already mobilizing more government revenue from non-tax sources than OECD countries and they would likely become less dependent on non-tax revenue as they develop. By contrast, the region still lags in tax revenue mobilization where policy space is more abundant.

3.1. Significant progress in tax revenue mobilization has been achieved but substantial space for improvement remains

Developing Asia-Pacific countries achieved remarkable progress in tax revenue mobilization since the turn of the millennium and no longer comprise a "low-tax" region in the developing world. In 2001, the tax-to-GDP ratio in the developing Asia-Pacific region averaged only 13.0 per cent, substantially below the 15.4 per cent level in other developing countries and 23.6 per cent in OECD countries. By 2011, the region's average tax ratio reached 17.8 per cent, surpassing the average of other developing countries, before experiencing a dent during the COVID-19 pandemic (figure 2.8).

This improvement was broad based. Between 2001 and 2021, the tax-to-GDP ratio increased in all Asia-Pacific subregions except East and North-East Asia (figure 2.8a) and in more than three quarters of countries with available data (figure 2.9). Encouragingly, decent progress was recorded in South and South-West Asia and the least developed countries, the two groups where tax levels were among the lowest worldwide.

However, the tax ratio varies notably across countries while some are still trapped in the low-tax bracket. Eight Asia-Pacific countries suffered a decline in the tax ratio between 2002 and 2021 (figure 2.9), while the ratio remained below the 15 per cent of GDP benchmark in 16 countries. Myanmar and Timor-Leste are notable cases, where tax revenue still falls far short of their development investment needs although both countries have tripled the tax ratio during this period.

In term of the breakdown, **direct taxes have contributed more to the overall growth of tax revenues than indirect taxes.**[8] Direct taxes, including taxes

4 The analysis covers seven large developing Asia-Pacific economies with available data for the time series regression analysis: China, India, Indonesia, Malaysia, Philippines, Republic of Korea and Thailand.

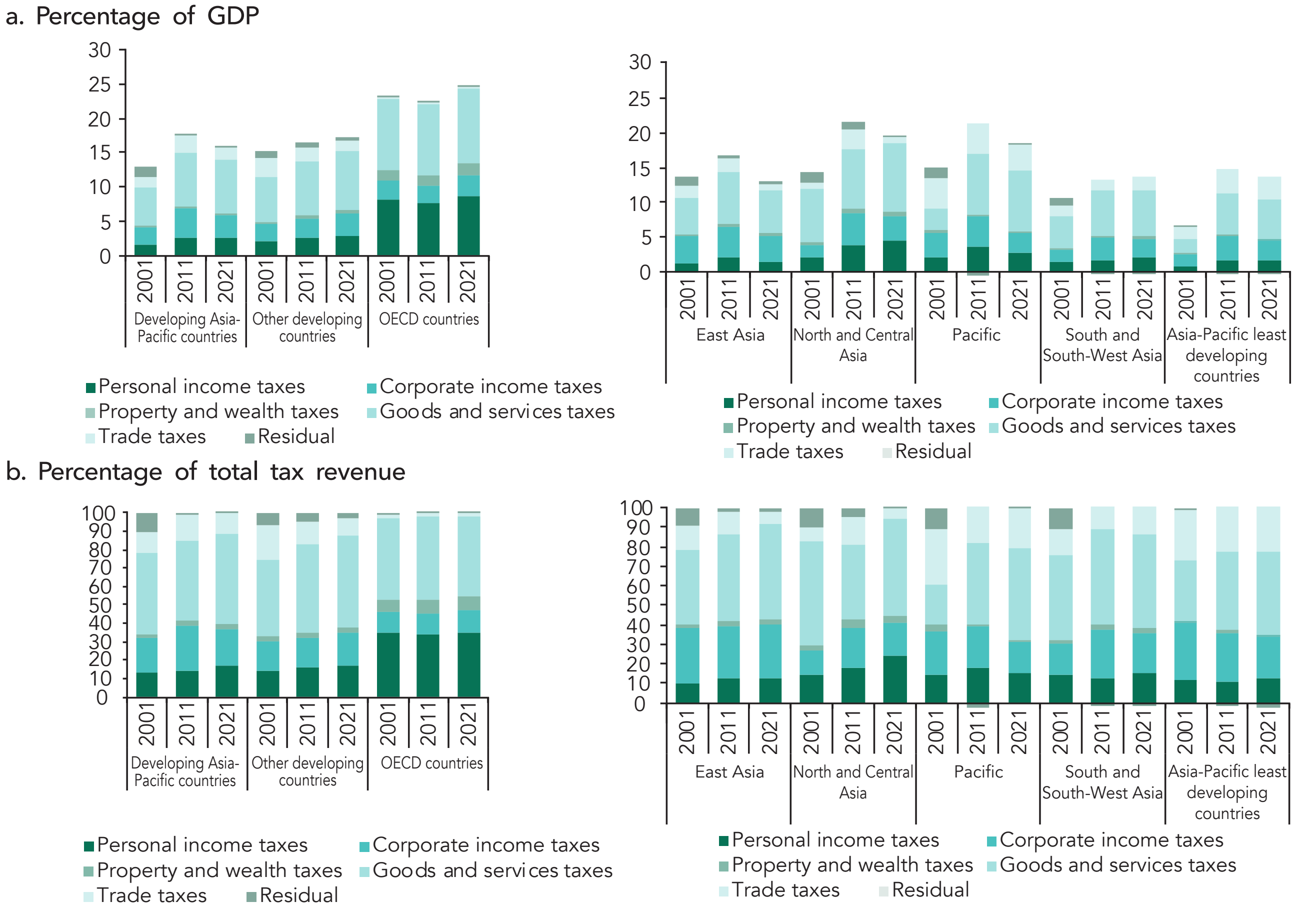
5 Overall, these results are as expected and consistent with those of other studies, such as Audzeyeva and Schenk-Hoppé (2010), Martinez, Terceño and Teruel (2013) and Chernov, Creal and Hördahl (2023).

6 For example, raising the price of public goods and services may produce strong public resistance.

7 Without a competitive and well-functioning market, privatization can lead to higher prices with limited fiscal benefits, as in the case of Latin America (Estache and Trujillo, 2008).

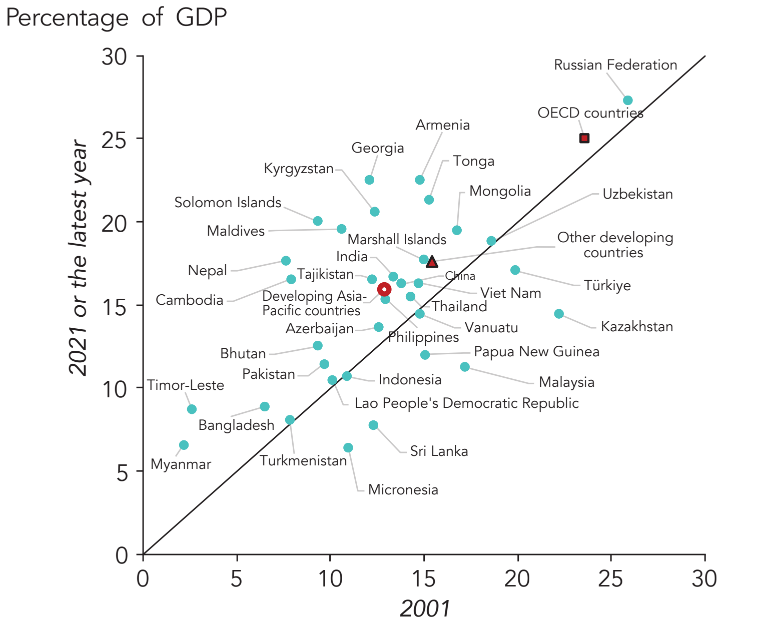
8 Direct taxes refer to tax items that target income and wealth of corporates and individuals, while indirect taxes are tax items that target transactions, consumption or business activities in which the tax burden can be passed on to another entity or individual.

Figure 2.8 Tax revenue mobilization changes over time



Source: ESCAP, based on the IMF Government Financial Statistics database and the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

Figure 2.9 Tax revenues in selected Asia-Pacific countries, 2001 versus 2021 (or the latest year)



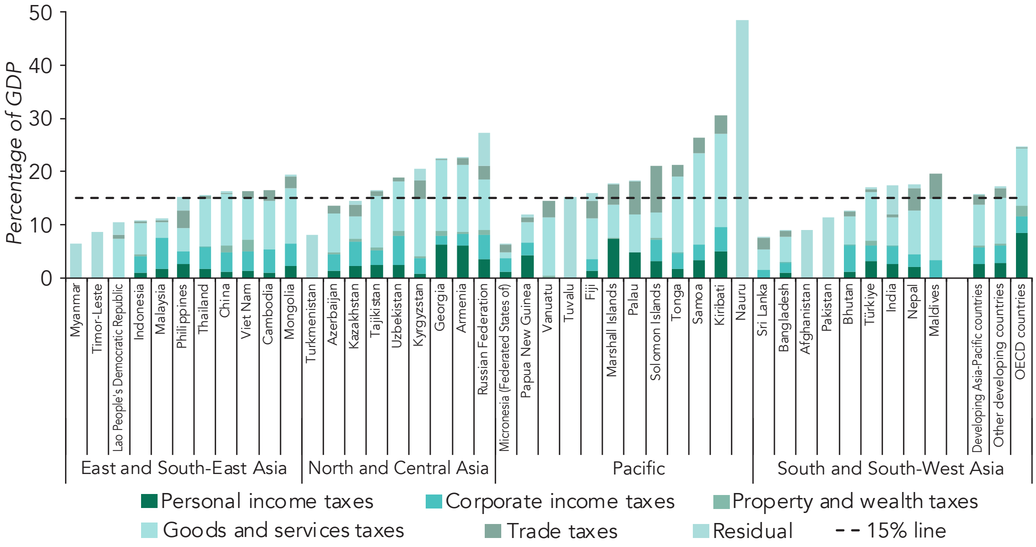
Source: ESCAP, based on the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

Note: Data for different countries/years are as follows: Afghanistan 2019; Bhutan 2020; India 2019; Marshall Islands 2020; Pakistan 2020; Papua New Guinea 2020; Tonga 2020; Turkmenistan 2020; Vanuatu 2020; and Viet Nam 2019.

on corporate and personal incomes and taxes on property and wealth, contributed three fifths of the total tax revenue increase in the region between 2002 and 2021, despite being only half the size of indirect taxes in 2002 (figure 2.8a). Correspondingly, the share of direct taxes in the overall tax mix rose from 34.0 to 39.2 per cent during this period (figure 2.8b).

Meanwhile, **the region's dependence on goods and services taxes (GSTs) was further cemented, while personal income taxes (PITs) also became much more important.** GSTs accounted for about two thirds of the region's tax revenue increased between 2001 and 2021 and contributed roughly half of total tax revenue in 2021. PITs were the second largest driver, with the share rising from 13 to 16 per cent during the same period, although still smaller than that of GSTs and corporate income taxes (CITs).

Figure 2.10 Tax revenue, by source, in selected Asia-Pacific countries, 2021 or the latest year

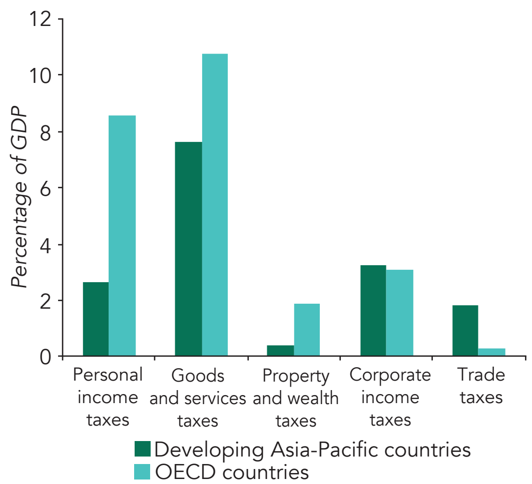


Source: ESCAP, based on the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

Note: Data for different countries/years are as follows: Afghanistan 2019; Bhutan 2020; India 2018; Marshall Islands 2020; Micronesia (Federated States of) 2020; Myanmar 2019; Nauru 2020; Pakistan 2020; Palau 2020; Papua New Guinea 2020; Solomon Islands 2020; Tonga 2020; Turkmenistan 2020; Tuvalu 2019; Vanuatu 2020; and Viet Nam 2019.

The greatest tax gaps between developing Asia-Pacific countries and developed countries rest in personal income taxes (PITs) and property and wealth taxes (PWTs). In 2021, the region's collection of PITs and PWTs stood at just 2.6 and 0.4 per cent of GDP, respectively, relative to 8.6 and 1.9 per cent of GDP in OECD countries, respectively (figure 2.11). If economies in the region were to match their revenue performance on PITs and PWTs with that of GSTs relative to OECD countries, they would be able to mobilize an additional 4.4 per cent of GDP annually and reduce the total tax revenue gap by about half.

Figure 2.11 Tax revenue comparison between developing Asia-Pacific and OECD countries, 2021



Source: ESCAP, based on the IMF Government Financial Statistics database and the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

3.2. Estimating the tax potential of developing Asia-Pacific countries

3.2.1. The policy question of desirable and sustainable tax levels

While mobilizing fiscal resources for development purposes relies on adequate tax revenue collection, **being able to tax more does not always mean taxing better, and tax policies often have to balance between different and sometimes conflicting policy objectives.**

For example, the developmental benefits of higher taxes depend on the prudence and effectiveness of policymaking and the efficiency of public service delivery, as well as the efficiency and productivity of private investments and household spending relative to public expenditures. For Governments plagued with corruption, inefficiencies or weak accountability, channelling resources from the private sector and households into the public sector through higher taxes may not be a desirable choice. Excessive concentration of tax burdens on specific sectors or groups that are easier to tax, such as the formal sector or workers on payrolls, can also be harmful due to related distortions. Finally, in open economies confronted with strong foreign competition for capital, market access and know-how, Governments may find it difficult to collect more tax revenues from businesses built on such internationally mobile factors.

Therefore, the desirable and sustainable level of taxation is essentially determined by a balance between fundamental economic and governance forces, and hovers around an "equilibrium position" (Bird, 2012). Any artificial deviation from such an "equilibrium" is likely to lead to unproductive public spending or declines in tax compliance, or both. The corresponding changes in tax revenue mobilization are also likely to prove short-lived and counterproductive. Indeed, economic and institutional constraints that prevent meaningful and sustained increases in tax revenue levels remain the greatest challenge to developing countries' efforts to strengthen tax revenue mobilization.

3.2.2. Tax potential in developing Asia-Pacific countries: findings and policy implications

There are two primary policy questions confronting developing Asia-Pacific countries in terms of tax revenue mobilization: **first, how much additional tax revenues can potentially be mobilized in a sustainable manner?** Second, what can Governments do to shift the tax "equilibrium" upward and raise the tax potential in the long run? Answering these two questions is both theoretically and practically challenging because the "equilibrium" can be shaped by numerous economic and non-economic factors, and there is no established theory on how these factors affect sustainable levels of tax revenue (box 2.1).

However, certain inferences can still be made by estimating the tax frontier,[9] which indicates the highest tax revenue level that a country can achieve if it were to match its best-performing peers with similar income levels and development traits, such as economic structure, public governance and social development. For any country, the corresponding spot on the tax frontier indicates its overall **tax potential**. The difference between the current tax level and its potential indicates the tax gap, which is the maximum amount of additional tax revenue that the country can hope to mobilize. The ratio of the country's current tax level and its tax potential can be viewed as its overall tax collection efficiency.

In this situation, a country can enhance its tax revenue mobilization in a sustainable manner in two ways. First, it can seek to address existing mobilization inefficiencies, such as lower tax rates compared with its peers, excessive tax exemptions and weak tax administration. The second approach is to enhance factors that affect the equilibrium of sustainable tax levels, i.e. the tax frontier itself.

A new ESCAP analysis reveals significant variations in tax revenue mobilization efficiency and tax potential across Asia-Pacific countries. The estimated efficiency values ranged between 0.56 and 0.94 during the period 2017-2019.[10] Armenia and Cambodia, and to a lesser extent Nepal and Georgia, ranked the highest, with efficiency scores exceeding 0.90. By contrast, Bhutan, the Islamic Republic of Iran and Malaysia registered efficiency scores below 0.68, indicating substantial margins for revenue enhancements through rationalized tax policies and stronger tax administration alone. These patterns are also consistent around the world, where within-region differences are much greater than differences across regions or country groupings (figure 2.12).

Tax revenue mobilization efficiency, rather than current tax revenue levels, is the deterministic factor of tax gaps. The estimated space for further tax revenue enhancement exceeds 5 per cent of GDP in Bhutan, the Islamic Republic of Iran and Malaysia and exceeds 2 per cent of GDP in China, Indonesia, Kyrgyzstan, the Philippines and Viet Nam. For the other eight developing Asia-Pacific countries, the tax gap ranges from 1.1 to 1.9 per cent of GDP.

Importantly, the estimated tax gaps indicate only the space for revenue enhancement that a country can tap into when benchmarked against its best-performing peers. Yet, whether the country should seek to realize its maximum tax potential remains a policy question. In cases where countries have alternative development financing sources or deem that their current tax level is already at an optimum level for its development objectives, the Government may consciously choose not to strive for maximized tax revenue mobilization.

Despite their low tax levels, tax gaps in Bangladesh, Pakistan and Sri Lanka are moderate, although such gaps are not necessarily small if measured as a share of current tax revenues rather than as a share of GDP (figure 2.13). This suggests that better tax policies and administration alone may not help to bridge the vast development financing gaps in low-tax countries. Overall improvements in socioeconomic development and public governance would be needed as well as tax revenue enhancement on a larger scale.

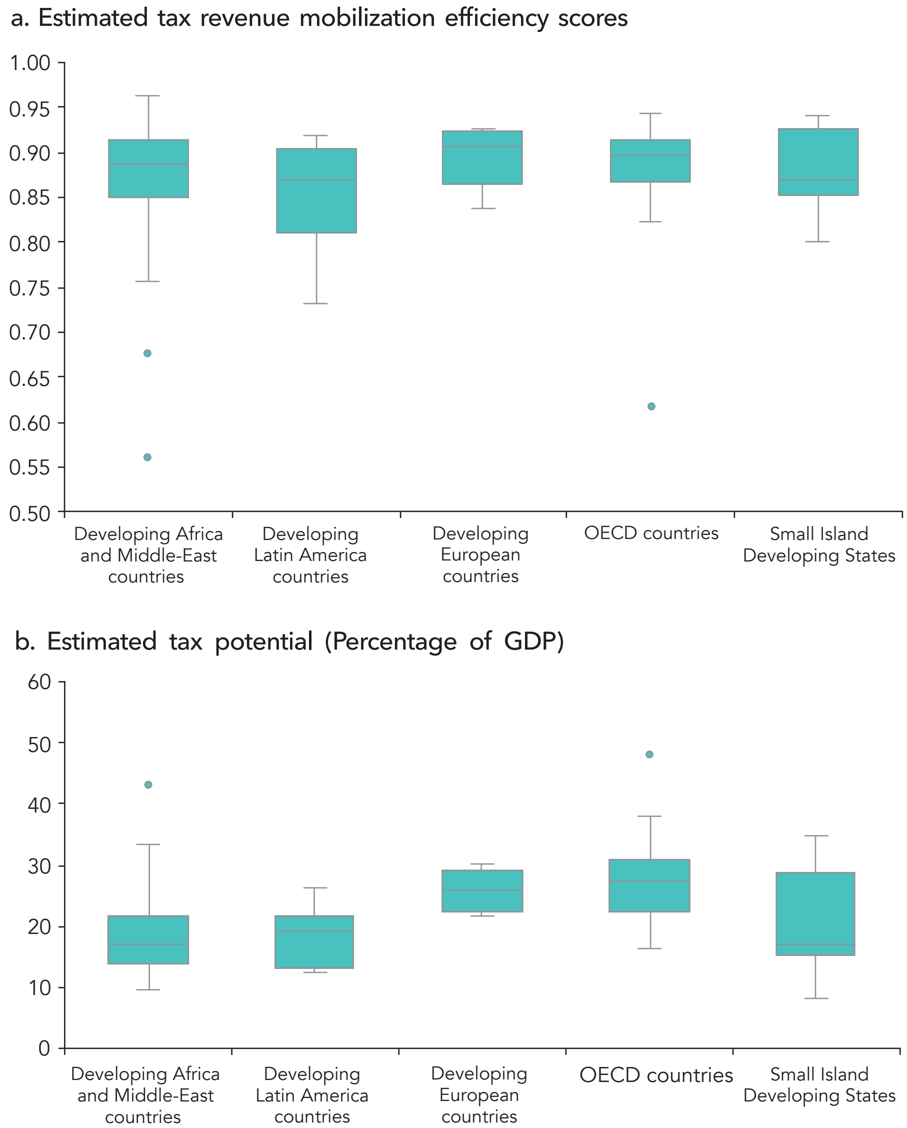
9 This chapter employs stochastic frontier analysis for an estimation of the tax potential in developing Asia-Pacific countries. For additional details see the online annex at https://bit.ly/3THhK5h.

10 The analysis does not include data on the year 2020 and 2021 to avoid distortions due to the COVID-19 shock.

Indeed, our analysis finds that higher income levels, higher government spending on education as well as reduced inequality and corruption can raise the tax potential of countries.[11,12] Among these factors, income levels seem to have the largest impact. A 1 per cent increase in per capita income is estimated to raise the tax potential by about 1 per cent. The impact of education spending, income inequality and level of corruption is roughly half, two fifths and a quarter relative to that of per capita income, respectively. In contrast, the analysis shows that the share of the agricultural sector in GDP and the degree of trade openness have a limited impact on raising the tax potential.

While these results should be interpreted with caution, several policy implications can be derived from them. First, improvements in tax policy and tax administration have the potential to further enhance revenue mobilization in most developing Asia-Pacific countries. However, it is only in a few countries where the maximum revenue increase can be significant without improvements in broader socioeconomic and public

Figure 2.12 Estimated tax collection efficiency and tax potential: comparison across regions, 2017-2019 average



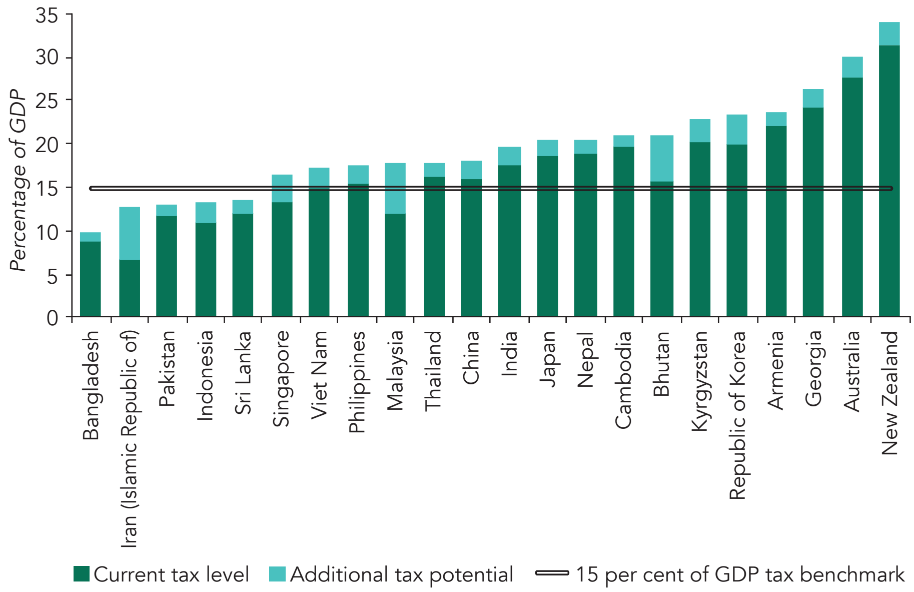
Source: ESCAP analysis based on the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

Note: The box-and-whisker plots show the minimum value, first quartile, median, third quartile and maximum value of the corresponding indicators. OECD = Organisation for Economic Co-operation and Development; and SIDS = small island developing States.

11 For additional details see the online annex at https://bit.ly/3THhK5h.

12 These findings are consistent with established theories and other studies, such as Langford and Ohlenburg (2016) and Gupta and Jalles (2023).

Figure 2.13 Estimated tax gap and additional tax potential in Asia-Pacific countries, 2017-2019 average



Source: ESCAP analysis based on the IMF World Revenue Longitudinal Data set. Accessed on 6 November 2023.

governance. Second, sustained growth of per capita income and reduction in economic inequality contribute to higher tax potential, but progress in these two areas relies on consistent policy effort over time. Third, increasing spending on education and stamping out corruption can also expand tax potential and these factors can be shaped through proactive and targeted policy efforts, possibly within a shorter time frame.

3.3. Policy options for enhancing tax revenue mobilization in Asia and the Pacific

3.3.1. Policy lessons at the global level

Rationalizing tax structure and tax rates to streamline taxation processes and unlock the revenue potential of broad-based tax handles, strengthening tax administration to ensure compliance and collection efficiency, and reducing wasteful tax exemptions to further broaden the tax base are among the most common best practices (ESCAP, 2014; 2018a; Hill and others, 2022). In many cases, they mutually support each other. For example, improved tax administration is often cited as a precondition for successful tax policy adjustments, while simplified tax rate structure and fewer exemptions reduce the burdens on tax administration and facilitate compliance enforcement.

Effective tax administration is more fundamental in the context of a developing country. In countries where enforcement capacity is low, a large part of the anticipated benefits from policy reforms may never be realized. Such eroded policy effectiveness may force policymakers to double down on tried policy measures to achieve the initial revenue objective, resulting in higher implementation costs and larger economic distortions. For example, in an analysis on corporate income tax in Indonesia, Basri and others (2021) estimated that a simple adjustment in tax administration that places large firms under the oversight of median taxpayer

Box 2.1 Challenges with estimating tax potential

A country's maximum sustainable level of taxation is shaped by various factors, ranging from economic structure and governance quality to government legitimacy and social fragmentation. Accurately calibrating the impact of these factors on tax potential and controlling for their influence to isolate the effect of tax policy or administration reforms on tax revenue mobilization can be very difficult. Existing methodologies to estimate the overall effort and efficiency of tax collection inevitably have to rely on simplified assumptions and work with limited data. The inference provided by the models is dependent on the model structure and data sets used. Thus, while the numerical analysis on tax capacity and potential can provide useful insights on where targeted reforms and additional effort are mostly needed and can generate decent returns in additional tax revenue mobilization, its verdict on individual countries should be interpreted with caution rather than viewed as a deterministic conclusion.

offices would more than double tax revenue from these firms over six years. Yet, to achieve similar results through policies alone, the current corporate income tax rate would have to be doubled.

Key ingredients for improving tax administration

Best practices for strengthening tax administration comprise a set of tested measures. These include: greater autonomy of revenue authorities to reduce external disruptions and enhance accountability; improvements in the management, funding and staffing of tax authorities to ensure sufficient capacity; streamlined, transparent and accountable tax administration processes that encourage sound performance of tax officials and generate trust between tax authorities and taxpayers; and greater effort and investment in tax auditing to strengthen tax compliance.

To make such tax administration reforms successful, **a coherent and comprehensive implementation strategy with clearly defined priorities and well-charted implementation pathways is needed** (Bird and Casanegra de Jantscher, 1992). Strong policy commitment to the reform would also be indispensable. Higher-level policymakers need to provide necessary insulation for the tax authority so that the reform agenda will not be hindered or misled. To reduce potential hurdles and implementation costs, pre-emptive effort to simplify the overall tax system and reduce tax administration burdens is also highly desirable.

Another key ingredient for improved tax administration is digital solutions. Well-designed electronic tax filing reduces taxpayers' compliance burdens due to shorter processing time. It also improves the overall management of tax data as the input, storage, analysis and sharing of data become automatic. Tax authorities also gain as online systems require less staff time and operating costs. Meanwhile, digital tax administration opens the opportunity for electronic payment, where transactions become much faster, safer and more transparent. Such benefits can be further amplified when mobile applications are also provided.

In developing Asia-Pacific countries, the adoption of digital solutions for tax administration remains limited. The lack of technical capacity and resources to develop tax filing and payment platforms that are reliable and secure is often cited as a primary bottleneck (ESCAP, 2023b). For example, in Indonesia and the Philippines, taxpayers were initially reluctant to transition to digitalized tax filing and payment due to frustrations with system bugs, connection failures and software malfunctions. Concerns over data privacy and safety also dissuaded many taxpayers from going online in Malaysia (OECD, 2021). The lack of data management, processing and analysis capacity of many tax authorities aggravate the challenge, when tax officials are overwhelmed with the new job requirements of digital systems and insufficiently prepared to reap all the anticipated benefits of the digital transition.

Making tax morale work for tax compliance

Traditional tax compliance theories emphasize the pecuniary incentives of selfish and risk-averse taxpayers who maximize their interest by weighing the monetary costs and benefits of evading taxes (Allingham and Sandmo, 1972). In such a setting, the only effective channel for improving tax compliance is either to increase the cost of non-compliance through more effective detection of tax evasion and higher penalties or to reduce tax compliance costs through improvements in taxpayer services. Thus, sound tax administration supported by effective tax monitoring and auditing should be the primary, or even sole, consideration of policymakers.

However, a growing body of literature suggests that pecuniary calculations and the fear of penalties are not the only motives for taxpayers to pay their taxes. For example, more than 60 per cent of respondents to the World Values Surveys believed that cheating on payment of tax is never acceptable and more than 80 per cent of respondents to the 2004 European Social Survey agreed with the statement that "citizens should not cheat on their taxes" (Luttmer and Singhal, 2014). Empirical studies also found high levels of compliance in self-reporting of income that could not be sufficiently explained by detection and penalty pressures, indicating the existence of voluntary tax compliance (Slemrod, 2007; Kleven and others, 2011). According to OECD (2019a), the age, education, gender and religious status of taxpayers have an influence on their tax compliance.

Tax morale is the umbrella term used to describe such non-pecuniary motives for tax compliance and it can influence taxpayers' behaviour through five main channels (Luttmer and Singhal, 2014). First, *intrinsic motives* induce voluntary tax compliance, when such psychological factors as pride or self-image contribute to honesty and fulfilment of social duties. Second, *reciprocal use of tax revenues* for high-quality public services leads to a stronger perception of fairness of the tax system and taxpayer cooperation. Third, *peer and social pressure* reduces non-compliance by obliging potential tax evaders to change their behaviour. Fourth, *cultural factors*, such as established norms and consensus, also affect willingness to pay taxes. Fifth, *information imperfections* create space for deliberate signalling and communication effort to shape the subjective belief of taxpayers on the effectiveness of tax auditing and severity of penalties.

To leverage these tax morale effects, policymakers have access to a range of low-cost policy instruments to enhance tax compliance (box 2.2), which complement

Box 2.2 Policy instruments for enhancing tax compliance through tax morale channels

Payment reminders

Taxpayers often underestimate the intensity and effectiveness of tax auditing, resulting in lower-than-expected compliance. Deliberate signalling through tax payment reminders can correct such misperceptions and enhance tax collection (Del Carpio, 2013; Hallsworth and others, 2017).

Moral suasion messages

In Norway, moral appeal messages contained in standard tax payment reminder letters helped double the reporting enhancement effect (Bott and others, 2020). In the United Kingdom of Great Britain and Northern Ireland, emphasis on how tax revenues finance public goods in such reminder letters reduced late tax payments (Hallsworth and others, 2017).

Indonesia offers a concrete example of how different taxpayer communication messages can be leveraged (see below) (BIT and DJP, 2019). In this experiment, all the message types were found to have a positive effect while "planning" emails had the greatest impact. In some other experiments, the overall compliance-enhancing effect was found to be greatest when different moral suasion messages were combined (Bott and others, 2020).

Taxpayer email versions from the Behavioural Insights Team (BIT) and the Indonesian Directorate General of Taxes (DJP) (2019):

Trial arm	Email content
No email	No email
Control group	Style and content similar to a previous DJP email reminder to file a tax return
Simplification	Simplified version of control email, emphasizing early filing
National pride	Appeal to help build the nation by illustrating how taxes are spent on public goods
Guidance	Highlighted that early filing avoids problems, with links to guidance documents on how to file a tax return
Planning	Highlighted that early filing avoids problems, with a link to a website to nominate a filing date and receive reminder emails two days before and on the selected date
Guidance + Planning	Combination of the above two messages

Disclosure of tax compliance behaviour

Public disclosure of tax compliance behaviour can be focused on factual sharing of tax compliance statistics or naming and shaming of exposed non-compliant taxpayers in order to leverage peer and social pressures. Although the compliance-enhancing effect was found in both cases (Bø, Slemrod and Thoresen, 2015; Perez-Truglia and Troiano, 2018), the collective evidence pointed to mixed results (Luttmer and Singhal, 2014; Slemrod, 2019). Meanwhile, some studies highlighted privacy concerns and possible backfiring when taxpayers deliberately underreport to stay below the disclosure threshold and avoid public attention (Hasegawa and others, 2013).

Positive inducements

Public recognition of and rewards for honest taxpayers have helped increase tax compliance (Slemrod, 2019; Carrillo, Castro and Scartascini, 2021). They primarily have an effect on intrinsically motivated taxpayers, but not on extrinsically motivated taxpayers (Dwenger and others, 2016). Meanwhile, tax compliance gains can be greater if the rewards are non-financial (Koessler and others, 2016), while rewards in the form of cash handouts or tax holidays have minimal or negative results (Dunning and others, 2015).

Taxpayer education

Proactive taxpayer education can contribute significantly to tax compliance, especially in countries where the taxpayers are inadequately informed of tax policies and tax administration processes. Successful initiatives are often underpinned by (a) an emphasis on who pays taxes, how to pay taxes and what taxpayers receive in return (Van den Boogaard and others, 2022); (b) programmes tailored to specific taxpayer segments (Fjeldstad and Heggstad, 2012); and (c) partnerships with influential individuals and organizations that have extensive outreach to the public (OECD and FIIAPP, 2015).

One successful example is Bangladesh's National Income Tax Day to raise awareness among its citizens of the importance of regularly paying income taxes for the country's development. Activities include tax clinics to help citizens file their taxes, tax rallies and award ceremonies to honour the highest taxpayers.

direct enforcement measures. The simplest measures include tax payment reminders with additional messaging on information-sharing or moral suasion. Public disclosure of tax payments and compliance information, including to name and shame tax evaders and to reward honest taxpayers, can be considered. Finally, taxpayer education helps lay a solid foundation for tax citizenship and increase understanding on the need for taxes and how to pay them and engage in constructive dialogues with Governments on tax matters.

To realize the full potential of tax morale in promoting compliance, broader improvements in public governance and service provision are also necessary. The perception of state legitimacy and governance quality and public service provision has a significant impact on tax compliance (Levi, 1988; Daude, Gutiérrez and Melguizo, 2012; Slemrod, 2019). Tax evasion is also lower when taxpayers can actively participate in the decision-making process (Alm, Jackson and McKee, 1993). Improving taxpayer perceptions requires consistent and tangible actions by Governments. However, preserving a positive perception over time can prove difficult, when mistrust and the perception of unfairness caused by short-lived policy missteps can leave a lasting scar on tax morale (Besley, Jensen and Persson, 2023). The cultivation of a conducive tax culture takes an even longer time and greater effort to achieve.

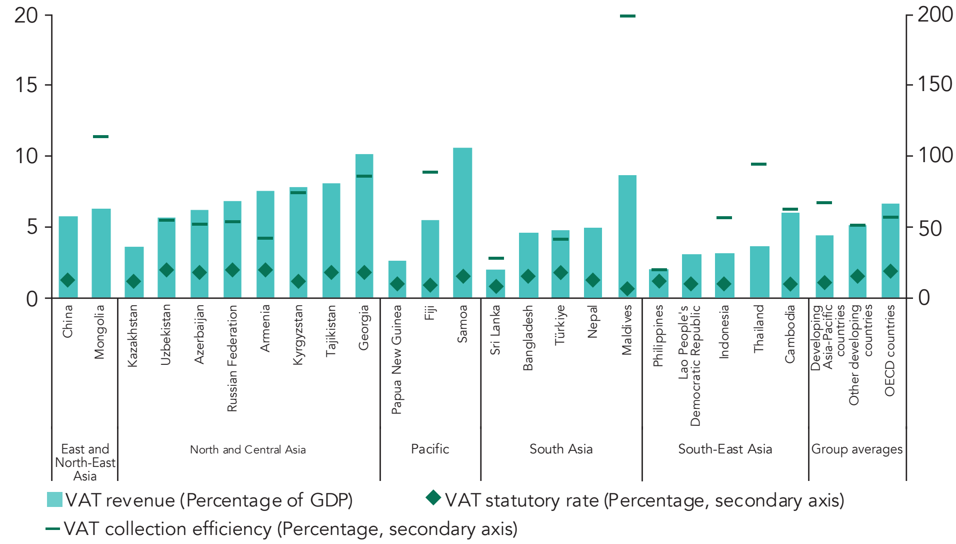
3.3.2. Selected policy opportunities in Asia and the Pacific

Value added tax

On average, the developing Asia-Pacific region outperforms other developing regions in the world and OECD countries in the collection efficiency of value added tax (VAT) (figure 2.14).[13] Nonetheless, **VAT collection efficiency is substantially below regional and global averages in Armenia, the Philippines, Sri Lanka and Türkiye, indicating that there is space for more VAT revenue collection.**

The introduction of a unified VAT as the primary component of goods and services taxes can deliver both tax revenue gains and broad economic efficiency gains, as the case of India's goods and services tax reform demonstrates (box 2.3). To further increase VAT revenue collection, it is desirable to rationalize reduced VAT rates and exemptions to broaden the tax base (Acosta-Ormaechea and Morozumi, 2021). Fewer exemptions and simplified structure help reduce the complexity of tax administration and administrative burdens on tax compliance.

Figure 2.14 Value added tax rates, revenue and C-efficiency, 2018



Source: ESCAP, based on the IMF Government Financial Statistics database and C-efficiency ratios. Accessed on 6 November 2023.

13 This collection efficiency, known as "C-efficiency", is measured as the ratio of actual VAT revenue to the theoretical VAT revenue based on the statutory VAT rate when there is no exemption or leakage. If the outlier Mongolia is excluded, the region's collection efficiency would surpass the OECD average but only marginally.

Box 2.3 India's goods and services tax reform

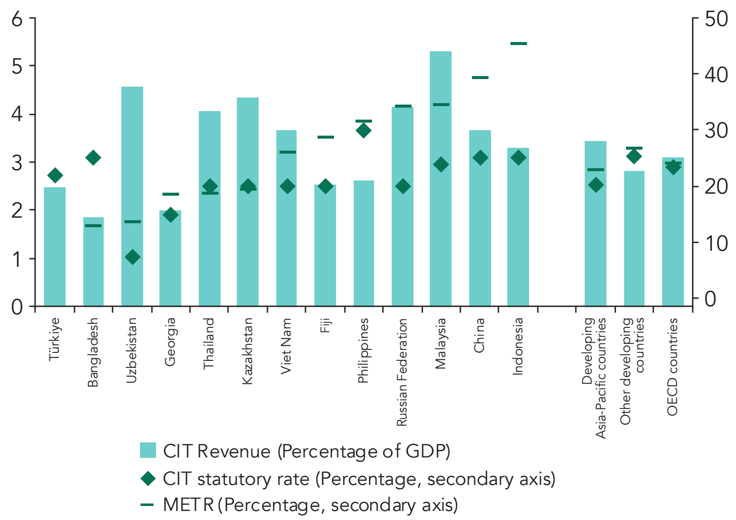
The goods and services tax (GST) reform in 2017 consolidated multiple layers of goods and services taxes into a single VAT-style regime, representing a significant transformation in India's indirect tax system. With a linear tax mix, a simplified rate structure and the built-in advantages of VAT in enforcing compliance, the reform enhanced tax administration and economic efficiency gains as it reduced past distortions and tax-induced domestic market fragmentation. Since the reform, the number of registered GST taxpayers has more than doubled. GST revenues also increased notably to more than 3.1 per cent of GDP in fiscal year 2023.

At its initial introduction, this landmark reform encountered multiple challenges. Transition to the new GST regime resulted in friction and high adaptation costs. Compliance burdens increased in some cases, especially for smaller firms. Technological glitches also caused problems in the early launch of the new GST Network. However, effective coordination among government stakeholders through the GST Council and post-launch adjustments contributed to the eventual success of the reform. The digitalized GST platform for tax registration, filing and payment also played an essential role in reducing the compliance and transition costs.

Corporate income tax

Developing Asia-Pacific countries outperform the rest of the world in corporate income tax (CIT) revenue mobilization. Surprisingly, this performance is achieved with substantially lower average statutory CIT rates and under the usual belief that corporate tax incentives are widely employed by economies in the region to attract foreign investment (figure 2.15). While the region's average CIT rates have steadily declined since the early 1990s (Gupta and Jalles, 2023) to 20.2 per cent in 2020, CIT revenue remains robust. This implies that the region is not necessarily more generous on tax incentives to attract foreign investment and the space for further CIT revenue enhancement may be limited in many countries.

Figure 2.15 Corporate income tax rates, revenue and marginal effective tax rate, 2020



Source: ESCAP, based on the IMF Government Financial Statistics database and the World Bank Global Marginal Effective Tax Rate (METR) database. Accessed on 6 November 2023.

Note: The marginal effective tax rate (METR) measures the wedge between the before-tax rate of return and the after-tax rate of return on marginal investments. For additional information, see World Bank (2022).

Economic digitalization poses a novel challenge to CIT revenues. The new business models, ranging from Web-based services to remote employment and manufacturing, have enabled multinational enterprises to be active in developing countries while avoiding paying taxes locally. Location and pricing challenges of digital assets and intellectual property also provide multinationals with additional opportunities for profit shifting. While ongoing norm-setting initiatives[14] have achieved some initial progress towards a reduction in tax evasion and avoidance in the digital era and a fairer allocation of taxing rights across countries, the tax revenue erosion risks confronting developing countries remain far from being fully addressed.

Personal income tax

The developing Asia-Pacific region lags far behind OECD countries in personal income tax mobilization, despite it being a central pillar in all optimum taxation recommendations. In 2021, average personal income tax (PIT) revenue in the region stood at just 2.6 per cent of GDP, which is less than a third of that in OECD countries.

14 Examples of these initiatives include the OECD-G20-led base erosion and profit shifting (BEPS) project and the work of the United Nations Tax Committee.

Although low PIT revenue levels are common in developing countries, **rising income levels in developing economies in Asia and the Pacific and the growing public concern over income inequality have created new opportunities for progressive income taxes.** A sound PIT system relies on a well-conceived balance between policy objectives and practical constraints (Jian and Lee, 2018). Countries with a small middle class and large populations of poor people can target primarily the top-income individuals and prioritize simplicity in their PIT regimes. Countries with higher income levels and stronger administrative capacities can aim at a broad-based PIT that covers the majority of people and effectively taps into capital and non-wage incomes.

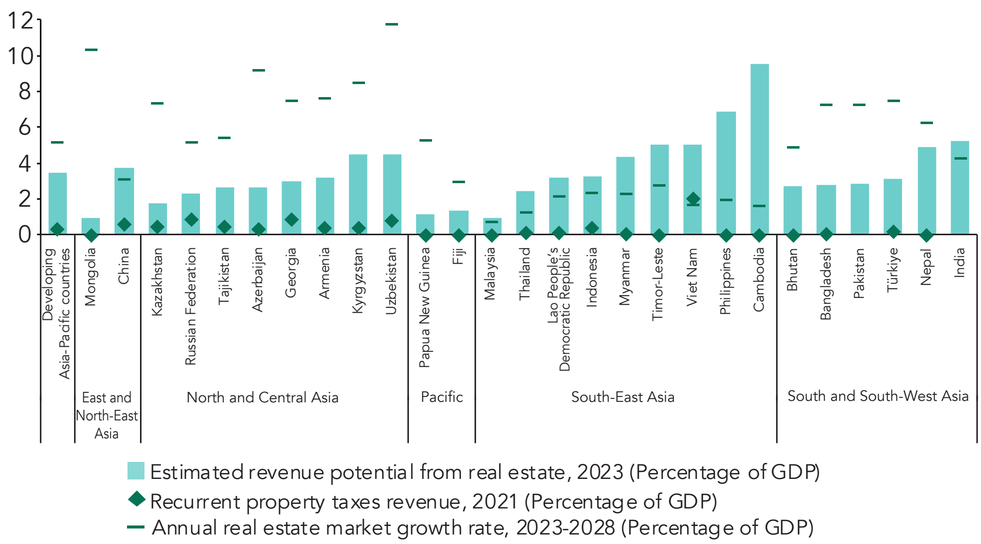
Recurrent property tax and land value capture

The booming property markets in many Asia-Pacific economies create fertile ground for public revenue mobilization, although few countries have managed to realize such potential. As of 2023, the total estimated value of property markets in developing Asia-Pacific countries was about seven times the size of their GDP and is projected to grow at more than 5 per cent annually between 2023 and 2028.[15] Assuming that 0.5 per cent of this market value can be mobilized as government revenue,[16] about 3.5 per cent of GDP can potentially be generated (figure 2.16). Despite this potential, government revenues from recurrent property tax stand at about 1 per cent of GDP in Viet Nam and close to null in many other economies in the region.

Land value capture (LVC) may provide a viable temporary alternative when the property tax system is being developed and complement the latter in the long run. LVC refers to policies and mechanisms that enable Governments to recover for reinvestment part of the increase in land value generated by public infrastructure and improvements in services. It has several advantages over the recurrent property tax, including being more front-loaded in its revenue stream and less visible as land developers rather than homeowners are charged.

While LVC mechanisms can be broadly categorized into the sale of development rights and betterment charges (Germán and Bernstein, 2018), it can take many different forms tailored to the local context. Some Asia-Pacific countries are already exploring or piloting this concept (box 2.4). In China, LVC has mobilized up to 7 per cent of GDP annually and provided an own-source fiscal backbone for municipal governments (Bahl and Qiao, 2019). However, in comparison with property tax, LVC is often negotiated on an ad hoc basis and may not be a stable long-term revenue source. Some LVC arrangements may also lead to distorted incentives for policymakers and to market inefficiencies (Suzuki and others, 2015).

Figure 2.16 Selected indicators on property market and property-related public revenue potential



Source: ESCAP, based on the IMF Government Financial Statistics database and Statista estimates on real estate market values. Accessed on 6 November 2023.

15 For details, see Statista at www.statista.com/outlook/fmo/real-estate/worldwide.

16 This assumption is consistent with experiences in OECD countries where typical recurrent property tax rates are between 0.3 and 1.3 per cent.

Box 2.4 Examples of land value capture

China: public land lease through auctions

Receipts from leasing out public land for real estate development grew rapidly and have become one of the primary revenue sources for subnational governments from the beginning of the real estate boom in the 1990s. Public auctions of development rights were also introduced as a standard practice to maximize revenue receipts from leases. By 2013, this revenue exceeded 7 per cent of GDP and contributed more than 30 per cent of the national budget revenue. LVC receipts also served as collateral for subnational government borrowing through local government financing platforms, thus further expanding resources available for development projects.

Hong Kong, China: "rail plus property"

The Mass Transit Railway Corporation (MTR) finances its infrastructure investments primarily through property development revenues on lands along newly constructed metro lines. This property development right is allocated to MTR by the government as a substitute for direct fiscal transfers. This revenue model has proved a huge success in the past three decades, sustaining steady investments in metro development in the city.

India: simultaneous presence of multiple handles

India has four major types of LVC handles primarily used by subnational governments. Three of them are used more frequently and take the form of the sale of development rights, including fees on land use conversions (rezoning), charges on property development at a higher density (premium floor space) and additional charges specifically targeting property developers. The last LVC handle takes the form of betterment charges, when landowners are requested to pay a levy for government-built infrastructure that benefits them directly.

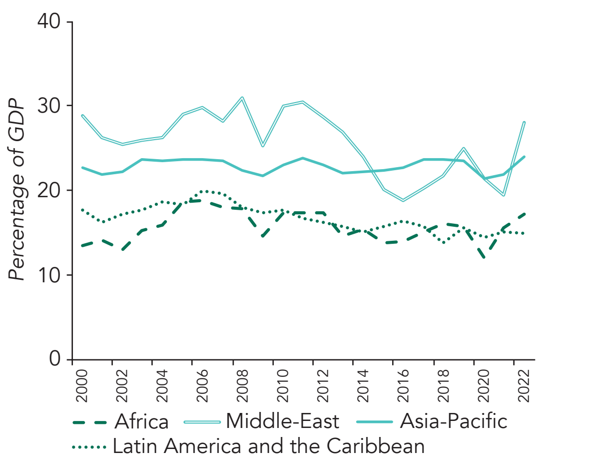
4. Increasing and channelling domestic savings for development financing

This section explores policy options to expand the supply of domestic capital, especially through domestic savings. It begins with a brief data analysis on the state of domestic savings in the Asia-Pacific region, then discusses policies aimed at enhancing the ability of households to save and increase their saving rates. Finally, this section discusses how to channel available domestic savings to entities in need of funds, including Governments, through capital markets.

4.1. Domestic savings: data and determinants

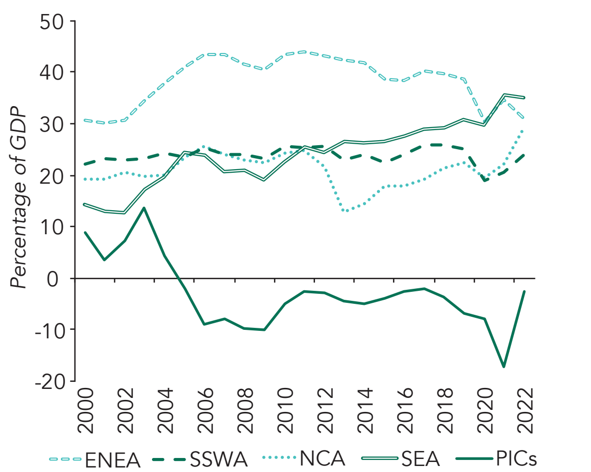
The overall level of domestic savings in Asia and the Pacific is not low, yet it varies notably across the subregions. In 2022, domestic savings (defined as GDP less total consumption by households, corporates and Governments) in the region stood at an average of 24 per cent of GDP. This was generally lower than the level in the resource-rich Middle East, but far higher than those in Africa, and Latin America and the Caribbean (figure 2.17). Within the Asia-Pacific region, the level of domestic savings varies from about 35 per cent of GDP in South-East Asia to –3 per cent of GDP in the Pacific (figure 2.18), mainly due to major dissaving in Kiribati, Marshall Islands and Tonga (figure 2.19).

Figure 2.17 Domestic savings across regions of the world



Source: ESCAP, based on the World Development Indicators database.

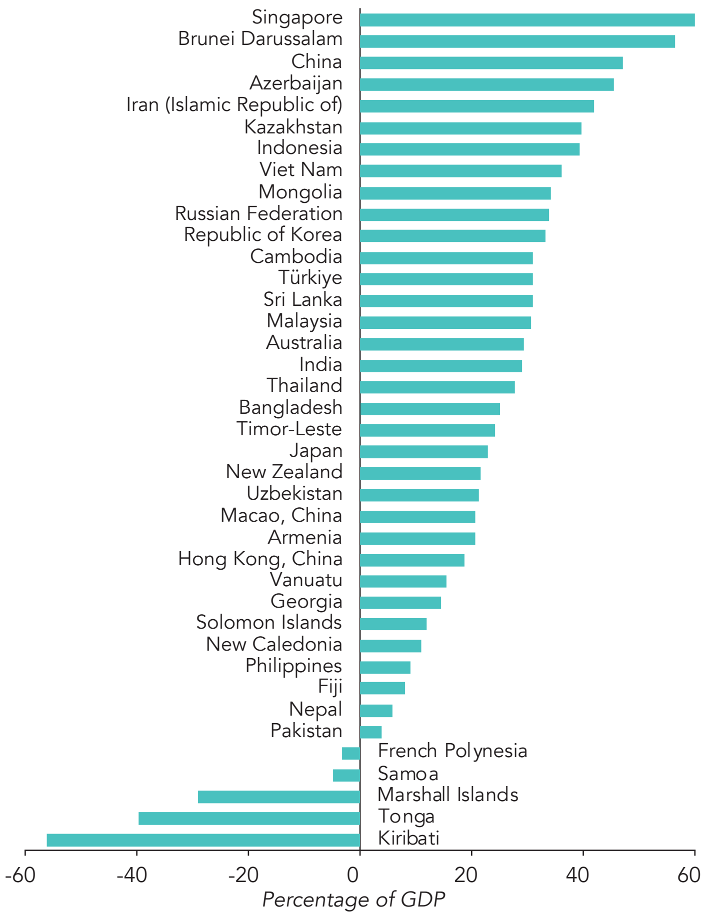
Figure 2.18 Domestic savings across Asia-Pacific subregions



Source: ESCAP, based on the World Development Indicators database.

Abbreviations: ENEA = East and North-East Asia; NCA = North and Central Asia; SEA = South-East Asia; SSWA = South and South-West Asia; and PIC = Pacific island countries.

Figure 2.19 Domestic savings across Asia-Pacific economies



Source: ESCAP, based on the World Development Indicators database.

Household savings are broadly determined by changes in lifetime earnings and the choice between current and future spending (Aghevli and others, 1990). In addition to various economic variables below that shape these two broad factors, cultural behaviours also influence people's attitude towards savings (Costa-Font, Guiliano and Ozcan, 2018).

- **First, income and economic growth.** Higher income generally leads to larger savings, which support capital accumulation and economic growth (Horioka and Terada-Hagiwara, 2010). Yet, saving rates could decline after a certain income threshold (Brueckner, Kikuchi and Vachadze, 2023). Meanwhile, periods of stable output growth raise saving rates owing to consumer confidence and financial stability (Brueckner, Kikuchi and Vachadze, 2023).

- **Second, age structure of the population.** In countries where there are many more young and old-age people relative to working-age persons, the saving rates tend to be lower. In going forward, rapid population ageing is expected to be the main driver of domestic saving rates in Asia and the Pacific (Horioka and Terada-Hagiwara, 2010).

- **Third, inflation and interest rates. High inflation devalues saved money and discourages saving.** Meanwhile, the net impact of interest rates on the saving rate can be mixed, as higher interest rates may encourage saving by offering better returns but also reduce the need to save for future consumption (Aizenman, Cheung and Ito, 2017).

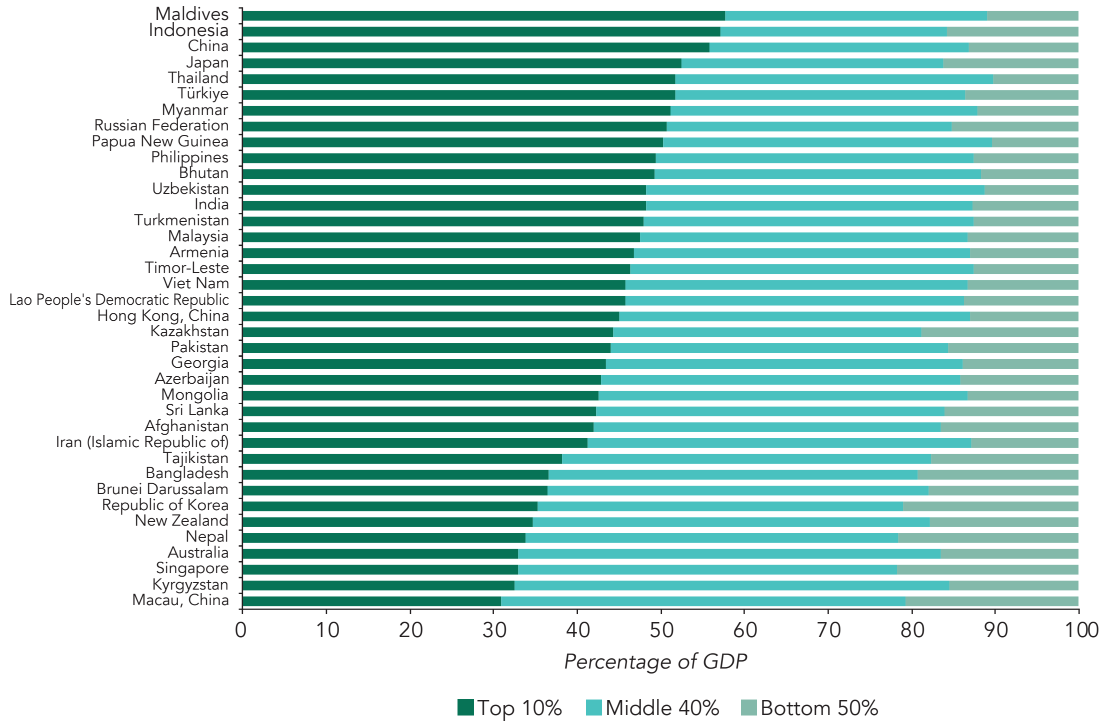
- **Fourth, the need for precautionary saving.** Household saving rates tend to be higher during periods of economic uncertainty, as people increase their precautionary savings (Hartzmark, 2016). In contrast, countries with generous tax treatment for pension savings and reliable social security systems require smaller precautionary savings (Crossley, Emmerson and Leicester, 2012).

4.2. Boosting domestic savings: policy options to increase the ability of households to save

Policies aimed at boosting domestic savings of wealthier individuals may offer a quicker win, but this would deepen income inequality. The propensity to save among richer people is typically higher than poorer people when income levels rise. As such, any fiscal measures that are aimed at increasing the income of richer people, such as tax cuts at higher income blankets or temporarily waiving financial transaction taxes, would tend to boost a country's domestic savings rather quickly and sizably. Yet, this would further raise within-country income inequality.

Policies that are aimed at increasing the income of most people in societies serve the dual purposes of boosting domestic savings and reducing economic inequality. Excluding the richest 10 per cent of the Asia-Pacific population, the income shares of the remaining 90 per cent of the population range between approximately 40 per cent of total income in such countries as China, Indonesia and Maldives to about 66 per cent in such countries as Australia, Kyrgyzstan and Singapore (figure 2.20). Increasing the income levels and saving rates of these populations should be a central element of policies to boost domestic savings.

Figure 2.20 Income shares of economies in Asia and the Pacific, 2022



Source: World Inequality Database. Available at https://wid.world/data/.

Higher labour productivity helps raise household savings in a sustainable manner. Providing universal access to education, boosting a country's spending on research and development and leveraging the benefits of international trade, all support labour productivity. As firms in the formal sectors are generally more productive than their informal peers, policymakers should also seek to remove obstacles to business registration and simplify the processes for payroll taxes and social security contributions. More broadly, wage adjustments that adequately reflect changes in labour productivity and cost of living can also increase workers' ability to save.

Adequate provision of basic public services helps release part of investible savings for investments. A large part of domestic savings in the region is indeed for precautionary savings as self-insurance against shocks, such as fluctuating prices and wages, and natural disasters. While such precautionary savings are counted in overall household savings, they are often invested in such safe assets as gold, rather than such long-term investment vehicles as government bonds. To increase investible savings, Governments should seek to relieve people's concerns about their future financial conditions by ensuring universal access to health-care services and social protection, such as unemployment insurance and old-age cash transfers, as well as enhancing catastrophe insurance schemes.

4.3. Boosting domestic savings: policy options to increase household saving rates

Even when the income of most people is stable, domestic savings will still be larger with higher saving rates. To increase household saving rates, the policy focus has traditionally been on improving financial inclusion. This subsection examines a broader issue of people's financial well-being or capacity.

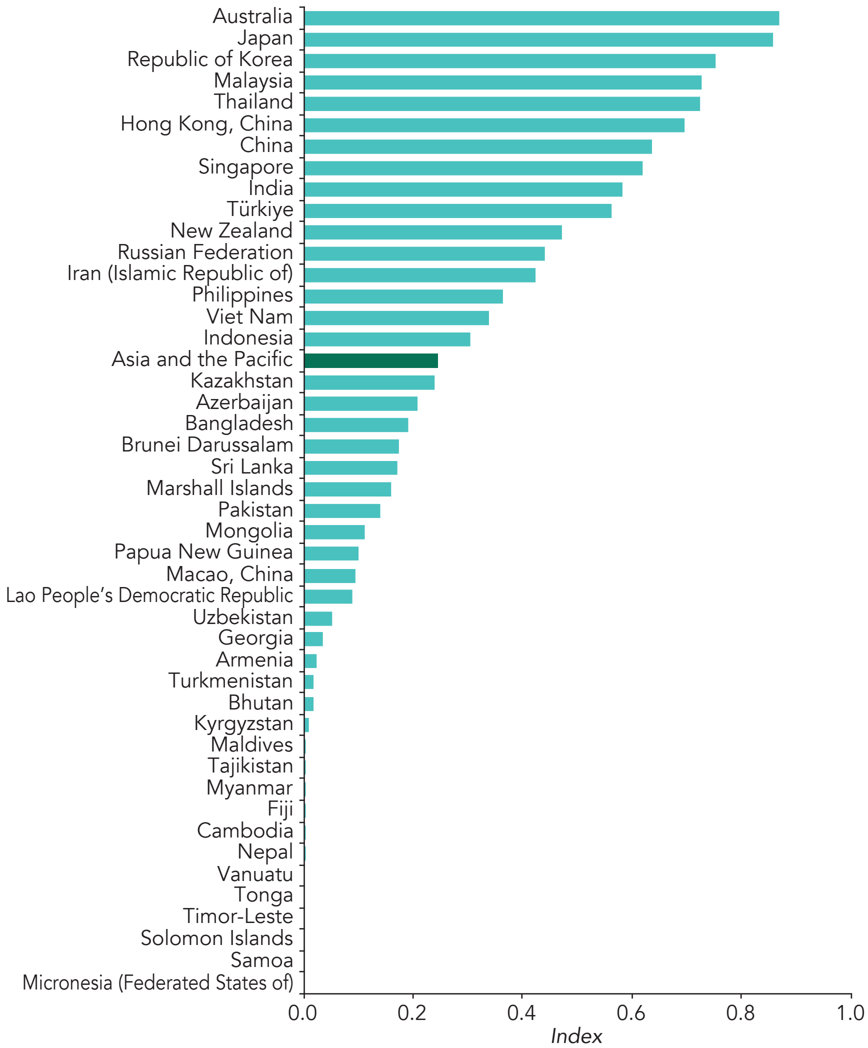
Improving people's financial well-being is key to raising household saving rates. According to the World Bank's 2021 Global Findex Questionnaire, about 68 per cent of the population in Asia and the Pacific aged at least 15 years old had financial accounts, up from 45 per cent in 2011. However, the concept of financial well-being goes beyond financial inclusion; it involves the ability of people to make informed financial investments underpinned by strong financial literacy and digital skills and to respond to negative shocks with adequate savings. Yet, the same survey revealed that more than 70 per cent of the respondents in 20 of 31 Asia-Pacific countries found it difficult or impossible to obtain emergency funding.

There are at least three policy areas to strengthen people's financial well-being. The first is to conduct regular national surveys on financial well-being. Currently, about 30 countries in the region are conducting surveys on financial well-being, with differences in their scope, definition and frequency. A more holistic approach is needed. For example, Australia's financial capability survey is conducted every two years and comprises four components on knowledge, skills, attitudes and behaviours (Australia, 2022).

Second, financial incentives and platforms should be provided for people to save. For example, Governments can provide partial matching of savings to incentivize younger people to save (Dolphin, 2012). In Thailand, the Government has created a retirement fund that accepts contributions from self-employed and informal workers, as they are not covered by the general pension scheme (Bank of Thailand, 2016). In Cambodia, the emergence of microfinance institutions supports families with lower income and savings, particularly in rural areas (Cambodia, 2019).

Finally, financial literacy and consumer protection should be strengthened. Strong financial literacy helps people choose financial products and services that are suitable to their needs and conditions. In Indonesia, a survey suggested that about 60 per cent of all respondents were familiar with both life and health insurance. The figure was below 10 per cent for pension funds, all of which are financial products that affect personal savings (Otoritas Jasa Keuangan, 2022). Among other measures, Governments should integrate financial education programmes into school curriculums, including digital financial services and attitudes towards saving. Public awareness campaigns in partnership with private financial institutions should also be conducted. Meanwhile, schemes on financial consumer protection need to ensure fair treatment of consumers in their purchases and use of financial products and services. This would help build trust in the financial system, thus promoting household savings.

Figure 2.21 Financial Development Index in Asia-Pacific economies, 2021



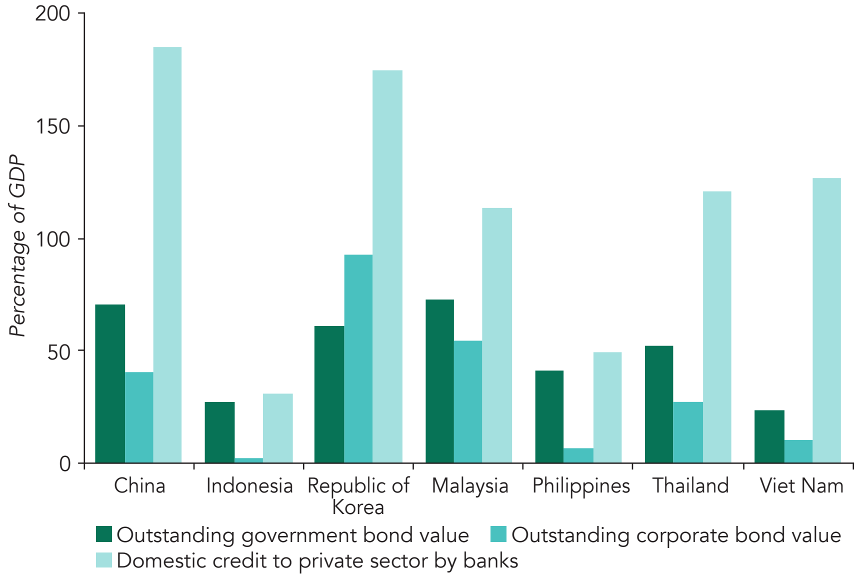
Source: ESCAP, based on the IMF Financial Development Index database.

4.4. Channelling domestic savings: role of capital markets

Larger domestic savings by themselves may not help Governments to access more funds unless domestic capital markets are relatively well developed. Capital markets pool together investors, such as individual savers and commercial banks, and entities in need of funds, such as companies and Governments. Sizeable and effective domestic capital markets offer benefits, such as providing alternative financial intermediation when banks are under stress, enabling investors to diversify portfolios and better manage risks, while reducing a country's reliance on external borrowing and thus exchange rate risk.

Domestic capital markets remain underdeveloped in many Asia-Pacific countries. According to the IMF Financial Market Development Index, which measures the size and liquidity of capital markets, ease of market access and the cost of financial services, capital market development is more limited in North and Central Asia, the Pacific, and South and South-West Asia (figure 2.21). Even in countries with relatively well-developed capital markets, the outstanding values of public and corporate bonds denominated in the local currency are still much smaller than that of bank credits extended to the private sector (figure 2.22).

Figure 2.22 Size of bond markets and bank credits in selected Asia-Pacific countries



Source: ESCAP, based on the Asian Development Bank AsianBondsOnline database and the World Bank's World Development Indicators database.

Note: The data period is the third quarter of 2023 for bond markets and 2022 for domestic credits.

Strong macroeconomic fundamentals enable Governments to issue sovereign bonds, which helps to further develop domestic capital markets. Government bonds generally offer the lowest coupon rates, thus serving as a reference point and providing yield curve benchmarks and price discovery for other bond issuers. As relatively risk-free assets, government bonds also help increase investors' familiarity with bond market trading. According to ESCAP (2018a), countries that have a larger debt stock, face wider fiscal and current account deficits, exhibit a weaker regulatory framework, and have a less open trade regime and less developed financial systems find it more difficult to issue public bonds.

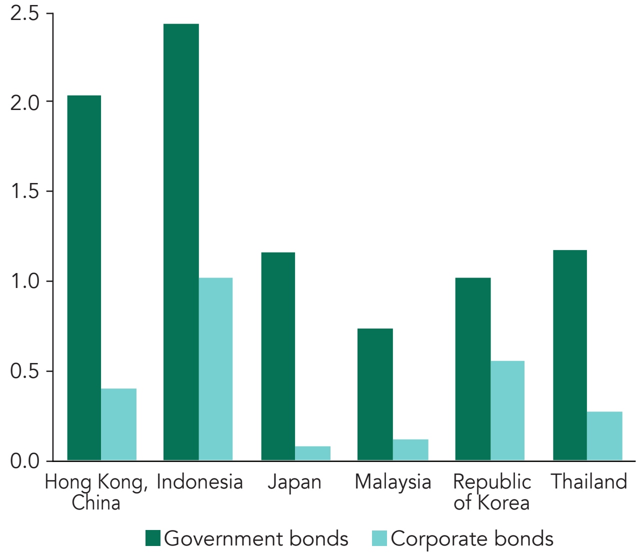
An effective bond market comprises several elements of bond market structure, intermediaries and architecture (ESCAP, 2019). Among other elements, these include an effective legal framework for the issuance process, a sizeable investor base, a diverse set of products, adequate market liquidity, knowledgeable financial intermediaries and an enabling market infrastructure, such as credit rating agencies and bond pricing agencies. Broader issues, such as strong corporate governance, contract enforcement and harmonization of international standards, also matter.

Given the nascent stage of capital markets in many Asia-Pacific countries, the focus here is on four fundamental policy areas. First is widening the investor base. Commercial banks are the largest investors in government bonds in many economies in the region. For example, as of September 2023, banks held about 70 and 40 per cent of government bonds in China and Viet Nam, respectively.[17] The role of institutional investors, such as pension funds, mutual funds and insurance companies, remains limited although their long-term liabilities make them suited to investing in such long-term securities as bonds. To broaden the investor base, which helps reduce market volatility, policymakers can seek to facilitate foreign investment by relaxing certain capital controls and harmonizing cross-border standards and regulations to reduce transaction costs (ESCAP, 2017a). Increasing the number of local credit rating agencies and the comparability of their ratings through more unified methodologies and definitions also support potential investors in assessing investment risks (IIMA, 2013). Finally, regulatory measures can be deployed. For example, India introduced a stipulation that requires life insurers to invest 50 per cent of their portfolio in government bonds.

Second is increasing the liquidity of secondary markets for bonds. The market liquidity of previously issued bonds remains limited in Asia and the Pacific. In 2022, the bond turnover ratios, or a ratio between the value of bonds traded to the average amount of bonds outstanding, were low at between 0.1 and 1.0 for corporate bonds and between 0.7 and 2.4 for government bonds in several regional economies

17 For details, see the AsianBondsOnline database.

Figure 2.23 Bond turnover ratios in selected Asia-Pacific economies, 2022



Source: ESCAP, based on the AsianBondsOnline database.

(figure 2.23). The low liquidity discourages investors from buying bonds in the first place as preterm exits are difficult. To increase such market liquidity, policymakers should create structured preterm exit options, such as bond buybacks and exchanges, and pursue broader policy actions, such as extending the yield curve to longer tenors, increasing market transparency and strengthening the legal infrastructure and enforceability of repurchase agreements.

Third is improving mechanisms for risk transfer and credit enhancement. To increase the bankability of bonds, fiscal measures can be considered, such as waiving the withholding tax on government bonds and providing State guarantees against default. For example, the Indonesia Infrastructure Guarantee Fund provides guarantees on the financial obligations of public contracting agencies participating in a public-private partnership (PPP) consortium. Compensation is given if the economic feasibility of the PPP project is compromised due to such events as early termination or project default because of changes in law.

The final policy area is protecting investor rights. Bond buyers face risks, such as expropriation risk and the lack of transparent and timely business reporting by bond issuers. A sound investor protection framework should include a bankruptcy law that helps determine the rights and obligations of market participants, effective contract enforcement and legal resources to support efficient conflict resolution. At the contract level, a provision on cross-default agreements, which puts a bond issuer in default if it defaults on another obligation, also helps to enhance investor protection.

Stronger regional cooperation can support Asia-Pacific countries in implementing these policy initiatives. For instance, the ASEAN+3 Multi-currency Bond Issuance Framework[18] was launched to facilitate intraregional fixed-income transactions by promoting common market practices for bond issuance, such as disclosure standards and common documents. Supported by this initiative, the Lao People's Democratic Republic has issued Thai baht-denominated government bonds on the Thai market (box 2.5). Similarly, the Asian Bond Market Forum was established in 2010 to foster the standardization of market practices and harmonization of regulations relating to cross-border bond transactions.

Box 2.5 Offshore sovereign bonds: the case of the Lao People's Democratic Republic

For countries with smaller or less developed capital markets, the issuance of public bonds in a neighbouring economy and denominated in the host country's currency can be considered. In addition to supporting fiscal positions while a lengthy process of developing domestic capital markets continues, such issuance tends to reduce borrowing costs compared with that in hard currencies in major international markets.

The issuance of bonds in Thailand by the Lao People's Democratic Republic is an example. During the period 2013-2023, the Lao Government and other public entities issued almost 50 Thai baht-denominated bonds in Thailand. As of the end of 2023, the total value of outstanding government bonds alone was about $787 million.[a] Among other factors, Thailand's sizeable capital markets and enabling investment rules and strong economic ties between the two countries underpinned the expansion of such issuances.

a The Thai Bond Market Association (www.thaibma.or.th/EN/Issuer/IssuerDetail.aspx?issuer=8f287f22-0dc8-e211-91c9-78e3b51dab3c&tab=issue).

18 ASEAN+3 comprises all 10 members of the Association of Southeast Asian Nations (ASEAN), plus China, Japan and the Republic of Korea.

While promoting capital market development, policymakers should be mindful of its potential adverse economic impacts. For example, as countries ease regulations that limit institutional investors' investment in capital markets, the impact on portfolio risk should be closely monitored. Similarly, more active participation by foreign investors raises the exposure of local bond markets to global financial conditions and capital flight. Removing capital controls can also lead to greater financial instability, especially amid weak regulatory supervision.

5. Concluding remarks

Developing Asia-Pacific countries are confronted with the dual challenge of sizable development financing gaps and rising cost of government debt. Enhancing domestic resource mobilization, including through strengthening public revenue collection and boosting domestic savings, is a critical and effective policy response.

A new ESCAP analysis suggests that substantial space for tax revenue enhancement exists in Bhutan, the Islamic Republic of Iran and Malaysia if their tax effort and efficiency match that of the best-performing peers. However, this space would be relatively modest in other regional economies unless broader progress is achieved in socioeconomic development and public governance. In particular, this chapter revealed that a country's maximum tax potential is positively linked to per capita income and government spending on education but negatively linked to income inequality and corruption.

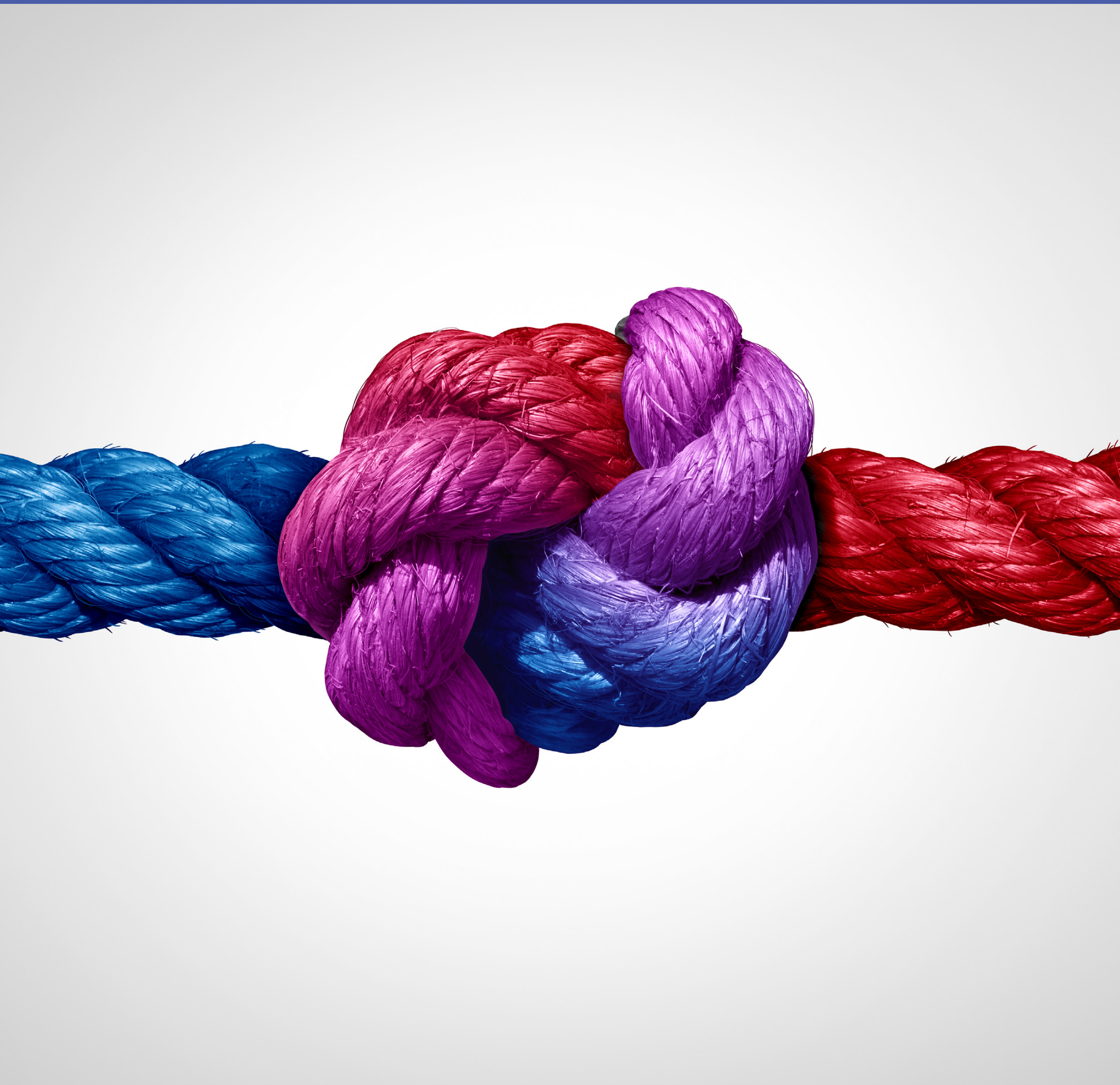
Past policy lessons suggest that coordinated efforts to rationalize tax structure and tax rates, strengthen tax administration and reduce wasteful tax exemptions may deliver the greatest revenue results. Meanwhile, smart application of tax morale mechanisms can further complement enforcement measures for greater tax compliance. Tax morale works through psychological channels, such as intrinsic motives, reciprocal motives, peer and social pressures, cultural influences and misperceptions in the presence of information imperfection. Experiments have been conducted successfully with a set of low-cost policy nudges, including sending reminder letters for tax payments with moral suasion and information-sharing, public disclosure of tax compliance data and taxpayer education efforts. These policy measures need to be well designed, targeted and accompanied by broader improvements in taxation and public governance to deliver robust results.

Land value capture offers significant potential as well at a time when the region's booming property sector remains largely untapped for public revenue mobilization. Designed to recover part of the real estate value increase driven by public spending on infrastructure and urban services for reinvestment, land value capture can serve as an important complement to the underperforming recurrent property tax. Experience on the use of land value capture in some Asia-Pacific countries is worth sharing.

This chapter also explored policy options to increase domestic savings to expand the supply of domestic capital. To enhance the ability of households to save in a sustainable manner, Governments should seek to raise labour productivity by providing universal access to education, boosting spending on research and development and fostering formalization of firms. Adequate provision of basic public services also helps reduce the need for precautionary savings and release part of investible savings for investment. Meanwhile, to increase household saving rates, there is a need to improve people's financial access, literacy and consumer protection so that they can make informed financial investments and respond to negative shocks with adequate savings.

Larger domestic savings by themselves may not help Governments to access more funds unless domestic capital markets are relatively well developed. As domestic capital markets remain underdeveloped in many Asia-Pacific countries, this chapter focused on four fundamental policy actions to widen the investor base, increase the liquidity of secondary bond markets, improve mechanisms for risk transfer and credit enhancing and protect investors' rights. Stronger multilateral cooperation can support the region in implementing these policy initiatives.

3 AFFORDABLE AND LONG-TERM FINANCING FOR GOVERNMENTS: MULTILATERAL DEVELOPMENT COOPERATION



1. Introduction

In the wake of the substantial financing needs for investing in the Sustainable Development Goals and tight global financing conditions (see chapter 1), increasing access to affordable and long-term financing for Governments cannot be achieved solely through domestic policy actions (see chapter 2). In February 2023, the United Nations Secretary-General outlined a vision to deliver financing at scale in his SDG Stimulus to Deliver Agenda 2030 initiative (United Nations, 2023d). Taking a cue from this global agenda, the present chapter explores three areas of stronger international development cooperation that can help increase access to development financing by Governments in the Asia-Pacific region.

First, finance received on concessional terms can reduce the need for borrowing from private creditors that charge higher interest rates with shorter loan maturities. To increase the availability of concessional finance, it is essential that all members of the OECD Development Assistance Committee honour their commitment of providing 0.7 per cent of their gross national income (GNI) as official development assistance (ODA). Moreover, any climate finance commitment made by donors should be delivered in addition to existing ODA commitments. Clarification of how to define and count "new and additional" climate finance is urgent so that climate action is not carried out at the cost of making development progress in other areas. Meanwhile, effective allocation of concessional financing is as important as increasing its size. There is increasing acceptance that traditional income-based criteria neither consider a country's vulnerability to external shocks nor capture the needs and the progress being made towards achieving the Sustainable Development Goals. The Multidimensional Vulnerability Index, which was launched at the annual meetings of the World Bank and the International Monetary Fund in Marrakech, Morocco, in October 2023, is used to guide the allocation of concessional financing and provide a more uniform measure to supplement GNI data.

Second, the resources and capabilities of multilateral development banks for lending to developing countries are being underutilized. Despite being well-positioned to amplify development finance, such banks are not fully leveraging their balance sheets to lend at scale. Practical reform solutions are needed, including reforming capital adequacy frameworks, improving lending terms and ensuring the efficiency and effectiveness of lending. However, even if implemented with maximum effectiveness, the additional headroom freed by implementing these measures will most likely fall substantively short of the required development spending needs. Major shareholders should work together to build consensus towards new capital injection for multilateral development banks.

Third, sovereign credit ratings have a direct bearing on government borrowing costs, but there has been limited progress in addressing long-standing structural challenges related to credit rating agencies. Sovereign credit ratings provide investors and creditors with assessments on perceived risk of default, which determine the size and cost of issuing government debt securities. Several structural limitations and associated solutions have been highlighted since the 2008 global financial crisis. Among other roles, credit rating agencies should refine and increase the transparency of their rating methodologies and assess sovereign creditworthiness from a longer-term perspective. To address the concerns on inadequate market competition in the credit rating industry, there are proposals to establish new regional or non-profit credit rating agencies, but several factors should be carefully considered to ensure the success of any new such agencies.

The support provided by the international development community should not undermine national efforts to deliver reforms to reduce fiscal risks and increase the supply of domestic capital, which serves as the foundation for sustainable development financing. Effective multilateral development cooperation is complementary to national efforts to ensure affordable and long-term financing for Governments.

2. Towards a larger and fairer concessional financing system

This section first highlights the important role that concessional finance plays in supporting developing countries to lower their overall costs of borrowing. It then calls for donors to honour their commitments and ensure fair allocation of limited concessional resources.

2.1. Importance of official development assistance should not be underestimated

Official development assistance is a critical source of development concessional financing. It is made up primarily of grants, loans at concessional terms and debt relief. In 2021, ODA represented an average of 75-88 per cent of the official development finance[1] received by least developed countries, small island developing States and landlocked developing countries worldwide (OECD, 2020).

1 This includes bilateral ODA, grants and concessional and non-concessional development lending by multilateral financial institutions, and other official flows for development purposes, such as refinancing loans.

Box 3.1 Foreign direct investment as a source of international development financing

A discussion of long-term development finance would be incomplete without recognizing the role of foreign direct investment (FDI). For example, FDI has been essential to financing the energy transition, accounting for more than 40 per cent of global capital flows into the renewable energy sector in 2019 (UNCTAD, 2020; 2023a).

Despite this, FDI has until now not been a part of the discussions at forums on boosting climate finance for developing countries. For example, FDI did not make it onto the main agenda or into the decision that was taken during the 27th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change held in 2022. The same was true at COP 28 in 2023.

Governments and their national investment promotion agencies must also take action to tangibly increase the FDI they target and receive. At the policy level, Governments can influence FDI through the legislation and regulations that they implement, as well as by offering certain financial and fiscal incentives to investors. Investment promotion agencies should proactively and meaningfully integrate sustainable development priorities into their investment attraction and facilitation work.

There are also other sources of development finance such as foreign direct investment (box 3.1) and South-South cooperation. South-South cooperation, which can be traced back to 1955, is aimed at promoting the exchange of resources, technology and knowledge among developing countries. Since the 1990s, it has gained prominence in the development cooperation landscape with such major contributors as China and India. For example, over the past decade, China has become the top creditor in such countries as Cambodia, Kyrgyzstan, the Lao People's Democratic Republic, Maldives, Pakistan, Samoa, Tajikistan, Tonga and Vanuatu.

Despite its vital role, the regular tracking of financial flows through South-South cooperation is still not settled. To address the issue of limited data availability, in 2023 UNCTAD launched a three-year project to support developing countries in using a common framework to measure South-South cooperation (UNCTAD, 2023b). The outcomes of this initiative, together with the monitoring of Sustainable Development Goal indicator 17.3.1 on measuring South-South cooperation, should provide a more complete picture of development finance beyond OECD-led ODA. This would also help shed light on policy issues for increasing more affordable and longer-term financing through South-South cooperation.

Members of the OECD Development Assistance Committee (DAC) are lagging far behind in meeting their ODA commitments. Since 1970, Committee members have pledged to provide ODA of 0.7 per cent of their GNI globally. Total ODA provided by DAC members in 2022 reached $211 billion (OECD, 2023). While this was one of the highest levels ever reached in terms of amount, it stood at just 0.37 per cent of GNI. According to Oxfam (2023), the value of DAC members' undelivered ODA exceeded $6.5 trillion between 1970 and 2021.

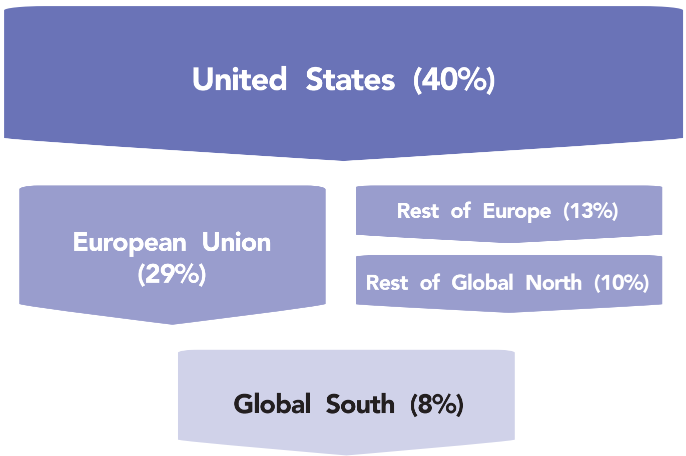
Worryingly, an increasing amount of ODA is being used to deal with global challenges in donor countries rather than supporting development ambitions in developing countries. Since the 1970s, the original aim of ODA has been to financially support poor countries in addressing country-specific development concerns, such as poverty alleviation, health care and education. Yet, ODA is increasingly used to cope with global development challenges, such as climate change, health pandemics and refugees. For example, the costs of hosting refugees in donor countries represented 14 per cent of the total ODA volumes reported in 2022.

2.2. Climate finance commitment should be additional to official development assistance

Most public climate finance reported by developed countries was taken directly from their ODA budgets, resulting in less ODA being used to address socioeconomic challenges in developing countries. Climate finance is financing drawn from public, private and alternative sources to support climate mitigation and adaptation actions. In 2009, developed countries committed to provide $100 billion a year by 2020 to support climate change adaptation and mitigation activities in developing countries (UNFCCC, 2023). However, that commitment was met only in 2022, while developed countries have also failed to ensure that climate finance was "new and additional" to ODA. According to Hattle and others (2023), only 7 per cent of the climate finance reported to UNFCCC from 2011 to 2020 was new and additional to DAC countries' ODA provisions. In this regard, it is urgent to identify clearly what constitutes "new and additional" climate finance so that any expansion of climate finance does not come at a cost to poverty reduction and other development needs in developing countries.

Convincing developed countries and expanding the list of climate finance donors to pay their fair share to deal with climate change are important matters but politically challenging. Building on the "polluters pay" principle, Hickel (2020) proposed a novel method for quantifying national responsibility for damage related to climate change and argued that high-income countries should pay developing countries to deal with climate change (figure 3.1). Another proposal is to expand the current list of climate finance donors and potential contributors to any loss and damage fund that goes beyond DAC members. For instance, while developed countries should still take primary responsibility for climate change, such countries as China, Mexico, Poland, the Republic of Korea, the Russian Federation, Saudi Arabia and the United Arab Emirates should also provide more climate finance after considering such factors as historical carbon emissions, cut-off dates of calculation and income levels (Beynon, 2023). Although the proposals are important, the politics of both of them is difficult.

Figure 3.1 Responsibility for climate breakdown



Source: Hickel (2020).

Note: For the purpose of this analysis, "Global North" refers to Australia, Canada, Europe, Israel, Japan, New Zealand, and the United States; "Global South" refers to the rest of the countries in Africa, Asia and the Pacific, Latin America and the Caribbean, and the Middle East.

2.3. Official development assistance eligibility and allocations

Based on the DAC list, 42 Asia-Pacific developing countries are eligible to receive ODA (OECD, 2019b). These include all 11 least developed countries and 14 of the 15 small island developing States in the region (Singapore is not included as it is a high-income country).

Two thirds of ODA is distributed through bilateral channels. ODA is either directly channelled bilaterally from a DAC donor to a recipient country or through multilateral institutions, such as multilateral development banks, thematic funds and the United Nations.

A large part of bilateral ODA allocations is not governed by the income level of recipient countries but by the national interests of donor countries. Strategic development priorities set by DAC members are often linked with historical ties, economic ties, access to natural resources or security-related priorities, including migration. For example, the United States, which was the largest ODA provider in 2022 (Donor Tracker, 2023), has a development agenda that prioritizes diplomatic and defence issues. Meanwhile, Japan has increasingly focused on Africa as part of its strategy to better connect Africa with Asia.

ODA delivered through multilateral facilities follows more concrete institutional guidelines and practices where criteria related to GNI per capita are often the starting point. For the Asia-Pacific region, the largest sources of multilateral development finance are the Asian Development Bank (ADB) and the World Bank. Allocation of concessional finance is determined by each institution's set of policies. For instance, the International Development Association (IDA), the concessional arm of the World Bank, supports all countries, the per capita GNI level of which falls below $1,315 (IDA, 2023).

Other ad hoc considerations have also been used by multilateral development banks to determine which countries are eligible for concessional finance. These factors include a country's ability to obtain financing in financial markets and to cope with shocks. For example, both IDA and ADB have recognized the additional challenges and vulnerabilities faced by small island developing States and have made them eligible for concessional lending on a case-by-case basis (IDA, 2023; ADB, 2023a). As a result, most Asia-Pacific countries that have been able to access concessional funds from IDA and ADB are above the GNI per capita threshold. Only three countries are below such a threshold: Afghanistan, Myanmar and Tajikistan (table 3.1).

Table 3.1 Top recipients of multilateral ODA as a share of GNI in 2021

Country	Eligible for concessional finance in	Multilateral ODA inflows as a percentage of GNI	GNI per capita, as a multiple of IDA cut-off
Tuvalu	IDA and ADB	18.96	5.48
Nauru	ADB only	16.09	13.59
Tonga	IDA and ADB	12.95	3.75
Marshall Islands	IDA and ADB	11.82	6.02
Samoa	IDA and ADB	9.84	2.76
Solomon Islands	IDA and ADB	8.55	1.69
Kiribati	IDA and ADB	7.27	2.49
Micronesia (Federated States of)	IDA and ADB	7.02	3.14
Vanuatu	IDA and ADB	5.06	2.71
Myanmar	IDA and ADB	2.25	0.92
Tajikistan	IDA and ADB	1.99	0.92
Kyrgyzstan	IDA and ADB	1.79	1.07
Bhutan	IDA and ADB	1.78	2.31
Lao People's Democratic Republic	IDA and ADB	1.34	1.79
Cambodia	IDA and ADB	1.20	1.29
Nepal	IDA and ADB	1.02	1.02
Maldives	IDA and ADB	0.89	8.39
Bangladesh	IDA only	0.57	2.14
Sri Lanka	IDA only	0.22	2.75
Afghanistan	IDA and ADB	0.00	0.40

Source: ESCAP calculations, based on the OECD Credit Reporting System and the World Bank World Development Indicators.

Note: GNI per capita as a multiple of IDA cut-off is calculated by each country's GNI per capita as of 2021 divided by the IDA concessional finance operational cut-off in 2021 at $1,205. The abbreviations IDA = International Development Association, which is the concessional arm of the World Bank, and ADB = Asian Development Bank.

As eligibility for concessional financing does not mean actual allocations, poorer countries are not necessarily receiving more ODA. For example, IDA uses a performance-based approach to determine ODA allocations, which consider such factors as alignment of countries' macroeconomic frameworks with preferred World Bank policies and their track-record in implementing previous projects (IDA, 2022). In practice, the poorest countries are not the ones where most ODA inflows are directed, as there are no comprehensive or comparable criteria that are applied uniformly.

2.4. Using the Multidimensional Vulnerability Index to better inform eligibility for and allocation of concessional finance

There is increasing awareness of the need to move beyond income-based indicators to broader measures that reflect a country's well-being and can be consistently applied across institutions. This has prompted various efforts towards developing more comprehensive indicators and measures that cover different dimensions of vulnerability, such as economic, social, environmental and governance (CASA, 2021). More recently, the previously mentioned Multidimensional Vulnerability Index was launched after more than three decades of lobbying by small island developing States (Wilkinson and Panwar, 2023). The index measures a country's structural vulnerability to recurrent adverse exogenous shocks as well as structural resilience, which is the inherited capacity of countries to withstand, recover from or minimize the adverse effects of such shocks (United Nations, 2023c). As such, the use of the index has the potential to improve the determination of eligibility and allocation of concessional finance.

However, there is still caution concerning the operationalization of the Multidimensional Vulnerability Index. For example, the rationale for selecting individual indicators should be evidence-based, while selected indicators must reflect the fragilities of the most vulnerable countries (Cepal, n.d.). Moreover, high-quality data should be widely available for each selected indicator in the context of developing countries.

Multilateral development banks are encouraged to pilot test the Multidimensional Vulnerability Index. They could work together as a system, in collaboration with the United Nations, towards a common methodology for the index and for developing common guidelines for targeted allocation of concessional finance to countries in need. Such an initiative is already under way for the Caribbean Development Bank, which set up a technical working committee to review the index's framework.

3. Towards a larger and better multilateral development banking system

In the context of substantial development finance needs, the 2015 Addis Ababa Action Agenda of the Third International Conference on Financing for Development highlights the vital role played by multilateral development banks in achieving the 2030 Agenda for Sustainable Development through financial support, technical assistance and policy advice. Compared with loans from commercial creditors, even non-concessional financing – not to mention concessional financing – provided by multilateral development banks is typically provided at a much lower rate and for a longer term. For instance, the spread of ADB non-concessional loans denominated in United States dollars is only between 72 and 147 basis points over the reference rate and their average maturity could be up to 19 years (ADB, 2022b). More importantly, multilateral development banks are uniquely positioned to leverage development finance, as they can raise funds by issuing bonds backed by capital received from shareholders in the international financial markets. Finally, such banks often play a key role as countercyclical lenders, maintaining and even increasing development lending during an economic crisis while private sector financing tends to retreat.

This section first examines the state of multilateral development banks in the Asia-Pacific region. It then highlights current limitations and discusses practical policy solutions to reform those banks so that they can provide more affordable and longer-term financing (table 3.2).

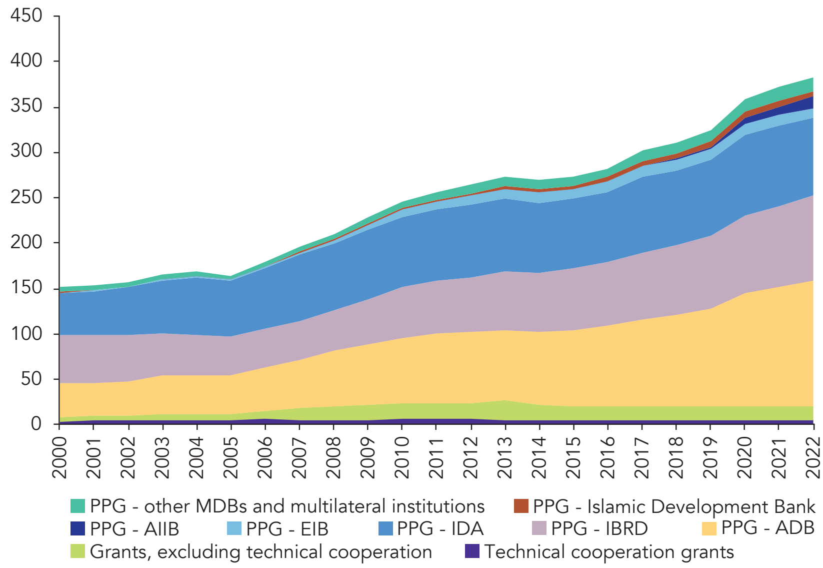
State of multilateral development banks in Asia and the Pacific

While the amount of grants and loans in nominal terms has steadily increased by twofold in the past two decades, the proportion of concessional loans has gradually declined. The total amount of public and publicly guaranteed debt from multilateral development banks extended to developing Asia-Pacific economies has increased from about $140 billion in 2000 to $350 billion in 2021 (figure 3.2). Among the multilateral development banks operating in the region, ADB and the World Bank Group stand out as significant providers of public and publicly guaranteed debt on a larger and more extensive scale. Another regional multilateral development bank, the Asian Infrastructure Investment Bank (AIIB), is relatively young but has been steadily expanding its operations. In 2022, combined lending from IDA, IBRD, ADB and AIIB together amounted to more than 20 per cent of GDP in such countries as Fiji, Georgia, Mongolia, Nepal and Samoa. Nevertheless, the proportion of concessional loans has gradually declined (see section 2.1 in chapter 2).

Table 3.2 Summary of recommendations to increase more affordable and longer-term financing from multilateral development banks

Recommendation 1	Boost lending capacity of multilateral development banks (MDBs)	
	1.1 Optimize MDBs' balance sheets and reform the MDB capital adequacy frameworks (CAFs)	
		Integrate callable capital in CAFs and reduce excessive reliance on credit rating agencies (CRAs) in setting risk appetite
		Improve CRA rating methodologies on MDB credit rating
		Improve capital adequacy governance
		Adopt operational and financial innovations
	1.2 Raise new equity capital for MDBs	
Recommendation 2	Improve MDBs' lending terms	
	2.1 Increase MDBs' lending in local currencies	
	2.2 Reduce administrative burdens	
Recommendation 3	Strengthen systemic coordination and resource allocation among MDBs	

Figure 3.2 Financial inflow from multilateral development banks and other multilateral organizations to developing Asia-Pacific economies



Source: World Bank International Debt Statistics database. Assessed on 8 January 2024.

Note: Grants, excluding technical cooperation and technical cooperation grants, are the sum of all multilateral organizations. PPG stands for public and publicly guaranteed debt.

3.1. Policy recommendation 1: Boost lending capacity of multilateral development banks

The most potent solution for boosting multilateral development banks' lending capacity is to increase their equity on balance sheets through the injection of shareholders' capital (section 3.1.2). However, as many multilateral development bank shareholders are currently reluctant to make fresh equity injections, multilateral development banks can work together to strengthen their lending capacity through a series of internal changes (section 3.1.1).

3.1.1. Optimize multilateral development bank's balance sheets and reform their capital adequacy frameworks

Amid reluctance of shareholders to increase multilateral development banks' equity capital, such banks should seek to optimize their available resources for development impacts. A G20-led review of multilateral development banks' capital adequacy frameworks by independent experts found that those banks could significantly increase their risk-tolerance and development exposure without threatening their triple-A credit ratings (GIH, 2022) (box 3.2). Following this review, ADB approved its capital management reforms in September 2023 so that it could expand the bank's annual new commitments capacity by 40 per cent, potentially unlocking $100 billion in new funding over the next decade (ADB, 2023b). Other multilateral development banks are encouraged to explore this approach, too. For example, if this review's recommendations are adopted, an additional $19 billion in lending to the Asia-Pacific region could be unlocked by IBRD and another $14 billion by AIIB (G20, 2023).[2]

Integrate callable capital in capital adequacy frameworks and reduce excessive reliance on credit rating agencies in setting risk appetite

Multilateral development banks should prudently incorporate callable capital[3] into their capital adequacy calculation as a form of shareholder guarantee to increase their risk-bearing capacity. Even though callable capital comprises subscribed capital for an overwhelming majority of such banks – exceeding

2 ESCAP calculations, based on the proportion of AIIB and IBRD public and public guaranteed lending to economies in the Asia-Pacific region.

3 Callable capital is a special type of guarantee that would be triggered only if multilateral development banks faced the imminent risk of being unable to pay off bondholders. It is different from paid-in capital, which is the portion of capital contributed by multilateral development bank shareholders that is immediately available for use by those banks.

Box 3.2 Understanding the importance of capital adequacy frameworks

Multilateral development banks leverage capital subscribed by shareholder Governments to raise funds in international capital markets and lend to sovereigns at favourable rates. The ability of such banks to offer interest rates below which sovereigns would be able to borrow in capital markets is made possible by their own strong credit ratings, which in turn largely depend on prudent levels of financial leverage. The financial leverage of a multilateral development bank is determined by its internal capital adequacy framework, which reflects the risk appetite of the bank's management and shareholders. Capital adequacy frameworks essentially determine how much risk-weighted exposure a multilateral development bank can accept for a given level of capital (i.e. the ratio of capital to assets); this has a crucial impact on the level of development finance mobilized by such banks. Loosening these frameworks can increase the amount of available financing for the countries; however, it can also increase the insolvency risk of multilateral development banks and may lead to a credit downgrade. Traditionally, multilateral development banks have implemented capital adequacy frameworks with the aim of maintaining a triple-A credit rating.

90 per cent for ADB and IBRD – most multilateral development banks do not consider callable capital within their capital adequacy frameworks. While the full amount of callable capital should not be considered as a guarantee nor should it be included as tier 1 equity capital[4] given the uncertainties regarding its disbursement, reasonable inclusion of callable capital would more adequately reflect the risk-bearing capacity of a multilateral development bank and increase its lending headroom. Currently, the Inter-American Development Bank (IADB) is the only multilateral development bank that has incorporated callable capital.

Improve rating methodologies of credit rating agencies

Credit rating agencies should better reflect the idiosyncrasies of multilateral development banks. Studies have shown that these methodologies tend to fundamentally underestimate the financial strength of multilateral development banks.[5] The reduced likelihood of default or delayed repayment thanks to the banks' de facto preferred creditor status[6] should be given greater bearing on the risk weights assigned to the assets of multilateral development banks. Conversely, credit rating agencies should adopt a more lenient approach when evaluating single-name concentration[7] risk inherent in the portfolios of multilateral development banks; such risk is currently calculated by adapting parameters developed for commercial banks with thousands of debtors.

Improve capital adequacy governance

Capital adequacy governance is made challenging by the asymmetries of information and expertise between the board of shareholders and management, the lack of publicly available data and clearly defined benchmarks that enable regular comparison across institutions. The previously mentioned G20-led review highlights the "AIIB Accountability Framework" as a good practice. Such a framework clearly states that the board of directors is responsible for establishing the bank's policies and strategies, while the management is responsible for conducting the business of the bank (AIIB, n.d.). The framework also includes external and independent members in the board's audit and risk committee.

To overcome the lack of data and common standards, the shareholders should push for the establishment of regular system-wide benchmarking exercises for multilateral development banks based on consistent indicators. A low-hanging fruit option is to scale-up the use of the Global Emerging Markets Risk Database Consortium (GEMs, 2024). Established in 2009 as a joint initiative between the European Investment Bank and the International Finance Corporation, it is one of the world's largest credit risk databases for emerging markets operations of multilateral development banks and development finance institutions. Wider access to GEMs data would improve risk assessment by multilateral development banks, private investors, credit rating agencies, insurers and securitization agents, thus strengthening capital efficiency and lending headroom.

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4 Tier 1 capital is the core measure of a bank's financial strength from a regulator's point of view. It is composed of core capital, which consists primarily of common stock and disclosed reserves, but may also include non-redeemable non-cumulative preferred stock, according to Wikipedia.

5 For examples, see Humphrey (2015); Perraudin, Powell and Yang (2016); and Settimo (2017).

6 Multilateral development banks are given priority for receiving debt repayment when a sovereign borrower experiences financial stress. The servicing of such banks' non-sovereign loans is also protected against restrictions on foreign exchange.

7 Single-name concentration refers to the degree to which a financial institution or entity is exposed to the risk associated with the concentration of loans or investments in a single borrower.

Adopt operational and financial innovations

Multilateral development banks can increase their lending capacity by reassessing and restructuring their operational frameworks. One example is to consolidate their concessional and non-concessional balance sheets. The integration of concessional window and non-concessional balance sheets by ADB effectively triples its capital to $53 billion and increases the bank's overall lending capacity by 50 per cent. This successful case sheds light on the key factors that make their merger a win-win situation, such as a high ratio of concessional to non-concessional equity[8] and the size of concessional borrowers relative to non-concessional borrowers.[9] Using the same procedure, IADB has completed a merger of its concessional window, the Fund for Special Operations (Humphrey, 2017). Both AfDB and IDA have explored similar options, but they decided to put this option on hold as they did not meet some of the requirements mentioned above.

Multilateral development banks should also accelerate the adoption of financial innovations to improve risk management and further increase lending capacity. Among others, multilateral development banks can engage in greater risk transfer to the private sector through insurance or synthetic securitization of loan assets, encourage new guarantee programmes among multilateral development banks and explore ways to crowd in private investment in developing countries through risk mitigation (box 3.3).

Box 3.3 Examples of innovation by multilateral development banks

Risk transfers of the Asian Development Bank

The Asian Development Bank has made significant efforts in deploying risk transfers at scale. As part of its Master Framework Program for Financial Institutions, ADB signed in 2022 an agreement with five leading private insurers that will cover the risk of non-repayment on a portion of ADB loans to both commercial banks and non-bank financial institutions.[a] This enables ADB to shift credit risk from its balance sheet to those of the insurers, freeing up more than $1 billion in co-financing capacity. In May 2023, ADB launched the Innovative Finance Facility for Climate in Asia and the Pacific,[b] which is a guarantee facility, by virtue of which public and private partners provide guarantees on a portion of the bank's sovereign portfolios, freeing up capacity for new climate-related lending in the region. In collaboration with Denmark, Japan, the Republic of Korea, Sweden, the United Kingdom and the United States, this new facility will help mobilize up to $15 billion for climate projects, with $3 billion in guarantees, over the next five years.[c]

Guarantee programme of the Asian Infrastructure Investment Bank with the International Bank for Reconstruction and Development

In 2023, the Asian Infrastructure Investment Bank[d] collaborated with IBRD to establish a new guarantee programme, through which the bank will guarantee $1 billion worth of sovereign-backed loans by IBRD. This helps free up IBRD lending headroom and diversify the exposure of AIIB. Increased portfolio diversification will in turn reduce risk-adjusted leverage, enabling AIIB to expand its lending to lower-rated member countries.

Asia Green Partnership Fund of the Asian Infrastructure Investment Bank

In 2023, the Asia Green Partnership Fund[e] is an innovative blended finance structure, jointly established through a partnership between AIIB and Bloomberg Philanthropies. This collaboration is aimed at attracting significant private and institutional investments in climate change mitigation projects, which previously were thought by institutional investors, including sovereign wealth funds, to be too risky. To de-risk green investment projects, Bloomberg Philanthropies will cover the first 10 per cent of capital losses, followed by AIIB for another 20 per cent, before other institutional investors incur a loss.

a For further information, see www.adb.org/news/adb-partners-global-insurers-mobilize-1-billion-lending-capacity-financial-institutions.

b An explanation of the facility is available at www.adb.org/what-we-do/funds/ifcap?preview=COhOb56PoSne0Q4nsAAR-66spgU18KYcXhC8qLFd-J8#what-is-ifcap.

c Further information on the large-scale climate finance mechanism is available at www.cgdev.org/blog/if-cap-recap-asian-development-banks-big-climate-finance-bet.

d A slide presentation by Rodrigo Salvado, Director General of the AIIB Operational Partnerships Department, is available at www.unescap.org/sites/default/d8files/event-documents/EGM%20Session%201%20Slides_AIIB.pdf.

e A slide presentation by Rodrigo Salvado, Director General of the AIIB Operational Partnerships Department, is available at www.unescap.org/sites/default/d8files/event-documents/EGM%20Session%201%20Slides_AIIB.pdf.

8 The more concessional equity can be merged into non-concessional equity, or a higher ratio of concessional to non-concessional equity, the more headroom can be created after the merger.

9 The relative size has an impact on the leverage ratio, as non-concessional lending raises the leverage ratio while concessional lending reduces it.

3.1.2. Raise new equity capital

Injection of fresh equity capital into the multilateral development bank system is indispensable. Even if implemented with maximum effectiveness, the additional headroom freed by the measures to optimize the banks' balance sheets, as discussed under 3.1.1, will most likely fall substantively short of the required development spending needs in developing countries. Therefore, injection of fresh equity capital is needed. Shareholders have not increased the subscriptions of multilateral development bank capital in line with the increase in size of the global economy or the need for funding sustainable development investments (United Nations, 2023d). For instance, the most recent general capital increase of ADB dates back to 2009 (ADB, 2017a).

However, a general capital increase[10] at any of the major multilateral development banks is difficult because of the complex interplay between developed and emerging shareholder countries. Some major developed shareholder countries find it either financially unfeasible or are unwilling to inject new capital. They also do not want to see their voting power getting diluted as a result of their inaction. On the other hand, with rising economic power, emerging countries are eager to contribute more funding and, not surprisingly, demand a larger role in the decision-making of multilateral development banks.

Despite these difficulties, shareholders of such banks should try to continue to build consensus towards general capital increases. While no country formally possesses veto power in any multilateral development bank, large shareholders generally have no difficulty in seeking coalition allies to support their position when being on their own is not enough (Humphrey, 2017). It is therefore critical to convince larger shareholders, particularly the United States, that contributing to multilateral development banks is a cost-effective way of achieving development goals and that doing so is in their own interest. Regardless, other shareholders should work together to build consensus towards general capital increases, which could in turn exert pressure on larger shareholders.

One potential solution is to explore financial innovation, such as mobilizing new non-voting hybrid capital. Hybrid capital, which falls between debt and equity,[11] can be sold to traditional government shareholders or private investors. Most multilateral development banks see it as a quite feasible way to raise new capital. Raising capital through hybrid capital can bypass the challenges of a general capital increase, which requires lengthy negotiations among shareholder Governments. Introducing this new type of capital can provide private investors with an opportunity to participate in the traditionally government-only market and diversify their portfolio. It is estimated that, through issuance of hybrid capital, an additional $15 billion of lending could be made available through ADB to countries in the Asia-Pacific region over 10 years, plus another $2.5 billion from IBRD (G20, 2023).

3.2. Policy recommendation 2: Improve the lending terms of multilateral development banks

Lowering interest rates and lengthening loan maturity for developing countries comes at a direct financial cost to multilateral development banks. Therefore, there is a limit on how far such banks can undertake these actions considering their financial sustainability and risk management strategy. Beyond these two evident areas, there is considerable scope to improve the lending terms of such banks.

3.2.1. Increase multilateral development banks' lending in local currencies

Increasing the lending of multilateral development banks in local currencies can reduce the foreign exchange risk faced by debtor countries. Between 70 and 90 per cent of lending by ADB, AIIB, IDA and IBRD is dominated in United States dollars. On the other hand, high proportions of project expenditures and/or revenues supported by multilateral development bank loans are in local currencies. Thus, developing countries are exposed to foreign exchange risk due to a currency mismatch.

In acknowledging this issue, several multilateral development banks have expanded their local currency services. For instance, the World Bank currently provides currency conversions for a total of 25 different local currencies (United Nations, 2023d). As of 2021, ADB has approvals to issue local currency bonds in 16 currencies to finance its local currency lending portfolio (ADB, 2022a). As of 2020, AIIB also offered 26 operational currencies for non-sovereign lending purposes.

Multilateral development banks are better placed than Governments in many developing countries to manage currency risk. Currency hedging is a sophisticated exercise and requires a strong team of experts and an enabling financial market infrastructure. Therefore,

10 A general capital increase means an across-the-board capital increase by all shareholders. As such, the share and voting power of each shareholder remains the same.

11 Hybrid capital can absorb losses before normal bonds, and thus are treated as paid-in capital equity by rating agencies and regulators. However, because it is different from convertible bonds, when hybrid capital is converted to equity, it does not dilute capital share, and thus has no impact on voting power.

compared with developing countries, multilateral development banks are in a better position to take on currency risk. Local currency bond issuance and swaps are the two traditional methods that such banks have used for local currency lending and hedging.

However, the scale of local currency financing is currently limited as further growth of local currency lending faces several challenges. The root cause of this situation lies in high hedging costs. At the *transactional level*, currency swaps are still less viable for some Asian currencies due to their perceived high risk and low liquidity. For issuance of local currency bonds, multilateral development banks usually have to pay a much higher interest rate compared with their issuance in United States dollars in international markets. At the *operational level*, managing a balance sheet that involves borrowing and lending in multiple currencies with varying maturity dates can be complex. To effectively minimize risks related to currency fluctuations and maturity mismatches, the pool of local currency lending also needs to be substantial.

Individually and together as a system, multilateral development banks should explore innovative solutions to facilitate local currency lending and foreign exchange risk mitigation. The Currency Exchange Fund founded in 2007 is one example of efforts made by a group of development finance institutions to act as a market-maker in currencies and maturities not covered by commercial banks or other such providers. By 2022, the fund has hedged a total volume of more than $12 billion in some 70 currencies (TCX, 2022).

3.2.2. Reduce administrative burdens

Some Governments may find non-concessional borrowing from multilateral development banks not viable once they factor in related administrative burdens. For instance, funding for a World Bank project currently takes 27 months on average from the concept stage to the first disbursement of funds as various operational rules and processes are required (Banga, 2023).

Among all administrative burdens, safeguard measures are the most substantial. Safeguard assessments,[12] mostly attached to infrastructure projects, are costly and substantially lengthen the loan process. For example, the average direct financial cost of safeguard assessments to the borrower is about $13.5 million for World Bank projects (Humphrey, 2023). While strict safeguards benefit environmental and social protection, the implementation process can be flawed. In particular, instead of encouraging developing countries to set up comprehensive national legal frameworks, multilateral development banks often bypass them and apply in parallel their own rules to their projects.

Complex or unfamiliar procurement and financial management rules are another main administrative burden. Multilateral development banks' rigid rules on project selection, design and management are designed to prevent financial mismanagement issues. However, rather than spending resources on procurement and fiduciary controls, the banks should increase their efforts in monitoring actual project deliverables. When projects deliver decent results in an efficient way, the rents that drive corruption in the first place are arguably reduced (Kenny, 2017).

Indirect borrowing costs associated with these administrative burdens can be largely reduced. First, there should be benchmarks for the speed of delivery. Transferring the loan-approval authority to lower levels with a clear accountability framework could streamline the process. Second, the adoption of results-based financing, which directly links fund disbursement with specific programme results, would put less emphasis on procurement and financial management rules. Third, instead of the current practice that carries out safeguard reviews for each project, bundling together such reviews for multiple projects in a single country would increase efficiency. More fundamentally, countries should be incentivized to reform domestic safeguard measures, so that multilateral development banks can make use of the existing framework.

3.3. Policy recommendation 3: Strengthen systemic coordination and resource allocation among multilateral development banks

A much scaled up global effort is required to strengthen collaboration and coordination among multilateral development banks for greater impact. While each such bank may be individually performing relatively well, the system as a whole is not delivering enough (Bhattacharya and others, 2018). Heads of multilateral development banks also recognize their collective role in bringing developing countries back on track towards efforts to achieve the Sustainable Development Goals (World Bank, 2023a).

The United Nations is playing a key role in pushing for substantive scaling up of affordable long-term financing by multilateral development banks. At the global level, the SDG Stimulus to Deliver Agenda 2030 proposes a concrete, ambitious yet achievable set of actions (box 3.4). World leaders have now committed to realizing the SDG Stimulus. ESCAP, at the forefront of regional cooperation, can support this important global agenda by facilitating collaboration among multilateral development banks at the regional level by co-hosting events at

12 Borrowing countries are required to follow multilateral development banks' safeguard policies, which are intended to mitigate the adverse social or environmental impacts of a development project. Such policies are usually applied above the laws and regulations of borrowing countries.

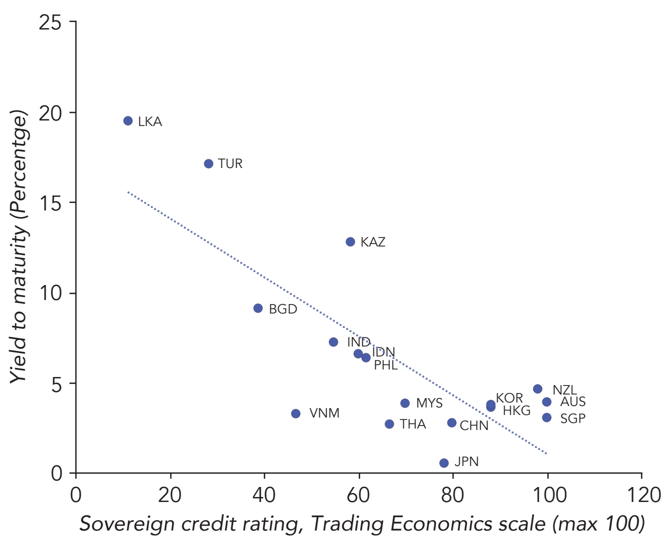
its flagship platforms, such as the annual sessions of the ESCAP Commission and other intergovernmental meetings, to share information on good practices and monitor the progress being achieved.

Box 3.4 SDG Stimulus to Deliver Agenda 2030

The SDG Stimulus (United Nations, 2023d) was introduced by the United Nations Secretary-General in September 2023. It proposes a set of immediate actions to deliver financing and investments for achieving the Sustainable Development Goals. Three concrete areas are identified under the SDG Stimulus: (a) address the rising risk of public debt distress and reduce government borrowing costs; (b) increase the supply of more affordable and longer-term development financing, particularly public development banks, including giving multilateral development banks a larger role to play; and (c) expand provision of contingency financing to more countries in need.

There are several areas for stepped-up collaboration. These include: (a) data-sharing, such as on credit defaults on the loans extended by multilateral development banks; (b) shared country platforms containing information on such factors as project preparation and application of common standards for procurement and financial management processes (Prizzon, Josten and Gyuzalyan, 2022); (c) platforms for sharing and strengthening knowledge products and technical assistance practices; and (d) joint efforts to design innovative financing structures that can unlock investments at scale (Bhattacharya and others, 2018).

Figure 3.3 Sovereign credit ratings and government borrowing costs, 2023



Source: ESCAP, based on data from Bloomberg and Trading Economics.

Note: The Trading Economics credit rating is shown as the average crediting rating of Fitch, Moody's and S&P based on the corresponding trading economics scale of 100 (riskless) and 0 (likely to default). Abbreviations: AUS = Australia; BGD = Bangladesh; CHN = China; HKG = Hong Kong, China; IND = India; IDN = Indonesia; JPN = Japan; KAZ = Kazakhstan; MYS = Malaysia; NZL = New Zealand; PHL = Philippines; SGP = Singapore; KOR= Republic of Korea; LKA = Sri Lanka; THA= Thailand; TUR = Türkiye; VNM = Viet Nam.

4. Towards a more development-aligned approach to sovereign credit ratings

Credit rating agencies, particularly the so-called Big Three (Fitch, Moody's and S&P), play an influential role in the global financing landscape as they directly affect a country's access to international capital markets and its cost of borrowing. According to Hanusch and others (2016), on average, a rating downgrade from investment to sub-investment grade by any one of the Big Three rating agencies results in 138 basis points of increases in treasury bill yields.[13] Such yields increase by another 56 basis points after a downgrade by another major credit rating agency. This increase in yields considerably amplifies a country's debt service costs, especially where the level of debt is already high. The negative relationship between sovereign credit ratings and government borrowing costs is also observed in Asia and the Pacific (figure 3.3).

Given their vital role, credit rating agencies have been under scrutiny by financial regulators, Governments and investors. This section discusses selected limitations of such agencies and proposes a set of policy recommendations that can enable them to play a more conducive role in improving access to affordable and long-term financing for developing economies (table 3.3).

13 Based on a sample of 20 developing countries, including Azerbaijan, India, the Republic Korea, the Russian Federation and Thailand in the Asia-Pacific region.

Table 3.3 Summary of limitations of credit rating agencies and recommendations

Limitations	Recommendations
Lack of transparency	Improve methodologies and increase transparency in credit ratings
Overestimating risks in developing countries	Reduce mechanistic reliance on credit ratings
Short-termism in credit rating methodologies	Increase dialogues between Governments and credit rating agencies
Procyclicality	Boost competition in the credit rating market

4.1. Current limitations of credit rating agencies

Staff judgement plays a significant role in sovereign rating decisions. As with corporate credit ratings, sovereign ratings contain two components: a quantitative assessment based on a country's fundamental capacity to repay its debt, and a discretionary component based on the judgement of credit analysts and credit committees comprised of employees of a credit rating agency. When released publicly, only the final credit ratings are presented so investors cannot differentiate between quantitative and discretionary elements.

Credit rating agencies are also criticized for being biased against developing countries, especially for overestimating sovereign risks. Many possible reasons contribute to this perception, such as insufficient local knowledge, a shorter history of issuing ratings in emerging markets, lack of mature reporting standards and robust data infrastructure and thus limited availability of reliable data, and cultural and linguistic factors (Assa and others, 2023; UNDP, 2023; Fuchs and Gehring, 2017). All these factors make credit rating agencies more cautious when rating developing economies, possibly overestimating risks in these markets (Kaminsky and Schmukler, 2011b).

More recent rating actions during the COVID-19 pandemic brought questions of potential bias to the fore. During the pandemic, the average government debt-to-GDP ratio in developed economies increased by 16 percentage points, to 120 per cent, while that of developing economies increased by only 9 percentage points, to 63 per cent. Despite this, developed economics received less than 5 per cent of all downgrades during the pandemic years (Kaminsky and Schmukler, 2011a).

Credit rating agencies tend to prioritize short-term indicators, which incentivize policymakers to focus on immediate fiscal prudence over long-term developmental investments. The duration of financial and economic forecasts used in the rating assessment models are only a few years in the current "long-term" credit ratings. As a result, Governments tend to forgo essential social and climate investments, which could bring tangible positive outcomes only in the long run, in order to avoid short-term credit downgrades.

Credit ratings are often procyclical, with unusually more upgrades during economic booms and downgrades during declines. Such a procyclical nature can lead to excessive borrowing and potential economic bubbles during good times. In contrast, downgrades during difficult economic periods push up borrowing costs, reduce investors' confidence and deepen and prolong recessions. For example, Ferri, Liu and Stiglitz (1999) argued that credit rating agencies' procyclical actions aggravated the 1997 Asian financial crisis.

Herding behaviour, in which different rating agencies tend to give similar ratings, also leads to procyclicality. In addition to the fundamental reason that credit rating agencies use similar methodologies and market data, this phenomenon is partly attributed to the agencies' concerns about reputation and their hesitancy to deviate from the practice of other agencies (An, Cordell and Nichols, 2019). Such herding behaviour was affirmatively present during the global financial crisis of 2008, when simultaneous downgrades of mortgage-backed securities intensified the crisis, amplified market cycles and increased systemic risks (Çankaya, 2017).

Excessive and mechanistic reliance on credit ratings by financial market participants further amplifies volatility and procyclicality. Many financial regulations and investment guidelines are built around credit ratings assigned by the Big Three. For example, regulatory measures may require that pension funds hold only investment grade bonds or that half of a bank's capital be invested in investment-grade securities. In such cases, if a bond nearing the edge of a grade is downgraded, the regulated entities must divest, causing a "cliff-edge" effect or a sudden yield surge due to mass sell-offs.

4.2. Policy recommendations

Policy recommendation 1: Update methodologies and increase transparency in credit ratings

Credit rating agencies should incorporate environmental, social and governance (ESG) factors into their rating models to ensure a more holistic assessment of a country's future creditworthiness. ESG risks have become crucial determinants of long-term financial viability (Zumente and Bistrova, 2021). By including these factors, ratings would capture potential risks and opportunities that derive from environmental impacts, social responsibility and governance practices (Ray, 2022). The proposal of ESCAP on the augmented approach of public debt sustainability analysis is an example of an initiative that duly considers long-term social and environmental issues (box 3.5).

In acknowledging their importance, credit rating agencies are increasingly incorporating environmental, social and governance factors into their ratings. For instance, Fitch launched its ESG Relevance Scores in 2019 (Fitch Ratings, 2019). It provides a transparent assessment of the impact of 15 distinct ESG issues. However, Fitch's Ratings tend to be focused more on immediate factors than on uncertain long-term forecasts. For example, even though Fitch's Sovereign Rating Model assesses the impact of climate change to a certain extent, climate change currently does not play a major role in sovereign ratings because of the uncertainty in magnitude and timing of its impacts. Nevertheless, Fitch anticipates that climate risk will lead to more frequent rating adjustments as its effects are becoming more pronounced, imminent and significant (Fitch Ratings, 2022).

Enhanced transparency would help boost investors' confidence in credit ratings and thus help investors make better informed decisions. It is essential for investors to have a thorough understanding of the credit rating methodologies. Credit rating agencies should clearly outline the underlying assumptions of their models and separate the rating results by systematic (model-based) calculations and discretionary judgments, so that users can distinguish objective measures from subjective evaluations in a rating.

Advances in artificial intelligence (AI) offer promising avenues for credit assessment. AI models can process vast amounts of data at high speeds, tap into unconventional data sources for credit assessment and uncover patterns and risks that might be missed by traditional models. Adopting AI-driven

Box 3.5 Augmented approach of ESCAP to public debt sustainability analysis

To complement the traditional debt sustainability analysis conducted by international financial institutions and credit rating agencies, the debt sustainability analysis of ESCAP provides a nuanced modelling tool that not only considers long-term economic gains from increased investments in sustainable development, but also incorporates associated social and environmental benefits, such as improved air quality, a healthier population, higher levels of labour productivity and potential outputs, and higher energy efficiency. All these benefits in turn have impacts on public debt levels in the future (ESCAP, 2023b).

The analysis on Mongolia as a pilot country shows that implementing an illustrative policy package that comprises Sustainable Development Goal investments, structural reforms to foster a greener and more diversified economy, and national Goal-financing strategies to boost public and private finance help reduce government debt levels in the long run. The projected government debt-to-GDP ratio in 2040 is comparable to that under the baseline scenario that assumes fiscal consolidation, but people and the environment are better off under this alternative scenario.

credit models could potentially enhance the accuracy of ratings. For instance, Moody's Analytics has sought to incorporate AI technology into its credit risk assessment services by streamlining a process of extracting and organizing data from financial statements. S&P has also started using AI to monitor alternative data sets, such as a company's website activity and trends (Hogersthal, 2023).

Nevertheless, before the use of AI in credit ratings becomes widespread, further studies need to be undertaken to ensure interpretability and transparency. First, as the AI-based models are trained on historical data, they can perpetuate and amplify existing biases. If there are discriminatory patterns in historical lending practices, an AI model might unintentionally learn and reproduce those biases. Second, AI models can sometimes "overfit" the data on which they are trained. As such, they might perform exceptionally well on historical data but fail to generalize for new or unseen situations. Third, AI models, especially deep learning ones, are often labelled as "black boxes". While they might produce highly accurate predictions, understanding the exact reasoning behind each decision can be challenging. This aspect can raise regulatory concerns, particularly around the issues of transparency and accountability.

Policy recommendation 2: Reduce mechanistic reliance on credit ratings

Financial regulators and investors should consider using the weighted average of a portfolio credit rating as a risk-control indicator to soften the "cliff edge" between investment-grade and below-investment-grade ratings. In this case, investment managers would not feel compelled to immediately sell off their holding if a sovereign debt instrument is downgraded to non-investment grade, thus mitigating undue market volatility. Such a shift would offer investment managers the flexibility to counterbalance a downgrade by either increasing their high-rated instrument holdings or gradually reducing their exposure to downgraded investments in a planned and gradual manner (Kaminsky and Schmukler, 2011a).

Policy recommendation 3: Increase dialogues between Governments and credit rating agencies

Regular communication between Governments and credit rating agencies help increase understanding of government policies that inform the ratings. It can also aid the agencies in grasping the nuances and intended outcomes of financial and technical support initiatives introduced by the international community, such as the Debt Service Suspension Initiative that G20 introduced during the COVID-19 pandemic. International organizations such as ESCAP can offer platforms and expertise to bridge the communication gap between Governments and credit rating agencies in Asia and the Pacific, so that credit ratings accurately reflect the economic and financial realities of countries and contribute to a more resilient global financial architecture.

Policy recommendation 4: Boost competition on the credit rating market

Initiatives should be undertaken to reduce the oligopolistic market power of the Big Three. Together, Fitch, Moody's and S&P, which are all United States-based firms, hold a market share of at least 95 per cent and globally cover all asset classes, such as bonds and asset-backed securities (Fox and Furber, 2018). Although there are at least 25 national credit rating agencies which are registered members of the Association of Credit Rating Agencies in Asia (JCR, n.d.), some of the Big Three are major shareholders of these national agencies.

A low-hanging fruit is to strengthen the capacity of the existing domestic credit rating agencies and harmonize each national agency's standard with international standards. Harmonizing credit rating standards in Asia requires collaborative design of a shared framework of credit ratings, considering region-specific challenges and financial dynamics. ESCAP and other development partners can facilitate dialogues between countries, and between domestic credit rating agencies and global ones. ESCAP can also organize regional workshops for them to share insights, challenges and strategies, to help domestic credit rating agencies strengthen and grow their technical and institutional capacity.

Supporting the set-up of a new credit rating agency to compete with the Big Three, including at the regional level, has been discussed for some time. This idea has been brought up several times by Governments and the development community, especially in the aftermath of major economic and financial crises. The proposals include a new structure of founding members and shareholders, new business model, such as a public versus non-profit one, and new geographical coverage that targets a specific region.

The most common proposal is to set up the region's own credit rating agency. With closer proximity and an inherent understanding of the region's socioeconomic situation, a regional credit rating agency would be expected to offer ratings that consider nuances and complexities often overlooked by global credit rating agencies. This would help produce more precise and fairer evaluations for developing countries in the region. Both the African Union and European Union expressed interest in setting up their own regional credit rating agencies and conducted feasibility studies on that proposal. However, they came to different conclusions.

The European Union decided not to pursue the idea of creating a European credit rating agency, citing likely limited added value. Instead, the focus is on promoting market diversity through other means, such as improving existing credit rating agencies, easing entry barriers for smaller agencies within the established regulatory structure, making sovereign debt ratings more transparent, creating alternative risk assessment tools and ensuring timely disclosure of data to allow investors to conduct their own credit analysis (Scheinert, 2016). More recently, in June 2022, the European Commission mandated Scope, a European Union-based credit rating agency, to rate the creditworthiness of its members. This decision demonstrates the Commission's ongoing commitment to supporting new entrants and fostering competition in the credit rating market. The move is aligned with the European Union's broader objective of creating a more competitive and varied market for credit ratings (European Commission, 2022).

By contrast, in September 2023, the African Union announced its plan to launch a new African credit rating agency by 2024. This plan is primarily in response to the numerous criticisms of the Big Three that have been highlighted by African Governments. For example, Kenya and Nigeria recently disagreed with the ratings assigned by Moody's, citing concerns on overestimated risk of financial market liquidity and inadequate understanding of the domestic economic environment, respectively (ECA and AUC, 2023). The new planned pan-African credit rating agency intends to provide more accurate assessments of African countries, factoring in regional and geopolitical contexts. Such fairer ratings could save African countries up to $74.5 billion, thus supporting debt management and resource allocation for development (Assa and others, 2023).

Another alternative is to set up a non-profit credit rating agency. This would help avoid the conflict of interest in the issuer-pays model with the belief that a non-profit credit rating agency could prioritize unbiased assessments over business interests. By focusing on the broader public interest, a non-profit credit rating agency can champion more equitable assessments, especially for developing countries, which often face challenges in securing favourable ratings from the Big Three. Furthermore, operating on a non-profit basis is expected to lead to greater transparency in methodologies and increasing investor confidence. In 2012, the Bertelsmann Foundation proposed a plan for a new global non-profit credit rating agency for sovereign debt and intended to seek endorsements from the G20 and various non-profit entities (Bertelsmann Foundation, 2012). However, this credit rating agency never came into existence, and it has been a decade since the last discussion regarding an international non-profit credit rating agency.

Regardless of the type of credit rating agency, establishment of any new such agency faces several similar challenges. First, establishment of such an agency requires significant initial capital and resources. Sourcing this, especially in regions with limited financial resources or where countries have conflicting priorities, can pose substantial challenges. Second, within a region, countries might have varying regulatory standards and practices. Harmonizing these into a cohesive framework for the credit rating agency can be a complex and lengthy process (Tullao, Cabuay and Hofileña, 2018). Third, the most fundamental challenge is the credibility and recognition of a new credit rating agency in the global market. Ensuring the agency's operational and financial independence is crucial to avoid political interference. A credit rating agency funded by Governments to rate themselves would be subject to conflict of interest. Any such regional agency may be perceived as biased towards its own region. Regional political dynamics could question its neutrality. A non-profit credit rating agency also cannot avoid similar issues, particularly if it has to rely on funding from certain donors. Moreover, gaining trust from market participants, that are accustomed to the established Big Three, is difficult unless the new credit rating agency can consistently outperform the Big Three.

Nevertheless, the Asia-Pacific region can learn from the experiences of the African Union and the European Union when considering the establishment of its own regional credit rating agency. Several factors need to be examined cautiously. First, a detailed business and financial model, including projected cash flows, has to be carefully designed to ensure both financial sustainability and independence of a new credit rating agency. Second, an appropriate legal framework needs to be explored. In the case of the proposed African credit rating agency, its legal framework is one critical precondition to ensure that it becomes an autonomous, self-funded, financially independent and universally credible agency. Third, the need for independence and credibility of the new credit rating agency should be taken into account when proposing a shareholder and management structure with a clear description of the roles of all potential stakeholders.

ESCAP can facilitate experience-sharing among member countries of the African Union and European Union in addition to Asia-Pacific countries, starting by co-organizing side events during major intergovernmental meetings, such as the annual sessions of the ESCAP Commission and the Asia-Pacific Forum on Sustainable Development. If the initiative triggers interest from the region, ESCAP can continue working with its member and associate member States to advance the exploration of this idea and bring the discussion to the main session of intergovernmental meetings for further consideration.

5. Concluding Remarks

Official development assistance remains a critical source of concessional financing for development; however, most donors still fail to meet their ODA commitments. Equally worrying, most of the public climate finance reported by developed countries was taken directly from development aid budgets, which meant that there was less ODA support for health, education, women's rights and poverty alleviation.

How ODA is provided bilaterally remains dependent on a donor country's national policy decision, while ODA delivered through multilateral facilities follows more concrete institutional guidelines. While GNI per capita is one factor guiding the allocation of concessional financing, it is certainly not the most important factor. Beyond income-based thresholds, additional criteria have also been considered by multilateral development banks, but sizeable ODA inflows are yet directed to countries most in need. As part of an effort to move towards broader measures, the Multidimensional Vulnerability Index, as proposed and supported by small island developing States, was recently launched. The creation of this index is a key milestone but there is a long way to go before countries reach agreement on its methodology and how to use it in guiding the allocation of concessional financing.

Multilateral development banks play a vital role in development finance. There is, however, a consensus that such banks' capital adequacy frameworks are excessively conservative, which prevents them from providing more development finance. A prudent reform of these frameworks would enable multilateral development banks to undertake some additional risk without jeopardizing their exceptionally strong credit ratings. The reforms discussed in this chapter would be most effective and better received by stakeholders and financial markets if conducted in a coordinated manner by multilateral development banks as a group. Shareholders must act as the key drivers of this reform process given their final say on the strategy and objectives of multilateral development banks. Nevertheless, the additional headroom freed by optimizing the banks' balance sheets is clearly not sufficient to close the funding gap. Injection of new capital from current or new shareholders is needed. Furthermore, there is considerable scope for multilateral development banks to improve their business models, including increasing lending in local currencies and reducing loan-related administrative burdens for debtor countries.

Sovereign credit ratings directly affect a Government's access to capital markets and costs of borrowing. To increase affordable and long-term development financing, credit rating agencies should seek to incorporate ESG metrics into and enhance the transparency of their assessments. A shift towards long-term debt sustainability analyses and more dialogues with Governments would help improve the creditworthiness of developing countries. Meanwhile, establishing a regional or public non-profit credit rating agency could offer an additional avenue for ensuring a more inclusive and transparent credit rating system. This idea is already being implemented in Africa. ESCAP could facilitate experience-sharing with development partners in Africa and beyond.

4 FISCAL IMPLICATIONS OF GLOBAL MEGATRENDS

1. Introduction

The rapidly evolving global landscape propels fiscal policy into profound transformations, frequently venturing into uncharted territory

This chapter delves into the influence of global megatrends on fiscal policymaking in Asia and the Pacific. It discusses the ramifications of demographic shifts, climate change and environmental degradation, as well as technological advancements and digitalization, with their impacts on fiscal revenues and expenditures, the sustainability of fiscal and debt positions and fiscal policy choices. The analysis outlines the trajectory of these megatrends along with their potential consequences and risks. The chapter is focused on how these megatrends have impacts on fiscal policymaking, and not how fiscal policy tools can be used to shape megatrends.

Mounting public debt sustainability concerns define an overarching economic constraint for fiscal policy

As of 2023, for 3.3 billion people globally, their Governments already allocated more fiscal resources to servicing public debt than to health care and education combined. With 40 per cent of developing countries experiencing high levels of debt distress (UNCTAD, 2023c), there is little to no fiscal space to invest in the Sustainable Development Goals. As highlighted in chapter 1 and in ESCAP (2023b), the situation in Asia and the Pacific mirrors this trend, with some economies facing difficulties in their pursuit of balanced fiscal policy or debt sustainability, often at the expense of their socioeconomic well-being.

The three megatrends: demographic shifts, climate change and technological advancements

Megatrends alter fiscal revenues and expenditures, rendering some existing sectoral policies financially unsustainable, thus prompting the exploration of new policy avenues. Megatrends compel and urge policymakers to actively seek alternative, more cost-effective and efficient policy paths to attain their objectives amid the backdrop of tighter fiscal and debt positions.

Demographic shifts stand out as one of the most influential factors shaping fiscal policy. Owing to their relatively predictable nature over a few decades, their impact on fiscal revenues and expenditures remains highly foreseeable. However, the effects of demographic shifts on fiscal policy and economies as a whole – such as changes in productivity, labour force participation and fiscal multipliers – remain less clear, introducing uncertainty into planning fiscal policy.

The impact of climate change and environmental degradation on fiscal policy is presented in two dimensions. First, through the conspicuous channel of violent and destructive weather events, resulting in substantial material losses and incalculable missed opportunities. Second, through slow onset events – a gradual and continuous, almost universally negative impact on the economy. This includes erosion of productivity, constraints on economic activity due to long-term adverse weather conditions, an increase in stranded assets and persistent inflationary pressures and associated higher interest rates.

The nexus between technology, digitalization and fiscal policy is analysed from two perspectives. First, the direct impact on economic activities: technology and digitalization create new industries while contributing to the decline of less competitive ones. As these forces reshape economies, fiscal policy is compelled to explore new territories, such as taxation of the emerging digital economy. Second, technology and digitalization redefine the conduct of fiscal policy itself, allowing for more informed management and implementation.

2. Demographic shifts

Demographic shifts have impacts on fiscal revenues, alter the demand for fiscal expenditure, change inflation dynamics and modify fiscal policy impact channels

Ageing is a natural phenomenon happening along with development progress. As people live longer and choose to have fewer children, this process changes economies. This section analyses these shifts in the context of the impact of ageing on fiscal policy, steering away from discussion on how fiscal policy tools can be used to influence the ageing processes.

First, many countries in Asia and the Pacific are experiencing significant demographic shifts affecting all aspects of their economies. Societies age at a different pace, yet the ageing trend is universal across the region. As the balance between younger and older populations shifts, ageing comes into the spotlight (see section 2.1).

Second, from the fiscal revenue perspective, ageing changes labour force participation and alters the formal versus informal employment balance. As people age, their productivity tends to fall, not considering technological progress, which also reduces tax revenues (IMF, 2019; NAS, 2012). Ageing alters the tax base due to partial erosion of personal income taxes and social security contributions. A shift in consumption from durables to services, such as health care, which are either price regulated or benefit from subsidies, and the overall declining propensity to consumption change the composition of tax revenues (Bodnár and Nerlich, 2022) (see section 2.2).

Third, on the expenditure front, ageing increases the demand for pensions, which constitute a significant portion of older people's consumption (IMF, 2019; NAS, 2012). Expenditure on health care, education and other forms of social protection also change, in both their size and relative proportions (see section 2.3).

Fourth, ageing influences public debt sustainability through inflationary pressures, and thus interest rates, resulting from an increase in longevity and a decline in birth rates, which affect productivity and aggregate demand (Katagiri, Konishi and Ueda, 2014) (see section 2.4).

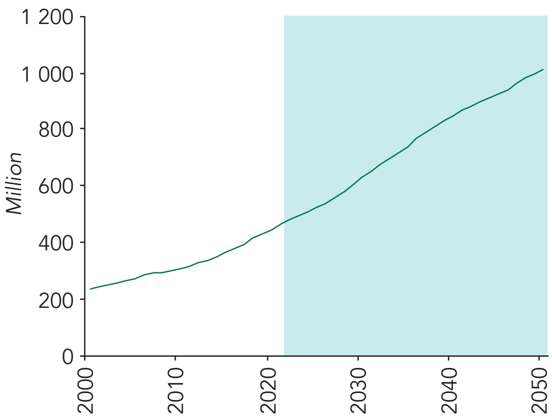
2.1. Overview of demographic data

Population ageing in Asia and the Pacific – the new reality

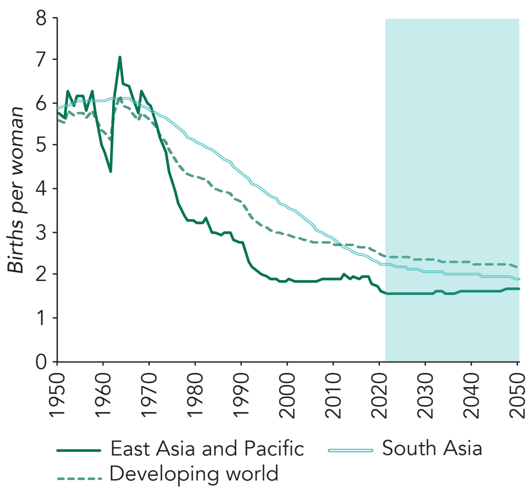
Population ageing is an increase in the share of older people in a population (figure 4.1A), driven by two factors: a decline in birth rates (figure 4.1B) and a decline in mortality rates (figure 4.1.C). Ageing is pertinent to fiscal policy, as older people are often less active in the workforce and more dependent on government support than younger persons.[1]

Figure 4.1 Key demographic shifts in Asia and the Pacific

A: Population aged 65 years or older



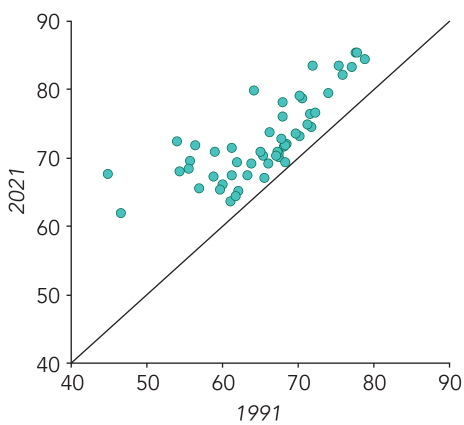
B: Developing Asia-Pacifc total fertility rate, births per woman, 2000-2050



Source: *World Population Prospects 2022*.

Note: shaded area - projections; Panel B: country aggregations used by the World Bank.

C: Years of average life expectancy at birth, Asia-Pacific, 1991 vs. 2021



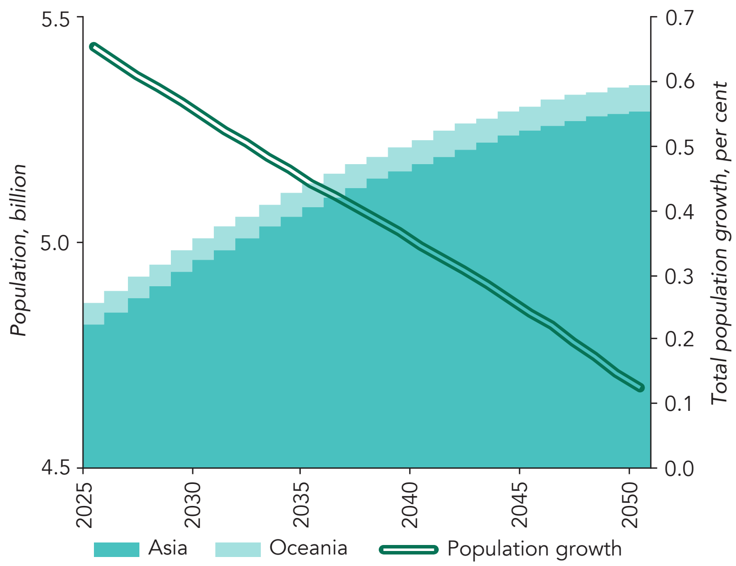
Source: *World Population Prospects 2022*.

1 The population aged 65 years or older is only a broad approximation of the older, non-working population. In reality, the number of non-working individuals gradually decreases until very old age, particularly in developing countries where people may not be covered by retirement schemes.

Asia-Pacific population growth slows

Approximately 4.7 billion individuals were living in the Asia-Pacific region in 2023. By 2050, this figure is projected to reach 5.2 billion and plateau afterwards (figure 4.2). The proportion of children (0-14 years old) in the total population of the region is expected to decrease from 22 to 17 per cent. The working-age population (15-64 years old) will remain nearly constant in numbers but will diminish in proportion from 67 to 63 per cent of the total population. The population of older persons aged 65 or older is anticipated to more than double, from almost 0.5 billion to more than 1 billion, constituting a rise from 10 to 20 per cent of the region's total population (table 4.1; figure 4.2).

Figure 4.2 Population in the Asia-Pacific region, 2023-2050



Source: ESCAP estimates based on data from the *World Population Prospects 2022*.

Note: Medium variant.

The pace of demographic shifts varies across the Asia-Pacific region, with rapid population ageing being the dominant trend

Various age groups have different abilities to fulfil their consumption by individuals' own labour, which defines the needs and possibilities of redistribution through fiscal policies.[2] From the fiscal perspective, the proportions of the working-age population to both children and the older population are particularly relevant. These proportions already vary significantly across the Asia-Pacific region and will continue to change at a different pace. For example, by 2050 the proportion of older persons is anticipated to reach 40 per cent in Japan and the Republic of Korea, whereas it will remain at only about 5 per cent in Afghanistan and Pakistan. The working-age population is projected to increase in the region until mid-2030, albeit at a slower rate than the combined population of children and older persons. The overall support ratio[3] will shift from 2.1 working-age persons per non-working age person in 2025, to 1.7 in 2050. Concerning only the old-age dependency ratio,[4] which is more significant as the older population consumes relatively more than children, the values will change from 6.2 to 3.2 working-age persons per 65 years or older person, respectively (figure 4.3 A and B).[5] Finally, countries will go through

Table 4.1 Population age structure, Asia-Pacific region

	Age group (years)					Age group (years)		
Year	0-14	15-64	65+	Total		0-14	15-64	65+
	Millions					Per cent of the total		
2023	1,059	3,195	493	4,748		22	67	10
2050	888	3,293	1,015	5,196		17	63	20
Percentage change	-16	+3	+106	+9	Percentage point change	-5	-4	+9

Source: ESCAP estimates based on data from *World Population Prospects 2022*.

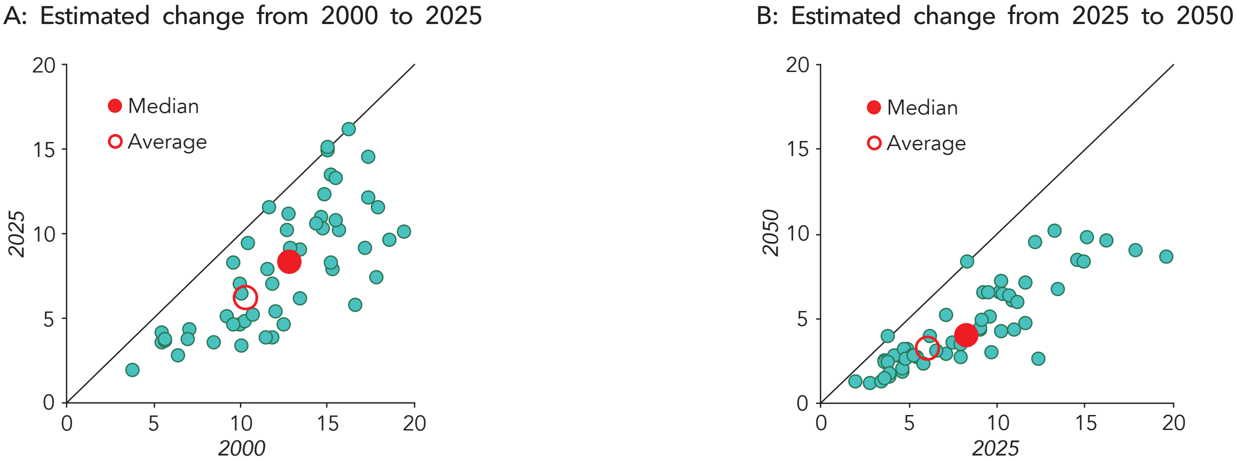
2 Children and youth remain largely outside of the workforce and receive such fiscal benefits as education. The working-age population contributes the most to fiscal revenue and receives relatively low benefits. Older persons gradually withdraw from the workforce and receive relatively larger fiscal benefits, such as health care and pensions.

3 The number of people aged 15-64 years to the combined population of children (0-14 years old) and people 65 years or older.

4 Ratio of individuals aged 65 or older to individuals aged 15-64 years old.

5 A shortcoming of these ratios is that they do not account for older persons who are still often involved in various work activities. For a broader discussion on other demographic indicators of ageing, see United Nations (2023e); ESCAP (2022c; 2023d); Sanderson and Scherbov (2019; 2020).

Figure 4.3 Old age dependency ratio, Asia-Pacific region, 2000, 2025 and 2050



Source: ESCAP estimates based on data from *World Population Prospects 2022*.

Note: The data show the number of persons in the age group 15-64 years old per person aged 65 years or older.

varying degrees of ageing intensity.[6] For example, ESCAP estimates based on United Nations (2022) show that the share of older persons is expected to increase by merely 2 percentage points in Afghanistan relative to 21 percentage points in the Republic of Korea, between 2025 and 2050.

2.2. Fiscal policymaking amid demographic shifts

Ageing has come to the fore of macroeconomic factors shaping fiscal policymaking in the developing Asia-Pacific region

In 1982, during the first World Assembly on Ageing, the socio-economic impact of ageing was primarily a concern of developed countries. Then, the Second World Assembly on Ageing in 2002 adopted the Madrid International Plan of Action on Ageing, highlighting connections between ageing and fiscal policy on health care, education and social protection (United Nations, 2002; ESCAP, 2022b, 2022c). As developing Asia-Pacific countries are ageing at a relatively rapid pace,[7] the region has little time to prepare for this new reality (ESCAP, 2022c). Evidence from Japan and the Republic of Korea, the two very aged Asia-Pacific countries, points to the negative impact of ageing on GDP, consumption, investment and tax base (Hur and Lee, 2019; Yoshino, Kim and Sirivunnabood, 2019).

The changing support ratio will increase the fiscal expenditure needs, compelling Governments to search for additional fiscal revenues

With an average tax-to-GDP ratio of 16 per cent, Governments in the Asia-Pacific region have a relatively low capacity to pursue an ambitious development agenda and support the growing number of older persons in need of support. As the working-to-non-working population ratios are anticipated to decrease in the region, economies will be compelled to raise these ratios or look for non-tax revenue sources (see chapter 3). Otherwise, the required fiscal support will be unsustainable and adversely affected.

Hidden impact channels of ageing on fiscal policy

There are various less researched and understood impact channels of ageing on fiscal policy. Yoshino and Miyamoto (2017) noted that the increase in retirees as a proportion of the working-age population in Japan not only weakens the impact of fiscal policy but also diminishes the effectiveness of monetary policy, thus presenting additional challenges in terms of inflation and debt management. The effectiveness of fiscal spending weakens due to changes in fiscal multipliers that depend on age structure, thus altering the output effect of government spending (Yoshino and Miyamoto, 2019; Hong and Schneider, 2020; Miyamoto, 2022; Miyamoto and Yoshino, 2022). Meanwhile, Shaik and others (2023) pointed to a limited consensus on the ageing-inequality nexus across the world. In some Asia-Pacific economies, ageing is associated with an increase in inequalities, putting further pressure on social protection and pension systems. However, this relationship is not universal.

6 Change in the proportion of the older population to the rest of the population within a certain time period.

7 For example, France and Sweden took 115 years and 85 years, respectively, to progress from being an ageing society (7-14 per cent of the population is 60 years or older) to an aged society (14–21 per cent of the population is 60 years or older.). This transition in China, Singapore, Thailand and Viet Nam is expected to take only 19-25 years (ESCAP, 2017b).

2.3. Health care, education and social protection

Demographic shifts steer fiscal policy onto new trajectories

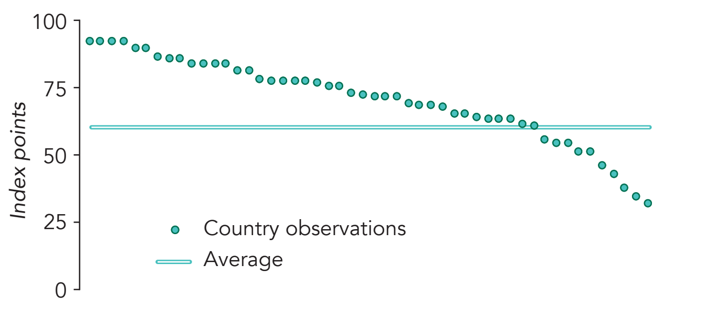
It would be misleading to project and extrapolate current fiscal expenditures onto future population structures and assert that ageing translates simply into higher or lower demand for certain fiscal expenditures. Demographic shifts change not only policy goals but also possible paths to achieve them, especially in the areas of health care, education and the quality of life among older persons (United Nations, 2002). Furthermore, regarding fiscal policies, it will be necessary to search for synergies coming from complementing fiscal policies. For example, expenditures on both health care and environmental protection improve people's health conditions. Finding the right mix of fiscal expenditures across all sectors is a growing fiscal policy field, where innovation can dramatically improve the total impact and sustainability of fiscal policy.

Health care

The current health-care expenditures in the Asia-Pacific region are still insufficient

Asia-Pacific economies allocate on average about 5.2 per cent of their GDP to health care (OECD, 2022b), hovering around the estimated minimum of 5 per cent of GDP necessary for achieving universal basic health care (UHC) (McIntyre, Meheus and Røttingen, 2017) (figure 4.4). Given the forecasted demographic shifts and the goal of achieving universal basic health care (Sustainable Development Goal 3), the required expenditures will increase significantly, which means that fiscal revenue must increase; changes in the allocation of funds for health care will also be necessary, as will be adoption of new, more efficient health-care technologies and the search for health synergies with other fiscal policies, such as those related to old-age employment.

Figure 4.4 Universal Health Care Service Coverage Index (Sustainable Development Goal indicator 3.8.1), 2015-2019



Source: WHO data.

Note: Each dot represents one Asia-Pacific economy, using the latest available aggregate data from 2021. The index reflects coverage of essential health services, using a unitless scale in which 100 = the highest score (WHO, 2024).

Increase in longevity raises health-care expenditures and requires gender-lens adjustments

Health care will become an increasingly dominant part of fiscal expenditures in societies with rising longevity. Health-care policies will need to change not only in terms of the size of such expenditures, which will grow, but also in their structure concerning the type of health-care services provided. Health care systems will also need to account for gender-specific needs, such as addressing life-expectancy gaps between men and women (Lancet, 2019) and the health-care needs of older women. Older women experience higher rates of widowhood and suffer from multiple gender-based disadvantages, ranging from lower education, inferior access to health care and social protection, and economic dependency on others (ESCAP, 2022c).

Fiscal expenditures might need to shift even further – from healing the ill to ensuring that people remain healthy under a "healthy ageing" policy framework

Health-care policies suffer from negative externalities, such as air pollution (Roy and Braathen, 2017), unhealthy food (BWH, 2019) and climate change (IPCC, 2023b), which push up health care costs. Fiscal expenditure in these and similar areas would help to reduce overall health-care costs and promote positive synergies. For instance, healthy ageing is largely determined by physical activity (Gopinath and others, 2018) and the availability of green spaces (Röbbel, 2016). As fiscal expenditure on public green spaces reduces air pollution, improves mental health and lowers the economic burden of physical activity (table 4.2), it produces quantifiable financial savings (Wilson and Xiao, 2023).

Table 4.2 Green space investment impact on fiscal expenditures

Investment in green spaces	Response	Health and well-being benefits/outcomes	Economic benefits
Development of new urban parks	Increase in park use and vegetation cover Lower air pollution	Improved health Higher social engagement Improved life satisfaction	Reduced health-care costs Increase in productivity

Source: Wilson and Xiao (2023).

Looking for synergies – retaining older individuals in the workforce enhances their health, increases fiscal revenues and reduces fiscal expenditures

Access to health care over the course of life helps prolong the participation of older persons in the workforce. As a result, expenditures on healthy ageing are offset by reduced spending on pensions (see below) and other social protection expenditures. In this mutually beneficial relationship, the longer older individuals remain employed, the better will be their health and income security, leading to an improved quality of life for them and greater social inclusion (Dannefer, 2003; ESCAP, 2022c).

Education

Workforce ageing redirects fiscal expenditure towards lifelong learning schemes

The Asia-Pacific region still underperforms in terms of the overall share of fiscal expenditures on education, with spending remaining below 4-6 per cent of GDP, a percentage recommended by UNICEF and UNESCO (2021). Against this backdrop and in the context of an ageing population, fiscal policy on education should be aimed at achieving two objectives. The first is to mobilize more fiscal resources for overall education over the life course. Second, education expenditures need to transition towards lifelong learning schemes, particularly embracing older populations that require reskilling to remain in the workforce (Ogg, 2021; UNESCO, 2023).

Towards synergies – complimentary expenditures on education and social protection

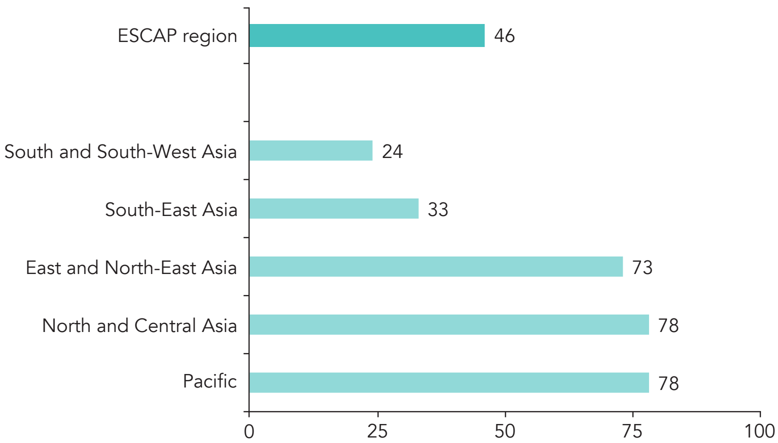
Implementation of society-wide policies that support active ageing should be occurring at all levels of socioeconomic development of countries. Reskilling and upskilling contribute to an overall increase in economic output and a decrease in poverty among older persons; they also directly alleviate the burden of pension system costs due to the postponement of the retirement age (World Bank, 2015). These undertakings may include vocational training, as well as embracing new technologies and digitalization, ensuring that the workforce continually adapts to changing labour market requirements and remains productive for longer into old age. For example, Thailand launched the first 20-year national plan on older persons in 1982; it was followed by the second plan covering the period 2002-2021 (Thailand, MSDHS, 2009) and the third one for the period 2023-2037 (Thailand, MSDHS, 2022). The latest strategy stresses the need to promote employment and income generation among older persons, such as the 2023 programme to educate 30,000 retired teachers and specialists for further employment (Nation Thailand, 2023).

Social protection and pensions

Social protection and pension systems have not achieved universal coverage in the Asia-Pacific region; yet, rapid population ageing has already prompted their redesign

Social protection expenditures in the region are at only one third of the global average, accounting for 11 per cent of GDP, with only approximately 46 per cent of the population in the region being covered[8] (figure 4.5) (ESCAP, 2018b). Often representing the single largest fiscal expenditure category, pension systems have become the cornerstone of old-age welfare and the reduction of old-age poverty in developed countries (ESCAP, 2022a). Similar benefits can be expected in the Asia-Pacific region. However, the expansion of coverage should not follow the same path as previously, as the needs and priorities of social protection are changing in rapidly ageing societies. Policymakers need to embrace synergies with other fiscal expenditures, in particular education and health care, which defer pension payments as a result of the enhanced capacity of older individuals to remain in the workforce.

Figure 4.5 Percentage of social protection coverage by at least one area, excluding health care and illness, in Asia and the Pacific, latest year available



Source: ESCAP and ILO (2020).

As populations of the elderly grow rapidly, the need to design and roll out pension systems grows even faster

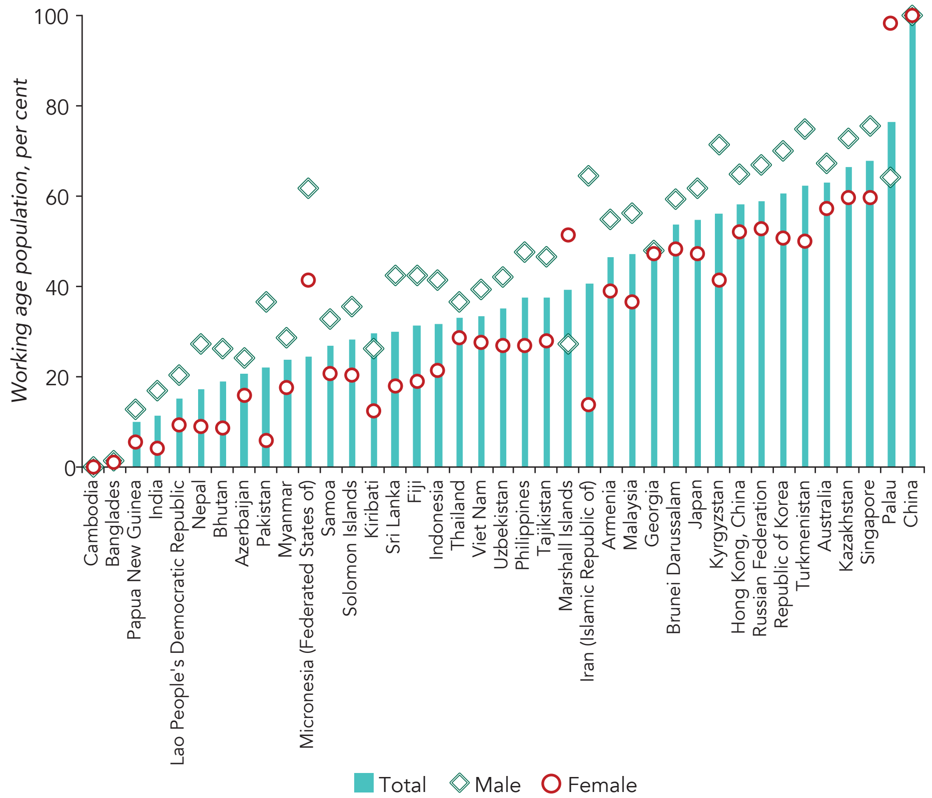
Pension system coverage remains relatively low in the Asia-Pacific region, a situation that requires its prompt expansion (figure 4.6). Policymakers will need to assess costs related to the development and long-term operation of pension systems and decide on their type. Funded pension systems[9] appear to be an appealing solution as they are usually outside of government management, do not create government debt and do not have adverse impacts on the tax-to-GDP ratio. In contrast, government-run pay-as-you-go systems[10] are often perceived to generate excessive pension debt, as under this system the Government owes transfers to pensioners after their years of contributions. However, these are mostly differences in the accounting presentation. Both systems are largely equal at the macro level, as they are an intergenerational transfer and redistribute goods and services produced by the working population (in the form of cash equivalents) to the retired population. Whichever way Asia-Pacific economies choose to follow, development of financially sustainable pension systems may become the principal challenge for fiscal policy in the near future.

8 Expenditures excluding health care and illness.

9 These schemes make pension payments from a fund that is an accumulation of financial assets built up over a period of years from the contributions of its members (Barr, 2002).

10 These systems pay pensions out of current contributions or taxes. They are usually run by Governments from current tax revenues, and the amounts of the benefits are based on commitments made by the Governments.

Figure 4.6 Pension system coverage in the Asia-Pacific region, percentage of working-age population, 2020 or later



Source: ESCAP (2022c).

Japan – the must-learn aged society case study for fiscal policymakers

With ultralow fertility and long life expectancy (OECD, 2019c; 2024), Japan is a global pioneer in setting new directions and ways of life for older people and in balancing fiscal sustainability with social protection. While the official government retirement age is 65 years of age, 94 per cent of companies currently have their own policies for retirement age, and 70 per cent of them set that age at 60 years[11] (Nikkei, 2024a). A more voluntary-based retirement age system would allow for higher future pensions and reduce poverty among older persons (OECD, 2024). This approach would also retain the skills and expertise of older people and contribute to the sustainability of old-age support systems and fiscal policy (United Nations, 2023e). This policy idea is already making progress, with more than 40 per cent of Japanese companies reporting that within the past year they hired workers older than 70 years of age (Nikkei, 2023). Furthermore, the number of job-seeking seniors doubled within last 10 years, and the labour market participation rate of 65-69-year-olds is 52 per cent (Nikkei, 2024b). Beyond the issue of retirement age, pension reforms should search for synergies with lifelong learning opportunities and promotion of employment for women (OECD, 2019c; 2024).

2.4. Reshaping fiscal-monetary policy interactions

Ageing has impacts on inflation and therefore impacts on fiscal policy through the monetary policy channel

In examining the intricate relationships between ageing, inflation and public debt sustainability, Katagiri, Konishi and Ueda (2014) argued that ageing induced by an increase in longevity is deflationary while ageing resulting from a decline in birth rates is inflationary. For instance, ageing in Japan is estimated to exert a deflationary push of 0.6 percentage points per year. In the United States, the generation of so-called baby boomers is estimated to have increased inflation by 6 percentage points between 1955 and 1975, followed by a reduction of 5 percentage points during the period 1975-1990 (Juselius and Takáts, 2016). In the Asia-Pacific region, ageing is caused by both factors, with varying

11 Ministry of Health, Labor and Welfare survey undertaken in 2022.

country-level net impacts. Studies have suggested that ageing is also linked to lower investment, thereby driving down demand and inflation. Additionally, as individuals get older, they tend to spend less. Finally, as older individuals often wish for low inflation as it does not significantly erode the real value of their savings, they may influence monetary policy through political channels (Yao, 2023). With still unknown net impacts, ageing will also change the monetary impact channels; thus, the fiscal implications of monetary decisions will become less understood and less predictable.

Ageing has impacts on debt sustainability through the interest rate channel

Ageing's effects on productivity, labour force size and fiscal revenues and expenditures have impacts on public debt sustainability. However, ageing also has impacts on debt sustainability in more nuanced ways through its influence on prices and ultimately the monetary policy stance. In Japan, ageing pushes down the natural interest rate[12] (Katagiri, Konishi and Ueda, 2014; IMF, 2023a), thereby improving debt sustainability, yet it does so at the cost of a declining trend in potential growth and future government revenue collection (Han, 2019).

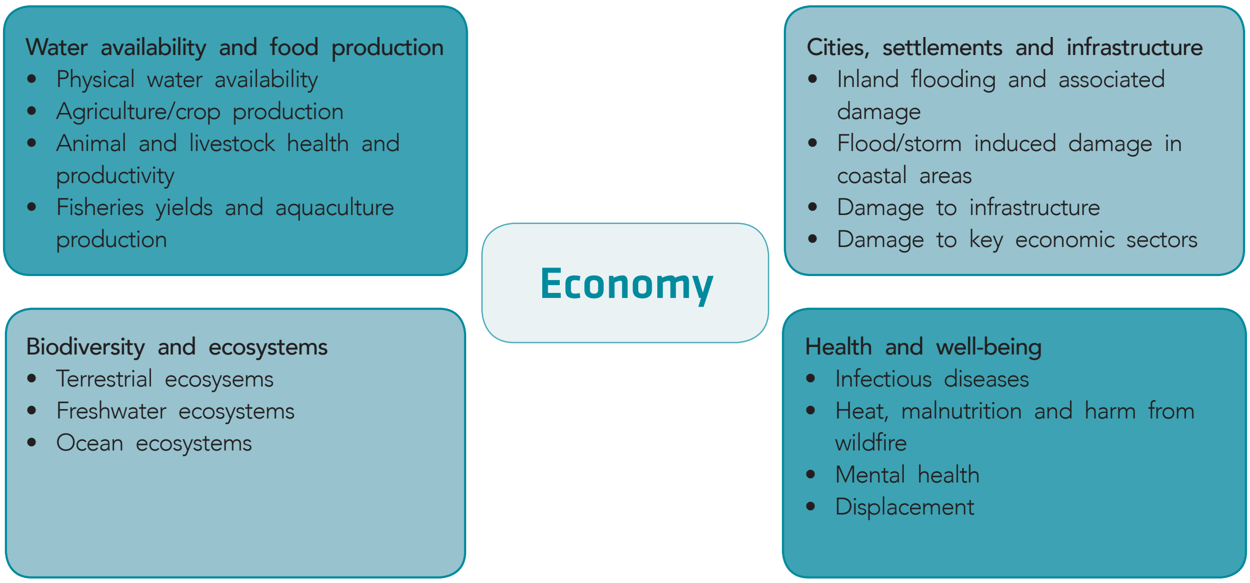
As noted in IMF (2023a), country-specific natural interest rates in developing economies are expected to converge with those of developed economies in coming decades partly due to demographic factors, thus easing pressure on fiscal policy. Higher inflation would also naturally reduce debt-to-GDP ratios for local-currency-denominated debt by increasing nominal GDP growth.[13] However, this occurrence merely reduces the imperative for significant debt deleveraging. Conversely, as the population currently working shrinks amid falling productivity, this situation will contribute to a lower GDP growth rate. Therefore, the fundamental question for debt sustainability is whether real GDP growth remains above the real interest rate (Hong and Schneider, 2020 and Schneider, 2020; Honda and Miyamoto, 2020).

3. Climate change and environmental degradation

Climate change and environmental degradation alter and redirect fiscal policy onto new paths

Climate change manifests itself through changes in multiple physical climate conditions, such as precipitation, sea level rise, ocean acidification, droughts, floods and hot weather extremes. These conditions mainly affect economies and thus fiscal policymaking and do so through various channels: (a) water availability and food production; (b) health and well-being; (c) cities, settlements and infrastructure; and (d) biodiversity and ecosystems (figure 4.7). Given these diverse channels, the economic impact of climate change varies across geographic areas. In some regions, the negative impact is large and obvious due to extreme weather events. In other areas, slow-onset events, such as rising temperature, desertification and loss of biodiversity, stealthily and gradually undermine an economy.

Figure 4.7 Climate change impact channels on economy



Source: IPCC (2023b).

12 Natural interest rate is a real, short-term interest rate that enables an economy to operate at full employment and output with a constant inflation rate. It is estimated by economists as a guide or target for monetary policy.

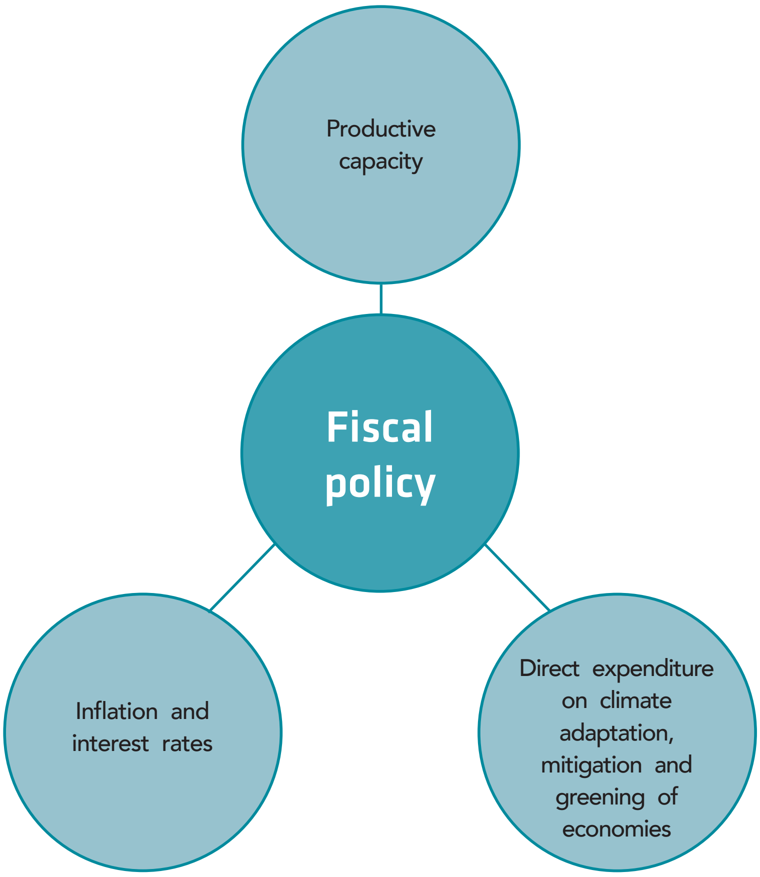
13 Inflation increases nominal GDP; therefore, the ratio of debt to relatively higher GDP decreases.

Fiscal policy has been reshaped by climate change through multiple interlinked channels, many of which are not immediately obvious

The aforementioned manifestations of climate change and environmental degradation have impacts on fiscal policy through three major economic channels: (a) productive capacity, as fiscal revenues decline due to the erosion of productive assets; (b) direct fiscal expenditure needs related to climate adaptation and mitigation, and the greening of economies; and (c) inflation and interest rates, such as when food prices increase due to lower crop yields, which can push up interest rates and fiscal borrowing costs (figure 4.8) (Avgousti and others, 2023).

Finally, climate change and environmental degradation also affect fiscal policy through more nuanced and indirect channels. An increase in poverty and inequalities due to the effects of climate change produces changes in tax policies and social spending (Islam and Winkel, 2017; Guivarch, Taconet, and Mejean, 2021; Cevik and Jalles, 2022; World Bank, 2020). Similarly, increased inflation variability, higher indebtedness and financial market turbulence also have impacts on the fiscal stance of a Government (Breckenfelder and others, 2023). Ultimately, climate change is expected to open still unknown impact channels, requiring fiscal systems to remain flexible and be ready for adjustments.

Figure 4.8 Climate change impact channels on economy and fiscal policy



Source: IPCC (2023b).

3.1. Productive capacity

As many people in Asia and the Pacific still rely on agriculture for their livelihood, any changes in agricultural productivity have significant implications for fiscal policy

Approximately 60 per cent of the population in the Asia-Pacific region relies on food production as a source of income (ADB, 2013). One in three workers in the region is employed in the agricultural sector, while about 300 million people face food insecurity (ADB, 2024). Therefore, climate-affected agricultural productivity, being crucial for poverty reduction, has a substantial impact on fiscal policy.

As agricultural productivity is largely linked to water availability, climate change has particular impacts on vulnerable semi-arid and low-capital regions (IPCC, 2014; 2023b). For example, Kazakhstan may be able to meet only half of its water needs by 2040, leading to a 6 per cent decrease in GDP (UNDP, 2021). In response, the Government of Kazakhstan cites water shortages as one of its major long-term development challenges and dedicates sizeable fiscal expenditures to agricultural irrigation investment (Nazarbayev, 2012).

Climate change may drive the search for larger agricultural subsidies

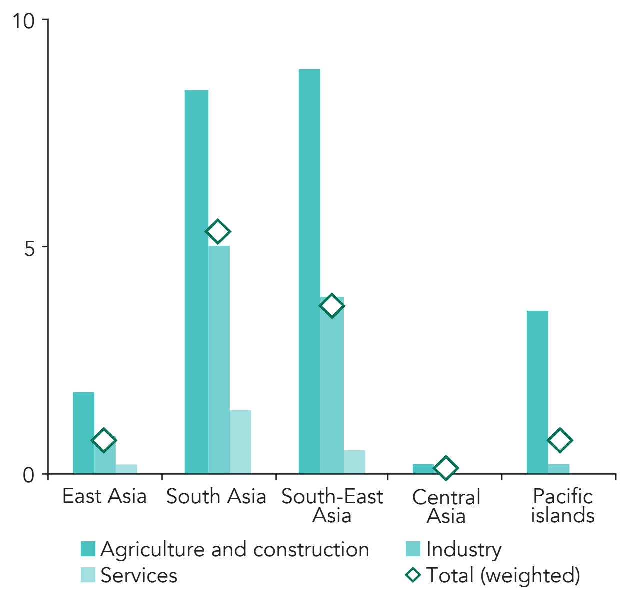
Agricultural subsidies play a notable role in the region and are strongly related to climate change. In India, farm subsidies reached 2 per cent of GDP in 2019 and constituted about one fifth of aggregate farm income (Ramaswami, 2019), while also helping to raise agricultural productivity (Badiani, Jessoe and Plant, 2012). An additional 1.2 per cent of GDP was spent on government food subsidies in fiscal year 2021/22 (India, MCAFPD, 2023; India, MSPI, 2023) as part of policies aimed at reducing rural poverty. Similarly, in China, Indonesia and Kazakhstan, government support stands at between 5 and 14 per cent of gross farm receipts. As climate change is expected to substantially decrease yields in agriculture (Guiteras, 2009), Governments might feel pressured to increase subsidies. Furthermore, while current fiscal transfers prioritize input subsidies for fertilizers, irrigation and energy (Zafar, Aarif and Tarique, 2023), further investment is needed to make the agricultural sector more resilient to climate change, thus affecting the allocation of fiscal expenditure.

Agriculture and public debt are closely intertwined in developing countries

During the 2002 World Food Summit, the then President of Indonesia, Megawati Soekarnoputri, noted that, alongside limited national resources and surging poverty in the wake of the 1997 Asian financial crisis, debt obligations were a major impediment to investing in food security (FAO, 2002). At the same time, food insecurity, which remains a pressing concern in South Asia (World Bank, 2023b) and countries such as Tajikistan, Thailand and Viet Nam (Bjoern and others, 2022), may swell government indebtedness.

Criticism for unsustainable debt often is directed towards failed economic initiatives, corruption and external shocks. However, inadequate food systems can also be a major factor (IPES, 2023). For example, the 2022 economic crisis in Sri Lanka illustrates the potential fiscal impact of agricultural breakdowns (Athukorala and Wagle 2022) and extensive global agricultural imports risks (IPS, 2022). More generally, after the COVID-19-pandemic-induced public debt spikes, the food crisis driven by the war in Ukraine has further escalated debt vulnerabilities, especially in low-income and fragile countries (Bjoern and others, 2022). Amid rising public debt levels, room for more government borrowing to deal with food shocks, such as in response to extensive flooding in Pakistan in 2022, remains limited.

Figure 4.9 Estimated percentage of total working hours lost to heat stress, and associated health, well-being and productivity effects, by sector, 2030



Source: Kjellstrom and others, 2019.

Climate change erodes productivity and fiscal revenues

Globally, about 2.2 per cent of working hours are estimated to be lost due to rising temperatures. In developing countries, total output losses due to heat stress are estimated at 1.5–4.0 per cent of GDP annually (Kjellstrom and others, 2019). South Asia is one of the regions most seriously affected, with India expected to lose about 5.8 per cent of daily working hours due to heat stress in 2030 (Kjellstrom and others, 2019). The problem is most severe for outdoor workers, particularly those employed in agriculture and construction, but also relevant for indoor factory workers. For example, the Asia-Pacific region is home to the majority of 66 million textile workers worldwide, many of whom work in factories without air conditioning (figure 4.9). With falling labour productivity and economic output, rising temperatures are expected to result in the collection of lower fiscal revenues.

Climate change contributes to the spread of disease, leading to lower government revenues and higher spending requirements

Climate change also reduces productive capacity and government revenue through its effects on health conditions, as it contributes to an increase in the occurrence of various diseases, deterioration of mental health and development of trauma (IPCC, 2023b). Furthermore, fiscal expenditure is required for mitigating such adverse effects and building resilience. For example, due to the changing climate, the occurrence of dengue fever has been on the rise across Asia and the Pacific (WHO, 2023).

As diseases become more widespread in existing areas and spread into new regions due to climate change, they cause additional fiscal costs for health-care systems. Necessary investments aimed at limiting the spread of diseases may require reorientation of spending from other development areas. Finally, government revenue collection could also decline as economic output decreases as a result of increased illnesses.

3.2. Fiscal expenditure and revenues

Although there is no consensus on the exact extent and scale of the negative impact of climate change on the global economy, analysts widely agree on its overall intensification

Available estimates on the net impact of climate change on global economic output vary notably (IPCC, 2022), mainly due to the different methodologies used (IPCC, 2021; Tol, 2024). Yet, there is a broad consensus on the overall negative direction of the impact, with large variations across regions. Scientists agree on an elevated chance for negative surprises (Tol, 2024); and they agree that developing countries are much more vulnerable than developed ones. There is also rich evidence of negative impact on individual cases, such as on infrastructure and health care. Finally, the impact of climate change on the economy is non-linear. Estimates suggest a relatively insignificant impact for warming within a rise in temperature not exceeding 1.6°C compared with pre-industrial times, yet growing exponentially in scenarios with higher temperature increases (IPCC, 2019; 2021; 2022; Tol, 2024).

Climate adaptation and mitigation costs add substantial burdens to fiscal expenditures...

Urban infrastructure, clean energy, climate-smart agriculture and disaster resilience undergo accelerated destruction and depreciation due to both extreme climate events and slow-onset processes (IPCC, 2023b). In the efforts to sustain economic growth against climate change headwinds, fiscal expenditures and private investment are destined to cover the costs of their maintenance and further development. According to ADB (2017b), developing Asian countries need to spend $22.6 trillion on infrastructure during the period 2016-2030 in order to maintain economic growth momentum and eradicate poverty under a scenario without climate change. After adjusting for climate change, this estimate increases by almost 20 per cent to $27 trillion.

...yet risks and potential socioeconomic gains drive fiscal policy to cover them

The value of global coastal assets exposed to a 1-in-100-years flooding risk is projected to be between $8 trillion and $14 trillion (IPCC, 2022). However, in the context of water-related infrastructure costs, a global investment of about $2 trillion on such areas as early warning systems, climate-resilient infrastructure, dryland crop production, mangrove protection and improvement of the resilience of water resources could yield benefits amounting to $7 trillion between 2020 and 2030 (GCA and WRI, 2019). Mangrove forests alone, for instance, prevent losses of $80 billion annually and contribute $40-50 billion to local economies through fisheries, forestry and recreation.

In the light of these figures, fiscal policy must seek a balance between mitigation and adaptation, considering the associated costs. According to GCA and WRI (2019), a 3 per cent increase in infrastructure costs dedicated to resilience yields a 4:1 benefit-cost ratio. ADB (2017c) also pointed out that building more robust infrastructure with advanced technologies adds only 2-4 per cent to the overall investment costs. Making resilience investments is more cost effective than covering potential losses.

Climate taxes have much broader impacts than their intended climate goals; thus, their net socioeconomic impact must be assessed carefully

Global tax policies increasingly consider carbon emissions and other pollution-related levies. In principle, climate-related taxes help expand the tax base by covering economic activities considered harmful to climate and the environment. However, implementation of these taxes is far from straightforward given their high launch and oversight costs and complex spillover effects. For example, carbon taxes could be regressive in the Asia-Pacific region, especially in countries with a higher share of carbon-based energy systems. Fiscal support measures would be needed to mitigate the likely increases in poverty and inequality due to green taxes (table 4.3) (IMF, 2021; Alonso and Kilpatrick, 2022). Overall, policymakers should carefully balance their willingness to implement fiscal revenue increases against the socioeconomic impact of specific tax policies, as well as agianst other policies aimed at achieving climate objectives, such as stricter regulation, pollution quotas and outright bans.

Climate and environmental tax revenues should not overshadow the underlying climate and environmental protection priorities

Plastic production grew from 234 million tons in 2000 to 460 million tons in 2019. The value of the global plastics trade reached $1.2 trillion in 2021. At the same time, only 9 per cent of plastics are successfully recycled globally (OECD, 2022a; UNCTAD, 2022). In order to shift the plastic economy paradigm towards reducing the overall use of plastics, the Asia-Pacific region must choose between imposing plastic taxes or bans and setting limits on the use of certain products.

Overall, taxes help reduce the production and use of plastics and increase fiscal revenues. However, an outright ban, such as for plastic bags, still remains often the best solution from the environmental perspective (Gula, 2016). As pointed out by Powell (2018), taxes on plastics alone might be insufficient for reducing the use of plastics. Governments may also be reluctant to adopt drastic policies to cut the use of plastics due to potential

Table 4.3 Impact of a $50 per ton carbon tax on selected Asia-Pacific economies

	Welfare loss (Percentage of household consumption)	Impact of carbon tax	Cost of cash transfer targeted towards the poorest 40 per cent of households to offset their welfare loss (Percentage of total collected carbon tax)
China	3	Regressive	15
India	3	Progressive	8
Indonesia	7	Regressive	23
Kiribati	<2	Progressive	11
Mongolia	10	Regressive	23
Myanmar	<2	Progressive	15
Philippines	2	Progressive	17

Source: Alonso and Kilpatrick (2022).

losses in fiscal revenues. Moreover, inelastic demand for plastic by consumers means that they could bear the largest part of the plastic tax burden (Quinn, 2023). Finally, government initiatives to promote the use of alternative materials, although requiring fiscal expenditures, not only limit the use of plastics but also boost local economies and fiscal revenues. For example, Bangladesh promotes the use of jute fibre instead of plastics, thus producing significant employment opportunities for local small and medium-sized enterprises and reducing poverty (NajmusSakib, 2021).

Managed retreat – when investment in resilience and mitigation reach their limits, policymakers must reflect on policy choices and search for alternative ideas

Following Cyclone Gabrielle in New Zealand in 2023, policymakers faced a critical question: how and where to rebuild? Owing to climate change, areas once deemed safe for habitation have become prone to destruction. Currently, of every seven New Zealanders, one resides in a flood-prone area (New Zealand, 2022). This situation leads to a pivotal fiscal expenditure question: should areas at risk be defended at all costs, or is it more cost effective and equitable to develop other areas?

"Managed retreat" might be the answer in some cases. This approach focuses public investment, particularly in infrastructure, on areas that can endure, while gradually withdrawing from areas where further investment is either not feasible or unreasonably expensive (1 News, 2023). This approach does not abandon climate mitigation or adaptation projects; rather, it inspires careful review and management of fiscal resources. These considerations also echo the ancient Japanese practice of constructing "tsunami stones". After experiencing destructive tsunamis over centuries, people in Japan place stones in areas where tsunami waves reached the farthest inland, warning future generations to avoid settling in areas below these stones where the risk of destruction is high.

3.3. Inflation and interest rates

Climateflation and greenflation are emerging challenges for fiscal policy

Climate change and policies supporting transformation towards more sustainable economies can be inflationary. For example, reduced agricultural production due to adverse weather conditions, erosion of productive capacity in various sectors and the implementation of carbon taxes and other environment-related taxes, such as recycling fees, all contribute to a decrease in the supply of goods and services and higher production costs, thus leading to inflation (Schnabel, 2022; Ferrari and Landi, 2022). For example, according to Breckenfelder and others (2023), climate change could increase global annual food inflation by 0.9-3.2 percentage points and headline inflation by 0.3-1.2 percentage points by 2035.

Although intended to push economies towards greener tracks, the removal of subsidies, the imposition of green taxation and regulations and a reduction in financing for the carbon industry hinder oil production and exploration thus increasing energy prices (Apel, 2022). At the same time, the expansion of the green energy sector requires time and substantial investments, further increasing energy prices (Schnabel, 2022). Owing to supply-side bottlenecks in production and services, the more intense and widespread is the green transition, the higher will be the inflation that can be expected. Finally, transitioning to green production technologies also raises production costs due to several factors, such as new investment needs, substitution of still productive assets for greener assets and the implementation of greener and more complex production processes (Apel, 2022; Schnabel, 2022; Avgousti and others, 2023). Policymakers need to be cognizant of these inflation-inducing factors as they endeavour to move towards a green transition.

The green transition, which requires significant amounts of commodities, such as certain metals for necessary investments, presents opportunities for commodity-rich countries; however, such transitions must be sustainable, just and fair (United Nations, 2023f). For example, Mongolia has seen higher demand for its commodities, including lithium, which is critical for battery production (Reuters, 2023). Mongolia's fiscal policy can leverage these commodity proceeds for equitable development through commodity taxes and their retention in wealth funds and fiscal stability funds that will support long-term economic development and the Government's fiscal stance during economic downturns (EBRD, 2023; Galindev and others, 2019).

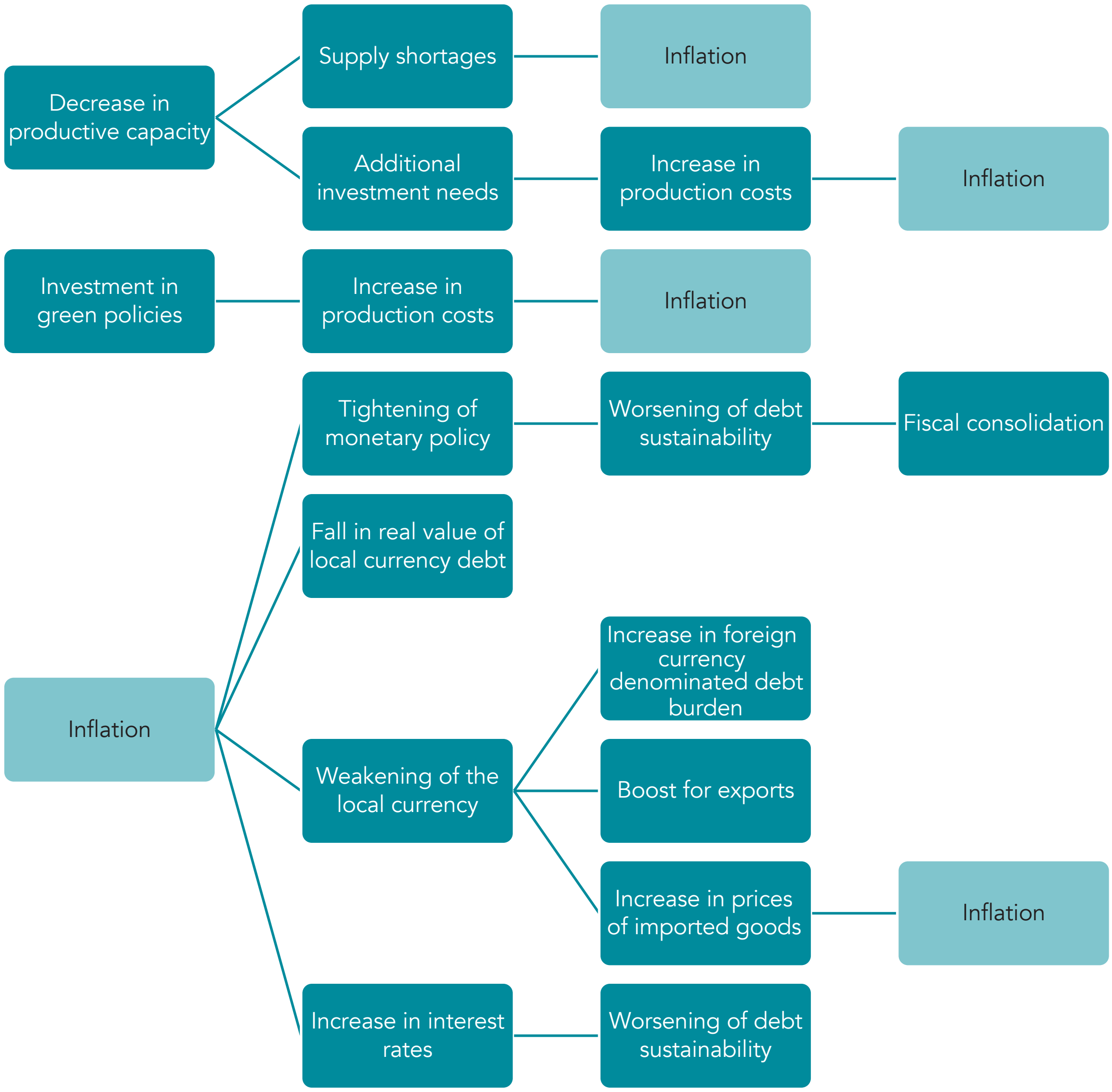
This time is no different for inflation – shifting from being a short-term ally to a long-term adversary

As the repercussions of climate-induced inflationary tailwinds are set to endure for decades, factors driving price increases are expected to accumulate. One-off and unexpected waves of inflation often help to reduce fiscal deficits because they promptly lead to higher fiscal revenues in nominal terms while fiscal expenditures take a longer time to adjust. However, as inflation persists over an extended period, expectations regarding inflation begin to change. Long-term government expenditures must start to catch up, such as through the indexation of public sector employee salaries, pensions and other government expenditures, including public investment. Given the overall negative impact of inflation on economic activity, the fiscal situation is likely to deteriorate.

Inflationary push compels fiscal policy to play an expanded role in the green transformation

This broad inflationary pressure, derived from multiple climate change and green policies (figure 4.10), is becoming a concern on the monetary and fiscal policy agenda. As central banks are obligated to ensure inflation stability, they may find it difficult to directly support the green transition by keeping interest rates low to facilitate green investment, among other initiatives. This situation requires fiscal policy to take a more proactive role in both promoting green investments and offsetting the negative impact of inflation on vulnerable households and the sectors of the economy most affected. Finally, there will be further unknown risks of climate-induced inflation for fiscal policy, as both climate change and related policies may change how known risks and shocks have impacts on the economy (Mann, 2023).

Figure 4.10 Possible inflation impact channels due to climate change and environmental degradation



Source: ESCAP.

4. Technological advancements and digitalization

This section underscores that the reality of the fourth industrial revolution is not being equally experienced by all the countries and people in Asia and the Pacific. Therefore, policymakers should not assume that the benefits that such a revolution brings about would automatically benefit all equally either. In contrast, a proactive fiscal policy is needed to capture and share some of its fruits. The discussion points out difficulties and research gaps in establishing clear channels through which technology and digitalization have impacts on the economy, and thus on fiscal policy. Finally, the analysis presents ways in which technology and digitalization can enhance the functioning and management of fiscal systems.

4.1. Overview and key impact channels

Disruptive technologies and the decline of labour-intensive industries – history rhymes again

Advancement in technology and science stands out as the singular megatrend that has consistently promoted socioeconomic development throughout history. New technologies and innovation continuously displace older, less innovative and less efficient solutions in a process of Schumpeterian creative destruction.[14] However, this positive change also conveys severe shocks to various sectors of the economy, labour markets and the people.

The "Luddite movement", infamous for destroying textile machines in nineteenth century England, is often simplified as a protest against "machines taking jobs from textile workers".[15] However, Caprettini and Voth (2020) highlighted that riots against new technologies were less intense when alternative employment opportunities were available, while the lack of job prospects exacerbated unrest. This is an important lesson for Asia-Pacific economic and fiscal planning as more than 200 years later, parallels to these events continue to emerge. Discussions on the negative impact of technological progress persist, such as the threats posed by artificial intelligence (AI). Yet, as was the case more than two centuries ago, the implications of technological changes, including for fiscal policies, are far from being black and white; they depend on the creation of new work opportunities and improvements in labour productivity. More generally, it is the overall policy environment that matters in giving shape to how technological changes are adopted and how their implications are managed.

In the light of the above arguments, technology and digitalization have impacts on fiscal policy via two main routes: changes in the economy to which fiscal policy needs to respond, and changes in fiscal policy management as new digital tools become available. As for the first route, the economy changes through (a) destruction and creation of new sectors, such as the digital economy; (b) creation of new goods and services, such as the commoditization of data; and (c) change in the form and location of employment, such as remote work, often outside the tax residency country. Regarding the second route, digitalization of fiscal management enables improvements in (a) efficiency, such as improvements in budget planning, implementation and control; (b) effectiveness in the delivery of policy targets; (c) monitoring and decision-making through real-time fiscal data and information; (d) debt sustainability through better cash management; (e) transparency amid less fraud; and (f) flexibility that enhances resource allocation between sectors (Rivero del Paso and others, 2023).

4.2. Difficulties in establishing clear impact channels

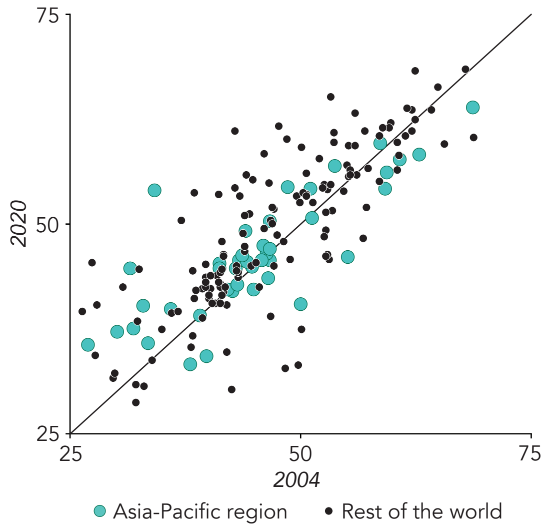
Changing income shares between capital and labour are tempting for tax adjustments; yet, there are still limited conclusive findings for evidence-based fiscal policymaking

The share of labour income as a percentage of GDP has been a focal point for economists for many decades and currently appears to be in a long-term downward trend (ILO, 2011; 2019a; 2019b). However, the estimates of the share of labour and capital income are subject to a high degree of uncertainty due to multiple technical, accounting and modelling assumptions, as well as data shortages. As a result, changes in the share of labour income are highly heterogeneous, both globally and in the Asia-Pacific region (figure 4.11 and table 4.4).

14 With the emergence of new consumer goods, methods of production, transportation and markets, this process of creative destruction destroys the old ones and is the essence of capitalism (Schumpeter, 1943).

15 In addition to job protection, the movement also sought decent wages and fair employment practices. For more details, see Conniff (2011).

Figure 4.11 Share of labour income as a percentage of GDP



Source: ILO data.

Note: The 2004 and 2020 cut-off years are the first and last years available in the latest ILO estimates.

Lack of clarity on the drivers of changing labour and capital shares of income poses a risk for mistargeted fiscal policies

While technological progress and globalization are often cited as the main drivers of the long-term increase in capital income, there are multiple other contributing factors. For example, Manyika and others (2019) noted that commodity and real estate cycles, capital depreciation and a shift to more intangible capital, such as intellectual property, are also leading factors. Other studies have pointed to such factors as the increased financialization that affects the distribution of profits between wages and dividends (Dünhaupt, 2017), as well as the decline in collective bargaining of workers, higher mobility of capital relative to labour and trade openness (ILO, 2011).[16]

While considerable uncertainty regarding how technologies affect shares of labour and capital income, and fiscal policymaking requires further research, there are much larger, well-identified risks and opportunities offered by technology and digitalization that should be addressed in the Asia-Pacific context. Examples include the need for a shift in taxation models and stronger multilateral cooperation to leverage the digital economy and the digitalization of fiscal systems. More broadly, any shifts in the shares of labour and capital income are relatively gradual, underscoring the importance of fair taxation of both labour and capital, rather than focusing solely on the precise proportions of these taxes here and now. This is particularly relevant for Asia and the Pacific where overall tax revenue collection remains rather low relative to developed economies (see chapter 3) so there is room for technology and digitalization to support fiscal space within a relatively short period of time.

16 In the context of the United States economy, York (2023) argued that methodological flaws explain a large part of the observed changes in the share of labour income. After necessary adjustments, the shares of labour and capital have largely remained steady for almost a century.

Table 4.4 Share of labour income as a percentage of GDP, 2004 versus 2020

	Asia-Pacific region	Rest of the world
Increased	25	99
Decreased	18	47

Source: ILO data.

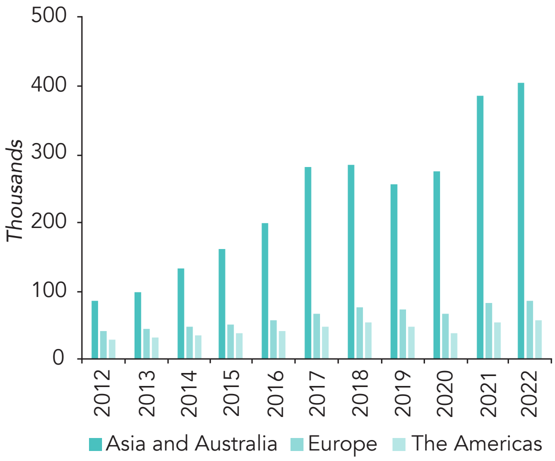
4.3. New industries and economic sectors

Robotization transforms employment dynamics, albeit in limited parts of the Asia-Pacific region

Technology is driving substantial changes in employment patterns, continuously reshaping labour-intensive industries (ILO, 2018), and thus tax potential. On a global scale, the Asia-Pacific region has been a front runner in the total deployment of industrial robots (figure 4.12), although this transformation is primarily concentrated in China, Japan and the Republic of Korea (figure 4.13). In the Republic of Korea and Japan, there are 1,000 and 399 robots per 10,000 workers, respectively. Meanwhile, China contributed 52 per cent of the new robots installed globally in 2022, up from just 14 per cent in 2012 (IFR, 2023).

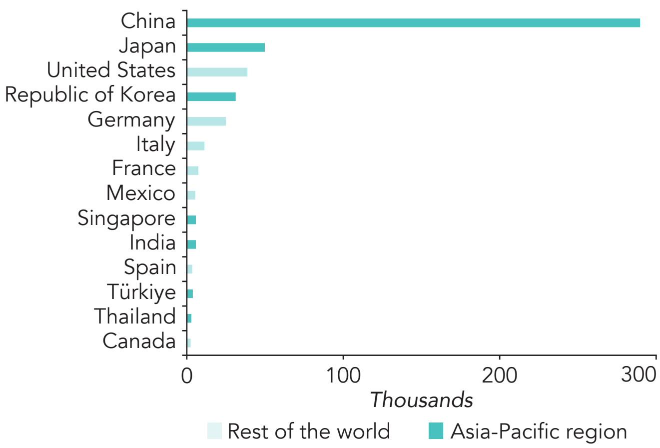
While robots are still concentrated in the production of electrical devices and electronics and in the automotive industry – where over half of them are deployed – their applications in other industries are rapidly expanding due to swift progress in the tasks that they can perform. Key areas of expansion include the medical and health-care industry, professional cleaning, agriculture, transportation and logistics, and hospitality. Together with the vast technical and business benefits of robotization, the decline in birth rates and shortage of skilled workers are key factors that drive the demand for robots (IFR, 2023).

Figure 4.12 Installation of industrial robots, by region



Source: IFR (2023).

Figure 4.13 Installation of industrial robots, by country



Source: IFR (2023).

The discussion on taxing the "robot revolution" is interwoven with some fear of robots or AI taking over human workplaces. However, as discussed above, neither history nor reality seems to point in that direction. Furthermore, the current robot taxation trends do not support this claim. For example, Japan and Thailand changed their taxation to promote further installation of robots to boost productivity of their economies and to support employment (Shome, 2022).

Technology propels fiscal revenue policies into new forms of taxation, but there is a substantial research and capacity gap undermining these efforts

Due to the high pace of technology-driven changes and the complexity of the observed shifts, adjusting tax systems to the new reality necessitates further research, design of new tax collection systems and closer multilateral cooperation. International cooperation is also needed for setting guidelines and standards on data sharing (ADB, 2022c), avoiding double or no taxation of profits, and making taxation easier to administer (United Nations, 2018; UNCTAD, 2019). Meanwhile, it is not clear if adding new taxes is necessary, as similar outcomes may be achieved by raising existing taxes and expanding the tax base under current tax types.

The emerging digital economy requires fundamental reform of national and international tax systems

The emerging digital economy falls outside the purview of current tax systems, thus compelling fiscal policymakers to redefine the legal foundations of these systems. In particular, the concept of permanent establishment, often the basis of current taxation regulations, does not adequately support taxation of digital trade. For example, a transborder online purchase of software may be taxed in the seller country, yet often no border tariffs, sales taxes or value-added taxes are paid in the recipient country. Another example is the commodification of data. Data collected by a foreign company, such as consumer preferences, can be sent abroad and traded there for profit, generating no tax revenues for the country of data origin (Dabla-Norris and others, 2021).

It is not entirely clear how to tap into this cross-border trade and collect potential fiscal revenues (Hanappi, Jakubik and Ruta, 2023). Income tax systems do not currently account for the geographical distribution of profits, and existing tax rules permit relatively easy and legal profit shifting due to the substantial value of intangible assets in digitalized businesses (Dabla-Norris and others, 2021). Therefore, in the highly and increasingly digitalized Asia-Pacific region, multilateral cooperation on tax regulations is necessary to effectively and fairly tax the digital economy. However, for many developing countries, the implementation of these emerging tax regulations requires considerable financial and human capital capacities, leaving them lagging behind the rapidly evolving global tax system (ESCAP, 2022a).

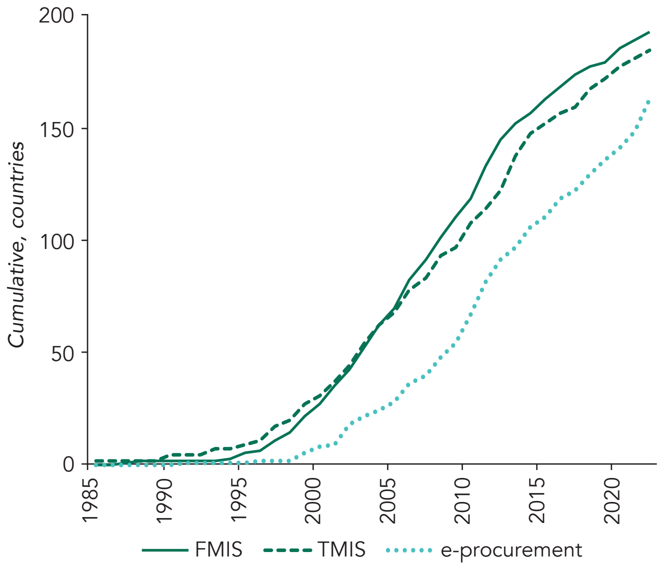
4.4. Digitalized fiscal policy

The digital revolution continues to thrive in Asia-Pacific fiscal management

Public fiscal management has been revolutionized by digital technologies for more than two decades, with digital financial management information systems operating in almost all Asia-Pacific countries (figure 4.14) (Rivero del Paso and others, 2023).

As noted above, digitalization of public financial management helps improve efficiency, effectiveness, monitoring, transparency and flexibility. In aiming for

Figure 4.14 Launch of fiscal management information systems, global, 1984-2022

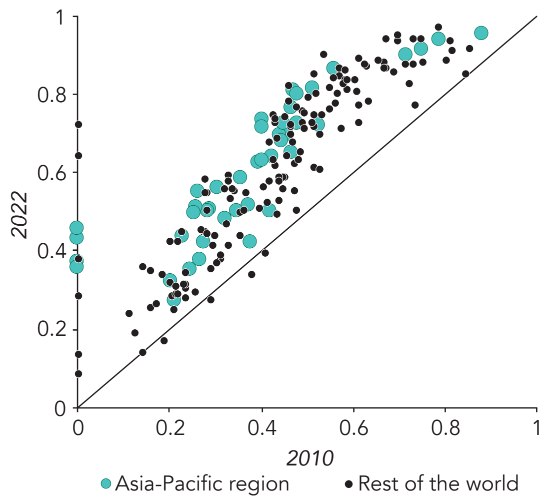


Source: World Bank data.

Abbreviations: FMIS: financial management information system; TMIS: tax management information system.

these improvements, Asia-Pacific countries have already entered a path of rapid digitalization (figure 4.15). For example, treasury single accounts (TSA) have recorded more than 75 per cent of government revenues and expenditures in South Asia. Tax management information systems (TMIS) are even more universal. Such systems enable Governments to collect and analyse tax data in almost real time, hasten tax collection and return processes, improve assessment of tax liabilities and compliance, as well as improve communication and interactions between taxpayers and tax authorities. Meanwhile, deploying the customs administration management information systems not only offers all the benefits of TMIS, but also facilitates international trade and promotes fair

Figure 4.15 Government online services index, 2010 versus 2020



Source: United Nations data.

taxation of digitalized trade. Finally, e-payroll systems and e-procurement systems are being launched across the region to further improve the human resources of Governments and increase the transparency and efficiency of government purchases (IMF, 2022). For example, such a system reduced the leakage of funds between the Government and employment and pension beneficiaries in India by 12.7 per cent (Gupta and others, 2017).

E-invoicing represents a significant breakthrough and an immensely powerful tool for tax collection and compliance

The global trend of utilizing digital technologies to enhance tax compliance is evident, with numerous examples across the Asia-Pacific region (box 4.1). Well-tested digital solutions are being implemented on a large scale, benefiting from economies of scale and resulting in lower operating costs. Currently, 15 Asia-Pacific countries have either introduced or are in advanced stages of implementing compulsory e-invoicing with centralized reporting to government tax authorities (VATCalc, 2023).

Box 4.1 E-invoicing in the Asia-Pacific region – the new era of tax system management

E-invoicing in the Asia-Pacific region – the new era of tax system management

E-invoicing systems provide tax authorities with real-time or near real-time access to invoicing data as e-invoices are usually submitted by the sellers to a continuous transaction control platform established by the tax administration agency. This enhances the efficiency of tax administration by ensuring correct calculation of tax amounts and reconciliation of tax flows against invoices.

The Republic of Korea launched an electronic tax invoicing (ETI) system in 2010, and currently all e-invoices are sent to the Korean National Tax Service. The ETI system has provided substantial savings in tax compliance costs for business and tax administration, as well as resulted in a significant reduction in the issuance of fraudulent tax invoices (Kim, 2023).

Uzbekistan's national e-invoicing platform was introduced in 2019. Companies must register with the State Tax Committee to obtain an electronic signature to issue e-invoices. The e-invoices are generated in a standardized electronic format and sent to customers via email or other electronic means. The customers then verify and approve the e-invoice through the government platform, which also integrates payments, enables companies to manage their invoicing records and simplifies tax reporting and compliance (Vat Update, 2023).

Singapore has implemented an e-invoicing since 2019 (IMDA, 2023). More recently, the tax administration authority intends to work with other government agencies and the business sector to expand the e-invoicing system to support the administration of the goods and services tax (Singapore, IRA, 2023).

Authors: Albert Isgut and Michał Podolski.

5. Concluding remarks

Megatrends reshape all economic activities and alter both fiscal revenues and expenditures. Demographic shifts redefine fiscal policy, reminding all that fiscal policy is dependent on population structure. Climate change distorts economic output and erodes accumulated wealth and prosperity, which forces policymakers to find new policy paths leading to desired socioeconomic goals. Finally, technology and digitalization have been a long-lasting tailwind for economies; yet, they require flexibility and innovation from fiscal policy to fully grasp technology benefits and avoid a plethora of risks. No research fully quantifies these impacts, although the direction of the changes is better understood.

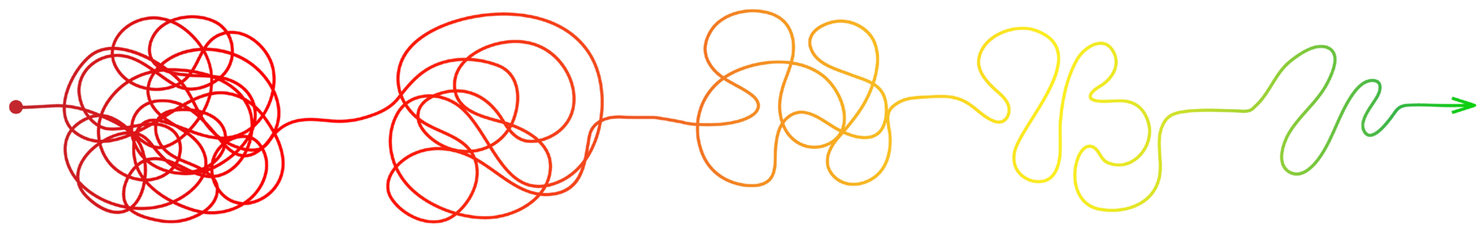
All megatrends and related fiscal policies are deeply connected. It is unlikely for most economies to address the megatrend impact by dedicated fiscal policies for each single policy goal individually. By contrast, fiscal policies must look beyond one-step impact analysis and look for far-reaching synergies. For example, a better environment makes for better health, which supports economic activity and decreases the need for social protection. In turn, less social protection expenditure saves resources for environmental policies. This holistic approach must become the working standard of fiscal policy.

Population ageing is a global and regional trend, affecting various economic aspects of Asia-Pacific countries. Compared with elsewhere in the world, population ageing is more rapid in the region due to steep declines in mortality and fertility. All countries must take measures to adapt their economies and fiscal stance to this process. Increases in productivity, expansion of the labour force towards old age, lifelong learning and more flexibility in retirement practices soften the impact of ageing on fiscal revenues. Fiscal expenditure must continue the "spend smart" approach, looking for efficiency and impact. Expenditure on health care, education and social protection do not change proportionately to the respective size of age groups. Therefore, policymakers cannot simply increase or decrease spending, but must again look for synergies between all fiscal expenditure sectors, making sure that financing addresses multiple goals simultaneously. Moreover, demographic foresight and forward-looking policies that anticipate demographic change and address such change early will contribute to addressing the economic impacts of population ageing.

Climate change and environmental degradation are permanent headwinds for fiscal policy. They reduce economic output and fiscal revenues, lower labour and capital productivity and increase fiscal expenditure needs. Worsening conditions for agricultural productivity, although they do not immediately endanger livelihoods, require sizeable public investment to foster food security. While costly, these expenditures on climate adaptation and mitigation are expected to produce large long-term savings and high returns. Yet, policymakers should still consider how and where to invest in resilience. Climate-induced inflation is intrinsically embedded into the green transition and cannot be ignored. Its impact on low-income households will have to be partly offset by fiscal policy support.

Technology and digitalization have been the true drivers of change and will remain an overall tailwind for fiscal policy. This support comes at a price though, in terms of large shifts, across all economic sectors, which can disrupt fiscal revenues and expenditures. The potential benefits of technological transformation are worth both the financial and labour efforts required to tap them. To this end, fiscal policies must follow two distinct paths. First, as the digital economy expands, shifts in taxation models and closer multilateral cooperation are necessary to expand the tax base towards these emerging areas. Second, digitalization of fiscal management generates new opportunities for increased monitoring, efficiency gains, debt management and overall improvements in public financial management.

Fiscal policies have never been designed to last for decades. In their essence, they are temporary solutions that readjust the direction of socioeconomic development. Development of these adjustment mechanisms, openness to change and willingness to implement new fiscal policies must be brought to the fore of planning and design of fiscal policies. Finally, amid the plethora of approaching risks, further digitalization of fiscal policy must be backed by expansion of related data analysis and research to tap fully the still missing mainstreaming of holistic planning and search for synergies among fiscal policies.



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Relatively steady economic growth in developing economies in Asia and the Pacific is masking declining purchasing power and the risk of rising poverty and socioeconomic inequalities faced by people in the region. Economic headwinds and downside risks that cloud the near-term prospects could further undermine people's living conditions and well-being.

Despite lagging progress towards achievement of the Sustainable Development Goals, Governments find it increasingly difficult to increase, or even maintain, public investments for development ambitions. Sovereign debt-servicing burden is taking away fiscal resources that should have been used to provide more and better public services and infrastructure.

The *Survey* for 2024 examines how Asia-Pacific countries, donors, multilateral development banks and credit rating agencies can boost the availability of affordable and long-term financing for Governments.

New policy solutions can solve this long-standing development challenge. For example, harnessing behavioural science to increase society's willingness to pay taxes offers large untapped potential to close the tax collection gaps that can reduce fiscal risks and thus borrowing costs.

In addition to stronger domestic political will and multilateral development cooperation, shifts in the perspectives of international development partners are critical. Donors should prioritize development financing gaps in recipient countries over political interests. Multilateral development banks could revisit whether the potential development impacts of their capital are being maximized. With a long-term approach, credit rating agencies should appreciate that public investment in sustainable development raises sovereign creditworthiness over time.

"Governments of developing countries across Asia and the Pacific are victims of an unjust, outdated and dysfunctional global financial architecture. They face fiscal constraints, rising borrowing rates with shorter loan maturity, and heavy debt burdens."

António Guterres
Secretary-General of the United Nations

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